

PROPOSED RULEMAKING

DEPARTMENT OF AGRICULTURE

[7 PA. CODE CH. 59a]

Milk Sanitation

The Department of Agriculture (Department) proposes to amend Chapter 59a (relating to milk sanitation) to read as set forth in Annex A.

Statutory Authority

This proposed rulemaking is authorized under the act of July 2, 1935 (P.L. 589, No. 210) (31 P.S. §§ 645—660g), referred to as the Milk Sanitation Law (act). Section 19 of the act (31 P.S. § 660c) provides, “The Secretary of Agriculture is hereby authorized to adopt and promulgate rules and regulations for the proper enforcement of this act.” In addition, the act of June 30, 2021 (P.L. 333, No. 62) (Act 62 of 2021) added 3 Pa.C.S. §§ 5741—5747 (relating to milk sell-by date and best-by date labeling). Section 5747 of 3 Pa.C.S. authorizes the Department to adopt the regulations necessary to administer the provisions of 3 Pa.C.S. §§ 5741—5747. Under 3 Pa.C.S. §§ 5721—5737 (relating to food safety) (Food Safety Act), the term “milk” is included within the definition of a “potentially hazardous food” and provides the Department broad authority to regulate “milk” as necessary for the proper enforcement of the Food Safety Act. See 3 Pa.C.S. §§ 5722 and 5733 (relating to definitions; and rules and regulations).

Need for the Proposed Rulemaking

This proposed rulemaking would accomplish several regulatory objectives, including:

(1) authorization for issuance of an additional raw milk butter permit to raw milk permitholders, in response to the industry-driven initiative to provide more raw milk products. Sections 59a.363(a)(1)(i), 59a.401, 59a.402(b)(2) and (c), 59a.405, 59a.408, 59a.409(e), 59a.411(a)(1) and (2) and (c), 59a.412 and 59a.413(a) and (b) are proposed to be amended to provide standards for raw milk butter.

(2) implementation of the statutory requirements imposed by Act 62 of 2021. Sections 59a.15(a), (b), (b.1), (c), (d), (e) and (f) and 59a.411(a)(3)(i), (ii) and (iv) (relating to labeling: milk dating and label content review by the Department) are proposed to be amended to provide standards for 3 Pa.C.S. §§ 5741—5747.

(3) removal of an outdated and extraneous regulatory requirement for label and labeling preapproval by the Department for all permitholders, as preapproval of labels and labeling are not expressly required by the act or by any other act under which milk, milk products, milk for manufacturing or manufactured dairy products may be regulated,¹ and to align with all other food products, which do not require preapproval of labels. The Department retains this requirement, however, for those raw milk permitholders subject to Subchapter F (relating to raw milk for human consumption). The change was prompted by the industry stating that no other product label or labeling requires preapproval of the label or labeling and it was delaying their ability to quickly market new products. Section 59a.14(a), (b) and (c) (relating to labeling: bottles, containers and packages of

milk, milk products or manufactured dairy products), which provide standards for the label and labeling requirements for milk, milk products, manufactured dairy products or milk for manufacturing purposes which currently establish the parameters for preapproval of labels, are proposed be deleted. Subsection (d) is proposed to be expanded to establish minimum label and labeling requirements for bottles, containers and packages enclosing milk, milk products or manufactured dairy products. While labels must comply with those standards, no preapproval of the labels will be required. The raw milk label content review provisions of § 59a.411 are not amended and are not affected. Raw milk labels must still be submitted to the Department for preapproval.

(4) regulating sampler, weigher/sampler and milk tanker inspections previously conducted by the Pennsylvania Milk Marketing Board (MMB) in accordance with a Memorandum of Understanding (MOU) with the Department. The MOU was terminated in 2019, and since then, the Department has been tasked with conducting the field certifications and inspection programs required by the Interstate Milk Shippers Grade A Program (a United States Food and Drug Administration (FDA) Federal cooperative program that each state and commonwealth must adopt and conform to for their dairy industry to ship in interstate commerce) and the United States Department of Health and Human Services, Federal Grade “A” Pasteurized Milk Ordinance (Grade “A” PMO). Appendix B (relating to milk sampling, hauling and transportation) of the Grade “A” PMO requires samplers and weigher/samplers to be approved and milk tanker inspections to be done. The Department had established an MOU with the MMB under which the MMB did a large percentage of the sampler and weigher/sampler certification and milk tanker inspections. As set forth previously, the MOU terminated in 2019 and was not renewed. The Department has no certification standards or requirements set forth in regulation. Therefore, it is necessary to establish uniform standards through regulation and to properly inform the regulated community of the requirements to be met. Sections 59a.6(a), (b), (c) and (f), 59a.16(g), (h) and (i), 59a.107(a), 59a.382(g) and 59a.409(d) are affected by standards for regulation of a sampler or weigher/sampler and milk tanker inspections.

(5) making the regulation more understandable and user-friendly for the regulated community, and more closely aligned with the Federal Grade “A” milk standards outlined in the Grade “A” PMO. The most current revision of the Grade “A” PMO and its appendices, as published by the FDA, may be found on the Department’s web site at www.agriculture.pa.gov/consumer_protection/FoodSafety. The web site contains a link to an electronic copy of the document. Many provisions of the current regulations contain references to the Grade “A” PMO. Proposed amendments to §§ 59a.2 (relating to definitions) specifically the terms “approved sampler,” “certified industry inspector,” “Grade A PMO or PMO” and “(c) [a]dditional terms used in the Grade ‘A’ PMO,” 59a.4(i), 59a.5(b)(3) and (c)(3), 59a.6(c)(4) and (f), 59a.7, 59a.12(j), 59a.16(g),(i) and (j), 59a.21(a) and (d) and 59a.28(a)(1) and (b) are affected by, contain slight changes to, or provide standards related to the Grade “A” PMO.

¹ The act of July 2, 1935 (P.L. 589, No. 210) (31 P.S. §§ 645—660g); the act of August 8, 1961 (P.L. 975, No. 436) (31 P.S. §§ 520-1.1—520-9) referred to as the Milk Adulteration and Labeling Act, specifically section 520-6 (31 P.S. § 520-6); the Food Safety Act; and Act 62 of 2021.

*Summary of this Proposed Rulemaking**Proposed revisions to § 59a.2*

This section is proposed to be amended by adding or refining various defined terms and include citations for various statutes referenced elsewhere in the regulation. These amendments include the following:

The definition of “approved inspector” is proposed to be deleted. The current definition is different from the statutory definition. In addition, the proposed amendments to § 59a.4(b)(3) (relating to approved inspectors and certified industry inspectors) clarify the licensure standards for approved inspectors.

The definition of “approved sampler” is proposed to be amended to make it clear that an approved sampler includes a certified person that obtains milk sampled as a “dairy plant sampler” or “industry plant sampler,” as those terms are defined under the Grade “A” PMO. The rationale for this amendment is to achieve consistency with Federal milk regulations and standards as outlined in the Grade “A” PMO.

The definition of the term “BTU—bulk tank unit” is defined in the current regulation. The Department proposes to modify the definition slightly to clarify that it includes both individual dairy farms and groups of dairy farms from which milk is collected. The current definition references only a “group” of dairy farms. However, many BTUs are located on individual farms. Therefore, the definition now includes a specified farm in addition to a group of dairy farms. This was done to ensure both accuracy and clarity of the definition. The term “BTU,” while not defined in the Grade “A” PMO, is used in the Grade “A” PMO, which is adopted in the current regulations and is proposed to be amended in this proposed rulemaking, and in § 59a.16(e) (relating to marking, sealing and documentation for vehicles containing milk and milk products) of both the current regulations and this proposed rulemaking.

The definition of “certified industry inspector” is proposed to be added because the term is used in § 59a.4(h) regarding approved inspectors current regulation and proposed subsection (i) regarding the certification process.

The Department proposes to amend the current definition of “Grade ‘A’ PMO” to set forth information disclosing the Federal agencies that publish it, provide factual information disclosing it, provide the minimum standards for Grade “A” milk production and processing as established by the FDA and provide the proper link to the Department’s web site.

The definition of “HTST” is proposed to be amended to correct the definition. The current definition is incorrect because it states that HTST stands for “high temperature short term.” In actuality, HTST stands for “high temperature short time,” as provided in the definition of “pasteurization” in section 1 RR of the Grade “A” PMO (see definition of pasteurization).

The Department proposes the addition of the definition of “ISO/IEC 17025.” This term appears in the amended regulations at § 59a.5(a)(3) and (b)(2) (relating to standards for Pennsylvania-approved dairy laboratories, official laboratories and other laboratories; reports of results).

The Department proposes to amend the definition of “manufactured dairy products” to ensure it is the same as the statutory definition under section 1 of the act (31 P.S. § 645).

The Department proposes to amend the definition of “milk products” by deleting the last sentence, “[t]he term includes those foods that are milk products under the Grade ‘A’ PMO.” This sentence is inconsistent with the definition of “milk products” set forth in section 1 of the act.

The Department proposes to add the definition of “pasteurization” for clarity purposes. It is used in the definitions of “pasteurized” and “Pennsylvania-approved dairy laboratory” and in §§ 59a.7, 59a.12, 59a.14, 59a.15, 59a.17, 59a.19—59a.21, 59a.309, 59a.363, 59a.373, 59a.382, 59a.402 and 59a.405. The definition of “pasteurization” comes from section 1 RR of the Grade “A” PMO. The Department proposes to add the phrase “the milk used for” when referring to manufactured dairy products to clarify only milk must be pasteurized, and not other ingredients in the manufacture of dairy products.

The Department proposes to add the definition of “pasteurized” for clarity. The definition of pasteurized is combined with the definition of “pasteurization” at section 1 RR of the Grade “A” PMO. Webster’s Dictionary defines “pasteurize” as “to expose to pasteurization.” Therefore, the Department is proposing to define “pasteurized” in a manner that denotes the milk, milk product or milk used in manufactured dairy product has undergone pasteurization. The word pasteurized is used in the definition of “Grade ‘A’ PMO or PMO” and in §§ 59a.7, 59a.14—59a.16, 59a.20, 59a.309, 59a.363, 59a.373 and 59a.382.

The Department proposes to add the definition of “raw milk butter” since it is different from “butter” which is made from pasteurized milk and the term is used in §§ 59a.363(a), 59a.401, 59a.402(b)(2) and (c), 59a.408, 59a.409(e), 59a.411(a) and (c), 59a.412 and 59a.413 of this proposed rulemaking, all of which set forth standards for “raw milk butter.”

The Department proposes to add the definition of a “retail food facility” because that term is used throughout §§ 59a.12(b)(3), 59a.15 and 59a.501 (relating to permits; labeling; milk dating; and interrelatedness with the Retail Food Facility Safety Act and the Food Safety Act).

The Department proposes to amend the definition of “weigher/sampler” by (1) adding the terms “certified industry inspector,” “approved inspector” and “other authorized designee,” and (2) deleting the term “milk plant person,” because there is no person specifically defined or set forth in the act or the Grade “A” PMO related to weigher and sampler and (3) deleting the “Pennsylvania Milk Marketing Board” and replacing it with “or other Department-approved certifying body.” The Department had established an MOU with the MMB to do a large percentage of the certification, but the MOU expired in 2019 and the MMB did not approve a renewal. Therefore, the specific reference to the MMB has been replaced with the broader term “Department-approved certifying body.” The amendment clarifies that certified inspectors and approved inspectors, as defined in the regulation, and other persons certified by the Department may be a weigher/sampler. In addition, Appendix B of the Grade “A” PMO requires weigher/samplers to be approved by the regulatory agency.

The Department proposes to amend § 59a2(c) which provides for additional terms used in the Grade ‘A’ PMO by adding paragraphs (1) and (2). Paragraph (1) is simply created from current language for clarity and paragraph (2) clarifies that additional terms used in the Grade “A” PMO include “milk products” which include both “milk” and “manufactured dairy products.”

Proposed amendments to § 59a.3 (relating to contacting the Department)

The Department proposes to amend this section by updating the contact and address information.

Proposed amendments to § 59a.4

The Department proposes to:

1. Add “and certified industry inspectors” to the title.
2. Reduce the applicant age from 21 years of age to 18 years of age in subsection (b)(1). There is no legal reason to require a person to be 21 years of age to become a licensed approved inspector when the legal age of adulthood in this Commonwealth is 18 years of age—see 23 Pa.C.S. § 5101 (relating to attainment of full age)—and there are no special circumstances to require a person to be 21 years of age prior to licensure.
3. Amend subsection (b)(3) to establish that the Department will evaluate each applicant and to increase the number of joint dairy farm evaluation inspections to five. The increase in joint dairy farm evaluation inspections is more consistent with the standards established in section 5 of the Grade “A” PMO.
4. Amend subsection (e) by deleting the reference to “subsections (b) and” in the second sentence resulting in only subsection (d) being referenced. The reason for the change is that subsection (b) does not apply to continuing education requirements for license renewals. The amendment will correct an error in the current regulation.
5. Amend the heading in subsection (g) to read “license” instead of “certificate” as the Department issues licenses.
6. Add subsection (i), regarding the certification process, to make it consistent with the Grade “A” PMO, and current industry practice. The Department established language that clarifies a person must be licensed as an approved inspector prior to seeking certification as a certified industry inspector. In addition, the Department set forth general standards for initial certification and renewal of certification that are established in the Grade “A” PMO.

Proposed changes to § 59a.5

1. The Department proposes to amend the title of subsection (a) by adding “laboratory” to clarify these are general standards for all laboratories covered under this section. In addition, the Department proposes to add subsections to break down standards for all laboratories, pathogen testing laboratories and to provide for alternate laboratory methods.
2. The Department proposes to add subsection (a)(1) regarding Pennsylvania-approved, official and other laboratories. The general laboratory standards for sampling and testing conducted by Pennsylvania-approved laboratories, official laboratories and other laboratories are not substantively changed from those that appear in the current regulations under subsection (a). The Department proposes to add a web site reference, “found at AOAC.org,” to allow the regulated community to view any updates or familiarize itself with the standards of the “Official Methods of Analysis of the Association of Official Analytical Chemists.”
3. The Department proposes to add subsection (a)(2) which requires all laboratories that conduct sampling or examinations to be listed with the National Conference on Interstate Milk Shippers (NCIMS). That listing identifies the interstate milk shippers who have been certified by Milk Sanitation Rating Officers as having attained the

necessary milk sanitation compliance and enforcement ratings. The ratings are based on compliance with the requirements of the latest revision of the USPHS/FDA Grade “A” PMO and are made in accordance with the procedures set forth in the latest revision of the Methods of Making Sanitation Rating of Milk Shippers.

4. The Department proposes to add subsection (a)(3) regarding pathogen testing laboratories. Subsection (a)(3) provides specific standards that must be attained by laboratories that conduct pathogen-specific testing required by the regulations. It requires laboratories conducting pathogen testing to have received accreditation to the ISO/IEC 17025 standard from a National third-party laboratory accrediting body that is a full member of the International Laboratory Accreditation Cooperation (ILAC) and a signatory to the ILAC mutual recognition arrangement. This proposed amendment helps to establish uniform standards across the industry and ensure proper, legally defensible and valid testing.

5. The Department proposes to add subsection (a)(4) regarding alternate laboratory methods, which provides that the Department may evaluate and approve alternative laboratory sampling and testing standards and procedures concerning bacteriological analysis of milk, milk products and manufactured dairy products. Approved methods would be published in the *Pennsylvania Bulletin*. This proposed amendment would provide some flexibility for “alternate laboratory methods” as new testing standards and techniques, proven to be just as effective as those currently followed, may come available in the future. Section 16 of the act (31 P.S. § 660) provides the Secretary authority to “. . . make requirements concerning the number and character of bacteria in milk, milk products and manufactured dairy products after hearing. Bacteriological analysis of milk, milk products and manufactured dairy products shall be made under the supervision of a laboratory, the equipment and director of which have been approved by the Secretary of Agriculture. The bacterial analysis of milk, milk products and manufactured dairy products shall be in accordance with. . . unless special permission is given by the secretary for a modification of the above standard methods.”

6. The Department proposes to amend the title of subsection (b) to read “laboratory reports.” The intent is to provide clarity that the standards under this section address laboratory reports. In addition, the Department proposes to split subsection (b) into three paragraphs, (1) addressing Pennsylvania-approved laboratory signatories, (2) addressing other laboratories’ signatories and (3) addressing reporting timetables for all laboratories.

7. The Department proposes to add subsection (b)(1), regarding Pennsylvania-approved laboratories, to this section. The standards for reports issued by Pennsylvania-approved laboratories and official laboratories are not changed from those that appear in the current regulations under subsection (b).

8. The Department proposes to add subsection (b)(2), regarding other laboratories, to address signature standards for laboratories, other than Pennsylvania-approved dairy laboratories or an official laboratory, issuing reports of the results of laboratory examinations. The proposed amendment is intended to provide clarity and to ensure uniform standards across the industry. The language of paragraph (2) establishes substantially the same signatory standards as those established in paragraph (1), allowing the laboratory director or person designated by the laboratory director to sign the laboratory reports. The only difference is that if the laboratory report is signed by

someone other than the laboratory director or a designee, the signatory must be a person designated by the laboratory's ISO/IEC standard accreditation documents. The Commonwealth may not specify a higher standard than that accepted by the industry.

9. The Department proposes to add subsection (b)(3), regarding report timetable, to clarify and establish reporting time periods for all laboratories. The timetables are those required in the NCIMS Grade "A" Program, or within 30 days of the test completion. This proposed amendment also addresses the timetable, 48 hours, for reporting results that are noncompliant with the standards of the Grade "A" PMO or the regulations. This is intended to provide clarity and a uniform standard for the industry to follow.

10. The Department proposes to amend subsection (c), regarding the Pennsylvania-approved dairy laboratory director, by deleting subparagraphs (i) and (ii) and adding paragraphs (5)–(8).

11. The Department proposes to amend subsection (c) by deleting subparagraph (i) standards that required the completion of a written examination as part of the criteria for becoming a provisionally certified dairy laboratory director as that is not required by the statute or the Grade "A" PMO. Subparagraph (ii) would no longer be necessary without subparagraph (i) so the language of subparagraph (ii) is proposed to be incorporated into paragraph (3). The language of what was subparagraph (ii) is proposed to be amended by adding language to require an onsite performance and facility evaluation that is "in accordance with the current *Evaluation of Milk Laboratories, Recommendations of the United States Public Health Service/Food and Drug Administration* and the Grade 'A' PMO." The Department's rationale for this amendment is that it is already industry practice and the Bureau of Food Safety and Laboratory Services (Bureau) desires to codify current practice consistent with Federal milk regulations standards including the Grade "A" PMO provisions.

12. The Department proposes to amend subsection (c) by adding paragraphs (5)–(7) which provide additional standards that a certified Pennsylvania-approved dairy laboratory director must follow. The language of paragraph (5) requires the director to continue to participate in the Department-conducted milk split sample proficiency program. Paragraph (6) requires the director to operate the Pennsylvania-approved laboratory in conformance with the standards of the act and the regulation, and paragraph (7) requires the director to ensure all records of laboratory test results are accurate and in compliance with the standards of the act and the regulations. These additions are intended to help ensure compliance and accountability.

13. The Department proposes to amend subsection (c) by adding paragraph (8) to clarify that any falsification of required records is a violation of the regulation. This will help to ensure compliance and accountability.

14. The Department proposes to amend this section by adding subsection (d), regarding refusal, revocation or suspension of approval of certification, which provides that upon written notice and opportunity for a hearing the Department may refuse, revoke or suspend a Pennsylvania-approved laboratory approval or a Pennsylvania-approved laboratory director certification for any violation of the act or regulation.

Proposed addition of § 59a.6 (relating to approved sampler and weigher/sampler)

The Department proposes to add § 59a.6 to the regulation which establishes certification criteria for an individual to be approved as a sampler or weigher/sampler consistent with the requirements established in the Grade "A" PMO. This section is more specific in detailing current practices of the Department in fulfilling the standards established in § 59a.104 (relating to certification of bulk milk collectors—weighers/samplers). This amendment would ensure samplers and weigher/samplers are properly and uniformly trained thereby providing better service to the industry and ensuring accountability now that the Department has assumed full responsibility for these certifications. By way of background, the Department had previously established an MOU with the MMB to do a large percentage of the certification, but the MOU expired in 2019 and the MMB did not approve a renewal. The overall purpose of this section is to align the regulation with the standards set forth in the Grade "A" PMO, provide for uniform certification standards and provide applicants with a general overview of the requirements for certification as a sampler or weigher/sampler. The proposed amendments require forms that will be provided by the Department. Those forms are attached to this proposed rulemaking. More specifically, the Department proposes to:

1. Add subsection (a), regarding application for approved sampler, which sets forth the manner by which a person may apply to the Department to be certified as an approved sampler. The Department will provide the certification application forms and the certification renewal forms.

2. Add subsection (b), regarding application for weigher/sampler, which sets forth the manner by which a person may apply to the Department to be certified as a weigher/sampler. The Department will provide the certification application forms and the certification renewal forms.

3. Add subsection (c), regarding criteria for approval, which includes three paragraphs. Paragraph (1) establishes the general criteria for certification as a sampler or weigher/sampler. The general criteria includes training and experience in the area of sampling milk, milk products and manufactured dairy products and passing a Department-administered or -approved field test to verify the applicant is utilizing proper sampling techniques. The Department added examples of the basic training or experience a person should have prior to applying for the position. Once the application is accepted the applicant must pass a field test, involving sampling technique, that is administered by the Department, or a Department-approved certifying body. Paragraph (2) sets forth additional criteria for a weigher/sampler certification, including training and experience in weighing milk for approval of the initial application, and once the applicant is accepted, the completion of a Department or MMB-administered written examination with a final score of at least 70%. Paragraph (3) provides language that will allow the Department to modify the training and approval criteria to remain consistent with the particular provisions in Appendix B of the Grade "A" PMO. This will help to ensure samplers and weigher/samplers are consistently trained and certified, thereby providing uniformity in sampling and weighing and sampling across the industry.

4. Add subsection (d), regarding certificate, establishing that the Department will issue a certificate in the

appropriate field (sampler or weigher/sampler) to any applicant meeting the standards established in subsection (c).

5. Add subsection (e), regarding duration of certificate; renewal, which establishes that certificates expire January 1 of each calendar year. Paragraph (1) requires that applicants apply or reapply for a certificate by December 31 of the preceding calendar year and paragraph (2) requires the applicant to provide verification of compliance with the continuing education requirements of the regulation.

6. Add subsection (f), regarding continuing education and recertification requirements, which requires continuing education for certified samplers and weigher/samplers. Paragraph (1) establishes that a prerequisite to renewal of certification as a sampler or weigher/sampler is that the applicant attend a Department or Department-approved continuing education training course that meets the requirements established in Appendix B of the Grade "A" PMO. Paragraph (2) requires applicants to demonstrate proper sampling techniques to the Department every 24 months. This subsection is intended to help ensure all samplers and weigher/samplers have up-to-date training and remain competent in the necessary skills to carry out their jobs.

7. Add subsection (g), regarding refusal, revocation or suspension of certificate, which provides that the Department may, upon written notice and opportunity for a hearing, refuse, revoke or suspend a certificate for any violation of the act or the regulation.

Proposed addition of § 59a.7 (relating to pasteurization standards)

This section provides specific standards for milk, milk products or manufactured dairy products that are sent for pasteurization. This section does not change the regulatory requirements enforced under the Grade "A" PMO and will provide clarity and ease of finding the requirements to the regulated community by referencing and providing a citation to the Grade "A" PMO pasteurization standard details within the regulation.

Proposed amendments to § 59a.12

The Department proposes the following amendments to § 59a.12:

Amend subsection (b), regarding exceptions, by making the following changes to paragraphs (3)—(5):

1. In paragraph (3) delete the broad reference to "store" and add clarity by adding "retail food facility or any other facility where these products are to be consumed on-premises. . . ." In addition, delete the redundant and now incorrect phrase "milk or milk products" and amend it to read ". . . when products have been purchased. . ." with "products" referring to the beginning of the sentences which clarifies that this paragraph refers to "milk, milk products or manufactured dairy products." Finally, the words "manufactured dairy products" are proposed to be added to the end of the sentence. This creates uniform language throughout the paragraph clarifying it only pertains to "milk, milk products and manufactured dairy products."

2. Delete current paragraph (4). The same language appears in section 2 of the act (31 P.S. § 646). This is redundant in the regulation because the facilities set forth are all retail food facilities that are addressed in paragraph (3).

3. In paragraph (5), delete the phrase "and exempted from permit requirements in accordance with the act."

That phrase is unnecessary as the act has a specific exemption for a person producing and selling from a single cow. See 31 P.S. § 646.

4. Amend subsection (j) by adding two sentences: one citing the standards and provisions of the Grade "A" PMO that require a permit for the interstate movement of milk products including the movement, manufacture, sale, storage or receipt of milk products, and the second sentence identifying when the Department will issue a permit. The Department proposes to add the information to provide additional clarity for the regulated community.

Proposed amendments to § 59a.13 (relating to adulterated or misbranded milk, milk products or manufactured dairy products)

The Department proposes to make a small formatting change to the title of section 2 of the Grade "A" PMO (relating to adulterated or misbranded milk and/or milk products) to ensure it matches the title set forth in the Grade "A" PMO.

Proposed amendments to § 59a.14

The Department proposes the following amendments to § 59a.14:

1. Delete subsections (a)—(c). The requirement for all dairy labels to be approved by the Bureau is not a requirement under the statute and it is extremely time consuming and burdensome on the Bureau. Furthermore, no other food has to have the labeling approved by a regulatory entity at a Federal or state level. The industry has the ultimate responsibility to make sure their labels are compliant with labeling standards established by the Department and at the Federal level. As with every other food under the Food Safety Act, if a label is noncompliant the Department would document that on an inspection and the firm would need to correct it. With regard to raw milk, the requirement for the raw milk permittees to seek label approval before using their labels was maintained. These small processors need guidance, and it will be much easier to work with them prior to them printing large amounts of labels than to force corrections if they are noncompliant. The Bureau will also continue to do "courtesy reviews" of labels upon request, as it currently does with any other food processors.

2. Amendments to the language related to label requirements in subsection (d) are necessary to establish and ensure compliance with the Commonwealth's and Federal labeling standards, including the act, the Food Safety Act and 3 Pa.C.S. §§ 5741—5747 and the Fair Packaging and Labeling Act (15 U.S.C. §§ 1451—1461). In addition, the Bureau clarified that "manufactured dairy products" must also meet the label requirements. Amendments are also proposed to be made to replace any reference to "product" with the more specific references to "milk," "milk product" or "manufactured dairy product."

3. Amendments to subsection (e) set forth the proper title of § 59a.16 of the regulation and delete the label requirement exclusion for raw milk for human consumption addressed in § 59a.411 of the regulation.

4. The addition of subsection (f)(1) and (2), regarding false and misleading material, for clarity and the purpose of consumer protection. Paragraph (1) clarifies that labels containing additional claims, such as A2A2, organic, kosher, grass fed or other marks or endorsements, must be accompanied by documentation supporting these claims and the documentation must be provided to the Department upon request. Paragraph (2) provides that certification issued by a National or third-party accredita-

tion or certification process must be maintained by the permittee and must support the marks, words or endorsements used on the label. Proof of certification must be provided to the Department upon request.

5. Amend subsection (g) by amending the word “regarding” to “relating to” in the Grade “A” PMO section reference.

Proposed amendments to § 59a.15

The Department proposes the following amendments to § 59a.15:

1. Clarification of which entities are included under this section by adding the more encompassing “retail food facility” and providing additional examples of farmers markets and roadside stands which commonly provide milk to consumers.

2. Addition of subsection (b.1) that specifies “sell by” and “best by” date limitations of 17 days which is in accordance with recently passed legislation found in 3 Pa.C.S. §§ 5741—5747.

3. Provisions for both a “sell by” and “best by” date. These provisions are proposed to be added to subsections (a)—(c) and are in accordance with recently passed legislation relating to milk sell-by date and best-by date labeling, found in 3 Pa.C.S. §§ 5741—5747, allowing for a “best by” date designation.

4. An additional process, in subsection (f), to petition the Department for approval to utilize a “sell by” or “best by” date that is greater than the 17-day period, as allowed by 3 Pa.C.S. §§ 5741—5747, established by the regulation. The process contains strict provisions for sampling, testing methodology, bacterial limits and storage, as well as authorizing the Department to take regulatory samples and view results of all testing. These provisions provide for a safe product while at the same time reducing food waste.

5. An amendment to subsection (e), regarding monitoring by the permitholder and the Department, including adding “the permitholder and” to the title to denote the permitholder now has monitoring duties, to require, under paragraph (1), the permit holder to sample and submit milk for routine monitoring testing dependent on whether the permitholder uses sell by or best by dates of 17 days or less or sell by and best by dates of greater than 17 days. Proposed paragraph (1.1) provides the Department discretion to monitor a permitholder through the pulling and testing of samples. Paragraph (2) further clarifies the testing methodology to be used and paragraph (3) establishes the process for sampling and retesting milk that exceeds bacterial limits for pasteurized milk. Paragraph (4) is proposed to be amended by adding a header to distinguish it as providing the process for resumption of a 17-day or less “sell by” or “best by” date. The language was clarified to require the submission of three samples in accordance with the requirements of 3 Pa.C.S. §§ 5744(b)(3)(i) and 5746(d)(2) (relating to sell-by date or best-by date of greater than 17 days from pasteurization; and monitoring by milk plants and department), and the language is proposed to be amended to be consistent with the provisions of 3 Pa.C.S. § 5746(b), regarding methodology, that require samples to be submitted to a Pennsylvania-approved dairy laboratory. Finally, proposed paragraph (5) establishes sample submission standards for reapplying to reinstate an extended “sell by” or “best by” date, and proposed paragraph (6) provides that test results must be submitted to the permitholder and the Department.

Proposed amendments to § 59a.16

The Department proposes the following amendments to § 59a.16:

1. The section name is proposed to be amended to better reflect the standards set forth in this section and to add manufactured dairy products since the substantive provisions of this section add and thereby clarify that manufactured dairy products are also regulated under these provisions.

2. Subsection (c)(12) clarifies the product grade must reference “Grade A” if the milk, milk products, or manufactured dairy products being transported are Grade “A” to clarify that the provisions of that subsection apply to Grade “A” and not nongrade “A” milk.

3. Adding subsection (g), regarding vehicle or milk tank truck inspection. The subsection provides clarity for the industry by adding language in accordance with section VIII (relating to milk tank truck permitting and inspection) of Appendix B of the Grade “A” PMO, which requires the Department to inspect all vehicles transporting raw, heat-treated or pasteurized milk, milk products or manufactured dairy products at least every 24 months or sooner if violations are found.

4. Adding subsection (h), regarding reporting and inspection. This provision relates to subsection (g) by requiring haulers and milk plants to provide, on forms supplied by or approved by the Department, an annual report of vehicles and milk trucks in their fleet and making milk trucks and vehicles available for inspection by the Department.

5. Adding subsection (i), regarding proof of inspection. Again, in accordance with subsection (g), which requires inspections, this subsection provides that upon a compliant inspection the Department will issue and apply a sticker to each vehicle or milk truck passing inspection, indicating compliance and setting forth the expiration date of the valid inspection.

6. Subsection (f), regarding reference to applicable provisions of the Grade “A” PMO, is proposed to be deleted and recodified as subsection (j) because of the other proposed amendments. This allows the regulations to have proper order and clarity. In addition, the provisions of what had been subsection (f) are proposed to be amended to update the applicable provisions of the Grade “A” PMO by adding a reference to Appendix B of the Grade “A” PMO.

Proposed amendments to § 59a.17 (relating to inspection of dairy farms and milk plants)

The Department proposes the following amendments to § 59a.17:

1. Deletion of a sentence related to inspection of raw milk producers in subsection (a). Raw milk is addressed later in this proposed rulemaking.

2. Addition of a standard requiring the bulk milk tank of the producer to be empty for any initial or change of market inspection.

3. Other amendments are minor and reflect clarity changes, such as setting forth a “relating to...” phrase when an Appendix or section of the Grade “A” PMO is mentioned.

Proposed amendments to § 59a.18 (relating to sampling and examination)

The Department proposes the following amendments to § 59a.18: The majority of amendments to this section are

minor clarity changes, such as setting forth a “relating to . . .” phrase when an Appendix or section of the Grade “A” PMO is mentioned. The Department proposes to add language to subsection (a) requiring laboratories to be compliant with the requirements of § 59a.5. Therefore, the Department proposes to delete what would be redundant language in subsection (a), requiring a laboratory to be listed with the NCIMS or to operate “in accordance with the current Evaluation of Milk Laboratories, Recommendations of the United States Public Health Service/Food and Drug Administration and current FDA 2400 Laboratory Series forms, or the Department.”

Proposed amendments to § 59a.19 (relating to standards for grade “A” milk for pasteurization, ultrapasteurization or aseptic processing)

The Department proposes the following amendments to § 59a.19: The one amendment to this section is a minor clarity change setting forth a “relating to . . .” phrase when a section of the Grade “A” PMO is mentioned.

Proposed amendments to § 59a.20 (relating to standards for grade “A” pasteurized, ultrapasteurized and aseptically processed milk and manufactured dairy products)

The Department proposes the following amendments to § 59a.20:

1. The title of the section is proposed to be amended to reflect that it covers manufactured dairy products as well as milk and that it covers all milk whether Grade “A” or non-grade “A” milk. The words “Grade A” are proposed to be deleted as the standard applies to all the milk and manufactured dairy products produced in this Commonwealth, whether from Grade “A” milk or non-grade “A” milk. Non-grade “A” milk may be pasteurized, ultrapasteurized or aseptically processed. It may also be utilized for manufactured dairy products. The Department also proposes to amend the title of the section.

2. Subsection (a) reflects that proposed amendment.

3. Subsection (b) reflects a proposed amendment to “(relating to . . .)” which is a proper formatting amendment.

4. Amendments to subsection (b)(14), (16) and (20) reflect amendments to the terms of the Grade “A” PMO that paragraphs (14), (16) and (20) fall under.

Proposed amendments to § 59a.21 (relating to standards)

The Department proposes the following amendments to § 59a.21:

1. The title of subsection (a) is proposed to be amended to reflect it covers manufactured dairy products as well as milk. The term “milk products” in the act and in the milk sanitation regulations includes ice cream. The definition of “milk products” differs between the act and the Grade “A” PMO. The definition under the act and its regulations states, “Ice cream, ice cream mix, custard ice cream, french ice cream, frozen custard and other similar frozen products, and all dairy products used in the manufacture thereof. The term includes those foods that are milk products under the Grade ‘A’ PMO.” The Grade “A” PMO defines “milk products” in a manner that excludes ice cream or frozen desserts. Therefore, to include milk products under this subsection would be inconsistent with the Grade “A” PMO. The standards for “milk products” are established under subsections (b) and (c).

