RULES AND REGULATIONS

Title 10—BANKING AND SECURITIES

DEPARTMENT OF BANKING AND SECURITIES

[10 PA. CODE CH. 59]

Mortgage Servicing

The Department of Banking and Securities (Department) adopts Chapter 59 (relating to mortgage servicing) to read as set forth in Annex A.

The regulations are published under the act of December 22, 2017 (P.L. 1260, No. 81) and 7 Pa.C.S. §§ 6101—6154 (relating to Mortgage Licensing Act) (act). Section 6141 of the act (relating to mortgage servicers) specifically provides that, to effectively incorporate the Consumer Financial Protection Bureau's (Bureau) mortgage servicer regulations in 12 CFR Part 1024, Subpart C (relating to mortgage servicing), the Department shall promulgate regulations that are not subject to sections 201—205 of the act of July 31, 1968 (P.L. 769, No. 240) (45 P.S. §§ 1201—1205), known as the Commonwealth Documents Law, the Regulatory Review Act (71 P.S. §§ 745.1—745.14) and sections 204(b) and 301(10) of the Commonwealth Attorneys Act (71 P.S. §§ 732-204(b) and 732-301(10)).

To comply with section 6141 of the act, the Department is publishing these regulations which incorporate the Federal requirements and standards in effect as April 19, 2018, as most recently issued by the Bureau. These are the current standards that the Department is obligated to incorporate. To further comply with section 6141 of the act, the Department may periodically publish regulations regarding mortgage servicing if changes are made to the Federal regulations (which the Department is obligated to incorporate into the Pennsylvania mortgage servicing regulations).

ROBIN L. WIESSMANN,
Secretary

(*Editor's Note*: Title 10 of the *Pennsylvania Code* is amended by adding §§ 59.1—59.15 to read as set forth in Annex A. These regulations are effective April 28, 2018.)

Fiscal Note: 3-56. No fiscal impact; (8) recommends adoption.

Annex A

TITLE 10. BANKING AND SECURITIES

PART IV. BUREAU OF CONSUMER CREDIT AGENCIES

CHAPTER 59. MORTGAGE SERVICING

Sec.

§ 59.1. Purpose.

In accordance with 7 Pa.C.S. § 6141 (relating to mortgage servicers) this chapter is intended to set forth mortgage servicing criteria and standards that incorporate the Consumer Financial Protection Bureau's mortgage servicer regulations in 12 CFR Part 1024, Subpart C (relating to mortgage servicing).

§ 59.2. Scope.

This chapter applies to any mortgage loan serviced by a mortgage servicer licensed by the Department under 7 Pa.C.S. § 6111 (relating to license requirements).

§ 59.3. Definitions.

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

Confirmed successor in interest—A successor in interest once a servicer has confirmed the successor in interest's identity and ownership interest in a property that secures a mortgage loan subject to this chapter.

Consumer reporting agency—has the meaning set forth in section 603 of the Fair Credit Reporting Act (15 U.S.C.A. § 1681a).

Day—Calendar day.

Delinquency—A period of time during which a borrower and a borrower's mortgage loan obligation are delinquent. A borrower and a borrower's mortgage loan obligation are delinquent beginning on the date a periodic payment sufficient to cover principal, interest, and, if applicable, escrow becomes due and unpaid, until such time as no periodic payment is due and unpaid.

Hazard insurance—Insurance on the property securing a mortgage loan that protects the property against loss caused by fire, wind, flood, earthquake, theft, falling objects, freezing, and other similar hazards for which the owner or assignee of such loan requires insurance.

Loss mitigation application—An oral or written request for a loss mitigation option that is accompanied by any information required by a servicer for evaluation for a loss mitigation option.

Loss mitigation option—An alternative to foreclosure offered by the owner or assignee of a mortgage loan that is made available through the servicer to the borrower.

Master servicer—The owner of the right to perform servicing. A master servicer may perform the servicing itself or do so through a subservicer.

Mortgage loan—A loan which is made primarily for personal, family or household use; and secured by any first lien mortgage, deed of trust, or equivalent consensual security interest on a dwelling or on residential real estate, but does not include open-end lines of credit (home equity plans).

Qualified written request—A written correspondence from the borrower to the servicer that includes, or otherwise enables the servicer to identify, the name and account of the borrower, and either:

(1) States the reasons the borrower believes the account is in error; or

(2) Provides sufficient detail to the servicer regarding information relating to the servicing of the mortgage loan sought by the borrower.

Reverse mortgage transaction—The meaning set forth in 12 CFR 1026.33(a) (relating to requirements for reverse mortgages).

Service provider—Any party retained by a servicer that interacts with a borrower or provides a service to the servicer for which a borrower may incur a fee.

Single point of contact—An individual or team of personnel, each of whom has the ability and authority to discuss mortgage loan mitigation options with a borrower on behalf of a mortgage servicer. The mortgage servicer shall ensure that each member of the team is knowledgeable about the borrower's situation and current status.

Subservicer—A servicer that does not own the right to perform servicing, but that performs servicing on behalf of the master servicer.

Successor in interest—A person to whom an ownership interest in a property securing a mortgage loan subject to 12 CFR Part 1024, Subpart C (relating to mortgage servicing) is transferred from a borrower, provided that the transfer is by devise, descent, or operation of law on the death of a joint tenant or tenant by the entirety; to a relative resulting from the death of a borrower; a transfer where the spouse or children of the borrower become an owner of the property; a transfer resulting from a decree of a dissolution of marriage, legal separation agreement, or from an incidental property settlement agreement, by which the spouse of the borrower becomes an owner of the property; or a transfer into an inter vivos trust in which the borrower is and remains a beneficiary and which does not relate to a transfer of rights of occupancy in the property.

Transferee servicer—A servicer that obtains or will obtain the right to perform servicing pursuant to an agreement or understanding.

Transferor servicer—A servicer, including a table-funding mortgage broker or dealer on a first-lien dealer loan, that transfers or will transfer the right to perform servicing pursuant to an agreement or understanding.

§ 59.4. General disclosure requirements.

(a) *Disclosure requirements.*

(1) *Form of disclosures.* Except as otherwise provided in this chapter, disclosures required under this chapter must be clear and conspicuous, in writing, and in a form that a recipient may keep. The disclosures required by this chapter may be provided in electronic form, subject to compliance with the consumer consent and other applicable provisions of the E-Sign Act, as set forth in 12 CFR 1024.3 (relating to E-Sign applicability). A servicer may use commonly accepted or readily understandable abbreviations in complying with the disclosure requirements of this chapter.

(2) *Foreign language disclosures.* Disclosures required under this chapter may be made in a language other than English, provided that the disclosures are made available in English upon a recipient's request.

(b) *Additional information; disclosures required by other laws.* Unless expressly prohibited in this chapter, by other applicable law, such as the Truth in Lending Act (15 U.S.C.A. §§ 1601—1667f) or the Truth in Savings Act (12 U.S.C.A. §§ 4301—4313), or by the terms of an agreement with a Federal regulatory agency or the Department, a servicer may include additional information in a disclosure required under this chapter or combine any disclosure required under this chapter with any disclosure required by such other law.

(c) *Successors in interest.*

(1) *Optional notice with acknowledgment form.* Upon confirmation, a servicer may provide a confirmed successor in interest who is not liable on the mortgage loan obligation with a written notice together with a separate acknowledgment form that meets the requirements of paragraph (c)(1)(iv) of this section and that does not require acknowledgment of any items other than those identified in paragraph (c)(1)(iv) of this section. The written notice must clearly and conspicuously explain that:

(i) The servicer has confirmed the successor in interest's identity and ownership interest in the property;

(ii) Unless the successor in interest assumes the mortgage loan obligation under law, the successor in interest is not liable for the mortgage debt and cannot be required to use the successor in interest's assets to pay the mortgage debt, except that the lender has a security interest in the property and a right to foreclose on the property, when permitted by law and authorized under the mortgage loan contract;

(iii) The successor in interest may be entitled to receive certain notices and communications about the mortgage loan if the servicer is not providing them to another confirmed successor in interest or borrower on the account;

(iv) In order to receive such notices and communications, the successor in interest must execute and provide to the servicer an acknowledgment form that:

(A) Requests receipt of such notices and communications if the servicer is not providing them to another confirmed successor in interest or borrower on the account; and

(B) Indicates that the successor in interest understands that such notices do not make the successor in interest liable for the mortgage debt and that the successor in interest is only liable for the mortgage debt if the successor in interest assumes the mortgage loan obligation under law; and

(C) Informs the successor in interest that there is no time limit to return the acknowledgment but that the servicer will not begin sending such notices and communications to the confirmed successor in interest until the acknowledgment is returned; and

(v) Whether or not the successor in interest executes the acknowledgment described in paragraph (c)(1)(iv) of this section, the successor in interest is entitled to submit notices of error under § 59.7 (relating to error resolution procedures), requests for information under § 59.8 (relating to requests for information), and requests for a payoff statement under 12 CFR 1026.36 (relating to prohibited acts or practices and certain requirements for credit secured by a dwelling) with respect to the mortgage loan account, with a brief explanation of those rights and how to exercise them, including appropriate address information.

(2) *Effect of failure to execute acknowledgment.* If, upon confirmation, a servicer provides a confirmed successor in interest who is not liable on the mortgage loan obligation with a written notice and acknowledgment form in accordance with paragraph (c)(1) of this section, the servicer is not required to provide to the confirmed successor in

interest any written disclosure required by 12 CFR 1024.17 (relating to escrow accounts), or § 59.5, § 59.6, § 59.9, or § 59.11 or to comply with the live contact requirements in § 59.11(a) (relating to early intervention requirements for certain borrowers) with respect to the confirmed successor in interest until the confirmed successor in interest either assumes the mortgage loan obligation under State law or executes an acknowledgment that complies with paragraph (c)(1)(iv) of this section and provides it to the servicer.

(3) *Additional copies of acknowledgment form.* If a servicer provides a confirmed successor in interest with a written notice and acknowledgment form in accordance with paragraph (c)(1) of this section, the servicer must make additional copies of the written notice and acknowledgment form available to the confirmed successor in interest upon written or oral request.

(4) *Multiple notices unnecessary.* Except as required by § 59.8, a servicer is not required to provide to a confirmed successor in interest any written disclosure required by 12 CFR 1024.17, or § 59.5, § 59.6, § 59.9, or § 59.11(b) if the servicer is providing the same specific disclosure to another borrower on the account. A servicer is also not required to comply with the live contact requirements set forth in § 59.11(a) with respect to a confirmed successor in interest if the servicer is complying with those requirements with respect to another borrower on the account.

§ 59.5. Mortgage servicing transfers.

(a) *Servicing disclosure statement.* Within three days (excluding legal public holidays, Saturdays, and Sundays) after a person applies for a reverse mortgage transaction, the lender, mortgage broker who anticipates using table funding, or dealer in a first-lien dealer loan shall provide to the person a servicing disclosure statement that states whether the servicing of the mortgage loan may be assigned, sold, or transferred to any other person at any time. Appendix MS-1 of 12 CFR Part 1024, Subpart C (relating to mortgage servicing) contains a model form for the disclosures required under this paragraph (a). If a person who applies for a reverse mortgage transaction is denied credit within the three-day period, a servicing disclosure statement is not required to be delivered.

(b) *Notices of transfer of loan servicing.*

(1) *Requirement for notice.* Except as provided in paragraph (b)(2) of this section, each transferor servicer and transferee servicer of any mortgage loan shall provide to the borrower a notice of transfer for any assignment, sale, or transfer of the servicing of the mortgage loan. The notice must contain the information described in paragraph (b)(4) of this section. Appendix MS-2 of 12 CFR Part 1024, Subpart C contains a model form for the disclosures required under this paragraph (b).

(2) *Certain transfers excluded.*

(i) The following transfers are not assignments, sales, or transfers of mortgage loan servicing for purposes of this section if there is no change in the payee, address to which payment must be delivered, account number, or amount of payment due:

(A) A transfer between affiliates;

(B) A transfer that results from mergers or acquisitions of servicers or subservicers;

(C) A transfer that occurs between master servicers without changing the subservicer;

(ii) The Federal Housing Administration (FHA) is not required to provide to the borrower a notice of transfer where a mortgage insured under the National Housing Act is assigned to the FHA.

(3) *Time of notice.*

(i) *In general.* Except as provided in paragraphs (b)(3)(ii) and (iii) of this section, the transferor servicer shall provide the notice of transfer to the borrower not less than 15 days before the effective date of the transfer of the servicing of the mortgage loan. The transferee servicer shall provide the notice of transfer to the borrower not more than 15 days after the effective date of the transfer. The transferor and transferee servicers may provide a single notice, in which case the notice shall be provided not less than 15 days before the effective date of the transfer of the servicing of the mortgage loan.

(ii) *Extended time.* The notice of transfer shall be provided to the borrower by the transferor servicer or the transferee servicer not more than 30 days after the effective date of the transfer of the servicing of the mortgage loan in any case in which the transfer of servicing is preceded by:

(A) Termination of the contract for servicing the loan for cause;

(B) Commencement of proceedings for bankruptcy of the servicer;

(C) Commencement of proceedings by the FDIC for conservatorship or receivership of the servicer or an entity that owns or controls the servicer; or

(D) Commencement of proceedings by the NCUA for appointment of a conservator or liquidating agent of the servicer or an entity that owns or controls the servicer.

(iii) *Notice provided at settlement.* Notices of transfer provided at settlement by the transferor servicer and transferee servicer, whether as separate notices or as a combined notice, satisfy the timing requirements of paragraph (b)(3) of this section.

(4) *Contents of notice.* The notices of transfer shall include the following information:

(i) The effective date of the transfer of servicing;

(ii) The name, address, and a collect call or toll-free telephone number for an employee or department of the transferee servicer that can be contacted by the borrower to obtain answers to servicing transfer inquiries;

(iii) The name, address, and a collect call or toll-free telephone number for an employee or department of the transferor servicer that can be contacted by the borrower to obtain answers to servicing transfer inquiries;

(iv) The date on which the transferor servicer will cease to accept payments relating to the loan and the date on which the transferee servicer will begin to accept such payments. These dates shall either be the same or consecutive days;

(v) Whether the transfer will affect the terms or the continued availability of mortgage life or disability insurance, or any other type of optional insurance, and any action the borrower must take to maintain such coverage; and

(vi) A statement that the transfer of servicing does not affect any term or condition of the mortgage loan other than terms directly related to the servicing of the loan.

(c) *Borrower payments during transfer of servicing.*

(1) *Payments not considered late.* During the 60-day period beginning on the effective date of transfer of the servicing of any mortgage loan, if the transferor servicer (rather than the transferee servicer that should properly receive payment on the loan) receives payment on or before the applicable due date (including any grace period allowed under the mortgage loan instruments), a payment may not be treated as late for any purpose.

(2) *Treatment of payments.* Beginning on the effective date of transfer of the servicing of any mortgage loan, with respect to payments received incorrectly by the transferor servicer (rather than the transferee servicer that should properly receive the payment on the loan), the transferor servicer shall promptly either:

(i) Transfer the payment to the transferee servicer for application to a borrower's mortgage loan account, or

(ii) Return the payment to the person that made the payment and notify such person of the proper recipient of the payment.

§ 59.6. Timely escrow payments and treatment of escrow account balances.

(a) *Timely escrow disbursements required.* If the terms of a mortgage loan require the borrower to make payments to the servicer of the mortgage loan for deposit into an escrow account to pay taxes, insurance premiums, and other charges for the mortgaged property, the servicer shall make payments from the escrow account in a timely manner, that is, on or before the deadline to avoid a penalty, as governed by the requirements in 12 CFR 1024.17(k) (relating to escrow accounts).

(b) *Refund of escrow balance.*

(1) *In general.* Except as provided in paragraph (b)(2) of this section, within 20 days (excluding legal public holidays, Saturdays, and Sundays) of a borrower's payment of a mortgage loan in full, a servicer shall return to the borrower any amounts remaining in an escrow account that is within the servicer's control.

(2) *Servicer may credit funds to a new escrow account.* Notwithstanding paragraph (b)(1) of this section, if the borrower agrees, a servicer may credit any amounts remaining in an escrow account that is within the servicer's control to an escrow account for a new mortgage loan as of the date of the settlement of the new mortgage loan if the new mortgage loan is provided to the borrower by a lender that:

(i) Was also the lender to whom the prior mortgage loan was initially payable;

(ii) Is the owner or assignee of the prior mortgage loan; or

(iii) Uses the same servicer that serviced the prior mortgage loan to service the new mortgage loan.

§ 59.7. Error resolution procedures.

(a) *Notice of error.* A servicer shall comply with the requirements of this section for any written notice from the borrower that asserts an error and that includes the name of the borrower, information that enables the servicer to identify the borrower's mortgage loan account, and the error the borrower believes has occurred. A notice on a payment coupon or other payment form supplied by the servicer need not be treated by the servicer as a notice of error. A qualified written request that asserts an error relating to the servicing of a mortgage loan is a notice of error for purposes of this section, and a servicer must comply with all requirements applicable to a notice of error with respect to such qualified written request.

(b) *Scope of error resolution.* For purposes of this section, the term "error" refers to the following categories of covered errors:

(1) Failure to accept a payment that conforms to the servicer's written requirements for the borrower to follow in making payments.

(2) Failure to apply an accepted payment to principal, interest, escrow, or other charges under the terms of the mortgage loan and applicable law.

(3) Failure to credit a payment to a borrower's mortgage loan account as of the date of receipt in violation of 12 CFR 1026.36(c)(1) (relating to prohibited acts or practices and certain requirements for credit secured by a dwelling).

(4) Failure to pay taxes, insurance premiums, or other charges, including charges that the borrower and servicer have voluntarily agreed that the servicer should collect and pay, in a timely manner as required by § 59.6(a) (relating to timely escrow payments and treatment of escrow account balances), or to refund an escrow account balance as required by § 59.6(b).

(5) Imposition of a fee or charge that the servicer lacks a reasonable basis to impose upon the borrower.

(6) Failure to provide an accurate payoff balance amount upon a borrower's request in violation of section 12 CFR 1026.36(c)(3).

(7) Failure to provide accurate information to a borrower regarding loss mitigation options and foreclosure, as required by § 59.11 (relating to early intervention requirements for certain borrowers).

(8) Failure to transfer accurately and timely information relating to the servicing of a borrower's mortgage loan account to a transferee servicer.

(9) Making the first notice or filing required by applicable law for any judicial or non-judicial foreclosure process in violation of § 59.13(f) or (j) (relating to loss mitigation procedures).

(10) Moving for foreclosure judgment or order of sale, or conducting a foreclosure sale in violation of § 59.13(g) or (j).

(11) Any other error relating to the servicing of a borrower's mortgage loan.

(c) *Contact information for borrowers to assert errors.* A servicer may, by written notice provided to a borrower, establish an address that a borrower must use to submit a notice of error in accordance with the procedures in this section. The notice shall include a statement that the borrower must use the established address to assert an error. If a servicer designates a specific address for receiving notices of error, the servicer shall designate the same address for receiving information requests pursuant to § 59.8(b) (relating to requests for information). A servicer shall provide a written notice to a borrower before any change in the address used for receiving a notice of error. A servicer that designates an address for receipt of notices of error must post the designated address on any Web site maintained by the servicer if the Web site lists any contact address for the servicer.

(d) *Acknowledgment of receipt.* Within five days (excluding legal public holidays, Saturdays, and Sundays) of a servicer receiving a notice of error from a borrower, the

servicer shall provide to the borrower a written response acknowledging receipt of the notice of error.

(e) *Response to notice of error.*

(1) *Investigation and response requirements.*

(i) *In general.* Except as provided in paragraphs (f) and (g) of this section, a servicer must respond to a notice of error by either:

(A) Correcting the error or errors identified by the borrower and providing the borrower with a written notification of the correction, the effective date of the correction, and contact information, including a telephone number, for further assistance; or

(B) Conducting a reasonable investigation and providing the borrower with a written notification that includes a statement that the servicer has determined that no error occurred, a statement of the reason or reasons for this determination, a statement of the borrower's right to request documents relied upon by the servicer in reaching its determination, information regarding how the borrower can request such documents, and contact information, including a telephone number, for further assistance.

(ii) *Different or additional error.* If during a reasonable investigation of a notice of error, a servicer concludes that errors occurred other than, or in addition to, the error or errors alleged by the borrower, the servicer shall correct all such additional errors and provide the borrower with a written notification that describes the errors the servicer identified, the action taken to correct the errors, the effective date of the correction, and contact information, including a telephone number, for further assistance.

(2) *Requesting information from borrower.* A servicer may request supporting documentation from a borrower in connection with the investigation of an asserted error, but may not:

(i) Require a borrower to provide such information as a condition of investigating an asserted error; or

(ii) Determine that no error occurred because the borrower failed to provide any requested information without conducting a reasonable investigation pursuant to paragraph (e)(1)(i)(B) of this section.

(3) *Time limits.*

(i) *In general.* A servicer must comply with the requirements of paragraph (e)(1) of this section:

(A) Not later than seven days (excluding legal public holidays, Saturdays, and Sundays) after the servicer receives the notice of error for errors asserted under paragraph (b)(6) of this section.

(B) Prior to the date of a foreclosure sale or within 30 days (excluding legal public holidays, Saturdays, and Sundays) after the servicer receives the notice of error, whichever is earlier, for errors asserted under paragraphs (b)(9) and (10) of this section.

(C) For all other asserted errors, not later than 30 days (excluding legal public holidays, Saturdays, and Sundays) after the servicer receives the applicable notice of error.

(ii) *Extension of time limit.* For asserted errors governed by the time limit set forth in paragraph (e)(3)(i)(C) of this section, a servicer may extend the time period for responding by an additional 15 days (excluding legal public holidays, Saturdays, and Sundays) if, before the end of the 30-day period, the servicer notifies the borrower of the extension and the reasons for the extension in writing. A servicer may not extend the time period for responding to errors asserted under paragraph (b)(6), (9), or (10) of this section.

(4) *Copies of documentation.* A servicer shall provide to the borrower, at no charge, copies of documents and information relied upon by the servicer in making its determination that no error occurred within 15 days (excluding legal public holidays, Saturdays, and Sundays) of receiving the borrower's request for such documents. A servicer is not required to provide documents relied upon that constitute confidential, proprietary or privileged information. If a servicer withholds documents relied upon because it has determined that such documents constitute confidential, proprietary or privileged information, the servicer must notify the borrower of its determination in writing within 15 days (excluding legal public holidays, Saturdays, and Sundays) of receipt of the borrower's request for such documents.

(5) *Omissions in responses to requests for documentation.* In its response to a request for documentation under paragraph (e)(4) of this section, a servicer may omit location and contact information and personal financial information (other than information about the terms, status, and payment history of the mortgage loan) if:

(i) The information pertains to a potential or confirmed successor in interest who is not the requester; or

(ii) The requester is a confirmed successor in interest and the information pertains to any borrower who is not the requester.

(f) *Alternative compliance.*

(1) *Early correction.* A servicer is not required to comply with paragraphs (d) and (e) of this section if the servicer corrects the error or errors asserted by the borrower and notifies the borrower of that correction in writing within five days (excluding legal public holidays, Saturdays, and Sundays) of receiving the notice of error.

(2) *Error asserted before foreclosure sale.* A servicer is not required to comply with the requirements of paragraphs (d) and (e) of this section for errors asserted under paragraph (b)(9) or (10) of this section if the servicer receives the applicable notice of an error seven or fewer days before a foreclosure sale. For any such notice of error, a servicer shall make a good faith attempt to respond to the borrower, orally or in writing, and either correct the error or state the reason the servicer has determined that no error has occurred.

(g) *Requirements not applicable.*

(1) *In general.* A servicer is not required to comply with the requirements of paragraphs (d), (e), and (i) of this section if the servicer reasonably determines that any of the following apply:

(i) *Duplicative notice of error.* The asserted error is substantially the same as an error previously asserted by the borrower for which the servicer has previously complied with its obligation to respond pursuant to paragraphs (d) and (e) of this section, unless the borrower provides new and material information to support the asserted error. New and material information means information that was not reviewed by the servicer in connection with investigating a prior notice of the same error and is reasonably likely to change the servicer's prior determination about the error.

(ii) *Overbroad notice of error.* The notice of error is overbroad. A notice of error is overbroad if the servicer cannot reasonably determine from the notice of error the

specific error that the borrower asserts has occurred on a borrower's account. To the extent a servicer can reasonably identify a valid assertion of an error in a notice of error that is otherwise overbroad, the servicer shall comply with the requirements of paragraphs (d), (e) and (i) of this section with respect to that asserted error.

(iii) *Untimely notice of error.* A notice of error is delivered to the servicer more than one year after:

(A) Servicing for the mortgage loan that is the subject of the asserted error was transferred from the servicer receiving the notice of error to a transferee servicer; or

(B) The mortgage loan is discharged.

(2) *Notice to borrower.* If a servicer determines that, pursuant to this paragraph (g), the servicer is not required to comply with the requirements of paragraphs (d), (e), and (i) of this section, the servicer shall notify the borrower of its determination in writing not later than five days (excluding legal public holidays, Saturdays, and Sundays) after making such determination. The notice to the borrower shall set forth the basis under paragraph (g)(1) of this section upon which the servicer has made such determination.

(h) *Payment requirements prohibited.* A servicer shall not charge a fee, or require a borrower to make any payment that may be owed on a borrower's account, as a condition of responding to a notice of error.

(i) *Effect on servicer remedies.*

(1) *Adverse information.* After receipt of a notice of error, a servicer may not, for 60 days, furnish adverse information to any consumer reporting agency regarding any payment that is the subject of the notice of error.

(2) *Remedies permitted.* Except as set forth in this section with respect to an assertion of error under paragraph (b)(9) or (10) of this section, nothing in this section shall limit or restrict a lender or servicer from pursuing any remedy it has under applicable law, including initiating foreclosure or proceeding with a foreclosure sale.

§ 59.8. Requests for information.

(a) *Information request.* A servicer shall comply with the requirements of this section for any written request for information from a borrower that includes the name of the borrower, information that enables the servicer to identify the borrower's mortgage loan account, and states the information the borrower is requesting with respect to the borrower's mortgage loan. A request on a payment coupon or other payment form supplied by the servicer need not be treated by the servicer as a request for information. A request for a payoff balance need not be treated by the servicer as a request for information. A qualified written request that requests information relating to the servicing of the mortgage loan is a request for information for purposes of this section, and a servicer must comply with all requirements applicable to a request for information with respect to such qualified written request.

(b) *Contact information for borrowers to request information.* A servicer may, by written notice provided to a borrower, establish an address that a borrower must use to request information in accordance with the procedures in this section. The notice shall include a statement that the borrower must use the established address to request information. If a servicer designates a specific address for receiving information requests, a servicer shall designate the same address for receiving notices of error pursuant to § 59.7(c) (relating to error resolution procedures). A servicer shall provide a written notice to a borrower before any change in the address used for receiving an information request. A servicer that designates an address for receipt of information requests must post the designated address on any Web site maintained by the servicer if the Web site lists any contact address for the servicer.

(c) *Acknowledgment of receipt.* Within five days (excluding legal public holidays, Saturdays, and Sundays) of a servicer receiving an information request from a borrower, the servicer shall provide to the borrower a written response acknowledging receipt of the information request.

(d) *Response to information request.*

(1) *Investigation and response requirements.* Except as provided in paragraphs (e) and (f) of this section, a servicer must respond to an information request by either:

(i) Providing the borrower with the requested information and contact information, including a telephone number, for further assistance in writing; or

(ii) Conducting a reasonable search for the requested information and providing the borrower with a written notification that states that the servicer has determined that the requested information is not available to the servicer, provides the basis for the servicer's determination, and provides contact information, including a telephone number, for further assistance.

(2) *Time limits.*

(i) *In general.* A servicer must comply with the requirements of paragraph (d)(1) of this section:

(A) Not later than 10 days (excluding legal public holidays, Saturdays, and Sundays) after the servicer receives an information request for the identity of, and address or other relevant contact information for, the owner or assignee of a mortgage loan; and

(B) For all other requests for information, not later than 30 days (excluding legal public holidays, Saturdays, and Sundays) after the servicer receives the information request.

(ii) *Extension of time limit.* For requests for information governed by the time limit set forth in paragraph (d)(2)(i)(B) of this section, a servicer may extend the time period for responding by an additional 15 days (excluding legal public holidays, Saturdays, and Sundays) if, before the end of the 30-day period, the servicer notifies the borrower of the extension and the reasons for the extension in writing. A servicer may not extend the time period for requests for information governed by paragraph (d)(2)(i)(A) of this section.

(3) *Omissions in responses to requests.* In its response to a request for information, a servicer may omit location and contact information and personal financial information (other than information about the terms, status, and payment history of the mortgage loan) if:

(i) The information pertains to a potential or confirmed successor in interest who is not the requester; or

(ii) The requester is a confirmed successor and the information pertains to any borrower who is not the requester.

(e) *Alternative compliance.* A servicer is not required to comply with paragraphs (c) and (d) of this section if the servicer provides the borrower with the information re-

quested and contact information, including a telephone number, for further assistance in writing within five days (excluding legal public holidays, Saturdays, and Sundays) of receiving an information request.

(f) *Requirements not applicable.*

(1) *In general.* A servicer is not required to comply with the requirements of paragraphs (c) and (d) of this section if the servicer reasonably determines that any of the following apply:

(i) *Duplicative information.* The information requested is substantially the same as information previously requested by the borrower for which the servicer has previously complied with its obligation to respond pursuant to paragraphs (c) and (d) of this section.

(ii) *Confidential, proprietary or privileged information.* The information requested is confidential, proprietary or privileged.

(iii) *Irrelevant information.* The information requested is not directly related to the borrower's mortgage loan account.

(iv) *Overbroad or unduly burdensome information request.* The information request is overbroad or unduly burdensome. An information request is overbroad if a borrower requests that the servicer provide an unreasonable volume of documents or information to a borrower. An information request is unduly burdensome if a diligent servicer could not respond to the information request without either exceeding the maximum time limit permitted by paragraph (d)(2) of this section or incurring costs (or dedicating resources) that would be unreasonable in light of the circumstances. To the extent a servicer can reasonably identify a valid information request in a submission that is otherwise overbroad or unduly burdensome, the servicer shall comply with the requirements of paragraphs (c) and (d) of this section with respect to that requested information.

(v) *Untimely information request.* The information request is delivered to a servicer more than one year after:

(A) Servicing for the mortgage loan that is the subject of the information request was transferred from the servicer receiving the request for information to a transferee servicer; or

(B) The mortgage loan is discharged.

(2) *Notice to borrower.* If a servicer determines that, pursuant to this paragraph (f), the servicer is not required to comply with the requirements of paragraphs (c) and (d) of this section, the servicer shall notify the borrower of its determination in writing not later than five days (excluding legal public holidays, Saturdays, and Sundays) after making such determination. The notice to the borrower shall set forth the basis under paragraph (f)(1) of this section upon which the servicer has made such determination.

(g) *Payment requirement limitations.*

(1) *Fees prohibited.* Except as set forth in paragraph (g)(2) of this section, a servicer shall not charge a fee, or require a borrower to make any payment that may be owed on a borrower's account, as a condition of responding to an information request.

(2) *Fee permitted.* Nothing in this section shall prohibit a servicer from charging a fee for providing a beneficiary notice under applicable State law, if such a fee is not otherwise prohibited by applicable law.

(h) *Servicer remedies.* Nothing in this section shall prohibit a servicer from furnishing adverse information to any consumer reporting agency or pursuing any of its remedies, including initiating foreclosure or proceeding with a foreclosure sale, allowed by the underlying mortgage loan instruments, during the time period that response to an information request notice is outstanding.

(i) *Potential successors in interest.*

(1) With respect to any written request from a person that indicates that the person may be a successor in interest and that includes the name of the transferor borrower from whom the person received an ownership interest and information that enables the servicer to identify the mortgage loan account, a servicer shall respond by providing the potential successor in interest with a written description of the documents the servicer reasonably requires to confirm the person's identity and ownership interest in the property and contact information, including a telephone number, for further assistance. With respect to the written request, a servicer shall treat the potential successor in interest as a borrower for purposes of the requirements of paragraphs (c) through (g) of this section.

(2) If a written request under paragraph (i)(1) of this section does not provide sufficient information to enable the servicer to identify the documents the servicer reasonably requires to confirm the person's identity and ownership interest in the property, the servicer may provide a response that includes examples of documents typically accepted to establish identity and ownership interest in a property; indicates that the person may obtain a more individualized description of required documents by providing additional information; specifies what additional information is required to enable the servicer to identify the required documents; and provides contact information, including a telephone number, for further assistance. A servicer's response under this paragraph (i)(2) must otherwise comply with the requirements of paragraph (i)(1). Notwithstanding paragraph (f)(1)(i) of this section, if a potential successor in interest subsequently provides orally or in writing the required information specified by the servicer pursuant to this paragraph (i)(2), the servicer must treat the new information, together with the original request, as a new, non-duplicative request under paragraph (i)(1), received as of the date the required information was received, and must respond accordingly.

(3) In responding to a request under paragraph (i)(1) of this section prior to confirmation, the servicer is not required to provide any information other than the information specified in paragraphs (i)(1) and (2) of this section. In responding to a written request under paragraph (i)(1) that requests other information, the servicer must indicate that the potential successor in interest may resubmit any request for information once confirmed as a successor in interest.

(4) If a servicer has established an address that a borrower must use to request information pursuant to paragraph (b) of this section, a servicer must comply with the requirements of paragraph (i)(1) of this section only for requests received at the established address.

§ 59.9. Force-placed insurance.

(a) *Definition of force-placed insurance.*

(1) *In general.* For the purposes of this section, the term "force-placed insurance" means hazard insurance obtained by a servicer on behalf of the owner or assignee of a mortgage loan that insures the property securing such loan.

(2) *Types of insurance not considered force-placed insurance.* The following insurance does not constitute "force-placed insurance" under this section:

(i) Hazard insurance required by the Flood Disaster Protection Act of 1973.

(ii) Hazard insurance obtained by a borrower but renewed by the borrower's servicer as described in 12 CFR 1024.17(k)(1), (2), or (5) (relating to escrow accounts).

(iii) Hazard insurance obtained by a borrower but renewed by the borrower's servicer at its discretion, if the borrower agrees.

(b) *Basis for charging borrower for force-placed insurance.* A servicer may not assess on a borrower a premium charge or fee related to force-placed insurance unless the servicer has a reasonable basis to believe that the borrower has failed to comply with the mortgage loan contract's requirement to maintain hazard insurance.

(c) *Requirements before charging borrower for force-placed insurance.*

(1) *In general.* Before a servicer assesses on a borrower any premium charge or fee related to force-placed insurance, the servicer must:

(i) Deliver to a borrower or place in the mail a written notice containing the information required by paragraph (c)(2) of this section at least 45 days before a servicer assesses on a borrower such charge or fee;

(ii) Deliver to the borrower or place in the mail a written notice in accordance with paragraph (d)(1) of this section; and

(iii) By the end of the 15-day period beginning on the date the written notice described in paragraph (c)(1)(ii) of this section was delivered to the borrower or placed in the mail, not have received, from the borrower or otherwise, evidence demonstrating that the borrower has had in place, continuously, hazard insurance coverage that complies with the loan contract's requirements to maintain hazard insurance.

(2) *Content of notice.* The notice required by paragraph (c)(1)(i) of this section shall set forth the following information:

(i) The date of the notice;

(ii) The servicer's name and mailing address;

(iii) The borrower's name and mailing address;

(iv) A statement that requests the borrower to provide hazard insurance information for the borrower's property and identifies the property by its physical address;

(v) A statement that:

(A) The borrower's hazard insurance is expiring, has expired, or provides insufficient coverage, as applicable;

(B) The servicer does not have evidence that the borrower has hazard insurance coverage past the expiration date or evidence that the borrower has hazard insurance that provides sufficient coverage, as applicable; and

(C) If applicable, identifies the type of hazard insurance for which the servicer lacks evidence of coverage;

(vi) A statement that hazard insurance is required on the borrower's property, and that the servicer has purchased or will purchase, as applicable, such insurance at the borrower's expense;

(vii) A statement requesting the borrower to promptly provide the servicer with insurance information;

(viii) A description of the requested insurance information and how the borrower may provide such information, and if applicable, a statement that the requested information must be in writing;

(ix) A statement that insurance the servicer has purchased or purchases:

(A) May cost significantly more than hazard insurance purchased by the borrower;

(B) Not provide as much coverage as hazard insurance purchased by the borrower;

(x) The servicer's telephone number for borrower inquiries; and

(xi) If applicable, a statement advising the borrower to review additional information provided in the same transmittal.

(3) *Format.* A servicer must set the information required by paragraphs (c)(2)(iv), (vi), and (ix)(A) and (B) in bold text, except that the information about the physical address of the borrower's property required by paragraph (c)(2)(iv) of this section may be set in regular text. A servicer may use form MS-3A in appendix MS-3 of 12 CFR Part 1024, Subpart C (relating to mortgage servicing) to comply with the requirements of paragraphs (c)(1)(i) and (2) of this section.

(4) *Additional information.* Except for the mortgage loan account number, a servicer may not include any information other than information required by paragraph (c)(2) of this section in the written notice required by paragraph (c)(1)(i) of this section. However, a servicer may provide such additional information to a borrower on separate pieces of paper in the same transmittal.

(d) *Reminder notice.*

(1) *In general.* The notice required by paragraph (c)(1)(ii) of this section shall be delivered to the borrower or placed in the mail at least 15 days before a servicer assesses on a borrower a premium charge or fee related to force-placed insurance. A servicer may not deliver to a borrower or place in the mail the notice required by paragraph (c)(1)(ii) of this section until at least 30 days after delivering to the borrower or placing in the mail the written notice required by paragraph (c)(1)(i) of this section.

(2) *Content of the reminder notice.*

(i) *Servicer receiving no insurance information.* A servicer that receives no hazard insurance information after delivering to the borrower or placing in the mail the notice required by paragraph (c)(1)(i) of this section must set forth in the notice required by paragraph (c)(1)(ii) of this section:

(A) The date of the notice;

(B) A statement that the notice is the second and final notice;

(C) The information required by paragraphs (c)(2)(ii) through (xi) of this section; and

(D) The cost of the force-placed insurance, stated as an annual premium, except if a servicer does not know the cost of force-placed insurance, a reasonable estimate shall be disclosed and identified as such.

(ii) *Servicer lacking evidence of continuous coverage.* A servicer that has received hazard insurance information after delivering to a borrower or placing in the mail the notice required by paragraph (c)(1)(i) of this section, but has not received, from the borrower or otherwise, evi-

dence demonstrating that the borrower has had sufficient hazard insurance coverage in place continuously, must set forth in the notice required by paragraph (c)(1)(ii) of this section the following information:

(A) The date of the notice;

(B) The information required by paragraphs (c)(2)(ii) through (iv) and (ix) through (xi) and (d)(2)(i)(B) and (D) of this section;

(C) A statement that the servicer has received the hazard insurance information that the borrower provided;

(D) A statement that requests the borrower to provide the information that is missing;

(E) A statement that the borrower will be charged for insurance the servicer has purchased or purchases for the period of time during which the servicer is unable to verify coverage;

(3) *Format.* A servicer must set the information required by paragraphs (d)(2)(i)(B) and (D) of this section in bold text. The requirements of paragraph (c)(3) of this section apply to the information required by paragraph (d)(2)(i)(C) of this section. A servicer may use form MS-3B in appendix MS-3 of 12 CFR Part 1024, Subpart C to comply with the requirements of paragraphs (d)(1) and (d)(2)(i) of this section. A servicer may use form MS-3C in appendix MS-3 of 12 CFR Part 1024, Subpart C to comply with the requirements of paragraphs (d)(1) and (d)(2)(ii) of this section.

(4) *Additional information.* Except for the borrower's mortgage loan account number, a servicer may not include any information other than information required by paragraph (d)(2)(i) or (ii) of this section, as applicable, in the written notice required by paragraph (c)(1)(ii) of this section. However, a servicer may provide such additional information to a borrower on separate pieces of paper in the same transmittal.

(5) *Updating notice with borrower information.* If a servicer receives new information about a borrower's hazard insurance after a written notice required by paragraph (c)(1)(ii) of this section has been put into production, the servicer is not required to update such notice based on the new information so long as the notice was put into production a reasonable time prior to the servicer delivering the notice to the borrower or placing the notice in the mail.

(e) *Renewing or replacing force-placed insurance.*

(1) *In general.* Before a servicer assesses on a borrower a premium charge or fee related to renewing or replacing existing force-placed insurance, a servicer must:

(i) Deliver to the borrower or place in the mail a written notice containing the information set forth in paragraph (e)(2) of this section at least 45 days before assessing on a borrower such charge or fee; and

(ii) By the end of the 45-day period beginning on the date the written notice required by paragraph (e)(1)(i) of this section was delivered to the borrower or placed in the mail, not have received, from the borrower or otherwise, evidence demonstrating that the borrower has purchased hazard insurance coverage that complies with the loan contract's requirements to maintain hazard insurance.

(iii) *Charging a borrower before end of notice period.* Notwithstanding paragraphs (e)(1)(i) and (ii) of this section, if not prohibited by State or other applicable law, if a servicer has renewed or replaced existing force-placed insurance and receives evidence demonstrating that the borrower lacked insurance coverage for some period of time following the expiration of the existing force-placed insurance (including during the notice period prescribed by paragraph (e)(1) of this section), the servicer may, promptly upon receiving such evidence, assess on the borrower a premium charge or fee related to renewing or replacing existing force-placed insurance for that period of time.

(2) *Content of renewal notice.* The notice required by paragraph (e)(1)(i) of this section shall set forth the following information:

(i) The date of the notice;

(ii) The servicer's name and mailing address;

(iii) The borrower's name and mailing address;

(iv) A statement that requests the borrower to update the hazard insurance information for the borrower's property and identifies the borrower's property by its physical address;

(v) A statement that the servicer previously purchased insurance on the borrower's property and assessed the cost of the insurance to the borrower because the servicer did not have evidence that the borrower had hazard insurance coverage for the property;

(vi) A statement that:

(A) The insurance the servicer purchased previously has expired or is expiring, as applicable; and

(B) Because hazard insurance is required on the borrower's property, the servicer intends to maintain insurance on the property by renewing or replacing the insurance it previously purchased;

(vii) A statement informing the borrower:

(A) That insurance the servicer purchases may cost significantly more than hazard insurance purchased by the borrower;

(B) That such insurance may not provide as much coverage as hazard insurance purchased by the borrower; and

(C) The cost of the force-placed insurance, stated as an annual premium, except if a servicer does not know the cost of force-placed insurance, a reasonable estimate shall be disclosed and identified as such.

(viii) A statement that if the borrower purchases hazard insurance, the borrower should promptly provide the servicer with insurance information.

(ix) A description of the requested insurance information and how the borrower may provide such information, and if applicable, a statement that the requested information must be in writing;

(x) The servicer's telephone number for borrower inquiries; and

(xi) If applicable, a statement advising a borrower to review additional information provided in the same transmittal.

(3) *Format.* A servicer must set the information required by paragraphs (e)(2)(iv), (vi)(B), and (vii)(A) through (C) of this section in bold text, except that the information about the physical address of the borrower's property required by paragraph (e)(2)(iv) may be set in regular text. A servicer may use form MS-3D in appendix MS-3 of 12 CFR Part 1024, Subpart C to comply with the requirements of paragraphs (e)(1)(i) and (2) of this section.

(4) *Additional information.* Except for the borrower's mortgage loan account number, a servicer may not include any information other than information required by paragraph (e)(2) of this section in the written notice required by paragraph (e)(1) of this section. However, a servicer may provide such additional information to a borrower on separate pieces of paper in the same transmittal.

(5) *Frequency of renewal notices.* Before each anniversary of a servicer purchasing force-placed insurance on a borrower's property, the servicer shall deliver to the borrower or place in the mail the written notice required by paragraph (e)(1) of this section. A servicer is not required to provide the written notice required by paragraph (e)(1) of this section more than once a year.