2. The rest of the amendments, with the exception of the somatic cell count exception in subsection (a), reflect formatting (“relating to . . .”) changes, including manufac-

tured dairy products and changes to reflect amendments to the Grade “A” PMO section numbers and titles.

3. The exception, in subsection (a), to the somatic cell count reflects and is consistent with negotiated changes with the industry. These occur throughout this proposed rulemaking.

Proposed amendments to § 59a.22 (relating to animal health)

The Department proposes a minor formatting change.

Proposed amendments to § 59a.23 (relating to milk, milk products and manufactured dairy products which may be sold)

The Department proposes the following amendments:

1. The title of the section is proposed to be amended to reflect that it covers manufactured dairy products as well as milk and milk products.

2. The rest of the proposed amendments reflect minor formatting changes and changes to reflect amendments to the title of section 9 of the Grade “A” PMO.

Proposed amendments to § 59a.24 (relating to transferring; delivery containers; cooling)

The Department proposes a minor formatting change and changes to reflect amendments to the title of section 10 of the Grade “A” PMO.

Proposed amendments to § 59a.25 (relating to milk, milk products and manufactured dairy products from points outside this Commonwealth)

The Department proposes a minor formatting change to subsection (b) and changes to reflect amendments to the title of section 11 of the Grade “A” PMO.

Proposed amendments to § 59a.26 (relating to plans for construction and reconstruction)

The Department proposes a minor formatting change to subsection (b).

Proposed amendments to § 59a.27 (relating to plans for personal health)

The Department proposes a minor formatting change.

Proposed amendments to § 59a.28 (relating to procedure when infection or high risk of infection is discovered)

The Department proposes the following amendments to § 59a.28:

1. Clarity to ensure inclusion of “manufactured dairy products” in the regulated products throughout.

2. Subsection (a)(1), an amendment to reflect the actual sections of the Grade “A” PMO, specifically sections 13 and 14 (relating to personnel health; and procedure when infection or high risk of infection is discovered) that apply to immediate exclusion of a person from handling milk, milk products or manufactured dairy products, and not section 15, which relates to enforcement.

3. Subsection (b), an amendment to reflect the actual section of the Grade “A” PMO, specifically section 14, and not section 16 (relating to penalty) applies.

Proposed amendments to § 59a.102 (relating to milk permits)

The Department proposes minor amendments for clarity to ensure milk products and manufactured dairy products are included.

Proposed amendments to § 59a.103 (relating to plant inspection)

The Department proposes minor amendments for clarity to ensure milk products and manufactured dairy products are included.

Proposed amendments to § 59a.104

The Department proposes to delete the broad and somewhat vague standard contained in subsections (a) and (b) and instead rely on the new and very specific certification and training provisions for samplers and weigher/samplers which is established in § 59a.6.

Proposed amendments to § 59a.105 (relating to approved milk graders)

The Department proposes to delete this section. No current approved milk graders exist and the current Grade "A" PMO or United States Department of Agriculture (USDA) recommended requirements have no provisions for these graders.

Proposed amendments to § 59a.106 (relating to basis)

The Department proposes a minor change, deleting "sediment content" from the raw milk quality classification, consistent with the deletion of § 59a.108 (relating to sediment content classification), and sets forth §§ 59a.107, 59a.109, 59a.110 and 59a.111, which establish the appearance and odor, bacterial estimate classification, somatic cell count and drug residue level standards.

Proposed amendments to § 59a.107 (relating to appearance and odor)

The Department proposes to break this section into subsections (a) and (b). Subsection (a) provides that approved samplers shall be responsible for ensuring that raw milk for manufacturing purposes meets the requirements of the section for appearance and odor. Subsection (b) contains the current language of the section, but the Department proposes to delete the reference to § 59a.108 since it is proposed to be deleted because it establishes sediment content classifications which the Department will no longer require. The Department also proposes to delete the word "excessive" from the language of subsection (b) as that term is too broad. In practice, if the inspector can visually see any sediment in the milk, then the milk should be rejected.

Proposed amendments to § 59a.108

The Department proposes to delete this section. The Department proposes, consistent with §§ 59a.106 and 59a.107 amendments, to remove all standards regarding sediment content, other than visual examination under § 59a.107, as sediment content is no longer used to determine quality of milk for manufacturing under the current Grade "A" PMO and is only a recommended requirement under the current USDA, Agricultural Marketing Service, Dairy Programs, titled *Milk for Manufacturing Purposes and its production and Processing-Recommended Requirements*.

Proposed amendments to § 59a.109 (relating to bacterial estimate classification).

The Department proposes two minor changes. First, the addition of language allowing other laboratories that are compliant with § 59a.5 to analyze milk samples. The proposed compliant laboratory standard has been added throughout this proposed rulemaking and expands the scope, while still requiring the same high standards, of laboratories sanctioned to test milk samples. Second, inserting the word "producer" to clarify that any bacterial

count in excess of 500,000 bacteria per milliliter will be considered a producer violation.

Proposed amendments to § 59a.110 (relating to somatic cell count)

The Department proposes the following amendments to § 59a.110:

1. The Department proposes to add language allowing other laboratories that are compliant with § 59a.5 to analyze milk samples. The compliant laboratory standard is proposed to be added throughout this rulemaking and expands the scope, while still requiring the same high standards, of laboratories sanctioned to test milk samples. This clarifies what is happening in the industry and provides a service to producers that border other states.

2. In accordance with changes requested by the regulated community, the Department proposes to reduce the somatic cells per millimeter from 750,000 to 500,000. The industry is already requiring these lower counts from their producers: the lower somatic cell counts make the milk easier to pasteurize and process and help to ensure a safer raw milk product.

3. For clarity, the Department proposes to add "sheep" to the somatic cell count standards that previously only included "goat" milk.

4. For clarity, the Department proposes to insert the word "producer" to clarify that any excess somatic count violations will be considered a producer violation.

Proposed amendments to § 59a.111 (relating to drug residue level)

The Department proposes a minor formatting change and to insert "Milk products. . ." in subsection (a) to clarify milk products are regulated under this section. The Department proposes a change to paragraph (1)(v) to clarify that all sample results, positive and negative, are to be reported.

Proposed amendments to § 59a.112 (relating to rejected milk)

The Department proposes to delete language referencing sediment content. The Department proposes, consistent with proposed amendments to §§ 59a.106—59a.108, to remove all standards regarding sediment content.

Proposed amendments to § 59a.113 (relating to suspended milk for manufacturing)

The Department proposes the following amendments to § 59a.113:

1. The Department proposes to delete the language in paragraphs (1) and (2) referencing deleted § 59a.108 and sediment content.

2. The Department proposes, consistent with proposed amendments to §§ 59a.106, 59a.107, 59a.108 and 59a.112, to delete all standards regarding sediment content.

3. The Department proposes to make amendments consistent with the proposed reductions to somatic cell counts and the addition of sheep in other sections of the proposed regulation.

Proposed amendments to § 59a.114 (relating to inspection and quality testing of milk from producers)

The Department proposes the following amendments to § 59a.114:

1. Consistent with proposed amendments to § 59a.17, in § 59a.114(a)(1) the Department proposes to add the requirement that initial and change market inspections be done with an empty bulk milk tank.

2. The Department proposes to delete subsections (b)(2) and (c)(2) referencing § 59a.108.

3. The Department proposes, consistent with proposed amendments to §§ 59a.106—59a.108, 59a.112 and 59a.113, to delete all standards regarding sediment content.

4. The Department proposes a minor formatting change to subsections (c) and (d).

Proposed amendments to § 59a.116 (relating to abnormal milk)

The Department proposes the following amendments to § 59a.116:

1. The Department proposes that all references to “cows” or “dairy cattle” be changed to “dairy animals” for clarity and consistency.

2. The Department proposes a minor formatting change to subsection (c).

Proposed amendments to § 59a.201 (relating to farm inspection)

The Department proposes the following amendments to § 59a.201:

1. The Department proposes, consistent with proposed amendments to § 59a.17, to amend paragraph (1) by adding the requirement that initial and change-of-market inspections be done with an empty bulk milk tank.

2. The Department proposes to delete the language in paragraph (2) referencing sediment content. The Department proposes, consistent with §§ 59a.106—59a.108 and 59a.112—59a.114 amendments, to delete all standards regarding sediment content.

3. The Department proposes to amend paragraph (3) by adding “e-mail” as an accepted means of notification.

Proposed amendment to § 59a.202 (relating to milking facilities and housing)

The Department proposes to delete the word “pools” from subsection (e), as it is redundant and is covered by the “standing water” standard.

Proposed amendments to § 59a.205 (relating to milkhouse and milkroom)

The Department proposes to amend subsection (b) to add insects to the list of contaminants that must be controlled.

Proposed amendments to § 59a.207 (relating to water supply)

The Department proposes a minor formatting change to this section.

Proposed amendments to § 59a.302 (relating to buildings)

The Department proposes the following amendments to § 59a.302:

1. The Department proposes to amend subsection (b) by adding self-closing to the requirements for outside doors opening into processing rooms and adding insects to the list of contaminants that must be controlled.

2. The Department proposes to amend subsection (f)(5) by deleting the language, “the current *Evaluation of Milk Laboratories, Recommendations of the United States Public Health Service/Food and Drug Administration* and

current FDA 2400 Laboratory Series forms,” as the required standard and replacing it with the updated standards established in § 59a.5. This is consistent with the changes made to other sections related to laboratory standards.

Proposed amendments to § 59a.303 (relating to facilities)

The Department proposes to amend subsection (a) by deleting the language “twice a year” and replacing it with “every 6 months.” This adds clarity to the standard and ensures the bacteriological examinations are spread out over the year.

Proposed amendments to § 59a.307 (relating to protection and transport of raw milk and cream)

The Department proposes to delete the word “milkstone” from subsection (a) and replace it with “milk residue” for clarity.

Proposed amendment to § 59a.308 (relating to raw product storage)

The Department proposes to amend subsection (e)(4) by replacing the word “license” with the word “permit” since a plant holds a “permit” under the act and that is what would be affected.

Proposed amendments to § 59a.309 (relating to pasteurized, ultrapasteurized or aseptically processed and packaged products)

The Department proposes to amend § 59a.309 to cite to the pasteurization standards that are now set forth in the substantive provisions of the regulation in § 59a.7, instead of citing a definition in § 59a.2, and to change the word “insure” to “ensure” for proper grammar purposes.

Proposed amendments to § 59a.310 (relating to composition and wholesomeness)

The Department proposes to amend § 59a.310, to ensure consistency and clarity by adding “milk,” “milk products” and “manufactured” dairy products throughout, adding a citation to applicable Federal regulations in 21 CFR, Chapter I, Subchapter B (relating to food for human consumption) and adding the requirement of adherence to Commonwealth regulations and statutes.

Proposed amendments to § 59a.313 (relating to plant records)

The Department proposes to amend § 59a.313 by deleting language in paragraph (1) referring to “sediment.” This proposed change is consistent with proposed amendments to §§ 59a.106—59a.108, 59a.112—59a.114 and 59a.201 which remove all standards regarding sediment content.

Proposed amendments to § 59a.314 (relating to packaging and general identification)

The Department proposes to amend § 59a.314, to ensure consistency and clarity by adding “milk,” “milk products” and “manufactured” dairy products throughout.

Proposed amendments to § 59a.315 (relating to storage of finished product)

The Department proposes to amend § 59a.315, to ensure consistency and clarity by adding “milk,” “milk products” and “manufactured” dairy products throughout and amending the structure of the sentence for ease of reading and clarity.

Proposed amendments to § 59a.317 (relating to Federal Food Safety regulations)

The Department proposes to add § 59a.317. The purpose of the proposed amendment is to add clarity for the

regulated community related to applicable statutory and regulatory standards. The Food Safety Act requires the Department to adopt all Federal regulations related to food. This proposed section sets forth those regulatory requirements.

Proposed amendments to § 59a.348 (relating to operations and operating procedures: packaging, repackaging and storage)

The Department proposes the following amendments to § 59a.348:

1. The Department proposes to amend this section by adding “manufactured” dairy products to subsection (a).
2. The Department proposes to correct the wording of subsection (b) to reference “palletizing” not “palleting.”
3. The Department proposes to correct subsection (d)(1) by deleting the reference to “milk” products. It now refers to all packaged dry products.

Proposed amendments to § 59a.350 (relating to operations and operating procedures: checking quality)

The Department proposes to amend this section by adding the term “milk products” to ensure dried milk products, such as dried ice cream mix, are included in the products regulated under this section. In addition, the Department replaces “and” with “to include” related to dry milk products because those products are part of milk or manufactured dairy products and the “and” made it sound like it was a separate product to be regulated.

Proposed amendments to § 59a.351 (relating to operations and operating procedures: requirements for instant non-fat dry milk)

The Department proposes to amend subsection (a) by adding language allowing other laboratories that are compliant with § 59a.5 to sample and test nonfat dry milk samples. This proposed compliant laboratory standard is proposed to be added throughout this proposed rulemaking and expands the scope while still requiring the same high standards of laboratories sanctioned to test milk samples.

Proposed amendments to § 59a.363 (relating to operations and operating procedures)

The Department proposes to amend § 59a.363 by adding language exempting cream used for the production of raw milk butter from the pasteurization standards, established in subsection (a)(1)(i), for the production of butter since pasteurization standards do not apply to raw milk.

Proposed amendments to § 59a.371 (relating to rooms and compartments)

The Department proposes to amend § 59a.371 by deleting the random text at the end of subsection (c).

Proposed amendments to § 59a.372 (relating to equipment and utensils)

The Department proposes to amend § 59a.372 by adding subsections (m)—(p), which establish construction and cleaning standards for conveyors, grinders and shredders, cookers and fillers used in the manufacturing of cheese and related products. These standards are already included in the current regulation in § 59a.381(b)—(e) (relating to equipment and utensils). The standards are being deleted from § 59a.381(b)—(e) and added to § 59a.372(m)—(p) because the purpose and regulatory requirements of the subchapter are proposed to be amended from addressing pasteurized processed cheese to addressing milk products, to include ice cream, frozen desserts and related products. In addition, currently

§ 59a.372(a) states, “[g]eneral construction, repair and installation. Equipment and utensils necessary to the manufacture of cheese and related products must meet the requirements of § 59a.304 (relating to equipment and utensils). In addition, for other equipment the following requirements in this section shall be met.” Therefore, the additions are intended to provide standards for other equipment and utensils that are utilized in the manufacture of cheese that currently are not covered or set forth in § 59a.372. This is to help to guarantee public safety by establishing standards for all equipment and utensils utilized and guaranteeing they can be properly cleaned and sanitized, just as the equipment and utensils were covered previously under § 59a.381.

Proposed amendments to § 59a.373 (relating to operations and operating procedures)

The Department proposes the following amendments to § 59a.373:

1. The Department proposes to amend subsection (a)(1) by deleting the reference to specific temperature and time standards and replacing it with language referencing the pasteurization standards established in § 59a.7.
2. The Department proposes to amend subsection (a)(2) by deleting the reference to HTST pasteurization units and instead broadly referring to any type of pasteurization unit since there are multiple types of pasteurization units and all must be properly equipped to ensure pasteurization.
3. The Department proposes to amend subsection (b) by breaking it into separate paragraphs for clarity and regulatory purposes and adding paragraph (3) creating standards for the labeling of “raw aged” cheese.
4. The Department proposes to add subsections (c.1), (c.2) and (d.1), creating standards for forming containers, filling containers and trimming and cleaning cheese. The addition of subsection (c.1), regarding forming containers, is proposed to be added for clarity and to address sanitation in the handling and storage of these containers. The addition of subsection (c.2), regarding filling containers, is proposed to be added for clarity and to address sanitation and proper weight controls during the filling of the containers, and the addition of subsection (d.1), regarding trimming and cleaning, is proposed to be added for clarity and to address sanitation and cleaning of natural cheese.
5. The Department proposes to amend subsection (e), regarding general identification, by adding language requiring each consumer-sized container of cheese to include the wording “raw milk,” “made with raw milk” or similar identifying language and add the number of days the cheese was aged to the labeling requirements.

Proposed amendments to § 59a.381

The Department proposes the following amendments to § 59a.381:

1. The standards for “Supplemental Requirements For Plants Manufacturing and Packaging Cheese” are addressed in §§ 59a.371—59a.373. The Department has chosen to amend the undesignated heading of this subchapter to include milk products and no longer addresses pasteurized processed cheese. The undesignated heading is proposed to be amended to “SUPPLEMENTAL REQUIREMENTS FOR PLANTS MANUFACTURING, PROCESSING AND PACKAGING MILK PRODUCTS, TO INCLUDE ICE CREAM, FROZEN DESSERTS AND RELATED PRODUCTS.” The Department proposes to delete the reference to “cheese” in subsection (a) and add

a reference to “milk.” Section 59a.381 already references § 59a.304, which is the proper section of the regulations concerning standards for equipment and utensils used for milk and manufacture of dairy products.

2. The Department proposes to delete subsections (b)—(e) regarding specific construction and cleaning requirements for conveyors, grinders or shredders, cooker and fillers utilized for handling and processing “milk” products, as those standards are already addressed in § 59a.304, which relates to equipment and utensils utilized for milk and manufacture of dairy products.

Proposed amendments to § 59a.382 (relating to operations and operating procedures)

The Department proposes the following changes to § 59a.382:

1. The Department proposes to delete subsections (a)—(d), as they reference standards for cheese, which are covered earlier in the regulations, so these provisions are redundant. In addition, they no longer apply since this section now covers milk products.

2. The Department proposes to add subsections (d.1), (d.2), (d.3), (f), (g) and (h) establishing standards for milk products regarding pasteurization of milk products, purchase of pasteurized mixes for production of milk products, filling containers, freezer storage, sampling and inspections.

3. The Department proposes to keep subsection (e) regarding closing and sealing containers, as its provisions may be applied to milk products.

Proposed amendments to § 59a.401 (relating to raw milk; general)

The Department proposes to amend § 59a.401 by adding “raw milk butter” to the permitting, testing and inspection requirements as new provisions related to raw milk butter are proposed to be established later in Subchapter F (relating to raw milk for human consumption).

Proposed amendments to § 59a.402 (relating to raw milk; prohibitions)

The Department proposes the following amendments to § 59a.402:

1. The Department proposes to add language to subsection (a) clarifying that the term “sell” applies to selling, exchanging or delivering to consumers that are members of a “buyer’s club,” cow share herd agreement or other type of membership purchasing group. These types of groups and entities have arisen since the passage of the current regulation and need to be addressed to add clarity.

2. The Department proposes to amend subsection (b) by breaking a long paragraph down into separate paragraphs of regulatory areas covered and add clarifying language related to the actions authorized by a raw milk permit. The Department also proposes to delete the provisions related to obtaining an additional raw milk permit for cheese and related cheese products. Raw milk aged cheeses are addressed under § 59a.373 and are allowed under the provisions in 21 CFR Part 133 (relating to cheeses and related cheese products) to be manufactured and sold in interstate commerce if the cheese has been aged at least 60 days. Therefore, the sale of raw milk aged cheeses is not unique to producers in this Commonwealth. However, cheese manufacturers are still required to hold a milk permit under 21 CFR Part 133, Subpart B (relating to requirements for specific standard-

ized cheese and related products), because they are producing a manufactured dairy product but would not be required to hold a special raw milk permit.

3. The Department proposes to establish a new provision in subsection (b)(2) to allow a raw milk permit holder to obtain an additional permit authorizing the production and sale of raw milk butter manufactured from raw milk and setting standards for the manufacturing, processing, packaging, storage and equipment and utensils used and operating procedures applicable to raw milk butter.

4. The Department proposes to add the term “raw milk butter” to subsection (c), regarding compliance with testing and documentation requirements, to ensure compliance with those standards.

Proposed amendments to § 59a.404 (relating to requirements for the issuance of a raw milk permit)

The Department proposes to amend § 59a.404(e)(1)(ii) by clarifying the submission, testing and analyzing process for new raw milk permit applicants and deleting “or the Department for analysis” since the new language provides the type of laboratories that may be used.

Proposed amendments to § 59a.405 (relating to sanitation)

The Department proposes a minor formatting change to § 59a.405.

Proposed amendments to § 59a.408 (relating to regular testing of raw milk and raw milk butter for human consumption)

The Department proposes the following amendments to § 59a.408:

1. The Department proposes to amend the title of this section to clarify it includes standards for raw milk butter.

2. The Department proposes to amend subsection (a) by adding the term “raw milk butter.”

3. The Department proposes to amend subsection (b) by adding the term “raw milk butter” and adding the standards for analysis set forth in § 59a.5.

4. The Department proposes to make minor changes to the chart “Raw Milk Testing Schedule and Standards,” including adding “cfu” to “per milliliter” as the unit of measurement, throughout, reducing the somatic cell count to 500,000 per milliliter consistent with changes made throughout the regulation and adding “sheep” to the somatic cell count requirement for goats to be consistent with changes made throughout the rest of this proposed rulemaking. Reducing the somatic cell count is in the interest of the general public because it lowers the bacteria count and enhances the quality of the milk.

5. The Department proposes to add subsection (d), regarding raw milk butter testing schedule and standards, to set forth the Commonwealth regulatory requirements for testing intervals and bacterial coliform and yeast and mold standards per gram. The proposed standards are consistent with Federal CFR standards for butter from pasteurized milk.

Proposed amendments to § 59a.409 (relating to violations of raw milk testing standards)

The Department proposes the following changes to § 59a.409:

1. The Department proposes to amend subsection (d)(3) and (4) to reference § 59.5.

2. The Department proposes to amend subsection (d)(4) and (5) to provide language consistent with other provisions of the regulation requiring an empty tank between samples being taken.

3. The Department proposes to add subsection (e), regarding raw milk butter not meeting testing standards, for purposes of clarity and to provide a standard and procedure to be followed by the producer that has not met microbiological limits for the raw milk butter. This also helps to guarantee consumer health.

Proposed amendments to § 59a.411

The Department proposes the following amendments to § 59a.411:

1. The Department proposes to add raw milk butter labeling standards and requirements to this section.

2. The Department proposes to add a reference to what laboratories meet the testing standards of the regulations in § 59.5.

3. The Department proposes to add “best by” language to this section.

4. The Department proposes to amend subsection (a)(3)(i) by adding clauses (A) and (B) for ease of reading and clarity and adding clarifying language and standards regarding both a “sell by” and “best by” date.

5. Consistent with previous proposed amendments to § 59a.15, the Department proposes to amend subsection (a)(3)(iv) to require the permitholder to submit samples and have them tested in accordance with the standards established in § 59a.15 and at a laboratory meeting the requirements of § 59a.5. In addition, the Department proposes to delete the provision that requires it to take at least one raw milk sample from each permitholder each year. The language requiring periodic testing remains. The language that provides discretion to periodically take samples and have them tested addresses both raw milk and raw milk butter and establishes a standard and procedure that a permitholder must follow for re-sampling and retesting when a product fails to meet bacterial and coliform standards.

6. The Department proposes to add subsection (c) establishing specific label standards for raw milk butter.

Proposed amendments to § 59a.412 (relating to inspection, sampling and testing by the Department)

The Department proposes to amend § 59a.412 by adding raw milk butter to the inspection, sampling and testing standards of this section.

Proposed amendments to § 59a.413 (relating to enforcement: suspension or revocation of a raw milk or raw milk butter permit).

1. The Department proposes to amend § 59a.413 by adding raw milk butter standards to all provisions of this section and changing the title of this section to reflect that change.

2. The Department proposes to amend subsection (b)(2)(i) to address initial enforcement procedures when a raw milk permitholder or raw milk butter permitholder, or both, voluntarily complies with a request from the Department to cease sales. It establishes that the Department will consider this action as a mitigating factor in determining any penalty or sanction issues.

3. The Department proposes to amend subsection (b)(2)(ii) to establish the enforcement measures that the Department will follow when a raw milk permit holder or a raw milk butter permit holder, or both, does not choose

to comply with a request from the Department to voluntarily cease the sale of raw milk or raw milk butter, or both. It provides the regulated community with clarity related to potential Department enforcement actions.

4. The Department proposes to amend subsection (c) to make it clear to the regulated entity that the Department owns the raw milk permit or raw milk butter permit that was issued, and that the permit must be returned to the Department after the permitholder has been afforded written notice and opportunity for a hearing upon a proposed suspension or revocation of the raw milk permit or raw butter permit issued to the regulated entity. Where a suspension has been imposed, the Department will promptly return the raw milk permit, or raw milk butter permit, or both, to the permitholder at the end of the suspension period.

Proposed amendments to § 59a.501

The Department proposes to amend § 59a.501 by adding provisions and citations referencing 3 Pa.C.S. §§ 5701—5714 (relating to retail food facility safety) and the Food Safety Act and their applicable regulations.

Persons Likely to be Affected

The number of people directly involved with this Commonwealth’s dairy industry is difficult to quantify, but the following provides an estimate: Businesses include approximately 8,500 dairy farms that produce milk within this Commonwealth, approximately 35 Grade “A” milk processing plants, approximately 150 Grade “A” BTUs (permitted farm groups), approximately 120 permitted raw milk facilities, approximately 125 dairy manufacturing (non-Grade “A”) facilities, 35 Interstate Milk Shippers Program-certified laboratory facilities, 120 drug residue testing facilities, 32 manufacturers of single service containers and closures and 100 milk hauling companies. Individuals include approximately 1,500 approved milk samplers/weighers, 100 approved farm inspectors, 70 approved dairy laboratory directors and 750 certified laboratory analysts.

Fiscal Impact

Commonwealth

This proposed rulemaking would have some minor positive fiscal impact upon the Commonwealth. However, for the most part, the proposed changes to the regulations are to provide consistency with the Federal standards and clarity. This proposed rulemaking will enhance public health and safety, maintain modern state-of-the-science milk sanitation standards in this Commonwealth and provide clarity to the dairy industry where ambiguity exists. The proposed regulatory amendments will not substantially affect the ongoing business practices or regulatory standards of the industry.

Political subdivisions

This proposed rulemaking would not have any appreciable fiscal impact on political subdivisions.

Private sector

This proposed rulemaking would have some appreciable fiscal impact on the private sector. This Commonwealth’s 800-plus milk permit holders will benefit from the regulation, as well as the 35 approved dairy laboratories. Other businesses will also benefit through the increased availability of desired dairy products. This proposed rulemaking will provide for further economic opportunities for the regulated industry by providing a path for extending shelf life dating on pasteurized milk and allowing for production of raw milk butter. Approved dairy testing

laboratories will benefit from increased revenue from shelf-life testing requirements and elimination of laboratory director exam requirements.

General public

This proposed rulemaking will benefit nearly all Commonwealth residents, since the majority of this Commonwealth's 12.8 million citizens are consumers of milk and dairy products, by protecting the public health, while expanding the availability of milk and raw milk products available to the consumer. This proposed rulemaking will enhance public health and safety by maintaining modern state-of-the-science milk sanitation standards in this Commonwealth.

Paperwork Requirements

This proposed rulemaking will not add to paperwork requirements for the regulated community. The various documents that comprise licensing and label applications and review will remain constant, with perhaps slight changes such as allowing for raw milk butter production. This proposed rulemaking does not add to those documents.

Regulatory Review

Under section 5(a) of the Regulatory Review Act (71 P.S. § 745.5(a)), on May 28, 2024, the Department submitted a copy of this proposed rulemaking and a copy of a Regulatory Analysis Form to the Independent Regulatory Review Commission (IRRC) and to the chairperson of the standing committee on Agriculture and Rural Affairs of the Senate and to the chairperson of the standing committee on Agriculture and Rural Affairs of the House of Representatives. A copy of this material is available to the public upon request.

Under section 5(g) of the Regulatory Review Act, IRRC may convey comments, recommendations or objections to the proposed rulemaking within 30 days of the close of the public comment period. The comments, recommendations or objections must specify the regulatory review criteria in section 5.2 of the Regulatory Review Act (71 P.S. § 745.5b) which have not been met. The Regulatory Review Act specifies detailed procedures for review prior to final publication of the rulemaking by the Department, the General Assembly and the Governor.

Effective Date

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

Public Comments

Interested persons are invited to submit written comments, suggestions or objections regarding this proposed rulemaking to Stefanie Smith, Chief, Division of Policy and Programs, Bureau of Food Safety and Laboratory Services, Department of Agriculture, 2301 North Cameron Street, Harrisburg, PA 17110-9408, (717) 787-5108, within 30 days of the publication of this proposed rulemaking in the *Pennsylvania Bulletin*.

Contact Person

The contact person for technical questions regarding this proposed rulemaking is Sheri Morris, Assistant Director, Bureau of Food Safety and Laboratory Services, Department of Agriculture, 2301 North Cameron Street, Harrisburg, PA 17110-9408, (717) 787-5289.

RUSSELL C. REDDING,
Secretary

Fiscal Note: 2-194. No fiscal impact; recommends adoption.

Annex A

TITLE 7. AGRICULTURE

PART III. BUREAU OF FOOD SAFETY AND LABORATORY SERVICES

Subpart B. LIQUID FOODS

CHAPTER 59a. MILK SANITATION

Subchapter A. PRELIMINARY PROVISIONS

§ 59a.2. Definitions.

(a) *Terms.* The following words and terms, when used in this chapter, have the following meanings, unless the context clearly indicates otherwise:

* * * * *

Adulterated—As defined in section 5728 of the Food Safety Act (relating to adulteration of food).

[*Approved inspector*—A person who has been licensed by the Department in accordance with § 59a.4 (relating to approved inspectors) to perform dairy farm inspections required under this chapter in a capable and efficient manner.]

Approved sampler—A person certified by the Department to obtain samples of milk or milk products for analysis by a Pennsylvania-approved dairy laboratory. **This includes dairy plant samplers and industry plant samplers as defined in the PMO.**

BTU—[*Bulk*] *bulk tank unit*—A specified **dairy farm or** group of dairy farms from which milk for pasteurization or for manufacturing purposes is collected by a milk tank truck.

* * * * *

Certified industry inspector—An approved inspector who has been licensed by the Department in accordance with § 59a.4(h) **and (i)** to inspect dairy farms on which milk is produced for an interstate milk shipper. [**A certified industry inspector is the equivalent of a “designated inspector,” for purposes of conducting certified inspections described in the Grade “A” PMO.**]

* * * * *

Grade “A” PMO or PMO—The most current revision of the Grade “A” Pasteurized Milk Ordinance and its appendices, as published by the **United States Department of Health and Human Services, Public Health Service and the FDA. The Grade “A” Pasteurized Milk Ordinance is a set of minimum standards and requirements for Grade A milk production and processing, established by the FDA.** The Department maintains a link to an electronic copy of this document on its web site at [**www.agriculture.state.pa.us**] **www.agriculture.pa.gov.**

* * * * *

HTST—High temperature short [**term**] **time.**

Herd—A group of animals or a single animal maintained for purposes related to this chapter.

ISO/IEC 17025—The 2017 edition of the standard owned by the International Standards Organization entitled **General Requirements for the Competence of Testing and Calibration Laboratories. Copies of the standard can be found at www.iso.org.**

Manufactured dairy products—Butter, cheese (natural or processed), dry whole milk, nonfat dry milk, dry

buttermilk, dry whey, evaporated milk (whole or skim), condensed whole and condensed skim (plain or sweetened), and other products for human consumption, as may be designated by the Secretary [**including:**

- (i) **Instant nonfat dry milk and other dry milk products.**
- (ii) **Pasteurized process cheese and related products.**
- (iii) **Sterilized milk products.**
- (iv) **Butter-related products.**
- (v) **Other products that must be produced at plants in accordance with supplemental requirements established under Subchapter E (relating to manufacturing plants)].**

* * * * *

Milk products—Ice cream, ice cream mix, custard ice cream, french ice cream, frozen custard, and other similar frozen products, and all dairy products used in the manufacture thereof. [**The term includes those foods that are milk products under the Grade “A” PMO.]**

* * * * *

Official laboratory—A biological, chemical or physical laboratory which is under the direct supervision of the Department. The term includes a dairy laboratory controlled and operated by the Department, a dairy laboratory that performs dairy testing and analysis under contract with the Department and a dairy laboratory at which Department personnel perform dairy testing and analysis.

Pasteurization—**The process of heating every particle of milk, milk product or the milk used for manufactured dairy product, in properly designed and operated equipment, to one of the temperatures set forth in § 59a.7 (relating to pasteurization standards) and held continuously at or above that temperature for at least the corresponding specified time.**

Pasteurized—**Milk, milk products or the milk used for manufactured dairy products that has undergone pasteurization.**

Pennsylvania-approved dairy laboratory—

- (i) A commercial or regulatory laboratory approved and certified by the Department within the preceding 2 years to do official analyses of milk and milk products.
- (ii) A milk industry laboratory approved and certified by the Department within the preceding 2 years for the examination of producer samples of milk for pasteurization, commingled milk for pasteurization or of raw milk for human consumption for the detection of drug residues, bacterial limits and somatic cell count.

* * * * *

Raw milk—Milk that is not pasteurized and may be sold to consumers without further treatment or processing, provided that it conforms to Subchapter F (relating to raw milk for human consumption).

Raw milk butter—**Butter made from raw milk, provided it conforms to Subchapter F.**

Retail food facility—**As defined in 3 Pa.C.S. § 5702 (relating to definitions) of the Retail Food Facility Safety Act.**

Secretary—The Secretary of the Department, or an authorized representative.

* * * * *

Weigher/sampler—A bulk milk pick-up driver [**or a milk plant person], certified industry inspector, approved inspector or other authorized designee certified by the Department [**or the Pennsylvania Milk Marketing Board] or other Department-approved certifying body** to take official samples of producers’ milk for chemical, antibiotic, somatic cell and bacteriological analyses.**

(b) *Additional terms used in this chapter and defined in the Grade “A” PMO.* Any word or term used in this chapter and not otherwise defined in subsection (a) has the meaning ascribed to it in the Grade “A” PMO.

(c) *Additional terms used in the Grade “A” PMO.* Any applicable word or term used in the Grade “A” PMO has the meaning ascribed to it in the Grade “A” PMO, with the exception of all of the following:

- (1) **The** term “regulatory agency,” which means the Department.
- (2) **The term “milk products,” which means both “milk” and “manufactured dairy products” as defined in this chapter.**

§ 59a.3. Contacting the Department.