(f) *Mailing the notices.* If a servicer mails a written notice required by paragraphs (c)(1)(i), (c)(1)(ii), or (e)(1) of this section, the servicer must use a class of mail not less than first-class mail.

(g) *Cancellation of force-placed insurance.* Within 15 days of receiving, from the borrower or otherwise, evidence demonstrating that the borrower has had in place hazard insurance coverage that complies with the loan contract's requirements to maintain hazard insurance, a servicer must:

(1) Cancel the force-placed insurance the servicer purchased to insure the borrower's property; and

(2) Refund to such borrower all force-placed insurance premium charges and related fees paid by such borrower for any period of overlapping insurance coverage and remove from the borrower's account all force-placed insurance charges and related fees for such period that the servicer has assessed to the borrower.

(h) *Limitations on force-placed insurance charges.*

(1) *In general.* Except for charges subject to State regulation as the business of insurance and charges authorized by the Flood Disaster Protection Act of 1973 (42 U.S.C.A. §§ 4001—4131), all charges related to force-placed insurance assessed to a borrower by or through the servicer must be bona fide and reasonable.

(2) *Bona fide and reasonable charge.* A bona fide and reasonable charge is a charge for a service actually performed that bears a reasonable relationship to the servicer's cost of providing the service, and is not otherwise prohibited by applicable law.

(i) *Relationship to Flood Disaster Protection Act of 1973.* If permitted by regulation under section 102(e) of the Flood Disaster Protection Act of 1973 (42 U.S.C.A. § 4012a(e)), a servicer subject to the requirements of this section may deliver to the borrower or place in the mail any notice required by this section and the notice required by section 102(e) of the Flood Disaster Protection Act of 1973 on separate pieces of paper in the same transmittal.

§ 59.10. General servicing policies, procedures, and requirements.

(a) *Reasonable policies and procedures.* A servicer shall maintain policies and procedures that are reasonably designed to achieve the objectives set forth in paragraph (b) of this section.

(b) *Objectives.*

(1) *Accessing and providing timely and accurate information.* The policies and procedures required by paragraph (a) of this section shall be reasonably designed to ensure that the servicer can:

(i) Provide accurate and timely disclosures to a borrower as required by this chapter or other applicable law;

(ii) Investigate, respond to, and, as appropriate, make corrections in response to complaints asserted by a borrower;

(iii) Provide a borrower with accurate and timely information and documents in response to the borrower's requests for information with respect to the borrower's mortgage loan;

(iv) Provide owners or assignees of mortgage loans with accurate and current information and documents about all mortgage loans they own;

(v) Submit documents or filings required for a foreclosure process, including documents or filings required by a court of competent jurisdiction, that reflect accurate and current information and that comply with applicable law; and

(vi)(A) Upon receiving notice of the death of a borrower or of any transfer of the property securing a mortgage loan, promptly facilitate communication with any potential or confirmed successors in interest regarding the property;

(B) Upon receiving notice of the existence of a potential successor in interest, promptly determine the documents the servicer reasonably requires to confirm that person's identity and ownership interest in the property and promptly provide to the potential successor in interest a description of those documents and how the person may submit a written request under § 59.8(i) (relating to requests for information) (including the appropriate address); and

(C) Upon the receipt of such documents, promptly make a confirmation determination and promptly notify the person, as applicable, that the servicer has confirmed the person's status, has determined that additional documents are required (and what those documents are), or has determined that the person is not a successor in interest.

(2) *Properly evaluating loss mitigation applications.* The policies and procedures required by paragraph (a) of this section shall be reasonably designed to ensure that the servicer can:

(i) Provide accurate information regarding loss mitigation options available to a borrower from the owner or assignee of the borrower's mortgage loan;

(ii) Identify with specificity all loss mitigation options for which borrowers may be eligible pursuant to any requirements established by an owner or assignee of the borrower's mortgage loan;

(iii) Provide prompt access to all documents and information submitted by a borrower in connection with a loss mitigation option to servicer personnel that are assigned to assist the borrower pursuant to § 59.12 (relating to continuity of contact);

(iv) Identify documents and information that a borrower is required to submit to complete a loss mitigation application and facilitate compliance with the notice required pursuant to § 59.13(b)(2)(i)(B) (relating to loss mitigation procedures); and

(v) Properly evaluate a borrower who submits an application for a loss mitigation option for all loss mitigation options for which the borrower may be eligible pursuant to any requirements established by the owner or assignee of the borrower's mortgage loan and, where applicable, in accordance with the requirements of § 59.13.

(vi) Promptly identify and obtain documents or information not in the borrower's control that the servicer requires to determine which loss mitigation options, if any, to offer the borrower in accordance with the requirements of § 59.13(c)(4).

(3) *Facilitating oversight of, and compliance by, service providers.* The policies and procedures required by paragraph (a) of this section shall be reasonably designed to ensure that the servicer can:

(i) Provide appropriate servicer personnel with access to accurate and current documents and information reflecting actions performed by service providers;

(ii) Facilitate periodic reviews of service providers, including by providing appropriate servicer personnel with documents and information necessary to audit compliance by service providers with the servicer's contractual obligations and applicable law; and

(iii) Facilitate the sharing of accurate and current information regarding the status of any evaluation of a borrower's loss mitigation application and the status of any foreclosure proceeding among appropriate servicer personnel, including any personnel assigned to a borrower's mortgage loan account as described in § 59.12, and appropriate service provider personnel, including service provider personnel responsible for handling foreclosure proceedings.

(4) *Facilitating transfer of information during servicing transfers.* The policies and procedures required by paragraph (a) of this section shall be reasonably designed to ensure that the servicer can:

(i) As a transferor servicer, timely transfer all information and documents in the possession or control of the servicer relating to a transferred mortgage loan to a transferee servicer in a form and manner that ensures the accuracy of the information and documents transferred and that enables a transferee servicer to comply with the terms of the transferee servicer's obligations to the owner or assignee of the mortgage loan and applicable law; and

(ii) As a transferee servicer, identify necessary documents or information that may not have been transferred by a transferor servicer and obtain such documents from the transferor servicer.

(iii) For the purposes of this paragraph (b)(4), transferee servicer means a servicer, including a master servicer or a subservicer, that performs or will perform servicing of a mortgage loan and transferor servicer means a servicer, including a master servicer or a subservicer, that transfers or will transfer the servicing of a mortgage loan.

(5) *Informing borrowers of the written error resolution and information request procedures.* The policies and procedures required by paragraph (a) of this section shall be reasonably designed to ensure that the servicer informs borrowers of the procedures for submitting written notices of error set forth in § 59.7 (relating to error resolution procedures) and written information requests set forth in § 59.8.

(c) *Standard requirements.*

(1) *Record retention.* A servicer shall retain records that document actions taken with respect to a borrower's mortgage loan account until one year after the date a mortgage loan is discharged or servicing of a mortgage loan is transferred by the servicer to a transferee servicer.

(2) *Servicing file.* A servicer shall maintain the following documents and data on each mortgage loan account serviced by the servicer in a manner that facilitates compiling such documents and data into a servicing file within five days:

(i) A schedule of all transactions credited or debited to the mortgage loan account, including any escrow account as defined in 12 CFR 1024.17(b) (relating to escrow accounts) and any suspense account;

(ii) A copy of the security instrument that establishes the lien securing the mortgage loan;

(iii) Any notes created by servicer personnel reflecting communications with the borrower about the mortgage loan account;

(iv) To the extent applicable, a report of the data fields relating to the borrower's mortgage loan account created by the servicer's electronic systems in connection with servicing practices; and

(v) Copies of any information or documents provided by the borrower to the servicer in accordance with the procedures set forth in § 59.7 or § 59.13.

§ 59.11. Early intervention requirements for certain borrowers.

(a) *Live contact.* Except as otherwise provided in this section, a servicer shall establish or make good faith efforts to establish a live single point of contact with a delinquent borrower no later than the 36th day of a borrower's delinquency and again no later than 36 days after each payment due date so long as the borrower remains delinquent. Promptly after establishing live contact with a borrower, the servicer shall inform the borrower about the availability of loss mitigation options, if appropriate.

(b) *Written notice.*

(1) *Notice required.* Except as otherwise provided in this section, a servicer shall provide to a delinquent borrower a written notice with the information set forth in paragraph (b)(2) of this section no later than the 45th day of the borrower's delinquency and again no later than 45 days after each payment due date so long as the borrower remains delinquent. A servicer is not required to provide the written notice, however, more than once during any 180-day period. If a borrower is 45 days or more delinquent at the end of any 180-day period after the servicer has provided the written notice, a servicer must provide the written notice again no later than 180 days after the provision of the prior written notice. If a borrower is less than 45 days delinquent at the end of any 180-day period after the servicer has provided the written notice, a servicer must provide the written notice again no later than 45 days after the payment due date for which the borrower remains delinquent.

(2) *Content of the written notice.* The notice required by paragraph (b)(1) of this section shall include:

(i) A statement encouraging the borrower to contact the servicer;

(ii) The telephone number to access servicer personnel assigned pursuant to § 59.12(a) (relating to continuity of contact) and the servicer's mailing address;

(iii) If applicable, a statement providing a brief description of examples of loss mitigation options that may be available from the servicer;

(iv) If applicable, either application instructions or a statement informing the borrower how to obtain more information about loss mitigation options from the servicer; and

(v) The Web site to access either the Consumer Financial Protection Bureau list or the HUD list of homeownership counselors or counseling organizations, and the HUD toll-free telephone number to access homeownership counselors or counseling organizations.

(3) *Model clauses.* Model clauses MS-4(A), MS-4(B), and MS-4(C), in appendix MS-4 to 12 CFR Part 1024, Subpart C (relating to mortgage servicing) may be used to comply with the requirements of this paragraph (b).

(c) *Borrowers in bankruptcy.*

(1) *Partial exemption.* While any borrower on a mortgage loan is a debtor in bankruptcy under title 11 of the *United States Code*, a servicer, with regard to that mortgage loan:

(i) Is exempt from the requirements of paragraph (a) of this section;

(ii) Is exempt from the requirements of paragraph (b) of this section if no loss mitigation option is available, or if any borrower on the mortgage loan has provided a notification pursuant to section 805(c) of the Fair Debt Collection Practices Act (FDCPA) (15 U.S.C.A. § 1692c(c)) with respect to that mortgage loan as referenced in paragraph (d) of this section; and

(iii) If the conditions of paragraph (c)(1)(ii) of this section are not met, must comply with the requirements of paragraph (b) of this section, as modified by this paragraph (c)(1)(iii):

(A) If a borrower is delinquent when the borrower becomes a debtor in bankruptcy, a servicer must provide the written notice required by paragraph (b) of this section not later than the 45th day after the borrower files a bankruptcy petition under title 11 of the *United States Code*. If the borrower is not delinquent when the borrower files a bankruptcy petition, but subsequently becomes delinquent while a debtor in bankruptcy, the servicer must provide the written notice not later than the 45th day of the borrower's delinquency. A servicer must comply with these timing requirements regardless of whether the servicer provided the written notice in the preceding 180-day period.

(B) The written notice required by paragraph (b) of this section may not contain a request for payment.

(C) A servicer is not required to provide the written notice required by paragraph (b) of this section more than once during a single bankruptcy case.

(2) *Resuming compliance.*

(i) Except as provided in paragraph (c)(2)(ii) of this section, a servicer that was exempt from paragraphs (a) and (b) of this section pursuant to paragraph (c)(1) of this section must resume compliance with paragraphs (a) and (b) of this section after the next payment due date that follows the earliest of the following events:

(A) The bankruptcy case is dismissed;

(B) The bankruptcy case is closed; and

(C) The borrower reaffirms personal liability for the mortgage loan.

(ii) With respect to a mortgage loan for which the borrower has discharged personal liability pursuant to 11 U.S.C.A. §§ 727, 1141, 1228, or 1328, a servicer:

(A) Is not required to resume compliance with paragraph (a) of this section; and

(B) Must resume compliance with paragraph (b) of this section if the borrower has made any partial or periodic payment on the mortgage loan after the commencement of the borrower's bankruptcy case.

(d) *Fair Debt Collection Practices Act—partial exemption.* With regard to a mortgage loan for which any borrower has provided a notification pursuant to section 805(c) of the Fair Debt Collection Practices Act (FDCPA) (15 U.S.C.A. § 1692c(c)), a servicer subject to the FDCPA with respect to that borrower's loan:

(1) Is exempt from the requirements of paragraph (a) of this section;

(2) Is exempt from the requirements of paragraph (b) of this section if no loss mitigation option is available, or while any borrower on that mortgage loan is a debtor in bankruptcy under title 11 of the *United States Code* as referenced in paragraph (c) of this section; and

(3) If the conditions of paragraph (d)(2) of this section are not met, must comply with the requirements of paragraph (b) of this section, as modified by this paragraph (d)(3):

(i) In addition to the information required pursuant to paragraph (b)(2) of this section, the written notice must include a statement that the servicer may or intends to invoke its specified remedy of foreclosure. Model clause MS-4(D) in appendix MS-4 12 CFR Part 1024, Subpart C may be used to comply with this requirement.

(ii) The written notice may not contain a request for payment.

(iii) A servicer is prohibited from providing the written notice more than once during any 180-day period. If a borrower is 45 days or more delinquent at the end of any 180-day period after the servicer has provided the written notice, a servicer must provide the written notice again no later than 190 days after the provision of the prior written notice. If a borrower is less than 45 days delinquent at the end of any 180-day period after the servicer has provided the written notice, a servicer must provide the written notice again no later than 45 days after the payment due date for which the borrower remains delinquent or 190 days after the provision of the prior written notice, whichever is later.

§ 59.12. Continuity of contact.

(a) *In general.* A servicer shall maintain policies and procedures that are reasonably designed to achieve the following objectives:

(1) Assign personnel to a delinquent borrower by the time the servicer provides the borrower with the written notice required by § 59.11(b) (relating to early intervention requirements for certain borrowers), but in any event, not later than the 45th day of the borrower's delinquency.

(2) Make available to a delinquent borrower, via telephone, personnel assigned to the borrower as described in paragraph (a)(1) of this section to respond to the borrower's inquiries, and as applicable, assist the borrower with available loss mitigation options until the borrower has made, without incurring a late charge, two consecutive mortgage payments in accordance with the terms of a permanent loss mitigation agreement.

(3) If a borrower contacts the personnel assigned to the borrower as described in paragraph (a)(1) of this section and does not immediately receive a live response from such personnel, ensure that the servicer can provide a live response in a timely manner.

(b) *Functions of servicer personnel.* A servicer shall maintain policies and procedures reasonably designed to

ensure that servicer personnel assigned to a delinquent borrower as described in paragraph (a) of this section perform the following functions:

(1) Provide the borrower with accurate information about:

(i) Loss mitigation options available to the borrower from the owner or assignee of the borrower's mortgage loan;

(ii) Actions the borrower must take to be evaluated for such loss mitigation options, including actions the borrower must take to submit a complete loss mitigation application, as defined in § 59.13 (relating to loss mitigation procedures), and, if applicable, actions the borrower must take to appeal the servicer's determination to deny a borrower's loss mitigation application for any trial or permanent loan modification program offered by the servicer;

(iii) The status of any loss mitigation application that the borrower has submitted to the servicer;

(iv) The circumstances under which the servicer may make a referral to foreclosure; and

(v) Applicable loss mitigation deadlines established by an owner or assignee of the borrower's mortgage loan or § 59.13.

(2) Retrieve, in a timely manner:

(i) A complete record of the borrower's payment history; and

(ii) All written information the borrower has provided to the servicer, and if applicable, to prior servicers, in connection with a loss mitigation application;

(3) Provide the documents and information identified in paragraph (b)(2) of this section to other persons required to evaluate a borrower for loss mitigation options made available by the servicer, if applicable; and

(4) Provide a delinquent borrower with information about the procedures for submitting a notice of error pursuant to § 59.7 (relating to error resolution procedures) or an information request pursuant to § 59.8 (relating to requests for information).

§ 59.13. Loss mitigation procedures.

(a) *Enforcement and limitations.* A borrower may enforce the provisions of this section pursuant to section 6(f) of Real Estate Settlement Procedures Act of 1974 (12 U.S.C.A. § 2605(f)). Nothing in this Section imposes a duty on a servicer to provide any borrower with any specific loss mitigation option. Nothing in this Section should be construed to create a right for a borrower to enforce the terms of any agreement between a servicer and the owner or assignee of a mortgage loan, including with respect to the evaluation for, or offer of, any loss mitigation option or to eliminate any such right that may exist pursuant to applicable law.

(b) *Receipt of a loss mitigation application.*

(1) *Complete loss mitigation application.* A complete loss mitigation application means an application in connection with which a servicer has received all the information that the servicer requires from a borrower in evaluating applications for the loss mitigation options available to the borrower. A servicer shall exercise reasonable diligence in obtaining documents and information to complete a loss mitigation application.

(2) *Review of loss mitigation application submission.*

(i) *Requirements.* If a servicer receives a loss mitigation application 45 days or more before a foreclosure sale, a servicer shall:

(A) Promptly upon receipt of a loss mitigation application, review the loss mitigation application to determine if the loss mitigation application is complete; and

(B) Notify the borrower in writing within 5 days (excluding legal public holidays, Saturdays, and Sundays) after receiving the loss mitigation application that the servicer acknowledges receipt of the loss mitigation application and that the servicer has determined that the loss mitigation application is either complete or incomplete. If a loss mitigation application is incomplete, the notice shall state the additional documents and information the borrower must submit to make the loss mitigation application complete and the applicable date pursuant to paragraph (b)(2)(ii) of this section. The notice to the borrower shall include a statement that the borrower should consider contacting servicers of any other mortgage loans secured by the same property to discuss available loss mitigation options.

(ii) *Time period disclosure.* The notice required pursuant to paragraph (b)(2)(i)(B) of this section must include a reasonable date by which the borrower should submit the documents and information necessary to make the loss mitigation application complete.

(3) *Determining protections.* To the extent a determination of whether protections under this section apply to a borrower is made on the basis of the number of days between when a complete loss mitigation application is received and when a foreclosure sale occurs, such determination shall be made as of the date a complete loss mitigation application is received.

(c) *Evaluation of loss mitigation applications.*

(1) *Complete loss mitigation application.* Except as provided in paragraph (c)(4)(ii) of this section, if a servicer receives a complete loss mitigation application more than 37 days before a foreclosure sale, then, within 30 days of receiving the complete loss mitigation application, a servicer shall:

(i) Evaluate the borrower for all loss mitigation options available to the borrower; and

(ii) Provide the borrower with a notice in writing stating the servicer's determination of which loss mitigation options, if any, it will offer to the borrower on behalf of the owner or assignee of the mortgage. The servicer shall include in this notice the amount of time the borrower has to accept or reject an offer of a loss mitigation program as provided for in paragraph (e) of this section, if applicable, and a notification, if applicable, that the borrower has the right to appeal the denial of any loan modification option as well as the amount of time the borrower has to file such an appeal and any requirements for making an appeal, as provided for in paragraph (h) of this section.

(2) *Incomplete loss mitigation application evaluation.*

(i) *In general.* Except as set forth in paragraphs (c)(2)(ii) and (iii) of this section, a servicer shall not evade the requirement to evaluate a complete loss mitigation application for all loss mitigation options available to the borrower by offering a loss mitigation option based upon an evaluation of any information provided by a borrower in connection with an incomplete loss mitigation application.

(ii) *Reasonable time.* Notwithstanding paragraph (c)(2)(i) of this section, if a servicer has exercised reasonable diligence in obtaining documents and information to complete a loss mitigation application, but a loss mitigation application remains incomplete for a significant period of time under the circumstances without further progress by a borrower to make the loss mitigation application complete, a servicer may, in its discretion, evaluate an incomplete loss mitigation application and offer a borrower a loss mitigation option. Any such evaluation and offer is not subject to the requirements of this section and shall not constitute an evaluation of a single complete loss mitigation application for purposes of paragraph (i) of this section.

(iii) *Short-term loss mitigation options.* Notwithstanding paragraph (c)(2)(i) of this section, a servicer may offer a short-term payment forbearance program or a short-term repayment plan to a borrower based upon an evaluation of an incomplete loss mitigation application. Promptly after offering a payment forbearance program or a repayment plan under this paragraph (c)(2)(iii), unless the borrower has rejected the offer, the servicer must provide the borrower a written notice stating the specific payment terms and duration of the program or plan, that the servicer offered the program or plan based on an evaluation of an incomplete application, that other loss mitigation options may be available, and that the borrower has the option to submit a complete loss mitigation application to receive an evaluation for all loss mitigation options available to the borrower regardless of whether the borrower accepts the program or plan. A servicer shall not make the first notice or filing required by applicable law for any judicial or non-judicial foreclosure process, and shall not move for foreclosure judgment or order of sale or conduct a foreclosure sale, if a borrower is performing pursuant to the terms of a payment forbearance program or repayment plan offered pursuant to this paragraph (c)(2)(iii). A servicer may offer a short-term payment forbearance program in conjunction with a short-term repayment plan pursuant to this paragraph (c)(2)(iii).

(iv) *Facially complete application.* A loss mitigation application shall be considered facially complete when a borrower submits all the missing documents and information as stated in the notice required under paragraph (b)(2)(i)(B) of this section, when no additional information is requested in such notice, or once the servicer is required to provide the borrower a written notice pursuant to paragraph (c)(3)(i) of this section. If the servicer later discovers that additional information or corrections to a previously submitted document are required to complete the application, the servicer must promptly request the missing information or corrected documents and treat the application as complete for the purposes of paragraphs (f)(2) and (g) of this section until the borrower is given a reasonable opportunity to complete the application. If the borrower completes the application within this period, the application shall be considered complete as of the date it first became facially complete, for the purposes of paragraphs (d), (e), (f)(2), (g), and (h) of this section, and as of the date the application was actually complete for the purposes of this paragraph (c). A servicer that complies with this paragraph (c)(2)(iv) will be deemed to have fulfilled its obligation to provide an accurate notice under paragraph (b)(2)(i)(B) of this section.

(3) *Notice of complete application.*

(i) Except as provided in paragraph (c)(3)(ii) of this section, within 5 days (excluding legal public holidays, Saturdays, and Sundays) after receiving a borrower's complete loss mitigation application, a servicer shall provide the borrower a written notice that sets forth the following information:

(A) That the loss mitigation application is complete;

(B) The date the servicer received the complete application;

(C) That the servicer expects to complete its evaluation within 30 days of the date it received the complete application;

(D) That the borrower is entitled to certain foreclosure protections because the servicer has received the complete application, and, as applicable, either:

(1) If the servicer has not made the first notice or filing required by applicable law for any judicial or non-judicial foreclosure process, that the servicer cannot make the first notice or filing required to commence or initiate the foreclosure process under applicable law before evaluating the borrower's complete application; or

(2) If the servicer has made the first notice or filing required by applicable law for any judicial or non-judicial foreclosure process, that the servicer has begun the foreclosure process, and that the servicer cannot conduct a foreclosure sale before evaluating the borrower's complete application;

(E) That the servicer may need additional information at a later date to evaluate the application, in which case the servicer will request that information from the borrower and give the borrower a reasonable opportunity to submit it, the evaluation process may take longer, and the foreclosure protections could end if the servicer does not receive the information as requested; and

(F) That the borrower may be entitled to additional protections under State or Federal law.

(ii) A servicer is not required to provide a notice pursuant to paragraph (c)(3)(i) of this section if:

(A) The servicer has already provided the borrower a notice under paragraph (b)(2)(i)(B) of this section informing the borrower that the application is complete and the servicer has not subsequently requested additional information or a corrected version of a previously submitted document from the borrower pursuant to paragraph (c)(2)(iv) of this section;

(B) The application was not complete or facially complete more than 37 days before a foreclosure sale; or

(C) The servicer has already provided the borrower a notice regarding the application under paragraph (c)(1)(ii) of this section.

(4) *Information not in the borrower's control.*

(i) *Reasonable diligence.* If a servicer requires documents or information not in the borrower's control to determine which loss mitigation options, if any, it will offer to the borrower, the servicer must exercise reasonable diligence in obtaining such documents or information.

(ii) *Effect in case of delay.* (A)(1) Except as provided in paragraph (c)(4)(ii)(A)(2) of this section, a servicer must not deny a complete loss mitigation application solely because the servicer lacks required documents or information not in the borrower's control.

(2) If a servicer has exercised reasonable diligence to obtain required documents or information from a party other than the borrower or the servicer, but the servicer

has been unable to obtain such documents or information for a significant period of time following the 30-day period identified in paragraph (c)(1) of this section, and the servicer, in accordance with applicable requirements established by the owner or assignee of the borrower's mortgage loan, is unable to determine which loss mitigation options, if any, it will offer the borrower without such documents or information, the servicer may deny the application and provide the borrower with a written notice in accordance with paragraph (c)(1)(ii) of this section. When providing the written notice in accordance with paragraph (c)(1)(ii) of this section, the servicer must also provide the borrower with a copy of the written notice required by paragraph (c)(4)(ii)(B) of this section.

(B) If a servicer is unable to make a determination within the 30-day period identified in paragraph (c)(1) of this section as to which loss mitigation options, if any, it will offer to the borrower because the servicer lacks required documents or information from a party other than the borrower or the servicer, the servicer must, within such 30-day period or promptly thereafter, provide the borrower a written notice, informing the borrower:

(1) That the servicer has not received documents or information not in the borrower's control that the servicer requires to determine which loss mitigation options, if any, it will offer to the borrower on behalf of the owner or assignee of the mortgage;

(2) Of the specific documents or information that the servicer lacks;

(3) That the servicer has requested such documents or information; and

(4) That the servicer will complete its evaluation of the borrower for all available loss mitigation options promptly upon receiving the documents or information.

(C) If a servicer must provide a notice required by paragraph (c)(4)(ii)(B) of this section, the servicer must not provide the borrower a written notice pursuant to paragraph (c)(1)(ii) of this section until the servicer receives the required documents or information referenced in paragraph (c)(4)(ii)(B)(2) of this section, except as provided in paragraph (c)(4)(ii)(A)(2) of this section. Upon receiving such required documents or information, the servicer must promptly provide the borrower with the written notice pursuant to paragraph (c)(1)(ii) of this section.

(d) *Denial of loan modification options.* If a borrower's complete loss mitigation application is denied for any trial or permanent loan modification option available to the borrower pursuant to paragraph (c) of this section, a servicer shall state in the notice sent to the borrower pursuant to paragraph (c)(1)(ii) of this section the specific reason or reasons for the servicer's determination for each such trial or permanent loan modification option and, if applicable, that the borrower was not evaluated on other criteria.

(e) *Borrower response.*

(1) *In general.* Subject to paragraphs (e)(2)(ii) and (iii) of this section, if a complete loss mitigation application is received 90 days or more before a foreclosure sale, a servicer may require that a borrower accept or reject an offer of a loss mitigation option no earlier than 14 days after the servicer provides the offer of a loss mitigation option to the borrower. If a complete loss mitigation application is received less than 90 days before a foreclosure sale, but more than 37 days before a foreclosure sale, a servicer may require that a borrower accept or reject an offer of a loss mitigation option no earlier than 7 days after the servicer provides the offer of a loss mitigation option to the borrower.

(2) *Rejection.*

(i) *In general.* Except as set forth in paragraphs (e)(2)(ii) and (iii) of this section, a servicer may deem a borrower that has not accepted an offer of a loss mitigation option within the deadline established pursuant to paragraph (e)(1) of this section to have rejected the offer of a loss mitigation option.

(ii) *Trial Loan Modification Plan.* A borrower who does not satisfy the servicer's requirements for accepting a trial loan modification plan, but submits the payments that would be owed pursuant to any such plan within the deadline established pursuant to paragraph (e)(1) of this section, shall be provided a reasonable period of time to fulfill any remaining requirements of the servicer for acceptance of the trial loan modification plan beyond the deadline established pursuant to paragraph (e)(1) of this section.

(iii) *Interaction with appeal process.* If a borrower makes an appeal pursuant to paragraph (h) of this section, the borrower's deadline for accepting a loss mitigation option offered pursuant to paragraph (c)(1)(ii) of this section shall be extended until 14 days after the servicer provides the notice required pursuant to paragraph (h)(4) of this section.

(f) *Prohibition on foreclosure referral.*

(1) *Pre-foreclosure review period.* A servicer shall not make the first notice or filing required by applicable law for any judicial or non-judicial foreclosure process unless:

(i) A borrower's mortgage loan obligation is more than 120 days delinquent;

(ii) The foreclosure is based on a borrower's violation of a due-on-sale clause; or

(iii) The servicer is joining the foreclosure action of a superior or subordinate lienholder.

(2) *Application received before foreclosure referral.* If a borrower submits a complete loss mitigation application during the pre-foreclosure review period set forth in paragraph (f)(1) of this section or before a servicer has made the first notice or filing required by applicable law for any judicial or non-judicial foreclosure process, a servicer shall not make the first notice or filing required by applicable law for any judicial or non-judicial foreclosure process unless:

(i) The servicer has sent the borrower a notice pursuant to paragraph (c)(1)(ii) of this section that the borrower is not eligible for any loss mitigation option and the appeal process in paragraph (h) of this section is not applicable, the borrower has not requested an appeal within the applicable time period for requesting an appeal, or the borrower's appeal has been denied;

(ii) The borrower rejects all loss mitigation options offered by the servicer; or

(iii) The borrower fails to perform under an agreement on a loss mitigation option.

(g) *Prohibition on foreclosure sale.* If a borrower submits a complete loss mitigation application after a servicer has made the first notice or filing required by applicable law for any judicial or non-judicial foreclosure process but more than 37 days before a foreclosure sale, a servicer shall not move for foreclosure judgment or order of sale, or conduct a foreclosure sale, unless:

(1) The servicer has sent the borrower a notice pursuant to paragraph (c)(1)(ii) of this section that the borrower is not eligible for any loss mitigation option and the appeal process in paragraph (h) of this section is not applicable, the borrower has not requested an appeal within the applicable time period for requesting an appeal, or the borrower's appeal has been denied;

(2) The borrower rejects all loss mitigation options offered by the servicer; or

(3) The borrower fails to perform under an agreement on a loss mitigation option.

(h) *Appeal process.*

(1) *Appeal process required for loan modification denials.* If a servicer receives a complete loss mitigation application 90 days or more before a foreclosure sale or during the period set forth in paragraph (f) of this section, a servicer shall permit a borrower to appeal the servicer's determination to deny a borrower's loss mitigation application for any trial or permanent loan modification program available to the borrower.

(2) *Deadlines.* A servicer shall permit a borrower to make an appeal within 14 days after the servicer provides the offer of a loss mitigation option to the borrower pursuant to paragraph (c)(1)(ii) of this section.

(3) *Independent evaluation.* An appeal shall be reviewed by different personnel than those responsible for evaluating the borrower's complete loss mitigation application.

(4) *Appeal determination.* Within 30 days of a borrower making an appeal, the servicer shall provide a notice to the borrower stating the servicer's determination of whether the servicer will offer the borrower a loss mitigation option based upon the appeal and, if applicable, how long the borrower has to accept or reject such an offer or a prior offer of a loss mitigation option. A servicer may require that a borrower accept or reject an offer of a loss mitigation option after an appeal no earlier than 14 days after the servicer provides the notice to a borrower. A servicer's determination under this paragraph is not subject to any further appeal.

(i) *Duplicative requests.* A servicer must comply with the requirements of this section for a borrower's loss mitigation application, unless the servicer has previously complied with the requirements of this section for a complete loss mitigation application submitted by the borrower and the borrower has been delinquent at all times since submitting the prior complete application.

(j) *Small servicer requirements.* A small servicer shall be subject to the prohibition on foreclosure referral in paragraph (f)(1) of this section. A small servicer shall not make the first notice or filing required by applicable law for any judicial or non-judicial foreclosure process and shall not move for foreclosure judgment or order of sale, or conduct a foreclosure sale, if a borrower is performing pursuant to the terms of an agreement on a loss mitigation option.

(k) *Servicing transfers.*

(1) *In general.*

(i) *Timing of compliance.* Except as provided in paragraphs (k)(2) through (4) of this section, if a transferee servicer acquires the servicing of a mortgage loan for which a loss mitigation application is pending as of the transfer date, the transferee servicer must comply with the requirements of this section for that loss mitigation application within the timeframes that were applicable to the transferor servicer based on the date the transferor servicer received the loss mitigation application. All rights and protections under paragraphs (c) through (h) of this section to which a borrower was entitled before a transfer continue to apply notwithstanding the transfer.

(ii) *Transfer date defined.* For purposes of this paragraph (k), the transfer date is the date on which the transferee servicer will begin accepting payments relating to the mortgage loan, as disclosed on the notice of transfer of loan servicing pursuant to § 59.5(b)(4)(iv) (relating to mortgage servicing transfers).

(2) *Acknowledgment notices.*

(i) *Transferee servicer timeframes.* If a transferee servicer acquires the servicing of a mortgage loan for which the period to provide the notice required by paragraph (b)(2)(i)(B) of this section has not expired as of the transfer date and the transferor servicer has not provided such notice, the transferee servicer must provide the notice within 10 days (excluding legal public holidays, Saturdays, and Sundays) of the transfer date.

(ii) *Prohibitions.* A transferee servicer that must provide the notice required by paragraph (b)(2)(i)(B) of this section under this paragraph (k)(2):

(A) Shall not make the first notice or filing required by applicable law for any judicial or non-judicial foreclosure process until a date that is after the reasonable date disclosed to the borrower pursuant to paragraph (b)(2)(ii) of this section, notwithstanding paragraph (f)(1) of this section. For purposes of paragraph (f)(2) of this section, a borrower who submits a complete loss mitigation application on or before the reasonable date disclosed to the borrower pursuant to paragraph (b)(2)(ii) of this section shall be treated as having done so during the pre-foreclosure review period set forth in paragraph (f)(1) of this section.

(B) Shall comply with paragraphs (c), (d), and (g) of this section if the borrower submits a complete loss mitigation application to the transferee or transferor servicer 37 or fewer days before the foreclosure sale but on or before the reasonable date disclosed to the borrower pursuant to paragraph (b)(2)(ii) of this section.

(3) *Complete loss mitigation applications pending at transfer.* If a transferee servicer acquires the servicing of a mortgage loan for which a complete loss mitigation application is pending as of the transfer date, the transferee servicer must comply with the applicable requirements of paragraphs (c)(1) and (4) of this section within 30 days of the transfer date.

(4) *Applications subject to appeal process.* If a transferee servicer acquires the servicing of a mortgage loan for which an appeal of a transferor servicer's determination pursuant to paragraph (h) of this section has not been resolved by the transferor servicer as of the transfer date or is timely filed after the transfer date, the transferee servicer must make a determination on the appeal if it is able to do so or, if it is unable to do so, must treat the appeal as a pending complete loss mitigation application.

(i) *Determining appeal.* If a transferee servicer is required under this paragraph (k)(4) to make a determination on an appeal, the transferee servicer must complete the determination and provide the notice required by paragraph (h)(4) of this section within 30 days of the transfer date or 30 days of the date the borrower made the appeal, whichever is later.

(ii) *Servicer unable to determine appeal.* A transferee servicer that is required to treat a borrower's appeal as a

pending complete loss mitigation application under this paragraph (k)(4) must comply with the requirements of this section for such application, including evaluating the borrower for all loss mitigation options available to the borrower from the transferee servicer. For purposes of paragraph (c) or (k)(3) of this section, as applicable, such a pending complete loss mitigation application shall be considered complete as of the date the appeal was received by the transferor servicer or the transferee servicer, whichever occurs first. For purposes of paragraphs (e) through (h) of this section, the transferee servicer must treat such a pending complete loss mitigation application as facially complete under paragraph (c)(2)(iv) as of the date it was first facially complete or complete, as applicable, with respect to the transferor servicer.

(5) *Pending loss mitigation offers.* A transfer does not affect a borrower's ability to accept or reject a loss mitigation option offered under paragraph (c) or (h) of this section. If a transferee servicer acquires the servicing of a mortgage loan for which the borrower's time period under paragraph (e) or (h) of this section for accepting or rejecting a loss mitigation option offered by the transferor servicer has not expired as of the transfer date, the transferee servicer must allow the borrower to accept or reject the offer during the unexpired balance of the applicable time period.

§ 59.14. Coordination with existing law.

Nothing in this chapter pre-empts or alters the requirements of the act of January 30, 1974 (P.L. 13, No. 6) (Act 6) (41 P.S. §§ 101—605), and the regulations in Chapter 7 (relating to residential real estate transactions), or the requirements of the act of December 23, 1983 (P.L. 385, No. 91) (Act 91), the Homeowners' Emergency Mortgage Assistance Program and regulations in 12 Pa. Code Chapter 31 (relating to Housing Finance Agency). All mortgage servicing licensees must comply with Acts 6 and 91.

§ 59.15. Additional notices.

All licensees must comply with the notices required under the act of January 30, 1974 (P.L. 13, No. 6) (41 P.S. §§ 101—605), found in § 7.4 (relating to notice of intention to foreclose mortgage), and the notice required by the act of December 23, 1983 (P.L. 385, No. 91), the Homeowners' Emergency Mortgage Assistance Program regulation in 12 Pa. Code § 31.309 (relating to other program requirements).

[Pa.B. Doc. No. 18-666. Filed for public inspection April 27, 2018, 9:00 a.m.]

Title 25—ENVIRONMENTAL PROTECTION

ENVIRONMENTAL QUALITY BOARD

[25 PA. CODE CH. 109]

Disinfection Requirements Rule

The Environmental Quality Board (Board) amends Chapter 109 (relating to safe drinking water) to read as set forth in Annex A. This final-form rulemaking will strengthen water system requirements relating to microbial protection and disinfection requirements.

This final-form rulemaking also includes minor clarifications to ensure consistency with and obtain or maintain primary enforcement authority for several Federal rules promulgated by the United States Environmental Protection Agency (EPA), including the Stage 2 Disinfectants/Disinfection Byproducts Rule (Stage 2 DBPR) (71 FR 388 (January 4, 2006)), Long Term 2 Enhanced Surface Water Treatment Rule (LT2) (71 FR 654 (January 5, 2006)) and the Lead and Copper Rule Short-Term Revisions (LCRSTR) (72 FR 57782 (October 10, 2007)). Chapter 109 was previously amended to implement these Federal rules. See 39 Pa.B. 7279 (December 26, 2009), regarding Stage 2 DBPR and LT2, and 40 Pa.B. 7212 (December 18, 2010), regarding LCRSTR.

This final-form rulemaking will protect public health through a multiple barrier approach designed to guard against microbial contamination by ensuring the adequacy of treatment designed to inactivate microbial pathogens and by ensuring the integrity of drinking water distribution systems.

Safe drinking water is vital to maintaining healthy and sustainable communities. Proactively avoiding incidents such as waterborne disease outbreaks can prevent loss of life, reduce the incidents of illness and reduce health care costs. Proper investment in public water system infrastructure and operations helps ensure a continuous supply of safe drinking water, enables communities to plan and build future capacity for economic growth, and ensures their long-term sustainability.

The disinfectant residual requirements in the distribution system will apply to all 1,949 community water systems and those noncommunity water systems that have installed disinfection (746) for a total of 2,695 public water systems. These public water systems serve a total population of 11.3 million people.

The CT/log inactivation monitoring and reporting requirements will apply to all 353 filter plants which are operated by 319 water systems.

This final-form rulemaking was adopted by the Board at its meeting of December 12, 2017.

A. *Effective Date*

This final-form rulemaking is effective upon publication in the *Pennsylvania Bulletin*. Based on advisory committee and public comments, this final-form rulemaking includes the following deferred implementation dates:

- The submission of a sample siting plan is required 6 months after the effective date to allow time for development of the plan.

- The development of a nitrification control plan is required 1 year after the effective date.

- The amended monitoring, reporting and treatment technique requirements for the disinfectant residual in the distribution system are required 1 year after the effective date to allow additional time for operational changes and to effectively increase disinfectant residuals to 0.2 milligram per liter (mg/L) throughout the distribution system. If additional time is needed for capital improvements or to complete more substantial operational changes, a system-specific compliance schedule may be requested.

B. *Contact Persons*

For further information, contact Lisa D. Daniels, Director, Bureau of Safe Drinking Water, P.O. Box 8467, Rachel Carson State Office Building, Harrisburg, PA 17105-8467, (717) 787-9633; 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 at (800) 654-5984 (TDD users) or (800) 654-5988 (voice users).

C. *Statutory Authority*

This final-form rulemaking is being made under the authority of section 4 of the Pennsylvania Safe Drinking Water Act (SDWA) (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 section 1920-A of The Administrative Code of 1929 (71 P.S. § 510-20), which authorizes the Board to promulgate rules and regulations necessary for the performance of the work of the Department of Environmental Protection (Department).

D. *Background and Purpose*

Amendments to surface water treatment regulations regarding monitoring and reporting

This final-form rulemaking includes new monitoring and reporting requirements to ensure compliance with existing treatment techniques regarding log inactivation and CT requirements. Log inactivation is a measure of the amount of viable microorganisms that are rendered nonviable during disinfection processes. CT is the product of residual disinfectant concentration (C) and disinfectant contact time (T). The CT value is used to determine the levels of inactivation under various operating conditions.

Public water systems using surface water or groundwater under the direct influence of surface water (GUDI) sources have long been required to meet log inactivation and CT requirements for the inactivation of Giardia cysts and viruses. These existing treatment technique requirements are intended to ensure that water systems provide adequate and continuous disinfection for the inactivation of pathogens. The only way to ensure compliance with the existing treatment techniques is to measure and record the data elements that are needed to calculate CTs (that is, disinfectant residual, temperature, pH, flow and volume) and report the results.

This final-form rulemaking also clarifies and strengthens the minimum residual disinfectant level at the entry point by adding a zero to the minimum level (0.20 mg/L). Water suppliers will be required to maintain a residual that is equal to or greater than 0.20 mg/L. Currently, levels of 0.15 mg/L or higher round up to 0.2 mg/L and are considered in compliance. A level of 0.20 mg/L is necessary due to the importance of meeting CTs and of maintaining an adequate disinfectant residual in the water entering the distribution system. Also, this level of sensitivity is consistent with existing requirements for the Groundwater Rule (0.40 mg/L) as specified in § 109.1302(a)(2) (relating to treatment technique requirements). Finally, this level of sensitivity is achievable using current instrumentation for the measurement of disinfectant residuals.

Amendments to disinfectant residual requirements in the distribution system

This final-form rulemaking is intended to strengthen the distribution system disinfectant residual requirements by increasing the minimum residual in the distribution system to 0.2 mg/L free or total chlorine. The Department's previous disinfectant residual requirements for distribution systems had not been substantially updated since 1992 and required the maintenance of a detectable residual that was defined as 0.02 mg/L. The Department's previous treatment technique was not protective of public health because a residual of 0.02 mg/L is below the minimum reporting level of 0.1 mg/L and represents a false positive reading.

Maintenance of a disinfectant residual in the distribution system is:

- Required under the Federal Surface Water Treatment Rule (40 CFR Part 141, Subpart H (relating to filtration and disinfection)) for all systems using surface water and GUDI sources and under Chapter 109 for all community water systems and those noncommunity water systems that have installed disinfection.
- Designated by the EPA as the best available technology for compliance with both the Total Coliform Rule (TCR) and the Revised TCR.
- Considered an important element in a multiple barrier strategy aimed at maintaining the integrity of the distribution system and protecting public health.
- Intended to maintain the integrity of the distribution system by inactivating microorganisms in the distribution system, indicating distribution system upset and controlling biofilm growth.

The proposed rulemaking was published at 46 Pa.B. 857 (February 20, 2016). The preamble included numerous studies, reports and data in support of the minimum disinfectant residual of 0.2 mg/L in the distribution system. Additional studies, reports and data were reviewed for this final-form rulemaking.

The EPA published a Six-Year Review 3 (SYR 3) Technical Support Document for Microbial Contaminant Regulations in December 2016. The 1996 amendments to the Federal Safe Drinking Water Act (42 U.S.C.A. §§ 300f—300j-27) require the EPA to periodically review existing National primary drinking water regulations and determine which, if any, need to be revised. The purpose of the review, called the SYR, is to identify those regulations for which current health effects assessments, changes in technology, analytical methods, occurrence and exposure, implementation or other factors will improve or strengthen public health protection.

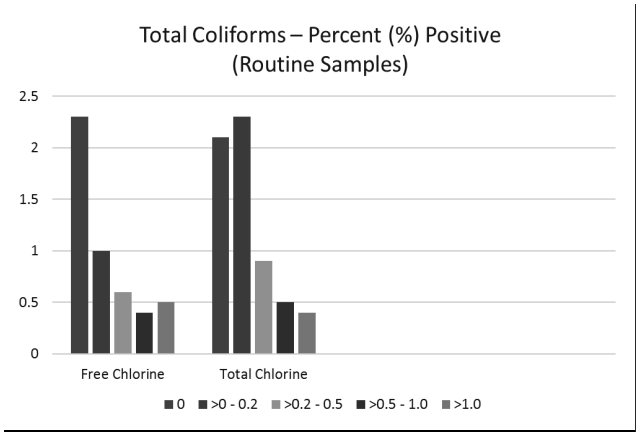
As part of the SYR 3, the EPA requested compliance monitoring data from states/tribes from 2006—2011 regarding the presence/absence of total coliforms, *E. coli* and fecal coliforms, and data for disinfectant residual levels in the distribution system. Microbial contaminant data from 34 states/tribes met the quality assurance/quality control criteria and are included in the SYR 3 microbial dataset.

Using the SYR 3 data, the EPA conducted an occurrence analysis of microbial indicators paired with disinfectant residual data that are measured at the same time and location. The five bins of free and total chlorine residual concentrations are as follows:

- Bin 1: Concentrations equal to 0 ("not detected or below detection limit")
- Bin 2: Concentrations >0 and ≤0.2 mg/L
- Bin 3: Concentrations >0.2 mg/L and ≤0.5 mg/L
- Bin 4: Concentrations >0.5 mg/L and ≤1.0 mg/L
- Bin 5: Concentrations >1.0 mg/L

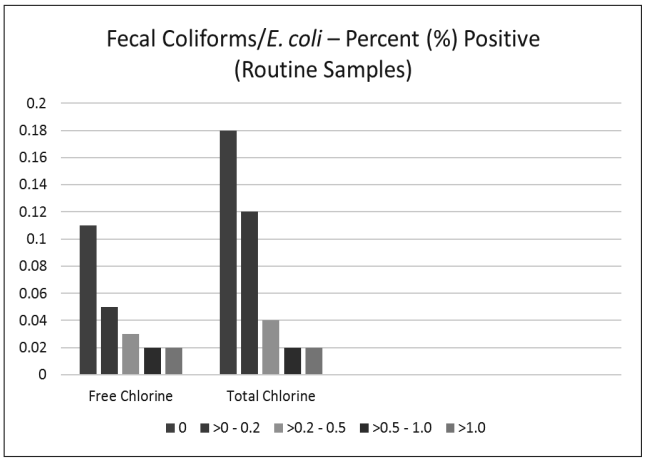
This represents the first National dataset available to evaluate microbial data as a function of disinfectant residual. More than 5 million samples were used for this analysis. The following figures represent a summary of the EPA's findings.

Figure 1. Summary of percent (%) positive routine total coliform samples for each bin of free and total chlorine residual concentrations (mg/L) from SYR 3 dataset (2006—2011). Dataset = 5.434 million samples.



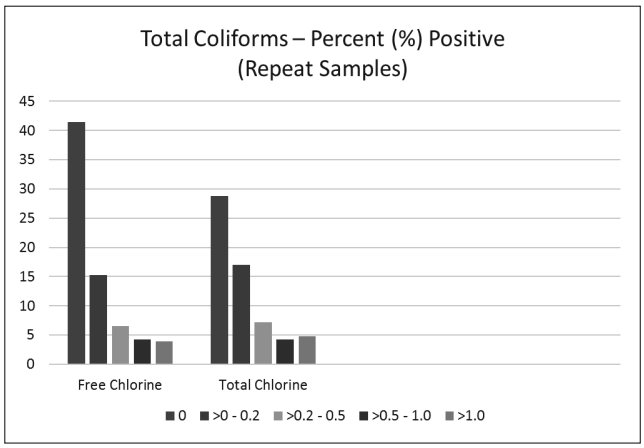
The EPA found that for routine samples with free chlorine, the highest percentage of samples that were positive occurred when free chlorine was equal to 0 mg/L ("not detected"). The percentages dropped by more than half for the >0—0.2 mg/L bin, then appeared to flatten when free chlorine was >0.2 mg/L. The total coliform positive rate was less than 1% when chlorine residuals were greater than or equal to 0.2 mg/L of free chlorine. The EPA found that the trend is similar for total chlorine routine samples except that for total coliforms, the percent of positive samples was slightly higher for the >0—0.2 mg/L bin than for the 0 mg/L bin.

Figure 2. Summary of percent (%) positive routine fecal coliform/E. coli samples for each bin of free and total chlorine residual concentrations (mg/L) from SYR 3 dataset (2006—2011). Dataset = 5.434 million samples.



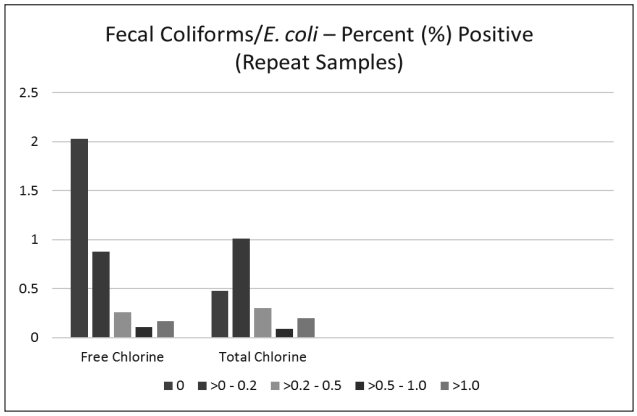
The EPA found that the trend is similar for fecal coliforms/*E.coli* positive samples. For total chlorine routine samples, percent positive fecal coliform/*E. coli* results for the >0.2 mg/L—0.5 mg/L bin were slightly higher than for the >0.5 mg/L—1.0 mg/L bin and the >1.0 bin, indicating a possible tailing off of the positive occurrence at 0.5 mg/L for total chlorine compared to tailing at 0.2 mg/L free chlorine.

Figure 3. Summary of percent (%) positive repeat total coliform samples for each bin of free and total chlorine residual concentrations (mg/L) from SYR 3 dataset (2006—2011). Dataset = 5.434 million samples.



As expected, the EPA found that the percentage of positive total coliform samples was much higher overall for repeat samples than for routine samples. More than 40% of repeat total coliform samples were positive when free chlorine was 0 mg/L, compared to a slightly lower repeat total coliform positive occurrence of ~29% when the total chlorine was 0 mg/L. Similar to routine samples, repeat total coliform positive occurrence declined as free and total chlorine residual increased, with a flattening of occurrence at 0.5 mg/L for both free and total chlorine residuals.

Figure 4. Summary of percent (%) positive repeat fecal coliform/E. coli samples for each bin of free and total chlorine residual concentrations (mg/L) from SYR 3 dataset (2006—2011). Dataset = 5.434 million samples.



The EPA found that the trend is similar for fecal coliforms/*E.coli* positive samples.

In summary, based on an assessment of 5.434 million samples, the EPA determined the following:

- A lower rate of both total coliform and fecal coliform/*E. coli* positives occurs as the free or total chlorine residual increased to higher levels.

- This relationship between chlorine residuals and occurrence of total coliform and fecal coliform/*E. coli*

positives was similar to results reported by the Colorado Department of Public Health and Environment (Ingels, 2015). In addition, this relationship is consistent with the findings of LeChevallier, et al. (1996) which stated that disinfectant residuals of 0.2 mg/L or more of free chlorine, or 0.5 mg/L or more of total chlorine, are associated with reduced levels of coliform bacteria. Both of these studies were previously discussed in the preamble of the proposed rulemaking.

• A detectable concentration of disinfectant residual in the distribution system may not be adequately protective of public health due to microbial pathogens. This is based on concerns about analytical methods and the potential for false positives (Wahman and Pressman, 2015). According to the EPA, maintaining a disinfectant residual above a set numerical value in the distribution system may improve public health protection from a variety of pathogens.

The EPA's concerns about the analytical methods and the potential for false positives is consistent with information provided by HACH©, the leading manufacturer of field test equipment. HACH© provided information to the Small Water Systems Technical Assistance Center (TAC) Board during the development of the proposed rulemaking that supported a minimum reporting level for a disinfectant residual of 0.1 mg/L. Details about this data were included in the preamble of the proposed rulemaking.

This determination is also consistent with a detection limit study that was performed by Aqua Pennsylvania in 2015 in conjunction with the Philadelphia Water Department and Corona Environmental Consulting. A summary of these experiments was included in Aqua Pennsylvania's public comments. According to Aqua Pennsylvania:

• Aqua Pennsylvania's laboratory conducted 199 determinations for total chlorine residual by the N,N Diethyl-1,4 Phenylenediamine Sulfate (DPD) method using the HACH Pocket Colorimeter II.

• Seven spike concentrations were used: 0.02 mg/L to 0.65 mg/L total chlorine.

• While method performance generally improved as spike concentration increased, performance did not clearly degrade at a specific concentration. The range of 0.1 mg/L to 0.2 mg/L was not unreasonable as a minimum reporting level.

• These data should be viewed as one piece of information on the topic. A much larger project and National discussion of a "true detectable residual" is needed.

To ensure that the Department's disinfectant residual requirements are adequately protective of public health and are achievable using currently available analytical methods, the Department has retained the level of 0.2 mg/L as a numeric standard. This level represents a standard that is above the minimum reporting level of 0.1 mg/L. Due to the EPA's rules of rounding for compliance determinations, disinfectant residual levels ≥0.15 mg/L will round up to 0.2 mg/L and will be in compliance with the numeric standard.

State data

At least 23 states have promulgated more stringent requirements when compared to the Commonwealth's previous standard of 0.02 mg/L. Nineteen of these states have disinfectant residual requirements that are ≥0.2 mg/L. The following table includes a summary of other states' requirements, including whether the state allows compliance with the heterotrophic plate count (HPC) standard of 500 as an alternative compliance criteria (ACC).

State	*Minimum Distribution System Residual (mg/L)*	*Allows HPC as ACC*
Alabama*	0.2 (free), 0.5 (total)	No
Colorado*	0.2 (free or total)	Yes
Delaware	0.3 (free)	No
Florida*	0.2 (free), 0.6 (total)	No
Georgia	0.2 (free)	Yes
Illinois*	0.2 (free), 0.5 (total)	No
Indiana	0.2 (free), 0.5 (total)	No
Iowa	0.3 (free), 1.5 (total)	Yes
Kansas*	0.2 (free), 1.0 (total)	No
Kentucky*	0.2 (free), 0.5 (total)	No
Louisiana*	0.5 (free or total)	No
Minnesota	0.1 (free or total)	No
Missouri	0.2 (total)	Yes
Nebraska	SW-0.2 (free), 0.25 or 0.5 (total); GW-0.1 (free)	Yes
Nevada	0.05 (free or total)	No
New Jersey*	0.05 (free or total)	Yes
North Carolina*	0.2 (free), 1.0 (total)	Yes
Ohio*	0.2 (free), 1.0 (total)	No
Oklahoma	0.2 (free), 1.0 (total)	No
Tennessee*	0.2 (free)	No
Texas*	0.2 (free), 0.5 (total)	No

State	*Minimum Distribution System Residual (mg/L)*	*Allows HPC as ACC*
Vermont	0.1 (free)	No
West Virginia*	0.2 (total)	No
* States with mandatory disinfection		

Of the 19 states with disinfectant residual requirements ≥0.2 mg/L, only 6 of these states retained the alternative compliance criteria for HPC. The Board requested comment on references to studies, reports or data that provide supporting evidence that an HPC <500 provides an equivalent level of public health protection when compared to a disinfectant residual of 0.2 mg/L. One citation was provided. However, the EPA document that was referenced was an unpublished draft document. Because of the lack of available studies on this issue and the fact that the majority of states (68%) previously listed do not allow the use of HPC as an ACC, the Board has reaffirmed the decision to not allow the use of HPC as an ACC.

The disinfectant residual requirements aim to strike a balance between improving microbial inactivation while limiting adverse impacts on disinfection byproduct (DBP) formation. Water systems can meet more stringent disinfectant residual requirements and still comply with DBP requirements as evidenced by a review of TCR and DBP compliance data from other states (the EPA, ECHO web site). The preamble of the proposed rulemaking included graphs that compared the percentage of community water systems with violations for the TCR and DBPs in Alabama, Tennessee, West Virginia, Illinois, Kentucky, Kansas, North Carolina and Ohio with the compliance rates in this Commonwealth. From 2011 to 2014, the large majority of states requiring disinfectant residual levels ≥0.2 mg/L had better TCR compliance rates than this Commonwealth (that is, had lower percentages of community water systems with TCR maximum contaminant level (MCL) violations). Some of these states were also able to maintain low rates of DBP violations as well.

A disinfectant residual serves as an indicator of distribution system contamination and the effectiveness of distribution system best management practices. Best management practices include flushing, storage tank maintenance, cross-connection control, leak detection, and effective pipe replacement and repair practices. The effective implementation of best management practices will help water suppliers comply with the disinfectant residual treatment technique by lowering chlorine demand and maintaining an adequate disinfectant residual throughout the distribution system. These same practices also help to control DBP formation.

Water systems that have participated in the Department's Distribution System Optimization Program have shown great success in utilizing operational changes and other lower cost options to maintain simultaneous compliance with adequate disinfectant residual levels and DBPs. Following are case studies from the Distribution System Optimization Program:

System A: This system serves 13,000 customers through 2,974 connections, uses free chlorine, has 1 standpipe and a distribution system storage capacity of 1.25 million gallons.

• *Historical problems*: This system experienced an upward trend in trihalomethane (THM) levels leading to drinking water locational running annual average (LRAA) MCL exceedances in 2 consecutive quarters and hydraulic dead-ends in portions of the distribution system requiring significant flushing to maintain a detectable residual.

• *Technical assistance efforts*: Department and system staff conducted in-plant water quality profiling (disinfectant residual, total organic carbon, pH and DBPs), distribution system investigative sampling, in-tank water quality monitoring and storage tank continuous disinfectant residual monitoring for 1 month.

• *Evaluation findings*: The evaluation found significant in-plant DBP formation, and high levels of THMs and low disinfectant residuals associated with stratification of standpipe.

• *Remedies*: The system decreased the pre-filtration chlorine feed rate to reduce in-plant THM formation resulting in a return to compliance with the LRAA MCL and increased the frequency and duration of routine distribution system flushing in problematic areas to maintain a minimum residual of 0.20 mg/L free chlorine. The system is currently evaluating the benefit of additional measures including the use of a mixing aeration system for the standpipe and automatic flushing units in problematic areas of the distribution system.

System B: This system serves 8,600 customers through 3,175 connections, uses chloramines for secondary disinfection, has 2 standpipes, 3 ground level tanks and a distribution system storage capacity of 4.755 million gallons.

• *Historical problems*: This system had difficulty maintaining a disinfectant residual throughout high- and low-pressure zones.

• *Technical assistance efforts*: Department and system staff conducted a chloramine dosing and hold study, entry point hold study, distribution system investigative sampling, in-tank water quality monitoring, storage tank turnover analysis and storage tank continuous disinfectant residual monitoring for 1 month.

• *Evaluation findings*: The evaluation found uneven chlorine dosing at the end of the sedimentation basin, poor control and monitoring of ammonia dosing prior to the entry point, highly reactive monochloramine residual degraded completely within 48 hours, poor mixing performance and excessive storage tank turnover time (~15 days), trace disinfectant residual in both standpipes and areas of nondetect monochloramine residual in both pressure zones.

• *Remedies*: The system developed a weir system to increase mixing at the chlorine dosing location in the sedimentation basins, began routine testing of ammonia strength and feed rates, began routine grab sample monitoring of free ammonia and monochloramine to achieve more precise ammonia dosing, increased flushing of problematic areas of the distribution system to maintain monochloramine residual of 1.0 mg/L, modified operations of storage tanks to decrease turnover time by ~50%, removed the standpipe from service to decrease excessive storage capacity by 1 million gallons and began system-wide flushing of the distribution system in coordination with free chlorine burns to minimize transitional

mixing zones. The system is currently evaluating the benefit of automatic flushing units in problematic areas of the distribution system.

System C: This system serves 6,000 customers through 2,900 connections, uses free chlorine and has 2 ground level storage tanks.

• *Historical problems*: This system had difficulty maintaining a disinfectant residual throughout the distribution system.

• *Technical assistance efforts*: Department and system staff conducted distribution system investigative sampling.

• *Evaluation findings*: The evaluation found that extremities within the distribution system had free chlorine residuals <0.10 mg/L and required significant flushing to maintain residuals >0.20 mg/L.

• *Remedies*: The system performed a flushing study to identify locations for installation of automatic flushing units and installed three automatic flushing units to create an artificial demand in areas of low disinfectant residuals.

System D: This system serves 7,800 customers through 4,382 connections, uses free chlorine, has 2 ground level storage tanks and a distribution system storage capacity of 4.5 million gallons.

• *Historical problems*: This system had difficulty maintaining disinfectant residuals at the master meters of consecutive systems.

• *Technical assistance efforts*: Department and system staff conducted in-tank water quality monitoring, storage tank turnover analysis and storage tank continuous disinfectant residual monitoring for 1 month.

• *Evaluation findings*: The evaluation found poor mixing performance and excessive storage tank turnover (15—22 days) and significant impact from storage tanks on disinfectant residuals in areas of influence.

• *Remedies*: The system modified operation of storage tanks to decrease turnover time and stratification as well as decrease degradation of disinfectant residuals.

System E: This system serves 25,500 customers through 9,300 connections, uses free chlorine, has 5 ground level storage tanks, 1 elevated tank and a distribution system storage capacity of 7.25 million gallons.

• *Historical problems*: This system had low disinfectant residuals at the master meter from the selling system and had difficulty maintaining residuals in portions of the distribution system.

• *Technical assistance efforts*: Department and system staff conducted a master meter hold study, in-tank water quality monitoring, storage tank turnover analysis and storage tank continuous disinfectant residual monitoring for 1 week.

• *Evaluation findings*: The evaluation found rapid degradation of free chlorine residual due to the purchase of chloraminated water at the master meter, poor mixing performance and excessive storage tank turnover (7-8 days), and significant impact of storage tanks on disinfectant residual in areas of influence.

• *Remedies*: The system increased communication with the selling system, modified its residual boosting strategy at the master meter and increased monitoring, and modified its operation of storage tanks to decrease turnover time and stratification as well as decrease degradation of disinfectant residual.

System F: This system serves 10,000 customers through 4,927 connections, uses free chlorine, has 4 ground level tanks, 1 elevated tank, 1 stand pipe and a distribution system storage capacity of 3.2 million gallons.

• *Historical problems*: This system had difficulty maintaining disinfectant residuals throughout the distribution system during summer and early fall.

• *Technical assistance efforts*: Department and system staff conducted a storage tank turnover analysis and distribution system and storage tank continuous disinfectant residual monitoring for 2 weeks.

• *Evaluation findings*: The evaluation found significant impact from storage tanks on the disinfectant residual in areas of influence and that storage tank operations were based on plant production rather than distribution system water quality data.

• *Remedies*: The system increased water quality data collection in the distribution system, modified storage tank operation based on water quality data, and removed a storage tank from service to reduce total distribution system capacity.

System G: This system serves 33,000 customers through 15,000 connections, uses free chlorine, has 4 ground level storage tanks, 1 standpipe and a distribution system storage capacity of 6 million gallons.

• *Historical problems*: This system had difficulty maintaining disinfectant residuals throughout the distribution system during summer and early fall.

• *Technical assistance efforts*: Department and system staff conducted a storage tank turnover analysis and storage tank continuous disinfectant residual monitoring for 2 weeks.

• *Evaluation findings*: The evaluation found poor mixing performance and excessive storage tank turnover time (~8 days).

• *Remedies*: The system installed mixing systems in storage tanks where stratification was observed to homogenize water quality.

System H: This system serves 18,000 customers through 8,200 connections, uses free chlorine, has 3 ground level storage tanks, 1 elevated tank and a distribution system storage capacity of 4.75 million gallons.

• *Historical problems*: This system had elevated THM and haloacetic acid levels.

• *Technical assistance efforts*: Department and system staff conducted a storage tank turnover analysis and storage tank continuous disinfectant residual monitoring at multiple locations over 3 months.

• *Evaluation findings*: The evaluation found significant impact from storage tanks on disinfectant residuals in areas of influence and poor mixing performance and excessive storage tank turnover time (6.2—12.5 days).

• *Remedies*: The system installed mixing systems in storage tanks where stratification was observed to homogenize water quality and modified storage tank operation to decrease turnover time.

Water suppliers can obtain more information about these distribution system assessment and optimization tools from the Department's web site at www.dep.pa.gov (keyword: distribution system optimization).

The Board requested comment on several aspects of the proposed rulemaking, including:

1. Additional studies and reports regarding detection limits for free and total chlorine residual analysis in the field.

The Board received one study and the data were used to inform decisions about the minimum reporting level.

2. Studies, reports or data that support a disinfectant residual of 0.1 mg/L or any other disinfectant residual that is equally protective of public health.

The Board received disinfectant residual and microbial data from six water systems. Following is a summary of the data:

System A: Large system; provided summary disinfectant residual data from 2004—2014; of the 36,500 samples analyzed, only ~3% of the samples were ≤0.15 mg/L total chlorine residual

System B: Large system; provided summary data for last 5 years; for the 14 total coliform positive samples reported, the disinfectant residual ranged from 0.02—1.35 mg/L, with an average = 0.67 mg/L

System C: Large system; uses chloramines; provided disinfectant residual and coliform data from 2008—2015; for 2011—2015, 7,363 disinfectant residual samples were analyzed with only 128 (1.7%) <0.15 mg/L

System D: 33,000 disinfectant residual records were analyzed from 2013—2016; only 332 (1%) <0.15 mg/L

System E: Medium system; provided a summary of free chlorine residual data for 2014-2015; in 2014, six dead end samples <0.15 mg/L; in 2015, all results >0.15 mg/L

System F: Large system; uses chloramines, provided 25,000 sample results from 2012—2016; 99.7% of samples ≥0.2 mg/L; only 0.3% of samples <0.2 mg/L; 59 positive total coliform samples with no correlation between residual

To summarize, data from these medium and large water systems indicate that a very small percentage (0.3—3%) of these historical disinfectant residuals would not have met a disinfectant residual requirement of 0.15—0.2 mg/L. These systems are well-positioned to meet a disinfectant residual of 0.2 mg/L.

Finally, the Board did not receive any studies or reports that support an alternate disinfectant residual of 0.1 mg/L.

3. References to studies, reports or data that provide supporting evidence that an HPC <500 provides an equivalent level of public health protection when compared to a disinfectant residual of 0.2 mg/L.

The Board received one reference to an unpublished draft document. However, the document was unavailable and could not be used. The Department is not aware of any other studies or reports that provide evidence that an HPC <500 provides equivalent public health protection.

4. Anticipated costs to comply with the proposed disinfectant residual requirements.

The Board received cost information from four water systems. Cost information in this preamble and the Regulatory Analysis Form (RAF) was updated accordingly.

5. Whether a deferred effective date of 6 months after final promulgation is warranted to provide water systems with additional time to make any necessary operational changes. The anticipated length of time needed to increase disinfectant residuals and whether capital improvements are anticipated to meet the proposed requirements.

The Board received multiple comments on the need for deferred effective dates. The effective dates were amended accordingly.

6. The compliance determination, especially for small systems.

The Board received several comments on the compliance determinations and all comments were taken into consideration.

This final-form rulemaking was presented to the TAC Board on July 13, 2017, and August 24, 2017. The TAC Board made nine recommendations, six of which were incorporated into this final-form rulemaking. Section E includes more information about the TAC Board's recommendations. The recommendation regarding averaging additional grab sample measurements from a sampling location will be included in Department guidance on system monitoring. Regarding the two remaining recommendations, one recommendation was to delay amendments to Chapter 109 until the Safe Drinking Water Program is at full complement and current regulations are uniformly enforced. The Board is taking steps to provide the Department with additional funds through fee increases and believes that proceeding with this final-form rulemaking now is in the public interest because of the compelling public health benefits discussed in previous sections of this preamble. The remaining recommendation is for the Department to conduct a DBP evaluation to determine the impacts of increasing the chlorine residual in the distribution system using data only from water systems in this Commonwealth. The Department will continue to track and analyze TCR and DBP compliance rates as this final-form rulemaking is implemented to determine whether simultaneous compliance is being achieved.

The Independent Regulatory Review Commission (IRRC) submitted several comments. To summarize, IRRC recommended the following:

1. The Board should continue to work with the regulated community to develop a schedule for implementing this final-form rulemaking that adequately protects the health, safety and welfare of the public, while at the same time minimizing the fiscal impact it will have on water systems.

Response: The Department worked with the TAC to develop an implementation plan for this final-form rulemaking. Most provisions will be deferred for 1 year following the effective date of this final-form rulemaking. In addition, compliance schedules will be used to allow more time for capital improvements or to implement more complex operational changes.

2. In the preamble and RAF to the final-form rulemaking, the Board should provide specific estimates of all the costs associated with compliance and an explanation of how the estimates were derived. In addition, the Board should provide further explanation concerning the benefits of the final-form rulemaking compared to the costs.

Response: The Department has updated the cost information in this preamble and the RAF based on comments received. Updated information includes costs to the regulated community as well as potential savings from the prevention of public health crises due to waterborne illnesses.

3. In the preamble of the final-form rulemaking, the Board should explain the reasonableness of requiring weekly monitoring and how the potential benefits outweigh any costs associated with it.

Response: After considerable discussion, the TAC Board issued final recommendations that the weekly monitoring frequency should be retained for two reasons: 1) weekly monitoring helps ensure continuous disinfection and improves public health protection; and 2) the collection of at least four samples per month allows a water system to have one sample below the minimum level and still be in compliance. If systems were to take fewer than four samples per month, any one sample below the minimum level would put the system out of compliance immediately. Finally, it was determined that weekly monitoring should not be a hardship because water system personnel are already onsite on a daily basis collecting daily entry point samples. These same personnel would be able to grab a weekly disinfectant residual sample within the distribution system.

4. In the preamble of the final-form rulemaking, the Board should explain what specific public health issue is being addressed by the proposed disinfectant residual that is not currently being handled by the Revised TCR or is not a premise plumbing concern. The Board should also explain what measures exist to safeguard against increases in DBPs.

Response: Based on an assessment of 5.434 million samples, the EPA found that a lower rate of both total coliform and fecal coliform/*E. coli* positives occurred as the free or total chlorine residual increased to higher levels. This relationship between chlorine residuals and occurrence of total coliform and fecal coliform/*E. coli* positives was similar to results reported by the Colorado Department of Public Health and Environment (Ingels, 2015). In addition, this relationship is consistent with the findings of LeChevallier, et al. (1996) which stated that disinfectant residuals of 0.2 mg/L or more of free chlorine, or 0.5 mg/L or more of total chlorine, are associated with reduced levels of coliform bacteria. (Both of these studies were discussed in the preamble of the proposed rulemaking.) Based on this data, the EPA determined that a detectable concentration of disinfectant residual in the distribution system may not be adequately protective of public health due to microbial pathogens. This is based on concerns about analytical methods and the potential for false positives (Wahman and Pressman, 2015). According to the EPA, maintaining a disinfectant residual above a set numerical value in the distribution system may improve public health protection from a variety of pathogens.

Regarding the ability of water systems to increase disinfectant residual levels to 0.2 mg/L and still meet DBP limits, data from other states shows that simultaneous compliance can be achieved with both rules. In addition, several case studies were described in this preamble regarding systems that have participated in the Department's Distribution System Optimization Program. These systems have been able to achieve simultaneous compliance by implementing operational changes and other lower cost measures.

The Department continues to believe that the large majority of systems will be able to achieve compliance with both rules because: 1) the large majority of systems already deliver water that meets disinfectant residual levels of $\geq$0.15 mg/L; and 2) for the remaining systems that do not currently meet a residual of $\geq$0.15 mg/L throughout the distribution system, many will be able to meet the requirement through operational changes or lower cost measures.

5. The fiscal analysis provided in the RAF indicates that the total estimated cost to the regulated community is $823,500. The regulated community believes the Department has overestimated the number of water suppliers that would be in compliance with the proposed residual and has underestimated capital and operational costs. For example, Philadelphia Water estimated $25 million dollars in capital costs and $2.5 million dollars in annual operating and maintenance costs. The Borough of Carlisle estimates capital costs ranging from $115,000 to $190,000 to potentially comply with a 0.2 mg/L free chlorine requirement. IRRC asked that as the Board developed this final-form rulemaking that they reach out to the regulated community to gain a better understanding of the potential costs associated with the new requirements and include the revised costs in the RAF submitted with this final-form rulemaking.

Response: The Department updated the cost information in this preamble and the RAF based on comments received.

6. In the preamble of the final-form rulemaking, the Board should explain why public notification is needed when the minimum disinfectant residual is not maintained in the distribution system and why the benefits of a notice outweigh any potential costs associated with such notice.

Response: Under 40 CFR 141.203(a) (relating to Tier 2 public notice—form, manner, and frequency of notice), a Tier 2 Public Notice is required for failure to meet the disinfectant residual treatment technique in the distribution system. The Commonwealth must be at least as stringent as 40 CFR 141.203(a). However, this final-form rulemaking is not anticipated to substantially increase the number of Tier 2 Public Notices. A violation does not occur unless the water system fails to meet the minimum level in more than 5% of samples for 2 consecutive months. The Department would expect that most water systems will be able to make operational changes (that is, increase flushing, and the like) after the first monthly failure and improve water quality ahead of the next monthly monitoring period. It should be the exception, not the norm, that water systems fail to meet the minimum level for 2 consecutive months.

7. IRRC noted that the Board asked for comments with references to studies, reports or data comparing whether HPC less than 500 provides the same level of public health protection as a disinfectant residual of 0.2 mg/L. In the preamble of the final-form rulemaking, the Board should explain its rationale for deleting this provision. IRRC will consider the Board's response to comments and changes made to this subsection during the review of the final-form rulemaking to determine whether it is in the public interest.

Response: References or studies were not provided by the public. The Department has not found any studies that HPC is an equivalent standard when compared to a disinfectant residual level of 0.2 mg/L. The majority of states with disinfectant residual standards of 0.2 mg/L or greater do not use HPC as an ACC. For these reasons, the Department is not allowing the use of HPC for compliance purposes. However, water suppliers are encouraged to continue to use HPC as an operational parameter to help inform proper operation of distribution systems.

8. The Board stated that proposed amendments were in response to the EPA comments to obtain primacy for LT2. Water dispensing unit operators commented that adding the HPC test alongside the Total Coliform test is duplicative and adds unnecessary costs. They further point out the drinking water standard for HPC is geared toward public water systems treating nonpotable surface water or GUDI and that it should not apply to water dispensing units that receive already treated municipal water. The Board should explain in the RAF and preamble of this final-form rulemaking the reasonableness of requiring water dispensing units to meet the same disinfection residual requirements as public water systems.

Response: The EPA recognizes bulk water hauling and vended water systems as public water systems under the Federal Safe Drinking Water Act and its regulations. Vended water systems that use purchased surface water shall comply with the various surface water treatment rules. Systems using surface water shall maintain a disinfectant residual in the water delivered to consumers. Since most vended water systems strip chlorine out of the water to improve taste, these systems are unable to comply with the Federal and State requirements. These systems generally retreat the water with ultraviolet or ozone, which does not provide a residual. Therefore, the only option for these systems is to monitor for and comply with the HPC alternative compliance criteria.

9. The EPA submitted comments that identified several instances when the bottled water and vended water systems, retail water facilities, and bulk water hauling systems (BVRB) monitoring provisions are inconsistent with Federal regulations and must be changed to obtain primacy. The EPA also sought clarification on the BVRB entry point residual. IRRC will review the Board's response to the EPA's comments and any revisions made to this section in its review of the final-form rulemaking to determine whether it is in the public interest.

Response: Revisions have been made to ensure consistency with Federal rules and to maintain primary enforcement authority. Refer to Section E for more information about the revisions.

References

Colorado Department of Public Health and Environment (April 2014). "Draft—Minimum Distribution System Disinfectant Residuals: Chlorine Residual Values Reported from Within Drinking Water Distribution Systems."

Department of Environmental Protection, Pennsylvania Drinking Water Information System (PADWIS) online database.

EPA (December 2016). "Six-Year Review 3 Technical Support Document for Microbial Contaminant Regulations." EPA 810-R-16-010.

EPA, Enforcement and Compliance History Online database.

LeChevallier, M. W., et al. (1996). "Full-Scale Studies of Factors Related to Coliform Regrowth in Drinking Water." *Applied and Environmental Microbiology*, 62(7), p. 2201.

Wahman, D. G. and Pressman, J. G. (2015). "Distribution System Residuals—Is 'Detectable' Still Acceptable for Chloramines." *Journal—American Water Works Association*, 107(8), p. 53.

E. *Summary of Changes to the Proposed Rulemaking*

§ 109.202. State MCLs, MRDLs and treatment technique requirements

Proposed subsection (c)(1)(ii)(B) was revised for consistent use of the phrase "residual disinfectant concentration."

Proposed subsection (c)(4) was renumbered as subsection (c)(6) and revised for consistent use of the phrase "residual disinfectant concentration."

Subsection (c)(5) was renumbered as subsection (c)(7) and revised for consistent use of the phrase "residual disinfectant concentration."

The proposed amendment to subsection (d) was withdrawn because it was included in the Revised TCR final-form rulemaking published at 46 Pa.B. 6005 (September 24, 2016).

§ 109.301. General monitoring requirements

Paragraph (1)(i)(D) was revised in response to public comments to clarify that the existing disinfectant residual requirements for filtered surface water and GUDI systems will remain in effect until 1 year after the effective date of this final-form rulemaking.

Paragraph (1)(i)(E) was added in response to public comments to defer the compliance date of the new disinfectant residual requirements until 1 year after the effective date of this final-form rulemaking.

Paragraph (1)(i)(E)(II)—(IV) was revised for consistent use of the phrase "residual disinfectant concentration."

Paragraph (1)(i)(E)(V) was added in response to TAC comments to allow the use of online analyzers for disinfectant residual monitoring and recording in the distribution system. Online analyzers are permitted so long as the units are validated for accuracy.

Paragraph (1)(v) and (vi) was revised in response to public comments to clarify that water suppliers shall calculate the log inactivation at least once per day during expected peak hourly flow.

Paragraph (2)(i)(E) was revised in response to public comments to clarify that the existing disinfectant residual requirements for unfiltered surface water and GUDI systems will remain in effect until 1 year after the effective date of this final-form rulemaking.

Paragraph (2)(i)(F) was added in response to public comments to defer the compliance date of the new disinfectant residual requirements until 1 year after the effective date of this final-form rulemaking.

Paragraph (2)(i)(F)(II)—(IV) was revised for consistent use of the phrase "residual disinfectant concentration."

Paragraph (2)(i)(F)(V) was added in response to TAC comments to allow the use of online analyzers for disinfectant residual monitoring and recording in the distribution system. Online analyzers are permitted so long as the units are validated for accuracy.

Paragraph (6)(vii)(D) was revised to correct a misspelled word.

Paragraph (13) was revised for consistent use of the phrase "residual disinfectant concentration."

Paragraph (13)(i)(A) and (B) was revised in response to public comments to defer the effective date of the new disinfectant residual requirements until 1 year after the effective date of this final-form rulemaking.

Proposed paragraph (13)(i)(A)—(C) was renumbered as paragraph (13)(i)(B)(I)—(III).

Paragraph (13)(i)(B)(I) was revised to correct a cross-reference.

Paragraph (13)(i)(B)(IV) was added to clarify that compliance determinations will be made in accordance with § 109.710 (relating to disinfectant residual in the distribution system).

Paragraph (13)(i)(B)(V) was added in response to TAC comments to allow the use of online analyzers for disinfectant residual monitoring and recording in the distribution system and to be consistent with paragraphs (1)(i)(E)(V) and (2)(i)(F)(V). Online analyzers are permitted so long as the units are validated for accuracy.

§ 109.408. Tier 1 public notice—categories, timing and delivery of notice

Subsection (a)(2) was revised to correct the cross-reference to § 109.301(7)(ii)(C) (relating to general monitoring requirements) to include subclauses (IV) and (V).

Subsection (a)(6)(iii) was revised for consistent use of the phrase "residual disinfectant concentration" and in response to public comments to clarify that Tier 1 public notice is required for a failure to maintain the minimum entry point disinfectant residual for more than 4 hours and either a failure to calculate the log inactivation, or a failure to meet the minimum log inactivation for more than 4 hours.

§ 109.701. Reporting and recordkeeping

Subsection (a)(8) was revised to clarify and renumber the requirements regarding submission of the sample siting plan, for consistent use of the phrase "residual disinfectant concentration" and to incorporate comments from the TAC to identify several items to be included in the sample siting plan, including whether mixing zones exist, the system implements a free chlorine burn and whether the system uses online analyzers.

This section was also revised to add certain reporting requirements regarding these sample siting plan items.

§ 109.710. Disinfectant residual in the distribution system

Subsections (a) and (b) were revised and subsection (c) was added in response to public comments to defer the compliance date of the new disinfectant residual requirements until 1 year after the effective date of this final-form rulemaking.

Subsections (c) and (d) were added in response to TAC comments to address measurements for mixing zones and free chlorine burns and to clarify when free or total, or both, chlorine residual should be monitored.

Existing subsections (b)—(d) were renumbered as subsections (d)—(f).

Subsection (d) was revised for consistent use of the phrase "residual disinfectant concentration."

Subsection (e) was revised in response to TAC comments to allow additional monitoring to be included in the compliance calculations.

Subsection (e)(1) and (2) was revised in response to TAC comments to allow additional monitoring to be included in the compliance calculations and to clarify that public water systems that use surface water or GUDI sources must comply with the Federal and State treatment technique requirement of no more than 5% of samples out of compliance.

Proposed subsection (e)(3) and (4) was renumbered as subsection (e)(4) and (5) and subsection (e)(3) was added in response to TAC comments to clarify how compliance will be determined when both free and total disinfectant residual measurements are reported.

Subsection (e)(5) was revised to correct a cross-reference.

Subsection (e)(6) was added in response to TAC and public comments to clarify that the Department may approve an alternate compliance schedule if the water supplier submits a written request with supporting documentation within 1 year of the effective date of this final-form rulemaking.

§ 109.716. Nitrification control plan

Proposed § 109.715 (relating to nitrification control plan) was renumbered as § 109.716 in this final-form rulemaking because § 109.715 (relating to seasonal systems) was added by the Revised TCR published at 46 Pa.B. 6005.

Subsection (a) was revised in response to TAC comments to defer the compliance date of the nitrification control plan until 1 year after the effective date of this final-form rulemaking.

§ 109.1003. Monitoring requirements

Subsection (a)(1)(ix)(A) was revised to cross-reference the monitoring requirements in § 109.301(12)(ii) in response to EPA comments to be at least as stringent as the Federal Stage 2 DBPR for bulk hauling, retail and vended water systems that meet the conditions of clause (D) or (E) (that is, systems that meet the definition of a community or nontransient noncommunity water system).

Subsection (a)(1)(ix)(C) was added in response to EPA comments to include language that is at least as stringent with the Federal Stage 2 DBPR that identifies the MCL compliance calculations for total trihalo-methanes and five haloacetic acid compounds to obtain primary enforcement authority for the Stage 2 DBPR.

The Editor's Note in subsection (a)(1)(xi) was revised. This subparagraph was also amended and proposed subsection (a)(1)(xi)(A)—(C) was deleted in response to EPA comments to include language that is at least as stringent as the Federal rule that identifies the Maximum Residual Disinfectant Level compliance calculations for chlorine dioxide.

Subsection (a)(1)(xii)(B)(II) was revised to be consistent with existing language in § 109.301(12)(iv)(B)(II) that identifies the specific requirements to qualify for reduced bromate monitoring to be at least as stringent as the Federal Stage 2 DBPR.

The Editor's Note in subsection (a)(1)(xiii) and (xiv) was revised. These subparagraphs were also revised for consistent use of the phrase "residual disinfectant concentration" and in response to EPA comments that the entry point residual disinfectant concentration should be 0.20 mg/L to be consistent with subparagraph (xiii) and § 109.202(c) (relating to State MCLs, MRDLs and treatment technique requirements).

Subsection (a)(2)(iv) was revised to clarify when compliance is required based on the effective date of this final-form rulemaking.

Subsection (b)(2) was revised in response to EPA comments that daily chlorite measurements may be conducted by a person meeting the requirements of

§ 109.1008(c) (relating to system management responsibilities) to be consistent with § 109.304(c) (relating to analytical requirements).

Subsections (d) and (e) were amended in response to the EPA comments for clarity to cross-reference the monitoring requirements in § 109.301 to be at least as stringent as the Federal rules for bulk hauling, retail and vended water systems that meet the definition of a community or nontransient noncommunity water system.

§ 109.1008. System management responsibilities

Proposed subsections (g) and (h) were renumbered as subsections (i) and (j) because subsections (g) and (h) were added by the Revised TCR published at 46 Pa.B. 6005.

F. *Benefits, Costs and Compliance*

Benefits

This final-form rulemaking will affect all 1,949 community water systems and those noncommunity water systems that have installed disinfection (746) for a total of 2,695 public water systems. These public water systems serve a total population of 11.3 million people.

This final-form rulemaking is intended to reduce the public health risks and associated costs related to waterborne pathogens and waterborne disease outbreaks. Costs related to waterborne disease outbreaks are extremely high. In 2008, a large Salmonella outbreak caused by contamination of a storage tank and distribution system and no disinfectant residual within the municipal drinking water supply occurred in Alamosa, CO. The outbreak's estimated total cost to residents and businesses of Alamosa using a Monte Carlo simulation model (10,000 iterations) was approximately $1.5 million (range: $196,677—$6,002,879) and rose to $2.6 million (range: $1,123,471—$7,792,973) with the inclusion of outbreak response costs to local, state and nongovernmental agencies, and City of Alamosa health care facilities and schools. This investigation documents the significant economic and health impacts associated with waterborne disease outbreaks and highlights the potential for loss of trust in public water systems following these outbreaks. See "Economic and Health Impacts Associated with a Salmonella Typhimurium Drinking Water Outbreak—Alamosa, CO, 2008," http://www.ncbi.nlm.nih.gov/pubmed/23526942.

Communities in this Commonwealth will benefit from: 1) the avoidance of a full range of health effects from the consumption of contaminated drinking water such as acute and chronic illness, endemic and epidemic disease, waterborne disease outbreaks and death; 2) the continuity of a safe and adequate supply of potable water; and 3) the ability to plan and build future capacity for economic growth and ensure long-term sustainability.

Compliance Costs

Disinfectant residual monitoring at the entry point

It is estimated that 114 of 352 plants (or ~30%) may be using paper chart recorders. Paper chart recorders can record measurements to two decimal places provided the proper scale and resolution is used. In cases where the requisite scale and resolution are not possible, an upgrade to electronic recording devices would cost approximately $1,500. It is estimated that 11 systems (10%) may need to upgrade to electronic recording devices. The estimated cost is 11 systems × $1,500 = $16,500.

This cost should not be prohibitive for filter plants, and the use of electronic devices offers several advantages. Advantages of using electronic recording devices include improved data reliability, faster and more comprehensive data analysis, better data resolution, elimination of the need for interpolating trace values from a chart, cost savings through the elimination of consumables (pens and chart paper) and reductions in errors associated with transferring analog data to a spreadsheet for recordkeeping or reporting purposes.