For purposes of this chapter, the Department may be contacted as follows:

- (1) By mail, at the following address:
 Pennsylvania Department of Agriculture
 Bureau of Food Safety and Laboratory Services
 ATTN: [**Division of Milk Sanitation**] **Milk Program**
 2301 North Cameron Street
 Harrisburg, PA 17110-9408
- (2) By telephone, as follows: (717) 787-4315
- (3) Through the following web site: [**www.agriculture.state.pa.us**] **www.agriculture.pa.gov/consumer_protection/foodsafety.**

§ 59a.4. Approved inspectors and certified industry inspectors.

* * * * *

(b) *Criteria for approval.* An applicant shall meet the following criteria to be eligible for licensure as an approved inspector:

- (1) The applicant shall be [**21**] **18** years of age or older.

* * * * *

(3) The applicant shall have at least 2 years of academic training or experience in the area of milk production and milk sanitation. The Department [**may**] **will** verify that an applicant has adequate experience by having **a** Department [**personnel conduct one or more**] **evaluator conduct five** joint dairy farm inspections with the applicant.

* * * * *

(e) *Education requirement.* The Department will convene an approved inspector educational seminar on at least two separate dates each calendar year, and provide

current approved inspectors written notice of the dates, times and locations of these seminars. As described in [subsections (b) and] subsection (d), attendance at an educational seminar is a requisite to the Department issuing or renewing a license.

* * * * *

(g) *Refusal, revocation or suspension of [certificate] license.* The Department may, upon written notice and opportunity for a hearing, refuse, revoke or suspend a license for [cause] a violation of the act or this chapter.

(h) *Certified industry inspectors.* The Department may designate on the license of an approved inspector that the approved inspector is a certified industry inspector who may, in addition to conducting the inspection activities of an approved inspector, inspect dairy farms on which milk is produced for an interstate milk shipper under the NCIMS Interstate Milk Shippers Program and the Grade "A" PMO.

(i) Certification process. A person seeking to become a certified industry inspector must be a licensed approved inspector. To become and remain a certified industry inspector, a person must meet the standards established in section 5 of the Grade "A" PMO (relating to inspection of dairy farms and milk plants). These standards include the following for initial certification and recertification:

(1) Initial certification. For initial certification, a person shall conduct 25 joint dairy farm inspections with a Department evaluator and achieve a passing score of 80% agreement with the same inspection completed by the Department's evaluator.

(2) Renewal certification. For recertification, a certified industry inspector shall conduct ten joint dairy farm inspections, over a period of 3 years, with a Department evaluator and achieve a passing score of 80% agreement with the same inspection completed by the Department's evaluator.

§ 59a.5. Standards for Pennsylvania-approved dairy laboratories, official laboratories and other laboratories; reports of results.

(a) *General laboratory standards.*

(1) Pennsylvania-approved, official and other laboratories. A Pennsylvania-approved dairy laboratory, an official laboratory or another laboratory that conducts sampling or laboratory examinations for purposes of this chapter shall conform that sampling or testing to the applicable standards and procedures set forth in the *Standard Methods for the Examination of Dairy Products* or the current edition of the *Official Methods of Analysis of the Association of Official Analytical Chemists found at AOAC.org*. Procedures, including laboratory examination procedures and the certification of sample collectors, shall be evaluated in accordance with the current *Evaluation of Milk Laboratories, Recommendations of the United States Public Health Service/Food and Drug Administration* and the Grade "A" PMO and operate in accordance with current FDA 2400 Laboratory Series forms.

(2) Laboratories. Each laboratory that conducts sampling or laboratory examinations for purposes of this chapter shall be listed with NCIMS.

(3) Pathogen testing laboratories. For pathogen-specific testing required by this chapter, laboratories shall have received accreditation to the ISO/

IEC 17025 standard, found at ISO.org, from a National third-party laboratory accrediting body to analyze food products. The accreditation body of the laboratory must be a full member of the International Laboratory Accreditation Cooperation (ILAC) and a signatory to the ILAC mutual recognition arrangement.

(4) Alternate laboratory methods. The Department may evaluate and approve alternative laboratory sampling or testing standards and procedures concerning bacteriological analysis of milk, milk products and manufactured dairy products as necessary and shall publish these approved methods in the Pennsylvania Bulletin.

(b) [Reports of results] Laboratory reports.

(1) Pennsylvania-approved laboratories. If a Pennsylvania-approved dairy laboratory issues a report of the results of laboratory examinations for purposes of this chapter, the report shall be signed by a Pennsylvania-approved dairy laboratory director or a person designated by a laboratory director to sign these reports. If an official laboratory issues a report of the results of laboratory examinations for purposes of this chapter, the report shall be signed by the laboratory director, a person designated by the laboratory director, the person who performed the tests described in the report or the Director of the Department's Bureau of Food Safety and Laboratory Services.

(2) Other laboratories. If another laboratory issues a report of the results of laboratory examinations for the purposes of this chapter, the report shall be signed by the laboratory director, the person designated by the laboratory director or as otherwise specified under the laboratory's ISO/IEC 17025 standard accreditation documents.

(3) Report timetable. Reports shall be provided to the Department within the time periods established in the NCIMS Grade "A" program, or within 30 days of test completion. Laboratories shall report results that are noncompliant under the standards established in the PMO or this chapter within 48 hours. The Department, through publication in the Pennsylvania Bulletin, may specify the format in which laboratories must submit test results.

(c) *Pennsylvania-approved dairy laboratory director.*

* * * * *

(3) The Department will provisionally certify a dairy laboratory director to be a Pennsylvania-approved dairy laboratory director with respect to one or more specific categories of testing procedures if the applicant meets the qualification standards in paragraph (2), submits an application and [does the following:

(i) Completes a Department-administered written examination and attains a score of at least 80%. The examination must have the following parts:

(A) A general section addressing sampling and culturing procedures.

(B) A section addressing the specific categories of dairy testing procedures with respect to which the applicant seeks certification.

(ii) Passes] passes an onsite performance and facilities evaluation by a laboratory evaluation officer from the Department in accordance with the current Evaluation of Milk Laboratories, Recommendations

of the United States Public Health Service/Food and Drug Administration and the Grade “A” PMO.

(4) After the provisional certification in paragraph (3), the Department will certify a dairy laboratory director to be a Pennsylvania-approved dairy laboratory director with respect to one or more specific categories of testing procedures if the provisionally-certified person submits a split sample to the Department for analysis, retains and analyzes the other portion of the split sample, and the results of analysis are consistent between the Department and the provisionally-certified person.

(5) A certified Pennsylvania-approved dairy laboratory director shall continue to participate in the Department-conducted milk split sample proficiency program, and performance shall be satisfactory.

(6) A certified Pennsylvania-approved dairy laboratory director shall perform their functions and shall operate a Pennsylvania-approved laboratory in compliance with the standards of the act and this chapter.

(7) A certified Pennsylvania-approved dairy laboratory director shall ensure recorded laboratory test results are accurate and in compliance with the act and this chapter.

(8) Falsification of required records shall be a violation of this chapter.

(d) Refusal, revocation or suspension of approval or certification. The Department may, upon written notice and opportunity for a hearing, refuse, revoke or suspend a Pennsylvania-approved dairy laboratory approval or a Pennsylvania-approved laboratory director certification for any violation of the act or this chapter.

(Editor’s Note: Sections 59a.6 and 59a.7 are proposed to be added and are printed in regular type to enhance readability.)

§ 59a.6. Approved sampler and weigher/sampler.

(a) *Application for approved sampler.* A person may apply to the Department to be certified as an approved sampler for purposes of the act and this chapter. The Department will provide certification application forms and the certification renewal forms described in subsection (e) upon receiving a request sent to the address or web site identified in § 59a.3 (relating to contacting the Department).

(b) *Application for weigher/sampler.* A person may apply to the Department to be certified as a weigher/sampler for purposes of the act and this chapter. The Department will provide certification application forms and the certification renewal forms described in subsection (e) upon receiving a request sent to the address or web site identified in § 59a.3.

(c) *Criteria for approval.*

(1) An applicant for certification under subsection (a) or subsection (b) must have training and experience in the area of sampling milk, milk products and manufactured dairy products, such as experience on a dairy farm, taking the Pennsylvania Milk Board’s Power Point training, working with a milk cooperative or dairy processor or other dairy or weighing and sampling experience, and shall pass a field test, administered by the Department, or other Department-approved certifying body, verifying appropriate sampling technique. At least one passing inspection score must be obtained.

(2) An applicant for a weigher/sampler certification must also have training and experience in weighing milk and shall complete a Department or Pennsylvania Milk Board administered written examination and achieve a final score of at least 70%.

(3) The Department may modify criteria for approval to be consistent with provisions of the Grade “A” PMO, in particular Appendix B (relating to milk sampling, hauling and transportation), which specifies the required training and periodic evaluation of samplers and weighers/samplers.

(d) *Certificate.* The Department will issue a certificate, verifying certification in the appropriate field, to any applicant meeting the standards established in subsection (c).

(e) *Duration of certificate; renewal.* A certificate shall expire as of January 1 of each calendar year. Applicants shall do the following:

(1) Apply or reapply by December 31 of the calendar year preceding the year for which certification is requested.

(2) Provide documentation verifying compliance with the continuing education training requirements established in subsection (f)(1).

(f) *Continuing education and recertification requirements.*

(1) As a prerequisite to renewal of certification under subsection (e), the applicant shall attend a Department or Department-approved continuing education training for approved samplers and weigher/samplers that meets the training requirements established in Appendix B of the Grade “A” PMO during the period of certification.

(2) Applicants are required to demonstrate proper sampling techniques every 24 months to the Department as referenced in Appendix B of the Grade “A” PMO.

(g) *Refusal, revocation or suspension of certificate.* The Department may, upon written notice and opportunity for a hearing, refuse, revoke or suspend a certificate for any violation of the act or this chapter.

§ 59a.7. Pasteurization standards.

To be considered pasteurized, every particle of milk, milk product or manufactured dairy product must be heated in properly designed and operated equipment to the applicable temperature and maintained at that temperature for the corresponding specified time, as set forth under the definition of “pasteurization” in section 1 of the Grade “A” PMO (relating to definitions).

Subchapter B. PERMIT REQUIREMENTS

§ 59a.12. Permits.

* * * * *

(b) *Exceptions.* The permit requirement of subsection (a) does not apply to the following:

(1) A person selling or delivering milk directly from a dairy farm to a milk plant.

(2) A dairy farm producing and selling milk for pasteurization or milk for manufacturing.

(3) A person selling milk, milk products or manufactured dairy products from a [store,] **retail food facility, or any other facility where these products are to be consumed on-premises** when the [milk or milk] products have been purchased from a person

already in possession of a permit to sell milk [or], milk products or manufactured dairy products.

(4) [A hotel, restaurant, soda fountain, boarding house or other place where milk, milk products or manufactured dairy products are to be consumed on-premises, and have been purchased from a person already in possession of a permit to sell milk or milk products] [Reserved].

(5) A person producing and selling milk from a single cow[, and exempted from the permit requirement in accordance with the act]. The registration shall be renewed every 2 years.

* * * * *

(j) Reference to applicable provisions of the Grade "A" PMO. The provisions of the Grade "A" PMO, in particular section 3[, regarding permits] (relating to permits), apply to this section to the extent described in § 59a.11 (relating to adoption of Grade "A" PMO). Section 3 of the Grade "A" PMO establishes that to move, including to manufacture, bring into, send into, receive into, sell, offer for sale or store, milk products, as defined in section 1 of the Grade "A" PMO (relating to definitions), in interstate commerce a person must possess a permit issued by the appropriate State regulatory agency. The Department will issue a permit upon verifying the person is a Grade A facility regulated by the appropriate State regulatory agency, and receipt of a copy of their most recent inspection report evidencing compliance.

§ 59a.13. Adulterated or misbranded milk, milk products or manufactured dairy products.

* * * * *

(c) Reference to applicable provisions of the Grade "A" PMO. The provisions of the Grade "A" PMO, in particular section 2[, regarding adulterated or misbranded milk or milk products] (relating to adulterated or misbranded milk and/or milk products), apply to this section to the extent described in § 59a.11 (relating to adoption of Grade "A" PMO).

§ 59a.14. Labeling: Bottles, containers and packages of milk, milk products or manufactured dairy products.

(a) [Department approval required. A permit-holder shall, before using a milk, milk product or manufactured dairy product label in commerce, apply for and obtain the approval of the Department for the use of that label. Labels in commercial use as of May 21, 2011, shall have until November 21, 2011, to come into compliance with this registration requirement] [Reserved].

(b) [Approval process.

(1) A permitholder seeking the Department's approval of a milk, milk product or manufactured dairy product label shall apply to the Department at the address, provided in § 59a.3 (relating to contacting the Department). The applicant may use an application form that the Department will provide upon request, or may apply by letter requesting label approval. The application must include clear, accurate copies of all labels for which approval is sought.

(2) The Department will approve the use of a milk, milk product or manufactured dairy product

label if it meets the requirements of the act and this chapter, including the specific requirements of this section.

(3) The Department will, within 10 business days of receiving a complete application, mail the applicant its written approval or denial of the application.

(i) If the application is denied, the written denial will set forth the basis for denial, and afford the applicant notice and opportunity for an administrative hearing on the denial.

(ii) If the application is granted, the written approval will contain a copy of the label and assign a unique serial number to each label approved under the application. The Department will retain copies of these approvals] [Reserved].

(c) [Changes of approved labels. If a label is approved under this section, colors and graphics may be changed without requiring reapproval of the label. If the text, type size or wording is to be changed, the label shall be submitted to the Department for approval in accordance with subsection (b)] [Reserved].

(d) Label requirements. Bottles, containers and packages enclosing milk, milk products or manufactured dairy products offered for sale shall be labeled. The label [shall be approved by the Department in accordance with] must comply with the labeling provisions of the act, the Food Safety Act, 3 Pa.C.S. §§ 5741—5747 (relating to milk sell-by date and best-by date labeling), the Federal Fair Packaging and Labeling Act (15 U.S.C. §§ 1451—1461) and this section, and contain at minimum the following information:

(1) The common or standardized name of the food.

(2) The net quantity of contents, which shall be in accordance with the standards provided in 21 CFR 101.7 (relating to declaration of net quantity of contents) and 16 CFR Parts 500—503.

(3) The common name of the hooved mammal producing the milk preceding the name of the milk [or], milk product[,] or manufactured dairy product if the milk [or], milk product or manufactured dairy product is or is made from milk other than cow's milk.

(4) The words "keep refrigerated after opening," if the milk [or], milk product or manufactured dairy product is aseptically processed.

(5) The words "keep refrigerated," if the [milk or PMO-defined milk product] milk, milk product or manufactured dairy product is conventionally pasteurized or UHT pasteurized.

(6) The words "Grade 'A'" on the exterior surface, except for bottles, containers and packages of milk [and], milk products or manufactured dairy products that are not eligible for certification as Grade "A" or that are eligible for certification but are not currently certified. Type size may not be larger than letters in the basic product name.

(7) The identity of the milk plant where pasteurized, ultrapasteurized, aseptically processed, condensed or dried. When the name and address of a distributor appears in lieu of that of the processor, words such as

“Mfg. for,” “Dist. by” or “Packed for” must also appear on the label. **[Milk or milk products] Milk, milk products or manufactured dairy products** showing a general address, or the name and address of a distributor shall be further labeled to identify the processing plant by assigned numerical code or the plant name and address.

(8) The identity of the plant where processed.

(9) The word “reconstituted” or “recombined,” immediately preceding or immediately following the name of the product, in type at least half the size of name of the product which has been reconstituted, if the **milk, milk product or manufactured dairy product** is made by reconstitution or recombination.

(10) The volume or proportion of water, **in both standard and metric units**, to be added for reconstitution or recombination, if the milk **[or]**, milk product **or manufactured dairy product** is concentrated **[milk or milk product]**.

(11) In descending order of predominance, a listing of additives, such as flavors, sweeteners, milk solids, lactose, stabilizers, emulsifiers, vitamins and minerals if used.

(12) The quantity or percentage of United States Recommended Daily Allowance (U.S. RDA) per serving, if vitamins, minerals or milk solids have been added to the milk **[or]**, milk product **or manufactured dairy product**.

(13) The word “pasteurized,” in type at least one-fourth the height of the letters in the basic product name, if the milk **[or]**, milk product **or manufactured dairy product** has been pasteurized. If desired, letters used in modifying terms and “pasteurized” may be the same size, but never larger than the product name. Printing must be readily legible.

(14) The word “homogenized,” if the milk **[or]**, milk product **or manufactured dairy product** has been homogenized.

(15) The words “protein fortified” immediately preceding or immediately following the name of the product which has been fortified, in type at least half the size of name of the product which has been fortified, if the milk **[or]**, milk product **or manufactured dairy product** is a protein fortified dairy product. The label must include the percentage of milk solids not fat added or the percentage of U.S. RDA of protein, vitamins and minerals per serving on the information panel of the container.

(16) The words “artificially colored,” if an artificial color is used for a flavored milk other than chocolate.

(17) The words “artificially (name of flavor imitated) flavored milk” in type at least half the size of the name of the product imitated, if an artificial flavor is used for artificially flavored milk.

(18) If the milk **[or]**, milk product **or manufactured dairy product** has been cultured or acidulated after pasteurization it may, at the applicant’s option, be labeled “made from pasteurized dairy products.”

(19) If a milk product **or manufactured dairy product** contains an “artificial dairy product” as defined in § 57.1 (relating to definitions) as an ingredient which replaces portions of basic compositional ingredients in the milk product **or manufactured dairy product**, the phrase “contains artificial _____,” with the blank filled in with names of the basic compositional ingredients being simulated, immediately following the name of the food.

(20) **[Any sell-by] The sell by date, best by date or other** information required under § 59a.15 (relating to labeling; milk dating).

(e) *Exception.* The label requirements prescribed under this section do not apply to milk tank trucks and storage tanks, which are addressed in § 59a.16 (relating to markings, sealing **[and]**, documentation **and inspection requirements** for vehicles containing milk **[and]**, milk products **[]**, **or to raw milk for human consumption, which is addressed in § 59a.411 (relating to label content review by the Department)] or manufactured dairy products**). In addition, these requirements do not apply to cans of raw milk from individual dairy farms, which must be identified by name or number of the producer.

(f) *False or misleading material.* False or misleading marks, words or endorsements upon the label are prohibited. In determining whether labeling is false or misleading, the Department will take into account not only the specific representations made on the label but also the extent to which the labeling fails to reveal facts that are material in light of **[such] these** representations. The Department may issue guidance documents addressing false or misleading label statements or any other aspect of labeling under this section. Registered trade designs or terms may be permitted on the container cap or label provided they are not misleading and do not obscure the required labeling.

(1) Labels containing claims, such as A2A2, organic, kosher, grass-fed and other marks, words or endorsements placed on the label, shall have documentation to support the claims. This documentation shall be provided to the Department upon request.

(2) Proof of certification issued by a National or third-party accreditation or certification process shall be maintained by the permittee and support the marks, words or endorsements used on the label. This proof of certification shall be provided to the Department upon request.

(g) *Reference to applicable provisions of the Grade “A” PMO.* The provisions of the Grade “A” PMO, in particular section 4 **[, regarding labeling] (relating to labeling)**, apply to this section to the extent described in § 59a.11 (relating to adoption of Grade “A” PMO).

§ 59a.15. Labeling: Milk dating.

(a) *Label requirement.* The cap or nonglass container of pasteurized milk held in **a retail food facility, to include** retail food stores, restaurants, schools **[or similar food facilities], farmers markets, and roadside stands**, for resale shall be conspicuously and legibly marked in a contrasting color with the designation of the **[“sell-by” date—] “sell by” or “best by” date.**

(1) Sell by date. A “sell by” date shall consist of a **designation** of the month and day of the month after which the product may not be sold or offered for sale **[. The designation may be numerical—such as “8-15”—]**, **whether expressed in standard fashion (such as “August 15”), numerically (such as “8-15”)** or with the use of an abbreviation **[for the month, such as “AUG 15 or AU 15.”** The words “Sell by” or “Not to be sold after” must precede the designation of the date, or the statement “Not to be sold after the date stamped above” must appear legibly on the container. This designation of the date may not

exceed 17 days beginning after midnight on the day on which the milk was pasteurized.] (such as “AUG 15 or AU 15”) and either:

(i) The words “Sell by” or “Not to be sold after” preceding that designation and appearing legibly on the cap or nonglass container; or

(ii) The statement “Not to be sold after the date stamped above” following that designation and appearing legibly on the cap or nonglass container.

(2) *Best by date.* A “best by” date shall consist of designation of the month and the day of the month, in the same format as required in paragraph (1), established by the permitholder as a product quality guideline and the words “Best By,” “Best if Consumed By” or “Best if Used By” preceding that designation and appearing legibly on the cap or nonglass container.

(b) *Prominence of [sell-by] sell by or best by date on label.* The [sell-by] “Sell By” or “Best By” date shall be separate and distinct from any other number, letter or intervening material on the cap or nonglass container.

(b.1) *Sell by or best by date limitation.* A “Sell By” or “Best By” date may not exceed 17 days beginning after midnight on the day on which the milk was pasteurized, unless the Department approves a longer interval in accordance with the procedure set forth in subsection (f).

(c) *Prohibition.* Pasteurized milk may not be [sold or offered for sale if the milk is] sold or offered for sale after the [sell-by] sell by or best by date designated on the cap or nonglass container.

(d) *Exemption.* The following types of pasteurized [dairy products] milk are exempt from the requirements of this section, provided that the cap or nonglass container [of all pasteurized dairy products contains,] contains a lot number or manufacturing date code that is acceptable to the Department and can be used for product traceability in the marketplace.

(1) Ultrapasteurized [dairy products] milk.

(2) Cultured [dairy products] milk.

(3) Aseptically processed [dairy products] milk.

(4) [Dairy products that have] Milk that has undergone [higher heat shorter time] HTST pasteurization.

(5) Milk sold or offered for retail sale on the same premises at which it was processed.

(e) *Monitoring by the permitholder and the Department.*

(1) [The Department will periodically sample containers of pasteurized milk in the possession of the processor or distributor. This sampling may occur at any time before the pasteurized milk is delivered to the store or the customer. The Department will sample at least one milk product from each processor each calendar year.] *Permitholder samples.* Permitholders shall sample and submit milk for testing in accordance with paragraph (2), and as often as follows:

(i) *Permitholders using sell by or best by dates of 17 days or less.* If the permitholder labels milk with a sell by or best by date that is no later than 17 days beginning after midnight on the day on

which the milk was pasteurized, the permitholder shall, at intervals of no greater than 12 months and for the highest-selling volume of milk type, and each type and volume of container of that highest-selling volume of milk type bearing that label information, sample and test in accordance with paragraph (2).

(ii) *Permitholders using sell by or best by dates of greater than 17 days.* If the permitholder labels milk with a sell by or best by date that is greater than 17 days beginning after midnight on the day on which the milk was pasteurized, and that has been approved by the Department under subsection (f), the permitholder shall, at intervals of no greater than 6 months and for the highest-selling volume of milk type, and each type and volume of container of that highest-selling volume of milk type bearing that label information, sample and test in accordance with paragraph (2).

(1.1) *Department monitoring.* The Department may, at its discretion, pull regulatory samples from a permitholder or person required to have a permit, at any time during regular business hours, for testing at an official laboratory.

(2) *Testing methodology.* The permitholder shall submit unopened samples described in paragraph (1) [will be analyzed by the Department or a Pennsylvania-approved dairy laboratory, applying a methodology in the most current edition of Dairy Practices Council Guideline No. 10, entitled “Guidelines for Maintaining and Testing Fluid Milk Shelf Life,”] for analysis by a laboratory meeting the requirements of § 59a.5 (relating to standards for Pennsylvania-approved dairy laboratories, official laboratories and other laboratories; reports of results, applying the methodology established in subsection (f)(1)(ii) or an approved method established under § 59a.5(a)(4) to determine whether the bacterial test results exceed the bacterial limits for pasteurized milk described in § 59a.21 (relating to standards) prior to the expiration of the [sell-by] sell by or best by date designated on the retail container.

(3) *Pasteurized milk that exceeds the bacterial limits.*

(i) When a sample pulled under paragraph (1) or paragraph (1.1) exceeds the bacterial limits for pasteurized milk described in § 59a.21 prior to the expiration of the sell by or best by date designated on the retail container, the permitholder shall resample that same product at the next production date, or within 10 days, following receipt of test results, for retesting as established in paragraph (2).

(ii) When two or more samples [demonstrate a processor] pulled under paragraph (1) or paragraph (1.1) indicate that a permitholder cannot produce pasteurized milk that remains consistently within the bacterial limits [referenced in paragraph (2)] during a 17-day sell-by period, the Department will require a processor to use a sell-by date of something less than the 17-day period described in subsection (a). The [established in § 59a.21 during the sell by or best by date period the Department will calculate [this revised sell-by] a reduced sell by or best by date so that bacterial growth in the milk will not exceed the referenced bacterial limits within that [sell-by] sell

by or best by date period if the milk is maintained in accordance with the temperature standards for pasteurized milk in § 59a.21.

(4) Resumption of use of a sell by or best by date not exceeding 17 days. A processor may submit three samples from different production days to [the Department] a laboratory meeting the requirements of § 59a.5 for analysis to obtain approval to resume a 17-day [sell-by] sell by, or less, period for the product sampled. The Department will approve resumption of a 17-day, or less, [sell-by] sell by period when analysis of a sample demonstrates that bacterial growth in the milk will not exceed the referenced bacterial limits within that [sell-by] sell by period if the milk is maintained in accordance with the temperature standards for pasteurized milk in § 59a.21.

(5) Reapplying to resume a sell by or best by date period greater than 17 days. A permitholder may reapply to the Department to resume a sell by or best by date period greater than 17 days for the product sampled by following the application process established in subsection (f).

(6) Reporting test results. The Pennsylvania-approved dairy laboratory conducting tests required under this section shall submit results to the permitholder and the Department as established in § 59a.5.

(f) Applying to the Department for approval to use a sell by or best by date greater than 17 days. A permitholder may apply to the Department for approval to use a sell by or best by date that exceeds the 17-day period referenced in subsection (b.1). The Department will approve a permitholder's application by type of milk and the type and volume of the milk container.

(1) Approval process. The permitholder shall apply to the Department for approval to use a specific sell by or best by date that is greater than 17 days using a form provided by the Department.

(i) The permitholder must specify on the form by milk type and type and volume of container each product for which approval is requested and the specific sell by date or best by date proposed for that product as packaged.

(ii) For each milk type and type and volume of container for which approval is requested, the permitholder must include a report from a laboratory meeting the requirements of § 59a.5 that confirms the requirements set forth in 3 Pa.C.S. § 5744(b)(3) (relating to sell-by date or best-by date of greater than 17 days from pasteurization). The bacterial count required under 3 Pa.C.S. § 5744(b)(3)(ii) shall conform with the bacteriological standards established in § 59a.21(a).

(iii) Testing results shall be maintained by the permitholder for a minimum of 2 years.

(2) Continuation of approval. The Department's approval under this section shall remain in effect as long as the permitholder continues to complete the periodic sampling and testing required in subsection (e).

§ 59a.16. Markings, sealing [and], documentation and inspection requirements for vehicles containing milk [and], milk products or manufactured dairy products.

(a) Marking requirements. A vehicle or milk tank truck containing milk [or], milk products or manufactured dairy products shall be legibly marked with the name and address of the milk plant or hauler in possession of the contents.

(b) Seal requirement. A vehicle or milk tank truck transporting raw, heat-treated or pasteurized milk [or], milk products or manufactured dairy products to a milk plant from another milk plant, receiving station or transfer station shall be marked with the name and address of the milk plant from which the milk [or], milk products or manufactured dairy products are transported, and shall be sealed.

(c) Documentation requirements. A vehicle or milk tank truck transporting raw, heat-treated or pasteurized milk [or], milk products or manufactured dairy products to a milk plant from another milk plant, receiving station or transfer station shall be accompanied by a legible shipping statement containing the following information:

(1) Shipper's name, address and permit number. A milk tank truck containing milk must include on the weigh ticket or manifest the IMS [Bulk Tank Unit (BTU)] BTU identification numbers or—for farm groups listed with a milk plant—the IMS Listed Milk Plant Number.

* * * * *

(12) Grade [of product] "A," if product is Grade "A."

(d) Cans of raw milk. Cans of raw milk from individual dairy farms shall be identified by the name, producer number or permit number of the individual milk producer.

(e) Additional documentation. Milk transport tank trucks transporting bulk milk [and] or manufactured dairy products must be accompanied by documentation, such as a weigh ticket or manifest, which includes the NCIMS BTU Identification Number or the NCIMS Listed Milk Plant Number, for farm groups listed with a milk plant.

(f) [Reference to applicable provisions of the Grade "A" PMO. The provisions of the Grade "A" PMO, in particular section 4, regarding labeling, apply to this section to the extent described in § 59a.11 (relating to adoption of Grade "A" PMO) [Reserved].

(g) Vehicle or milk tank truck inspection. Vehicles and milk tank trucks transporting raw, heat-treated or pasteurized milk, milk products or manufactured dairy products within this Commonwealth shall be inspected at least once every 24 months, or at a lesser interval where violations have occurred, by the Department or other Department authorized official, or a non-Commonwealth State agency participating in the NCIMS program, and shall comply with standards set forth in PMO Appendix B, VIII (relating to milk tank truck permitting and inspection).

(h) Reporting and inspection. Haulers and milk plants shall cooperate with the Department by:

(1) Providing an annual report of the vehicles and milk tank trucks described in subsection (g) in

their fleet on forms supplied by the Department or as otherwise deemed acceptable by the Department.

(2) Making those vehicles and milk tanker trucks available for inspection.

(i) Proof of inspection. Upon compliant inspection, the Department will issue an official sticker indicating compliance and setting forth the expiration date of the current valid inspection. The Department shall apply the sticker to each vehicle and milk tanker truck found to be compliant.

(j) Reference to applicable provisions of the Grade "A" PMO. The provisions of the Grade "A" PMO, in particular section 4 (relating to labeling) and Appendix B (relating to milk sampling, hauling and transportation), apply to this section to the extent described in § 59a.11 (relating to adoption of Grade "A" PMO).

§ 59a.17. Inspection of dairy farms and milk plants.

(a) General inspection requirement. Dairy farms shall be inspected by an approved inspector at intervals of no greater than 6 months[, unless the dairy farm produces raw milk for human consumption under a raw milk permit, in which case the inspection shall be as prescribed in Subchapter F (relating to raw milk for human consumption)]. Grade "A" dairy farms shall be inspected by a certified industry inspector. Milk plants shall be inspected by [**an approved inspector**] **the Department** at intervals of no greater than 3 months, or as otherwise prescribed by the Grade "A" PMO [, as referenced in subsection (d)].

(b) Inspection frequency. Each producer of milk for pasteurization will be inspected initially and on any change of market by an approved inspector[, and]. **The milk producer shall have an empty bulk tank for an initial inspection or change of market inspection.** **An inspection** shall have a passing score before the first milk is shipped. Producers shall be inspected at least once in each 6-month period by an approved inspector, and an accurate record of farm inspections and quality control testing shall be maintained on forms acceptable to the Department. The records of farm inspections must include the date of inspection, [**any**] noted deficiencies, whether the inspection resulted in a passing score, suspension or reinspection. The records of quality control testing must include bacterial count, somatic cell count, drug residue screening results, temperature results, records of water supply testing, copies of warning letters and suspension letters and information required under Appendix N (**relating to drug residue testing and farm surveillance**) of the Grade "A" PMO [**regarding drug residue testing and farm surveillance**].

(c) Notification to the Department of producer status. A permitholder shall, within 24 hours of its initial instatement of a producer, its suspension of a producer or its reinstatement of a producer, provide the Department **with** the name and address of the producer and the specific action taken by the permitholder.

(d) Reference to applicable provisions of the Grade "A" PMO. The provisions of the Grade "A" PMO, in particular section 5[, **regarding inspection of dairy farms and milk plants**] (**relating to inspection of dairy farms and milk plants**), apply to this section to the extent described in § 59a.11 (relating to adoption of Grade "A" PMO).

§ 59a.18. Sampling and examination.

(a) Sampling and testing costs. Sampling and testing required under this section shall be at the expense of the permitholder or permit applicant, and shall be conducted by a Pennsylvania-approved dairy laboratory[, **an out-of-State dairy laboratory that is listed with the NCIMS or that operates in accordance with the current Evaluation of Milk Laboratories, Recommendations of the United States Public Health Service/Food and Drug Administration and current FDA 2400 Laboratory Series forms, or the Department**] **or laboratory compliant with § 59a.5 (relating to standards for Pennsylvania-approved dairy laboratories, official laboratories and other laboratories; reports of results).**

(b) Certified milk plants, receiving stations and transfer stations; milk plants and transfer stations that receive Grade "A" milk. A milk plant, receiving station or transfer station shall comply with Appendix N (**relating to drug residue testing and farm surveillance**) of the Grade "A" PMO[, **regarding drug residue testing and farm surveillance,**] if it is certified under the NCIMS Interstate Milk Shippers Program, or if it receives Grade "A" milk.

* * * * *

(e) Reference to applicable provisions of the Grade "A" PMO. The provisions of the Grade "A" PMO, in particular section 6 (**relating to examination of milk and/or milk products**) and Appendix N [**regarding examination of milk and milk products and drug residue testing and farm surveillance,**] apply to this section to the extent described in § 59a.11 (relating to adoption of Grade "A" PMO).

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§ 59a.19. Standards for Grade "A" milk for pasteurization, ultrapasteurization or aseptic processing.

* * * * *

(b) Reference to applicable provisions of the Grade "A" PMO. The provisions of the Grade "A" PMO, in particular the *Standards for Grade "A" Raw Milk for Pasteurization, Ultrapasteurization or Aseptic Processing* set forth in that document and section 7[, **regarding**] (**relating to standards for Grade "A" milk and milk products**) are incorporated by reference as regulations authorized under the act, to the extent they do not conflict with the act or [**any provision**] **the provisions** of this chapter. This includes all of the items listed under the referenced Grade "A" PMO provisions, including the following:

* * * * *

§ 59a.20. Standards for [Grade "A"] pasteurized, ultrapasteurized and aseptically processed milk and [milk] manufactured dairy products.

(a) Applicability. The standards prescribed under this section apply to a milk plant **processing milk and manufactured dairy products** regardless of whether it is certified under the NCIMS Interstate Milk Shippers Program.