Disinfectant residuals in the distribution system

It is anticipated that the large majority of water systems will be able to comply with this requirement with little to no capital costs because many of these systems are already meeting a disinfectant residual of ≥0.15 mg/L. In this Commonwealth, 1,949 community water systems are required to provide and maintain disinfection treatment. Of these systems, 1,298 (67%) are required to collect only 1 disinfectant residual measurement each month. An additional 232 systems are only required to collect 2 measurements each month. In total, 1,530 systems (79%) are only required to collect 1 or 2 disinfectant residual measurements each month, which means the average result reported each month for the large majority of systems is essentially the same as the actual sample results.

The Department reviewed the summary data (distribution system disinfectant residual average result values) from January 2012 to May 2017 for the 1,949 community water systems.

- During this period, 165,328 average result values were reported; of these records, 154,623 average result values (93.5%) were at or above 0.15 mg/L.
- For the systems that are required to conduct only 1 or 2 measurements each month, 136,743 average result values were reported; of these records, 126,406 average result values (92.4%) were at or above 0.15 mg/L.
- For the systems that only conduct 1 measurement each month, 116,900 average result values were reported; of these records, 107,366 (91.8%) were at or above 0.15 mg/L.

The following table shows the number of community water systems and the number of average result summary records submitted for each population group.

Community Water System Disinfectant Average Result by Population Category

Population Group	*Number of Samples Required*	*Number of Public Water Supplies*	*Total POPL*[1]	*Total Number of Records*	*Number of Results < 0.15*	*Number of Results >= 0.15*
<25[2]	1	9	172	300	14	286
25—1,000	1	1,290	311,515	116,600	9,520	107,080
1,001—2,500	2	231	381,322	19,843	803	19,040

Population Group	*Number of Samples Required*	*Number of Public Water Supplies*	*Total POPL*[1]	*Total Number of Records*	*Number of Results < 0.15*	*Number of Results >= 0.15*
2,501—3,300	3	86	255,069	6,292	168	6,124
3,301—4,100	4	28	103,784	2,534	65	2,469
4,101—4,900	5	37	164,629	2,518	11	2,507
4,901—5,800	10	27	145,425	1,752	0	1,752
5,801—6,700	15	22	137,596	1,672	1	1,671
6,701—7,600	20	22	156,720	1,246	0	1,246
7,601—8,500	25	22	178,117	1,194	22	1,172
8,501—12,900	30	46	469,925	3,311	34	3,277
12,901—33,000	35	69	1,436,581	4,333	66	4,267
>33,000	>40	60	7,628,402	3,733	1	3,732
Total		*1,949*	*11,369,257*	*165,328*	*10,705*	*154,623*

[1] Total POPL is the total population served for the population category, based on the community water system population in PADWIS. The Revised TCR required water systems to submit a revised sampling plan which included updated population numbers in accordance with existing EPA guidance. The community water system population served includes nontransient and transient consumers.

[2] These community water systems triggered applicability under the SDWA because each system provides water to 15 or more service connections.

An additional 621 noncommunity water systems with disinfection treatment are currently required to maintain a disinfectant residual in the distribution system. Of these 621 water systems, 598 (96%) are only required to collect 1 or 2 residual measurements each month; 554 (89%) are only required to conduct 1 measurement each month.

Therefore, the Department believes it is appropriate to use the average result data, and that the data indicate that most water systems are already in compliance with these minimum disinfectant residual requirements.

Systems may need to increase the frequency of or improve the effectiveness of existing operation and maintenance best management practices, such as flushing, storage tank maintenance, cross-connection control, leak detection, and effective pipe replacement and repair practices, to lower chlorine demand and meet disinfectant residual requirements at all points in the distribution system.

Some systems with very large and extensive distribution systems may need to install automatic flushing devices, tank mixers or booster chlorination stations to achieve ≥0.15 mg/L (which rounds to 0.2 mg/L) at all points in the distribution system. As a result of public comments, the Department revised its capital expense estimates and added annual operational expense estimates as follows:

Type of Facility	*Capital Expenses*	*Annual Expenses*
Automatic flushing device	$2,500	$750
Tank mixer	$75,000	
Booster chlorination station	$250,000	$10,000

It is estimated that 25% of community water systems serving over 25,000 people, or ~20 systems, may need to install automatic flushing devices, tank mixers or booster chlorination stations. Of these 20 systems:

• Twelve water systems may need to install up to ten automatic flushing devices for capital costs of up to $25,000 and annual expenses of up to $7,500 per system. The total cost for 12 systems is estimated to be up to $300,000 in capital costs and up to $90,000 in annual expenses.

• Four water systems may need to install up to two tank mixers for capital costs of up to $150,000 per system. The total cost for four systems is estimated to be up to $600,000 in capital costs.

• Four systems may need to install up to four booster chlorination stations for capital costs of up to $1 million and annual expenses of up to $40,000 per system. The total cost for four systems is estimated to be up to $4 million in capital costs and up to $160,000 in annual expenses.

Costs for small systems are not expected to increase because most small systems are already maintaining adequate disinfectant residuals (0.40 mg/L) as required by the Groundwater Rule. Further, with regard to operating costs, it is unlikely costs to small systems would increase because § 109.304 specifies that certain parameters (including turbidity and disinfectant residuals) may be analyzed by an appropriately certified operator or a person using a standard operating procedure as specified in the Water and Wastewater Systems Operators' Certification Act (63 P.S. §§ 1001—1015.1). Small water systems that are required to install and maintain disinfection (under either the Surface Water Treatment Rule or the Groundwater Rule) are currently required to measure the disinfectant residual at the entry point at least once per day, so a procedure is in place for conducting daily disinfectant residual measurements. The weekly distribution system measurements may be conducted by the same person.

Total estimated costs to the regulated community are as much as $4.9 million in capital costs and up to $250,000 in annual operational expenses. Capital costs are one-time costs expected to be split over the first 3 years. Annual operational expenses are not expected to begin until year 2.

Estimate of Fiscal Savings and Costs						
	Current FY	*FY +1*	*FY +2*	*FY +3*	*FY +4*	*FY +5*
Savings	$	$	$	$	$	$
Regulated community	0	1,500,000	1,500,000	1,500,000	1,500,000	1,500,000
Local and state costs	0	1,100,000	1,100,000	1,100,000	1,100,000	1,100,000
Total savings	0	2,600,000	2,600,000	2,600,000	2,600,000	2,600,000
Costs		$	$	$	$	$
Regulated community	0	1,630,000	1,880,000	1,880,000	250,000	250,000
Local and state costs	0	0	0	0	0	0
Total costs	0	1,630,000	1,880,000	1,880,000	250,000	250,000

However, these costs are offset by the avoidance of waterborne disease outbreaks. If even one waterborne disease outbreak is avoided each year, the cost savings to the regulated community (residents and businesses) is estimated at $1.5 million, with an additional $1.1 million in savings to local, State and nongovernmental agencies, health care facilities and schools.

Compliance assistance plan

The Safe Drinking Water Program utilizes the Commonwealth's Pennsylvania Infrastructure Investment Authority (PENNVEST) Program to offer financial assistance to eligible public water systems. This assistance is in the form of a low-interest loan, with some augmenting grant funds for hardship cases. Eligibility is based upon factors such as public health impact, compliance necessity and project/operational affordability.

The Safe Drinking Water Program has established a network of regional and Central Office training staff that is responsive to identifiable training needs. The target audience in need of training may be either program staff or the regulated community.

In addition to this network of training staff, the Bureau of Safe Drinking Water has staff dedicated to providing both training and outreach support services to public water system operators. The Department's web site also provides timely and useful information for treatment plant operators.

Finally, the Department also provides various tools and technical assistance to water systems through the Distribution System Optimization Program. The goal of distribution optimization is to sustain the water quality leaving the plant throughout all points in the distribution system. To further define distribution system optimization, "optimization" refers to improving drinking water quality to enhance public health protection without significant capital improvements to the water treatment plant or distribution system infrastructure.

The distribution system is the last "barrier" for protecting public health, meaning the physical and chemical barriers that have been established are necessary to protect the public from intentional or unintentional exposure to contaminants after the water has been treated. Distribution system optimization focuses on two primary health concerns related to water quality within the distribution system—microbial contamination and DBP formation.

If implemented, distribution system optimization will lead to increased public health protection through increased monitoring and operational oversight, resulting in improved physical protection and improved water quality for all customers.

Paperwork Requirements

Paperwork requirements include: electronic reporting of log inactivation values on a monthly basis using existing formats; electronic reporting of additional disinfectant residual levels measured in the distribution system using existing formats; development of a disinfectant residual sample siting plan; and development of a nitrification control plan.

G. *Sunset Review*

The Board is not establishing a sunset date for these regulations since they are needed for the Department to carry out its statutory authority. The Department will continue to closely monitor these regulations for their effectiveness and recommend updates to the Board as necessary.

H. *Regulatory Review*

Under section 5(a) of the Regulatory Review Act (71 P.S. § 745.5(a)), on February 11, 2016, the Department submitted a copy of the notice of proposed rulemaking, published at 46 Pa.B. 857, 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 this final-form rulemaking, the Department has considered all comments from IRRC and the public.

Under section 5.1(j.2) of the Regulatory Review Act (71 P.S. § 745.5a(j.2)), on February 21, 2018, this final-form rulemaking was deemed approved by the House and Senate Committees. Under section 5.1(e) of the Regulatory Review Act, IRRC met on February 22, 2018, and approved this 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) These regulations do not enlarge the purpose of the proposed rulemaking published 46 Pa.B. 857.

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

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 adding § 109.716 and amending §§ 109.1, 109.202, 109.301, 109.303, 109.408, 109.701, 109.710, 109.1002, 109.1003, 109.1004, 109.1008, 109.1103, 109.1107, 109.1202 and 109.1302 and to read as set forth in Annex A, with ellipses referring to the existing text of the regulations.

(*Editor's Note*: Proposed § 109.715 was renumbered as § 109.716 in this final-form rulemaking.)

(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 the IRRC and the Senate and House Environmental Resources and Energy Committees as required by the Regulatory Review Act (71 P.S. §§ 745.1—745.14).

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

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

PATRICK McDONNELL,
Chairperson

(*Editor's Note*: See 48 Pa.B. 1482 (March 10, 2018) for IRRC's approval order.)

Fiscal Note: Fiscal Note 7-520 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 A. GENERAL PROVISIONS

§ 109.1. Definitions.

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

* * * * *

Consecutive water system—A public water system which obtains all of its water from another public water system and resells the water to a person, provides treatment to meet a primary MCL, MRDL or treatment technique, or provides drinking water to an interstate carrier. The term does not include bottled water and bulk water systems.

* * * * *

Subchapter B. MCLs, MRDLs OR TREATMENT TECHNIQUE REQUIREMENTS

§ 109.202. State MCLs, MRDLs and treatment technique requirements.

(a) *Primary MCLs, MRDLs and treatment technique requirements.*

(1) A public water system shall supply drinking water that complies with the primary MCLs, MRDLs and treatment technique requirements adopted by the EQB under the act.

(2) This subchapter incorporates by reference the primary MCLs, MRDLs and treatment technique requirements in the National Primary Drinking Water Regulations 40 CFR Part 141 (relating to National Primary Drinking Water Regulations) as State MCLs, MRDLs and treatment technique requirements under authority of section 4 of the act (35 P.S. § 721.4), unless other MCLs, MRDLs and treatment technique requirements are established by regulations of the Department. The primary MCLs, MRDLs and treatment technique requirements which are incorporated by reference are effective on the date established by the Federal regulations.

(3) A public water system that is installing granular activated carbon or membrane technology to comply with the MCL for TTHMs, HAA5, chlorite (where applicable) or bromate (where applicable) may apply to the Department for an extension of up to 24 months past the applicable compliance date specified in the Federal regulations, but not beyond December 31, 2003. In granting the extension, the Department will set a schedule for compliance and may specify any interim measures that the Department deems necessary. Failure to meet the schedule or interim treatment requirements constitutes a violation of National Primary Drinking Water Regulations.

(b) *Secondary MCLs.*

(1) A public water system shall supply drinking water that complies with the secondary MCLs adopted by the EQB under the act, except for the MCL for pH which represents a reasonable goal for drinking water quality.

(2) This subchapter incorporates by reference the secondary MCLs established by the EPA in the National Secondary Drinking Water Regulations, 40 CFR 143.3 (relating to secondary maximum contaminant levels), as of January 30, 1991, as State MCLs, under the authority of section 4 of the act, unless other MCLs are established by regulations of the Department. The secondary MCL for copper is not incorporated by reference.

(3) A secondary MCL for aluminum of 0.2 mg/L is adopted as a State MCL.

(c) *Treatment technique requirements for pathogenic bacteria, viruses and protozoan cysts.* A public water system shall provide adequate treatment to reliably protect users from the adverse health effects of microbiological contaminants, including pathogenic bacteria, viruses and protozoan cysts. The number and type of treatment barriers and the efficacy of treatment provided shall be commensurate with the type, degree and likelihood of contamination in the source water.

(1) A public water supplier shall provide, as a minimum, continuous filtration and disinfection for surface water and GUDI sources. The treatment technique must provide at least 99.9% removal and inactivation of *Giardia lamblia* cysts, and at least 99.99% removal and inactivation of enteric viruses. Beginning January 1, 2002, public water suppliers serving 10,000 or more people shall provide at least 99% removal of *Cryptosporidium* oocysts. Beginning January 1, 2005, public water suppliers serving fewer than 10,000 people shall provide at least 99% removal of *Cryptosporidium* oocysts. The Department, depending on source water

quality conditions, may require additional treatment as necessary to meet the requirements of this chapter and to protect the public health.

(i) The filtration process shall meet the following performance requirements:

(A) *Conventional or direct filtration.*

(I) The filtered water turbidity shall be less than or equal to .5 NTU in 95% of the measurements taken each month under § 109.301(1) (relating to general monitoring requirements).

(II) The filtered water turbidity shall be less than or equal to 2.0 NTU at all times, measured under § 109.301(1).

(III) Beginning January 1, 2002, for public water systems serving 10,000 or more persons, the filtered water turbidity shall meet the following criteria:

(-a-) Be less than or equal to 0.3 NTU in at least 95% of the measurements taken each month under § 109.301(1).

(-b-) Be less than or equal to 1 NTU at all times, measured under § 109.301(1).

(IV) Beginning January 1, 2005, for public water systems serving fewer than 10,000 persons, the filtered water turbidity shall meet the following criteria:

(-a-) Be less than or equal to 0.3 NTU in at least 95% of the measurements taken each month under § 109.301(1).

(-b-) Be less than or equal to 1 NTU at all times, measured under § 109.301(1).

(B) *Slow sand or diatomaceous earth filtration.*

(I) The filtered water turbidity shall be less than or equal to 1.0 NTU in 95% of the measurements taken each month under § 109.301(1).

(II) The filtered water turbidity shall be less than or equal to 2.0 NTU at all times, measured under § 109.301(1).

(C) *Other filtration technologies.* The same performance criteria as those given for conventional filtration and direct filtration in clause (A) shall be achieved unless the Department specifies more stringent performance criteria based upon onsite studies, including pilot plant studies, where appropriate.

(ii) The combined total effect of disinfection processes utilized in a filtration plant shall:

(A) Achieve at least 1.0-log inactivation of Giardia cysts and 3.0-log inactivation of viruses as demonstrated by measurements taken under § 109.301(1). Failure to maintain the minimum log inactivation for more than 4 hours of operation constitutes a breakdown in treatment.

(B) Provide a minimum residual disinfectant concentration of 0.20 mg/L at the entry point as demonstrated by measurements taken under § 109.301(1). Failure to maintain the minimum entry point residual disinfectant concentration for more than 4 hours of operation is a treatment technique violation.

(iii) For an unfiltered surface water source permitted for use prior to March 25, 1989, the public water supplier shall:

(A) Maintain a minimum residual disinfectant concentration in the water delivered to the distribution system prior to the first customer of 2.5 mg/L expressed as free chlorine or its equivalent as approved by the Department. The residual disinfectant concentration shall be demonstrated by measurements taken under § 109.301(2).

(I) For a system using disinfectants other than free chlorine, the water supplier shall maintain:

(-a-) A minimum concentration that provides, in terms of CTs achieved, a level of protection equivalent to that provided by 2.5 mg/L free chlorine, as determined by the available contact time between the point of application and the first customer, under peak flow conditions.

(-b-) At least .2 mg/L of disinfectant in the water delivered to the distribution system prior to the first customer.

(II) For a system with extended contact times, generally 60 minutes or more, between the point of application and the first customer, the Department may allow the water supplier to maintain a disinfectant residual concentration less than 2.5 mg/L free chlorine or its equivalent if the CTs established by the EPA are achieved.

(B) Provide continuous filtration and disinfection in accordance with this paragraph according to the following schedule:

(I) By December 31, 1991, for a public water system that, prior to March 25, 1989, had a waterborne disease outbreak or Giardia contamination in its surface water source.

(II) Within 48 months after the discovery of one of the following conditions, or by December 31, 1995, whichever is earlier, for a public water system that experiences the condition after March 25, 1989:

(-a-) A waterborne disease outbreak.

(-b-) Giardia contamination in its surface water source.

(-c-) A violation of the microbiological MCL, the turbidity MCL or the monitoring or reporting requirements for the microbiological MCL.

(-d-) A violation of the source microbiological or turbidity monitoring requirements under § 109.301(2)(i)(A) and (B) or the related reporting requirements.

(-e-) The source water fecal coliform concentration exceeds 20/100 ml or the total coliform concentration exceeds 100/100 ml in a source water sample collected under § 109.301(2).

(-f-) The source water turbidity level exceeds 5.0 NTU in a sample collected under § 109.301(2).

(-g-) The system fails to maintain a continuous residual disinfectant concentration as required under this subparagraph.

(III) By December 31, 1995, for other public water systems not covered by subclause (I) or (II).

(iv) For an unfiltered surface water source which is subject to subparagraph (iii)(B)(II) and (III), the public water supplier shall:

(A) Submit to the Department for approval a feasibility study which specifies the means by which the supplier shall, by the applicable deadline established in subparagraph (iii)(B), meet the requirements of this paragraph. The study shall identify the alternative which best assures the long-term viability of the public water system to meet drinking water standards. The study shall propose a schedule for completion of work, including the design, financing, construction and operation of one of the following alternatives:

(I) Permanent filtration treatment facilities that meet the requirements of this chapter.

(II) Abandonment of the unfiltered surface water source and one of the following:

(-a-) Permanent interconnection with another water supply which meets the requirements of this chapter.

(-b-) Permanent water treatment facilities, utilizing groundwater as the source of supply, which meet the requirements of this chapter.

(-c-) Provision for adequate supply from existing sources which meets the requirements of this chapter.

(B) Submit the feasibility study according to the following schedule:

(I) By March 31, 1992, for a supplier which prior to August 31, 1991, experienced a triggering event as specified in subparagraph (iii)(B)(II).

(II) By June 30, 1992, for a supplier which after August 31, 1991, but before January 1, 1992, experienced a triggering event as specified in subparagraph (iii)(B)(II).

(III) By August 31, 1992, for other suppliers.

(C) Submit a full and complete permit application for the means identified in the approved feasibility study by which the supplier shall meet the requirements of this paragraph, according to the following schedule:

(I) By the date set in the approved feasibility study for a supplier which, prior to January 1, 1992, experienced a triggering event as specified in subparagraph (iii)(B)(II).

(II) By June 30, 1993, for a supplier subject to the requirements of subparagraph (iii)(B)(III), except that a public water supplier serving fewer than 3,300 people may submit its permit application by December 31, 1993.

(D) Initiate construction of the means identified in the approved feasibility study by which the supplier shall meet the requirements of this paragraph, according to the following schedule:

(I) By the date set in the approved feasibility study for a supplier which, prior to January 1, 1992, experienced a triggering event as specified in subparagraph (iii)(B)(II).

(II) By June 30, 1994, for a supplier subject to the requirements of subparagraph (iii)(B)(III), except that a public water supplier serving fewer than 3,300 people may initiate construction by December 31, 1994.

(E) Complete construction and commence operation of the alternative identified in the approved feasibility study by the dates specified in subparagraph (iii)(B).

(v) The requirements of subparagraph (iv) do not modify, repeal, suspend, supersede or otherwise change the terms of a compliance schedule or deadline, established by an existing compliance order, consent order and agreement, consent adjudication, court order or consent decree. For purposes of this paragraph, the term "existing" means a compliance order, consent order and agreement, consent adjudication, court order or consent decree which was issued or dated before December 14, 1991.

(vi) For a source including springs, infiltration galleries, cribs or wells permitted for use by the Department prior to May 16, 1992, and determined by the Department to be a GUDI source, the public water supplier shall:

(A) Maintain a minimum residual disinfectant concentration in the water delivered to the distribution system prior to the first customer in accordance with subparagraph (iii)(A).

(B) Provide continuous filtration and disinfection in accordance with this paragraph within 48 months after the Department determines the source of supply is a GUDI source.

(C) Submit to the Department for approval a feasibility study within 1 year after the Department determines the source of supply is a GUDI source. The feasibility study shall specify the means by which the supplier shall, within the deadline established in clause (B), meet the requirements of this paragraph and shall otherwise comply with subparagraph (iv)(A).

(2) In addition to meeting the requirements of paragraph (1), a public water supplier using surface water or GUDI sources shall also comply with the requirements of, and on the schedules in, Subchapter L (relating to long-term 2 enhanced surface water treatment rule).

(3) A community public water system shall provide continuous disinfection and comply with Subchapter M (relating to additional requirements for groundwater sources) for groundwater sources.

(4) Public water systems shall conduct assessments in accordance with § 109.705(b) (relating to system evaluations and assessments) after meeting any of the triggers under subparagraph (i) or (ii). Failure to conduct an assessment or complete a corrective action in accordance with § 109.705(b) is a treatment technique violation requiring 1-hour reporting in accordance with § 109.701(a)(3) (relating to reporting and recordkeeping) and public notification in accordance with § 109.409 (relating to Tier 2 public notice—categories, timing and delivery of notice).

(i) A Level 1 assessment is triggered if any of the following conditions occur:

(A) For systems taking 40 samples or more per month under § 109.301(3), the system exceeds 5.0% total coliform-positive samples for the month.

(B) For systems taking fewer than 40 samples per month under § 109.301(3), the system has two or more total coliform-positive samples in the same month.

(C) The system fails to take every required check sample under § 109.301(3) after any single total coliform-positive sample.

(ii) A Level 2 assessment is triggered if any of the following conditions occur:

(A) A system fails to meet the *E. coli* MCL as specified under subsection (a)(2).

(B) A system triggers another Level 1 assessment, as defined in subparagraph (i), within a rolling 12-month period, unless the Department has determined a likely reason that the samples that caused the first Level 1 assessment were total coliform-positive and has established that the system has corrected the problem.

(5) Failure by a seasonal water system to complete the approved start-up procedure prior to serving water to the public as required under § 109.715 (relating to seasonal systems) is a treatment technique violation requiring 1-hour reporting in accordance with § 109.701(a)(3) and public notification in accordance with § 109.409.

(6) Community water systems using a chemical disinfectant or that deliver water that has been treated with a chemical disinfectant shall comply with the minimum residual disinfectant concentration specified in § 109.710 (relating to disinfectant residual in the distribution system).

(7) Nontransient noncommunity water systems that have installed chemical disinfection and transient noncommunity water systems that have installed chemical disinfection in accordance with paragraph (1) or § 109.1302(b) (relating to treatment technique requirements) shall comply with the minimum residual disinfectant concentration specified in § 109.710.

(d) *Fluoride.* A public water system shall comply with the primary MCL for fluoride of 2 mg/L, except that a noncommunity water system implementing a fluoridation program approved by the Department of Health and using fluoridation facilities approved by the Department under § 109.505 (relating to requirements for noncommunity water systems) may exceed the MCL for fluoride but may not exceed the fluoride level approved by the Department of Health. The secondary MCL for fluoride of 2 mg/L established by the EPA under 40 CFR 143.3 is not incorporated into this chapter.

(e) *Treatment technique requirements for acrylamide and epichlorohydrin.* Systems which use acrylamide or epichlorohydrin in the water treatment process shall certify in accordance with § 109.701(d)(7) that the following specified levels have not been exceeded:

(1) Acrylamide = 0.05% dosed at 1 ppm (or equivalent).

(2) Epichlorohydrin = 0.01% dosed at 20 ppm (or equivalent).

(f) *MRDLs.*

(1) A public water system shall supply drinking water that complies with the MRDLs adopted by the EQB under the act.

(2) This subchapter incorporates by reference the primary MRDLs in the National Primary Drinking Water Regulations, in 40 CFR Part 141, Subpart G (relating to National Primary Drinking Water Regulations: maximum contaminant levels and maximum residual disinfectant levels) as State MRDLs, under the authority of section 4 of the act, unless other MRDLs are established by regulations of the Department. The primary MRDLs which are incorporated by reference are effective on the date established by the Federal regulations.

(g) *Treatment technique requirements for disinfection byproduct precursors.* Community water systems and nontransient noncommunity water systems that use either surface water or GUDI sources and that use conventional filtration treatment shall provide adequate treatment to reliably control disinfection byproduct precursors in the source water. Enhanced coagulation and enhanced softening are deemed by the Department to be treatment techniques for the control of disinfection byproduct precursors in drinking water treatment and distribution systems. This subchapter incorporates by reference the treatment technique in 40 CFR 141.135 (relating to treatment technique for control of disinfection byproduct (DBP) precursors). Coagulants approved by the Department are deemed to be acceptable for the purpose of this treatment technique. This treatment technique is effective on the date established by the Federal regulations.

(h) *Recycling of waste stream.*

(1) Except as provided in paragraph (2), a public water system that uses surface water source or GUDI and provides conventional filtration or direct filtration treatment and recycles spent filter backwash water, thickener supernatant, or liquids from dewatering processes shall return these recycled flows through the processes of the system's existing conventional or direct filtration system as defined in § 109.1 (relating to definitions) or at an alternate location approved by the Department by June 8, 2004.

(2) If capital improvements are required to modify the recycle location to meet the requirement of paragraph (1), the capital improvements shall be completed by June 8, 2006.

(3) Capital improvement means a nonrecurring, significant modification for nonroutine, long-term physical improvements to any part of a public water system, including, but not limited to, construction activities, renovation activities, demolition activities, source development, treatment process modifications, storage modifications, distribution system modifications, waste-processing modifications and all associated design costs.

Subchapter C. MONITORING REQUIREMENTS

§ 109.301. General monitoring requirements.

Public water suppliers shall monitor for compliance with MCLs, MRDLs and treatment technique requirements in accordance with the requirements established by the EPA under the National Primary Drinking Water Regulations, 40 CFR Part 141 (relating to National Primary Drinking Water Regulations), except as otherwise established by this chapter unless increased monitoring is required by the Department under § 109.302 (relating to special monitoring requirements). Alternative monitoring requirements may be established by the Department and may be implemented in lieu of monitoring requirements for a particular National Primary Drinking Water Regulation if the alternative monitoring requirements are in conformance with the Federal act and regulations. The monitoring requirements shall be applied as follows:

(1) *Performance monitoring for filtration and disinfection.* A public water supplier providing filtration and disinfection of surface water or GUDI sources shall conduct the following performance monitoring requirements, unless increased monitoring is required by the Department under § 109.302.

(i) Except as provided under subparagraphs (ii) and (iii) a public water supplier:

(A) Shall determine and record the turbidity level of representative samples of the system's filtered water as follows:

(I) For systems that operate continuously, at least once every 4 hours that the system is in operation, except as provided in clause (B).

(II) For systems that do not operate continuously, at start-up, at least once every 4 hours that the system is in operation, and also prior to shutting down the plant, except as provided in clause (B).

(B) May substitute continuous turbidity monitoring and recording for grab sample monitoring and manual recording if it validates the continuous measurement for accuracy on a regular basis using a procedure specified by the manufacturer. At a minimum, calibration with an EPA-approved primary standard shall be conducted at least quarterly. For systems using slow sand filtration or filtration treatment other than conventional filtration, direct filtration or diatomaceous earth filtration, the Department may reduce the sampling frequency to once per day.

(C) Shall continuously monitor and record the residual disinfectant concentration of the water being supplied to the distribution system and record both the lowest value

for each day and the number of periods each day when the value is less than 0.20 mg/L for more than 4 hours. If a public water system's continuous monitoring or recording equipment fails, the public water supplier may, upon notification of the Department under § 109.701(a)(3) (relating to reporting and recordkeeping), substitute grab sampling or manual recording every 4 hours in lieu of continuous monitoring. Grab sampling or manual recording may not be substituted for continuous monitoring or recording for longer than 5 working days after the equipment fails.

(D) Until April 28, 2019, shall measure and record the residual disinfectant concentration at representative points in the distribution system no less frequently than the frequency required for total coliform sampling for compliance with the MCL for microbiological contaminants.

(E) Beginning April 29, 2019, shall measure and record the residual disinfectant concentration at representative points in the distribution system in accordance with a sample siting plan as specified in § 109.701(a)(8) and as follows:

(I) A public water supplier shall monitor the residual disinfectant concentration at the same time and from the same location that a total coliform sample is collected as specified in paragraph (3)(i) and (ii). Measurements taken under this subclause may be used to meet the requirements under subclause (II).

(II) A public water supplier shall monitor the residual disinfectant concentration at representative locations in the distribution system at least once per week.

(III) A public water supplier that does not maintain the minimum residual disinfectant concentration specified in § 109.710 (relating to disinfectant residual in the distribution system) at one or more sample sites shall include those sample sites in the monitoring conducted the following month.

(IV) Compliance with the minimum residual disinfectant concentration shall be determined in accordance with § 109.710.

(V) A public water system may substitute online residual disinfectant concentration monitoring and recording for grab sample monitoring and manual recording if it validates the online measurement for accuracy in accordance with § 109.304 (relating to analytical requirements).

(ii) For a public water supplier serving 3,300 or fewer people, the Department may reduce the residual disinfectant concentration monitoring for the water being supplied to the distribution system to a minimum of 2 hours between samples at the grab sampling frequencies prescribed as follows if the historical performance and operation of the system indicate the system can meet the residual disinfectant concentration at all times:

System Size (People)	*Samples/Day*
<500	1
500—1,000	2
1,001—2,500	3
2,501—3,300	4

If the Department reduces the monitoring, the supplier shall nevertheless collect and analyze another residual disinfectant measurement as soon as possible, but no longer than 4 hours from any measurement which is less than .2 mg/L.

(iii) For a public water supplier serving fewer than 500 people, the Department may reduce the filtered water turbidity monitoring to one grab sample per day, if the historical performance and operation of the system indicate effective turbidity removal is maintained under the range of conditions expected to occur in the system's source water.

(iv) A public water supplier providing conventional filtration treatment or direct filtration and serving 10,000 or more people and using surface water or GUDI sources shall, beginning January 1, 2002, conduct continuous monitoring of turbidity for each individual filter using an approved method under the EPA regulation in 40 CFR 141.74(a) (relating to analytical and monitoring requirements) and record the results at least every 15 minutes. Beginning January 1, 2005, public water suppliers providing conventional or direct filtration and serving fewer than 10,000 people and using surface water or GUDI sources shall conduct continuous monitoring of turbidity for each individual filter using an approved method under the EPA regulation in 40 CFR 141.74(a) and record the results at least every 15 minutes.

(A) The water supplier shall calibrate turbidimeters using the procedure specified by the manufacturer. At a minimum, calibration with an EPA-approved primary standard shall be conducted at least quarterly.

(B) If there is failure in the continuous turbidity monitoring or recording equipment, or both, the system shall conduct grab sampling or manual recording, or both, every 4 hours in lieu of continuous monitoring or recording.

(C) A public water supplier serving 10,000 or more persons has a maximum of 5 working days following the failure of the equipment to repair or replace the equipment before a violation is incurred.

(D) A public water supplier serving fewer than 10,000 persons has a maximum of 14 days following the failure of the equipment to repair or replace the equipment before a violation is incurred.

(v) A public water supplier shall calculate the log inactivation of Giardia, using measurement methods established by the EPA, at least once per day during expected peak hourly flow. The log inactivation for Giardia must also be calculated whenever the residual disinfectant concentration at the entry point falls below the minimum value specified in § 109.202(c) (relating to State MCLs, MRDLs and treatment technique requirements) and continue to be calculated every 4 hours until the residual disinfectant concentration at the entry point is at or above the minimum value specified in § 109.202(c). Records of log inactivation calculations must be reported to the Department in accordance with § 109.701(a)(2).

(vi) In addition to the requirements specified in subparagraph (v), a public water supplier that uses a disinfectant other than chlorine to achieve log inactivation shall calculate the log inactivation of viruses at least once per day during expected peak hourly flow. The log inactivation for viruses shall also be calculated whenever the residual disinfectant concentration at the entry point falls below the minimum value specified in § 109.202(c) and continue to be calculated every 4 hours until the residual disinfectant concentration at the entry point is at or above the minimum value specified in § 109.202(c). Records of log inactivation calculations shall be reported to the Department in accordance with § 109.701(a).

(2) *Performance monitoring for unfiltered surface water and GUDI.* A public water supplier using unfiltered surface water or GUDI sources shall conduct the following source water and performance monitoring requirements on an interim basis until filtration is provided, unless increased monitoring is required by the Department under § 109.302:

(i) Except as provided under subparagraphs (ii) and (iii), a public water supplier:

(A) Shall perform *E. coli* or total coliform density determinations on samples of the source water immediately prior to disinfection. Regardless of source water turbidity, the minimum frequency of sampling for total coliform or *E. coli* determinations may be no less than the following:

System Size (People)	*Samples/Week*
<500	1
500—3,299	2
3,300—10,000	3
10,001—25,000	4
25,001 or more	5

(B) Shall measure the turbidity of a representative grab sample of the source water immediately prior to disinfection as follows:

(I) For systems that operate continuously, at least once every 4 hours that the system is in operation, except as provided in clause (C).

(II) For systems that do not operate continuously, at start-up, at least once every 4 hours that the system is in operation, and also prior to shutting down the plant, except as provided in clause (C).

(C) May substitute continuous turbidity monitoring for grab sample monitoring if it validates the continuous measurement for accuracy on a regular basis using a procedure specified by the manufacturer. At a minimum, calibration with an EPA-approved primary standard shall be conducted at least quarterly.

(D) Shall continuously monitor and record the residual disinfectant concentration required under § 109.202(c)(1)(iii) of the water being supplied to the distribution system and record the lowest value for each day. If a public water system's continuous monitoring or recording equipment fails, the public water supplier may, upon notification of the Department under § 109.701(a)(3), substitute grab sampling or manual recording, or both, every 4 hours in lieu of continuous monitoring. Grab sampling or manual recording may not be substituted for continuous monitoring for longer than 5 days after the equipment fails.

(E) Until April 28, 2019, shall measure the residual disinfectant concentration at representative points in the distribution system no less frequently than the frequency required for total coliform sampling for compliance with the MCL for microbiological contaminants.

(F) Beginning April 29, 2019, shall measure and record the residual disinfectant concentration at representative points in the distribution system in accordance with a sample siting plan as specified in § 109.701(a)(8) and as follows:

(I) A public water supplier shall monitor the residual disinfectant concentration at the same time and from the same location that a total coliform sample is collected as specified in paragraph (3)(i) and (ii). Measurements taken under this subclause may be used to meet the requirements under subclause (II).

(II) A public water supplier shall monitor the residual disinfectant concentration at representative locations in the distribution system at least once per week.

(III) A public water supplier that does not maintain the minimum residual disinfectant concentration specified in § 109.710 at one or more sample sites shall include those sample sites in the monitoring conducted the following month.

(IV) Compliance with the minimum residual disinfectant concentration shall be determined in accordance with § 109.710.

(V) A public water system may substitute online residual disinfectant concentration monitoring and recording for grab sample monitoring and manual recording if it validates the online measurement for accuracy in accordance with § 109.304.

(ii) For a public water supplier serving 3,300 or fewer people, the Department may reduce the residual disinfectant concentration monitoring for the water being supplied to the distribution system to a minimum of 2 hours between samples at the grab sampling frequencies prescribed as follows if the historical performance and operation of the system indicate the system can meet the residual disinfectant concentration at all times:

* * * * *

(5) *Monitoring requirements for VOCs.* Community water systems and nontransient noncommunity water systems shall monitor for compliance with the MCLs for VOCs established by the EPA under 40 CFR 141.61(a) (relating to maximum contaminant levels for organic contaminants). The monitoring shall be conducted according to the requirements established by the EPA under 40 CFR 141.24(f) (relating to organic chemicals, sampling and analytical requirements), incorporated herein by reference, except as modified by this chapter. Initial or first year monitoring mentioned in this paragraph refers to VOC monitoring conducted on or after January 1, 1993.

(i) *Vinyl chloride.* Monitoring for compliance with the MCL for vinyl chloride is required for groundwater entry points at which one or more of the following two-carbon organic compounds have been detected: trichloroethylene, tetrachloroethylene, 1,2-dichloroethane, 1,1,1-trichloroethane, cis-1,2-dichloroethylene, trans-1,2-dichloroethylene or 1,1-dichloroethylene and shall consist of quarterly samples. If the results of the first analysis do not detect vinyl chloride, monitoring shall be reduced to one sample during each compliance period. Surface water entry points shall monitor for vinyl chloride as specified by the Department.

(ii) *Initial monitoring.* Initial monitoring shall consist of 4 consecutive quarterly samples at each entry point in accordance with the following monitoring schedule during the compliance period beginning January 1, 1993, except for systems which are granted reduced initial monitoring in accordance with clauses (E) and (F). A system which monitors during the initial monitoring period, but begins monitoring before its scheduled initial monitoring year specified in this subparagraph, shall begin monitoring every entry point during the first calendar quarter of the year it begins monitoring, except as provided in clause (E).

(A) Systems serving more than 10,000 persons shall begin monitoring during the quarter beginning January 1, 1994.

(B) Systems serving 3,301 persons to 10,000 persons shall begin monitoring during the quarter beginning January 1, 1995.

(C) Systems serving 500 to 3,300 persons shall begin monitoring during the quarter beginning January 1, 1993.

(D) Systems serving fewer than 500 persons shall begin monitoring during the quarter beginning January 1, 1994.

(E) For systems serving 3,300 or fewer people which monitor at least one quarter prior to October 1, 1993, and do not detect VOCs at an entry point during the first quarterly sample, the required initial monitoring is reduced to one sample at that entry point. For systems serving 500 to 3,300 people to qualify for this reduced monitoring, the initial monitoring shall have been conducted during the quarter beginning January 1, 1993.

(F) For systems serving more than 3,300 people, which were in existence prior to January 1, 1993, initial monitoring for compliance with the MCLs for VOCs established by the EPA under 40 CFR 141.61(a) is reduced to one sample for each entry point which meets the following conditions:

(I) VOC monitoring required by the Department between January 1, 1988, and December 31, 1992, has been conducted and no VOCs regulated under 40 CFR 141.61(a) were detected.

(II) The first quarter monitoring required by this paragraph has been conducted during the first quarter of the system's scheduled monitoring year under this paragraph, with no detection of a VOC.

(G) Systems with new entry points associated with new sources which are permitted under Subchapter E (relating to permit requirements) to begin operation after December 31, 1992, shall conduct initial monitoring as follows. New entry points shall be monitored quarterly, beginning the first full quarter the entry point begins serving the public.

(iii) *Repeat monitoring for entry points at which a VOC is detected.* For entry points at which a VOC is detected at a level equal to or greater than 0.0005 mg/L, then:

(A) Monitoring shall be repeated quarterly beginning the quarter following the detection for VOCs for which the EPA has established MCLs under 40 CFR 141.61(a), except for vinyl chloride as provided in subparagraph (i), until reduced monitoring is granted in accordance with this subparagraph.

(B) The Department may decrease the quarterly monitoring requirement specified in clause (A) provided it has determined that the system is reliably and consistently below the MCL. For an initial detection of a VOC, the Department will not make this determination until the water system obtains results from a minimum of four consecutive quarterly samples that are reliably and consistently below the MCL.

* * * * *

(6) *Monitoring requirements for SOCs (pesticides and PCBs).* Community water systems and nontransient noncommunity water systems shall monitor for compliance with the MCLs for SOCs established by the EPA under 40 CFR 141.61(c). The monitoring shall be conducted according to the requirements established by the EPA under 40 CFR 141.24(h), incorporated herein by reference except as modified by this chapter.

(i) *Initial monitoring.* Initial monitoring shall consist of 4 consecutive quarterly samples at each entry point beginning during the quarter beginning January 1, 1995, except for systems which are granted an initial monitoring waiver in accordance with subparagraph (vii). Systems which monitor during the initial monitoring period but begin monitoring before 1995 shall begin monitoring during the first calendar quarter of the year. New entry points associated with new sources which are vulnerable to SOC contamination, as determined in accordance with subparagraph (vii), and which begin operation after March 31, 1995, shall be monitored quarterly, beginning the first full quarter the entry point begins serving the public.

(ii) *Repeat monitoring for SOCs that are detected.* If an SOC is detected (as defined by the EPA under 40 CFR 141.24(h)(18) or by the Department), then:

(A) Monitoring for the detected SOC shall be conducted quarterly, beginning the quarter following the detection, until reduced monitoring is granted in accordance with this subparagraph.

(B) The Department may decrease the quarterly monitoring requirement specified in clause (A) provided it has determined that the system is reliably and consistently below the MCL. For an initial detection of a SOC, the Department will not make this determination until the water system obtains results from a minimum of four consecutive quarterly samples that are reliably and consistently below the MCL.

(C) If the Department determines that the system is reliably and consistently below the MCL, the Department may allow the system to monitor annually. Systems which monitor annually shall monitor during the quarter that previously yielded the highest analytical result, or as specified by the Department.

(D) Systems which have 3 consecutive years of quarterly or annual samples with no detection of a contaminant may apply to the Department for a waiver as specified in subparagraph (vii). A waiver is effective for one compliance period and may be renewed in each subsequent compliance period.

(E) For entry points at which either heptachlor or heptachlor epoxide is detected during the initial round of consecutive quarterly samples, or in subsequent repeat samples, the monitoring shall be continued for both contaminants in accordance with the more frequent monitoring required of the two contaminants based on the level at which each is detected.

(iii) *Repeat monitoring for SOCs that are not detected.* For entry points at which SOCs are not detected during the first year of quarterly monitoring, the required monitoring is reduced to one sample in each 3-year compliance period for systems serving 3,300 or fewer persons and to 2 consecutive quarterly samples in each compliance period for systems serving more than 3,300 persons. Reduced monitoring shall be conducted at 3-year intervals from the year of required initial VOC monitoring, in accordance with paragraph (5)(ii).

(iv) *Repeat monitoring for SOCs with MCL exceedances.* For entry points at which an SOC MCL is exceeded, monitoring for the detected SOC shall be conducted quarterly, beginning the quarter following the exceedance. Quarterly monitoring shall continue until a minimum of 4 consecutive quarterly samples shows the system is in compliance as specified in subparagraph (ix) and the Department determines the system is reliably and consistently below the MCL. If the Department determines that the system is in compliance and is reliably and consis-

tently below the MCL, the Department may allow the system to monitor in accordance with subparagraph (ii)(C).

(v) *Confirmation samples.* A confirmation sample shall be collected and analyzed for each SOC listed under 40 CFR 141.61(c) which is detected at a level in excess of its MCL during annual or less frequent compliance monitoring. The confirmation sample shall be collected within 2 weeks of the water supplier receiving notification from the accredited laboratory performing the analysis that an MCL has been exceeded. The average of the results of the original and the confirmation samples will be used to determine compliance. Confirmation monitoring shall be completed by the deadline specified for SOC compliance monitoring.

(vi) *Reduced monitoring.* When reduced monitoring is provided under subparagraph (ii) or (iii), the system shall monitor the entry point during the second calendar year quarter, or the second and third calendar year quarter when 2 quarterly samples are required in each compliance period, unless otherwise specified by the Department. The reduced monitoring option in subparagraph (iii) does not apply to entry points at which treatment has been installed for SOC removal. Compliance monitoring for SOCs for which treatment has been installed to comply with an MCL shall be conducted at least annually, and performance monitoring shall be conducted quarterly.