(b) Reference to applicable provisions of the Grade "A" PMO. The provisions of the Grade "A" PMO, in particular the *Standards for Grade "A" Pasteurized, Ultrapasteurized and Aseptically Processed Milk and Milk Products* and section 7[, **regarding**] (**relating to standards for Grade "A" milk and milk products**), apply to this section to the extent described in § 59a.11 (relating to adoption

of Grade “A” PMO). This includes all of the items listed under the referenced Grade “A” PMO provisions, including the following:

- (1) Item 1p. Floors—Construction
- (2) Item 2p. Walls and Ceilings—Construction
- (3) Item 3p. Doors and Windows
- (4) Item 4p. Lighting and Ventilation
- (5) Item 5p. Separate Rooms
- (6) Item 6p. Toilet-Sewage Disposal Facilities
- (7) Item 7p. Water Supply
- (8) Item 8p. Handwashing Facilities
- (9) Item 9p. Milk Plant Cleanliness
- (10) Item 10p. Sanitary Piping
- (11) Item 11p. Construction and Repair of Containers and Equipment
- (12) Item 12p. Cleaning and Sanitizing of Containers and Equipment
- (13) Item 13p. Storage of Cleaned Containers and Equipment
- (14) Item 14p. Storage of Single-Service [**Containers**] **Articles**, Utensils and Materials
- (15) Item 15p. Protection from Contamination
- (16) Item 16p. **Pasteurization and Aseptic Processing and Packaging, Retort Processed after Packaging, and Fermented High Acid, Shelf-Stable Processing and Packaging**
- (17) Item 17p. Cooling of Milk and Milk Products
- (18) Item 18p. Bottling, Packaging and Container Filling
- (19) Item 19p. Capping, Container Closure and Sealing and Dry Milk Product Storage
- (20) Item 20p. Personnel—Cleanliness **and Practices**
- (21) Item 21p. Vehicles
- (22) Item 22p. Surroundings

§ 59a.21. **Standards.**

(a) *Standards for milk and [milk] manufactured dairy products.* The standards that apply to milk and [**milk**] **manufactured dairy** products are as set forth in section 7 (**relating to standards for Grade “A” milk and milk products**) of the Grade “A” PMO, in Table 1[, **regarding**] (**relating to** chemical, physical, bacteriological, and temperature standards) **except that the somatic cell count for Grade “A” raw milk and manufactured dairy products for pasteurization shall not exceed 500,000 per milliliter.**

(b) *Standards for milk for manufacturing, milk products and manufactured dairy products.* The standards that apply to milk for manufacturing, **milk products** and manufactured dairy products are as set forth in Subchapter C (relating to production and processing of milk for manufacturing purposes). Other fluid derivatives of milk, including condensed milk and milk products, nonfat dry milk and milk products, condensed whey and whey products, and buttermilk and buttermilk products, may be processed according to the standards and requirements for manufactured grade milk and [**milk**] **manufactured dairy** products provided that they meet [**all**] **the** applicable requirements of Subchapter C.

(c) *Standards for **milk products, including ice cream and frozen dessert mixes.*** Frozen desserts—vanilla, chocolate, and one other flavor when applicable—shall be tested at least monthly for the standard plate count and coliform group. Frozen desserts mix shall be tested at least monthly for the standard plate count, coliform group, and phosphatase activity. The following are the specific standards for ice cream and frozen dessert mixes:

(1) *Temperature.* Cooled to 45° F (7° C) or less and maintained thereat.

(2) *Bacterial limits applicable to all but cultured products.* 50,000 per gram.

(3) *Coliform.* Not to exceed 10 per gram. When fruit or nuts and flavoring are added after pasteurization, the count shall not exceed 20 per gram.

(4) *Phosphatase.* Less than 350 milliunits per liter by approved electronic phosphatase procedures.

(5) *Drugs.* On test of milk ingredients, no positive results on drug residue detection methods as referenced in section 7 (**relating to standards for Grade “A” milk and milk products**) of the Grade “A” PMO, Table 1[, **regarding chemical, physical, bacteriological and temperature standards**] .

(d) *Reference to applicable provisions of the Grade “A” PMO.* The provisions of the Grade “A” PMO and, in particular, section [7] **6 (relating to the examination of milk and/or milk products)** and Appendix N [**of that document regarding examination of milk and milk products and drug residue testing and farm surveillance, respectively**] (**relating to drug residue testing and farm surveillance**), apply to this section to the extent described in § 59a.11 (relating to adoption of Grade “A” PMO).

§ 59a.22. **Animal health.**

The provisions of the Grade “A” PMO, in particular section 8[, **regarding**] (**relating to** animal health), apply to this section to the extent described in § 59a.11 (relating to adoption of Grade “A” PMO).

§ 59a.23. **Milk [and], milk products and manufactured dairy products** which may be sold.

The provisions of the Grade “A” PMO, in particular section 9[, **regarding**] (**relating to** milk [**and**] **and/or** milk products which may be sold), apply to this section to the extent described in § 59a.11 (relating to adoption of Grade “A” PMO).

§ 59a.24. **Transferring; delivery containers; cooling.**

The provisions of the Grade “A” PMO, in particular section 10[, **regarding**] (**relating to** transferring; delivery containers; **and** cooling), apply to this section to the extent described in § 59a.11 (relating to adoption of Grade “A” PMO).

§ 59a.25. **Milk, milk products and manufactured dairy products from points outside this Commonwealth.**

* * * * *

(b) *Reference to applicable provisions of the Grade “A” PMO.* The provisions of the Grade “A” PMO, in particular section 11[, **regarding**] (**relating to** milk [**and**] **and/or** milk products from points beyond the limits of routine inspection), apply to this section to the extent described in § 59a.11 (relating to adoption of Grade “A” PMO).

§ 59a.26. Plans for construction and reconstruction.

* * * * *

(b) *Reference to applicable provisions of the Grade "A" PMO.* The provisions of the Grade "A" PMO, in particular section 12 [, regarding] (relating to plans for construction and reconstruction), apply to this section to the extent described in § 59a.11 (relating to adoption of Grade "A" PMO).

§ 59a.27. Personnel health.

The provisions of the Grade "A" PMO, in particular section 13 [, regarding] (relating to personnel health), are adopted as the regulatory standards of the Department to the extent described in § 59a.11 (relating to adoption of Grade "A" PMO).

§ 59a.28. Procedure when infection or high risk of infection is discovered.

(a) *Specific requirements.* When reasonable cause exists to suspect the possibility of transmission of infection from a person concerned with the handling of milk [or], milk products **or manufactured dairy products**, the Department is authorized to require one or more of the following measures:

(1) The immediate exclusion of that person from handling milk [or], milk products **or manufactured dairy products**, or the handling of related [**milk or milk-product**] **product** contact surfaces, subject to release from this exclusion if in accordance with [**Table 5 of section 15**] **sections 13 and 14 (relating to personnel health; and procedure when infection or high risk of infection is discovered)** of the Grade "A" PMO.

(2) The immediate exclusion of the milk supply concerned from distribution and use.

(3) Adequate medical and bacteriological examination of the person and his associates and of their body discharges.

(b) *Reference to applicable provisions of the Grade "A" PMO.* The provisions of the Grade "A" PMO, in particular section [**16, regarding procedure when infection or high risk of infection is discovered**] **14**, apply to this section to the extent described in § 59a.11 (relating to adoption of Grade "A" PMO).

Subchapter C. PRODUCTION AND PROCESSING OF MILK FOR MANUFACTURING PURPOSES

§ 59a.102. Milk permits.

Plants, receiving stations, transfer stations and [**bulk tank units**] **BTUs** handling or processing milk for manufacturing of **milk products or manufactured dairy products** shall apply for a permit in accordance with § 59a.12 (relating to permits) which describes the process and requirements by which permits are acquired and maintained.

(1) Permits are required for the sale of milk for manufacturing purposes, **manufactured milk products** and manufactured dairy products. Application shall be made annually on a form secured from the Secretary.

(2) A separate permit shall be obtained for each plant, receiving station, transfer station and bulk tank unit.

(3) The permit year begins September 1 of each year and ends on August 31 of the following year.

§ 59a.103. Plant inspection.

Plants receiving milk, **milk products** or **manufactured** dairy products, for manufacturing or further processing, will be subject to inspection by the Secretary or an agent.

§ 59a.104. [**Certification of bulk milk collectors—weighers/samplers**] [**Reserved**].

[(a) **Weighers/samplers** will be evaluated and approved by the Department.

(b) **The provisions of the Grade "A" PMO, in particular Appendix B, regarding the required training and periodic evaluation of weighers/samplers, apply to this section to the extent described in § 59a.11 (relating to adoption of Grade "A" PMO).**]

§ 59a.105. [**Approved milk graders**] [**Reserved**].

[**Milk graders will be approved by the Department based upon the milk grader being capable of determining the quality classification of raw milk for manufacturing purposes in accordance with §§ 59a.106—59a.111.**]

§ 59a.106. Basis.

The quality classification of raw milk for manufacturing purposes shall be based on an organoleptic examination for appearance and odor, a drug residue test and quality control tests for [**sediment content,**] bacterial estimate and somatic cell count, **as set forth in §§ 59a.107, 59a.109, 59a.110 and 59a.111.**

§ 59a.107. Appearance and odor.

(a) ***Industry responsibilities.* Approved samplers shall be responsible for ensuring that raw milk for manufacturing purposes meets the requirements of this section.**

(b) ***Examination for appearance and odor.*** The appearance of acceptable raw milk for manufacturing purposes must be normal and free of [**excessive**] coarse sediment when examined visually [**or by the methods described in § 59a.108(a) (relating to sediment content classification)**]. The milk may not show any abnormal condition including curdles, ropy, bloody or mastitic conditions, as indicated by visual examination of the milk. The odor must be fresh and sweet. The milk must be free from objectionable feed and other off-odors that would adversely affect the finished product.

§ 59a.108. [**Sediment content classification**] [**Reserved**].

[(a) ***Method of testing.*** Methods for determining the sediment content of the milk of individual producers shall be those described in the *Standard Methods for the Examination of Dairy Products*. Sediment content must be based on comparison with applicable charts of the United States Sediment Standards for Milk and Milk Products. These charts are available from the Dairy Standardization Branch, Dairy Programs, Agricultural Marketing Service, United States Department of Agriculture, Room 2746-South, 1400 Independence Avenue, S.W., Washington, D.C. 20250-0230.

(b) ***Classifications.*** Milk shall be classified for sediment content in accordance with the USDA Sediment Standard, regardless of the results of the

appearance and odor examination described in § 59a.107 (relating to appearance and odor), as set forth in this subsection. The USDA Sediment Standard defines the following classifications:

(1) Milk classified as “No. 1” has a tested sediment content that does not exceed 0.50 mg. or equivalent, and is acceptable.

(2) Milk classified as “No. 2” has a tested sediment content that does not exceed 1.50 mg. or equivalent, and is acceptable.

(3) Milk classified as “No. 3” has a tested sediment content that does not exceed 2.50 mg. or equivalent, and is probational for not more than 10 days.

(4) Milk classified as “No. 4” has a tested sediment content that exceeds 2.50 mg. or equivalent, and is rejected.

(c) *Frequency of tests.* At least once each month, at irregular intervals, the milk from each producer shall be tested as follows:

(1) *Milk in cans.* A sample shall be taken from one or more cans of milk selected at random from each producer.

(2) *Milk in farm bulk tanks.* A sample shall be taken from each farm bulk tank.

(d) *Acceptance or rejection of milk.*

(1) If the sediment disc is classified as No. 1, No. 2 or No. 3, the producer’s milk may be accepted.

(2) If the sediment disc is classified as No. 4, the milk shall be rejected.

(3) If the shipment of milk is commingled with other milk in a transport tank, the next shipment may not be accepted until its quality has been determined at the farm before being picked up. If the person making the test is unable to get to the farm before the next shipment, it may be accepted but no further shipments shall be accepted unless the milk meets the requirements of No. 3 or better. In the case of milk classified as No. 3 or No. 4, if in cans, all cans shall be tested. Producers of No. 3 or No. 4 milk-cans or bulk-shall be notified immediately and shall be furnished applicable sediment discs and the next shipment shall be tested.

(e) *Retests.* On tests of the next shipment (if in cans, all cans shall be tested) milk classified as No. 1, No. 2 or No. 3, may be accepted, but No. 4 milk shall be rejected. Retests of bulk milk classified as No. 4 shall be made at the farm before pickup. The producers of No. 3 or No. 4 milk shall be notified immediately, furnished applicable sediment discs and the next shipment shall be tested. This procedure of retesting successive shipments and accepting probational (No. 3) milk and rejecting No. 4 milk may be continued for a period not to exceed 10 calendar days. If, at the end of this time, all of the producer’s milk does not meet the acceptable sediment content classification (No. 1 or No. 2), it shall be excluded from market.]

§ 59a.109. Bacterial estimate classification.

(a) *General testing requirement.* A laboratory examination to determine the bacterial estimate shall be made on each producer’s milk at least once each month at irregular intervals. Samples shall be analyzed at a Pennsylvania-approved dairy laboratory or other labo-

ratory compliant with § 59a.5 (relating to standards for Pennsylvania-approved dairy laboratories, official laboratories and other laboratories; reports of results). The laboratory must report the results to the permitholder.

* * * * *

(c) *Excessive bacteria.* Whenever the bacterial estimate indicates the presence of more than 500,000 bacteria per milliliter, the result shall be noted as a producer violation in the permitholder’s records. When two of the last four consecutive bacterial estimates exceed 500,000 per milliliter, the permitholder shall send a written warning notice to the producer in violation. This notice shall be in effect as long as two of the last four consecutive samples exceed the limit of the standard.

* * * * *

§ 59a.110. Somatic cell count.

(a) *General testing requirement.* A laboratory examination to determine the level of somatic cells shall be made on each producer’s milk at least once each month. Samples shall be analyzed at a Pennsylvania-approved dairy laboratory or other laboratory compliant with § 59a.5 (relating to standards for Pennsylvania-approved dairy laboratories, official laboratories and other laboratories; reports of results). The laboratory must report the results to the permitholder.

* * * * *

(c) *Excessive somatic cell count.* Whenever the official test indicates the presence of more than [750,000] 500,000 somatic cells per milliliter (1,500,000/ml for [goat] goat/sheep milk), the result shall be noted as a producer violation in the permitholder’s records. When two of the last four consecutive bacterial estimates exceed [750,000/ml] 500,000/ml (1,500,000/ml for [goat] goat/sheep milk), the permitholder shall send a written warning notice to the producer in violation. This notice shall be in effect as long as two of the last four consecutive samples exceed the limit of the standard.

(d) *Excluding milk with an excessive somatic cell count from the market.* If a producer receives the written notice described in subsection [(c)(2)] (c), the producer shall have an additional sample taken between 3 and 21 days after receiving the notice. If this sample also exceeds [750,000] 500,000 per milliliter (1,500,000/ml for goat/sheep milk), subsequent milkings shall be excluded from the market until satisfactory compliance is obtained. Shipment may be resumed and a temporary status assigned to the producer by the Department when an additional sample of herd milk is tested and found satisfactory. The producer shall be assigned a full reinstatement status when three out of four consecutive somatic cell count tests do not exceed [750,000] 500,000 per milliliter (1,500,000/ml for goat/sheep milk). The samples shall be taken at a rate of not more than two per week on separate days within a 3-week period.

§ 59a.111. Drug residue level.

(a) *Industry responsibilities.* [Manufactured] Milk products and manufactured dairy products permit-holders shall meet the requirements of this section to confirm their milk products and manufactured dairy products are free of violative drug residues.

(1) *Sampling and testing program.*

(i) Milk shipped for processing or intended to be processed on the farm where it was produced shall be

sampled and tested, prior to processing, for *beta lactam* drug residue. Collection, handling and testing of samples shall be done according to procedures established by the Department in this section, and in accordance with Appendix N of the Grade "A" PMO [, regarding] (relating to drug residue testing and farm surveillance). If a person processes milk on the farm where it was produced and produces that milk in accordance with a written quality control program addressing the use of animal drugs at that dairy operation, that person may request a variance from the testing requirements of this subparagraph. The request shall be in writing and include a copy of the written quality control program. The Department may, on the basis of the request, issue a variance with respect to the requirements of this subparagraph. A variance issued under this subparagraph will be valid for no more than 1 year and may be renewed for additional periods of up to 1 year following the Department's review of the quality control program and any on-farm inspections the Department deems necessary to determine whether a successor variance should be issued.

* * * * *

(v) [Sample test results for milk] A sample test result, including negative and positive test results, shall be recorded. The test result records shall be retained for 6 months.

* * * * *

(b) Responsibilities of the Department.

* * * * *

(2) Enforcement.

* * * * *

(vi) The actions and procedures of the Department will be in accordance with this chapter and Appendix N of the Grade "A" PMO [, regarding] (relating to drug residue testing and farm surveillance).

§ 59a.112. Rejected milk.

(a) Rejection requirement. A plant shall reject specific milk from a producer if it fails to meet the requirements under § 59a.107 (relating to appearance and odor) [, if it is classified No. 4 for sediment content,] or if it tests positive for drug residue.

(b) Tagging and coloring rejected milk. Rejected milk shall be identified with a reject tag and colored with harmless food coloring.

§ 59a.113. Suspended milk for manufacturing.

A plant may not accept milk from a producer if one of the following occurs:

(1) [The producer's initial milk shipment to a plant is classified as No. 3 for sediment content, as described in § 59a.108 (relating to sediment content classification)] [Reserved].

(2) [The milk has been in a probational (No. 3) sediment content classification for more than 10-calendar days] [Reserved].

(3) Three of the last five milk samples have exceeded the maximum bacterial estimate of 500,000 per milliliter, as described in § 59a.109 (relating to bacterial estimate classification).

(4) Three of the last five milk samples have exceeded the maximum somatic cell count level of [750,000]

500,000 per milliliter (1,500,000/ml for [goat] goat/sheep milk), as described in § 59a.110 (relating to somatic cell count).

(5) The producer's milk shipments to either the Grade "A" milk market or the manufacturing grade milk market are currently prohibited due to a positive drug residue test.

(6) The milk contains added water. For purposes of this requirement, samples analyzed for added water and found to have a freezing point above -0.525° [F] Hortvet (0.508° [C] Celsius) shall be considered adulterated unless proven free of added water.

§ 59a.114. Inspection and quality testing of milk from producers.

(a) Inspections. Inspections shall be as follows:

(1) A dairy farm on which milk is produced for manufacturing purposes shall be inspected initially with an empty bulk milk tank and have a passing score before the first milk is shipped.

(2) The dairy farm of a producer, on a change of market, shall [be] have an empty bulk milk tank inspected by an approved inspector and have a passing score before the first milk is shipped.

* * * * *

(b) Testing of first shipment. An examination and tests shall be made on the first shipment of milk from producers shipping milk to a plant for the first time or after a period of nonshipment. The milk must meet the following requirements:

(1) The requirements of § 59a.107 (relating to appearance and odor).

(2) [The requirements of § 59a.108 (relating to sediment content classification)] [Reserved].

(3) The requirements of § 59a.109 (relating to bacterial estimate classification).

(4) The requirements of § 59a.110 (relating to somatic cell count).

(5) The requirements of § 59a.111 (relating to drug residue level).

(c) Testing of subsequent shipments. For all shipments of milk not described in subsection (b), testing must meet the following requirements:

(1) The requirements of § 59a.107.

(2) [The requirements of § 59a.108] [Reserved].

(3) The requirements of § 59a.109.

(4) The requirements of § 59a.110.

(5) The requirements of § 59a.111.

(d) Transfer producers. When a producer discontinues milk delivery to one plant and begins delivery to a different plant, the provisions of the Grade "A" PMO, in particular section 5 [, regarding certified industry inspection and change-of-market requirements] (relating to inspection of dairy farms and milk plants), apply to the extent described in § 59a.11 (relating to adoption of Grade "A" PMO).

§ 59a.116. Abnormal milk.

(a) Certain milk to be excluded from human consumption. [Cows] Dairy animals which show evidence of the secretion of abnormal milk in one or more quarters or

halves based on bacteriological, chemical or physical examination and [cows] dairy animals which have been treated with or have consumed chemical, medicinal or radioactive agents which are capable of being secreted in the milk in excess of any established limits and which may be deleterious to human health shall be milked last or with separate equipment and the milk may not be offered for sale for human consumption.

(b) *Medicinal agents.* Milk from [cows] dairy animals being treated with medicinal agents may not be offered for sale for periods recommended by the attending veterinarian or as indicated on the package label of the medicinal agent.

(c) *Pesticides.* Milk from [cows] dairy animals treated with or exposed to pesticides not approved for use on dairy [cattle] animals by the United States Environmental Protection Agency may not be offered for sale until the milk has been tested and found acceptable by the Secretary, in accordance with the procedures and standards set forth in Appendix N of the Grade "A" PMO[, regarding] (relating to drug residue testing and farm surveillance).

(d) *Visibly abnormal milk and odorous milk.* Bloody, stringy, off-color milk or milk abnormal in sight and odor shall be handled and disposed of to preclude the infection of other [cows] dairy animals, and the contamination of the utensils.

* * * * *

Subchapter D. FARMS PRODUCING MILK FOR MANUFACTURING

§ 59a.201. Farm inspection.

Farms producing and selling milk for manufacturing purposes shall comply with the following inspection provisions:

(1) Each dairy farm operated by a producer of milk for manufacturing purposes shall be inspected initially and on any change of market by an approved inspector. The dairy farm shall have an empty bulk tank for inspection and shall have a passing score before the first milk is shipped. To attain a passing score, there may not be deficiencies in areas of major significance to the sanitary quality of the farm's milk supply unless these deficiencies are immediately corrected during the inspection. These areas of major significance include toilet, water supply, construction of utensils and equipment, cleaning and sanitizing of equipment, cow cleanliness and proper storage and labeling of medications. Dairy farms producing milk for manufacturing purposes shall be inspected every 6 months by an approved inspector, and an accurate record of inspections shall be maintained by each permitholder for 24 months.

(2) Producers who cannot produce milk of a wholesome sanitary quality will be suspended. Producers who are not in substantial compliance with this section or § 59a.102 (relating to milk permits) will be reinspected after an appropriate time for correction of deficiencies. Milk for manufacturing is of wholesome sanitary quality if it meets the applicable requirements of Subchapter C (relating to production and processing of milk for manufacturing purposes), including those relating to appearance and odor, drug residue, [sediment content,] bacterial estimate and somatic cell count, and § 59a.202 (relating to milking facilities and housing).

(3) A permitholder shall promptly notify the Department of initial instatement, suspension or reinstatement

of a producer from which milk for manufacturing is or was received. Identification of the producer, including name and address, shall be provided orally [or], by mail or e-mail within 24 hours of the action.

§ 59a.202. Milking facilities and housing.

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(e) *Yard requirements.* The yard or loafing area must be of ample size to prevent overcrowding, be drained to prevent forming of standing water [pools], insofar as practicable, and kept clean.

§ 59a.205. Milkhouse or milkroom.

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(b) *Equipment and construction.* The milkroom must be equipped with a wash and rinse vat, utensil rack, milk cooling facilities and an adequate supply of hot water available for cleaning milking equipment. If a part of the barn or other building, it must be partitioned, screened and sealed to prevent the entrance of dust, flies, insects or other contamination. The floor of the building must be of concrete or other impervious material and graded to provide proper drainage. The walls and ceilings must be constructed of smooth easily cleaned material. Outside doors must open outward and be self-closing, unless they are provided with tight-fitting screen doors that open outward or unless other effective means are provided to prevent the entrance of flies or insects.

* * * * *

§ 59a.207. Water supply.

A dairy farm water supply shall be properly located, protected and operated, and shall be easily accessible, ample, and of safe, sanitary quality for the cleaning of dairy utensils and equipment. The water supply must come from a source which complies with the water supply provisions of the Grade "A" PMO, including Appendix D[, regarding] (relating to standards for water sources), and is approved by the Department.

**Subchapter E. MANUFACTURING PLANTS
GENERAL REQUIREMENTS**

§ 59a.302. Buildings.

* * * * *

(b) *Outside doors, windows and openings.* Openings to the outer air, including doors, windows, skylights and transoms, shall be effectively protected or screened against the entrance of flies and other insects, rodents, birds, dust and dirt. Outside doors opening into processing rooms must be in good condition, self-closing, and fit properly. Hinged, outside screen doors must open outward. Doors and windows shall be kept clean and in good repair. Outside conveyor openings and other special-type outside openings shall be effectively protected to prevent the entrance of flies, insects and rodents, by the use of doors, screens, flaps, fans or tunnels. Outside openings for sanitary pipelines shall be covered when not in use. On new construction, window sills should be slanted downward at a 45° angle.

* * * * *

(f) *Certain rooms and compartments.* Rooms and compartments in which raw material, packaging, ingredient supplies or dairy products are handled, manufactured, packaged or stored shall be designed, constructed and maintained to [assure] ensure desirable room temperatures and clean and orderly operating conditions free from objectionable odors and vapors. Enclosed bulk milk receiving rooms must be separated from the processing

rooms by a partition. Rooms for receiving can milk must be separated from the processing rooms by a partition—partial or complete—by suitable arrangement of equipment or by allowing enough distance between receiving and processing operations to avoid possible contamination of milk or dairy products during manufacturing and handling. Processing rooms shall be kept free from equipment and materials not regularly used. Rooms and compartments must comply with the following:

* * * * *

(5) *Laboratory.* The permit holder may establish its own laboratory to perform required tests on milk received as milk for manufacturing purposes. The laboratory shall be adequately equipped and maintained and be properly staffed with qualified, trained personnel and operate in accordance with [the current *Evaluation of Milk Laboratories, Recommendations of the United States Public Health Service/Food and Drug Administration and current FDA 2400 Laboratory Series forms*] § 59a.5 (relating to standards for Pennsylvania-approved dairy laboratories, official laboratories and other laboratories; reports of results). If the permit holder does not establish its own laboratory, an existing [approved laboratory] Pennsylvania-approved dairy laboratory or other laboratory compliant with § 59a.5 is acceptable if services are conveniently available so that samples and results can be transmitted without delay.

* * * * *

§ 59a.303. Facilities.

(a) *Water supply.* There must be an ample supply of both hot and cold water of safe and sanitary quality, with adequate facilities for its proper distribution throughout the plant, and protection against contamination and pollution. Water from other facilities, when approved in writing by the Department, may be used for boiler feed water and condenser water provided that the waterlines are completely separated from the waterlines carrying the sanitary water supply, and the equipment is so constructed and controlled to preclude contamination of product contact surfaces. There may not be cross connection between the safe water supply and [any] an unsafe or questionable water supply, or any other source of pollution through which contamination of the safe water supply is possible. Bacteriological examination shall be made of the sanitary water supply at least [twice a year] every 6 months, or as often as necessary to determine purity and suitability for use in manufacturing dairy products. The tests shall be made in a laboratory that is approved by the Department. The results of all water tests shall be kept on file at the plant for which the test was performed.

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§ 59a.307. Protection and transport of raw milk and cream.

(a) *Equipment and facilities.*

(1) *Milk cans.* Cans used in transporting milk from dairy farm to plant must be constructed to be easily cleaned, and shall be inspected, repaired and replaced as necessary to exclude substantially the use of cans and lids with open seams, cracks, rust, [milkstone] milk residue or any unsanitary condition.

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§ 59a.308. Raw product storage.

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(e) Procedures if bacterial counts are high. Whenever a bacterial estimate of commingled milk in a plant indicates the presence of more than 1 million per milliliter, the following procedures shall be applied:

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(4) If a plant remains in temporary status in excess of 60 days, administrative procedures to suspend the plant's [license] permit will be taken by the Department until the plant complies with the bacteriological requirements.

* * * * *

§ 59a.309. Pasteurized, ultrapasteurized or aseptically processed and packaged products.

Pasteurized, ultrapasteurized or aseptically processed and packaged products must conform with [§ 59a.2 (relating to definitions)] the pasteurization standards established in § 59a.7 (relating to pasteurization standards). When pasteurization or sterilization is intended or required, or when a product is designated "pasteurized" or "sterilized," every particle of the product shall be subjected to temperatures and holding periods that [assure] ensure proper pasteurization or sterilization of the product. The heat treatment by either process must be sufficient to [insure] ensure public health safety and [to assure] adequate keeping quality, [yet] while retaining the most desirable flavor and body characteristics of the finished product. The phenol value of test samples of pasteurized finished product may be no greater than the maximum specified for the particular product as determined and specified by the phosphatase test method prescribed in the latest edition of "Official Methods of Analysis of the Association of Official Agricultural Chemists" (a publication of the Association of Official Analytical Chemists International, 481 North Frederick Avenue, Suite 500, Gaithersburg, MD 20877-2417).

§ 59a.310. Composition and wholesomeness.

Necessary precautions shall be taken to prevent contamination or adulteration of the milk, milk products or manufactured dairy products during manufacturing. Substances and ingredients used in the processing or manufacturing of a milk, milk product or manufactured dairy product will be subject to inspection and must be wholesome and practically free from impurities. The finished product must comply with the Food, Drug, and Cosmetic Act (21 U.S.C. [A.] §§ 301—399i) [and], applicable regulations under 21 CFR Chapter I, Subchapter B (relating to food for human consumption), and applicable Commonwealth statutes and regulations as to their composition and wholesomeness.

§ 59a.313. Plant records.

A milk plant shall retain adequate records of required tests on raw milk receipts. Records shall be available for examination at reasonable times by the Department. The following records shall be maintained for examination at the plant or receiving station where performed:

(1) [Sediment, drug] Drug residue and bacterial test results on raw milk from each producer: retain for 12 months.

(i) Routine tests and monthly summary of all producers showing number and percent of total in each class.

(ii) Retests, if initial test places milk in probationary status.

[(iii) Rejection of raw milk over No. 3 in quality] [Reserved].

(2) Positive drug residue tests: retain for 12 months.

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§ 59a.314. Packaging and general identification.

(a) *Containers.* Containers must meet the following standards:

(1) The size, style and type of packaging used for **milk, milk products and manufactured** dairy products shall be commercially acceptable containers and packaging materials which satisfactorily cover and protect the quality of the contents during storage and regular channels of trade and under normal conditions of handling. The weights and shape within each size and style shall be as nearly uniform as is practical.

(2) Packaging materials for **milk, milk products and manufactured** dairy products shall be selected which provide sufficiently low permeability to air and vapor to prevent the formation of mold growth and surface oxidation. The wrapper must be resistant to puncturing, tearing, cracking or breaking under normal conditions of handling, shipping and storage. When a special type of packaging is used, the instructions of the manufacturers shall be followed closely as to its application and methods of closure.

(b) *Packaging and repackaging.* Packaging **milk, milk products or manufactured** dairy products or cutting and repackaging dairy products require a high level of sanitation to prevent the contamination of exposed product. The atmosphere of the packaging rooms, the equipment and packaging material must be practically free from mold and bacterial contamination. The method for checking the level of contamination shall be as prescribed by the *Standard Methods for the Examination of Dairy Products*.

(c) *General identification.* Commercial bulk packages containing **milk, milk products or manufactured** dairy products manufactured under this subchapter must be adequately and legibly marked with the name of the product, net weight, name and address of processor or manufacturer or other assigned plant identification, lot number and other identification that may be required. Consumer packaged products must be legibly marked with the name of the product, net weight, name and address of packer, manufacturer or distributor and other identification required by the Department.

§ 59a.315. Storage of finished product.

(a) *Dry storage.* The finished product must be stored at least 18 inches from the wall in aisles, rows or sections and lots, so it is orderly and easily accessible for inspection. Rooms shall be cleaned regularly. Care shall be taken in the storage of other products [**foreign to**] **and items in the same room with milk, milk products and manufactured** dairy products [**in the same room**], to prevent impairment or damage to the **milk, milk products or manufactured** dairy product from mold, absorbed odors, vermin or insect infestation. Control of humidity and temperature shall be maintained at all times, consistent with good commercial practices, to prevent conditions detrimental to the product and container.

(b) *Refrigerated storage.* The finished product must be placed on shelves, dunnage or pallets and properly identified. It must be stored under temperatures that will best maintain the initial quality. The product may not be exposed to anything from which it might absorb foreign odors or be contaminated by drippage or condensation.

(*Editor's Note:* Section 59a.317 is proposed to be added and is printed in regular type to enhance readability.)

§ 59a.317. Federal food safety regulations.

(a) The Department adopts all Federal regulations related to food as dictated by 3 Pa.C.S. § 5733(f) (relating to rules and regulations), including all applicable enforcement provisions.

(b) Permitholders shall comply with food facility registration requirements established in 21 CFR Chapter II, Subchapter A, Part 1, Subpart H (relating to registration of food facilities).

(c) Permitholders shall comply with the requirements of 21 CFR Chapter I, Subchapter B, Part 117 (relating to current good manufacturing practice, hazard analysis, and risk-based preventive controls for human food).

(d) Permitholders shall comply with applicable provisions and requirements under 7 CFR Subtitle B, Chapter I, Subchapter C, Part 58 (relating to grading and inspection, general specifications for approved plants and standards for grades of dairy products).

SUPPLEMENTAL REQUIREMENTS FOR PLANTS MANUFACTURING, PROCESSING AND PACKAGING INSTANT NONFAT DRY MILK, NONFAT DRY MILK, DRY WHOLE MILK, DRY BUTTERMILK, DRY WHEY AND OTHER DRY MILK PRODUCTS

§ 59a.348. Operations and operating procedures: Packaging, repackaging and storage.

(a) *Containers.* Packages or containers used for the packaging of nonfat dry milk or other dry milk products must be any clean, sound, commercially accepted container or packaging material which satisfactorily protects the contents through the regular channels of trade, without significant impairment of quality with respect to flavor, wholesomeness or moisture content under the normal conditions of handling. Packages or containers that comply with 21 CFR 177.1520 (relating to olefin polymers) are among the packages that meet the requirements of this subsection. Containers which have previously been used for nonfood items or food which would be deleterious to the **manufactured** dairy product may not be used for the bulk handling of [**dairy**] **these** products.

(b) *Filling.* Empty containers shall be protected from possible contamination and containers which are to be lined may not be prepared more than 1 hour in advance of filling. Every precaution shall be taken during the filling operation to minimize product dust and spillage. When necessary, a mechanical shaker shall be provided. The tapping or pounding of containers shall be prohibited. The containers shall be closed immediately after filling and the exteriors shall be vacuumed or brushed when necessary to render them practically free of product remnants before being transferred from the filling room to the [**palleting**] **palletizing** or dry storage areas.

* * * * *

(d) *Storage.* Storage shall be as follows:

(1) *Product.* The packaged dry [**milk**] product must be stored or arranged in aisles, rows or sections and lots at least 18 inches from a wall and in an orderly, easily accessible manner for inspection or for cleaning of the room. Bags and small containers of products must be placed on pallets elevated approximately 6 inches from the floor. The storage room shall be kept clean and dry and all openings protected against **the** entrance of insects and rodents.

(2) *Supplies.* Supplies must be placed on dunnage or pallets and arranged in an orderly manner for accessibility and cleaning of the room. Supplies must be kept enclosed in their original wrapping material until used. After removal of supplies from their original containers, they must be kept in an enclosed metal cabinet, bins or on shelving, and if not enclosed shall be protected from powder and dust or other contamination. The room shall be vacuumed as often as necessary and kept clean and orderly.

§ 59a.350. Operations and operating procedures: Checking quality.

Milk, **milk products and** manufactured dairy products [**and**], **to include** dry milk products shall be subject to inspection an analysis by the plant for quality and condition throughout each processing operation. Line samples shall be taken periodically as an aid to quality control in addition to the regular routine analysis made on the finished products.

§ 59a.351. Operations and operating procedures: Requirements for instant nonfat dry milk.

(a) *Sampling and testing.* Instant nonfat dry milk offered for sale shall be sampled and tested by an approved **dairy laboratory meeting standards established in § 59a.5 (relating to standards for Pennsylvania-approved dairy laboratories, official laboratories and other laboratories; reports of results)** at least once each month for the purpose of assuring that the product meets the requirements of subsection (b). The dry milk plant shall have each subplot of approximately 4,000 pounds tested and analyzed prior to being packaged or offered for sale. Products which do not meet the requirements of subsection (b) may not be offered as Extra Grade.

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SUPPLEMENTAL REQUIREMENTS FOR PLANTS MANUFACTURING, PROCESSING AND PACKAGING BUTTER AND RELATED PRODUCTS

§ 59a.363. Operations and operating procedures.

(a) *Pasteurization.* The milk or cream shall be pasteurized at the plant where the milk or cream is processed into the finished product.

(1) *Cream for buttermaking.* Requirements are as follows:

(i) The cream for buttermaking, **other than the cream for production of raw milk butter as described in § 59a.402 (relating to raw milk; prohibitions), with respect to which pasteurization requirements are not applicable**, shall be pasteurized at a temperature of at least 165° F and held continuously in a vat at that temperature at least than 30 minutes, pasteurized by the HTST method at a minimum time and temperature of at least 185° F for at least 15 seconds or by another equivalent time and temperature combination that is approved by the Department. Additional heat treatment above the minimum pasteurization requirement is advisable to [**insure**] **ensure** improved keeping quality characteristics.

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SUPPLEMENTAL REQUIREMENTS FOR PLANTS MANUFACTURING AND PACKAGING CHEESE, PASTEURIZED PROCESS CHEESE AND RELATED PRODUCTS

§ 59a.371. Rooms and compartments.

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(c) *Drying room.* If cheese is to be paraffined, a drying room of adequate size shall be provided to accommodate the maximum production of cheese during the flush period. Adequate shelving and air circulation shall be provided for proper drying. Suitable temperature and humidity control facilities shall be provided. [**tion.**]

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§ 59a.372. Equipment and utensils.

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(1) *Cheese vacuumizer.* Bulk cheese vacuum chambers, if used, must be installed so that floor surfaces underneath are effectively sealed or have enough clearance so they can be cleaned. Interior surfaces of the vacuum chamber must be constructed and maintained so that the product is not contaminated with rust or flaking paint. An inner liner of stainless steel or other corrosion resistant material shall be provided. [**tion.**]

(m) Conveyors. Conveyors shall be constructed of material which can be properly cleaned, will not rust, or otherwise contaminate the cheese, and shall be maintained in good repair.

(n) Grinders or shredders. Product contact surfaces shall be of corrosion resistant material, and of a construction to prevent contamination of the cheese and to allow thorough cleaning of all parts and product contact surfaces, and shall be kept in good repair.

(o) Cookers. Cookers shall meet the following standards:

(1) The cookers shall be the steam jacketed or direct steam type.

(2) The cookers shall be constructed of stainless steel or other equally corrosion resistant material.

(3) The product contact surface shall be readily and easily accessible for cleaning.

(4) The cooker shall be equipped with an indicating thermometer and a temperature recording device.

(5) Steam check valves on direct steam type cookers shall be mounted flush with the cooker wall, constructed of stainless steel and designed to prevent the backup of product into the steam line, or the steam line shall be constructed of stainless steel pipes and fittings which can be readily and easily cleaned.

(6) If direct steam is applied to the product, only culinary steam shall be used.

(p) Fillers. The filler valves and head shall be kept in good repair and be capable of accurate measurements. The hoppers of a filler shall meet the following standards:

(1) Be covered, but these covers may have sight ports.

(2) May, where necessary, have an agitator to prevent buildup on the side wall.

§ 59a.373. Operations and operating procedures.

(a) *Cheese from pasteurized milk.*

(1) When the cheese is labeled as pasteurized, the milk shall be pasteurized [**by subjecting every particle of milk to a minimum temperature of 161° F for at**

least 15 seconds] in accordance with the standards established in § 59a.7 (relating to pasteurization standards).

(2) [HTST pasteurization] Pasteurization units must be equipped with the proper controls and equipment to [assure] ensure pasteurization. If the milk is held more than 2 hours between time of receipt or heat treatment and setting, it shall be cooled to 45° F or lower until time of setting.

(b) Cheese from unpasteurized milk.

(1) When the cheese is labeled as “heat treated,” “unpasteurized,” “raw milk” or “for manufacturing,” the milk may be raw or heated at a temperature below pasteurization.

(2) If the milk is held more than 2 hours between time of receipt or heat treatment and setting, it shall be cooled to 45° F or lower until time of setting.

(3) Cheese to be labeled as “raw aged” shall meet the following requirements:

(i) The cheese is a standardized cheese identified in 21 CFR Chapter I, Subchapter B, Part 133, Subpart B (relating to requirements for specific standardized cheese and related products).

(ii) The standards set forth in 21 CFR Chapter I, Subchapter B, Part 133, Subpart B, must allow that type of cheese to be manufactured from raw milk.

(iii) Laboratory test results verifying the cheese conforms with all applicable CFR standards shall be made available to the Department.

(c) Whey disposal. Disposal of whey shall be as follows:
* * * * *

(c.1) Forming containers.

(1) When lined or unlined containers are assembled and stored, it shall be done in a sanitary manner to prevent contamination.

(2) Procedures must be in place for the handling of containers between forming and filling that prevent contamination of the product contact surfaces.

(3) Preforming and assembling of pouch liners and containers shall be based on production needs and the supply rotated to limit the length of time exposed to possible contamination prior to filling.

(c.2) Filling containers. Hot fluid cheese from the cookers may be held in hotwells or hoppers to ensure a constant and even supply of processed cheese to the filler or slice former. Filler valves must effectively measure the desired amount of product into the pouch or container in a sanitary manner and cut off sharply without drip or drag of cheese across the opening. An effective system shall be used to maintain accurate and precise weight control. Damaged or unsatisfactory packages shall be removed from production, and the cheese may be salvaged into sanitary containers and added back to cookers.

(d) Packaging and repackaging. Packaging rindless cheese or cutting and repackaging all styles of bulk cheese requires a high level of sanitation to prevent the contamination of exposed product. The atmosphere of the packaging rooms, the equipment and the packaging material must be practically free from mold and bacterial contamination.

(d.1) Trimming and cleaning. The natural cheese shall be cleaned so that it is free of all nonedible portions. Paraffin and bandages as well as rind surfaces, mold or other unclean areas deemed unwholesome shall be removed.

(e) General identification. Each bulk cheese must be legibly marked with the name of the product, code or date of manufacture, vat number, officially designated code number or name and address of manufacturer. Each consumer sized container must be plainly marked with the name and address of the manufacturer, packer, or distributor, net weight of the contents, name of the product, to include the wording “raw milk” “made with raw milk,” or similar identifying language, the number of days the cheese aged, and other information that may be required.

SUPPLEMENTAL REQUIREMENTS FOR PLANTS MANUFACTURING, PROCESSING AND PACKAGING [PASTEURIZED PROCESS CHEESE] MILK PRODUCTS, TO INCLUDE ICE CREAM, FROZEN DESSERTS AND RELATED PRODUCTS

§ 59a.381. Equipment and utensils.

(a) General construction, repair and installation. The equipment and utensils used for the handling and processing of [cheese] milk products must be as specified in § 59a.304 (relating to equipment and utensils). [In addition, for certain other equipment the requirements in this section shall be met.]

(b) [Conveyors. Conveyors must be constructed of material which can be properly cleaned, will not rust, or otherwise contaminate the cheese, and shall be maintained in good repair] [Reserved].

(c) [Grinders or shredders. The grinders or shredders used in the preparation of the trimmed and cleaned natural cheese for the cookers must be adequate in size. Product contact surfaces must be of corrosion resistant material, and of a construction to prevent contamination of the cheese and to allow thorough cleaning of all parts and product contact surfaces] [Reserved].

(d) [Cookers. The cookers must be the steam jacketed or direct steam type. The cookers must be constructed of stainless steel or other equally corrosion resistant material. Product contact surfaces must be readily accessible for cleaning. Each cooker must be equipped with an indicating thermometer and a temperature recording device. Steam check valves on direct steam type cookers must be mounted flush with cooker wall, constructed of stainless steel and designed to prevent the backup of product into the steam line, or the steam line must be constructed of stainless steel pipes and fittings which can be readily cleaned. If direct steam is applied to the product, only culinary steam shall be used] [Reserved].

(e) [Fillers. The hoppers of all fillers must be covered but the cover may have sight ports. If necessary, the hopper may have an agitator to prevent buildup on side wall. The filler valves and head shall be kept in good repair, capable of accurate measurements] [Reserved].

§ 59a.382. Operations and operating procedures.

(a) [Trimming and cleaning. The natural cheese shall be cleaned free of all nonedible portions.

Paraffin and bandages as well as rind surfaces, mold or unclean areas of another part which is unwholesome or unappetizing shall be removed] [Reserved].

(b) [*Cooking the batch.* Each batch of cheese within the cooker, including the optional ingredients, shall be thoroughly commingled, the contents pasteurized at a temperature of at least 158° F and held at that temperature for at least 30 seconds. Care shall be taken to prevent the entrance of cheese particles or ingredients after the cooker batch of cheese has reached the final heating temperature. After holding for the required period of time, the hot cheese shall be emptied from the cooker as quickly as possible] [Reserved].

(c) [*Forming containers.* Containers either lined or unlined shall be assembled and stored in a sanitary manner to prevent contamination. Procedures must be in place for the handling of containers between forming and filling that prevent contamination of the product contact surfaces. Preforming and assembling of pouch liners and containers shall be kept to a minimum and the supply rotated to limit the length of time exposed to possible contamination prior to filling] [Reserved].

(d) [*Filling containers.* Hot fluid cheese from the cookers may be held in hotwells or hoppers to assure a constant and even supply of processed cheese to the filler or slice former. Filler valves must effectively measure the desired amount of product into the pouch or container in a sanitary manner and cut off sharply without drip or drag of cheese across the opening. An effective system shall be used to maintain accurate and precise weight control. Damaged or unsatisfactory packages shall be removed from production, and the cheese may be salvaged into sanitary containers and added back to cookers] [Reserved].

(d.1) Pasteurization of milk products.

(1) Milk products shall be pasteurized.

(2) HTST, UHT and BATCH pasteurization units shall be equipped with the proper controls and equipment to complete the pasteurization process. Where milk is held more than 2 hours between time of receipt or heat treatment and setting, it shall be cooled to 45° Fahrenheit or lower during the entire time period.

(d.2) Purchase of pasteurized mixes for production of milk products. Permitholders may purchase a pasteurized frozen dessert or ice cream mix from a permitted facility for further production of a milk product.

(d.3) Filling Containers.

(1) Mechanical fillers. Both gravity and vacuum type fillers shall be of sanitary design and all product contact surfaces, if metal, shall be made of stainless steel or equally corrosion resistant material. Certain evaporated milk fillers having brass parts may be approved if free from corroded surfaces and kept in good repair. Fillers shall be designed in a manner to ensure they will not contaminate or detract from the quality of the product in any way.

(2) Manual fillers. Manual filling shall be done in a sanitary manner to prevent contamination of the product contact surfaces of containers. The containers shall be kept sanitary and may not contaminate or detract from the quality of the product in any way.

(e) *Closing and sealing containers.* Pouches, liners or containers having product contact surfaces after filling shall be folded or closed and sealed in a sanitary manner, preferably by mechanical means, to [assure] ensure against contamination. Each container, in addition to other required labeling, must be coded in a manner that is easily identifiable as to date of manufacture by lot or subplot number.

(f) Freezer storage. Freezer storage shall comply with the following:

(1) The room shall be maintained at a temperature of 0° Fahrenheit or lower.

(2) Air circulation must be sufficient to preclude odors and maintain uniform storage temperatures throughout the freezer.

(g) Sampling. Milk products shall be sampled by an approved sampler and tested in accordance with § 59a.21(c) (relating to standards).

(h) Inspections. Milk product manufacturers will be inspected by the Department every 6 months.

Subchapter F. RAW MILK FOR HUMAN CONSUMPTION

§ 59a.401. Raw milk; general.

This subchapter prescribes the permitting, testing and inspection requirements that are applicable to persons seeking to sell raw milk and raw milk butter for human consumption.

§ 59a.402. Raw milk; prohibitions.

(a) *Sale of raw milk without permit.* A person may not sell raw milk for human consumption without having a current raw milk permit issued by the Department. The term "sell" includes the selling, exchanging, delivering or having in possession, care, control or custody with intent to sell, exchange, or deliver or to offer or to expose for sale. **The term "sell" also includes selling, exchanging or delivering to a consumer who is a member of a "buyer's club," cow herd share agreement or other type of membership purchasing group.**

(b) *Actions authorized under a raw milk permit.*

(1) A raw milk permit authorizes the permitholder to lawfully produce and sell (within this Commonwealth) raw whole milk for human consumption. [**It also authorizes the permitholder to obtain an additional permit, issued by the Department under authority of 21 CFR Part 133 (relating to cheese and related cheese products), authorizing the sale of cheese manufactured from raw milk if all of the following apply:**

(1) The cheese is a standardized cheese identified in 21 CFR Part 133, Subpart B (relating to requirements for specific standardized cheese and related products).

(2) The standards for that cheese allow for it to be manufactured from raw milk.] The permit only authorizes the sale of raw milk that has been produced by the permitholder.

(2) A raw milk permitholder may obtain an additional permit, issued by the Department, authorizing the production and sale of raw milk butter manufactured from raw milk if that raw milk butter is produced in compliance with the supplemental requirements for plants manufacturing, processing and packaging butter and related products presented in §§ 59a.361, 59a.362 and 59a.363 (relating to rooms and compartments; equipment and utensils; and operations and operating procedures) and any other provision of this chapter relating to the production of butter, other than a provision or requirement relating to pasteurization under § 59a.7 (relating to pasteurization standards). The additional permit only authorizes the sale of raw milk butter that has been manufactured by the permitholder from raw milk that has been produced by the permitholder.

(c) *Compliance with testing and documentation requirements.* A person may not sell raw milk **or raw milk butter** for human consumption without being in compliance with the testing and documentation requirements of this section.

§ 59a.404. Requirements for the issuance of a raw milk permit.

* * * * *

(e) *Sampling and testing.*

(1) *New raw milk permits.* An applicant for a new raw milk permit shall demonstrate its ability to produce raw milk for human consumption through the following process:

(i) The applicant shall have an approved sampler draw three separate samples of commingled milk from the bulk tank. The samples shall be drawn at least 7 days apart, and be taken on an unannounced basis.

(ii) Each of these three samples described in subparagraph (i) shall be submitted to **and tested and analyzed by** a Pennsylvania-approved dairy laboratory [**or the Department for analysis**], **official laboratory, or other laboratory meeting the requirements of § 59a.5 (relating to Standards for Pennsylvania-approved dairy laboratories, official laboratories and other laboratories; reports of results).**

* * * * *

§ 59a.405. Sanitation.

A raw milk permitholder shall maintain and operate the subject dairy operation in compliance with the same sanitation and handling standards that are applicable to the production of milk for pasteurization, as set forth in § 59a.19 (relating to standards for Grade “A” milk for pasteurization, ultra-pasteurization or aseptic processing) except to the extent any of those provisions are inconsistent with this subchapter. The provisions of the Grade “A” PMO, in particular the *Standards for Grade “A” Raw Milk for Pasteurization, Ultrapasteurization or Aseptic Processing* and section 7[**, regarding**] (relating to standards for Grade “A” milk and milk products), are incorporated by reference as regulations authorized under the act, to the extent they do not conflict with the act or this subchapter. This includes the items listed under the referenced Grade “A” PMO provisions, including the following:

* * * * *

§ 59a.408. Regular testing of raw milk and raw milk butter for human consumption.

(a) *Responsibility.* A raw milk **or raw milk butter** permitholder shall be responsible to arrange for the regular sampling and testing required with respect to the raw milk **and raw milk butter** permit, and to pay for this testing.

(b) *Testing laboratories.* Raw milk or **raw milk butter** samples submitted for testing shall be analyzed at [**an official laboratory or**] a Pennsylvania-approved dairy laboratory, **official laboratory, or other laboratory meeting the requirements of § 59a.5 (relating to standards for Pennsylvania-approved dairy laboratories, official laboratories and other laboratories; reports of results).**

(c) [*Testing*] **Raw milk and raw milk butter testing schedule and standards.** A **person holding a** raw milk [**permitholder**] **permit or raw milk butter permit, or both,** shall coordinate the testing of raw milk **and raw milk butter** for human consumption on the following schedule, and the raw milk **and raw milk butter** samples must meet the following standards:

Raw Milk Testing Schedule and Standards

<i>Required Action Interval</i>	<i>Type of Action or Test Required</i>	<i>Standard</i>
At all times	Maintain raw milk temperature in accordance with raw milk temperature standards.	Raw milk shall be cooled to 40° F (4° C) or less within 2 hours after milking, provided that the blend temperature after the first and subsequent milking does not exceed 50° F (10° C).
At least twice each month, in conjunction with the tests for coliform count and for the presence of drugs (including growth inhibitors), described in this subsection	Bacterial count	Bacteria may not be present in excess of 20,000 cfu per milliliter. <i>Note:</i> Tested in conjunction with a drug residue/inhibitory substance test.

<i>Required Action Interval</i>	<i>Type of Action or Test Required</i>	<i>Standard</i>
At least twice each month, in conjunction with the tests for bacterial count and for the presence of drugs (including growth inhibitors), described in this subsection	Coliform count	Coliform may not exceed 10 cfu per milliliter. <i>Note:</i> Tested in conjunction with a drug residue/inhibitory substance test.
At least twice each month	Somatic cell count	The somatic cell count may not exceed [750,000/milliliter] 500,000/milliliter (1,500,000/ml for [goat] goat/sheep milk).
At least twice each month, in conjunction with the tests for bacterial count and for coliform count, described in this subsection	Test for presence of drugs (including growth inhibitors)	There may be no positive results for drug residue, using drug residue detection laboratory techniques referenced in the current Grade "A" [Pasteurized Milk Ordinance] PMO developed by the United States Department of Health and Human Services, Food and Drug Administration.
Once every 6 months	From a sample drawn from the bulk tank, test for presence of the following pathogenic bacteria: <i>Salmonellae</i> , <i>Listeria monocytogenes</i> , <i>Camphylobacter</i> and <i>E. Coli</i> 0157:H7	There may be no pathogenic bacteria present.

(d) Raw milk butter testing schedule and standards. In addition to the raw milk used for raw milk butter meeting the requirements of the testing schedule and standards in subsection (c), a raw milk butter permitholder shall coordinate and ensure the testing of raw milk butter every 6 months for bacterial count, coliform, and yeast and mold count. The product shall meet the most current microbiological standards outlined in 7 CFR 58.345 (relating to butter). Current standards include:

- (1) Bacterial count not exceeding 100 cfu per gram.**
- (2) Coliform count not exceeding 10 cfu per gram.**
- (3) Yeast and mold count not exceeding 20 cfu per gram.**

§ 59a.409. Violations of raw milk testing standards.

* * * * *

(d) *Disease-producing organisms.* If a raw milk sample tests positive for the presence of pathogenic bacteria or other disease-producing organisms such as *Salmonellae*, *Listeria monocytogenes*, *Camphylobacter* or *E. Coli* 0157:H7, the raw milk permitholder shall do the following:

- (1) Immediately cease the sale of raw milk for human consumption.
- (2) Investigate and determine the cause of the contamination, report the result of that investigation to the Department, and correct that cause of contamination.
- (3) Wait at least 2 days from the cessation of raw milk sales, and then have an approved sampler collect a sample and submit it to a Pennsylvania-approved dairy laboratory, **official laboratory, or other laboratory meeting the requirements of § 59a.5 (relating to standards for Pennsylvania-approved dairy labora-**

tories, official laboratories and other laboratories; reports of results) to be tested for the presence of pathogenic bacteria.

(4) Following the initial sampling described in the preceding requirement, have an approved sampler collect an additional sample, at least 1 day after the previous sample **and with an empty tank between samples**, and submit it to a Pennsylvania-approved dairy laboratory, **official laboratory, or other laboratory meeting the requirements of § 59a.5** for testing for the presence of pathogenic bacteria.

(5) Refrain from selling raw milk for human consumption until and unless two consecutive tests, from samples drawn at least 1 day apart **and with an empty tank between samples**, show that raw milk produced at the dairy operation that is the subject of the raw milk permit is free from disease-producing organisms, and the Department reviews these test results and approves the resumption of raw milk sales.

(e) Raw milk butter not meeting testing standards. When two or more raw milk butter samples exceed the microbiological limits referenced in § 59a.408(d), the permitholder must cease production of the raw milk butter until the permitholder can demonstrate, through additional sample testing on two different production dates, that the raw milk butter meets the microbiological standards referenced in § 59a.408.

§ 59a.411. Label content review by the Department.

(a) *Raw milk and packaged raw milk butter in containers owned by the raw milk permitholder.*

(1) *General label statements.* If raw milk **or raw milk butter** for human consumption is prepackaged for sale in containers that are owned by the raw milk permitholder, **and where applicable the raw milk butter permitholder**, the labeling on these containers and caps shall

be submitted to the Department and approved by the Department prior to use in commerce. The container must be labeled as raw milk or raw milk butter, comply with § 59a.14 (relating to labeling: bottles, containers and packages of milk, milk products or manufactured dairy products), and at a minimum include the fluid volume, for raw milk, or the net weight, for raw milk butter, as well as the name and address of the distributor or producer, the raw milk permit number under which the raw milk was produced, and for raw milk butter, the additional raw milk butter permit number under which the raw milk butter was produced, and the words “Keep Refrigerated.” It may not be misbranded or contain any false or misleading statements. The Department will, within 10 business days of receiving a complete application for label approval, mail the applicant its written approval or denial of the label.

(i) If the application is denied, the written denial will set forth the basis for denial and afford the applicant notice and opportunity for an administrative hearing on the denial.

(ii) If the application is granted, the written approval will contain a copy of the label and assign a unique serial number to each label approved under the application. The Department will retain copies of these approvals.

(2) *Consumer advisory for raw animal-derived foods that have not been processed to remove pathogens.* In addition to the information in paragraph (1), the label must contain a consumer advisory statement to notify consumers of the increased risks (particularly to certain highly susceptible populations) associated with the consumption of raw animal-derived foods that have not been processed to remove pathogens. An acceptable notice would be as follows: Raw milk [has] and raw milk butter have not been processed to remove pathogens that can cause illness. The consumption of raw milk or raw milk butter may significantly increase the risk of foodborne illness in persons who consume it—particularly with respect to certain highly-susceptible populations such as preschool-age children, older adults, pregnant women, persons experiencing illness, and other people with weakened immune systems.

(3) *Label requirement: raw milk dating.*

(i) *Requirement.* The cap of the raw milk container, or the container itself, must be conspicuously and legibly marked in a contrasting color with the designation of the [“sell-by” date—] “sell by” or “best by” date.

(A) *Sell by date.* A “sell by” date shall consist of a designation of the month and day of the month after which the raw milk may not be sold or offered for sale. The designation may be numerical—such as “8-15”—or with the use of an abbreviation for the month, such as “AUG 15” or “AU 15.” The], whether expressed in standard fashion (such as “August 15”), numerically (such as “8-15”) or with use of an abbreviation (such as “AUG 15” or “AU 15”) and either the words “Sell by” or “Not to be sold after” must precede the designation of the date, or the statement “Not to be sold after the date stamped above” must appear legibly on the container. This designation of the date may not exceed 17 days beginning after midnight on the day on which the raw milk was produced.

(B) *Best by date.* A “best by” date shall consist of designation of the month and the day of the month, in the same format as required in clause (A),

established by the permitholder as a product quality guideline and the words “Best By,” “Best if Consumed By” or “Best if Used By” preceding that designation.

(ii) *Prominence of [sell-by] sell by or best by date on label.* The [sell-by] sell by or best by date must be separate and distinct from any other number, letter or intervening material on the cap or container.

(iii) *Prohibition.* Raw milk may not be sold or offered for sale for human consumption [if the raw milk is sold or offered for sale] after the [sell-by] sell by or best by date designated on the container.

(iv) *Monitoring by the permitholder and the Department.*

(A) *Department.* The Department will periodically sample containers of raw milk and raw milk butter for human consumption that is in the possession of the raw milk permitholder or a distributor. This sampling may occur at any time before the raw milk, or raw milk butter is delivered to the customer. [The Department will take at least one sample of raw milk from each raw milk permitholder each calendar year.]

(A.1) *Permitholders.* The permitholder shall, at intervals of no greater than 12 months, sample and test in accordance with § 59a.15(e)(2) (relating to labeling: milk dating).

(B) The samples described in [clause (A)] clauses (A) and (A.1) shall be analyzed by [the Department or] a Pennsylvania-approved dairy laboratory, official laboratory, or other laboratory meeting the requirements of § 59a.5 (relating to standards for Pennsylvania-approved dairy laboratories, official laboratories and other laboratories; reports of results), to determine whether bacterial and coliform test results exceed the bacterial limits for raw milk described in the Raw Milk Testing Schedule and Standards in § 59a.408 (relating to regular testing of raw milk and raw milk butter for human consumption) prior to the expiration of the [sell-by] sell by or best by date designated on the raw milk container.

(B.1) When any sample pulled under clause (A.1) exceeds the bacterial or coliform limits for raw milk described in § 59a.408, the permitholder shall resample at the next production date, or within 10 days, following receipt of test results, for retesting as described in clause (B).

(C) When two or more samples, pulled under clause (A) or clause (A.1), demonstrate a raw milk permitholder cannot produce raw milk for human consumption that remains consistently within the bacterial and coliform limits referenced in clause (B) through the [sell-by] sell by or best by date marked on the container, the Department will require a raw milk permitholder to use a shorter [sell-by] sell by or best by date specified by the Department. The Department will calculate this revised [sell-by] sell by or best by date so that bacterial growth in the raw milk will not exceed the referenced bacterial limits within that [sell-by] sell by or best by period if the raw milk is maintained in accordance with the temperature requirements for raw milk in the Raw Milk Testing Schedule and Standards in § 59a.408.

(D) A raw milk permitholder may submit samples to [the Department] a Pennsylvania-approved dairy

laboratory, official laboratory, or other laboratory meeting the requirements of § 59a.5 for analysis to obtain approval to resume a specific [sell-by] sell by or best by period for the raw milk sampled. The Department will approve resumption of a specific [sell-by] sell by or best by period when analysis of [a sample] at least three samples from 3 different production days demonstrates that bacterial growth in the raw milk will not exceed the referenced bacterial and coliform limits within that [sell-by] sell by or best by period if the raw milk is maintained in accordance with the temperature requirements for raw milk in the Raw Milk Testing Schedule and Standards in § 59a.408.

(b) *Raw milk in customer-owned containers.*

(1) *Container labeling and caps.* If raw milk for human consumption is packed for sale in containers that are owned by the consumer, Departmental review of the labeling on the container or caps is not required. The Department recommends, but does not require, that customer owned containers be clean, food-grade containers of 1 gallon or smaller capacity.

(2) *Consumer advisory.* If raw milk for human consumption is packed for sale in containers that are owned by the consumer, the raw milk permit holder shall post a consumer advisory at the location where the customer owned containers are filled, or in close proximity to that location, to provide consumers notice of increased risks associated with the consumption of raw animal-derived foods that have not been processed to remove pathogens by certain highly susceptible populations. An acceptable notice would be as described in subsection (a)(2).

(c) Label statements for raw milk butter. Raw milk butter shall be packaged or wrapped prior to sale with a label identifying the name and address of the distributor or producer, date of manufacture code, and the raw milk and raw milk butter permit number under which the raw milk butter was produced and shall conform with the labeling requirements of subsection (a)(1) and (2).

§ 59a.412. Inspection, sampling and testing by the Department.

A raw milk permit holder, and a raw milk butter additional permit holder, shall allow the Department and its personnel to inspect the dairy operation that is the subject of the permit, review records, draw samples, conduct tests and take other actions necessary to the Department's performance of its responsibilities under the act, the Food Safety Act or any other applicable statute or regulation. If a raw milk or raw milk butter permit holder fails to allow this inspection and sampling by the Department, the Department may take steps to revoke or suspend the raw milk permit or the raw milk butter permit, or both.

§ 59a.413. Enforcement: Suspension or revocation of a raw milk or raw milk butter permit.

(a) *General.* The Department may take action to suspend or revoke a raw milk permit or raw milk butter permit, or both, if a permit holder does not comply with the act or this chapter.

(b) *Procedure.*

(1) The act requires that the Department provide a raw milk or raw milk butter permit holder with at least 5 days advance written notice of a [raw milk permit] revocation or suspension of their raw milk permit or raw milk butter permit, or both. This written notice

will be sent by certified mail. The Department may supplement the notice by providing the permit holder the written notice by personal service or other means. The written notice must specify the procedure by which the permit holder may request an administrative hearing and the 5-day window within which a written request for an administrative hearing shall be submitted to the Department.

(2) If the basis for a proposed [raw milk permit] suspension or revocation of the raw milk permit or raw milk butter permit, or both, is that pathogenic bacteria have been detected in the raw milk or raw milk butter, or foreign substances are present in the raw milk or raw milk butter, or any condition exists when consumption of raw milk or raw milk butter produced and sold prior to revocation or suspension of the raw milk or raw milk butter permit may pose a threat to the health or safety of those persons who consume it, the Department will immediately notify the raw milk or raw milk butter permit holder, or both, and request that it voluntarily cease all sales of raw milk, raw milk butter, or both—without regard to whether the [raw milk] permit holder has received the 5 days advance written notice required under the act. The requirements of this paragraph do not alter the obligation of a raw milk or raw milk butter permit holder to cease sales of raw milk or raw milk butter, or both, for human consumption if required under § 59a.409 (relating to violations of raw milk testing standards).

(i) If a raw milk permit holder or raw milk butter permit holder, or both, complies with a request that it voluntarily cease raw milk sales, the Department will consider this cooperation a mitigating factor as it determines any penalty or sanction relating to the violation.

(ii) If a raw milk permit holder or raw milk butter permit holder, or both, does not choose to comply with a request that it voluntarily cease [raw milk sales,] the sale of raw milk or raw milk butter, or both, the Department will do the following:

(A) Apprise the Department of Health and any local health department having jurisdiction of the situation, and recommend these entities take lawful action to ensure that sales of raw milk or raw milk butter, or both, cease.

(B) Consult with the Office of Attorney General regarding whether it should institute legal action to obtain an injunction to prohibit the [raw milk] sales of raw milk or raw milk butter, or both.

(C) Arrange for an administrative hearing before a hearing examiner, if the raw milk permit holder or raw milk butter permit holder has been afforded written notice and opportunity for a hearing on the proposed suspension or revocation and requests a hearing on the proposed permit suspension or revocation.

(D) Issue a final adjudication, ordering the suspension or revocation, if the raw milk permit holder or raw milk butter permit holder, or both, does not request a hearing on the proposed permit suspension or revocation.

(E) Recommend to the raw milk permit holder or raw milk butter permit holder, or both, that it inform its customers that it has been asked by the Department to voluntarily cease [raw milk sales] the sale of raw milk or raw milk butter, or both, and provide these customers the basis for the Department's request.

(c) *Ownership of raw milk permit or raw milk butter permit.* A raw milk permit or a raw milk butter

permit is and remains the property of the Department even when it is in the physical custody of the permitholder. If a raw milk permit **or a raw milk butter permit, or both**, is suspended or revoked, and the permitholder has been afforded written notice and opportunity for a hearing on the proposed suspension or revocation, the person in possession of the raw milk permit **or raw milk butter permit, or both**, shall immediately return or surrender that raw milk permit **or raw milk butter permit, or both**, to the Department. In the case of a permit suspension, the Department will promptly return the raw milk permit **or raw milk butter permit, or both**, to the permitholder at the end of the suspension period.

Subchapter G. MISCELLANEOUS PROVISIONS

§ 59a.501. Interrelatedness with **the Retail Food Facility Safety Act and the Food Safety Act**.

The subject matter of the act and this chapter overlaps with the subject matter of **3 Pa.C.S. §§ 5701—5714 (relating to retail food facility safety) and the Food Safety Act [(repealed)]** and the **applicable** regulations promulgated under **the** authority of **[that] each statute which is codified in [Chapter 46 (relating to food code)] Chapters 37—57 and this chapter**. This chapter does not restrict, prevent or limit the Department or any other government entity from exercising authority under **3 Pa.C.S. §§ 5701—5714 or the Food Safety Act or [its] their** attendant regulations with respect to milk, milk products, manufactured dairy products or any other foods.

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STATE BOARD OF EDUCATION

[22 PA. CODE CH. 4]

Academic Standards and Assessment

The State Board of Education (Board) proposes to amend Chapter 4 (relating to academic standards and assessment) by amending §§ 4.11—4.13, 4.21 4.23 and 4.51a and adding Appendix C-1, Appendix D-1, Appendix E-1 and Appendix F to read as set forth in Annex A. The Board further is proposing that certain provisions of Appendix C and Appendix D and the entirety of Appendix B and Appendix E expire as set forth in Annex A. The Board is acting under the authority of sections 290.1, 1551, 2603-B and 2604-B of the Public School Code of 1949 (24 P.S. §§ 2-290.1, 15-1551, 26-2603-B and 26-2604-B).