(vii) *Waivers.* A waiver will be granted to a public water supplier from conducting the initial compliance monitoring or repeat monitoring, or both, for an SOC based on documentation provided by the public water supplier and a determination by the Department that the criteria in clause (B), (C) or (D) has been met. A waiver is effective for one compliance period and may be renewed in each subsequent compliance period. If the Department has not granted a use waiver in accordance with clause (B), the public water supplier is responsible for submitting a waiver application and renewal application to the Department for review in accordance with clause (B), (C) or (D) for specific entry points. Waiver applications will be evaluated relative to the vulnerability assessment area described in clause (A) and the criteria in clause (B), (C) or (D). Entry points at which treatment has been installed to remove an SOC are not eligible for a monitoring waiver for the SOCs for which treatment has been installed.

(A) *Vulnerability assessment area for SOCs including dioxin and PCBs.*

(I) For groundwater or GUDI entry points, the vulnerability assessment area shall consist of wellhead protection area Zones I and II.

(II) For surface water entry points, the vulnerability assessment area shall consist of the area that supplies water to the entry point and is separated from other watersheds by the highest topographic contour.

(B) *Use waivers.* A use waiver will be granted by the Department for contaminants which the Department has determined have not been used, stored, manufactured, transported or disposed of in this Commonwealth, or portions of this Commonwealth. A use waiver specific to a particular entry point requires that an SOC was not used, stored, manufactured, transported or disposed of in the vulnerability assessment area. If use waiver criteria cannot be met, a public water supplier may apply for a susceptibility waiver.

(C) *Susceptibility waivers.* A susceptibility waiver for specific contaminants may be granted based on the following criteria, and only applies to groundwater entry points:

(I) Previous analytical results.

(II) Environmental persistence and transport of the contaminant.

(III) Proximity of the drinking water source to point or nonpoint source contamination.

(IV) Elevated nitrate levels as an indicator of the potential for pesticide contamination.

(V) Extent of source water protection or approved wellhead protection program.

(D) *Waiver requests and renewals.* Waiver requests and renewals shall be submitted to the Department, on forms provided by the Department, for review and approval prior to the end of the applicable monitoring period. Until the waiver request or renewal is approved, the public water system is responsible for conducting all required monitoring.

(viii) *Invalidation of SOC samples.*

(A) The Department may invalidate results of obvious sampling errors.

(B) An SOC sample invalidated under this subparagraph does not count towards meeting the minimum monitoring requirements of this paragraph.

(ix) *Compliance determinations.* Compliance with the SOC MCLs shall be determined based on the analytical results obtained at each entry point. If one entry point is in violation of an MCL, the system is in violation of the MCL.

(A) For systems monitoring more than once per year, compliance with the MCL is determined by a running annual average of all samples taken at each entry point.

(B) If monitoring is conducted annually or less frequently, the system is out of compliance if the level of a contaminant at any entry point is greater than the MCL. If a confirmation sample is collected as specified in subparagraph (v), compliance is determined using the average of the two sample results.

(C) If any sample result will cause the running annual average to exceed the MCL at any entry point, the system is out of compliance with the MCL immediately.

(D) If a system fails to collect the required number of samples, compliance with the MCL will be based on the total number of samples collected.

(E) If a sample result is less than the detection limit, zero will be used to calculate compliance.

(7) *Monitoring requirements for IOCs.* Community water systems and nontransient noncommunity water systems shall monitor for compliance with the MCLs for IOCs established by the EPA under 40 CFR 141.62 (relating to maximum contaminant levels for inorganic contaminants). Transient noncommunity water suppliers shall monitor for compliance with the MCLs for nitrate and nitrite. The monitoring shall be conducted according to the requirements established by the EPA under 40 CFR 141.23 (relating to inorganic chemical sampling and analytical requirements). The requirements are incorporated by reference except as modified by this chapter.

(i) *Monitoring requirements for asbestos.*

(A) *Monitoring frequency.* Community water systems and nontransient noncommunity water systems not granted a waiver under clause (F) shall monitor for compliance with the MCL for asbestos by taking one sample at each vulnerable sampling point during the first 3-year compliance period of each 9-year compliance cycle, with the initial compliance monitoring beginning not later than the calendar year beginning January 1, 1995.

(B) *Sampling points.* A system shall monitor at the following locations:

(I) Each entry point to the distribution system.

(II) At least one representative location within the distribution system identified in a written sample site plan that includes a materials evaluation of the distribution system. The written sample site plan shall be maintained on record and submitted to the Department prior to conducting initial monitoring or upon request.

(C) *Monitoring of new entry points.* New entry points which begin operation after December 31, 1995, shall conduct initial monitoring during the first compliance period of the first compliance cycle after the entry point begins serving the public, if the Department determines that a waiver cannot be granted in accordance with clause (F).

(D) *Repeat monitoring for systems that exceed the asbestos MCL.* If a sample exceeds the MCL for asbestos, the monitoring at that sampling point shall be continued quarterly beginning in the quarter following the MCL exceedance. After four consecutive quarterly samples with results reliably and consistently below the MCL at that entry point, the required monitoring is reduced to one sample at that entry point during the first 3-year compliance period of each subsequent 9-year compliance cycle, if treatment has not been installed to remove asbestos from the source water. Compliance monitoring at entry points at which treatment has been installed to remove asbestos from source water shall be conducted at least annually, and performance monitoring shall be conducted quarterly.

(E) *Confirmation samples.* For asbestos sample results in excess of the MCL during annual or less frequent compliance monitoring, the water supplier shall take a confirmation sample within 2 weeks of notification by the accredited laboratory performing the analysis. The average of the results of the original and the confirmation sample will be used to determine compliance. Monitoring shall be completed by the deadline specified for asbestos compliance monitoring.

(F) *Waivers for asbestos monitoring.* A waiver will be granted to a public water supplier from conducting compliance monitoring for asbestos based on documentation provided by the public water supplier and a determination by the Department that the criteria in this clause have been met. A waiver is effective for one compliance period and may be renewed in each subsequent compliance period. Entry points at which treatment has been installed to remove asbestos are not eligible for a monitoring waiver.

(I) A waiver for entry point compliance monitoring may be granted if the sources supplying the entry point are not vulnerable to asbestos contamination.

(II) A waiver for distribution system monitoring may be granted if the distribution system does not contain asbestos cement pipe as indicated in the materials evaluation or if the water system has optimized corrosion control as specified in Subchapter K (relating to lead and copper).

(III) Waiver requests and renewals shall be submitted to the Department, on forms provided by the Department, for review and approval prior to the end of the applicable monitoring period. Until the waiver request or renewal is approved, the public water system is responsible for conducting all required monitoring.

(ii) *Monitoring requirements for nitrate and nitrite.*

(A) *Initial monitoring schedule.* A public water system shall begin monitoring for nitrate and nitrite by taking one annual sample at each groundwater or GUDI entry point to the distribution system beginning during the year beginning January 1, 1993. Community water systems and nontransient noncommunity water systems with surface water sources shall monitor quarterly at each surface water entry point for nitrate and nitrite beginning during the quarter beginning January 1, 1993. Transient noncommunity water systems shall monitor each surface water entry point by taking one annual sample beginning during the year beginning January 1, 1993.

(B) *Monitoring of new entry points.*

(I) New community and nontransient noncommunity surface water entry points associated with new sources shall be monitored quarterly, beginning the first full quarter the entry point begins serving the public. Quarterly monitoring shall continue until reduced monitoring is granted in accordance with clause (C)(II) or (D).

(II) New community and nontransient noncommunity groundwater or GUDI entry points and new transient noncommunity entry points associated with new sources shall be monitored annually, beginning within 1 year of serving the public.

(C) *Repeat monitoring for systems with nitrate or nitrite levels equal to or greater than 50% of the MCLs.*

(I) For entry points at which initial monitoring results or subsequent monitoring indicate nitrate or nitrite levels equal to or greater than 50% of the MCL, water systems shall begin quarterly monitoring the quarter following detection at that level and continue quarterly monitoring for both nitrate and nitrite, unless reduced monitoring is granted in accordance with subclause (II) or (III).

(II) For surface water entry points, after 4 consecutive quarterly samples at an entry point for a water system indicate nitrate and nitrite levels in each sample are less than 50% of the MCLs, the required compliance monitoring is reduced to 1 sample per year at the entry point. Annual monitoring shall be conducted during the quarter which previously resulted in the highest analytical result, unless the Department determines that a different monitoring quarter should be used in accordance with paragraph (10).

(III) For groundwater or GUDI entry points, after 4 consecutive quarterly samples at an entry point for a water system indicate nitrate and nitrite levels in each sample are reliably and consistently below the MCL, the required compliance monitoring is reduced to 1 sample per year at the entry point. Annual monitoring shall be conducted during the quarter which previously resulted in the highest analytical result, unless the Department determines that a different monitoring quarter should be used in accordance with paragraph (10).

(IV) For nitrate or nitrite sample results in excess of the MCLs, the water supplier shall take a confirmation sample within 24 hours of having received the original sample result. A water supplier that is unable to comply with the 24-hour sampling requirement shall immediately

notify persons served by the public water system in accordance with § 109.408. Systems exercising this option shall take and analyze a confirmation sample within 2 weeks of notification of the analytical results of the first sample.

(V) Noncommunity water systems for which an alternate nitrate level has been approved by the Department in accordance with 40 CFR 141.11(d) (relating to maximum contaminant levels for inorganic chemicals) are not required to collect a confirmation sample if only the nitrate MCL is exceeded and nitrate is not in excess of the alternate nitrate level. If the alternate nitrate level is exceeded, the water supplier shall collect a confirmation sample within 24 hours after being advised by the certified laboratory performing the analysis that the compliance sample exceeded 20 mg/L for nitrate. Confirmation monitoring shall be completed by the deadline for compliance monitoring.

(VI) Quarterly performance monitoring is required for nitrate and nitrite at entry points where treatment has been installed to remove nitrate or nitrite.

(D) *Repeat monitoring for systems with nitrate and nitrite levels less than 50% of the MCLs.* For entry points at which initial monitoring results indicate nitrate and nitrite levels in each sample are less than 50% of the MCLs, nitrate and nitrite monitoring shall be repeated annually during the calendar quarter which previously resulted in the highest analytical result, unless the Department determines that a different monitoring quarter should be used in accordance with paragraph (10).

(iii) *Monitoring requirements for antimony, arsenic, barium, beryllium, cadmium, cyanide, chromium, fluoride, mercury, nickel, selenium and thallium.*

(A) *Initial monitoring schedule.* Community water systems and nontransient noncommunity water systems shall monitor each surface water entry point annually beginning during the year beginning January 1, 1993, and shall monitor each groundwater or GUDI entry point once every 3 years beginning during the year beginning January 1, 1994.

(B) *Monitoring of new entry points.* New groundwater or GUDI entry points which begin operation after December 31, 1994, shall begin initial monitoring in accordance with the schedule in clause (A)—that is, 1997, and so forth. New surface water entry points shall begin initial annual monitoring during the first new calendar year after the entry point begins serving the public.

(C) *Repeat monitoring for entry points at which an IOC MCL is exceeded.*

(I) For entry points at which initial monitoring results or subsequent monitoring indicates an IOC level in excess of the MCL, monitoring shall be repeated quarterly beginning the quarter following detection at that level for each IOC in excess of an MCL, until reduced monitoring is granted in accordance with subclause (II).

(II) After analyses of four consecutive quarterly samples indicate that contaminant levels are reliably and consistently below the MCLs, the required monitoring at an entry point where treatment has not been installed to comply with an IOC MCL for each IOC that is reliably and consistently below the MCL is reduced to the frequencies stated in clause (A). This reduced monitoring option does not apply to entry points at which treatment has been installed for IOC removal. Compliance monitoring for IOCs for which treatment has been installed to comply with an MCL shall be conducted at least annually, and performance monitoring shall be conducted quarterly.

* * * * *

(12) *Monitoring requirements for disinfection byproducts* and disinfection byproduct precursors. Community water systems and nontransient noncommunity water systems that use a chemical disinfectant or oxidant shall monitor for disinfection byproducts and disinfection byproduct precursors in accordance with this paragraph. Community water systems and nontransient noncommunity water systems that obtain finished water from another public water system that uses a chemical disinfectant or oxidant to treat the finished water shall monitor for TTHM and HAA5 in accordance with this paragraph. Systems that use either surface water or GUDI sources and that serve at least 10,000 persons shall begin monitoring by January 1, 2002. Systems that use either surface water or GUDI sources and that serve fewer than 10,000 persons, or systems that use groundwater sources, shall begin monitoring by January 1, 2004. Systems monitoring for disinfection byproducts and disinfection byproduct precursors shall take all samples during normal operating conditions. Systems monitoring for disinfection byproducts and disinfection byproduct precursors shall use only data collected under this chapter to qualify for reduced monitoring. Compliance with the MCLs and monitoring requirements for TTHM, HAA5, chlorite (where applicable) and bromate (where applicable) shall be determined in accordance with 40 CFR 141.132 and 141.133 (relating to monitoring requirements; and compliance requirements) which are incorporated herein by reference.

* * * * *

(iv) *Bromate.* Community water systems and nontransient noncommunity water systems that use ozone for disinfection or oxidation shall monitor for bromate.

(A) *Routine monitoring.* Systems shall take one sample per month for each treatment plant that uses ozone. Systems shall take the monthly sample at the entrance to the distribution system while the ozonation system is operating under normal conditions.

(B) *Reduced monitoring.*

(I) Until March 31, 2009, systems that have an average source water bromide concentration that is less than 0.05 mg/L based upon representative monthly bromide measurements for 1 year, the required monitoring is reduced from monthly to quarterly. Systems on reduced monitoring shall continue to take monthly samples for source water bromide. If the running annual average source water bromide concentration, computed quarterly, equals or exceeds 0.05 mg/L based upon representative monthly measurements, the system shall revert to routine monitoring as prescribed by clause (A).

(II) Beginning April 1, 2009, a system required to analyze for bromate may reduce monitoring from monthly to quarterly, if the system's running annual average bromate concentration computed quarterly is less than or equal to 0.0025 mg/L based on monthly measurements as prescribed in clause (A) analyzed using methods specified in 40 CFR 141.132(b)(3)(ii)(B) for the most recent 4 quarters. Systems qualifying for reduced bromate monitoring under subclause (I) may remain on reduced monitoring as long as the running annual average of quarterly bromate samples analyzed using methods specified in 40 CFR 141.132(b)(3)(ii)(B) is less than or equal to 0.0025 mg/L. If the running annual average bromate concentration is greater than 0.0025 mg/L, the system shall resume routine monitoring as prescribed under clause (A).

(v) *DBP precursors.* Community water systems and nontransient noncommunity water systems that use ei-

ther surface water or GUDI sources and that use conventional filtration shall monitor for disinfection byproduct precursors.

(A) *Routine monitoring.* Systems shall take monthly samples of the source water alkalinity, the source water TOC and postsedimentation TOC for each treatment plant that uses conventional filtration. Postsedimentation TOC can be taken at any point between sedimentation effluent and the entry point to the distribution system. The three samples shall be taken concurrently and at a time that is representative of both normal operating conditions and influent water quality.

(B) *Reduced monitoring.* For systems with an average postsedimentation TOC of less than 2.0 mg/L for 2-consecutive years, or less than 1.0 mg/L for 1 year, the required monitoring for source water alkalinity, source TOC and postsedimentation TOC is reduced from monthly to quarterly for each applicable treatment plant. The system shall revert to routine monitoring as prescribed by clause (A) in the month following the quarter when the annual average postsedimentation TOC is not less than 2.0 mg/L.

(C) *Early monitoring.* Systems may begin monitoring to determine whether the TOC removal requirements of 40 CFR 141.135(b)(1) (relating to treatment technique for control of disinfection byproduct (DBP) precursors) can be met 12 months prior to the compliance date for the system. This monitoring is not required and failure to monitor during this period is not a violation. However, any system that does not monitor during this period, and then determines in the first 12 months after the compliance date that it is not able to meet the requirements of 40 CFR 141.135(b)(1) and shall therefore apply for alternate minimum TOC removal requirements under 40 CFR 141.135(b)(4) is not eligible for retroactive approval of the alternate minimum TOC removal requirements and is in violation. Systems may apply for alternate minimum TOC removal requirements any time after the compliance date.

(13) *Monitoring requirements for disinfectant residuals.* Community water systems and nontransient noncommunity water systems that use either chlorine or chloramines or that obtain finished water from another public water system that uses either chlorine or chloramines, and transient noncommunity water systems that install chemical disinfection treatment in accordance with § 109.1302(b) (relating to treatment technique requirements) shall monitor for residual disinfectant concentration in accordance with this paragraph. Community water systems, nontransient noncommunity water systems and transient noncommunity water systems that use chlorine dioxide to treat the finished water shall monitor for chlorine dioxide in accordance with this paragraph. Systems monitoring for residual disinfectant concentration shall take all samples during normal operating conditions. Compliance with the MRDLs and monitoring requirements for chlorine, chloramines and chlorine dioxide (where applicable) shall be determined in accordance with 40 CFR 141.132 and 141.133 which are incorporated herein by reference. Compliance with the minimum residual disinfectant concentration shall be determined in accordance with § 109.710.

(i) *Chlorine and chloramines.*

(A) Until April 28, 2019, systems shall measure the residual disinfectant level at the same points in the distribution system and at the same time that total coliforms are sampled, as specified in paragraph (3). Systems that used either surface water or GUDI sources may use the results of residual disinfectant concentration sampling conducted under paragraph (1) or (2) in lieu of taking separate samples.

(B) Beginning April 29, 2019, systems shall measure the residual disinfectant concentration in accordance with a sample siting plan as specified in § 109.701(a)(8) and as follows:

(I) Public water systems shall monitor the residual disinfectant concentration at the same time and from the same location that a total coliform sample is collected as specified in paragraph (3)(i) and (ii). Systems that use either surface water or GUDI sources may use the results of residual disinfectant concentration sampling conducted under paragraph (1) or (2) instead of taking separate samples. Measurements taken under this clause may be used to meet the requirements under subclause (II).

(II) Public water systems shall monitor the residual disinfectant concentration at representative locations in the distribution system at least once per week.

(III) A public water system that does not maintain the minimum residual disinfectant concentration specified in § 109.710 at one or more sample sites shall include those sample sites in the monitoring conducted the following month.

(IV) Compliance with the minimum residual disinfectant concentration shall be determined in accordance with § 109.710.

(V) A public water system may substitute online residual disinfectant concentration monitoring and recording for grab sample monitoring and manual recording if it validates the online measurement for accuracy in accordance with § 109.304.

(ii) *Chlorine dioxide.*

* * * * *

§ 109.303. Sampling requirements.

* * * * *

(e) Compliance monitoring samples for the contaminants listed under 40 CFR 141.40(a), 141.61(a) and (c), 141.62 and 141.88 may be composited in accordance with 40 CFR 141.23(a)(4), 141.24(f)(14) and (h)(10) and 141.88(a)(1)(iv) (relating to inorganic chemical sampling and analytical requirements; organic chemicals, sampling and analytical requirements; and monitoring requirements for lead and copper in source water) except:

* * * * *

Subchapter D. PUBLIC NOTIFICATION

§ 109.408. Tier 1 public notice—categories, timing and delivery of notice.

(a) *General violation categories and other situations requiring a Tier 1 public notice.* A public water supplier shall provide Tier 1 public notice for the following circumstances:

(1) Violation of the MCL for *E. coli*, as specified in § 109.202(a)(2) (relating to State MCLs, MRDLs and treatment technique requirements), or when the water supplier fails to test for *E. coli* when any check sample tests positive for coliforms, as specified in § 109.301(3) (relating to general monitoring requirements).

(2) Violation of the MCL for nitrate, nitrite or total nitrate and nitrite, as defined in § 109.202(a)(2), or when the water supplier fails to take a confirmation sample within 24 hours of the system's receipt of the first sample

showing an exceedance of the nitrate or nitrite MCL, as specified in § 109.301(7)(ii)(C)(IV) and (V).

(3) Exceedance of the nitrate MCL by noncommunity water systems, when permitted by the Department in writing to exceed the MCL in accordance with 40 CFR 141.11(d) (relating to maximum contaminant levels for inorganic chemicals).

(4) Violation of the MRDL for chlorine dioxide, as defined in § 109.202(f)(2), when one or more samples taken in the distribution system the day following an exceedance of the MRDL at the entrance of the distribution system exceed the MRDL, or when the water supplier does not take the required samples in the distribution system, as specified in § 109.301.

(5) Violation of the turbidity MCL of 5 NTU based on an average for 2 consecutive days by a public water system using an unfiltered surface water source, as specified in § 109.202(a)(2).

(6) Violation of a treatment technique requirement for pathogenic bacteria, viruses and protozoan cysts as defined in § 109.202(c), resulting from:

(i) A single exceedance of the maximum allowable turbidity limit.

(ii) A failure to meet the minimum log inactivation for more than 4 hours.

(iii) A failure to maintain the minimum entry point residual disinfectant concentration for more than 4 hours and either of the following:

(A) A failure to calculate the log inactivation in accordance with § 109.301(1)(v) and (vi).

(B) A failure to meet the minimum log inactivation for more than 4 hours.

(7) Violation of a treatment technique requirement for *Cryptosporidium* as defined in § 109.1203 (relating to bin classification and treatment technique requirements), resulting from a failure to provide the level of treatment appropriate for the systems bin classification.

* * * * *

Subchapter G. SYSTEM MANAGEMENT RESPONSIBILITIES

§ 109.701. Reporting and recordkeeping.

(a) *Reporting requirements for public water systems.* Public water systems shall comply with the following requirements:

(1) *General reporting requirements.* Unless a different reporting period is specified in this chapter, the water supplier shall assure that the results of test measurements or analyses required by this chapter are reported to the Department within either the first 10 days following the month in which the result is received or the first 10 days following the end of the required monitoring period as stipulated by the Department, whichever is shorter. The test results shall include the following at a minimum:

(i) The name, address and public water system identification number (PWSID) of the public water system from which the sample was taken.

(ii) The name, address and identification number of the laboratory performing the analysis unless the analysis is not required to be performed by a certified laboratory.

(iii) The results of analytical methods, including negative results.

(iv) Contaminants.

(v) Analytical methods used.

(vi) The date of sample.

(vii) The date of analysis.

(viii) Sample location.

(2) *Monthly reporting requirements for performance monitoring.* In addition to the reporting requirements specified in paragraph (1), public water systems shall report performance monitoring data as follows:

(i) The test results of performance monitoring required under § 109.301(1) (relating to general monitoring requirements) for public water suppliers providing filtration and disinfection of surface water or GUDI sources must include the following at a minimum:

(A) For turbidity performance monitoring:

(I) The number of days of filtration operation.

(II) The number of filtered water turbidity measurements taken each month.

(III) The number of filtered water turbidity measurements that are less than or equal to 0.5 NTU for conventional, direct or other filtration technologies, or 1.0 NTU for slow sand or diatomaceous earth filtration technologies.

(IV) The date, time and values of any filtered water turbidity measurements exceeding 2.0 NTU.

(V) Instead of subclauses (III) and (IV), beginning January 1, 2002, for public water systems that serve 10,000 or more people and use conventional or direct filtration:

(-a-) The number of filtered water turbidity measurements that are less than or equal to 0.3 NTU.

(-b-) The date, time and values of any filtered water turbidity measurements exceeding 1 NTU.

(VI) Instead of subclauses (A)(III) and (IV), beginning January 1, 2005, for public water systems that serve fewer than 10,000 persons and use conventional or direct filtration:

(-a-) The number of filtered water turbidity measurements that are less than or equal to 0.3 NTU.

(-b-) The date, time and values of any filtered water turbidity measurements exceeding 1 NTU.

(VII) Instead of subclauses (III) and (IV), beginning January 1, 2002, for public water systems that serve 10,000 or more people and use other filtration technologies:

(-a-) The number of filtered water turbidity measurements that are less than or equal to 0.3 NTU or a more stringent turbidity performance level requirement that is based upon onsite studies and is specified by the Department.

(-b-) The date, time and values of any filtered water turbidity measurements exceeding 1 NTU or a more stringent turbidity performance level requirement that is based upon onsite studies and is specified by the Department.

(B) For performance monitoring of the residual disinfectant concentration of the water being supplied to the distribution system:

(I) The date, time and lowest value each day the residual disinfectant concentration remains equal to or greater than the required minimum.

(II) The initial date, time and value for each occurrence that the residual disinfectant concentration is less than the required minimum, and the subsequent date, time and value that the residual disinfectant concentration is equal to or greater than the required minimum.

(III) The date the entry point is not in operation.

(C) For performance monitoring of the log inactivation for Giardia, public water systems shall report as follows:

(I) The date, time and lowest log inactivation value for each day the value remains equal to or greater than the required minimum.

(II) The initial date, time and value for each occurrence that the log inactivation is less than the required minimum, and the subsequent date, time and value that the log inactivation is equal to or greater than the required minimum.

(III) The date the entry point is not in operation.

(D) For performance monitoring of the log inactivation for viruses, public water systems using a disinfectant other than chlorine to achieve log inactivation of viruses shall report as follows:

(I) The date, time and lowest log inactivation value for each day the value remains equal to or greater than the required minimum.

(II) The initial date, time and value for each occurrence that the log inactivation is less than the required minimum, and the subsequent date, time and value that the log inactivation is equal to or greater than the required minimum.

(III) The date the entry point is not in operation.

(ii) The test results of performance monitoring required under § 109.301(2) for public water suppliers using unfiltered surface water or GUDI sources shall include the following, at a minimum:

(A) For turbidity performance monitoring:

(I) The date, time and value of each sample that exceeds 1.0 NTU.

(II) The date, time and highest turbidity value, if the turbidity does not exceed 1.0 NTU in a sample.

(B) For performance monitoring of the residual disinfectant concentration of the water being supplied to the distribution system:

(I) The date, time and lowest value each day the concentration is less than the residual disinfectant concentration required under § 109.202(c)(1)(iii) (relating to State MCLs, MRDLs and treatment technique requirements).

(II) If the concentration does not fall below that required under § 109.202(c)(1)(iii) during the month, report the date, time and lowest value measured that month.

(C) For performance monitoring of the *E. coli* or total coliform density determinations on samples of the source water immediately prior to disinfection: the date, time and value of each sample.

(iii) The test results from performance monitoring required under § 109.301(8)(v) of the residual disinfectant concentration of the water in the distribution system shall include the date, time and value of each sample.

(3) *One-hour reporting requirements.* A public water supplier shall report the circumstances to the Department within 1 hour of discovery for the following violations or situations:

(i) A primary MCL or an MRDL has been exceeded or a treatment technique requirement has been violated under Subchapter B, K, L or M.

(ii) A sample result requires the collection of check samples under § 109.301.

(iii) Circumstances exist which may adversely affect the quality or quantity of drinking water including, but not limited to:

(A) The occurrence of a waterborne disease outbreak.

(B) A failure or significant interruption in key water treatment processes.

(C) A natural disaster that disrupts the water supply or distribution system.

(D) A chemical spill.

(E) An unexpected loading of possible pathogens into the source water that significantly increases the potential for drinking water contamination.

(F) An overfeed of a drinking water treatment chemical that exceeds a published maximum use value, such as National Sanitation Foundation's "Maximum Use Value," as applicable.

(G) A situation that causes a loss of positive water pressure in any portion of the distribution system where there is evidence of contamination or a water supplier suspects a high risk of contamination.

(H) A lack of resources that adversely affect operations, such as staff shortages, notification by the power utility of planned lengthy power outages or imminent depletion of treatment chemical inventories.

(iv) Any sample result is *E. coli*-positive.

(4) *Notice.* The water supplier shall, within 10 days of completion of each public notification required under Subchapter D (relating to public notification) with the exception of a CCR, submit to the Department a certification that it has fully complied with the public notification requirements. The water supplier shall include with this certification a representative copy of each type of notice distributed, published, posted and made available to persons served by the system and to the media and a description of the means undertaken to make the notice available.

(5) *Siting plan.* The water supplier shall submit to the Department a written sample siting plan for routine and repeat coliform sampling as required under § 109.301(3) by September 24, 2016. A public water system that begins operation after September 24, 2016, shall submit the sample siting plan prior to serving water to the public.

(i) A sample siting plan must include, at a minimum, the following:

(A) A list of sample site locations as specified in § 109.303(a)(2) (relating to sampling requirements) in the distribution system to be used for routine monitoring purposes.

(B) The name of the company or individual collecting the samples.

(C) A sample collection schedule.

(D) Available repeat monitoring locations for each routine monitoring location.

(E) Triggered source water monitoring locations as specified under § 109.1303 (relating to triggered monitoring requirements for groundwater sources).

(F) The population served by the system.

(G) A description of the accessibility of sample sites.

(H) The beginning and ending dates of each operating season for seasonal systems.

(ii) A water supplier shall revise and resubmit its sample siting plan within 30 days of notification by the Department of a sample siting plan which fails to meet the criteria in subparagraph (i).

(iii) The water supplier shall notify the Department of subsequent revisions to a coliform sample siting plan as they occur. Revisions to a coliform sample siting plan shall be submitted in written form to the Department within 30 days of notifying the Department of the revisions.

(6) *Records.* Upon request by the Department, the water supplier shall submit copies of records required to be maintained under this subchapter.

(7) *Form.* Reports required by this chapter shall be submitted in a manner or form acceptable to the Department.

(8) *Reporting requirements for disinfectant residuals.* In addition to the reporting requirements specified in paragraph (1), public water systems monitoring for disinfectant residuals under § 109.301 shall:

(i) Submit to the Department a written sample siting plan by October 29, 2018. A public water system that begins operation after April 28, 2018, shall submit the sample siting plan prior to serving water to the public. The sample siting plan for disinfectant residuals may be combined with the sample siting plan for coliforms specified in paragraph (5) if all content elements are included. At a minimum, the sample siting plan must include all of the following:

(A) A list of representative sample site locations in the distribution system to be used for residual disinfectant concentration monitoring. Representative locations include the following:

(I) Dead ends.

(II) First service connection.

(III) Finished water storage facilities.

(IV) Interconnections with other public water systems.

(V) Areas of high water age.

(VI) Areas with previous coliform detections.

(VII) Mixing zones for systems using chlorine and purchasing water from a system using chloramines or for systems using chloramines and purchasing water from a system using chlorine.

(B) Whether the sample site location is also used as a coliform, disinfection byproducts, or lead and copper sampling location.

(C) Whether the sample site location is located within a mixing zone.

(D) Whether online monitoring and recording will be substituted for grab sample measurements at the sample site location and the frequency of measurements by the online analyzer.

(E) A sample collection schedule.

(ii) Submit to the Department a revised sample siting plan within 30 days of notification by the Department that a sample siting plan fails to meet the criteria in clauses (A)—(E).

(iii) Notify the Department of subsequent revisions to a sample siting plan as they occur. Revisions to a sample siting plan shall be submitted in written form to the Department within 30 days of notifying the Department of the revisions.

(IV) Report to the Department the beginning and ending dates when a free chlorine burn is conducted for a system using chloramines.

(V) Report to the Department a daily average if online monitoring and recording is substituted for grab sample measurements.

(9) *Level 1 and Level 2 assessments.* A public water supplier shall:

(i) Submit an assessment form completed in accordance with § 109.705(b) (relating to system evaluations and assessments) to the Department within 30 days after the system learns that it has exceeded a trigger under § 109.202(c)(4).

(ii) Submit a revised assessment form in accordance with § 109.705(b) within 30 days of notification from the Department that revisions are necessary.

* * * * *

§ 109.710. Disinfectant residual in the distribution system.

(a) Until April 28, 2019, a disinfectant residual acceptable to the Department shall be maintained throughout the distribution system of the community water system sufficient to assure compliance with the microbiological MCLs and the treatment technique requirements specified in § 109.202 (relating to State MCLs, MRDLs and treatment technique requirements). The Department will determine the acceptable residual of the disinfectant considering factors such as type and form of disinfectant, temperature and pH of the water, and other characteristics of the water system.

(b) Until April 28, 2019, a public water system that uses surface water or GUDI sources or obtains finished water from another permitted public water system using surface water or GUDI sources shall comply with the following requirements:

(1) As a minimum, a detectable residual disinfectant concentration of 0.02 mg/L measured as total chlorine, combined chlorine or chlorine dioxide shall be maintained throughout the distribution system as demonstrated by monitoring conducted under § 109.301(1) and (2) or (8)(v) (relating to general monitoring requirements).

(2) Sampling points with nondetectable disinfectant residuals which have heterotrophic plate count (HPC) measurements of less than 500/ml are deemed to be in compliance with paragraph (1).

(3) When the requirements of paragraph (1) or (2) cannot be achieved, the supplier shall initiate an investigation under the Department's direction to determine the cause, potential health risks and appropriate remedial measures.

(c) Beginning April 29, 2019, a community water system using a chemical disinfectant or that delivers water that has been treated with a chemical disinfectant shall maintain a minimum residual disinfectant concentration throughout the distribution system sufficient to assure compliance with the microbiological MCLs and the treatment technique requirements specified in § 109.202. The minimum residual disinfectant concentration is 0.2 mg/L or another level approved by the Department for systems

using an alternate oxidizing disinfection treatment. The residual disinfectant concentration shall be measured as follows:

(1) Free chlorine for systems using chlorine.

(2) Total chlorine for systems using chloramines.

(3) Both free chlorine and total chlorine for sampling locations in a mixing zone as identified in the monitoring plan.

(4) Both free chlorine and total chlorine when a system using chloramines is conducting a free chlorine burn.

(d) Beginning April 29, 2019, a nontransient noncommunity water system that has installed chemical disinfection or a transient noncommunity water system that has installed chemical disinfection in accordance with § 109.202(c)(1) or § 109.1302(b) (relating to treatment technique requirements) shall maintain a minimum residual disinfectant concentration throughout the distribution system sufficient to assure compliance with the microbiological MCLs and the treatment technique requirements specified in § 109.202. The minimum residual disinfectant concentration is 0.2 mg/L or another level approved by the Department for systems using an alternate oxidizing disinfection treatment. The residual disinfectant concentration shall be measured as follows:

(1) Free chlorine for systems using chlorine.

(2) Total chlorine for systems using chloramines.

(3) Both free chlorine and total chlorine for sampling locations in a mixing zone as identified in the monitoring plan.

(4) Both free chlorine and total chlorine when a system using chloramines is conducting a free chlorine burn.

(e) Beginning April 29, 2019, compliance with the disinfectant residual treatment technique will be based on the number of samples collected each month as specified in the system distribution sample siting plan submitted to the Department under § 109.701(a)(8) (relating to reporting and recordkeeping). Compliance will be determined as follows:

(1) For a public water system that collects less than 40 samples per month and uses only groundwater or purchased groundwater sources, if no more than 1 sample collected per month is less than the minimum level specified in subsection (c) or (d) for 2 consecutive months, the system is in compliance with the treatment technique.

(2) For a public water system that collects 40 or more samples per month or that uses surface water, GUDI, purchased surface water or purchased GUDI sources, if no more than 5% of the samples collected per month are less than the minimum level specified in subsection (c) or (d) for 2 consecutive months, the system is in compliance with the treatment technique.

(3) For systems reporting both free and total chlorine residual measurements in accordance with subsections (c) and (d), compliance shall be based on the higher residual measurement.

(4) A public water system that experiences a treatment technique violation shall notify the Department within 1 hour of discovery of the violation in accordance with § 109.701(a)(3) and issue a Tier 2 public notice in accordance with § 109.409 (relating to Tier 2 public notice—categories, timing and delivery of notice).

(5) In addition to the requirements in paragraphs (1)—(4), a public water system that fails to meet the minimum level specified in subsection (c) or (d) at any sample location for 2 consecutive months or more shall conduct an investigation to determine the cause and appropriate corrective actions and shall submit a written report to the Department within 60 days.

(6) The Department may approve in writing an alternate compliance schedule if the water supplier submits a written request with supporting documentation by April 29, 2019.

(f) Public water systems may increase residual chlorine or chloramine, but not chlorine dioxide, disinfectant levels in the distribution system to a level that exceeds the MRDL for that disinfectant and for a time necessary to protect public health or to address specific microbiological contamination problems caused by circumstances such as, but not limited to, distribution line breaks, storm runoff events, source water contamination events or cross-connection events.

§ 109.716. Nitrification control plan.

(a) A public water system that uses chloramines or purchases water that contains chloramines shall develop a nitrification control plan by April 29, 2019. The plan must conform to the guidelines in industry standards such as the American Water Works Association's M56 Manual on Nitrification and contain at least the following information:

(1) A system-specific monitoring plan that includes, at a minimum:

(i) The list of parameters that will be monitored such as pH, free ammonia, total chlorine, monochloramine, HPC, nitrite and nitrate.

(ii) The monitoring locations.

(iii) The monitoring schedule.

(2) A response plan with expected water quality ranges and action levels.

(b) The public water system shall implement the nitrification control plan in accordance with accepted practices of the water supply industry.

(c) The public water system shall review and update the plan as necessary.

(d) The plan shall be retained onsite and shall be made available to the Department upon request.

Subchapter J. BOTTLED WATER AND VENDED WATER SYSTEMS, RETAIL WATER FACILITIES AND BULK WATER HAULING SYSTEMS

§ 109.1002. MCLs, MRDLs or treatment techniques.

(a) Bottled water and vended water systems, retail water facilities and bulk water hauling systems shall supply drinking water that complies with the MCLs, MRDLs and treatment technique requirements under §§ 109.202 and 109.203 (relating to State MCLs, MRDLs and treatment technique requirements; and unregulated contaminants). Bottled water systems, vended water systems, retail water facilities and bulk water hauling systems using surface water or GUDI sources shall comply with the requirements in § 109.204 (relating to disinfection profiling and benchmarking). Bottled water systems, vended water systems, retail water facilities and bulk water hauling systems shall provide continuous disinfection for groundwater sources. Water for bottling labeled as mineral water under § 109.1007 (relating to labeling requirements for bottled water systems, vended water systems and retail water facilities) shall comply with the MCLs except that mineral water may exceed the MCL for total dissolved solids.

(b) Bottled water and vended water systems, retail water facilities and bulk water hauling systems shall supply drinking water that contains no more than 0.005 mg/L of lead and no more than 1.0 mg/L copper.

(c) Bottled water and vended water systems, retail water facilities and bulk water hauling systems shall comply with the treatment technique requirements under Subchapter L (relating to long-term 2 enhanced surface water treatment rule).

(d) Bottled water and vended water systems, retail water facilities and bulk water hauling systems shall comply with Subchapter M (relating to additional requirements for groundwater sources). For the purpose of determining compliance with Subchapter M, bottled water and vended systems, retail water facilities and bulk water hauling systems using groundwater sources shall comply with standards pertaining to noncommunity groundwater systems.

§ 109.1003. Monitoring requirements.

(a) *General monitoring requirements.* Bottled water and vended water systems, retail water facilities and bulk water hauling systems shall monitor for compliance with the MCLs, MRDLs and treatment techniques as follows, except that systems which have installed treatment to comply with a primary MCL shall conduct quarterly operational monitoring for the contaminant which the treatment is designed to remove:

(1) Bottled water systems, retail water facilities and bulk water hauling systems, for each entry point shall:

* * * * *

(ix) *TTHM and HAA5 Stage 2 DBP Rule.* Beginning October 1, 2013, monitor annually for TTHM and HAA5 if the system uses a chemical disinfectant or oxidant to treat the water, or obtains finished water from another public water system that uses a chemical disinfectant or oxidant to treat the water as follows:

(A) *Routine monitoring.* Systems shall take at least one dual sample set per year per entry point during the peak historical month except that systems meeting the conditions in subsection (d) or (e) shall monitor in accordance with § 109.301(12)(ii) (relating to general monitoring requirements).

(B) *Increased monitoring.* If any sample results exceed either a TTHM or HAA5 MCL, the system shall take at least one dual sample set per quarter (every 90 days) per entry point. The system shall return to the sampling frequency of one dual sample set per year per entry point if, after at least 1 year of monitoring, each TTHM sample result is no greater than 0.060 mg/L and each HAA5 sample result is no greater than 0.045 mg/L.

(C) *Compliance determinations.* Compliance with the TTHM and HAA5 MCLs is based on the LRAA.

(I) A system required to monitor quarterly shall calculate LRAAs for TTHM and HAA5 using monitoring results collected under this subparagraph and determine that each LRAA does not exceed the MCL. A system that fails to complete 4 consecutive quarters of monitoring shall calculate compliance with the MCL based on the average of the available data from the most recent 4 quarters. A system that takes more than one sample per quarter at a monitoring location shall average all samples taken in the quarter at that location to determine a quarterly average to be used in the LRAA calculation.

(II) A system required to monitor yearly or less frequently shall determine that each sample result is less than the MCL. If any single sample result exceeds the MCL, the system shall comply with the requirements of clause (B). If no sample result exceeds the MCL, the sample result for each monitoring location is considered the LRAA for that monitoring location.

(III) A system required to conduct quarterly monitoring shall make compliance calculations at the end of the 4th calendar quarter that follows the compliance date (or earlier if the LRAA calculated based on fewer than 4 quarters of data would cause the MCL to be exceeded regardless of the monitoring results of subsequent quarters) and at the end of each subsequent calendar quarter. A system required to conduct monitoring at a frequency that is less than quarterly shall make compliance calculations beginning with the first compliance sample taken after the compliance date.

(IV) A system is in violation of the MCL when the LRAA at any location exceeds the MCL for TTHM or HAA5, calculated as specified in subclause (I), or the LRAA calculated based on fewer than 4 quarters of data if the MCL would be exceeded regardless of the monitoring results of subsequent quarters. If a system fails to monitor, the system is in violation of the monitoring requirements for each quarter that a monitoring result would be used in calculating an LRAA.

(x) Beginning January 1, 2004, monitor daily for chlorite if the system uses chlorine dioxide for disinfection or oxidation. Systems shall take at least one daily sample at the entry point. If a daily sample exceeds the chlorite MCL, the system shall take three additional samples within 24 hours from the same lot, batch, machine, carrier vehicle or point of delivery. The chlorite MCL is based on the average of the required daily sample plus any additional samples.

(xi) Beginning April 28, 2018, a system using chlorine dioxide shall take one sample per day at each entry point. A violation of the chlorine dioxide MRDL occurs when any entry point sample result exceeds the chlorine dioxide MRDL.

(xii) Beginning January 1, 2004, monitor monthly for bromate if the system uses ozone for disinfection or oxidation.

(A) *Routine monitoring.* Systems shall take one sample per month for each entry point that uses ozone while the ozonation system is operating under normal conditions.

(B) *Reduced monitoring.*

(I) Until March 31, 2009, systems shall reduce monitoring for bromate from monthly to quarterly if the average source water bromide concentration is less than 0.05 mg/L based upon representative monthly bromide measurements for 1 year. Systems on reduced monitoring shall continue monthly source water bromide monitoring. If the running annual average source water bromide concentration, computed quarterly, is equal to or exceeds 0.05 mg/L, the system shall revert to routine monitoring as prescribed by clause (A).

(II) Beginning April 1, 2009, a system required to analyze for bromate may reduce monitoring from monthly to quarterly, if each sample result analyzed using methods specified in 40 CFR 141.132(b)(3)(ii)(B) (relating to monitoring requirements) is less than or equal to 0.0025 mg/L based on monthly measurements as prescribed in clause (A) for the most recent 12 months. Systems qualifying for reduced bromate monitoring under subclause (I) may remain on reduced monitoring as long as each sample result analyzed using methods specified

in 40 CFR 141.132(b)(3)(ii)(B) from the previous 12 months is less than or equal to 0.0025 mg/L. If any sample result exceeds 0.0025 mg/L, the system shall resume routine monitoring as prescribed under clause (A).

(xiii) Beginning April 28, 2018, a system that provides filtration of surface water or GUDI sources shall comply with the following:

(A) Maintain a residual at the entry point as specified in § 109.202(c)(1)(ii) (relating to State MCLs, MRDLs and treatment technique requirements).

(B) Monitor residual disinfectant concentration at the entry point in accordance with § 109.301(1)(i)(C).