Purpose

Chapter 4 sets forth requirements for State academic standards and assessments for public schools across the Commonwealth, including school districts, area career and technical schools (ACTS), charter schools and cyber charter schools. This proposed rulemaking seeks to update the existing academic standards for Career Education and Work (CEW), Family and Consumer Sciences (FCS) and Economics (ECON). Consistent with the act of December 13, 2023 (P.L. 311, No. 35) (Act 35 of 2023) this proposed rulemaking further seeks to establish stand-alone academic standards for Personal Finance. This proposed rulemaking also shifts the grade level at which the Commonwealth's elementary-level science assessment

is administered, requires school entities to post various strategic plans on their publicly accessible web sites and makes numerous clarifying and technical amendments.

Background

The Board's Standing Committee on Academic Standards/Chapter 4 (Committee) is designated responsibility for leading efforts on regulations governing State academic standards and assessments. This responsibility includes overseeing reviews of the regulations in Chapter 4 and developing recommendations pertinent to these policies for consideration by the Board. Part of the responsibility designated to the Committee includes leading periodic reviews of the academic standards in Chapter 4 as called for in § 4.12(i) (relating to academic standards). Periodic reviews of State academic standards are intended to determine if the standards are appropriate, clear, specific and challenging.

On September 14, 2022, the Committee held a public meeting to determine which academic standards next would be opened for a periodic review. The Committee recommended to the Board that the academic standards for CEW, FCS and ECON be called up for review. The existing ECON and FCS standards took effect on January 11, 2003, and the existing CEW standards took effect on July 8, 2006. The Committee recommended that these standards be reviewed in their totality with a focus on whether the existing standards adequately address concepts related to financial literacy.

To support this work, the Board requested that the Department of Education (Department) convene advisory committees of educators and other content experts to conduct an initial review of the existing academic standards for CEW, ECON and FCS, and to consider whether the standards adequately addressed what students should know to be financially literate. The Committee tasked the Department to consult with these external standards review committees to develop recommendations on whether the existing standards should be revised and, if so, to formulate draft amendments to the standards for the Committee's consideration.

In the fall of 2022, educators and other content experts were invited by the Department to apply to serve on the advisory committees. Nominees to serve on these standards review committees were presented to the Committee for approval at its public meeting on January 11, 2023. An opportunity for public comment on the nominees was made available at the meeting prior to the Committee's approval of the standards review committees' membership. At the direction of the Committee, the Department later added four additional members to the standards review committees to provide greater geographic representation from Philadelphia and from this Commonwealth's Northern Tier.

The standards review committees met throughout the winter and spring of 2023 to develop recommendations in response to the charge presented to them. Meetings were held on February 22, 2023, March 9, 2023, March 20, 2023, April 3, 2023 (whole group session) and April 20, 2023 (whole group session). During these sessions, the standards review committees developed recommendations for updating the existing standards for CEW, ECON and FCS. The standards review committees also reached consensus to recommend the establishment of a stand-alone set of academic standards for Personal Finance.

To provide further guidance surrounding the recommendation to establish new stand-alone standards for Personal Finance, another external stakeholder advisory committee

was formed to draft recommended Academic Standards for Personal Finance. That advisory committee was composed of some members of the teams that conducted an initial review of the CEW, ECON and FCS standards, along with additional members who held professional experience in personal finance. The Personal Finance Standards Committee met on May 31, 2023, and on June 1, 2023, in Harrisburg, and met again on June 15-16, 2023, at the Federal Reserve Bank in Philadelphia.

To inform their recommendations, the standards review committees examined standards from National organizations and exemplary standards from other states to identify strengths and gaps in the Commonwealth's current standards. The CEW standards review committee utilized the following resources as part of its evaluation: the National Business Education Association's National Standards for Business Education, North Dakota Career Development Content Standards, Nebraska Standards for Career Readiness and the Nevada State Board for Career and Technical Education's Employability Skills for Career Readiness Standards.

The CEW standards review committee recommended reorganizing the CEW standards into four new strands that reflected combining strands in the existing CEW standards and adding new strands to reflect components of the National and other state standards that the committee used in conducting its review. Recommended updates included reframing the existing strand for Career Awareness and Preparation to focus on Career Awareness and Exploration, reframing the existing strand for Career Retention and Advancement to address Personal Interests and Career Planning, and reframing the existing strand for Entrepreneurship to address Growth and Advancement.

The CEW standards review committee also proposed adding a new strand for Employability Skills that would replace the strand in the current CEW standards for Career Acquisition (Getting a Job). Employability skills address qualities that employers often look for in candidates in addition to academic or technical qualifications. These skills are not specific to a particular job. Rather, they embody foundational skills that are transferable across workplace settings. Competencies for students addressed within the recommended new strand for Employability Skills included critical thinking and problem solving, oral and written communication, teamwork and collaboration, technology, time management and entrepreneurial mindset.

The ECON standards review committee utilized a similar approach in reviewing the Commonwealth's existing ECON standards and identifying strengths and gaps in the standards. The standards review committee utilized the following resources to inform its work: the Voluntary National Content Standards in Economics from the Council for Economic Education, Delaware's K—12 Economic Standards, Indiana's K—12 Economic Standards and Minnesota's K—12 Economic Strand of its Social Studies Standards. Stemming from its analysis, the ECON review committee recommended four new strand topics under which existing standards and recommended new standards would be organized. The existing ECON standards include five strands for: Economic Systems, Markets and the Functions of Governments, Scarcity and Choice, Economic Interdependence and Work and Earnings. The review committee recommended transforming the standards to be arranged under the following strands: Fundamentals of Economics, Microeconomics, Macroeconomics, and Money and Financial Institutions.

The FCS standards review committee also consulted other National and state-level resources to inform its work. The review committee recommended updates to the Commonwealth's FCS standards consistent with the language and formatting of the Family and Consumer Sciences National Standards 3.0, a resource from the National Association of State Administrators of Family and Consumer Sciences and consistent with National standards of the Family, Career and Community Leaders of America. The Pennsylvania Learning Standards for Early Childhood also were used by the standards review committee to inform the development of FCS standards for the K—2 grade band. These Commonwealth early childhood standards are research-based according to age and development and address a continuum of learning from the infant and toddler stages through second grade. The FCS standards review committee also consulted FCS standards from Wisconsin and New Hampshire and used these other exemplary state standards as a point of reference when considering revisions or additions to the Commonwealth's existing standards and in considering whether recommended revisions or additions were aligned in a coherent manner.

The FCS standards review committee supported restructuring the Commonwealth's current standards. The existing FCS standards include four strands for: Food Science and Nutrition; Financial and Resource Management; Child Development and Balancing Family, Work and Community Responsibility. The standards review committee recommended restructuring the FCS standards under the following six strands: Food Science and Nutrition; Physical Resource Management; Human Development, Family, and Relationships. Education and Early Childhood Development; Personal Finance and Consumer Skills and Career, Community and Family Connections. For the recommended standards applicable to the 6—8 and 9—12 grade bands, the FCS standards review committee also recommended adding a career-focused standard within each strand as a means of incorporating employability skills within the standards.

The standards review committees further recommended that the Board adopt standalone academic standards for Personal Finance. While the standards review committees recognized that content related to personal finance is embedded throughout the existing CEW, ECON and FCS standards, the standards review committees determined that standalone standards would benefit students by creating greater alignment and consistency in how this content is taught. A July 2023 report containing recommendations from the standards review committees found that personal financial literacy "is a key aspect of preparing students for meaningful engagement in postsecondary education, workforce training, and career pathways and as responsible, involved citizens." The standards review committees concluded that, for this reason, a separate standalone set of standards should be added to Chapter 4.

To provide further guidance on the recommendation to establish new standalone standards, another external committee of educators and content experts was convened to draft recommended academic standards for Personal Finance. The Committee reviewed resources from other states and National organizations to inform its work, including: the National Jump\$tart Standards, Wisconsin's Standards for Personal Finance, Washington's Standards for Personal Finance and Delaware's Standards for Personal Finance. The Committee also reviewed Pennsylvania's Instructional Framework for Personal Finance. This resource was developed by the Department in accordance with the act of November 17, 2010 (P.L. 996, No. 104) to

provide economic and personal financial literacy materials to educators in this Commonwealth's public and private schools. Stemming from this review, the committee developed recommended standards for Personal Finance that include competencies organized under the following six strands: Personal Finance Fundamentals, Income, Spending, Saving and Investment, Risk and Insurance and Credit.

The standards review committees further recommended a new organizational structure that would be applied consistently across the CEW, ECON, FCS and Personal Finance standards. The existing academic standards for CEW include standards for grade 3, grade 5, grade 8 and grade 11. The existing academic standards for ECON and for FCS include standards for grade 3, grade 6, grade 9 and grade 12. The standards review committees recommended that updates to these existing standards and new standards for Personal Finance be organized in grade bands covering Kindergarten—grade 2, grades 3—5, grades 6—8 and grades 9—12. The standards review committees concluded that organizing the standards around these four grade bands provides flexibility to school entities in determining how best to meet each standard, when to include particular courses and how to best support the needs of individual students. The standards review committees further supported reorganizing the standards in grade bands as this structure is used frequently in National standards and standards adopted by other states, but, at present, is applied inconsistently in the Commonwealth's academic standards.

These recommendations for updating the existing academic standards for CEW, ECON and FCS and for establishing new academic standards for Personal Finance were presented by the Department to the Committee at a public meeting on July 12, 2023, and were shared with the Board at its public meeting later that same day. At its meeting on July 12, 2023, the Committee also reviewed in detail unrelated draft amendments to other provisions within Chapter 4 and determined that it would consider those other draft amendments in tandem with the recommended revisions to academic standards. The other draft amendments to Chapter 4 reviewed by the Committee addressed the grade level at which the Commonwealth's elementary-level science assessment is administered, posting requirements for the various plans named in § 4.13 (relating to strategic plans) after they are adopted as final and numerous clarifying and technical amendments. An opportunity to offer public comment on these items and on the academic standards recommendations was made available before both the Committee and the Board at their meetings on July 12, 2023. A report containing the standards review committees' academic standards recommendations and an Annex presenting the other unrelated draft amendments to Chapter 4 were made publicly accessible on the Board's web site.

The Committee held public hearings in Harrisburg (September 13, 2023) and in Allegheny County (September 25, 2023) to gather feedback from stakeholders on the academic standards recommendations and on its other draft amendments to Chapter 4. A third public hearing scheduled for September 14, 2023, in Montgomery County was canceled due to lack of registrations to participate in the event. The Committee also accepted written testimony through the end of September 2023 from individuals who were unable to attend one of its hearings in person.

Testimony submitted by stakeholders was made available to all Board members and was also made available

to the standards review committees that developed initial recommendations on updating the academic standards. At the request of the Committee, those standards review committees reconvened on October 24 and 25, 2023, to review this additional stakeholder input and to provide their professional judgment on whether the recommended standards should be further revised in response to the testimony received from interested stakeholders. The Department presented a report of the standards review committees' responses to stakeholder feedback at the Committee's next public meeting on November 8, 2023. An opportunity for public comment was made available at that meeting, and the standards review committees' report was made publicly accessible on the Board's web site.

As part of their continued efforts in advising the Committee on this work, the standards review committees addressed concerns expressed by stakeholders pertaining to the length and complexity of the recommended Personal Finance standards. In response to these concerns, the standards review committees sought to identify and eliminate areas of duplication across the recommended CEW, ECON and FCS standards updates and the recommended Personal Finance standards. The standards review committees noted that they recommended retaining a concept related to personal finance that may overlap with another standard if the concept was necessary for the focus lens of the discipline. The standards review committees identified the following focus lenses to guide their decision-making in this regard: Personal Finance—individual; CEW—individual planning of educational and professional choices; FCS—resource management for the family and home; and ECON—markets and societal.

The report from the standards review committees identifies additional areas where the standards review committees made refinements to their initial recommendations in response to stakeholder input and where the standards review committees disagreed that further modifications were necessary. Among the refinements, the standards review committees made edits to their initial recommendations to improve clarity, ensure the standards use straightforward language, ensure the standards are developmentally appropriate and, if necessary, to ensure the standards are provided for a more sophisticated progression of knowledge and skills.

The Board's work on these academic standards was further directed by the enactment of Act 35 of 2023. Existing language in section 1551 of the Public School Code of 1949 (24 P.S. § 15-1551) requires the Department to provide resources and curriculum materials related to economic education and personal financial literacy to public and private schools in this Commonwealth. Historically, these materials were to be aligned with the State academic standards for ECON, FCS and CEW as promulgated by the Board in Chapter 4. With the adoption of Act 35 of 2023, the General Assembly amended section 1551 of the Public School Code of 1949 to require the Department to provide model curriculum materials pertaining to economic education and personal financial literacy that are aligned to State academic standards for Personal Financial Literacy as established by the Board in Chapter 4. Act 35 of 2023 also directs the Department to review and update its existing model curriculum materials and other resources no later than the beginning of the 2025-2026 school year and within 1 year of any revision of the State academic standards for Personal Financial Literacy promulgated by the Board.

In Act 35 of 2023, the General Assembly further directed the Board to review the existing State academic

standards for ECON, FCS and CEW and to revise the standards as necessary to implement the amendments set forth in Act 35 of 2023. Finally, in Act 35 of 2023, the General Assembly established a new requirement for high school students to complete a mandatory course in personal financial literacy with the course valued at least one-half credit or half of a full credit. Both public school entities and nonpublic schools must provide the required course beginning in the 2026-2027 school year.

The Committee reconvened on January 11, 2024, to consider the stakeholder feedback it gathered during the fall of 2023, along with the additional perspectives on that feedback provided by the standards review committees. The Committee also reviewed Act 35 of 2023 and discussed considerations for crafting a proposed rulemaking responsive to the directives of the General Assembly in Act 35 of 2023. In deliberating on input from stakeholders and on Act 35 of 2023, the Committee expressed support for adopting the standards review committees' recommendations for updating the CEW, ECON and FCS standards. The Committee noted that the process conducted to review and update the standards aligned with the charge made to the Board in Act 35 of 2023 to review those standards.

The Committee further expressed support for adopting the standards review committee's recommendations for standalone Personal Finance standards. Adding standalone standards for Personal Finance to Chapter 4 is responsive to provisions in Act 35 of 2023 that direct the Department to align model curriculum to the standards as set forth in Chapter 4. The Personal Finance standards also will serve as a guidepost to which the new high school level course required by Act 35 of 2023 would be aligned.

Furthermore, the Committee found that organizing the Personal Finance standards in grade bands, as recommended by the standards review committee, is consistent with expectations for the personal financial literacy course required in Act 35 of 2023. The General Assembly set forth that students must complete the course once during grade 9, grade 10, grade 11 or grade 12. The recommended Personal Finance standards are organized in grade bands for K—2, 3—5, 6—8 and 9—12. Structuring the standards to include a 9—12 grade band, rather than prescribing standards to be taught at a particular grade level, aligns with the flexibility envisioned in Act 35 of 2023 for the required course to be completed at any point during a student's high school career and provides school entities and students with latitude to determine when the coursework best fits into their schedules.

The Committee also discussed time frames for implementation of updates to the academic standards. The Committee determined that new Personal Finance standards should take effect with the 2026-2027 school year for consistency with the year that Act 35 of 2023 requires school entities to begin offering a personal financial literacy course to high school students. The Committee further determined that updates to the CEW, ECON and FCS standards also should take effect with the 2026-2027 school year to align with implementation planning efforts.

Upon conclusion of its deliberations, the Committee acted to adopt proposed amendments to Chapter 4, including updates to the academic standards for CEW, ECON and FCS, new standards for Personal Finance and other unrelated amendments to Chapter 4. The Committee's recommended amendments were considered by the Board's Council of Basic Education (Council) at a public meeting on January 11, 2024, and the Council approved

the proposed amendments to Chapter 4 as recommended by the Committee. Later that same day, the proposed amendments to Chapter 4 were approved by the Board, as recommended by the Council and the Committee. Opportunities for public comment were made available at each of the public meetings held by the Committee, the Council and the Board.

Need for the Rule

Academic standards define what students should know and be able to do at specific grade levels. They establish goals for student learning. Academic standards do not represent a particular curriculum or instructional methodology. Rather, they provide a foundation for the development of local curriculum and serve as guideposts to which local curriculum should be aligned.

This proposed rulemaking is necessary to comply with the directives set forth in Act 35 of 2023. In Act 35 of 2023, the General Assembly charged the Board with reviewing and, as necessary, updating the existing standards for CEW, ECON and FCS. Act 35 of 2023 also newly refers to standards for personal financial literacy as a component of the Board's regulations in Chapter 4 and, through this proposed rulemaking, the Board is establishing standalone standards in that content area. The adoption of standalone standards will provide for greater alignment and consistency in how this content is taught, including serving as a guidepost for the high school level personal financial literacy course that all public and private schools in this Commonwealth will be required to offer under Act 35 of 2023.

This proposed rulemaking also is responsive to § 4.12(i) in which the Board calls for the academic standards in Chapter 4 to be reviewed no sooner than every 5 years and no later than every 10 years to determine if the standards are appropriate, clear, specific and challenging. This proposed rulemaking includes revisions to the academic standards for CEW, FCS and ECON stemming from the Board's periodic review of the existing academic standards under subsection (i).

This proposed rulemaking further is necessary to align administration of the Commonwealth's elementary-level science assessment with the end-of-the-grade bands in the Pennsylvania Integrated Standards for Science, Environment, Ecology, Technology, and Engineering (Grades K—5). These standards are set to take effect with the 2025-2026 school year. Through this proposed rulemaking, the Board is seeking to shift the grade level at which the elementary-level science assessment is administered in the same year that the new standards take effect.

Finally, this proposed rulemaking is necessary to create greater transparency surrounding the various strategic plans that are adopted by public school entities under § 4.13. During roundtable discussions on gifted education that were conducted by the Board's Committee on Special and Gifted Education in 2022, stakeholders requested that school districts be required to publicly post their gifted education plans after they are approved as final as a means of improving transparency. The Committee on Special and Gifted Education recommended to the Board's Academic Standards/Chapter 4 Committee that it consider proposing an amendment to § 4.13(e) to require school districts to post gifted education plans in their final form on the district's publicly accessible web site. The Board determined that this transparency should apply to each of the plans cited in § 4.13 and should not be limited to plans for gifted education.

Summary of this Proposed Rulemaking

This proposed rulemaking would amend the following provisions in Chapter 4:

Table of contents

Academic standards that are published as appendices to Chapter 4 are proposed to be added to the table of contents for reference. The listing of standards in the table of contents reflects how the standards would be organized if proposed amendments to § 4.12 are adopted. References to Appendix A and Appendix A-1 denote former standards that previously were reserved, and references to Appendix A-2 and Appendix B-1 denote existing standards to which no amendments are proposed. The heading of Appendix B-1 is proposed to be amended to include standards currently in the Appendix that were omitted from the heading.

The Board proposes that the academic standards for Science and Technology and Environment and Ecology in Appendix B expire July 1, 2025. Expiration of these standards is consistent with existing language in § 4.12(a)(1)(i) and (ii) that sets forth that these standards will be in effect only through June 30, 2025. Following the sunset of the academic standards in Appendix B, academic standards related to science, environment, ecology, technology and engineering will be based on the existing standards in Appendix B-1, as established in § 4.12(a)(2)(i)—(iii).

The Board proposes that the standards for Economics in Appendix C (relating to academic standards for civics and government and economics and geography and history and the Pennsylvania core standards for reading in history and social studies and Pennsylvania core standards for writing in history and social studies) expire July 1, 2026, and be replaced with updated standards for Economics in Appendix C-1 (relating to academic standards for economics). The heading of Appendix C is proposed to be amended to include standards currently in the Appendix that were omitted from the heading. The Board proposes that the standards for Family and Consumer Sciences in Appendix D (relating to academic standards for arts and humanities and health, safety and physical education and family and consumer sciences) expire July 1, 2026, and be replaced with updated standards for Family and Consumer Sciences in Appendix D-1 (relating to academic standards for family and consumer sciences). The Board further proposes that the academic standards for Career Education and Work in Appendix E (relating to academic standards for career education and work) expire on July 1, 2026, and be replaced with updated standards for Career Education and Work in Appendix E-1 (relating to academic standards for career education and work). Finally, the Board proposes to add new standards for Personal Finance in Appendix F (relating to academic standards for personal finance).

§ 4.11. Purpose of public education

Provisions under § 4.11 (relating to purpose of public education) address the purpose of public education and its relationship with the standards in § 4.12. Section 4.11(g) lists the standards in which public schools must provide instruction. The Board is proposing to add a reference to Personal Finance standards to this paragraph for completeness as new standards in that content area are proposed to be added under § 4.12.

The Board also is proposing to amend § 4.11(g) to correct the title of the standards for Family and Consumer Sciences to make the term “sciences” plural. The title of these existing standards is published correctly

using the plural noun throughout Appendix D, but is incorrectly referred to in the singular in § 4.11(g). The Board is proposing to make this same technical correction to the title of the standards in §§ 4.12(a)(7), and 4.22(c)(11) and 4.23(c)(9) (relating to middle level education; and high school education).

§ 4.12. Academic standards

The Board is proposing, in § 4.12(a), to adopt updated standards for ECON in Appendix C-1, updated standards for CEW in Appendix E-1 and updated standards for FCS in Appendix D-1. In § 4.12(a)(10), the Board further is proposing to establish standalone academic standards for Personal Finance in Appendix F. Proposed updates to the ECON, CEW and FCS standards and the proposed standards for Personal Finance would apply on and after July 1, 2026. Existing standards for ECON in Appendix C, FCS in Appendix D and CEW in Appendix E are proposed to expire on July 1, 2026.

The existing academic standards for CEW include standards for grade 3, grade 5, grade 8 and grade 11. The existing academic standards for ECON and for FCS include standards for grade 3, grade 6, grade 9 and grade 12. The Board is proposing to modify how these existing standards are organized by structuring the updated standards for CEW, ECON and FCS in grade bands covering Kindergarten—grade 2, grades 3—5, grades 6—8 and grades 9—12.

The Board is proposing to further modify how the existing CEW, ECON and FCS standards are structured by organizing the proposed updated standards under new strands. An overview of the proposed CEW standards found in Appendix E-1 explains that the proposed standards “reflect the increasing complexity and sophistication that students experience as they progress through school, focusing on the skills and continuous learning and innovation required for students to succeed in a rapidly changing workplace.” The proposed standards are organized under the following four strands: Career Awareness and Exploration, Employability Skills, Growth and Advancement, and Personal Interests and Career Planning.

Concepts within each of these strands are arranged in substrands with grade-banded standards identified across each substrand for grades K—2, 3—5, 6—8 and 9—12. The strand for Career Awareness and Exploration contains substrands for: educational requirements and opportunities; entrepreneurship; factors in career decisions; local, National and global labor market; resources in school and community, and rights of workers. The strand for Employability Skills contains substrands for: critical thinking and problem solving, oral and written communication, teamwork and collaboration, technology, time and project management and entrepreneurial mindset. The strand for Growth and Advancement contains competencies in substrands for: career growth, lifelong learning, strategic goals and work ethic. Finally, the CEW strand for Personal Interests and Career Planning contains competencies in substrands for: develop a personal brand, identify personal interests, research careers and understand a career path.

An overview of the ECON standards proposed in Appendix C-1 describes the field of Economics as being “concerned with the behavior of individuals and institutions engaged in the production, exchange, and consumption of goods and services.” The overview further emphasizes knowledge that the Board maintains all students should possess in this field—characteristics of economic systems, how markets establish prices, how scarcity and choice affect the allocation of resources, the global nature of economic interdependence and how work and earnings

impact productivity. These concepts are addressed in proposed ECON standards under the following strands: Fundamentals of Economics, Microeconomics, Macroeconomics and Money and Economic Institutions.

Standards within each of these strands are arranged in substrands with grade-banded standards identified across each substrand for grades K—2, 3—5, 6—8 and 9—12. The strand for Fundamentals of Economics contains substrands for: economic systems, fundamental economic questions, scarcity, economic choice, economic resources, marginal analysis, opportunity cost, incentives, specialization, trade, foreign trade, global interdependence and comparative advantage. The strand for Microeconomics contains substrands for: circular flow, competition, monopolies, supply and demand, economic patterns, wages, productivity, types of businesses, profit and loss and entrepreneurship. The strand for Macroeconomics contains substrands for: economic indicators, business cycles, fiscal policy, Federal budget, taxation, tax policy, economic role of government, externalities and public goods and services. The strand for Money and Economic Institutions contains substrands for: money, exchange rates, monetary policy, banking, the Federal Reserve System, nongovernmental organizations and interest rate policy.

The FCS standards proposed in Appendix D-1 emphasize the crucial role of families in shaping individual and community well-being. As stated in the overview of the proposed standards, “the standards aim to prepare students not just for personal, family, and work responsibilities but also to empower them for the challenges of living and working in a diverse, global society, fostering holistic individual development and community advancement.” The standards are organized under the following strands: Food Science and Nutrition, Resource Management, Human Development, Family and Relationships, Education and Early Childhood Development, Personal Finance and Consumer Skills and Career, Community and Family Connections.

Concepts within each of these strands are arranged in substrands with grade-banded standards identified across each substrand for grades K—2, 3—5, 6—8 and 9—12. The strand for Food Science and Nutrition contains substrands for: food supply, safety and sanitation, nutrition analysis, meal management, culinary math and measurement, culinary equipment and techniques, food science, nutrition and health, calories and energy and careers. The strand for Resource Management contains substrands for: resource sustainability, individual and family resources, housing and interior design, consumer strategies, textiles, fashion and apparel, laundering and career. The strand for Human Development, Family and Relationships contains substrands for: role of family, family life cycle, interpersonal communications, human development and well-being and careers.

Within the FCS standards, the proposed new strand for Education and Early Childhood Development contains substrands for: developmental stages, learning environments, health and safety, literacy, collaborative relationships and careers. In the act of July 8, 2022 (P.L. 620, No. 55), the General Assembly directed the Department to develop a Career and Technical Education (CTE) Program of Study in Education as an avenue for high school students who are interested in pursuing teaching as a career. The proposed addition of the strand for Education and Early Childhood Development will support instruction aligned to the Commonwealth’s new CTE Program of Study in Education.

The proposed FCS standards strand for Personal Finance and Consumer Skills contains substrands for:

consumer rights and responsibilities, financial planning and budgeting, financial resources and careers. The proposed strand for Career, Community and Family Connections contains substrands for: action plans, teamwork and leadership, role of technology and service providers.

The standalone academic standards for Personal Finance proposed in Appendix F identify competencies to support students in gaining financial literacy to manage their personal finances. The proposed standards identify competencies for students in six strands: Personal Finance Fundamentals; Income; Spending; Saving and Investing; Risk and Insurance; and Credit. Consistent with the structure of proposed updates to the CEW, ECON and FCS standards, the proposed standards for Personal Finance also are arranged in grade bands for Kindergarten—grade 2, grades 3—5, grades 6—8 and grades 9—12.

The area of Personal Finance Fundamentals further delineates standards in substrands focused on: financial goal setting and decision making, financial mindset and behaviors, financial services, financial record keeping and consumer protection. Standards that pertain to the proposed strand for Income are organized in substrands that address: sources of income, factors influencing income, self-employment and supplemental income and income and payroll taxes. Concepts related to Spending are arranged under substrands for: spending decisions, developing a budget, payment methods, major life purchases, sales and property taxes and charitable giving.

The proposed Personal Finance standards further would require instruction in Saving and Investing, with standards proposed in the areas of asset building, saving, investing and investing and tolerance. The proposed standards address concepts pertaining to Risk and Insurance in substrands for: risk identification and management, insurance and financial fraud and identify theft. Finally, the proposed standards include a strand focused on helping students to better understand credit. Related competencies are centered around substrands for: credit use and benefits, types of credit, costs of credit and credit rights and responsibilities.

The Board also is proposing to make clarifying amendments to provisions within § 4.12 that affect academic standards in other content areas. In a prior final-form rulemaking adopted by the Board and published at 44 Pa.B. 1131 (March 1, 2014), the Board adopted the Pennsylvania Core Standards for English Language Arts (ELA) and the Pennsylvania Core Standards for Mathematics (Mathematics), which are published in Appendix A-2. These ELA and Mathematics standards replaced the former Common Core State Standards for English Language Arts and the former Common Core State Standards for Mathematics. The Board is proposing to make technical amendments to § 4.12(a)(8) to delete language that facilitated the transition from the former Common Core State Standards for English Language Arts to the current ELA standards. The transitional language is no longer necessary as these ELA standards have been in effect since March 1, 2014. Likewise, the Board is making the same technical amendments to § 4.12(a)(9) to delete language that facilitated that transition from the former Common Core State Standards for Mathematics to the Pennsylvania Core Standards for Mathematics as that transition also took effect on March 1, 2014. No changes are proposed to the content of the existing standards for ELA or Mathematics.

§ 4.13. *Strategic plans*

Section 4.13 requires school entities to develop various strategic plans on a cyclical basis. At present, school entities must adopt professional education plans for edu-

cators every 3 years, induction plans for newly hired teachers every 6 years and student services plans every 6 years that address the provision of services such as guidance counseling, psychological services, social work services and nutritional services. In addition, school districts must adopt a special education plan every 3 years and a gifted education plan every 6 years.

Under the existing requirements of subsections (a)—(e), each of these plans must be made available for a public inspection and comment period prior to the plan's approval by a school entity's board of directors. However, no similar requirement exists for these plans to be made publicly accessible after they are approved as final. Therefore, for transparency, the Board is proposing to amend subsections (a)—(e) to require that school entities post their professional education, induction, student services, special education and gifted education plans on their publicly accessible web sites after they are approved by a school entity's governing board.

§ 4.21. *Elementary education: primary and intermediate levels*, § 4.22. *Middle level education* and § 4.23. *High school education*

Section 4.21 (relating to elementary education: primary and intermediate levels) and §§ 4.22 and 4.23 establish requirements for school entities to deliver curriculum and planned instruction to students that are based on the academic standards in § 4.12. The Board is proposing to make technical and clarifying amendments throughout these sections to align various provisions with updates to certain academic standards as previously adopted by the Board or to align provisions with the academic standards updates that are proposed in this proposed rulemaking.

Per § 4.21(a), the primary level program ordinarily is completed by children who are approximately 6 years of age and, per § 4.21(c), the intermediate level program ordinarily is completed by children who are approximately 11 years of age. Section 4.22(a) establishes that the middle level serves children who are approximately 11 years of age to 14 years of age.

The Board is proposing to make clarifying amendments to §§ 4.21(e)(1) and (f)(1), 4.22(c)(1) and 4.23(c)(1) to align language that describes the focus of ELA instruction with the structure of the ELA standards in Appendix A-2. These ELA standards took effect in 2014, but parallel technical amendments to align these paragraphs to the organization of the ELA standards in Appendix A-2 were not adopted concurrent with the adoption of the standards. As such, the Board is seeking to make clarifying amendments for consistency with the existing ELA standards to which instruction is to be aligned.

The ELA standards for grades PreK—5 are categorized under five strands as follows: Foundational Skills, Reading Informational Text, Reading Literature, Writing and Speaking and Listening. As such, proposed amendments to § 4.21(e)(1) and (f)(1), that govern curriculum and planned instruction in ELA for elementary education at the primary and intermediate levels, make these paragraphs consistent with the strands in the related standards. Likewise, proposed amendments to §§ 4.22(c)(1) and 4.23(c)(1) align these requirements for ELA instruction at the middle and high school levels, respectively, to the strands under which the ELA standards for grades 6—12 are organized as follows: Reading Informational Text, Reading Literature, Writing and Speaking and Listening.

The Board further is proposing to add new paragraphs to align the requirements for curriculum and planned instruction at the elementary, middle and high school

levels with updates to the standards for CEW, as proposed in Appendix E-1. The proposed CEW standards are organized into grade bands that include standards for grades K—2, 3—5, 6—8 and 9—12, while the existing CEW standards include standards only for grades 3, 5, 8 and 11. The Board is proposing to add § 4.21(e)(8) to the requirements for planned instruction at the elementary level to reflect the addition of proposed CEW standards in the K—2 grade band.

The Board also is proposing to amend the requirements for middle level instruction in § 4.22(c)(9) to align with the proposed CEW standards' focus on career awareness, employability skills and work-based learning experiences. The Board is proposing to add § 4.23(c)(9) to the requirements for instruction at the high school level to reflect the expectations for instruction in the CEW standards in this section of the regulation.

The Board also is proposing to add references to personal finance to the requirements for curriculum and planned instruction at the elementary (primary and intermediate) level, middle level and high school level. The proposed addition of §§ 4.21(e)(9) and (f)(9), 4.22(c)(11) and 4.23(c)(10) will align the requirements for curriculum and planned instruction with the academic standards for Personal Finance that are proposed in this proposed rulemaking in Appendix F.

Proposed clarifying amendments to § 4.22(c)(5) and (10) and proposed amendments to § 4.23(c)(5) and (d)(4) align the requirements for planned instruction in technology and engineering at the middle and high school levels with the Pennsylvania Technology and Engineering Standards for grades 6—12 in Appendix B-1. These standards previously were adopted by the Board and published in a final-form rulemaking at 52 Pa.B. 3946 (July 16, 2022). However, amendments to align the related expectations for curriculum and planned instruction were not made at the time these standards were adopted. As such, the Board is seeking to make clarifying amendments to these paragraphs for consistency with the standards to which instruction is to be aligned.

Finally, the Board is proposing to amend the descriptions of curriculum and planned instruction at the middle level in § 4.22(c)(11) and at the high school level in § 4.23(c)(9). Amendments to these sections add a reference to the strand within the proposed FCS standards for Food Science and Nutrition. Proposed amendments to these sections also make a grammatical change to the title of the content area to refer to Family and Consumer Sciences as plural.

§ 4.51a. *Pennsylvania System of School Assessment*

The Pennsylvania System of School Assessment (PSSA) is part of the State assessment system that is designed to provide information on student and school performance and to determine the degree to which school programs enable students to attain proficiency of the academic standards in § 4.12. PSSAs are administered in ELA and Mathematics in grades 3—8 and in Science at grades 4 and 8. The Board is proposing to amend subsection (c) to shift the administration of the State's elementary-level science PSSA from grade 4 to grade 5 beginning in the 2025-2026 school year. This shift will align the assessment with the end-of-the-grade band in the academic standards to which the assessment will be aligned.

The Pennsylvania Integrated Standards for Science, Environment, Ecology, Technology and Engineering (Grades K—5) were adopted by the Board and published in a final-form rulemaking at 52 Pa.B. 3946 (July 16, 2022). These standards are published in Appendix B-1

and will take effect in the 2025-2026 school year. The standards are organized in the K—5 grade band with individual grade-level standards for Kindergarten—grade 5 in the domains of Earth and Space Sciences, Life Science, and Physical Science and with standards for the K—2 and 3—5 grade bands in the domains of Environmental Literacy and Sustainability and for Technology and Engineering. In contrast, the former standards for Science and Technology and Environment and Ecology, published in Appendix B, included elementary-level standards at grade 4 only that described what students should know and be able to do by the end of fourth grade. As such, the current elementary-level science PSSA is administered at grade 4, consistent with the grade level at which related standards were adopted.

The proposed shift to administering a Science PSSA at grade 5 will align the assessment with the structure of the new standards. The standards provide a set of grade band endpoints for each domain that describe the developing understanding that students should acquire by the ends of grade 2 and grade 5. Further, resources developed for educators to support the implementation of these standards also are structured to align with the grade bands as organized in the standards.

Affected Parties

This proposed rulemaking would affect public school districts, ACTSs, charter schools and cyber charter schools in this Commonwealth and their employees and students. This proposed rulemaking also will affect the Department and programs that prepare new teachers.

Cost and Paperwork Estimates

This proposed rulemaking will not impose any costs on students. Further, this proposed rulemaking is not anticipated to impose new costs on programs that train new educators. The proposed updated academic standards will act as a guide for reflecting the content of the standards in some courses that educator preparation programs deliver to individuals preparing to become teachers to ensure course content is aligned to current State academic standards. This does not impose a new cost for additional coursework. Rather, the impact on programs that train new teachers may shift the content of some existing courses. The Department will provide educator preparation program faculty with access to implementation supports it will make available to support school entities in implementing the updated CEW, ECON and FCS standards and the new standards for Personal Finance to support this work.

Further, the Board recognizes that school entities typically engage in curriculum review cycles every 5 years to 6 years. Thus, the Board anticipates that efforts to implement the updated and new standards in this proposed rulemaking will be reflected in school entities' existing budgetary practices for curriculum review and updates, therefore becoming part of a traditional cycle for updating school entity resources. As such, this proposed rulemaking does not add new costs inasmuch as it refines the focus of current instruction. Additionally, the Department will make numerous resources available at no cost to school entities to support implementation of the standards in this proposed rulemaking, including opportunities for educator professional development, model curriculum and other instructional resources and technical assistance.

Further, Act 35 of 2023 requires school entities to offer a half-credit course in Personal Financial Literacy aligned with personal finance standards in Chapter 4 and requires all students in this Commonwealth to complete the

course during grade 9, grade 10, grade 11 or grade 12. Act 35 of 2023 further directed the Board to review and, as necessary, update the existing CEW, ECON and FCS standards, envisioned the inclusion of standards for Personal Finance in Chapter 4 and directed the Department to update its resources and model curriculum related to economic education and personal financial literacy. As such, costs related to the standards updates proposed in this proposed rulemaking also are responsive to the requirements set forth by the General Assembly in Act 35 of 2023.

At the State level, the Board anticipates that this proposed rulemaking will cost approximately \$565,300 in total through fiscal year (FY) 2028-2029 to support implementation of this proposed rulemaking. These efforts will include reviewing and updating model curriculum and resources for educators on the Pennsylvania Standards Aligned System (SAS) to align with updates to the academic standards in Chapter 4 and providing technical supports for school entities. These resources will be updated as directed by the General Assembly in Act 35 of 2023. Per Act 35 of 2023, the Department must update these resources no later than the 2025-2026 school year and, in the future, within 1 year of any revisions to these standards.

To support implementation of the proposed updates to the CEW, ECON and FCS standards and the proposed new standards for Personal Finance, the Department will provide educators with access to State-developed resources through the SAS web site, professional learning and ongoing support and consultation. The Department will provide technical assistance through the expertise of its content advisors and additional professional learning through the Statewide System of Support. The Statewide System of Support is deployed through collaboration with the existing network of 29 regional Intermediate Units (I.U.). I.U.s function as regional educational service agencies that are organized geographically to provide supports to schools and to students across the entirety of this Commonwealth. Through its existing staff complement, content advisors within the Office of Elementary and Secondary Education provide support for standards implementation, including updating, aligning and designing resources for school entities and educators. The resources developed by the Department will be curated on the Department's SAS web site for voluntary use by school entities at no cost to school entities.

Below is an estimate of anticipated costs to the State on an annual basis through FY 2028-2029:

FY 2023-2024: There are no costs to State government associated with implementation of this proposed rulemaking during FY 2023-2024 as the Board anticipates that activity during the current fiscal year will involve consideration of proposed and final-form rulemakings through the procedures established in the Regulatory Review Act.

FY 2024-2025: The estimated cost to State government is \$145,300. Act 35 of 2023 directs the Department to update its existing resources and model curriculum related to economic education and personal financial literacy no later than the beginning of the 2025-2026 school year. To meet this time frame, work to develop implementation supports will be concentrated during FY 2024-2025. To support implementation of this proposed rulemaking, in FY 2024-2025 the Department anticipates investing \$65,000 in the Statewide System of Support, which provides grants to this Commonwealth's 29 I.U.s to provide educator professional development and technical assistance to school entities within their regions. The

Department will work with State and regional I.U. leads to design and execute a “train-the-trainer” model and funnel support, materials and resources to school entities at no cost to the school entities. Support for this investment is budgeted from Federal Title II-A professional development funds.

In FY 2024-2025, the Department also anticipates a \$42,500 cost to maintain a contract with The Pennsylvania State University for collecting and reporting data relative to financial literacy. The Department intends to expand and repurpose the existing contract to include consultation in the development of materials and resources aligned to the standards in this proposed rulemaking. Support for this investment is budgeted from the Teacher Professional Development line item allocated to the Department of Education in the General Fund.

Finally, in FY 2024-2025, the Department anticipates a \$21,000 cost to develop a professional development course for educators to support implementation of the standards in this proposed rulemaking and a \$16,800 cost to develop related resources that will be made available to educators on the SAS portal. The professional development course will be delivered online through the Department’s professional development center at no cost to educators. The course will be coupled with additional downloadable resources on SAS, such as a curriculum framework, instructional toolkit, lessons and assessments. Support for these investments is budgeted from State assessment funds.

FY 2025-2026: The estimated cost to State government is \$112,500, which represents a sustained effort to support State-level resources to assist school entities and educators with implementation of the academic standards in this proposed rulemaking. This includes a \$60,000 investment in the Statewide System of Support, a \$42,500 investment to maintain the Department’s contract with The Pennsylvania State University and a \$10,000 investment in the maintenance of SAS resources. These investments will support the delivery of professional learning and technical assistance aligned with the standards in this proposed rulemaking at no cost to educators.

FY 2026-2027: The estimated cost to State government is \$107,500, which represents a sustained effort to support State-level resources to assist school entities and educators with implementation of the academic standards in this proposed rulemaking. This includes a \$55,000 investment in the Statewide System of Support, a \$42,500 investment to maintain the Department’s contract with The Pennsylvania State University and a \$10,000 investment in the maintenance of SAS resources.

FY 2027-2028: The estimated cost to State government is \$102,500, which represents a sustained effort to support State-level resources to assist school entities and educators with implementation of the academic standards in this proposed rulemaking. This includes a \$50,000 investment in the Statewide System of Support, a \$42,500 investment to maintain the Department’s contract with The Pennsylvania State University and a \$10,000 investment in the maintenance of SAS resources.

FY 2028-2029: The estimated cost to State government is \$97,500, which represents a sustained effort to support State-level resources to assist school entities and educators with implementation of the academic standards in this proposed rulemaking. This includes a \$45,000 investment in the Statewide System of Support, a \$42,500 investment to maintain the Department’s contract with The Pennsylvania State University and a \$10,000 investment in the maintenance of SAS resources.

Effective Date

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

Sunset Date

The Board will review the effectiveness of Chapter 4 periodically in accordance with the Board’s policy and practice respecting all of its regulations and in accordance with the expectations for the periodic review of academic standards set forth in § 4.12(i). Thus, no sunset date is necessary, other than sunset dates previously described for certain provisions of Appendix C and Appendix D and the entirety of Appendix B and Appendix E.

Regulatory Review

Under section 5(a) of the Regulatory Review Act (71 P.S. § 745.5(a)), on May 21, 2024, the Board submitted a copy of this proposed rulemaking and a copy of a Regulatory Analysis Form to the Independent Regulatory Review Commission (IRRC) and to the chairperson of the Committee on Education of the Senate and the chairperson of the Committee on Education of the House of Representatives. A copy of this material is available to the public upon request.

Under section 5(g) of the Regulatory Review Act, IRRC may convey any comments, recommendations or objections to this proposed rulemaking within 30 days of the close of the public comment period. The comments, recommendations or objections must specify the regulatory review criteria in section 5.2 of the Regulatory Review Act (71 P.S. § 745.5b) which have not been met. The Regulatory Review Act specifies detailed procedures for review, prior to final publication of the rulemaking, by the Board, the General Assembly and the Governor.

Public Comments and Contact Person

Interested persons and individuals affiliated with small businesses are invited to submit written comments, questions, suggestions, recommendations, concerns or objections regarding this proposed rulemaking to Karen Molchanow, Executive Director, State Board of Education, 333 Market Street, Harrisburg, PA 17126, ra-stateboardofed@pa.gov. Comments must be submitted to the Board within 30 days of publication of this notice of proposed rulemaking in the *Pennsylvania Bulletin*.

Persons with disabilities needing an alternative means of providing public comment may make arrangements by calling the Board at (717) 787-3787 or through the Pennsylvania Hamilton Relay Service at (800) 654-5984 (TDD) or (800) 654-5988 (voice users) to discuss how the Board may accommodate their needs.

KAREN MOLCHANOW,
Executive Director

Fiscal Note: 6-354. No fiscal impact; recommends adoption.

Annex A

TITLE 22. EDUCATION

PART I. STATE BOARD OF EDUCATION

Subpart A. MISCELLANEOUS PROVISIONS

CHAPTER 4. ACADEMIC STANDARDS AND ASSESSMENT

(Editor’s Note: The academic standards appendices are proposed to be added to the table of contents following § 4.83, as follows.)

ACADEMIC STANDARDS

Appx.

Appendix A **[Reserved]**

Appendix A-1 [Reserved]**Appendix A-2** Pennsylvania Core Standards for English Language Arts and Mathematics**Appendix B** Academic Standards for Science and Technology and Environment and Ecology

(*Editor's Note:* Appendix B is proposed to expire July 1, 2025.)

Appendix B-1 Pennsylvania Integrated Standards for Science, Environment, Ecology, Technology and Engineering (Grades K–5), Pennsylvania Integrated Standards for Science, Environment and Ecology (Grades 6–12), and Pennsylvania Technology and Engineering Standards (Grades 6–12)

(*Editor's Note:* Appendix B-1 applies on and after July 1, 2025.)

Appendix C Academic Standards for Civics and Government and Economics and Geography and History and the Pennsylvania Core Standards for Reading in History and Social Studies and Pennsylvania Core Standards for Writing in History and Social Studies

(*Editor's Note:* The standards for Economics in Appendix C are proposed to expire July 1, 2026.)

Appendix C-1 Academic Standards for Economics

(*Editor's Note:* Appendix C-1 is proposed to apply on and after July 1, 2026.)

Appendix D Academic Standards for Arts and Humanities and Health, Safety and Physical Education and Family and Consumer Sciences

(*Editor's Note:* The standards for Family and Consumer Sciences in Appendix D are proposed to expire July 1, 2026.)

Appendix D-1 Academic Standards for Family and Consumer Sciences

(*Editor's Note:* Appendix D-1 is proposed to apply on and after July 1, 2026.)

Appendix E Academic Standards for Career Education and Work

(*Editor's Note:* Appendix E is proposed to expire July 1, 2026.)

Appendix E-1 Academic Standards for Career Education and Work

(*Editor's Note:* Appendix E-1 is proposed to apply on and after July 1, 2026.)

Appendix F Academic Standards for Personal Finance

(*Editor's Note:* Appendix F is proposed to apply on and after July 1, 2026.)

ACADEMIC STANDARDS AND PLANNING**§ 4.11. Purpose of public education.**

* * * * *

(g) Public schools provide instruction throughout the curriculum so that students may develop knowledge and skills in the following areas:

- (1) English language arts.
- (2) Mathematics.
- (3) Science and environment and ecology.
- (4) Technology and engineering.
- (5) Social studies (civics and government, geography, economics and history).
- (6) Arts and humanities.
- (7) Career education and work.
- (8) Health, safety and physical education.
- (9) Family and consumer [**science**] **sciences**.

(10) Personal finance.

(h) Public education provides planned instruction to enable students to attain academic standards under § 4.12. Planned instruction consists of at least the following elements:

(1) Objectives of a planned course, instructional unit or interdisciplinary studies to be achieved by all students.

(2) Content, including materials and activities, and estimated instructional time to be devoted to achieving the academic standards. Courses, instructional units or interdisciplinary studies of varying lengths of time may be taught.

(3) The relationship between the objectives of a planned course, instructional unit or interdisciplinary studies and academic standards specified under § 4.12 and any additional academic standards as determined by the school entity.

(4) Procedures for measurement of the objectives of a planned course, instructional unit or interdisciplinary studies.

§ 4.12. Academic standards.

(a) School entities may develop, expand or improve existing academic standards in the following content areas:

(1) The following apply:

(i) *Through June 30, 2025: Science and technology.* Study of the natural world and facts, principles, theories and laws in the areas of biology, chemistry, physics and earth sciences. Technology is the application of science to enable societal development, including food and fiber production, manufacturing, building, transportation and communication. Science and technology share the use of the senses, science processes, inquiry, investigation, analysis and problem solving strategies. The Pennsylvania Core Standards for Reading in Science and Technology and the Pennsylvania Core Standards for Writing in Science and Technology will be an appendix to the Commonwealth's academic standards for Science and Technology upon publication in the *Pennsylvania Bulletin*.

(ii) *Effective July 1, 2025: Pennsylvania Integrated Standards for Science, Environment, Ecology, Technology and Engineering (Grades K–5).* Guide the elementary-level study of the natural and human-made world through inquiry, problem-solving, critical thinking and authentic exploration. The integration of these disciplines in the elementary grades highlights the interconnectedness of scientific study and the integral relationship between humans and the environment.

(2) The following apply:

(i) *Through June 30, 2025: Environment and ecology.* Understanding the components of ecological systems and their interrelationships with social systems and technologies. These components incorporate the disciplines of resource management, agricultural diversity, government and the impact of human actions on natural systems. This interaction leads to the study of watersheds, threatened and endangered species, pest management and the development of laws and regulations.

(ii) *Effective July 1, 2025: Pennsylvania Integrated Standards for Science, Environment and Ecology (Grades 6–12).* Utilize a three-dimensional approach to guide the study of physical sciences, life sciences, and earth and space sciences at the middle and high school levels. The standards highlight the critical intersections of these disciplines with environmental science, ecology, and agriculture. These three-dimensional standards integrate dis-

ciplinary core ideas, practices in science and engineering, and crosscutting concepts into coherent learning progressions across the grade bands.

(iii) *Effective July 1, 2025: Pennsylvania Technology and Engineering Standards (Grades 6–12)*. Define the knowledge, skills, and abilities necessary for establishing literacy in technology and engineering literacy. Students develop a practical understanding of how humans are influenced by science and technology. Four core disciplinary standards describe practices in technology and engineering and include specific benchmarks for students in grade bands 6–8 and 9–12.

(2.1) Appendix B (relating to academic standards for science and technology and environment and ecology shall expire July 1, 2025. The academic standards under paragraphs (1)(ii) and (2)(ii) and (iii) shall be based on the provisions of Appendix B-1 (relating to Pennsylvania integrated standards for science, environment, ecology, technology and engineering (Grades K–5), Pennsylvania integrated standards for science, environment and ecology (Grades 6–12), and Pennsylvania technology and engineering standards (Grades 6–12)) on and after July 1, 2025.

(3) *Social studies*.

(i) *History*. Study of the record of human experience including important events; interactions of culture, race and ideas; the nature of prejudice; change and continuity in political systems; effects of technology; importance of global-international perspectives; and the integration of geography, economics and civics studies on major developments in the history of the Commonwealth, the United States and the world.

(ii) *Geography*. Study of relationships among people, places and environments, of geographic tools and methods, characteristics of place, concept of region, and physical processes.

(iii) *Civics and government*. Study of United States constitutional democracy, its values and principles, study of the Constitution of the Commonwealth and government, including the study of principles, operations and documents of government, the rights and responsibilities of citizenship, how governments work and international relations.

(iv) *Economics*. Study of how individuals and societies choose to use resources to produce, distribute and consume goods and services. Knowledge of how economies work, economic reasoning and basic economic concepts, economic decision making, economic systems, the Commonwealth and the United States economy and international trade. **The academic standards for Economics in Appendix C (relating to academic standards for civics and government and economics and geography and history and the Pennsylvania core standards for reading in history and social studies and Pennsylvania core standards for writing in history and social studies) shall expire July 1, 2026. The academic standards under this subparagraph shall be based on the provisions of Appendix C-1 (relating to academic standards for economics) on and after July 1, 2026.**

(v) *Appendix*. The Pennsylvania Core Standards for Reading in History and Social Studies and the Pennsylvania Core Standards in Writing for History and Social Studies will be an appendix to the Commonwealth's academic standards for History upon publication in the *Pennsylvania Bulletin*.

(4) *Arts and humanities*. Study of dance, theatre, music, visual arts, language and literature including forms of expression, historical and cultural context, critical and aesthetic judgment and production, performance or exhibition of work.

(5) *Career education and work*. Understanding career options in relationship to individual interests, aptitudes and skills including the relationship between changes in society, technology, government and economy and their effect on individuals and careers. Development of knowledge and skill in job-seeking and job-retaining skills and, for students completing career and technical education programs, the skills to succeed in the occupation for which they are prepared. **Appendix E (relating to academic standards for career education and work) shall expire July 1, 2026. The academic standards under this paragraph shall be based on the provisions of Appendix E-1 (relating to academic standards for career education and work) on and after July 1, 2026.**

(6) *Health, safety and physical education*. Study of concepts and skills which affect personal, family and community health and safety, nutrition, physical fitness, movement concepts and strategies, safety in physical activity settings, and leadership and cooperation in physical activities.

(7) *Family and consumer [science] sciences*. Understanding the role of consumers as a foundation for managing available resources to provide for personal and family needs and to provide basic knowledge of child health and child care skills. **The academic standards for Family and Consumer Sciences in Appendix D (relating to academic standards for arts and humanities and health, safety and physical education and family and consumer sciences) shall expire July 1, 2026. The academic standards under this paragraph shall be based on the provisions of Appendix D-1 (relating to academic standards for family and consumer sciences) on and after July 1, 2026.**

(8) **[Through June 30, 2013: Reading, writing, speaking and listening.] Pennsylvania Core Standards for English Language Arts. The English Language Arts standards describe what students should know and be able to do with the English language as follows:**

(i) *Reading*. The application of phonemic awareness, phonics and word study, vocabulary, fluency and text comprehension in reading critically across subject areas; the interpretation and analysis of literary expression with analysis of the origins and structures of the English language and learning how to search a variety of texts to conduct research.

(ii) *Writing*. Narrative, informational and persuasive formal writing for an audience, including spelling and editing skills; and informal writing to capture and organize information for individual use.

(iii) *Speaking and listening*. Participation in conversation and formal speaking presentations.

(iv) **[English Language Arts. Upon publication in the Pennsylvania Bulletin, following full implementation of a transition plan to be developed by the Department in collaboration with education stakeholders, academic] Academic standards [will be] are based on the Pennsylvania Core Standards for Eng-**

lish Language Arts in Appendix A-2 (relating to Pennsylvania core standards for English language arts and mathematics).

(9) **Pennsylvania Core Standards for Mathematics.** The understanding of fundamental ideas and the development of proficient mathematical skills in numbers, computation, measurement, statistics and data analysis, probability and predictions, algebra and functions, geometry, trigonometry and concepts of calculus. Using this content, students will learn to think, reason and communicate mathematically. Students will learn to model real-world situations by creating appropriate representations of numerical quantities and plan and implement problem-solving strategies to answer the question in the context of the situation. [Upon publication in the Pennsylvania Bulletin, following implementation of a transition plan to be developed by the Department in collaboration with education stakeholders, academic] Academic standards [will be] are based on the Pennsylvania Core Standards for Mathematics in Appendix A-2.

(10) **Personal finance.** Understanding the process of planning and managing personal financial activities such as income generation, spending, saving, investing and risk protection. Development of knowledge of personal finance foundations, income, spending, saving and investing, risk and insurance, and credit. Personal finance is also known as personal financial literacy and financial literacy. On and after July 1, 2026, the academic standards under this paragraph shall be based on the provisions of Appendix F (relating to academic standards for personal finance).

(b) In designing educational programs, school entities shall provide for the attainment of the academic standards under subsections (a) and (c) and any additional academic standards as determined by the school entity. Attaining the academic standards in this section requires students to demonstrate the acquisition and application of knowledge.

* * * * *

STRATEGIC PLANS

§ 4.13. Strategic plans.

(a) [Upon expiration of its current strategic planning phase, each] Each school entity shall submit to the Secretary for approval a professional education plan every 3 years as required under § 49.17(a) (relating to continuing professional education). A school entity shall make its professional education plan available for public inspection and comment for a minimum of 28 days prior to approval of the plan by the school entity's governing board and submission of the plan to the Secretary. **A school entity shall post the plan approved by its governing board on its publicly accessible web site.**

(b) [Upon expiration of its current strategic planning phase, each] Each school entity shall submit to the Department for approval an induction plan every 6 years as required under § 49.16(a) (relating to approval of induction plans). A school entity shall make its induction plan available for public inspection and comment for a minimum of 28 days prior to approval of the plan by the school entity's governing board and submission of the plan to the Department. **A school entity shall post the plan approved by its governing board on its publicly accessible web site.**

(c) [Upon expiration of its current strategic planning phase, each] Each school entity shall develop and implement a comprehensive and integrated K—12 program of student services based on the needs of its students every 6 years as provided in § 12.41(a) (relating to student services). A school entity shall make its student services plan available for public inspection and comment for a minimum of 28 days prior to approval of the plan by the school entity's governing board. **A school entity shall post the plan approved by its governing board on its publicly accessible web site.**

(d) [Upon expiration of its current strategic planning phase, each] Each school district shall develop, submit to the Department for approval and implement a special education plan every 3 years as required under § 14.104 (relating to special education plans). A school district shall make its special education plan available for public inspection and comment for a minimum of 28 days prior to approval of the plan by the school district's board of directors and submission of the plan to the Department. **A school district shall post the plan approved by its governing board on its publicly accessible web site.**

(e) [Upon expiration of its current strategic planning phase, each] Each school district shall develop and implement a gifted education plan every 6 years as required under § 16.4 (relating to strategic plans). A school district shall make its gifted education plan available for public inspection and comment for a minimum of 28 days prior to approval of the plan by the school district's board of directors. **A school district shall post the plan approved by its governing board on its publicly accessible web site.**

CURRICULUM AND INSTRUCTION

§ 4.21. Elementary education: primary and intermediate levels.

* * * * *

(e) Planned instruction aligned with academic standards in the following areas shall be provided to every student every year in the primary program. Planned instruction may be provided as a separate course or other interdisciplinary activity.

(1) [Language arts, integrating reading, writing, phonics, spelling, listening, speaking, literature and grammar] **English Language Arts, integrating foundational skills, reading informational text, reading literature, writing, speaking and listening,** and information management, including library skills.

(2) Mathematics, including problem-solving and computation skills.

(3) Science, environment and ecology, involving active learning experiences for students.

(4) Technology and engineering education, involving active learning experiences for students.

(5) Social studies (civics and government, economics, geography and history).

(6) Health, safety and physical education, including instruction in concepts and skills which affect personal, family and community health and safety, nutrition, the prevention of alcohol, chemical and tobacco abuse, knowledge and practice of lifetime physical activities, personal fitness, basic movement skills and concepts, motor skill

development, principles and strategies of movement, and safety practices in physical activity settings.

(7) The arts, including active learning experiences in art, music, dance and theatre.

(8) Career education, including exposure to various social-emotional learning and employability skills, career awareness and learning experiences and the educational preparation necessary to achieve those experiences.

(9) Personal finance.

(f) Planned instruction in the following areas shall be provided to every student every year in the intermediate level program. Planned instruction may be provided as a separate course or as an instructional unit within another course or other interdisciplinary instructional activity:

(1) **[Language arts, integrating reading, writing, spelling, listening, speaking, literature and grammar.] English Language Arts, integrating foundational skills, reading informational text, reading literature, writing, and speaking and listening.**

(2) Mathematics, including problem-solving and computation skills.

(3) Science, environment and ecology, including instruction about agriculture and agricultural science.

(4) Technology and engineering.

(5) Social studies (civics and government, economics, geography and history).

(6) The arts, including art, music, dance and theatre.

(7) Understanding and use of library and other information sources.

(8) Health, safety and physical education, including instruction in concepts and skills which affect personal, family and community health and safety, nutrition, the prevention of alcohol, chemical and tobacco abuse, knowledge and practice of lifetime physical activities, personal fitness, basic movement skills and concepts, motor skill development, principles and strategies of movement and safety practices in physical activity settings.

(9) Personal finance.

(g) Planned instruction aligned with academic standards in the following areas shall be provided to every student at least once by the end of elementary school. Planned instruction may be provided as a separate course or as an instructional unit within another course or other interdisciplinary instructional activity. See section 1511 of the School Code (24 P.S. § 15-1511).

- (1) History of the United States.
- (2) History of the Commonwealth.
- (3) Geography.
- (4) Civics.

* * * * *

§ 4.22. Middle level education.

(a) The middle level planned instruction aligned with academic standards serves children who are approximately 11—14 years of age. School entities may modify the grouping of students based upon student needs identified by the school entity.

(b) Curriculum and instruction in the middle level program must be standards-based and focus on mastery of academic subjects, the development of critical and

creative thinking, information literacy, good health and encourage active participation in the school and community.

(c) Planned instruction aligned with academic standards in the following areas shall be provided to every student in the middle level program. Planned instruction may be provided as a separate course or as an instructional unit within a course or other interdisciplinary instructional activity:

(1) **[Language arts, integrating reading, writing, listening, speaking, literature and grammar] English Language Arts, integrating reading informational text, reading literature, writing, and speaking and listening.**

(2) Mathematics, including mathematical reasoning, algebra and problem-solving.

(3) Science, environment and ecology, which involves active learning experiences and which may include laboratory experiments, instruction in agriculture and agricultural science, and political and economic aspects of ecology.

(4) Social studies (civics and government, economics, geography and history, including the history and cultures of the United States, the Commonwealth, and the world).

(5) **[Technology and engineering] [Reserved].**

(6) Information skills, including access to traditional and electronic information sources, computer use and research.

(7) Health, safety and physical education, including instruction in concepts and skills which affect personal, family and community health and safety, nutrition, physical fitness, movement concepts, motor skill development, safety in physical activity settings, and the prevention of alcohol, chemical and tobacco abuse.

(8) The arts, including art, music, dance and theatre.

(9) Career education, including exposure to various **[career options and the educational preparation necessary to achieve those options] employability skills, career awareness and work-based learning experiences and the educational preparation necessary to achieve those experiences.**

(10) Technology **[education, emphasizing practical application of academic skills and problem-solving experiences facilitated by technology] and engineering, focusing on the interactions among technology, engineering, society, the environment, and other disciplines, with a goal of developing students that can create, utilize, and assess current and emerging technologies.**

(11) Family and consumer **[science] sciences**, including principles of **food science and nutrition**, consumer behavior, and basic knowledge of child health and child care skills.

(12) Personal finance.

(d) This section does not preclude the teaching of other planned instruction designed to achieve a school entity's academic standards.

(e) School entities shall determine the most appropriate way to operate their middle level programs to achieve the purposes under subsection (b) and any additional academic standards as determined by the school entity.

§ 4.23. High school education.

(a) Instruction in the high school program must focus on the development of abilities needed to succeed in work and advanced education through planned instruction.

(b) Curriculum and instruction in the high school must be standards-based and provide all students opportunities to develop the skills of analysis, synthesis, evaluation and problem-solving and information literacy.

(c) Planned instruction aligned with academic standards in the following areas shall be provided to every student in the high school program. Planned instruction may be provided as a separate course or as an instructional unit within a course or other interdisciplinary instructional activity:

(1) [**Language arts, integrating reading, writing, listening, speaking, literature and grammar**] **English Language Arts, integrating reading informational text, reading literature, writing, and speaking and listening.**

(2) Mathematics, including problem-solving, mathematical reasoning, algebra, geometry and concepts of calculus.

(3) Science, environment and ecology, including scientific, social, political and economic aspects of ecology, participation in hands-on experiments and at least one laboratory science chosen from life sciences, earth and space sciences, chemical sciences, physical sciences and agricultural sciences.

(4) Social studies (civics and government, economics, geography and history, including the history and cultures of the United States, the Commonwealth and the world).

(5) [**Technology and engineering**] **[Reserved].**

(6) The arts, including art, music, dance, theatre and humanities.

(7) Use of applications of microcomputers and software, including word processing, database, spreadsheets and telecommunications; and information skills, including access to traditional and electronic information sources, computer use and research.

(8) Health, safety and physical education, including instruction in concepts and skills which affect personal, family and community health and safety, nutrition, physical fitness, movement concepts, motor skill development, safety in physical activity settings, and the prevention of alcohol, chemical and tobacco abuse.

(9) Family and consumer [**science**] **sciences**, including principles of **food science and nutrition**, consumer behavior, and basic knowledge of child health, child care and early literacy skill development.

(10) **Career education, including exposure to various employability skills, career awareness and work-based learning experiences, and the educational preparation necessary to achieve those experiences.**

(11) **Personal finance.**

(d) The following planned instruction shall be made available to every student in the high school program:

(1) Career and technical education under §§ 4.3 and 4.31—4.35.

(2) Business education, including courses to assist students in developing business and information technology skills.

(3) World languages under § 4.25 (relating to languages).

(4) **Technology [education, incorporating technological problem-solving and the impacts of technology on individuals and society] and engineering, focusing on the interactions among technology, engineering, society, the environment and other disciplines, with a goal of developing individuals that can create, utilize and assess current and emerging technologies.**

(e) College-level advanced placement courses may be offered as planned instruction in the high school curriculum.

(f) This section does not preclude the teaching of other planned instruction designed to achieve a school district's, including a charter school's, academic standards.

(g) School districts, including a charter school, shall determine the most appropriate way to operate their high school programs to achieve the purposes under subsection (a) and any additional academic standards as determined by the school entity.

ASSESSMENT

§ 4.51a. Pennsylvania System of School Assessment.

(a) All PSSA assessments administered in English Language Arts, Mathematics, and Science, Environment, Ecology, Technology and Engineering will be standards-based and criterion referenced and include essay or open-ended response items in addition to other item formats. The proportion of type of items will vary by grade level. The criteria for judging performance on PSSA assessments are as follows:

(1) Performance on PSSA English Language Arts assessments shall be demonstrated by students' responses to comprehension questions about age-appropriate reading passages, by their written responses to in-depth comprehension questions about the passages and by the quality of their written compositions on a variety of topics and modes of writing.

(2) Performance on PSSA mathematics assessments shall be demonstrated by students' responses to questions about grade-appropriate content and by the quality of their responses to questions that require a written solution to a problem.

(3) Performance on PSSA science assessments shall be demonstrated by students' responses to grade appropriate content and by the quality of their responses to questions that demonstrate knowledge of each category of the standards for science, environment, ecology, technology and engineering.

(4) Performance levels shall be advanced, proficient, basic and below basic. In consultation with educators, students, parents and citizens, the Department will develop and recommend to the Board for its approval specific criteria for advanced, proficient, basic and below basic levels of performance.

(b) The Department will develop or cause to be developed PSSA assessments based on Pennsylvania Core Standards in Mathematics and English Language Arts under § 4.12 (relating to academic standards) and contained in Appendix A-2. Through June 30, 2025, the Department will develop or cause to be developed PSSA assessments based on academic standards in Science, Technology, Environment and Ecology under § 4.12 and contained in Appendix B. Beginning July 1, 2025, the Department will develop or cause to be developed PSSA

assessments based on academic standards in Science, Environment, Ecology, Technology and Engineering under § 4.12 and contained in Appendix B-1. In developing PSSA assessments, the Department will consult with educators, students, parents and citizens regarding the specific methods of assessment.

(c) The PSSA assessments shall be administered annually and include assessments of the State academic standards in Mathematics and English Language Arts at grades 3 through 8, and in Science, Environment, Ecology, Technology and Engineering at grades 4 and 8. **Beginning in the 2025-2026 school year, the PSSA that assesses State academic standards in Science, Environment, Ecology, Technology and Engineering shall be administered at grade 5 and grade 8 and**

the PSSA assessment of these standards administered at grade 4 shall be discontinued.

(Editor's Note: Appendix B, which appears in 22 Pa. Code pages 4-112.36—4-201, serial pages (371216) to (371218), (286565) to (286596), (371219) to (371224), (286599) to (286602), (371225) to (371232), (286605) to (286652) and (410373), is proposed to expire July 1, 2025, and the Pennsylvania Integrated Standards for Science, Environment, Ecology, Technology and Engineering (Grades K—5), the Pennsylvania Integrated Standards for Science, Environment and Ecology (Grades 6—12), and the Pennsylvania Technology and Engineering Standards (Grades 6—12) in Appendix B-1 are proposed to apply on and after that date.)

APPENDIX B

Academic Standards for Science and Technology and Environment and Ecology

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(Editor’s Note: Appendix B, which appears in 22 Pa. Code pages 4-112.36—4-201, serial pages (371216) to (371218), (286565) to (286596), (371219) to (371224), (286599) to (286602), (371225) to (371232), (286605) to (286652) and (410373), is proposed to expire July 1, 2025, and the Pennsylvania Integrated Standards for Science, Environment, Ecology, Technology and Engineering (Grades K—5), the Pennsylvania Integrated Standards for Science, Environment and Ecology (Grades 6—12), and the Pennsylvania Technology and Engineering Standards (Grades 6—12) in Appendix B-1 applies on and after that date.)