(C) Report the results in accordance with § 109.701(a)(2).

(xiv) Beginning April 28, 2018, a system that uses or obtains finished water from another permitted public water system using surface water or GUDI sources shall comply with the following requirements:

(A) As a minimum, a detectable residual disinfectant concentration of 0.20 mg/L measured as total chlorine, combined chlorine, chlorine dioxide or another level approved by the Department for systems using an alternate oxidizing disinfection treatment shall be maintained at the entry point as demonstrated by monitoring conducted under § 109.301(1) and (2) or (8)(v).

(B) Sampling points with nondetectable residual disinfectant concentrations which have heterotrophic plate count measurements of less than 500/ml are deemed to be in compliance with clause (A).

(C) When the requirements of clause (A) or (B) cannot be achieved, the supplier shall initiate an investigation under the Department's direction to determine the cause, potential health risks and appropriate remedial measures.

(2) Vended water systems shall monitor in accordance with paragraph (1) except that vended water systems qualifying for permit by rule under § 109.1005(b), for each entry point shall:

(i) Monitor monthly for microbiological contaminants.

(ii) Monitor annually for total dissolved solids, lead and cadmium.

(iii) Conduct special monitoring as required by the Department.

(iv) Beginning April 28, 2018, a system that obtains finished water from another permitted public water system using surface water or GUDI sources shall also monitor in accordance with paragraph (1)(xiv).

(b) *Sampling requirements.*

(1) For bottled water and vended water systems, retail water facilities and bulk water hauling systems, samples taken to determine compliance with subsection (a) shall be taken from each entry point.

(i) For bottled water systems, each entry point means each finished bottled water product. If multiple sources are used for a product and are not blended prior to bottling, the bottled water product for each source shall be considered a different product for monitoring purposes.

(ii) For bulk water hauling systems, retail water facilities and vended water systems, each entry point shall mean a point of delivery to the consumer from each carrier vehicle, machine or dispenser representative of each source.

(2) For the purpose of determining compliance with the monitoring and analytical requirements established under this subchapter, the Department will consider only those samples analyzed by a laboratory accredited by the Department, except that measurements of turbidity, fluoridation operation, residual disinfectant concentration, daily chlorite, temperature and pH may be performed by a person meeting the requirements of § 109.1008(c) (relating to system management responsibilities).

(3) Public water suppliers shall assure that samples for laboratory analysis are properly collected and preserved, are collected in proper containers, do not exceed maximum holding times between collection and analysis and are handled in accordance with guidelines governing quality control which may be established by the Department. A public water supplier who utilizes a certified laboratory for sample collection as well as analysis satisfies the requirements of this subsection.

(4) Compliance monitoring samples for VOCs, as required under subsection (a)(1)(iii), shall be collected by a person properly trained by a laboratory certified by the Department to conduct VOC or vinyl chloride analysis.

(5) Compliance monitoring samples required under subsection (a)(1)(iii) may be composited in accordance with 40 CFR 141.24(g)(7) (relating to organic chemicals, sampling and analytical requirements) except:

(i) Samples from groundwater entry points may not be composited with samples from surface water entry points.

(ii) Samples from one type of bottled water product or vended water product may not be composited with samples from another type of bottled water product or vended water product.

(iii) Samples used in compositing shall be collected in duplicate.

(iv) If a VOC listed under 40 CFR 141.61(a) is detected at an entry point, samples from that entry point may not be composited for subsequent compliance or repeat monitoring requirements.

(v) Samples obtained from an entry point which contains water treated by a community water supplier or nontransient noncommunity water supplier to specifically meet an MCL for a VOC listed under 40 CFR 141.61(a) may not be composited with other entry point samples.

(6) Sampling and analysis shall be performed in accordance with analytical techniques adopted by the EPA under the Federal act or methods approved by the Department.

(c) *Repeat monitoring for microbiological contaminants.*

(1) If a sample collected in accordance with subsection (a)(1)(i) or (2)(i) is found to be total coliform-positive:

(i) The bottled water system shall collect a set of three additional samples (check) from the same lot or batch of the type of product.

(ii) The vended water, retail water facility or bulk water hauling systems shall collect a set of three additional samples (check) from the same entry point (machine, point of delivery or carrier vehicle).

(2) Samples shall be collected for analysis within 24 hours of being notified of the total coliform-positive sample. The Department may extend this 24-hour collection limit to a maximum of 72 hours if the system adequately demonstrates a logistical problem outside the system's control in having the check samples analyzed within 30 hours of collection. A logistical problem outside

the system's control may include a coliform-positive result received over a holiday or weekend in which the services of a Department certified laboratory are not available within the prescribed sample holding time.

(3) At a minimum, the system shall collect one set of check samples for each total coliform-positive routine sample. If a check sample is total coliform-positive, the public water system shall collect additional check samples in the manner specified in this subsection. The system shall continue to collect check samples until either total coliforms are not detected in a set of check samples, or the system determines that an assessment has been triggered under § 109.202(c)(4).

(d) *A bulk water hauling system that serves at least 25 of the same persons year around.* A bulk water hauling system that is determined by the Department to serve at least 25 of the same persons year round shall also comply with the monitoring requirements for community water systems in accordance with § 109.301.

(e) *A bulk water hauling system, vended water system or retail water facility that serves at least 25 of the same persons over 6 months per year.* A bulk water hauling system, vended water system or retail water facility that is determined by the Department to serve at least 25 of the same persons over 6 months per year shall also comply with the monitoring requirements for nontransient noncommunity water systems in accordance with § 109.301.

(f) *Additional monitoring requirements for surface water and GUDI sources.* Bottled water and vended water systems, retail water facilities and bulk water hauling systems shall comply with the monitoring requirements under Subchapter L (relating to long-term 2 enhanced surface water treatment rule).

(g) *Additional monitoring requirements for groundwater sources.* Bottled water and vended water systems, retail water facilities and bulk water hauling systems shall comply with the monitoring requirements under Subchapter M (relating to additional requirements for groundwater sources).

(h) *Compliance determinations.* Compliance with MCLs, MRDLs and treatment techniques shall be determined in accordance with §§ 109.202 and 109.301.

(i) *Special monitoring requirements.* Bottled water and vended water systems, retail water facilities and bulk water hauling systems shall comply with § 109.302 (relating to special monitoring requirements).

§ 109.1004. Public notification.

(a) *General public notification requirements.* A bottled water supplier shall give public notification in accordance with this section. A bulk water hauler, vended water supplier or retail water supplier shall give public notification in accordance with Subchapter D (relating to public notification). For the purpose of establishing a bulk hauling, vended or retail water supplier's responsibilities under Subchapter D, a bulk water supplier shall comply with the public notification requirements specified for a community water system and a vended or retail water supplier shall comply with the public notification requirements specified for a noncommunity water system.

(1) A bottled water supplier who knows that a primary MCL or an MRDL has been exceeded or treatment technique performance standard has been violated or has reason to believe that circumstances exist which may adversely affect the quality of drinking water, including, but not limited to, source contamination, spills, accidents, natural disasters or breakdowns in treatment, shall report the circumstances to the Department within 1 hour of discovery of the problem.

(2) If the Department determines, based upon information provided by the bottled water supplier or other information available to the Department, that the circumstances present an imminent hazard to the public health, the water supplier shall issue a water supply warning approved by the Department and, if applicable, initiate a program for product recall approved by the Department under this subsection. The water supplier shall be responsible for disseminating the notice in a manner designed to inform users who may be affected by the problem.

* * * * *

§ 109.1008. System management responsibilities.

* * * * *

(b) *Operation and maintenance plan requirements.* Bottled water, vended water, retail water and bulk water suppliers shall develop an operation and maintenance plan for each system. The operation and maintenance plan shall conform to the guidelines contained in Part III of the Department's *Public Water Supply Manual* which is available from the Bureau of Safe Drinking Water, Post Office Box 8467, Harrisburg, Pennsylvania 17105-8467. The water supplier shall implement the operation and maintenance plan in accordance with this chapter, and if appropriate in accordance with accepted practices of the bottled water, vended water, retail water facility or bulk water hauling industry. The plan shall be reviewed and updated as necessary to reflect changes in the operation or maintenance of the water system. The plan shall be bound and placed in locations which are readily accessible to the water system's personnel, and shall be presented upon request to the Department.

(c) *Operator requirements.* Bottled water and vended water systems, retail water facilities and bulk water hauling systems shall have competent personnel qualified to operate and maintain the system's facilities.

(d) *Annual system evaluation requirements.* Bottled water and vended water systems, retail water facilities and bulk water hauling systems shall conduct an evaluation of the water system at least annually that includes the activities listed in paragraphs (1)—(4). A bottled water, vended water, bulk water hauling system or retail water facility obtaining finished water from a permitted public water system is not required to perform the activities in paragraphs (1) and (2) if the Department determines that there are no potential problems necessitating inspection and evaluation of the source.

(1) Watershed surveillance consisting of an inspection of portions of the drainage area necessary to identify and evaluate actual and probable sources of contamination.

(2) Evaluation of source construction and protection and, when appropriate, withdrawal and transmission facilities.

(3) Treatment facilities inspection consisting of an evaluation of the effectiveness of the operation and maintenance procedures and the condition and operability of permitted facilities.

(4) Evaluation of finished water storage facilities.

(e) *Emergency response requirements.*

(1) A bottled water, vended water, retail water or bulk water supplier who knows or has reason to believe that circumstances exist which may adversely affect the qual-

ity of drinking water supplied by the system, shall notify the Department immediately under § 109.1004 (relating to public notification).

(2) The bottled water, vended water, retail water or bulk water supplier shall develop a plan for product recall under emergency circumstances, and submit the plan to the Department for approval. The plan shall:

(i) Identify detailed procedures for implementing product recalls, including emergency communications and notifications.

(ii) Be kept on file in a readily accessible location by the bottled water, vended water, retail water or bulk water supplier.

(iii) Be reviewed and updated at least annually. A copy of the update shall be included in the annual water supply report to the Department under this section.

(f) *Cross-connection control program.* At the direction of the Department, the bottled water, vended water, retail water or bulk water supplier shall develop and implement a comprehensive control program for the elimination of existing cross-connections or the effective containment of sources of contamination, and prevention of future cross-connections. A description of the program, including the following information, shall be submitted to the Department for approval:

(1) A description of the methods and procedures to be used.

(2) An implementation schedule for the program.

(3) A description of the methods and devices which will be used to protect the water system.

(g) *Level 1 and Level 2 assessments.* Bottled water systems, vended water systems, retail water facilities and bulk water hauling systems shall comply with the requirements of § 109.705(b) (relating to system evaluations and assessments). Bottled water systems, vended water systems, retail water facilities and bulk water hauling systems may use a Nationally-recognized organization which inspects bottled water systems for compliance with 21 CFR Part 129, such as NSF, or another organization, state or country which utilizes an inspection protocol as stringent as NSF's protocols to conduct the Level 2 assessment.

(h) *Seasonal systems.* A bottled water system, vended water system, retail water facility or bulk water hauling system that operates as a seasonal system shall comply with the requirements of § 109.715 (relating to seasonal systems).

(i) *Significant deficiencies.* Bottled water and vended water systems, retail water facilities and bulk water hauling systems shall comply with § 109.705(d) and (e).

(j) *Stage 2 Disinfectants/Disinfection Byproducts Rule monitoring plan and operational evaluation levels.* A bulk water hauling system, vended water system or retail water facility that is determined by the Department to meet the definition of a community or nontransient noncommunity public water system and that uses a chemical disinfectant or that obtains finished water from another public water system that uses a chemical disinfectant or oxidant shall comply with § 109.701(g)(2).

Subchapter K. LEAD AND COPPER

§ 109.1103. Monitoring requirements.

* * * * *

(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).

(1) *Lead and copper tap monitoring.* A system shall monitor for lead and copper at the tap during each specified monitoring period at the number of sample sites specified in subsection (a)(1)(v).

(i) A large water system shall monitor during each of two consecutive 6-month monitoring periods beginning no later than January 1, 1997. Following completion of this monitoring, but no later than January 31, 1998, the water supplier shall submit a request for the Department to designate optimal corrosion control treatment performance requirements for the system. Upon approval of the request, the Department will designate water quality parameter performance requirements in accordance with § 109.1102(b)(5) or source water treatment performance requirements in accordance with § 109.1102(b)(4), or both. The water supplier may request, and the Department may designate, performance requirements before the system completes the monitoring for both monitoring periods if the system has never exceeded an action level and the system demonstrates in its request that optimal corrosion control treatment has been achieved. After the Department has designated performance requirements, the system shall monitor in accordance with subsection (d)(1).

(ii) A small or medium water system shall monitor during each of two consecutive 6-month monitoring periods beginning no later than 60 months from the end of the monitoring period in which the action level was exceeded. The water supplier shall submit within 30 days of the end of the second monitoring period a request for the Department to designate optimal corrosion control treatment performance requirements for the system. Upon approval of the request, the Department will designate water quality parameter performance requirements in accordance with § 109.1102(b)(5) or source water treatment performance requirements in accordance with § 109.1102(b)(4). 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 may reduce the number of sample sites and reduce the frequency of sampling to once per year in accordance with subsection (e)(1)(i). Systems not eligible for reduced monitoring under subsection (e)(1) shall monitor in accordance with subsection (d)(1).

(2) *Water quality parameter monitoring.* A system shall monitor for the applicable water quality parameters specified in subparagraph (iii) in the distribution system during each specified monitoring period at the number of sites specified in subsection (a)(2)(ii) and at each entry point at least once every 2 weeks.

(i) A large water system shall measure the water quality parameters during each of the two consecutive 6-month monitoring periods in which the system conducts lead and copper tap monitoring under paragraph (1)(i).

(ii) A small or medium water system which is conducting lead and copper tap monitoring in accordance with paragraph (1)(ii) 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 once during the monitoring period and biweekly entry point monitoring shall continue as long as the system exceeds the action level.

(iii) The water quality parameters shall be measured as follows:

(A) At sites within the distribution system, two sets of samples taken on different days from the same sample sites for:

(I) pH.

(II) Alkalinity.

(III) Orthophosphate, when an inhibitor containing a phosphate compound is used.

(IV) Silica, when an inhibitor containing a silicate compound is used.

(V) Calcium, when calcium carbonate stabilization is used as part of corrosion control.

(B) At each entry point, one set of samples every 2 weeks for:

(I) pH.

(II) When alkalinity is adjusted as part of corrosion control treatment, a reading of the dosage rate of the chemical used to adjust the alkalinity, and the alkalinity concentration.

(III) When a corrosion inhibitor is used as part of corrosion control treatment, a reading of the dosage rate of the inhibitor used, and the concentration of orthophosphate or silica, whichever is applicable.

(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). 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).

* * * * *

(e) *Reduced monitoring.*

* * * * *

(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) If either the lead or copper action level is exceeded, 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 § 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 insufficient 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 noncommunity 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 noncommunity facilities that operate continuously.* A community water system meeting the conditions in § 109.1104(a)(2)(i)(I), 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 the samples it collects during each monitoring period 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.

* * * * *

(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 paragraph (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.

(1) *Materials criteria.* The system shall demonstrate that its distribution system, service lines and all drinking water plumbing, including plumbing conveying drinking water within all residences and buildings connected to the system, are free of lead-containing materials or copper-containing materials or both as follows:

(i) *Lead.* To qualify for a waiver of tap monitoring requirements for lead, the system shall provide certification and supporting documentation to the Department that the system is free of all lead-containing materials as follows:

(A) It contains no plastic pipes which contain lead plasticizers, or plastic service lines which contain lead plasticizers.

(B) It is free of lead service lines, lead pipes, lead soldered pipe joints, and leaded brass or bronze alloy fittings and fixtures, unless the fittings and fixtures meet the specifications of any standard established under 42 U.S.C.A. § 300g-6(e) (relating to plumbing fittings and fixtures).

(ii) *Copper.* To qualify for a waiver of the tap water monitoring requirements for copper, the system shall provide certification and supporting documentation to the Department that the system contains no copper pipes or copper service lines.

(2) *Monitoring criteria for waiver issuance.* The system shall have completed at least one 6-month round of routine tap water monitoring for lead and copper at sites approved by the Department and from the number of sites as required under subsection (a)(1)(v). The system shall demonstrate that the 90th percentile levels for all rounds of monitoring conducted since the system became free of all lead-containing or copper-containing materials, as appropriate, meet the following criteria:

(i) *Lead levels.* To qualify for a waiver of the lead tap monitoring, the system shall demonstrate that the 90th percentile lead level does not exceed 0.005 mg/L.

(ii) *Copper levels.* To qualify for a waiver of the copper tap monitoring, the system shall demonstrate that the 90th percentile copper level does not exceed 0.65 mg/L.

(3) *Department approval of waiver application.* The Department will notify the system of its waiver determination, in writing, setting forth the basis of the decision and any condition of the waiver. A system shall continue monitoring for lead and copper at the tap as required by this section until it receives written notification from the Department that the waiver has been approved.

(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.

(ii) A system shall continue to monitor for any nonwaived contaminants in accordance with subsection (a)(1), as appropriate.

(iii) A system with a waiver shall notify the Department, in writing, within 60 days after becoming aware that it is no longer free of lead-containing or copper-containing materials, as appropriate, as a result of new construction or repair.

(5) *Continued eligibility.* If the system continues to satisfy the requirements of paragraph (4), the waiver will be renewed automatically unless any of the conditions listed in subparagraph (i)—(iii) occurs. A system whose waiver has been revoked may reapply for a waiver when it again meets the appropriate materials and monitoring criteria of paragraphs (1) and (2).

(i) A system with a lead waiver no longer satisfies the materials criteria of paragraph (1)(i) or has a 90th percentile lead level greater than 0.005 mg/L.

(ii) A system with a copper waiver no longer satisfies the materials criteria of subsection (k)(1)(ii) or has a 90th percentile copper level greater than 0.65 mg/L.

(iii) The Department notifies the system, in writing, that the waiver has been revoked.

(6) *Requirements following waiver revocation.* A water system whose waiver has been revoked is subject to the corrosion control treatment, and lead and copper tap water monitoring requirements as follows:

(i) If the system exceeds the lead or copper, or both, action level, the system shall implement corrosion control treatment in accordance with § 109.1102(b), and any other applicable requirements of this subchapter.

(ii) If the system meets both the lead and copper action levels, the system shall monitor for lead and copper at the tap no less frequently than once every 3 years in accordance with the frequency, timing and the reduced number of sample sites specified in subsection (e).

§ 109.1107. System management responsibilities.

* * * * *

(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 bear the cost of replacing the privately-owned portion of the line or to replace the privately-owned portion of 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:

* * * * *

Subchapter L. LONG-TERM 2 ENHANCED SURFACE WATER TREATMENT RULE

§ 109.1202. Monitoring requirements.

(a) *Initial round of source water monitoring.* A system shall conduct the following monitoring on the schedule in subsection (c) unless it meets the monitoring exemption criteria in subsection (d):

(1) Filtered systems serving at least 10,000 people shall sample their source water for *Cryptosporidium, E. coli* and turbidity at least monthly for 24 months.

(2) Unfiltered systems serving at least 10,000 people shall sample their source water for *Cryptosporidium* at least monthly for 24 months.

(3) Filtered systems serving less than 10,000 people shall sample their source water for *E. coli* at least once every 2 weeks for 12 months. A filtered system serving less than 10,000 people may avoid *E. coli* monitoring if the system notifies the Department that it will monitor for *Cryptosporidium* as described in paragraph (4). The system shall notify the Department no later than 3 months prior to the date the system is otherwise required to start *E. coli* monitoring under subsection (c).

(4) Filtered systems serving less than 10,000 people shall sample their source water for *Cryptosporidium* at least twice per month for 12 months or at least monthly for 24 months if they meet one of the following subparagraphs, based on monitoring conducted under paragraph (3):

(i) For systems using lake/reservoir sources, the annual mean *E. coli* concentration is greater than 100 *E. coli*/100 mL.

(ii) For systems using flowing stream sources, the annual mean *E. coli* concentration is greater than 100 *E. coli*/100 mL.

* * * * *

(i) *Source water sample collection period.* Systems shall collect samples within 2 days before or 2 days after the dates indicated in their sampling schedule (that is, within a 5 day period around the schedule date) unless one of the conditions of paragraph (1) or (2) applies.

* * * * *

Subchapter M. ADDITIONAL REQUIREMENTS FOR GROUNDWATER SOURCES

§ 109.1302. Treatment technique requirements.

(a) *Community groundwater systems.* Community groundwater systems are required to provide continuous disinfection under § 109.202(c)(3) (relating to State MCLs, MRDLs and treatment technique requirements) and in addition shall:

* * * * *

[Pa.B. Doc. No. 18-667. Filed for public inspection April 27, 2018, 9:00 a.m.]

Title 58—RECREATION

PENNSYLVANIA GAMING CONTROL BOARD

[58 PA. CODE CH. 809]

General Interactive Gaming Platform Requirements; Temporary Regulations

The Pennsylvania Gaming Control Board (Board), under its specific authority in 4 Pa.C.S. § 13B03(b) (relating to regulations) and the general authority in 4 Pa.C.S. § 1202(b)(30) (relating to general and specific powers), adds the rules regarding platform operations in connection with interactive gaming in this Commonwealth to read as set forth in Annex A.

Purpose of this Temporary Rulemaking

This temporary rulemaking includes rules regarding platform operations in connection with interactive gaming in this Commonwealth intended to ensure players are not exposed to unnecessary security risks by choosing to participate in interactive gaming in this Commonwealth and to ensure the integrity and security of interactive gaming operations in this Commonwealth.

Explanation of Chapter 809

Chapter 809 (relating to interactive gaming platform requirements—temporary regulations) addresses the physical location of interactive gaming devices and associated equipment used by an interactive gaming certificate holder or an interactive gaming licensee to conduct interactive gaming in this Commonwealth as well as the physical and environmental controls that shall be implemented relative to this equipment. These temporary regulations also delineate proper access, remote or otherwise, to all components of interactive gaming systems.

These temporary regulations establish the interactive gaming system requirements relative to security, integrity, data logging, monitoring, disclosure requirements regarding software and source code, system shutdown and recovery requirements, standards regarding disaster or emergency situations, and geolocation rules.

Affected Parties

Any entity that operates interactive gaming in this Commonwealth, as well as any entity or individual that will interact with platform operations in this Commonwealth, will be affected by this temporary rulemaking. This temporary rulemaking provides interested parties information relative to platform operations in connection with interactive gaming in this Commonwealth.

Fiscal Impact

Commonwealth

The Board expects that this temporary rulemaking will have minimal fiscal impact on the Board and other Commonwealth agencies. Impact should be confined to the additional personnel and expenses related to implementing these rules as well as continued oversight of expanded gaming with portions of these costs absorbed by existing Board staff.

Political subdivisions

This temporary rulemaking will not have direct fiscal impact on political subdivisions of this Commonwealth. Host municipalities and counties benefit from the local share funding mandated by the act of January 7, 2010 (P.L. 1, No. 1).

Private sector

This temporary rulemaking includes rules regarding platform operations in connection with interactive gaming in this Commonwealth. It is anticipated that this temporary rulemaking will have an impact on those individuals seeking to operate a platform in connection interactive gaming in this Commonwealth and those individuals seeking to provide services to platform operators. The fiscal impact to these parties will be offset by revenues collected through the play of interactive games.

General public

This temporary rulemaking will not have direct fiscal impact on the general public.

Paperwork Requirements

Interactive gaming certificate holders, interactive gaming operators, and individuals and entities providing service to those entities in connection with platform operations will be required to generate and maintain various types of information relative to the platform operation, including access logs, revenue information and patron complaint records.

Effective Date

This temporary rulemaking will become effective upon publication in the *Pennsylvania Bulletin* and expires 2 years after publication.

Public Comments

While this temporary rulemaking will be effective upon publication, the Board is seeking comments from the public and affected parties as to how these temporary regulations might be improved.

Interested persons are invited to submit written comments, suggestions or objections regarding this temporary rulemaking within 30 days after the date of publication in the *Pennsylvania Bulletin* to Laura R. Burd, Senior Counsel, Pennsylvania Gaming Control Board, P.O. Box 69060, Harrisburg, PA 17106-9060, Attention: Public Comment on Regulation # 125-213.

Contact Person

The contact person for questions about this temporary rulemaking is Laura R. Burd, Senior Counsel, (717) 346-8300.

Regulatory Review

Under 4 Pa.C.S. § 13B03, the Board has the authority to promulgate temporary regulations to facilitate the prompt implementation of interactive gaming in this Commonwealth. The temporary regulations adopted by the Board are not subject to sections 201—205 of the act of July 31, 1968 (P.L. 769, No. 240) (45 P.S. §§ 1201—1205), known as the Commonwealth Documents Law, the Regulatory Review Act (71 P.S. §§ 745.1—745.14) and section 204(b) of the Commonwealth Attorneys Act (71 P.S. § 732-204(b)). Under 4 Pa.C.S. § 13B03(c), these temporary regulations expire 2 years after publication in the *Pennsylvania Bulletin*.

Findings

The Board finds that:

(1) Under 4 Pa.C.S. § 13B03, the temporary regulations are exempt from the requirements of the Regulatory Review Act, sections 201—205 of the Commonwealth Documents Law and section 204(b) of the Commonwealth Attorneys Act.

(2) The adoption of the temporary regulations is necessary and appropriate for the administration and enforcement of 4 Pa.C.S. Part II (relating to Pennsylvania Race Horse Development and Gaming Act).

Order

The Board, acting under 4 Pa.C.S. Part II, orders that:

(1) The regulations of the Board, 58 Pa. Code, are amended by adding temporary §§ 809.1—809.8 to read as set forth in Annex A.

(2) The temporary regulations will be posted on the Board's web site.

(3) The temporary regulations are subject to amendment as deemed necessary by the Board.

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

(5) These temporary regulations are effective upon publication in the *Pennsylvania Bulletin* and expire on April 28, 2020.

DAVID M. BARASCH,
Chairperson

Fiscal Note: 125-213. No fiscal impact; (8) recommends adoption.

Annex A

TITLE 58. RECREATION

PART VII. GAMING CONTROL BOARD

Subpart L. INTERACTIVE GAMING

CHAPTER 809. INTERACTIVE GAMING PLATFORM REQUIREMENTS—TEMPORARY REGULATIONS

Sec.

§ 809.1. Scope.

To ensure players are not exposed to unnecessary security risks by choosing to participate in interactive gaming in this Commonwealth and to ensure the integrity and security of interactive gaming operations in this Commonwealth, the system requirements in this chapter apply to all of the following critical components of an interactive gaming system:

(1) Interactive gaming system components which record, store, process, share, transmit or retrieve sensitive player information (for example, credit and debit card details, authentication information and player account balances).

(2) Interactive gaming system components which generate, transmit or process random numbers used to determine the outcome of games or virtual events.

(3) Interactive gaming system components which store results or the current state of a player's wager.

(4) Points of entry and exit from the above systems or other systems which are able to communicate directly with core critical systems.

(5) Communication networks which transmit sensitive player information.

§ 809.2. Definitions.

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

Domain name system—The globally distributed Internet database which maps machine names to IP numbers, and vice versa.

Player device—The device that converts communications from the interactive gaming platform into a human interpretable form and converts human decisions into a communication format understood by the interactive gaming platform. The term includes personal computers, mobile phones, tablets, and the like.

Primary server—First source for Domain Name System data and responds to queries.

Remote access—Any access from outside the interactive gaming system or interactive gaming system network, including access from other networks within the same facility.

Secondary server or *redundancy server*—A server that shares the same features and capabilities as the primary server serves and acts as a second or substitutive point of contact in case the primary server is unavailable, busy or overloaded.

Stateful protocol—A protocol in which the communication system utilized by the player and the primary or secondary server tracks the state of the communication session.

Stateless protocol—A protocol in which neither the player nor the primary or secondary servers communication systems tracks the state of the communication session.

§ 809.3. Location of equipment.

The Board shall approve the location of all interactive gaming devices and associated equipment used by an interactive gaming certificate holder or interactive gaming operator licensee to conduct interactive gaming. The interactive gaming devices and associated equipment may be located in a restricted area on the premises of the licensed facility, in an interactive gaming restricted area within the geographic limits of the county in this Commonwealth where the licensed facility is situated or any other area, located within the United States, provided the location adheres to all of the following limitations:

(1) The primary server used to resolve domain name service (DNS) inquiries used by an interactive gaming certificate holder or interactive gaming operator licensee to conduct interactive gaming in this Commonwealth must be physically located in a secure data center. At least one secondary server must be able to resolve DNS queries.

(2) Redundancy, secondary and emergency servers used by an interactive gaming certificate holder or interactive gaming operator licensee to conduct interactive gaming in this Commonwealth must be physically located in a secure data center at a separate premises than the primary server.

(3) The Board may require interactive gaming system data necessary to certify revenue and resolve player complaints to be maintained in this Commonwealth in a manner and location approved by the Board. The data must include data related to the calculation of revenue, player transactions, game transactions, game outcomes, responsible gaming and any other data which may be prescribed by the Board. The data must be maintained in a manner which prevents unauthorized access or modification without the prior approval of the Board.

§ 809.4. Physical and environmental controls for equipment.

(a) An interactive gaming system and the associated communications systems must be located in facilities which provide physical protection against damage from fire, flood, hurricane, earthquake, and other forms of natural or manmade disaster by utilizing and implementing at least all of the following measures:

(1) Security perimeters (barriers such as walls, card controlled entry gates or manned reception desks) must be used to protect areas that contain interactive gaming systems components.

(2) Secure areas must be protected by appropriate entry controls to ensure that access is restricted to only authorized personnel.

(3) All access must be recorded in a secure log which is available for inspection by Board staff.

(4) Secure areas must include an intrusion detection system. Attempts at unauthorized access must be logged.

(b) Interactive gaming system servers must be located in server rooms which prohibit unauthorized access.

(c) Interactive gaming system servers must be housed in racks located within a secure area.

(d) Interactive gaming system components must provide all of the following minimum utility support:

(1) Interactive gaming system components must be provided with adequate primary power.

(2) Interactive gaming system components must have uninterruptible power supply equipment to support operations in the event of a power failure.

(3) There must be adequate cooling for the equipment housed in the server area.

(4) Power and telecommunications cabling carrying data or supporting information services must be protected from interception or damage.

(5) There must be adequate fire protection for the interactive gaming system components housed in the server room.

§ 809.5. Access to equipment.

(a) The interactive gaming certificate holder and interactive gaming operator licensee shall limit and control access to the primary server and any secondary servers by ensuring all of the following:

(1) Maintain access codes and other computer security controls.

(2) Maintain logs of user access, security incidents and unusual transactions.

(3) Coordinate and develop an education and training program on information security and privacy matters for employees and other authorized users.

(4) Ensure compliance with all State and Federal information security policies and rules.

(5) Prepare and maintain security-related reports and data.

(6) Develop and implement an incident reporting and response system to address security breaches, policy violations and complaints from external parties.

(7) Develop and implement an ongoing risk assessment program that targets information security and privacy matters by identifying methods for vulnerability detection and remediation and overseeing the testing of those methods.

(b) Remote access to an interactive gaming certificate holder or interactive gaming operator licensee's interactive gaming system is only permitted as follows:

(1) To Board employees upon request and without limitation.

(2) For testing purposes with prior approval from and as limited by the Board.

(3) By employees of an interactive gaming certificate holder or an interactive gaming operator licensee with prior approval from and as limited by the Board.

(c) All interactive gaming certificate holder's or interactive gaming operator licensee's interactive gaming systems must be available for independent testing by the Board, without limitation.

§ 809.6. System requirements.

(a) *Interactive gaming system methodology.* An interactive gaming system shall be designed with a methodology (for example, cryptographic controls) approved by the Board to ensure secure communications between a player's device and the interactive gaming system. When reviewing the security of an interactive gaming certificate holder or interactive gaming operator licensee's interactive gaming system methodology, the Board will consider all of the following:

(1) The interactive gaming system methodology shall be designed to ensure the integrity and confidentiality of all player communication and ensure the proper identification of the sender and receiver of all communications. If communications are performed across a third-party network, the system must either encrypt the data packets or utilize a secure communications protocol to ensure the integrity and confidentiality of the transmission.

(2) Wireless communications between the player device and the primary or secondary server must be encrypted in transit using a method (for example, AES, IPsec and WPA2) approved by the Board.

(3) An interactive gaming certificate holder or interactive gaming operator licensee shall mask the service set identification of the interactive gaming system network to ensure that it is unavailable to the general public.

(4) All communications that contain patron account numbers, user identification, or passwords and PINs must utilize a secure method of transfer (for example, 128-bit key encryption) approved by the Board.

(5) Only devices authorized by the Board are permitted to establish communications between a player device and an interactive gaming system.

(6) Server-based interactive gaming systems must maintain an internal clock that reflects the current date and time that must be used to synchronize the time and date among all components that comprise the interactive gaming system. The interactive gaming system date and time must be visible to the patron when logged on.

(b) *Change or modification.* Any change or modification to the interactive gaming system which impacts a regulated feature of an approved gaming system, unless otherwise permitted by the Board, requires submission to and approval by the Board or its designee prior to implementation of the change or modification.

(c) *Standards for data logging.* An interactive gaming system must meet all of the following standards regarding data logging:

(1) Interactive gaming systems must employ a mechanism capable of maintaining a separate copy of all of the information required to be logged in this section on a separate and independent logging device capable of being administered by an employee with no incompatible function. If the interactive gaming system can be configured so that any logged data is contained in a secure transaction file, a separate logging device is not required.

(2) Interactive gaming systems must provide a mechanism for the Board to query and export, in a format required by the Board, all interactive gaming system data.

(3) Interactive gaming systems must electronically log the date and time any player gaming account is created or terminated (Account Creation Log).

(4) An interactive gaming system must maintain all information necessary to recreate player game play and account activity during each player session, including any identity or location verifications, for not less than 6 years.

(5) Unless otherwise authorized by the Board, when software is installed on or removed from an interactive gaming system, the action must be recorded in a secure

electronic log (Software Installation/Removal Log), which must include all of the following:

(i) The date and time of the action.

(ii) The identification of the software.

(iii) The identity of the person performing the action.

(6) Unless otherwise authorized by the Board, when a change in the availability of game software is made on an interactive gaming system, the change must be recorded in a secure electronic log (Game Availability Log), which must include:

(i) The date and time of the change.

(ii) The identification of the software.

(iii) The identity of the person performing the change.

(7) Unless otherwise exempted by the Board, an interactive gaming system must record all promotional offers (Promotions Log) issued through the system. The log must provide the information necessary as determined by the Board to audit compliance with the terms and conditions of current and previous offers.

(8) Results of all authentication attempts must be retained in an electronic log (Authentication Log) and accessible for not less than 90 days.

(9) All adjustments to an interactive gaming system data made using stored procedures must be recorded in an electronic log (Adjustments Log), which lists all of the following:

(i) The date and time.

(ii) The identification and user ID of user performing the action.

(iii) A description of the event or action taken.

(iv) The initial and ending values of any data altered as a part of the event or action performed.

(d) *Security requirements.*

(1) Networks should be logically separated so that there should be no network traffic on a network link which cannot be serviced by hosts on that link.

(2) Networks must meet all of the following requirements to assure security:

(i) The failure of any single item should not result in a denial of service.

(ii) An intrusion detection system/intrusion prevention system must be installed on the network which can do all of the following:

(A) Listen to both internal and external communications.

(B) Detect or prevent Distributed Denial of Service attacks.

(C) Detect or prevent shellcode from traversing the network.

(D) Detect or prevent Address Resolution Protocol spoofing.

(E) Detect other Man-in-the-Middle indicators and server communication immediately if detected.

(iii) Each server instance in cloud and virtualized environments should perform only one function.

(iv) In virtualized environments, redundant server instances cannot run under the same hypervisor.

(v) Stateless protocols should not be used for sensitive data without stateful transport.

(vi) All changes to network infrastructure must be logged.

(vii) Virus scanners or detection programs, or both, should be installed on all pertinent information systems and should be updated regularly to scan for new strains of viruses.

(viii) Network security should be tested by a qualified and experienced individual on a regular basis.

(viv) Testing should include testing of the external interfaces and internal network.

(x) Testing of each security domain on the internal network should be undertaken separately.

(e) *Self-monitoring of critical components.* The interactive gaming system must implement the self-monitoring of critical components. A critical component that fails self-monitoring tests shall be taken out of service immediately and may not be returned to service until there is reasonable evidence that the fault has been rectified. Required self-monitoring measures include all of the following:

(1) The clocks of all components of the interactive gaming system must be synchronized with an agreed accurate time source to ensure consistent logging. Time skew shall be checked periodically.

(2) Audit logs recording user activities, exceptions and information security events must be produced and kept for a period of time to be determined by the Board to assist in investigations and access control monitoring.

(3) System administrators and system operator activities must be logged.

(4) Logging facilities and log information must be protected against tampering and unauthorized access.

(5) Any modifications, attempted modifications, read access, or other change or access to any interactive gaming system record, audit or log must be detectable by the interactive gaming system. It must be possible to see who has viewed or altered a log and when.

(6) Logs generated by monitoring activities shall be reviewed periodically using a documented process. A record of each review must be maintained.

(7) Interactive gaming system faults shall be logged, analyzed and appropriate actions taken.

(8) Network appliances with limited onboard storage must disable all communication if the audit log becomes full or offload logs to a dedicated log server.

(f) *System disclosure requirements.*

(1) A petitioner for or holder of an interactive gaming certificate, an applicant for or holder of an interactive gaming operator license, and an applicant for or holder of an interactive gaming manufacturer license shall seek Board approval of all source code used to conduct interactive gaming in this Commonwealth.

(2) All documentation relating to software and application development should be available for Board inspection and retained for the duration of its lifecycle.

(3) All software used to conduct interactive gaming in this Commonwealth shall be designed with a method, approved by the Board, that permits remote validation of software.

(g) *Shutdown and recovery capabilities.* The interactive gaming system must have all of the following shutdown

and recovery capabilities to maintain the integrity of the hardware, software and data contained therein in the event of a shutdown:

(1) The interactive gaming system must be able to perform a graceful shutdown and only allow automatic restart on power up after all of the following procedures have been performed:

(i) The program resumption routine, including self-tests, completes successfully.

(ii) All critical control program components of the interactive gaming system have been authenticated using a method approved by the Board.

(iii) Communication with all components necessary for the interactive gaming system operation have been established and similarly authenticated.

(2) The interactive gaming system must be able to identify and properly handle the situation when master resets have occurred on other remote gaming components which affect game outcome, win amount or reporting.

(3) The interactive gaming system must have the ability to restore the system from the last backup.

(4) The interactive gaming system must be able to recover all critical information from the time of the last backup to the point in time at which the interactive gaming system failure or reset occurred.

(h) *Recovery plan.* An interactive gaming certificate holder or interactive gaming operator licensee shall have a plan in place, approved by the Board, to recover interactive gaming operations in the event that the interactive gaming system is rendered inoperable (that is, Disaster/Emergency Recovery Plan). When reviewing the sufficiency of an interactive gaming certificate holder or interactive gaming operator licensee's plan to recover interactive gaming system operations in the event the interactive gaming system is rendered inoperable, the Board will consider all of the following:

(1) The method of storing player account information and gaming data to minimize loss in the event the interactive gaming system is rendered inoperable.

(2) If asynchronous replication is used, the method for recovering data should be described or the potential loss of data should be documented.

(i) *Recovery plan requirements.* An interactive gaming certificate holder's or interactive gaming licensee's Disaster/Emergency Recovery Plan must also:

(1) Delineate the circumstances under which it will be invoked.

(2) Address the establishment of a recovery site physically separated from the interactive gaming system site.

(3) Contain recovery guides detailing the technical steps required to re-establish gaming functionality at the recovery site.

(4) Include a Business Continuity Plan that addresses the process required to resume administrative operations of interactive gaming activities after the activation of the recovered platform for a range of scenarios appropriate for the operations context of the interactive gaming system.

(j) *Location of equipment.* Equipment used by a server-based interactive gaming system for the sole purpose of restoring data following a disaster must be located in a location within the United States as approved by the Board.

(k) *Player self-exclusion.* The interactive gaming system must provide an easy and obvious mechanism for players to self-exclude from interactive gaming.

(l) *Mechanism for self-exclusion.* The interactive gaming system must provide a mechanism by which a player may be excluded from interactive gaming according to the terms and conditions agreed to by the player upon registration.

§ 809.7. Geolocation requirements.

(a) An interactive gaming system must employ a mechanism to detect the physical location of a player upon logging into the interactive gaming system and as frequently as specified in the Board's technical standards and the interactive gaming certificate holder's or interactive gaming operator licensee's approved internal controls submission. If the system detects that the physical location of the player is in an area unauthorized for an interactive gaming system, the system may not accept wagers and must disable any interactive gaming activity for that player until the player is in an authorized location.

(b) The geolocation system must be equipped to dynamically monitor the player's location and block unauthorized attempts to access the interactive gaming system throughout the duration of the gaming session.

(c) An interactive gaming certificate holder or interactive gaming operator licensee must prevent registered players within a licensed facility from accessing authorized interactive games on the registered player's own computers or other devices through the use of geolocation technologies.

(d) Interactive gaming shall only occur within this Commonwealth unless the conduct of gaming is not inconsistent with Federal law, law of the jurisdiction, including any foreign nation, in which the participating player is located, or the gaming activity is conducted pursuant to a reciprocal agreement to which the Commonwealth is a party that is not inconsistent with Federal law.

§ 809.8. Security policy requirements.

Interactive gaming certificate holders and interactive gaming operator licensees shall adopt and maintain a Board-approved information security policy which describes the certificate holder's or licensee's approach to managing information security and its implementation. This policy is required in addition to any similar requirements that may be imposed as part of the certificate holder's or licensee's internal controls. The information security policy must:

(1) Have a provision requiring review when changes occur to the interactive gaming system or the processes which alter the risk profile of the interactive gaming system.

(2) Be approved by the certificate holder's or licensee's management.

(3) Be communicated to all employees and relevant external parties.

(4) Undergo review at planned intervals.

(5) Delineate the responsibilities of the certificate holder's or licensee's staff and the staff of any third parties for the operation, service and maintenance of the interactive gaming system and its components.

[Pa.B. Doc. No. 18-668. Filed for public inspection April 27, 2018, 9:00 a.m.]

Title 58—RECREATION

PENNSYLVANIA GAMING CONTROL BOARD

[58 PA. CODE CHS. 810, 813 AND 817]

Interactive Gaming Game Testing and Controls; Advertisements, Promotions and Tournaments; Live Studio; Temporary Regulations

The Pennsylvania Gaming Control Board (Board), under its specific authority in 4 Pa.C.S. § 13B03(b) (relating to regulations) and the general authority in 4 Pa.C.S. § 1202(b)(30) (relating to general and specific powers), adds the rules regarding interactive game testing and controls, advertising, promotions and tournaments, and live studio in connection with interactive gaming in this Commonwealth to read as set forth in Annex A.

Purpose of this Temporary Rulemaking

This temporary rulemaking includes rules to ensure the integrity and security of interactive games, including livestudio games, offered in this Commonwealth, and the fairness and transparency of advertising, promotions and tournaments associated with interactive gaming in this Commonwealth.

Explanation of Chapter 810, 813 and 817

Chapter 810 (relating to interactive gaming testing and controls—temporary regulations) address the standards all interactive games must meet to be operational in this Commonwealth. These temporary regulations also delineate the requirements for submission of games for review and approval, interactive game standards relative to fairness and screen display.

Chapter 813 (relating to interactive gaming advertisements, promotions and tournaments—temporary regulations) addresses the standards for review, submission and approval of all advertisements, promotions and tournaments offered by interactive gaming certificate holders and operators in this Commonwealth.

Chapter 817 (relating to interactive gaming live studio—temporary regulations) addresses the standards and rules relative to live studio interactive gaming in this Commonwealth.

Affected Parties

An entity that operates interactive gaming in this Commonwealth and an entity or individual that will interact with or participate in interactive gaming operations in this Commonwealth will be affected by this temporary rulemaking. This temporary rulemaking provides interested parties information relative to interactive game testing and control, including live studio gaming, as well as advertisements, promotions and tournaments associated with interactive gaming in this Commonwealth.

Fiscal Impact

Commonwealth

The Board expects that this temporary rulemaking will have minimal fiscal impact on the Board and other Commonwealth agencies. Impact should be confined to the additional personnel and expenses related to implementing these rules as well as continued oversight of expanded gaming with portions of these costs absorbed by existing Board staff.

Political subdivisions

This temporary rulemaking will not have direct fiscal impact on political subdivisions of this Commonwealth. Host municipalities and counties benefit from the local share funding mandated by the act of January 7, 2010 (P.L. 1, No. 1).

Private Sector

This temporary rulemaking includes rules regarding interactive game testing and controls, including live studio gaming, as well as standards for review, submission and approval of all advertisements, promotions and tournaments offered by interactive gaming certificate holders and operators in this Commonwealth. It is anticipated that this temporary rulemaking will have an impact on those individuals seeking to operate interactive gaming in this Commonwealth as well as those individuals and entities affiliated with the operation of interactive gaming in this Commonwealth. The fiscal impact to these parties will be offset by revenues collected through the play of interactive games.

General public

This temporary rulemaking will not have direct fiscal impact on the general public.

Paperwork requirements

Interactive gaming certificate holders, interactive gaming operators, and individuals and entities providing services to those entities in connection with interactive gaming operations will be required to generate and maintain various types of information relative to the testing and control of interactive games, including records on game outcomes. Interactive gaming certificate holders, interactive gaming operators, and individuals and entities providing services to those entities in connection with interactive gaming operations will be required to draft, maintain and submit documents related to advertisements, promotions and tournaments associated with interactive gaming in this Commonwealth.

Effective Date

This temporary rulemaking will become effective upon publication in the *Pennsylvania Bulletin* and expires 2 years after publication.

Public Comments

While this temporary rulemaking will be effective upon publication, the Board is seeking comments from the public and affected parties as to how these temporary regulations might be improved.

Interested persons are invited to submit written comments, suggestions or objections regarding this temporary rulemaking within 30 days after the date of publication in the *Pennsylvania Bulletin* to Laura R. Burd, Senior Counsel, Pennsylvania Gaming Control Board, P.O. Box 69060, Harrisburg, PA 17106-9060, Attention: Public Comment on Regulation # 125-214.

Contact Person

The contact person for questions about this temporary rulemaking is Laura R. Burd, Senior Counsel, (717) 346-8300.

Regulatory Review

Under 4 Pa.C.S. § 13B03, the Board has the authority to promulgate temporary regulations to facilitate the prompt implementation of interactive gaming in this Commonwealth. The temporary regulations adopted by the Board are not subject to sections 201—205 of the act of July 31, 1968 (P.L. 769, No. 240) (45 P.S. §§ 1201—1205), known as the Commonwealth Documents Law, the Regulatory Review Act (71 P.S. §§ 745.1—745.14) and section 204(b) of the Commonwealth Attorneys Act (71 P.S. § 732-204(b)). Under 4 Pa.C.S. § 13B03(c), these temporary regulations expire 2 years after publication in the *Pennsylvania Bulletin*.

Findings

The Board finds that:

(1) Under 4 Pa.C.S. § 13B03, the temporary regulations are exempt from the requirements of the Regulatory Review Act, sections 201—205 of the Commonwealth Documents Law and section 204(b) of the Commonwealth Attorneys Act.

(2) The adoption of the temporary regulations is necessary and appropriate for the administration and enforcement of 4 Pa.C.S. Part II (relating to Pennsylvania Race Horse Development and Gaming Act).

Order

The Board, acting under 4 Pa.C.S. Part II, orders that:

(1) The regulations of the Board, 58 Pa. Code, are amended by adding temporary §§ 810.1—810.13, 813.1—813.5 and 817.1 to read as set forth in Annex A.

(2) The temporary regulations will be posted on the Board's web site.

(3) The temporary regulations are subject to amendment as deemed necessary by the Board.

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

(5) These temporary regulations are effective upon publication in the *Pennsylvania Bulletin* and expire on April 28, 2020.

DAVID M. BARASCH,
Chairperson

Fiscal Note: 125-214. No fiscal impact; (8) recommends adoption.

Annex A

TITLE 58. RECREATION

PART VII. GAMING CONTROL BOARD

Subpart L. INTERACTIVE GAMING

CHAPTER 810. INTERACTIVE GAMING TESTING AND CONTROLS—TEMPORARY REGULATIONS

Sec.

§ 810.1. Scope.

To ensure players are not exposed to unnecessary security risks by choosing to participate in interactive gaming in this Commonwealth and to ensure the integrity and security of interactive gaming operations in this Commonwealth, this chapter applies to all games an interactive gaming certificate holder or interactive gaming operator licensee seeks to offer to players in this Commonwealth.

§ 810.2. Definitions.

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

Artwork or *art*—Graphical and auditory information that is sent to the player device for presentation to the player.

Game cycle—The finite set of all possible combinations.

Player interface—The interface within the software in which the player interacts. The term is also referred to as the gaming window.

Progressive jackpot—

(i) An increasing prize based on a function of credits that are wagered.

(ii) A monetary prize that increases in value based on a function of credits wagered.

(iii) The term includes prizes that are awarded based on criteria other than obtaining winning outcomes in the game, such as mystery progressives.

§ 810.3. Minimum game standards.

All of the following requirements apply to the game information, artwork, paytables and help screens which include all written, graphical and auditory information provided to the player either directly from the game interface or from a page accessible to the player from the game interface through a hyperlink located in a conspicuous location.

(1) All statements and graphics within the gaming information, artwork, paytables and help screens must be accurate and not misleading.

(2) All game rules and paytable information must be available to the player directly on the player interface or accessible from the player interface through a hyperlink without the need for funds to be deposited or funds to be staked.

(3) All game rules and paytable information must be sufficient to explain all the applicable rules and how to participate in all stages of the game.

(4) Paytable information must include all possible winning outcomes, patterns, rankings and combinations, and their corresponding payouts with a designated denomination or currency. All displayed payouts must be theoretically possible.

(5) The rules of the game must inform the players of the imperfections of the communications medium for the game and how this affects them.

(6) There must be sufficient information regarding any award payout adjustments such as fees, rakes, commissions, and the like.

(7) If the artwork contains game instructions specifying a maximum win then it must be possible to win this amount from a single game (including features or other game options).

(8) For games that offer bonus bets that require a base game bet, the minimum percentage return to player of the bonus bet must take into account that a base game bet must be placed.

(9) If random/mystery prizes are offered, the maximum value obtainable from the random/mystery prize must be indicated. If the value of the random/mystery prize depends on credits wagered or any other factors, this must be stated.

(10) The artwork should clearly state the rules for payments of prizes when multiple wins are possible.

(i) A description of what combinations will be paid when a pay line may be interpreted to have more than one individual winning combination ("only highest paid win per line").

(ii) When the game supports multiple pay lines, the artwork should display a message indicating wins on different pay lines are added or equivalent.

(iii) When the game supports scatters, artwork should display a message indicating that scattered wins are added to pay line wins, or equivalent, if this is the rule of the game.

(iv) The artwork should clearly communicate the treatment of coinciding scattered wins with respect to other possible scattered wins. For example, the artwork should state whether combinations of scattered symbols pay all possible prizes or only the highest prize.

(v) The artwork should clearly communicate the treatment of coinciding game outcome (that is, straight flush can be a flush and a straight, three red 7s can be any three 7s).

(11) If it is possible to bet on multiple lines and it is not clear which reel positions are part of each of the possible lines, then the additional lines must be clearly displayed on the artwork and appropriately labeled. The additional lines must either be shown on the displayed artwork, be available for display on a help screen or permanently displayed on all game-play screens in a location separate from the actual reels.

(12) When multiplier instructions are displayed on artwork, there must be no question as to whether the multiplier applies.

(13) All game symbols and objects must be clearly displayed to the player and not be misleading in any way. Game symbols and objects must retain their shape throughout all artwork, except while animation is in progress.

(14) The artwork must clearly state which symbols and objects may act as a substitute or wild and in which winning combinations the substitute/wild may be applied.

(15) The artwork must clearly state which symbols and objects may act as scatter and in which winning combinations the scatter may be applied.

(16) The game may not advertise upcoming wins unless the advertisement is accurate and mathematically demonstrable.

(17) All of the following requirements apply to games depicting cards being drawn from a deck:

(i) A game which utilizes multiple decks of cards must clearly indicate the number of cards and card decks in play.

(ii) Once removed from the deck, cards may not be returned to the deck except as provided by the rules of the game depicted.

(iii) The deck may not be reshuffled except as provided by the rules of the game depicted.

(18) All of the following requirements apply to multiwager games:

(i) Each individual wager to be played must be clearly indicated to inform the player as to which wagers have been made and the credits bet per wager.

(ii) Each winning prize obtained must be displayed to the player in a way that clearly associates the prices to the appropriate wager. When there are wins associated with multiple wagers, each winning wager must be indicated in turn.

§ 810.4. Minimum display standards.

All of the following game information must be visible or easily accessible to the player at all times during a player session:

(1) The name of the game being played.

(2) Restrictions on play or betting such as any play duration limits, maximum win values, and the like.

(3) The player's current session balance.

(4) The current bet amount. This is only during the phase of the game when the player can add to or place additional bets for that phase.

(5) Current placement of all bets.

(6) The denomination of the bet.

(7) The amount won for the last completed game (until the next game starts or betting options are modified).

(8) The player options selected for the last completed game (until the next game starts or a new selection is made).

(9) Initial player section options are to be described. Player selection options once the game has commenced should be clearly shown on the screen.

(10) The winning amount for each separate wager and total winning amount are to be displayed on the screen.

§ 810.5. Random number generator standards.

(a) The random number generator must be cryptographically strong at the time of submission for approval. When more than one instance of a random number generator is used in an interactive gaming system, each instance must be separately evaluated and certified. When each instance is identical, but involves a different implementation within a game/application, each implementation shall also be separately evaluated and certified. Any outcomes from the random number generator used for game symbol selection/game outcome determination must be shown, by data analysis and a source code read, to:

(1) Be statistically independent.

(2) Be fairly distributed (within statistically expected bounds) over their range.

(3) Pass various recognized statistical tests.

(4) Be cryptographically strong.

(b) Random number generators must adhere to standards in § 461a.7 (relating to slot machine minimum design standards).

(c) The gaming laboratory may employ the use of various recognized tests to determine whether or not the random values produced by the random number generator pass the desired confidence level of 95%. These tests include the following:

(1) Chi-square test.

(2) Equi-distribution (frequency) test.

(3) Gap test.

(4) Overlaps test.

(5) Poker test.

(6) Coupon collectors test.

(7) Permutation test.

(8) Kolmogorov-Smirnov test.

(9) Adjacency criterion tests.

(10) Order statistic test.

(11) Runs tests (patterns of occurrences should not be recurrent).

(12) Interplay correlation test.

(13) Serial correlation test potency and degree of serial correlation (outcomes should be independent of the previous game).

(14) Tests on subsequences.

(15) Poisson distribution.

(d) The scaling method may not compromise the cryptographic strength of the random number generator. The scaling method must preserve the distribution of the scaled values. For example, if a 32-bit random number generator with a range of the set of integers in the closed interval [0, 2_{32}-1] were to be scaled to the range of the set of integers in the closed interval [1, 6] so that the scaled values can be used to simulate the roll of a standard six-sided die, then each integer in the scaled range should theoretically appear with equal frequency. In the example given, if the theoretical frequency for each value is not equal, then the scaling method is considered to have a bias. Thus, a compliant scaling method must have bias equal to zero.

(e) If the interactive gaming system utilizes hard-based random number generators, there must be dynamic/active, real-time monitoring of the output with a sample size large enough to allow for reasonably high statistically powerful testing so that game play is disabled when an output testing failure is detected.

(f) If the interactive gaming system utilizes a software-based random number generator, it must adhere to all of the following:

(1) The period of the random number generator, in conjunction with the methods of implementing the random number generator outcomes, must be sufficiently large to ensure that all game independent outcome combinations/permutations are possible for the given game/application.

(2) The methods of seeding/re-seeding must ensure that all seed values are determined in a manner that does not compromise the cryptographic security of the random number generator.

(3) To ensure that random number generator outcomes cannot be predicted, adequate background cycling/activity must be implemented in between games. Whenever a game outcome is made up of multiple mapped random number generator values, background cycling/activity must be implemented during the game (that is, in between the selection of each mapped random number generator value) to ensure that the game outcome is not comprised of sequential mapped random number generator outcomes. The rate of background cycling/activity must be sufficiently random in and of itself to prevent prediction.

§ 810.6. Software authentication.

The acquisition and development of new software must follow defined processes in accordance with the information security policy.

(1) The production environment must be logically and physically separated from the development and test environments.

(2) Development staff shall be precluded from having access to promote code changes into the production environment.

(3) There must be a documented method to verify that test software is not deployed to the production environment.

(4) To prevent leakage of personally identifiable information, there must be a documented method to ensure that raw production data is not used in testing.

(5) All documentation relating to software and application development should be available and retained for the duration of its lifecycle.

§ 810.7. Changes to game.

A change or modification to an interactive game which impacts a regulated feature of an approved game, unless otherwise permitted by the Board, requires submission to and approval by the Board or its designee prior to implementation of the change or modification.

§ 810.8. Game rules.

(a) Interactive gaming certificate holders and interactive gaming operator licensees shall adopt and adhere to written, comprehensive house rules governing wagering transactions by and between authorized players that are available for review at all times by players through a conspicuously displayed link. House rules must include all of the following:

(1) Clear and concise explanation of all fees.

(2) The rules of play of a game.

(3) Any monetary wagering limits.

(4) Any time limits pertaining to the play of a game.

(b) House rules must be approved by the Board.

(c) House rules that deviate from Board regulations shall be submitted to the Board's Office of Gaming Laboratories for review and approval prior to submission to the Board for approval prior to implementation.

§ 810.9. Submission of game rules for approval.

(a) Prior to offering a table game authorized under this subpart governing interactive gaming in this Commonwealth, the interactive gaming certificate holder or interactive gaming operator licensee shall submit and obtain approval of a Rules Submission which specifies which options the interactive gaming certificate holder or interactive gaming operator will use in the conduct of the table game.

(b) The initial Rules Submission for any interactive game and any amendment to the Rules Submission shall be submitted electronically to the Bureau of Gaming

Operations using the form specified on the Board's web site at www.gamingcontrolboard.pa.gov.

(c) An interactive gaming certificate holder or interactive gaming operator licensee may implement the provisions in a Rules Submission upon receipt of written notice of approval from the Board's Executive Director or on the 15th calendar day following the filing of the Rules Submission unless the interactive gaming certificate holder or interactive gaming operator licensee receives written notice under subsection (d) tolling the Rules Submission or written notice of disapproval from the Board's Executive Director.

(d) If during the 15-day review period in subsection (c) the Bureau of Gaming Operations determines that a provision in the Rules Submission is inconsistent with the regulations for the conduct of that interactive game, the Bureau of Gaming Operations, by written notice to the interactive gaming certificate holder or interactive gaming operator licensee, will:

(1) Specify the nature of the inconsistency and, when possible, an acceptable alternative procedure.

(2) Direct that the 15 calendar day review period in subsection (c) be tolled and that the Rules Submission not be implemented until approved under subsection (e).

(e) When a Rules Submission has been tolled under subsection (d), the interactive gaming certificate holder or interactive gaming operator licensee may submit a revised Rules Submission within 15 days of receipt of the written notice from the Bureau of Gaming Operations. The interactive gaming certificate holder or interactive gaming operator licensee may implement the revised Rules Submission upon receipt of written notice of approval from the Board's Executive Director or on the 15th calendar day following the filing of the revised Rule Submission unless the interactive gaming certificate holder or interactive gaming operator licensee receives written notice under subsection (d) tolling the revised Rules Submission or written notice of disapproval from the Board's Executive Director.

(f) The current version of each Rules Submission of an interactive gaming certificate holder or interactive gaming operator licensee shall be maintained and made available in electronic form through secure computer access to the internal audit and surveillance departments of the interactive gaming certificate holder or interactive gaming operator licensee and the Board's casino compliance representatives and other Board employees. Each page of the Rules Submission must indicate the date on which it was approved by the Board's Executive Director.

(g) An interactives gaming certificate holder or interactive gaming operator licensee shall maintain a copy, either in paper or electronic form, of any superseded Rules Submission for a minimum of 5 years.

§ 810.10. Fairness.

(a) All critical functions including the generation of the result of any game (and the return to the player) must be generated by the interactive gaming platform and be independent of the player device. All of the following also apply:

(1) Game outcome may not be affected by the effective bandwidth, link utilization, bit error rate or other characteristic of the communications channel between the interactive gaming platform and the player device.

(2) Determination of events of chance that result in a monetary award may not be influenced, affected or controlled by anything other than numerical values derived in an approved manner from the certified random number generator when applicable and in conjunction with the rules of the game.

(3) Each possible permutation or combination of game elements that produces winning or losing game outcomes must be available for random selection at the initiation of each play, unless otherwise denoted by the game.

(4) As game symbols are selected/game outcomes are determined, they must be immediately used as directed by the rules of the game.

(5) When the game requires a sequence or mapping of symbols or outcomes to be set up in advance, the symbols or outcomes should not be resequenced or remapped, except as provided for in the rules of the game.

(6) After selection of the game outcome, the game may not make a variable secondary decision which affects the result shown to the player.

(7) Except as provided by the rules of the game, events of chance within games should be independent and not correlated with any other events within the game or events within the previous game.

(8) For game types such as a spinning reel game, unless otherwise disclosed to the player, the mathematical probability of a symbol appearing in a position for any game outcome must be constant.

(b) A game may not be designed to give the player a false expectation of better odds by misrepresenting any occurrence or event.

(1) Games that are designed to give the player the perception that they have control over the game due to player skill when they actually do not must fully address this behavior in the game help screens.

(2) The final outcome of each game must be displayed for a sufficient length of time that permits a player to verify the outcome of the game.

§ 810.11. Prohibitions.

(a) *Forced game play.*

(1) The player may not be forced to play a game just by selecting that game.

(2) It must be possible to start a new game in the same player interface instance before all relevant meters have been updated on the interactive game system and all other relevant connections and player session balance or, if applicable, the player's total balance has been updated.

(3) If an auto play mode is incorporated, it must be possible to turn this mode off at any time during game play.

(b) *Bots and computerized players.* Bots or computerized players are only permitted when employed by the interactive gaming system in free play or training mode, or if use of the bot or computerized player satisfies all of the following:

(1) The use of artificial intelligence software must be clearly explained in the help menus.

(2) All computerized players must be clearly marked at the tables so that players are aware of which players are not human.

(c) *Incomplete games.* A game is incomplete when the game outcome remains unresolved or the outcome cannot be properly seen by the player.

(1) The interactive gaming certificate holder or interactive gaming operator licensee may provide a mechanism for a player to complete an incomplete game.

(2) Incomplete games shall be resolved before a player is permitted to participate in another instance of the same game.

(3) Wagers associated with an incomplete game must be voided within 24 hours and the wagers can be forfeited or returned to the player provided that:

(i) The terms and conditions or the game rules, or both, must clearly define how wagers will be handled when they remain undecided beyond the specified time period and the interactive gaming system must be capable of returning or forfeiting the wagers, as appropriate.

(ii) In the event that a game cannot be continued due to an interactive gaming system action, all wagers must be returned to the players of that game.

(d) *Auto play prohibited.* Game play shall be initiated only after a patron has affirmatively placed a wager and activated play. An auto play feature is not permitted in game software unless authorized by the Board.

§ 810.12. Controls.

(a) A replay last game feature either as a re-enactment or by description must be available to players. The replay must clearly indicate that it is a replay of the entire previous game cycle, and must provide, at a minimum, all of the following information:

(1) The date and time the game started or ended, or both.

(2) The display associated with the final outcome of the game, either graphically or by a clear text message.

(3) Total player cash/credits at start or end of play, or both.

(4) Total amount bet.

(5) Total cash/credits won for the prize (including progressive jackpots).

(6) The results of any player choices involved in the game outcome.

(7) Results of any intermediate game phases, such as gambles or feature games.

(8) Amount of any promotional awards received, if applicable.

(b) For each individual game played, all of the following information must be recorded, maintained and easily demonstrable by the interactive gaming system:

(1) Unique player ID.

(2) Contributions to progressive jackpot pools, if applicable.

(3) Game status (in progress, complete, and the like).

(4) The table number, if applicable, at which the game was played.

(5) The paytable used.

(6) Game identifier and version.

(c) An organized event that permits a player to either purchase or be awarded the opportunity to engage in competitive play against other players may be permitted providing all of the following rules are met:

(1) While enabled for tournament play, a game may not accept real money from any source, nor pay out real money in any way, but must utilize tournament specific credits, points or chips which have no cash value.

(2) Interactive gaming contest/tournament rules are available to a player on the web site where the interactive gaming contest/tournament is being conducted. The rules must include, at a minimum, all of the following:

(i) All conditions players shall meet to qualify for entry into and advancement through the contest/tournament.

(ii) Any conditions concerning late arrivals or complete tournament no-shows and how auto-blind posting or initial entry purchase, or both, is handled.

(iii) Specific information pertaining to any single contest/tournament, including the amount of money placed in the prize pool.

(iv) The distribution of funds based on specific outcomes.

(v) The name of the organization or person that conducted the contest/tournament on behalf of, or in conjunction with, the operator, if applicable.

(3) The results of each contest/tournament shall be made available on the interactive gaming web site for the players to review. Subsequent to being posted on the web site, the results of each contest/tournament shall be available upon request. The recording must include all of the following:

(i) Name of the event.

(ii) Date of event.

(iii) Total number of entries.

(iv) Amount of entry fees.

(v) Total prize pool.

(vi) Amount paid for each winning category.

(d) All of the following requirements apply to the disabling and re-enabling of gambling on the interactive gaming system:

(1) The interactive gaming system must be able to disable or enable all gambling on command.

(2) When any gambling is disabled or enabled on the interactive gaming system an entry must be made in an audit log that includes the reason for any disable or enable.

(e) When a game or gaming activity is disabled:

(1) The game is not to be accessible to a player once the player's game has fully concluded.

(2) The player should be permitted to conclude the game in play (that is, bonus rounds, double up/gamble and other game features related to the initial game wager should be fully concluded).

(3) If wagers have been placed on pending real-life events:

(i) The terms and conditions must clearly define what happens to the wagers if the gaming activity is to remain disabled and the corresponding real-life event is completed, and the interactive gaming system must be capable of returning all bets to the players or settling all bets, as appropriate.

(ii) The terms and conditions must clearly define what happens to the wagers if the gaming activity is to re-enable before the corresponding real-life event is completed, and the interactive gaming system must be capable of returning all bets to the players, or leaving all bets active, as appropriate.

(f) When one or more feature/bonus prize may be paid to the player, the bonus game must be part of the overall paytable theoretical return to player.

(g) All progressive jackpots must adhere to all of the following:

(1) All players that play progressive jackpot games must be made aware of actions which would make them eligible to win the progressive jackpot.

(2) When progressive jackpot contributions are part of the return to player calculation, the contributions may not be assimilated into revenue. If a cap is established on any progressive jackpot all additional contributions once that cap is reached are to be credited to a diversion pool.

(3) The rules of the game must incorporate how the progressive jackpot is funded and determined.

(4) If a minimum bet amount exists for a player to win a progressive jackpot, then the return to player (excluding the progressive jackpot) must meet the minimum player return. The calculation of the theoretical payout percentage may not include the amount of any progressive jackpot in excess of the initial reset amount.

(5) The current progressive jackpot amount should be displayed on all player devices participating in the progressive jackpot. This display should be updated on all participating player devices at least every 30 seconds.

(6) The rules of the game must inform the players of any maximum awards or time limits, or both, which may exist for each progressive jackpot.

(7) For progressive jackpots offering multiple levels of awards, the player must always be paid the higher amount if a particular combination is won that should trigger the higher paying award. This may occur when a winning combination may be evaluated as more than one of the available paytable combinations (that is, a flush is a form of a straight flush and a straight flush is a form of a royal flush). There may be situations when the progressive jackpot levels must be swapped to ensure the player is being awarded the highest possible value based on all combinations the outcome may be defined as.

(8) If multiple progressive jackpots occur at approximately the same time and there is no definitive way of knowing which jackpot occurred first, the operator shall adopt procedures, approved by the Board, for resolution. The rules of the game must include information which addresses the resolution of this possibility.

§ 810.13. Test accounts.

(a) Interactive gaming certificate holders and interactive gaming operator licensees may establish test accounts to be used to test the various components and operation of an interactive gaming system in accordance with internal controls, which, at a minimum, address all of the following:

(1) The procedures for the issuance of funds used for testing, including the identification of who is authorized to issue the funds and the maximum amount of funds that may be issued.

(2) The procedures for assigning each test account for use by only one person.

(3) The maintenance of a record for all test accounts to include when they are active, to whom they are issued and the employer of the person to whom they are issued.

(4) The procedures for the auditing of testing activity by the interactive gaming certificate holder or interactive gaming operator licensee to ensure the accountability of funds used for testing and proper adjustments to gross interactive gaming revenue.

(5) The ability to withdraw funds from a test account without the Board's prior approval must be disabled by the interactive gaming system.

(6) For testing of peer-to-peer games:

(i) A person may utilize multiple test accounts.

(ii) Test account play shall be conducted without the participation of players.

(b) In addition to the required internal controls in subsection (a)(1)—(6), for any wagering on test accounts conducted outside the boundaries of this Commonwealth, the procedures for auditing of testing activity must include the method for ascertaining the location from which persons using test accounts access the interactive gaming system.

CHAPTER 813. INTERACTIVE GAMING ADVERTISEMENTS, PROMOTIONS AND TOURNAMENTS—TEMPORARY REGULATIONS

Sec.

§ 813.1. Definitions.

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

Celebrity player—A well-known or professional interactive gaming player who is under agreement with an interactive gaming certificate holder or interactive gaming operator licensee whereby the interactive gaming certificate holder or interactive gaming operator licensee pays the celebrity player a fixed sum to engage in interactive gaming with the certificate holder's players as an advertising or promotional enticement to its customers.

Promotion—An event conducted by an interactive gaming certificate holder or an interactive gaming operator licensee that provides or offers registered or prospective players cash, credits, merchandise, coupons, players club credits, or points, bonuses or anything else of value to entice the player to wager with the interactive gaming certificate holder or interactive gaming operator licensee.

Restricted interactive gaming credit—Interactive gaming funds that cannot be cashed out by the player until the wagering requirements or other restrictions associated with those funds are met in accordance with disclosed terms and conditions.

§ 813.2. Advertising.

(a) Interactive gaming certificate holders and interactive gaming operator licensees shall comply with § 501a.7 (relating to advertising).

(b) Advertising utilized by interactive gaming certificate holders and interactive gaming operator licensees may not:

(1) Consist of indecent or offensive graphics or audio, or both.

(2) Obscure the game play area or obstruct a game in progress.

(3) Contain content that contradicts the game rules or terms and conditions.

(4) Specifically target players which have been excluded from play.

(c) Interactive gaming certificate holders and interactive gaming operator licensees may utilize celebrity or other players to participate in peer-to-peer games for advertising or publicity purposes provided:

(1) The interactive gaming certificate holder or an interactive gaming operator licensee clearly identifies the celebrity player to the players.

(2) The interactive gaming certificate holder or an interactive gaming operator licensee does not realize a profit beyond the rake for hosting the celebrity player.

(3) The interactive gaming certificate holder or an interactive gaming operator licensee shall include winnings by the celebrity player in its gross gaming revenue if the certificate holder or licensee does not permit the celebrity player to retain these funds.

(d) An interactive gaming certificate holder or an interactive gaming operator licensee that contracts with a celebrity player to advertise or promote its services may fund the celebrity player's interactive gaming account in full or in part. The certificate holder or licensee may also pay the celebrity player a one-time or flat fee for his services.

(e) A celebrity player engaged in interactive gaming in this Commonwealth pursuant to an agreement with an interactive gaming certificate holder or an interactive gaming operator licensee for advertising or promotional purposes may or may not utilize his own funds to wager.

§ 813.3. Promotions.

(a) An interactive gaming certificate holder or interactive gaming operator licensee shall, at least 5 days prior to implementing a promotion, submit terms and conditions of each promotion to the Bureau of Gaming Operations. The terms and conditions must include, at a minimum, all of the following:

(1) A description of what is being offered as part of the promotion.

(2) The dates and times that the promotion is being conducted.

(3) The persons who are eligible to participate in the promotion.

(4) The required action to receive whatever is being offered as part of the promotion.

(5) The procedure to claim or redeem the promotional offer, if applicable.

(6) Registration procedures.

(7) Limitations on participation.

(8) Wagering requirements and limitations by type of game.

(9) The order in which funds are used for wagering.

(10) Eligible games.

(11) Any restrictions on the withdrawal of funds.

(12) Rules regarding cancellation.

(13) The statement "If you or someone you know has a gambling problem, help is available. Call 1-800-GAMBLER."

(14) Any other information the Board may require.

(b) An interactive gaming certificate holder or an interactive gaming operator licensee shall designate one employee responsible for submitting promotions to the Bureau of Gaming Operations. The designated employee shall provide a signed attestation with the submitted promotion indicating the employee has reviewed the promotion for compliance with Board regulations. The designated employee shall serve as the point of contact between a certificate holder or a licensee and the Board on all submitted promotions.

(c) An interactive gaming certificate holder or interactive gaming operator licensee shall be responsible for the submission of the terms and conditions of promotions and the conduct of all promotions offered directly or indirectly by a third-party vendor or marketing affiliate on behalf of the interactive gaming certificate holder or an interactive gaming operator licensee.

(d) The terms and conditions of all promotions communicated to players must be posted on the interactive gaming certificate holder's home webpage as well as any skins the interactive gaming certificate holder operates or an interactive gaming operator licensee operates on behalf of an interactive gaming certificate holder. The terms and conditions must be stated in a clear and conspicuous manner using plain language and be readily accessible and available for review for the duration of the promotion (even after player accepts a promotion).

(e) An interactive gaming certificate holder or interactive gaming operator licensee shall provide a clear and conspicuous method for a player to cancel his participation in a promotion that utilizes restricted interactive gaming credits. Upon request for cancellation, the interactive gaming certificate holder or interactive gaming operator shall inform the player of the amount of unrestricted funds that will be returned upon cancellation and the value of restricted funds that will be removed from the player's interactive gaming account. If the player elects to proceed with cancellation, unrestricted funds remaining in a player's interactive gaming account must be returned in accordance with the terms and conditions.

(f) An interactive gaming certificate holder or interactive gaming operator licensee may not, once a player has met the terms of a promotion, cap or limit winnings earned while participating in the promotion.

(g) An interactive gaming certificate holder or an interactive gaming operator may be required to discontinue, as expeditiously as possible, the use of a particular promotion upon receipt of written notice from the Bureau of Gaming Operations that the Bureau of Gaming Operations has determined that the use of the particular promotion in, or with respect to, this Commonwealth could adversely impact the public or the integrity of gaming.

(h) An interactive gaming certificate holder or interactive gaming operator licensee may not offer or conduct a promotion which violates any Federal, State or local law.

(i) An interactive gaming certificate holder or an interactive gaming operator shall develop and submit to the Board, as part of the submission required as part of the certificate holder's or licensee's internal controls, procedures governing the conduct of all promotions to be offered by an interactive gaming certificate holder or interactive gaming operator licensee.

§ 813.4. Interactive gaming tournaments.

(a) An organized event that permits a player to purchase or be awarded the opportunity to engage in competitive play against other players (that is, a tournament) may be permitted providing all of the following:

(1) Prior to conducting an interactive gaming tournament, an interactive gaming certificate holder or an interactive gaming operator licensee shall file for approval of the terms and conditions of each interactive gaming tournament type with the Bureau of Gaming Operations as part of the certificate holder's or licensee's internal controls. The terms and conditions shall be followed and include, at a minimum, all of the following:

(i) Game type (for example, hold'em poker).

(ii) Rules concerning tournament play and participation.

(iii) All conditions registered players shall meet to qualify for entry into, and advancement through, the tournament.

(iv) Any conditions concerning late arrivals or complete tournament no-shows and how auto-blind posting or initial entry purchase, or both, is handled.

(v) Funding source amounts comprising the prize pool (for example, buy-ins, re-buys or add-ons).

(vi) Prize structure on payout.

(vii) Methodology for determining win.

(viii) Any other information as the Board may require.

(2) While enabled for tournament play, a game may not accept real money from any source, nor pay out real money in any way, and must utilize tournament specific credits, points or chips which do not have cash value.

(b) The terms and conditions of all interactive gaming tournaments communicated to players shall be posted on the interactive gaming web site and stated in a clear and conspicuous manner using plain language. The terms and conditions of each interactive gaming tournament must be readily accessible and remain available for review by the player until the interactive gaming tournament is complete.

(c) An interactive gaming certificate holder or an interactive gaming operator licensee may be required to discontinue, as expeditiously as possible, an interactive gaming tournament upon receipt of written notice from the Board's Executive Director that the Board's Executive Director has determined that the conduct of an interactive gaming tournament could adversely impact the public or the integrity of gaming.

(d) An interactive gaming certificate holder or an interactive gaming operator licensee shall submit a notice of intent to conduct an interactive gaming tournament at least 5 business days prior to the start of the tournament. The notice shall be submitted electronically to the Bureau of Gaming Operations using the Internal Controls & Table Games Submission Form, which is posted on the Board's web site, and must include all of the following:

(1) The type of game to be played.

(2) The dates and times the tournament will be conducted.

(3) Participation eligibility requirements including all of the following:

(i) Who is eligible to participate.

(ii) The minimum and maximum number of participants.

(iii) Entry fees charged.

(4) The monetary amount or description of the prizes to be awarded.

(5) Any other information as the Board may require.

(e) Submission of a proposed schedule may not require the interactive gaming certificate holder or interactive gaming operator licensee to conduct all tournaments in the schedule.

(f) An interactive gaming certificate holder or interactive gaming operator licensee may seek to amend or modify the schedule at any time by filing a written request with the Board's Executive Director.

(g) An interactive gaming certificate holder or interactive gaming operator licensee shall maintain records related to the conduct of interactive gaming tournaments in accordance with § 465a.6(c) (relating to retention, storage and destruction of books, records and documents). These records shall be made available to Board staff and the Department upon request and must include all of the following:

(1) A full accounting of gross interactive gaming revenue for each tournament including cash received as entry fees and the total of cash or cash equivalents paid out to registered players.

(2) The names and addresses of all prize winners and the prize each winner was awarded.

§ 813.5. Record retention and reports.

(a) Unless otherwise approved by the Board, a record of all bonus and promotional wagering offers related to interactive gaming shall be maintained in an electronic file that is readily available to the Board. All bonus and promotional wagering offers must be stated in clear and unambiguous terms and be readily accessible by the patron.

(b) Unless otherwise exempted by the Board, a gaming system must record all promotional offers (Promotions Log) issued through the system. The log must provide the information necessary to audit compliance with the terms and conditions of current and previous offers.

(c) An interactive gaming system must be able to provide a Promotional Account Summary Report (or similarly named report) on demand for any player loyalty promotions or bonuses, or both, that are redeemable for cash, monetary game play credits or merchandise. The report must contain, at a minimum, all of the following information:

(1) Beginning balance for promotion type.

(2) Total amount of awards by promotion type.

(3) Total amount used by promotion type.

(4) Total amount expired by promotion type.

(5) Total adjustment amount by promotion type.

(6) Ending balance by promotion type.

CHAPTER 817. INTERACTIVE GAMING LIVE STUDIO—TEMPORARY REGULATIONS

Sec.
817.1. Live studio simulcasting.

§ 817.1. Live studio simulcasting.

(a) An interactive gaming certificate holder or interactive gaming operator licensee shall obtain Board approval to simulcast authorized table games.

(b) An interactive gaming certificate holder or interactive gaming operator licensee shall obtain Board approval for the location of its proposed live simulcast studio.

(c) An entity producing, hosting, offering or otherwise providing live studio services shall be licensed by the Board prior to providing live studio services.

(d) An interactive gaming certificate holder or interactive gaming operator licensee seeking to offer live studio simulcasting, as well as the entity producing, hosting, offering or otherwise providing live studio services, shall adhere to § 465a.9 (relating to surveillance system; surveillance department control; surveillance department restrictions), Chapter 611a (relating to table game minimum training standards) and game approval as set forth in this chapter.

(e) Table game simulcasting must utilize a simulcast control server for the purpose of recording all wagering activity and game results. The simulcast control server must do all of the following:

(1) Provide the player with real time visual access to the live game being played.

(2) Prevent anyone from accessing the wagering outcome prior to finalizing a wager.

(3) Record dealer-verified game results before posting.

(4) Be equipped with a mechanism to void game results, if necessary.

(f) All of the following information, at a minimum, must be readily available on an interactive gaming certificate holder's or interactive gaming operator's skin/web site before a player begins play and at all times during play:

(1) The table number and location.

(2) The table minimum and maximum wagers.

(3) The number of decks used, if applicable.

(4) Dealer actions, if applicable.

(5) The amount wagered.

(6) The game outcome.

(7) Vigorish amount, if applicable.

(8) Payout odds, when applicable.

(9) The amount won or lost.

[Pa.B. Doc. No. 18-669. Filed for public inspection April 27, 2018, 9:00 a.m.]

Title 58—RECREATION

PENNSYLVANIA GAMING CONTROL BOARD

[58 PA. CODE CHS. 1201—1209]

Fantasy Contests; Temporary Regulations

The Pennsylvania Gaming Control Board (Board), under the general authority in 4 Pa.C.S. § 311(a) and (b)(6) (relating to general and specific powers of board) and the specific authority in 4 Pa.C.S. § 312 (relating to temporary regulations), promulgates regulations governing the licensing, conduct and regulatory oversight of fantasy contests in this Commonwealth to read as set forth in Annex A.

Purpose of this Temporary Rulemaking

This temporary rulemaking will provide a regulatory oversight structure for the conduct of fantasy contests in this Commonwealth.

This temporary rulemaking is necessary to implement 4 Pa.C.S. Chapter 3 (relating to fantasy contests), the intent of which is to ensure that fantasy contests operated in this Commonwealth are conducted by operators have been vetted for suitability, to ensure the accountability for player accounts and fairness of the conduct of play, as well as to provide player protection mechanisms including player imposed account and play limitations and self-exclusion options.

Explanation

Subpart O (relating to fantasy contests) establishes the temporary regulations necessary for the Board to license fantasy contest operators who make fantasy contests available through an Internet connection and through fantasy contest terminals in licensed gaming facilities, as well as of the principals and key employees of the licensed operators. In addition, Subpart O provides rules for player accounts, licensed operator duties and restrictions, and accounting and internal controls governing the conduct of fantasy contests. Finally, Subpart O addresses advertising, compulsive and problem gambling, and self-exclusion of players from fantasy contest activities in this Commonwealth.

Subpart O establishes a broad regulatory oversight structure for fantasy contests. Section 1201.2 (relating to definitions) provides definitions of terms used throughout Subpart O for the conduct of fantasy contests.

This temporary rulemaking identifies five categories of licensees based upon the statutory criteria for licensure in 4 Pa.C.S. Chapter 3. See 4 Pa.C.S. § 321 (relating to general prohibition). Categories subject to licensure include fantasy contest operators and their principals and key employees, as well as licensed gaming entities which elect to receive a fantasy contest license permitting them to operate fantasy contest terminals within the facility and gaming service providers.

Chapter 1202 (relating to application requirements—temporary regulations) establishes the application and general requirements under which fantasy contest operators, licensed gaming entities, principals, key employees and gaming service providers shall apply to the Board for approval to participate in the regulated conduct of fantasy contests.

Chapter 1203 (relating to application process—temporary regulations) provides for a preliminary review of the application, the processing of applications by Board staff, deficient and abandoned applications, avenues for withdrawing an application from consideration, the terms and renewal periods for licenses and the registration of licensed entity representatives with the Board.

Chapter 1204 (relating to fantasy contest licenses—temporary regulations) addresses the issuance of the fantasy contest license and the conditions placed thereon.

Sections 1205.1 and 1205.2 (relating to fantasy contests generally; and procedures to govern the conduct of fantasy contests) address the requirements for a fantasy contest and the procedures by which fantasy contests shall be operated. Section 1205.3 (relating to fantasy contest accounts) sets forth the requirements for player fantasy contest accounts assuring age, location and identity verifications, funding of player accounts, password access, account options to restrict or limit play as elected by the player, and account withdrawal and closing procedures.

Section 1205.4 (relating to fantasy contest licensed operator duties) imposes affirmative duties on fantasy contest operators to ensure compliance with statutory and regulatory mandates designed to assure integrity of the fantasy contests as well as safeguarding of player's information and assets. Section 1205.5 (relating to fan-

tasy contest licensed operator restrictions) sets forth restrictions on fantasy contest operations which provide a minimum age for players, limit the sports which can form the basis of fantasy contests, fulfill requirements that a player have established a verified account prior to play, prohibit the issuance of credit to a player and impose a host of restrictions designed to promote fairness in the play of fantasy contests. Section 1205.6 (relating to licensed gaming entities) provides for licensed gaming entities to obtain fantasy contest terminals if desired. Section 1205.7 (relating to record and data retention) addresses record and data retention requirements designed to enhance auditing and accountability.

Chapter 1206 (relating to accounting and internal controls—temporary regulations) addresses the accounting and internal control requirements for fantasy contest operators. Chapter 1206 requires submission to the Board and approval prior to commencement of play.

Chapter 1207 (relating to advertising—temporary regulations) addresses advertising of fantasy contests and provides standards to prohibit false or misleading advertising, portraying minors in the advertisements, representing endorsements by sports prohibited from forming the basis of fantasy contest and marketing to persons on the self-exclusion list.

Chapter 1208 (relating to compulsive and problem gaming—temporary regulations) requires signage providing information sources for those experiencing compulsive or problem gaming.

Chapter 1209 (relating to self-exclusion—temporary regulations) establishes a self-exclusion procedure for individuals who voluntarily seek to be prohibited from playing fantasy contests.

Fiscal Impact

Commonwealth

The Board expects that this temporary rulemaking will have a very minimal fiscal impact on the Board and other Commonwealth agencies, which primarily is the result of the need for some additional personnel needed to process applications and review, as well as to monitor and regulate the conduct of fantasy contests. Most of the additional duties will be absorbed by existing Board staff. The costs of the temporary regulations will be paid for by an assessment against the licensed fantasy contest operators' fantasy contest adjusted revenue as determined by the Department of Revenue.

Political subdivisions

This temporary rulemaking will not have fiscal impact on political subdivisions of this Commonwealth.

Private sector

This temporary rulemaking is not anticipated to impose a negative fiscal impact on the regulated entities. The decision to participate in fantasy contests by an eligible fantasy contest operator is not mandated by 4 Pa.C.S. Chapter 3 but is left to the discretion of those qualifying establishments.

If pursued, there will be licensing costs as set forth by 4 Pa.C.S. Chapter 3. Otherwise, additional costs to operators will likely be negligible since fantasy contests are currently be operated in other regulated jurisdictions or in unregulated jurisdictions. Any costs incurred to operate fantasy contests in this Commonwealth should be offset by the operator proceeds of the fantasy contests.

General public

This temporary rulemaking will not have fiscal impact on the general public.

Paperwork Requirements

A fantasy contest licensed operator, licensed gaming entity, gaming service provider, and principals and key employees thereof involved in the provision of fantasy contests in this Commonwealth will be required to file applications with the Board providing information regarding the person's proposed activity, as well as accounting and internal control protocols and background information of each individual sufficient to permit the Board to determine the individual's suitability for licensure.

Effective Date

The temporary rulemaking will become effective upon publication in the *Pennsylvania Bulletin* and expires 2 years after publication.

Public Comments

Interested persons are invited to submit written comments, suggestions or objections regarding the temporary rulemaking within 30 days after publication in the *Pennsylvania Bulletin* to R. Douglas Sherman, Chief Counsel, Attention: Regulation # 125-212 Public Comment, Pennsylvania Gaming Control Board, P.O. Box 69060, Harrisburg, PA 17106-9060.

Contact Person

The contact person for questions about this temporary rulemaking is R. Douglas Sherman, Chief Counsel, (717) 346-8300.

Regulatory Review

Under 4 Pa.C.S. § 312, the Board is granted the authority to promulgate temporary regulations which shall expire no later than 2 years following publication in the *Pennsylvania Bulletin*. The temporary regulations are not subject to sections 201—205 of the act of July 31, 1968 (P.L. 769, No. 240) (45 P.S. §§ 1201—1205), known as the Commonwealth Documents Law, the Regulatory Review Act (71 P.S. §§ 745.1—745.14) and section 204(b) of the Commonwealth Attorneys Act (71 P.S. § 732-204(b)). The authority to adopt temporary regulations expires 2 years after the publication of the temporary regulations, after which regulations adopted by the Board will be promulgated as provide by law.

Findings

The Board finds that:

(1) Under 4 Pa.C.S. § 312, the temporary regulations are exempt from the requirements in the Regulatory Review Act, sections 201—205 of the Commonwealth Documents Law and section 204(b) of the Commonwealth Attorneys Act.

(2) The adoption of the temporary regulations is necessary and appropriate for the administration and enforcement of 4 Pa.C.S. Chapter 3.

Order

The Board, acting under 4 Pa.C.S. Chapter 3, orders that:

(1) The regulations of the Board, 58 Pa. Code, are amended by adding temporary §§ 1201.1, 1201.2, 1202.1—1202.6, 1203.1—1203.5, 1204.1, 1205.1—1205.7, 1206.1, 1207.1, 1208.1, 1208.2 and 1209.1—1209.5 to read as set forth in Annex A.

(2) The temporary regulations will be posted on the Board's web site.

(3) The temporary regulations are subject to amendment as deemed necessary by the Board.

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

(5) These temporary regulations are effective upon publication in the *Pennsylvania Bulletin* and expire on April 28, 2020.

DAVID M. BARASCH,
Chairperson

Fiscal Note: 125-212. No fiscal impact; (8) recommends adoption.

Annex A

TITLE 58. RECREATION

PART VII. GAMING CONTROL BOARD

Subpart O. FANTASY CONTESTS

Chap.
1201. FANTASY CONTESTS GENERALLY—TEMPORARY REGULATIONS
1202. APPLICATION REQUIREMENTS—TEMPORARY REGULATIONS
1203. APPLICATION PROCESS—TEMPORARY REGULATIONS
1204. FANTASY CONTEST LICENSES—TEMPORARY REGULATIONS
1205. FANTASY CONTESTS—TEMPORARY REGULATIONS
1206. ACCOUNTING AND INTERNAL CONTROLS—TEMPORARY REGULATIONS
1207. ADVERTISING—TEMPORARY REGULATIONS
1208. COMPULSIVE AND PROBLEM GAMING—TEMPORARY REGULATIONS
1209. SELF-EXCLUSION—TEMPORARY REGULATIONS

CHAPTER 1201. FANTASY CONTESTS GENERALLY—TEMPORARY REGULATIONS

Sec.
1201.1. Scope.
1201.2. Definitions.

§ 1201.1. Scope.

The purpose of this subpart is to implement and govern the operation and conduct of fantasy contests in this Commonwealth as provided for in 4 Pa.C.S. Chapter 3 (relating to fantasy contests).

§ 1201.2. Definitions.

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

Applicant—A person who, on his own behalf or on behalf of another, is applying for permission to engage in any act or activity which is regulated under this subpart. If the applicant is a person other than an individual, the Board will determine the associated persons whose qualifications are necessary as a precondition to the licensing of the applicant.

Beginner—A participant who has entered fewer than 51 contests offered by a single licensed operator or who does not meet the definition of "highly-experienced player."

Entry fee—The cash or cash equivalent paid by a participant to a licensed operator to participate in a fantasy contest.

Fantasy contest—

(i) An online fantasy or simulated game or contest with an entry fee and a prize or award in which all of the following apply:

(A) The value of all prizes or awards offered to winning participants is established and made known to participants in advance of the contest and the value is not determined by the number of participants or the amount of any fees paid by those participants.

(B) All winning outcomes reflect the relative knowledge and skill of participants and are determined by accumulated statistical results of the performance of individuals, including athletes in the case of sports events.

(C) The winning outcome is not based on the score, point spread or performance of a single actual team or combination of teams, or solely on a single performance of an individual athlete or player in a single actual event.

(ii) The term does not include social fantasy contests.

Fantasy contest account—The formal electronic system implemented by a licensed operator to record a participant's entry fees, prizes or awards and other activities related to participation in the licensed operator's fantasy contests.

Fantasy contest license—A license issued by the Board authorizing a person to offer fantasy contests in this Commonwealth in accordance with this subpart.

Fantasy contest terminal—A computerized or electronic terminal or similar device within a licensed facility that allows participants to do all of the following:

(i) Register for a fantasy contest account.

(ii) Pay an entry fee.

(iii) Select athletes for a fantasy contest.

(iv) Receive winnings.

(v) Otherwise participate in a fantasy contest.

Highly experienced player—

(i) Any participant who has done all of the following:

(A) Entered more than 1,000 fantasy contests.

(B) Won more than three fantasy contest prizes or awards valued at $1,000 or more.

(ii) Once a participant is classified as a highly-experienced player, a player shall remain classified as a highly-experienced player.

Key employee—An individual who is employed by an applicant for a fantasy contest license or a licensed operator in a director or department head capacity or who is empowered to make discretionary decisions that regulate fantasy contest operations as determined by the Board.

Licensed facility—

(i) The physical land-based location at which a licensed gaming entity is authorized to place and operate slot machines and, if authorized by the Board, to conduct table games or interactive gaming, or both.

(ii) The term includes any of the following:

(A) An area of a licensed racetrack at which was previously authorized under 4 Pa.C.S. § 1207(17) (relating to regulatory authority of board) to operate slot machines prior to the April 28, 2018.

(B) A Board-approved interim facility or temporary facility.

(C) An area of a hotel which the Board determines is suitable to conduct table games.

(D) An area of a licensed facility where casino simulcasting is conducted, as approved by the Board.

(iii) The term does not include a redundancy facility or an interactive gaming restricted area which is not located on the premises of a licensed facility as approved by the Board and which is maintained and operated by an

interactive gaming certificate holder in connection with interactive gaming or casino simulcasting.

Licensed operator—A person who holds a fantasy contest license.

Participant—An individual who participates in a fantasy contest, whether the individual is located in this Commonwealth or another jurisdiction.

Person—A natural person, corporation, publicly traded corporation, foundation, organization, business trust, estate, limited liability company, licensed corporation, trust, partnership, limited liability partnership, association or any other form of legal business entity.

Principal—An officer, director or person who directly holds a beneficial interest in or ownership of the securities of an applicant for a fantasy contest license or a licensed operator, a person who has a controlling interest in an applicant for a fantasy contest license or a licensed operator or who has the ability to elect a majority of the board of directors of a licensed operator or to otherwise control a licensed operator, lender or other licensed financial institution of an applicant for a fantasy contest license or a licensed operator, other than a bank or lending institution which makes a loan or holds a mortgage or other lien acquired in the ordinary course of business, underwriter of an applicant for a fantasy contest license or a licensed operator or other person or employee of an applicant for a fantasy contest license or a licensed operator deemed to be a principal by the Board.

Prize or *award*—Anything of value worth $100 or more, or any amount of cash or cash equivalents.

Publicly traded corporation—A person, other than an individual, who:

(i) Has a class or series of securities registered under the Securities Exchange Act of 1934 (15 U.S.C.A. §§ 78a—78qq).

(ii) Is a registered management company under the Investment Company Act of 1940 (15 U.S.C.A. §§ 80a-1—80a-64).

(iii) Is subject to the reporting requirements under section 15(d) of the Securities Exchange Act of 1934 (15 U.S.C.A. § 78o(d)) by reason of having filed a registration statement that has become effective under the Securities Act of 1933 (15 U.S.C.A. §§ 77a—77aa).

Script—A list of commands that a fantasy contest related computer software program can execute that is created by a participant or third party not approved by the licensed operator to automate processes on a licensed operator's fantasy contest platform.

Season-long fantasy contest—A fantasy contest offered by a licensed operator that is conducted over an entire sports season.

Social fantasy contest—A fantasy contest which meets one or more of the following criteria:

(i) Nothing is offered to participants other than game-based virtual currency that cannot be redeemed for cash, merchandise or anything of value outside the context of game play.

(ii) The contest is free to all participants.

(iii) The entity offering the contest does not receive compensation other than an administrative fee for the maintenance of statistical information in connection with the contest.

(iv) The winnings offered are of no greater value than the lowest individual fee charged to a single participant for entering or participating in the contest.

(v) The contest encompasses an entire season of the activity in which the underlying competition is being conducted and the winnings offered, if any, are determined by agreement of the participants only to distribute fully the participants' contributions to a fund established to grant the winnings for the contest.

Suspicious transaction—A transaction between a licensed operator or an employee of a licensed operator and an individual that involves the acceptance or redemption by a person of cash or cash equivalent involving or aggregating $5,000 or more which a licensed operator or employee of a licensed operator knows, suspects or has reason to believe:

(i) Involves funds derived from illegal activities or is intended or conducted to conceal or disguise funds or assets derived from illegal activities.

(ii) Is part of a plan to violate or evade a law or regulation to avoid a transaction reporting requirement under the laws or regulations of the United States or the Commonwealth, including a plan to structure a series of transactions to avoid a transaction reporting requirement under the laws of the United States or the Commonwealth.

(iii) Has no apparent lawful purpose or is not the type of transaction in which a person would normally be expected to engage and the licensed operator or employee knows of no reasonable explanation for the transaction after examining the available facts, including the background and possible purpose of the transaction.

CHAPTER 1202. APPLICATION REQUIREMENTS—TEMPORARY REGULATIONS

Sec.

§ 1202.1. General licensing requirements.

A fantasy contest license holder may conduct fantasy contests in this Commonwealth in accordance with 4 Pa.C.S. Chapter 3 (relating to fantasy contests) and this subpart.

§ 1202.2. Fantasy contest licenses.

(a) An application for a fantasy contest license shall be submitted on forms or in an electronic format supplied or approved by the Board and must contain all of the following information:

(1) The identity of the applicant as follows:

(i) If the applicant is an individual, the name, Federal employer identification number, contact information and business address of the applicant.

(ii) If the applicant is a corporation, the name and business address of the corporation, the state of its incorporation, and the full name, contact information and business address of each officer and director thereof.

(iii) If the applicant is a foreign corporation, the name and business address of the corporation, whether it is qualified to do business in this Commonwealth, and the full name, contact information and business address of each officer and director thereof.

(iv) If the applicant is a partnership or joint venture, the name, contact information and business address of each officer thereof.

(2) The name and location of the applicant's licensed facility, if applicable.

(3) The name, contact information and business address of the person having custody of the applicant's financial records.

(4) The name and business address, job title, fingerprints and a photograph of each principal and key employee of the applicant who will be involved in fantasy contests and who is not currently licensed by the Board, if known. If the principal and key employee are currently licensed by the Board, the application must specifically identify their participation in offering fantasy contests.

(5) Information and documentation concerning financial background and resources, as the Board may require, to establish by clear and convincing evidence the financial stability, integrity and responsibility of the applicant.

(6) A copy of any agreement or agreements the applicant has entered into or a detailed description of the terms and conditions of any agreement the applicant will enter into to facilitate the operation or conduct of fantasy contests.

(7) Any other information the Board may require.

(b) Upon request of the Board or Board staff, the applicant shall cooperate and provide supplemental information in support of its application. The applicant shall provide requested documents, records, supporting data and other information within the time period specified in the request or, if no time is specified, within 30 days of the date of the request. If the applicant fails to provide the requested information within the required time period in the request, the Board may deny the application.

(c) The application, and amendments thereto, and other specific documents designated by the Board shall be sworn to or affirmed by the applicant before a notary public which shall be filed promptly with the Board.

(d) An application and related materials that have been submitted to the Board will become the property of the Board and will not be returned to the applicant.

§ 1202.3. Licensed gaming entities.

(a) An abbreviated application for a fantasy contest license by a licensed gaming entity may be submitted on forms or in an electronic format supplied or approved by the Board.

(b) Upon request of the Board or Board staff, the applicant shall cooperate and provide supplemental information in support of its application. The applicant shall provide requested documents, records, supporting data and other information within the time period specified in the request or, if no time is specified, within 30 days of the date of the request. If the applicant fails to provide the requested information within the required time period in the request, the Board may deny the application.

(c) The application, and amendments thereto, and other specific documents designated by the Board shall be sworn to or affirmed by the applicant before a notary public which shall be filed promptly with the Board.

(d) An application and related materials that have been submitted to the Board will become the property of the Board and will not be returned to the applicant.

§ 1202.4. Principals.

(a) A principal as defined in this subpart shall apply for licensure as a principal in accordance with § 433a.8 (relating to principal applications).

(b) In addition to information required under § 433a.8, an individual required to be licensed as a principal, unless otherwise directed by the Board, shall submit all of the following:

(1) The nonrefundable application fee posted on the Board's web site.

(2) A description of responsibilities as a principal.

(3) Details relating to a similar license, permit or other authorization obtained in another jurisdiction.

(4) The consent to a background investigation by the Bureau and a release to obtain the information necessary for the completion of the background investigation.

(5) Other information required by the Board.

(c) Following review of the application and background investigation, the Board may approve a principal license if the applicant has proven by clear and convincing evidence that the applicant is a person of good character, honesty and integrity, and is eligible and suitable to be licensed as a principal.

(d) A principal license is not transferable.

(e) A temporary credential, which may be valid up to 270 days, may be issued by the Board to a principal if the Board determines additional time is needed to complete an investigation for licensure.

§ 1202.5. Key employees.

(a) A key employee as defined in this subpart shall apply for licensure as a key employee in accordance with § 435a.2 (relating to key employee license).

(b) In addition to information required under § 435a.2, an individual required to be licensed as a key employee, unless otherwise directed by the Board, shall submit all of the following:

(1) The nonrefundable application fee posted on the Board's web site.

(2) A description of employment responsibilities.

(3) The consent to a background investigation by the Bureau and a release to obtain the information necessary for the completion of the background investigation.

(4) Details relating to a similar license or other authorization obtained in another jurisdiction.

(5) Other information required by the Board.

(c) Following review of the application and background investigation, the Board may approve a key employee license if the applicant has proven by clear and convincing evidence that the applicant is a person of good character, honesty and integrity, and is eligible and suitable to be licensed as a key employee.

(d) A temporary credential, which may be valid up to 270 days, may be issued by the Board to a key employee if the Board determines additional time is needed to complete an investigation for licensure.

(e) An individual may not perform duties associated with a position that requires a key employee license prior to receiving a temporary or permanent credential unless otherwise authorized by the Board.

§ 1202.6. Gaming service providers.

The Board may, in its discretion, require a licensed operator who is not a licensed gaming entity to apply for a certificate or registration as a gaming service provider to provide fantasy contests to, or on behalf of, a licensed gaming entity under 4 Pa.C.S. § 342 (relating to licensed gaming entities).

CHAPTER 1203. APPLICATION PROCESS—TEMPORARY REGULATIONS

Sec.
1203.1. Application review and processing.
1203.2. Application withdrawal.
1203.3. Existing activity.
1203.4. Renewals.
1203.5. Licensed entity representatives.

§ 1203.1. Application review and processing.

(a) The Board will review applications submitted under this subpart to ensure compliance with 4 Pa.C.S. Chapter 3 (relating to fantasy contests) and Board regulations.

(b) If an applicant fails to include any required documentation or information, the Board will notify the applicant and give him an opportunity to cure the deficiency.

(c) Upon a determination that the prerequisites for filing have been met, the application will be accepted for filing and Board staff, if applicable, will:

(1) Obtain information as may be necessary to determine the qualifications of the applicant and any matter relating to the application.

(2) Promptly conduct an investigation of the applicant and on any matter relating to the application, if applicable.

(3) Request the Department to promptly conduct or update a tax clearance review.

(4) Request the Pennsylvania State Police or Federal Bureau of Investigation to conduct or update a criminal history review.

(5) Request any agencies, entities or persons to provide information to the Board as deemed necessary by the Board.

(d) An application submitted under this subpart and information obtained by Board staff relating to the application will be part of the evidentiary record to be utilized by the Board when deciding to approve, condition, issue or deny a fantasy contest license.

(e) A determination as to the merit of the applicant to receive a fantasy contest license will be made within 120 days. If the license is not approved, the Board will provide the applicant with the justification for not issuing the fantasy contest license.

§ 1203.2. Application withdrawal.

(a) A request for withdrawal of an application may be made at any time prior to the Board taking action on the application in accordance with all of the following requirements:

(1) A request for withdrawal of an entity applying for a license, certification or registration, or an individual applying for a principal license shall be made by filing a petition with the Board in accordance with § 493a.4 (relating to petitions generally).

(2) A request for withdrawal of an individual applying for a key employee license or a permit shall be made on a form supplied by the Bureau of Licensing. If Board staff objects to the request for withdrawal, the person filing the form will be notified and may be required to file a petition for withdrawal with the Board in accordance with § 493a.4.

(b) The petition or form must set forth the reasons for the withdrawal.

(c) When rendering a decision on a petition for withdrawal, the Board may set the conditions of withdrawal and may deny or grant the request with or without prejudice.

(d) Unless the Board otherwise directs, fees or other payments relating to an application, license, permit, registration or certification are not refundable by reason of the withdrawal.

§ 1203.3. Existing activity.

An applicant for a fantasy contest license who is conducting fantasy contests in this Commonwealth prior to the effective date of 4 Pa.C.S. Chapter 3 (relating to fantasy contests), or during the time period of a renewal application, may operate fantasy contests during the application or renewal process and prior to the Board granting a fantasy contest license unless the Board has reasonable cause to believe the person or licensed operator is, or may be, in violation of 4 Pa.C.S. Chapter 3 and the Board has required the person to suspend the operation of a fantasy contest until the Board takes action on the application.

§ 1203.4. Renewals.

(a) Licenses and registrations issued under this subpart will be for a term of 5 years from the date of issuance.

(b) An application for renewal of a license or registration shall be submitted at least 180 days prior to the expiration of the license or registration and must include an update of the information in the initial application and any prior renewal applications.

(c) A license, permit or registration for which an application for renewal has been timely filed will continue in effect until the Board acts upon the application for renewal.

§ 1203.5. Licensed entity representatives.

(a) A licensed entity representative shall register with the Board in a manner prescribed by the Board. The registration must include the name, employer or firm, business address and business telephone number of the licensed entity representative and any licensed operator, applicant for licensure or other person being represented.

(b) A licensed entity representative has an affirmative duty to update its registration information on an ongoing basis. Failure to update a registration is punishable by the Board.

CHAPTER 1204. FANTASY CONTEST LICENSES—TEMPORARY REGULATIONS

Sec.
1204.1. Fantasy contest license issuance and statement of conditions.

§ 1204.1. Fantasy contest license issuance and statement of conditions.

(a) *Issuance criteria.* In addition to the criteria in 4 Pa.C.S. Chapter 3 (relating to fantasy contests), the Board will not issue or renew a fantasy contest license unless all of the following criteria have been established by the applicant:

(1) The applicant has fulfilled each condition set by the Board or contained in 4 Pa.C.S. Chapter 3, including the execution of a statement of conditions.

(2) The applicant is found suitable consistent with the laws of the Commonwealth and is otherwise qualified to be issued a fantasy contest license.

(b) *Statement of conditions.*

(1) The applicant, as a condition precedent to the issuance of a fantasy contest license, shall execute a Statement of Conditions in the manner and form required by the Board. Execution of the Statement of Conditions constitutes the acceptance of each provision in the Statement of Conditions by the applicant.

(2) Failure to fully comply with any provision in an executed Statement of Conditions constitutes a violation and may result in Board-imposed administrative sanctions, up to and including revocation, against a licensee.

CHAPTER 1205. FANTASY CONTESTS—TEMPORARY REGULATIONS

Sec.

§ 1205.1. Fantasy contests generally.

A fantasy contest licensee may offer a fantasy contest only under all of the following conditions:

(1) The value of all prizes or awards offered to winning participants is established and made known in advance of the fantasy contest.

(2) The value of the prize or award is not determined by the number of participants or the amount of fees paid by the participants.

(3) The winning outcome reflects the relative knowledge and skill of the participant.

(4) The winning outcome is not based on the score, point spread or performance of a single actual team or combination of teams, or solely on a single performance of an individual athlete or player in a single actual event.

(5) The winning outcome is based on statistical results accumulated from fully completed athletic sports contests or events, except that participants may be credited for statistical results accumulated in a suspended or shortened sports event which has been partially completed on account of weather or other natural or unforeseen event.

§ 1205.2. Procedures to govern the conduct of fantasy contests.

(a) Each fantasy contest license holder shall establish and implement procedures governing the conduct of fantasy contests, as approved by the Board.

(b) The governing procedures must include, at a minimum, all of the following:

(1) A participant may not be eligible to engage in a fantasy contest by a licensed operator without first establishing a fantasy contest account, unless the fantasy contest is through a fantasy contest terminal in a licensed facility.

(2) Prior to a participant engaging in a fantasy contest or making a deposit in a fantasy contest account, the licensed operator shall verify the age, location and identity of the participant. A person under 18 years of age may not engage in a fantasy contest by a licensed operator. If the participant is utilizing a fantasy contest terminal in a licensed facility, the participant shall be 21 years of age to engage in a fantasy contest.

(3) Each time a participant enters his registered fantasy account, he shall enter his unique username and password to verify his identity.

(4) Prior to accepting of a participant's entry fee for a specific fantasy contest, all Board-approved rules, prizes and award values must be posted on the specific fantasy contest homepage in a clear and decipherable manner.

(5) Provisions to prohibit a participant from participating in beginner fantasy contests, except as provided by 4 Pa.C.S. § 325(4.1)(ii) (relating to conditions of licensure). If a participant who is not a beginner attempts to enter a beginner contest, his account shall be temporarily suspended from further fantasy contest participation for 15 days and the fantasy contest operator shall ban the individual from any further participation in beginner fantasy contests offered by the licensed operator.

(6) Provisions to prohibit a highly experienced player from participating in fantasy contests that exclude highly experienced players. In accordance with 4 Pa.C.S. § 325(4.2), if a participant who is a highly experienced player attempts to enter a fantasy contest for which he is ineligible, his account must be temporarily suspended for 15 days and his account shall be banned from entering further contests of this type.

(7) Upon the creation of a fantasy contest account or the engagement of a fantasy contest terminal in a licensed facility, the licensed operator shall require the participant to identify any professional sports in which he currently engages in and which are subject to a fantasy contest and shall limit the participant's account from entering into contests of that sport.

(8) Allowing a person to restrict himself from entering a fantasy contest or accessing a fantasy contest account for a specific period of time as determined by the participant and implement procedures to prevent the person from participating in the licensed operator's fantasy contests.

(9) Allowing a person to restrict the total amount of deposits that the participant may pay to the licensed operator for a specific time period established by the participant and implement procedures to prevent the participant from exceeding the limit.

(10) Establishing procedures to monitor for and prevent the use of scripts.

(11) Establishing procedures determining when a fantasy contest locks and when no further entries or substitutions can be made. The procedures must require that the prize stipulated in the entry rules is available and can be demonstrated upon request of the Board.

(12) A process for a fantasy contest operator to receive and respond to participant complaints and reconciling a participant's fantasy contest account.

§ 1205.3. Fantasy contest accounts.

(a) A participant in a fantasy contest by a licensed operator may only enter a fantasy contest if the participant has established an account with the fantasy contest operator.

(b) The licensed operator shall perform all of the following with respect to each participant account:

(1) Verify the age, location and identity of participants in a fantasy contest prior to accepting an entry in a fantasy contest by the participant account holder.

(2) Assure the participant has funds on account sufficient to pay the fantasy contest entry fee at the time of entry.

(3) Require that each time a participant enters his registered fantasy account, he shall enter his unique username and password to verify his identity.

(4) Provide the account holder the option to:

(i) Restrict the participant from entering a fantasy contest or accessing a fantasy contest account for a specific period of time as determined by the account holder.

(ii) Restrict the total amount of deposits that the participant may pay to the licensed operator for a specific time period established by the participant.

(iii) Restrict the total amount of entry fees that the participant may pay to the licensed operator for a specific time period established by the participant.

(iv) Restrict the number of fantasy contests the participant may enter for a specific time period as determined by the account holder.

(v) With respect to subparagraphs (i)—(iv), a participant may make his limits more restrictive at any time but may not make a limit less restrictive within 90 days of imposing a restriction.

(5) Prevent unauthorized withdrawals from a fantasy contest account.

(6) Establish protocols for participants to withdraw funds whether the account is open or closed.

(7) Establish procedures for closing accounts and paying balances.

(8) Establish procedures for the disbursement of unclaimed prizes.

§ 1205.4. Fantasy contest licensed operator duties.

(a) A licensed operator shall comply with the conditions of licensure in 4 Pa.C.S. Chapter 3 (relating to fantasy contests) and the Board's regulations.

(b) A licensed operator shall continually monitor fantasy contests for conduct which violates the provisions and restrictions of 4 Pa.C.S. Chapter 3 and the Board's regulations, and immediately take steps to report this conduct to the Bureau upon discovery.

(c) A licensed operator shall implement measures to ensure the confidentiality of participants' personal, financial and account information, and to prevent the public disclosure of this information except as provided by law.

(d) A licensed operator shall timely remit all taxes and assessments to the Department as provided for in 4 Pa.C.S. Chapter 3.

(e) A licensed operator shall cooperate with the Board, the Bureau, the Department and law enforcement authorities performing any function or duties related to monitoring, investigating or enforcing 4 Pa.C.S. Chapter 3 or regulations relating to fantasy contest-related activities.

(f) A licensed operator shall permit access to the licensee's premises and fantasy contest terminal premises used in connection with the conduct of fantasy contests for the Board, the Bureau, the Department and the Pennsylvania State Police to facilitate the ability to perform regulatory oversight and law enforcement functions.

(g) A licensed operator shall submit a record of all participant complaints along with a description of how the complaint was resolved and reconciled to the Board on a quarterly basis.

(h) A licensed operator shall submit to the Bureau a record of any suspicious transactions as provided in 4 Pa.C.S. § 325(4.5) (relating to conditions of licensure) within 2 business days of learning of the event.

(i) Each licensed operator shall maintain an office or place of business in this Commonwealth and shall file with the Board the address and contact information for a person or representative in this Commonwealth authorized to receive service of process, documents and requests issued by the Board. If the Board makes a request for information or delivers documents or a notice to that address, it shall constitute receipt of those documents or requests by the licensed operator or applicant. If the Board will require access to the database for the licensed operator, this information shall be kept and be made available to the Board at the Pennsylvania office address.

§ 1205.5. Fantasy contest licensed operator restrictions.

A licensed operator may not do all of the following:

(1) Except as provide in paragraph (2), permit an individual under 18 years of age to participate in a fantasy contest.

(2) Permit an individual under 21 years of age to participate in a fantasy contest which is conducted within a licensed facility.

(3) Offer a fantasy contest based in whole or in part on collegiate or high school events or players.

(4) Permit a participant to enter a fantasy contest prior to establishing a fantasy contest account, unless the licensed operator is also a licensed gaming entity and the participant enters the fantasy contest through a fantasy contest terminal located within the licensed gaming entities licensed facility.

(5) Establish a fantasy contest account for a person who is not an individual.

(6) Alter the rules established for a fantasy contest after a participant has entered the fantasy contest.

(7) Issue credit to a participant to establish or fund a fantasy contest account.

(8) Permit the use of scripts by participants. A licensed operator shall implement technologies to prevent the use of scripts.

(9) Knowingly market to a participant during a time period in which the participant has self-excluded from the licensed operator's fantasy contests.

(10) Knowingly allow a self-excluded person to collect, keep or retain a prize.

(11) Knowingly accept a deposit or entry in excess of a limit established by a participant for the specific time period established by the participant.

(12) Share confidential information that could affect fantasy contest play with third parties until the information is made publicly available.

(13) Knowingly permit a principal, an employee of a licensed operator or a relative living in the same house-

hold of an employee, or a principal of a licensed operator to become a participant in a fantasy contest offered by any licensed operator in which the licensed operator offers a prize or award.

§ 1205.6. Licensed gaming entities.

(a) A licensed gaming entity which holds a fantasy contest license may petition the Board for authority to place and operate fantasy contest terminals within the licensed gaming entity's licensed facility.

(b) A licensed gaming entity may not place a fantasy contest terminal on its approved gaming floor. The Board's Executive Director will approve the placement of terminals within the licensed facility.

(c) A participant entering a fantasy contest through a fantasy contest terminal is not required to establish an account with the licensed gaming entity prior to entering the fantasy contest.

(d) A licensed gaming entity which offers a fantasy contest through a fantasy contest terminal may offer slot machine promotional play or table game match play to a participant who is at least 21 years of age as a prize or award or for participating in a fantasy contest conducted by the licensed gaming entity, as approved by the Board.

(e) A licensed gaming entity which obtains authorization from the Board to conduct fantasy contests through fantasy contest terminals is subject to all requirements and restrictions, except for those relating to prior account establishment, in this chapter and Chapters 1206—1209.

§ 1205.7. Record and data retention.

(a) A licensed operator shall retain account information for a 5-year period, including records of deposits into and out of a fantasy contest account, winnings, payouts and withdrawals, and record of participant play of fantasy contests.

(b) A licensed operator shall retain records of each fantasy contest conducted by the licensed operator for a 5-year period.

(c) A licensed operator shall retain copies of all advertisements for at least 2 years from the date of the last use of the advertisement and shall retain records to identify where advertisements were placed.

CHAPTER 1206. ACCOUNTING AND INTERNAL CONTROLS—TEMPORARY REGULATIONS

Sec.
1206.1. Fantasy contest accounting and internal controls.

§ 1206.1. Fantasy contest accounting and internal controls.

(a) At least 45 days prior to commencing fantasy contests under this subpart, except as provided for in § 1203.3 (relating to existing activity), a fantasy contest licensee or an applicant for a fantasy contest license shall submit to the Board for approval all internal control systems and audit protocols for the fantasy contest operations.

(b) An applicant for a fantasy contest license who is conducting fantasy contests in this Commonwealth prior to the effective date of 4 Pa.C.S. Chapter 3 (relating to fantasy contests) shall submit a copy of its internal control systems and audit protocols for the fantasy contest operations simultaneously with its application for a fantasy contest license.

(c) A fantasy contest licensed operator's internal controls and audit protocols must include all of the following:

(1) Provide for reliable records, accounts and reports of any financial event that occurs in the conduct of fantasy contests, including reports to the Board related to fantasy contests.

(2) Provide for accurate and reliable financial records related to the conduct of fantasy contests, including by or through participants located in this Commonwealth.

(3) Establish procedures and security for the recordation of wagering, winnings, and fantasy contest adjusted revenue and taxation.

(4) Establish procedures and security standards for the maintenance of fantasy contests and associated equipment used in connection with the conduct of fantasy contests.

(5) Establish procedures and rules to govern the conduct of fantasy contests and the responsibility of employees related to fantasy contest.

(6) Establish procedures for the collection, recording and deposit of revenue from the conduct of fantasy contests by or through participants located in this Commonwealth.

(7) Establish reporting procedures and records required to ensure that all money generated from fantasy contests by or through participants located in this Commonwealth is accounted for.

(8) Ensure that all functions, duties and responsibilities related to fantasy contests are appropriately segregated and performed in accordance with sound financial practices by qualified employees.

(9) Ensure the confidentiality of participant's personal and financial information.

(10) Ensure the segregation of participant funds from operational funds in separate accounts and maintain a reserve in the form of cash, cash equivalents, security deposits held by banks and processors, an irrevocable letter of credit, payment processor reserves and receivables, a bond or a combination thereof in an amount sufficient to pay all prizes and awards offered to winning participants.

(d) The submissions required under subsections (a) and (b) must include a detailed description of the fantasy contest license operator's administrative and accounting procedures related to fantasy contests, including its written system of internal controls. Each written system of internal controls must include all of the following:

(1) An organizational chart depicting appropriate functions and responsibilities of employees involved in fantasy contests.

(2) A description of the duties and responsibilities of each position shown on the organizational chart.

(3) A detailed narrative description of the administrative and accounting procedures to satisfy the requirements in 4 Pa.C.S. § 325 (relating to conditions of licensure).

(4) The record retention policy of the licensed operator.

(5) The procedure to be utilized to ensure that money generated from the conduct of fantasy contests is safeguarded, including mandatory counting and recording procedures.

(6) Procedures to ensure that recorded accountability for assets is compared with actual assets at intervals required by the Board and appropriate action is taken with respect to discrepancies.

(7) Procedures to be utilized by an employee of a licensed operator in the event of a malfunction of a fantasy contest terminal or other equipment used in the conduct of fantasy contests.

(8) Procedures to be utilized by a licensed operator to prevent minors from entering fantasy contests.

(9) Other items the Board may request in writing to be included in the internal controls.

(10) A statement signed by the chief financial officer of the proposed licensed operator or other competent person and the chief executive officer of the proposed licensed operator or other competent person attesting that the officer believes, in good faith, that the system satisfies the requirements in 4 Pa.C.S. § 325.

(e) Except as provided in § 1203.3, prior to authorizing a licensed operator to commence the conduct of fantasy contests, the Board will review the system of internal controls and audit protocols submitted under subsections (a) and (b) to determine whether it conforms to the requirements in this chapter and whether it provides adequate and effective controls for the conduct of fantasy contests.

(f) If a licensed operator intends to make a change or amendment to its system of internal controls, it shall submit the change or amendment electronically to the Bureau of Gaming Operations in a manner prescribed by the Bureau of Gaming Operations. The licensed operator may implement the change or amendment upon receipt of approval or on the 30th calendar day following the filing of a complete submission unless the fantasy contest licensee receives written notice tolling the change or amendment in accordance with subsection (g) or written notice from the Board's Executive Director rejecting the change or amendment.

(g) If during the 30-day review period in subsection (f), the Bureau of Gaming Operations preliminarily determines that a procedure in a submission contains an insufficiency likely to negatively affect the integrity of fantasy contests or the control of revenue generated from fantasy contests, the Bureau of Gaming Operations, by written notice to the licensed operator, will:

(1) Specify the nature of the insufficiency and, when possible, an acceptable alternative procedure.

(2) Direct that the 30-calendar day review period in subsection (f) be tolled and that any internal controls at issue not be implemented until approved under subsection (i).

(h) Examples of submissions that may contain an insufficiency likely to negatively affect the integrity of fantasy contests include the following:

(1) Submissions that fail to provide information sufficient to permit the review of fantasy contests.

(2) Submissions that fail to provide for the segregation of incompatible functions so that no employee is in a position to commit an error or perpetrate a fraud and to conceal the error or fraud in the normal course of the employee's duties.

(3) Submissions that do not include forms or other materials referenced in the submission or required under 4 Pa.C.S. Chapter 3 or this subpart.

(4) Submissions that would implement operations or accounting procedures not authorized by 4 Pa.C.S. Chapter 3 or this subpart.

(i) When a change or amendment has been tolled under subsection (g), the licensed operator may submit a revised change or amendment within 30 days of receipt of the written notice from the Bureau of Gaming Operations. The licensed operator may implement the revised change or amendment upon receipt of written notice of approval from the Board's Executive Director or on the 30th calendar day following the filing of the revision unless the licensed operator receives written notice tolling the change or amendment in accordance with subsection (g) or written notice from the Board's Executive Director rejecting the change or amendment.

CHAPTER 1207. ADVERTISING—TEMPORARY REGULATIONS

Sec.
1207.1. Fantasy contest advertising.

§ 1207.1. Fantasy contest advertising.

(a) Advertisements related to fantasy contests used by a licensed operator through any form of media, Internet application, or fantasy contest terminal or its agent may not do all of the following:

(1) Contain false or misleading information. An advertisement will be considered misleading if it makes representations about average winnings without equally prominently representing the average net winnings of all players and that not all players will achieve the results referenced.

(2) Portray play by minors (other than professional athletes who may be minors), students, schools, colleges or their settings.

(3) Represent endorsements by minors, college athletes, colleges or college athletic associations.

(4) Appear in a publication that is aimed exclusively or primarily at minors, or individuals attending an elementary or secondary school or school-related event.

(5) Fail to disclose conditions or limiting factors associated with the advertisement.

(b) A licensed operator may not directly market to a person on the Board's fantasy contest self-exclusion list.

(c) A licensed operator or fantasy contest terminal operator or its agent shall discontinue as expeditiously as possible the use of a particular advertisement in this Commonwealth or directed to residents in this Commonwealth upon receipt of written notice that the Board's Office of Compulsive and Problem Gaming has determined that the use of the particular advertisement in this Commonwealth could adversely impact the public or the integrity of fantasy gaming.

CHAPTER 1208. COMPULSIVE AND PROBLEM GAMING—TEMPORARY REGULATIONS

Sec.
1208.1. Signage requirements.
1208.2. Problem gambling information.

§ 1208.1. Signage requirements.

(a) A fantasy contest licensee shall conspicuously post notices on the licensee's web site, including on the account registration and access page, a statement providing the following: "If you or someone you know has a gambling problem, help is available. Call (1-800-GAMBLER)."

(b) The operator of any fantasy contest terminal shall conspicuously post notice on the front of the fantasy contest terminal and notices on the opening screen and on an account registration or access screen, if applicable,

a statement providing the following: "If you or someone you know has a gambling problem, help is available. Call (1-800-GAMBLER)."

§ 1208.2. Problem gambling information.

A licensed operator shall make available through its web site a Responsible Gaming page, as approved by the Board's Office of Compulsive and Problem Gaming (Office), containing links to compulsive and problem gaming treatment information and provider sites and materials provided by the Office regarding compulsive and problem gaming in a .pdf format which can be viewed, downloaded and printed by an individual.

CHAPTER 1209. SELF-EXCLUSION—TEMPORARY REGULATIONS

Sec.
1209.1. Self-exclusion definitions.
1209.2. Self-exclusion procedure.
1209.3. Fantasy contest self-exclusion list.
1209.4. Duties of fantasy contest licensees.
1209.5. Removal from fantasy contest self-exclusion list.

§ 1209.1. Self-exclusion definitions.

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

Fantasy contest activity—The play of fantasy contests at any location in this Commonwealth.

Fantasy contest related activity—An activity related to the play of fantasy contests including creating a player account, funding a player account or withdrawing funds on account.

Fantasy contest self-excluded person—A person whose name and identifying information is included, at the person's request, on the fantasy contest self-exclusion list maintained by the Board.

Fantasy contest self-exclusion list—A list of names and identifying information of persons who, under this chapter, have voluntarily agreed to be excluded from the conduct of fantasy contests for a period of time as selected by the person.

Winnings—Any money or thing of value received from, or owed by, a fantasy contest licensee as a result of a fully executed fantasy contest transaction.

§ 1209.2. Self-exclusion procedure.

(a) A person may request to be self-excluded from fantasy contest activities in this Commonwealth.

(b) A person requesting self-exclusion shall complete a form approved by the Board for the purpose of self-excluding from fantasy contests and fantasy contest-related activity, and which is available on the fantasy contest licensee's web site. The person shall do all of the following:

(1) Provide the individual's complete name, including any aliases or nicknames, current address, telephone number, e-mail address, age, date of birth, state of issue of driver's license and driver's license number.

(2) Identify the period of time in years for which the individual seeks to self-exclude. The period of time for fantasy contest self-exclusion may not be less than 1 year.

(3) Agree that, during any period of voluntary self-exclusion, the person may not collect any winnings or recover any losses resulting from any fantasy contest activity.

(4) Agree to release, indemnify, hold harmless and forever discharge the Commonwealth, the Board and all fantasy contest licensees from claims, damages, losses, expenses or liability arising out of, by reason of or relating to the fantasy contest self-excluded person or to any other party for any harm, monetary or otherwise, which may arise as a result of one or more of the following:

(i) The failure of a fantasy contest licensee to withhold fantasy contest privileges from or restore fantasy contest privileges to a fantasy contest self-excluded person.

(ii) Otherwise permitting or not permitting a fantasy contest self-excluded person to engage in fantasy contest activity while on the list of fantasy contest self-excluded persons.

(iii) Confiscation of the individual's winnings.

(5) Agree to other conditions established by the Board.

(c) Forms to be used to request placement on the fantasy contest self-exclusion list must be available on the responsible gaming webpage of each fantasy contest licensed operator's web site. The forms will also be available on the Board's web site.

§ 1209.3. Fantasy contest self-exclusion list.

(a) The Board will maintain the official fantasy contest self-exclusion list and provide access to an updated fantasy contest self-exclusion list on a weekly basis to each licensed operator by transmitting the fantasy contest self-exclusion list electronically to each licensed operator.

(b) The notice provided to licensed operators by the Board will include all of the following information concerning a person who has been added to the fantasy contest self-exclusion list:

(1) The individual's complete name, including any aliases or nicknames.

(2) Current address.

(3) Telephone number.

(4) E-mail address.

(5) Age.

(6) Date of birth.

(7) State of issue of driver's license and driver's license number.

(c) A licensed operator shall establish procedures to ensure that its data base of self-excluded persons is updated to correspond with the Board's current fantasy contest self-exclusion list.

(d) A licensed operator shall maintain a copy of the fantasy contest self-exclusion list and establish procedures to ensure that all appropriate employees and agents of the licensed operator are notified of the updated self-exclusion list within 5 business days after the day notice is transmitted electronically to each fantasy contest license.

(e) Information furnished to or obtained by the Board under this chapter will be deemed confidential and will not be disclosed except in accordance with this chapter and 4 Pa.C.S. § 325(6)(ii) (relating to conditions of licensure).

(f) Except as provided in 4 Pa.C.S. § 325(6)(ii), licensed operators and employees or agents thereof may not disclose the name of, or any information about, a person who has requested fantasy contest self-exclusion to anyone other than employees and agents of the licensed operator whose duties and functions require access to the information.

(g) A fantasy contest self-excluded person may not collect in any manner or in any proceeding any winnings or recover any losses arising as a result of any gaming activity for the entire period of time that the person is on the fantasy contest self-exclusion list.

(h) Winnings incurred by a fantasy contest self-excluded person shall be remitted to the Board to support compulsive and problem gambling programs of the Board.

(i) For the purposes of this section, winnings issued to or redeemed by a fantasy contest self-excluded person will be presumed to constitute winnings subject to remittance to the Board.

§ 1209.4. Duties of fantasy contest licensees.

(a) A fantasy contest licensee shall do all of the following:

(1) Deny fantasy contest related activities to a fantasy contest self-excluded person.

(2) Ensure that a fantasy contest self-excluded persons may not establish an account or deposit money in an established account while the person is on the fantasy contest self-exclusion list.

(3) Retain a record of any attempts of a fantasy contest self-excluded person to engage in fantasy contest related activity and to provide the record to the Board's Office of Compulsive and Problem Gaming (Office) in a form and manner as approved by the Office. The record must include the name of the self-excluded person, the date of the occurrence and a description of the attempted fantasy contest related activity.

(4) Notify the Office within 24 hours of identifying that an individual on the self-exclusion list has gained access to the individual's account or has entered a fantasy contest.

(5) Make available to patrons materials explaining the fantasy contest self-exclusion program.

(b) The list of video gaming self-excluded persons is confidential, and any distribution of the list to an unauthorized source constitutes a violation of 4 Pa.C.S. Chapter 3 (relating to fantasy contests).

§ 1209.5. Removal from fantasy contest self-exclusion list.

An individual who has elected to self-exclude from fantasy contest related activity will remain on the self-exclusion list for the duration of the period selected and will be removed from the fantasy contest self-exclusion list only upon the conclusion of the period of self-exclusion.

[Pa.B. Doc. No. 18-670. Filed for public inspection April 27, 2018, 9:00 a.m.]