APPENDIX B-1

**Pennsylvania Integrated Standards for Science, Environment, Ecology, Technology and Engineering (Grades K—5)^{1, 2},
Pennsylvania Integrated Standards for Science, Environment and Ecology (Grades 6—12), and Pennsylvania
 Technology and Engineering Standards (Grades 6—12)**

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(Editor’s Note: The academic standards for Economics in Appendix C, which appear in 22 Pa. Code pages 4-272—4-248, serial pages (294939) to (294960), are proposed to expire July 1, 2026, and the academic standards for Economics in proposed Appendix C-1 are proposed to apply on and after that date.)

APPENDIX C

Academic Standards for Civics and [**Governmentand**] **Government and** Economics and Geography and History
 Academic Standards for History

**Academic Standards for Civics and Government and Geography and History and the Pennsylvania Core
 Standards for Reading in History and Social Studies and Pennsylvania Core Standards for Writing in
 History and Social Studies**

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APPENDIX C-1

Academic Standards for Economics

Grades K—12

Overview

Economics is concerned with the behavior of individuals and institutions engaged in the production, exchange, and consumption of goods and services. For students to succeed in the workforce, knowledge of how the world works is critical. Every student should know the characteristics of economic systems, how markets establish prices, how scarcity and choice affect the allocation of resources, the global nature of economic interdependence, and how work and earnings impact productivity. These standards are intended to provide direction in learning how economic activity impacts everyday life through the areas of fundamentals of economics, microeconomics, macroeconomics, and money and financial institutions. The standards are grade banded and reflect the increasing complexity and sophistication that students are expected to achieve as they progress through school.

<i>Number</i>	<i>Areas</i>
6.1	Fundamentals of Economics
6.2	Microeconomics
6.3	Macroeconomics
6.4	Money and Economic Institutions

Grades 9 to 12

Grades 6 to 8

Grades 3 to 5

Kindergarten to Grade 2

1. Fundamentals of Economics

Economic systems	Intentionally blank	Intentionally blank	6.1.6-8.A Describe and identify the characteristics of traditional, command, and market systems.	6.1.9-12.A Evaluate the strengths and weaknesses of traditional, command, and market economies.
Fundamental economic questions	6.1.K-2.B Explain how limited resources require us to make choices and share when we cannot have everything we want.	6.1.3-5.B Identify the three basic questions that all economic systems attempt to answer: <ul style="list-style-type: none"> • What goods and services should be produced? • How will goods and services be produced? • Who will consume goods and services? 	6.1.6-8.B Explain how traditional, command, and market economies answer the basic economic questions: <ul style="list-style-type: none"> • What goods and services should be produced? • How will goods and services be produced? • Who will consume goods and services? 	6.1.9-12.B Analyze the impact of traditional, command, and market economies on the United States economy.
Scarcity	Intentionally blank	6.1.3-5.C Define scarcity and how it impacts personal, household, and community decision-making.	6.1.6-8.C Describe ways to deal with scarcity within various communities.	6.1.9-12.C Analyze actions taken as a result of scarcity in decision-making.
Economic choice	Intentionally blank	Intentionally blank	6.1.6-8.D Explain that scarcity is the condition of not having all the goods and services wanted because resources are limited.	6.1.9-12.D Analyze how choices made by individuals, firms, or government officials are constrained by available resources.

Substrand	Kindergarten to Grade 2	Grades 3 to 5	Grades 6 to 8	Grades 9 to 12
Economic resources	Intentionally blank	Intentionally blank	6.1.6-8.E Explain how resources can be used in different ways to produce different goods and services.	6.1.9-12.E Evaluate the allocation of resources used to produce goods and services.
Marginal analysis	Intentionally blank	6.1.3-5.F Explain the costs and benefits of an economic decision.	6.1.6-8.F Explain how the additional cost and additional benefit of a choice affects decision-making (marginal analysis).	6.1.9-12.F Evaluate regional, national, or international economic decisions using marginal analysis.
Opportunity cost	Intentionally blank	6.1.3-5.G Define opportunity cost and describe the opportunity cost of a personal choice.	6.1.6-8.G Explain the opportunity cost of a public choice from different perspectives.	6.1.9-12.G Analyze the opportunity cost of decisions by individuals, businesses, communities, and nations.
Incentives	Intentionally blank	6.1.3-5.H Explain how negative and positive incentives affect choices.	6.1.6-8.H Explain how incentives affect the behaviors of workers, savers, consumers, and producers.	6.1.9-12.H Evaluate in terms of marginal analysis how incentives influence decisions of consumers, producers, and policymakers.
Specialization	6.1.K-2.I Describe why people divide tasks to make work easier.	6.1.3-5.I Define specialization and identify examples of interdependence.	6.1.6-8.I Describe how specialization may lead to increased production and consumption.	6.1.9-12.I Analyze the relationship between specialization and the standard of living.
Trade	6.1.K-2.J Explain why people trade.	6.1.3-5.J Explain why countries trade.	6.1.6-8.J Explain how trade may improve a society's standard of living.	6.1.9-12.J Analyze the relationships between trade, competition, and productivity.
Foreign trade	Intentionally blank	6.1.3-5.K Identify and define imports, exports, and international trade.	6.1.6-8.K Explain why governments sometimes subsidize or restrict trade (i.e., tariffs or quotas).	6.1.9-12.K Evaluate how a country might benefit by lowering or removing trade barriers.

Substrand	Kindergarten to Grade 2	Grades 3 to 5	Grades 6 to 8	Grades 9 to 12
Global interdependence	Intentionally blank	Intentionally blank	6.1.6-8.L Explain how specialization and trade lead to interdependence.	6.1.9-12.L Analyze how consumers and producers participate in the global production and consumption of goods or services.
Comparative advantage	Intentionally blank	6.1.3-5.M Explain why some products are produced locally while others are not.	6.1.6-8.M Explain how opportunity costs influence where goods and services are produced locally and regionally.	6.1.9-12.M Explain that individuals and nations have a comparative advantage in the production of goods or services if they can produce a product at a lower opportunity cost than other individuals or nations.
2. Microeconomics				
Circular flow	6.2.K-2.A Define and identify goods and services.	6.2.3-5.A Describe how consumers purchase goods and services from producers.	6.2.6-8.A Explain the flow of goods, services, and resources in an economy.	6.2.9-12.A Analyze the circular flow of products, resources, and money in a mixed economy.
Competition	Intentionally blank	6.2.3-5.B Identify ways local businesses compete for customers.	6.2.6-8.B Describe the advantages and disadvantages of competition for consumers in markets.	6.2.9-12.B Define noncompetitive markets and explain how consumers and producers operate in those markets.
Monopolies	Intentionally blank	6.2.3-5.C Define and provide an example of a monopoly.	6.2.6-8.C Identify historical examples of monopolies in the United States.	6.2.9-12.C Evaluate the economic roles of governments in promoting free markets (e.g., price controls, antitrust actions).
Supply and demand	Intentionally blank	6.2.3-5.D Explain how markets bring together buyers and sellers.	6.2.6-8.D Explain how supply and demand affect the prices of goods and services.	6.2.9-12.D Predict how changes in supply and demand affect equilibrium price and quantity sold.

	Kindergarten to Grade 2	Grades 3 to 5	Grades 6 to 8	Grades 9 to 12
Economic patterns	Intentionally blank	6.2.3-5.E Explain how the location of resources and transportation have affected Pennsylvania economic patterns.	6.2.6-8.E Explain how the location of resources, transportation, and technology have affected United States economic patterns.	6.2.9-12.E Explain how the location of resources, transportation, and technology have affected international economic patterns.
Wages	Intentionally blank	Intentionally blank	6.2.6-8.F Define wages and explain how wages are determined by the supply of and demand for workers.	6.2.9-12.F Analyze the factors influencing wages, including demand for goods and services produced, productivity of labor, labor unions, and education and skills.
Productivity	Intentionally blank	Intentionally blank	6.2.6-8.G Describe how productivity is measured and identify ways in which a person can improve his or her productivity.	6.2.9-12.G Evaluate how changes in education, incentives, technology, and capital investment alter productivity.
Types of businesses	6.2.K-2.H Identify businesses in your community.	6.2.3-5.H Describe businesses that provide goods and businesses that provide services.	6.2.6-8.H Identify and explain the characteristics of the three types of businesses: sole proprietorship, partnership, and corporation.	6.2.9-12.H Analyze the costs and benefits of organizing a business as a sole proprietorship, partnership, or corporation.
Profit and loss	Intentionally blank	6.2.3-5.I Define profit and loss.	6.2.6-8.I Explain how profits and losses serve as incentives.	6.2.9-12.I Analyze the role of profits and losses in the allocation of resources in a market economy.
Entrepreneurship	6.2.K-2.J Define entrepreneurship and identify entrepreneurs in the local community.	6.2.3-5.J Identify historical and contemporary entrepreneurs in Pennsylvania.	6.2.6-8.J Investigate leading entrepreneurs in Pennsylvania and the United States and describe the characteristics of successful entrepreneurship (including risks and rewards).	6.2.9-12.J Evaluate the impact of entrepreneurs on the economy.

Grades 9 to 12

Grades 6 to 8

Grades 3 to 5

Kindergarten to Grade 2

3. Macroeconomics

Economic indicators	Intentionally blank	6.3-3-5.A Define unemployment and inflation.	6.3-6-8.A Define macroeconomic indicators such as the Consumer Price Index (CPI), gross domestic product (GDP), and unemployment rate.	6.3-9-12.A Evaluate the relationship between economic growth and changes in macroeconomic indicators such as the Consumer Price Index (CPI), gross domestic product (GDP), and unemployment rate.
Business cycles	Intentionally blank	Intentionally blank	6.3-6-8.B Describe historical examples of expansion, recession, and depression in the United States.	6.3-9-12.B Compare current and historical examples of expansion, recession, and depression.
Fiscal policy	Intentionally blank	Intentionally blank	6.3-6-8.C Define fiscal policies available to the federal government.	6.3-9-12.C Identify fiscal and monetary policies that address inflation, unemployment, or economic growth.
Federal budget	Intentionally blank	Intentionally blank	Intentionally blank	6.3-9-12.D Explain how deficit spending by the federal government increases the national debt and the impact it has on the economy.
Taxation	6.3-K-2.E Define a tax and identify examples.	6.3-3-5.E Explain how taxes affect the price of goods and services.	6.3-6-8.E Define the three different types of tax structures (progressive, proportional, and regressive) and different tax bases, such as income, wealth, property, etc.	6.3-9-12.E Evaluate the impact of different tax structures (progressive, proportional, and regressive) and different tax bases (income, wealth, property, etc.) on households and firms.

	Kindergarten to Grade 2	Grades 3 to 5	Grades 6 to 8	Grades 9 to 12
Tax policy	Intentionally blank	6.3.3-5.F Explain how the government pays for goods and services through taxes.	6.3.6-8.F Compare the taxation policies of local, state, and national government levels in the economy.	6.3.9-12.F Analyze the social, political, and economic consequences of changes in tax policy.
Economic role of government	Intentionally blank	Intentionally blank	6.3.6-8.G Analyze the economic roles of governments in market economies in promoting growth and stability and providing legal frameworks (laws and regulations).	6.3.9-12.G Evaluate the economic roles of governments in a globalized economy (e.g., trade policy, income inequality, distribution of wealth).
Externalities	Intentionally blank	6.3.3-5.H Identify unintended consequences of market activities (e.g., pollution, noise, traffic).	6.3.6-8.H Identify policies governments can use to address unintended consequences (i.e., externalities) of market activities.	6.3.9-12.H Evaluate policies governments can use to address unintended consequences (i.e., externalities) of market activities.
Public goods and services	6.3.K-2.I Define public goods and services provided by the government.	6.3.3-5.I Distinguish between public and private goods and services.	6.3.6-8.I Explain why the government provides public goods and services (e.g., education, infrastructure, national defense, safety and health).	6.3.9-12.I Evaluate government decisions in prioritizing public goods and services.
4. Money and Economic Institutions				
Money	Intentionally blank	6.4.3-5.A Explain the advantages of using money instead of bartering.	6.4.6-8.A Identify and explain various forms of payments used in markets.	6.4.9-12.A Explain how the Federal Reserve defines money.
Exchange rates	Intentionally blank	6.4.3-5.B Explain why most countries create their own form of money.	6.4.6-8.B Explain why you have to exchange currencies to purchase goods when you visit another country.	6.4.9-12.B Explain how changes in exchange rates affect the relative prices of foreign goods and services.

Substrand	Kindergarten to Grade 2	Grades 3 to 5	Grades 6 to 8	Grades 9 to 12
Monetary policy	Intentionally blank	Intentionally blank	Intentionally blank	6.4.9-12.C Explain how changes in the money supply and monetary policy affect interest rates throughout the economy.
Banking	6.4.K-2.D Define saving and explain why people use banks to save.	6.4.3-5.D Explain how banks bring savers and borrowers together.	6.4.6-8.D Explain how banks and other financial institutions channel funds from savers to borrowers and investors.	6.4.9-12.D Evaluate the role of banks in promoting economic growth in the economy.
Federal reserve system	Intentionally blank	Intentionally blank	6.4.6-8.E Explain the history, structure, and purposes of the Federal Reserve System.	6.4.9-12.E Analyze Federal Reserve policies designed to raise or lower interest rates.
Nongovernmental organizations	Intentionally blank	Intentionally blank	6.4.6-8.F Define nongovernmental economic institutions (e.g., labor unions, non-profits, financial markets).	6.4.9-12.F Evaluate the role of nongovernmental economic institutions (e.g., labor unions, non-profits, financial markets).
Interest rate policy	Intentionally blank	Intentionally blank	6.4.6-8.G Explain the impact of higher or lower interest rates for savers, borrowers, consumers, and producers.	6.4.9-12.G Evaluate benefits and costs of changes in interest rates for individuals and society.

(Editor’s Note: The academic standards for Family and Consumer Sciences in Appendix D, which appear in 22 Pa. Code pages 4-342—4-355, serial pages (295054) to (295066) and (320291), are proposed to expire July 1, 2026, and the academic standards for Family and Consumer Sciences in proposed Appendix D-1 are proposed to apply on and after that date.)

APPENDIX D

Academic Standards for Arts and Humanities and Health, Safety and Physical Education and Family and Consumer Sciences

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(Editor’s Note: The academic standards for Family and Consumer Sciences in Appendix D, which appear in 22 Pa. Code pages 4-342—4-355, serial pages (295054) to (295066) and (320291), are proposed to expire July 1, 2026, and the academic standards for Family and Consumer Sciences in proposed Appendix D-1 are proposed to apply on and after that date.)

APPENDIX D-1

Academic Standards for Family and Consumer Sciences

Grades K—12

Overview

This document includes Academic Standards for Family and Consumer Sciences at four grade levels (K—2, 3—5, 6—8, 9—12), with the emphasis on what students will know and be able to do in the following areas:

<i>Number</i>	<i>Areas</i>
11.1	Food Science and Nutrition
11.2	Resource Management
11.3	Human Development, Family, & Relationships
11.4	Education and Early Childhood Development
11.5	Personal Finance and Consumer Skills
11.6	Career, Community, and Family Connections

The Academic Standards for Family and Consumer Sciences emphasize the crucial role of families in shaping individual and community well-being. This educational approach underscores the shared responsibility of meeting diverse needs, promoting lifelong learning, and contributing to the community. The standards aim to prepare students not just for personal, family, and work responsibilities but also to empower them for the challenges of living and working in a diverse, global society, fostering holistic individual development and community advancement.

Family and Consumer Sciences (FCS) is a field of study focused on the science and art of living and working well in our complex world, encompassing family and consumer sciences, career exploration, community and family connections, consumer and family resource management, parenting and child development, food, nutrition, wellness, and family and interpersonal relationships.

Substrand	Kindergarten to Grade 2	Grades 3 to 5	Grades 6 to 8	Grades 9 to 12
1. Food Science and Nutrition				
Food supply	<p>11.1.K-2.A Identify the production steps that food travels from the farm to the consumer.</p>	<p>11.1.3-5.A Demonstrate knowledge of techniques used to evaluate food in various forms.</p>	<p>11.1.6-8.A Evaluate factors that affect food safety from production through consumption.</p>	<p>11.1.9-12.A Predict factors that affect food safety and security from production through consumption.</p>
Safety and sanitation	<p>11.1.K-2.B Describe personal hygiene techniques in food handling.</p>	<p>11.1.3-5.B Describe safe food-handling techniques.</p>	<p>11.1.6-8.B Demonstrate food safety and sanitation procedures.</p>	<p>11.1.9-12.B Evaluate the role of government agencies in safeguarding our food supply</p>
Nutrition analysis	<p>11.1.K-2.C Explain the importance of eating a varied diet in maintaining health.</p>	<p>11.1.3-5.C Establish factors that affect food choices.</p>	<p>11.1.6-8.C Analyze factors that influence nutrition and wellness practices across the life span.</p>	<p>11.1.9-12.C Model the ability to acquire, handle, and use foods to meet nutrition and wellness needs of individuals and families across the life span.</p>
Meal management	<p>Intentionally blank</p>	<p>11.1.3-5.D Identify components of a well-balanced meal.</p>	<p>11.1.6-8.D Hypothesize the effectiveness of the use of meal management principles.</p>	<p>11.1.9-12.D Evaluate the application of nutrition and meal-planning principles in the selection, planning, preparation, and serving of meals that meet the specific nutritional needs of individuals across their life span.</p>

	Kindergarten to Grade 2	Grades 3 to 5	Grades 6 to 8	Grades 9 to 12
Culinary math & measurement	11.1.K-2.E Name and classify culinary measurement tools.	11.1.3-5.E Demonstrate measurement skills used in food preparation.	11.1.6-8.E Apply measurement and math skills in following recipe directions.	11.1.9-12.E Apply principles of measurement, portion control, conversions, food cost analysis and control, menu terminology, and menu pricing to menu planning.
Culinary equipment and techniques	11.1.K-2.F Name basic kitchen measuring tools and cooking equipment.	11.1.3-5.F Describe the use of common cooking tools and equipment.	11.1.6-8.F Prepare a recipe using fundamental culinary skills and techniques.	11.1.9-12.F Apply the fundamentals of time, temperature, and cooking techniques to preparing, cooking, cooling, reheating, and holding a variety of foods.
Food science	11.1.K-2.G Classify foods according to the senses.	11.1.K-3-5.G Understand and identify the physical changes that occur during food preparation.	11.1.6-8.G Demonstrate food science through principles of food biology and chemistry.	11.1.9-12.G Analyze the relevance of scientific principles to food processing, preparation, and packaging.
Nutrition and health	11.1.K-2.H Classify foods by food group within the current USDA dietary guidelines.	11.1.3-5.H Describe a well-balanced daily menu using the current USDA dietary guidelines.	11.1.6-8.H Examine the nutritional needs of individuals and families in relation to health and wellness across the life span.	11.1.9-12.H Evaluate nutrition principles, food plans, preparation techniques, and specialized dietary plans.
Calories and energy	Intentionally blank	11.1.3-5.I Describe the relationship between food input and energy output.	11.1.6-8.I Analyze the energy and nutrient requirements for individuals at various stages of the life cycle.	11.1.9-12.I Analyze the breakdown of foods, the absorption of nutrients, and their conversion to energy by the body.
Careers	11.1.K-3.J Identify career choices that relate to food.	11.1.3-5.J Describe career choices within food services.	11.1.6-8.J Investigate career choices within food services, sciences, and nutrition industries.	11.1.9-12.J Analyze career paths within food services, sciences, and nutrition industries.

Grades 9 to 12

Grades 6 to 8

Grades 3 to 5

Kindergarten to Grade 2

2. Resource Management

<p>Resource sustainability</p>	<p>11.2.K-2.A Identify waste and practice ways to reduce, reuse, and recycle.</p>	<p>11.2.3-5.A Explain the decision to use or not use resources based on resource availability and sustainability.</p>	<p>11.2.6-8.A Analyze sustainability practices and their effect on future renewable and non-renewable resources.</p>	<p>11.2.9-12.A Develop a global view to weigh consumer and design decisions with the parameters of sustainability, socioeconomic, and cultural contexts.</p>
<p>Individual and family resources</p>	<p>11.2.K-2.B Identify individual and family resources and responsibilities.</p>	<p>11.2.3-5.B Develop planning skills to organize individual and family resources and responsibilities.</p>	<p>11.2.6-8.B Apply planning skills to manage individual and family resources such as food, clothing, shelter, time, and human capital.</p>	<p>11.2.9-12.B Examine strategies for managing individual and family resources such as food, clothing, shelter, health care, recreation, transportation, time, and human capital.</p>
<p>Housing and interior design</p>	<p>Intentionally blank</p>	<p>11.2.3-5.C Explain the importance of organizing space for efficiency.</p>	<p>11.2.6-8.C Apply elements of design to create products and environments.</p>	<p>11.2.9-12.C Evaluate housing and design concepts and theories, including sustainability and universal design, in relation to available resources and options.</p>
<p>Consumer strategies</p>	<p>Intentionally blank</p>	<p>11.2.3-5.D Identify information in care instructions, safety precautions, and recommended use of consumable goods.</p>	<p>11.2.6-8.D Evaluate different strategies to safely obtain and maintain consumer goods and services.</p>	<p>11.2.9-12.D Compare and contrast the selection of goods and services by applying safe and effective consumer strategies.</p>
<p>Textiles, fashion and apparel</p>	<p>11.2.K-2.E Identify resources used for clothing.</p>	<p>11.2.3-5.E Select clothing for specific tasks and/or environment.</p>	<p>11.2.6-8.E Assess effects of design construction, care, use, and maintenance of textiles.</p>	<p>11.2.9-12.E Demonstrate skills needed to produce, alter, and repair textiles and fashion apparel.</p>

	Kindergarten to Grade 2	Grades 3 to 5	Grades 6 to 8	Grades 9 to 12
Laundering	11.2.K-2.F Identify how to care for clothing.	11.2.3-5.F Select proper laundering methods for clothing and other textiles.	11.2.6-8.F Demonstrate laundering processes aligned with industry standards and regulations.	11.2.9-12.F Analyze procedures for the selection of textiles, chemicals, and equipment associated with laundry.
Career	Intentionally blank	11.2.3-5.G Identify career choices in the field of Family and Consumer Sciences.	11.2.6-8.G Investigate career choices within resource management, including human, environmental, textiles and apparel, and consumer products in the field of Family and Consumer Sciences.	11.2.9-12.G Analyze the career paths within resource management, including human, environmental, and consumer products, in the field of Family and Consumer Sciences.
3. Human Development, Family, and Relationships				
Role of family	11.3.K-2.A Explain daily activities that fulfill family functions in meeting responsibilities.	11.3.3-5.A Compare how different cultures meet family responsibilities within various family structures.	11.3.6-8.A Analyze the effects of change and family transitions over the life span.	11.3.9-12.A Evaluate the impact of family and its effects on the well-being of individuals and society.
Family life cycle	Intentionally blank	11.3.3-5.B Identify the characteristics of the stages of the family life cycle.	11.3.6-8.B Explain the influences of family life cycle stages on the needs of families and communities.	11.3.9-12.B Hypothesize the impact of present family life cycle trends on the global community.
Interpersonal communications	11.3.K-2.C Identify how to resolve conflict using interpersonal communication skills.	11.3.3-5.C Describe positive and negative interactions within patterns of interpersonal communication.	11.3.6-8.C Justify the significance of interpersonal communication skills in the practical reasoning method of decision-making.	11.3.9-12.C Evaluate the effectiveness of using interpersonal communication skills to resolve conflict.
Human development and well-being	11.3.K-2.D Identify similarities and differences between self and others.	11.3.3-5.D Describe how areas of development impact human growth across the life cycle.	11.3.6-8.D Discuss factors that influence human growth, development, and well-being.	11.3.9-12.D Analyze strategies that promote human growth, development, and well-being.

Kindergarten to Grade 2		Grades 3 to 5		Grades 6 to 8		Grades 9 to 12	
Careers	Intentionally blank	11.3.3-5.E Identify career and work choices within family and human services.	11.3.6-8.E Investigate career and work choices within family and human services.	11.3.9-12.E Analyze career paths within family and human services.			
4. Education and Early Childhood Development							
Developmental stages	Intentionally blank	Intentionally blank	11.4.6-8.A Identify child guidance practices for each stage of child development.	11.4.9-12.A Demonstrate the integration of theories of child development and their impact on parenting and childcare.			
Developmental needs	Intentionally blank	Intentionally blank	11.4.6-8.B Identify learning activities that meet the developmental needs of learners.	11.4.9-12.B Demonstrate integration of academic standards that address language, culture, learning styles, and early childhood experiences.			
Learning environments	Intentionally blank	11.4.3-5.C Establish the characteristics of a healthy learning environment.	11.4.6-8.C Evaluate various environments to determine if they provide the characteristics of a proper learning environment.	11.4.9-12.C Analyze developmentally appropriate and culturally responsive practices to evaluate early childhood education providers and services.			
Health and safety	Intentionally blank	11.4.3-5.D Identify health and safety needs for children at each stage of child development.	11.4.6-8.D Evaluate health and safety hazards relating to children at each stage of child development.	11.4.9-12.D Analyze current issues in health and safety affecting children at each stage of child development.			
Literacy	Intentionally blank	Intentionally blank	11.4.6-8.E Explain how storytelling, story reading, and writing enhance literacy development in children.	11.4.9-12.E Identify characteristics of quality literature for children that develop the child's imagination, creativity, reading, and writing skills.			

Substrand	Kindergarten to Grade 2	Grades 3 to 5	Grades 6 to 8	Grades 9 to 12
Collaborative relationships	11.4.K-2.F Identify community resources and services.	Intentionally blank	11.4.6-8.F Evaluate support systems that provide services for parents and families.	11.4.9-12.F Demonstrate skills for building and maintaining positive collaborative relationships with children, youth, and adults in their family, school, and community environments.
Careers	Intentionally blank	Intentionally blank	11.4.6-8.G Investigate career choices within early childhood, education, and other careers in the field.	11.4.9-12.G Analyze career paths within education and early childhood.
5. Personal Finance and Consumer Skills				
Consumer rights and responsibilities	11.5.K-2.A Describe self as consumer.	11.5.3-5.A Explain consumer rights and responsibilities: <ul style="list-style-type: none"> • To be safe, • To be informed, • To be heard, • To choose, • To redress. 	11.5.6-8.A Explain how consumer rights and responsibilities are protected.	11.5.9-12.A Analyze factors including socioeconomic and cultural influences that affect consumer advocacy
Financial planning and budgeting	Intentionally blank	11.5.3-5.B Define the difference between a short-term and long-term goal.	11.5.6-8.B Develop short-term and long-term financial goals for a family budget.	11.5.9-12.B Demonstrate the ability to manage and maintain individual and family budgets.
Financial planning and budgeting	Intentionally blank	Intentionally blank	Intentionally blank	11.5.9-12.C Analyze components of a family financial planning process that reflect the distinction between wants, needs, values, goals, and economic resources.

Substrand	Kindergarten to Grade 2	Grades 3 to 5	Grades 6 to 8	Grades 9 to 12
Financial resources	Intentionally blank	11.5.3-5.D Explain the relationship between work and income within the family.	11.5.6-8.D Compare/evaluate the financial advantages and disadvantages of various incomes.	11.5.9-12.D Demonstrate the ability to use knowledge and skills to manage one's income, spending, and savings effectively for a lifetime of financial security.
Careers	Intentionally blank	Intentionally blank	11.5.6-8.E Investigate career choices within financial service industries.	11.5.9-12.E Analyze career paths within financial service industries.
6. Career, Community, and Family Connections				
Action plans	Intentionally blank	11.6.3-5.A Identify the importance of routines and schedules while differentiating between short- and long-term goals.	11.6.6-8.A Explain the FCCLA action planning procedure and how to apply it to family, work, and community decisions.	11.6.9-12.A Evaluate the effectiveness of action plans that integrate personal, work, family, and community responsibilities.
Teamwork and leadership	Intentionally blank	11.6.3-5.B Classify the components of effective teamwork and leadership.	11.6.6-8.B Assess the use of teamwork and leadership skills in accomplishing the work of families and communities.	11.6.9-12.B Analyze teamwork and leadership skills and their application in various family dynamics and employability skills.
Role of technology	Intentionally blank	11.6.3-5.C Describe the roles of technology within the family and community in maintaining a safe and healthy living environment.	11.6.6-8. Assess the use of technology and its effect on the quality of life.	11.6.9-12.C Analyze and evaluate emerging technologies that impact individuals, families, and communities.

Substrand	Kindergarten to Grade 2	Grades 3 to 5	Grades 6 to 8	Grades 9 to 12
Service providers	Intentionally blank	11.6.3-5.D Identify the public and nonpublic services that are available to serve families within the community.	Intentionally blank	11.6.9-12.D Analyze how public, nonpublic, and for-profit service providers serve the family.

(Editor’s Note: Appendix E, which appears in 22 Pa. Code pages 4-355—4-375, serial pages (320291) to (320300), (371245), (320303) to (320310) and (371247), is proposed to expire July 1, 2026, and the academic standards for Career Education and Work in proposed Appendix E-1 are proposed to apply on and after that date.)

APPENDIX E

Academic Standards for Career Education and Work

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(Editor’s Note: Appendix E, which appears in 22 Pa. Code pages 4-355—4-375, serial pages (320291) to (320300), (371245), (320303) to (320310) and (371247), is proposed to expire July 1, 2026, and the academic standards for Career Education and Work in proposed Appendix E-1 are proposed to apply on and after that date.)

APPENDIX E-1

Academic Standards for Career Education and Work

Grades K—12

Pennsylvania’s economic future depends on having a well-educated and skilled workforce. Career Education and Work standards reflect the increasing complexity and sophistication that students experience as they progress through school, focusing on the skills and continuous learning and innovation required for students to succeed in a rapidly changing workplace. The standards are written as grade-banded standards built around the concepts of career awareness and exploration, employability skills, growth and advancement, and personal interests and career planning.

<i>Number</i>	<i>Areas</i>
13.1	Career Awareness and Exploration
13.2	Employability Skills
13.3	Growth and Advancement
13.4	Personal Interests and Career Planning

Kindergarten to Grade 2

Grades 3 to 5

Grades 6 to 8

Grades 9 to 12

1. Career Awareness and Exploration

<p>Educational requirements and opportunities</p>	<p>13.1.K-2.A Identify that there are different ways to prepare for careers.</p>	<p>13.1.3-5.A Investigate how people prepare for different careers that may include various levels of education, experiences, and training.</p>	<p>13.1.6-8.A Analyze the relationship of school subjects, extracurricular activities, and community experiences to career preparation.</p>	<p>13.1.9-12.A Analyze the relationship between career choices and career preparation opportunities to choose a path.</p>
<p>Entrepreneurship</p>	<p>Intentionally blank</p>	<p>13.1.3-5.B Define entrepreneurship and identify the risks and rewards of self-employment.</p>	<p>13.1.6-8.B Compare and contrast entrepreneurship and other self-employment opportunities to other employment types.</p>	<p>13.1.9-12.B Analyze entrepreneurship and other self-employment opportunities as they relate to personal career goals and corporate opportunities.</p>
<p>Factors in career decisions</p>	<p>13.1.K-2.C Describe the work done by community helpers and business owners.</p>	<p>13.1.3-5.C Describe external factors that influence career choices, such as, but not limited to:</p> <ul style="list-style-type: none"> • Geographic location • Salaries/benefits • Work schedule • Working conditions 	<p>13.1.6-8.C Compare and contrast multiple careers using a variety of career research resources.</p>	<p>13.1.9-12.C Analyze external factors that impact employment opportunities, such as, but not limited to:</p> <ul style="list-style-type: none"> • Competition • Global influences • Job growth • Job openings • Labor supply • Potential advancement • Potential earnings

	Kindergarten to Grade 2	Grades 3 to 5	Grades 6 to 8	Grades 9 to 12
Local, national, and global labor market	13.1.K-2.D Describe what a job is and the reasons people may have jobs.	13.1.3-5.D Identify the range of jobs available in the community.	13.1.6-8.D Use multiple resources or tools to research the job availability in a local, national, and global job market.	13.1.9-12.D Describe employment outlook, organized by in-demand occupations, clusters, pathways, or other methods.
Resources in school and community	Intentionally blank	13.1.3-5.E Explain the benefits of participating in hands-on career awareness/preparation activities.	13.1.6-8.E Identify and participate in school- and community-based opportunities for career awareness/preparation.	13.1.9-12.E Utilize school- and community-based opportunities for career awareness/preparation.
Rights of workers	Intentionally blank	13.1.3-5.F Explain why employers pay people for their labor.	13.1.6-8.F Understand what labor laws are and how they impact worker wages and safety.	13.1.9-12.F Examine basic labor laws to determine the rights and responsibilities of both employers and employees.
2. Employability Skills				
Critical thinking and problem solving	13.2.K-2.A Practice solving problems individually and in groups.	13.2.3-5.A Develop the traits needed to solve problems.	13.2.6-8.A Apply critical thinking to solve real-life problems.	13.2.9-12.A Identify solutions to existing conditions or problems using critical thinking skills.
Oral and written communication	13.2.K-2.B Use context clues to identify how communication varies within different social situations in varied environments.	13.2.3-5.B Use context clues to determine how communication varies within different social situations in varied environments.	13.2.6-8.B Develop formal communication that demonstrates professional etiquette and observes social protocols when communicating verbally, and in writing.	13.2.9-12.B Use professional etiquette and observe social protocols when communicating verbally, nonverbally, and in writing.

Substrand	Kindergarten to Grade 2	Grades 3 to 5	Grades 6 to 8	Grades 9 to 12
Teamwork and collaboration	13.2.K-2.C Demonstrate cooperation and positive interactions with classmates, recognizing that people have different backgrounds, experiences, and beliefs.	13.2.3-5.C Demonstrate the ability to work well in group or team interactions, recognizing that people have different backgrounds, experiences, and beliefs.	13.2.6-8.C Practice effective group interactions, acknowledging people's different backgrounds, experiences, and beliefs.	13.2.9-12.C Demonstrate shared responsibility for collaborative work and the value of contributions made by team members with various perspectives.
Technology	13.2.K-2.D Demonstrate proper and safe Internet use.	13.2.3-5.D Demonstrate proper and safe Internet use.	13.2.6-8.D Demonstrate proficient use of technologies by using various types of technology.	13.2.9-12.D Use job-specific technologies to accomplish work responsibilities in a productive manner.
Time and project management	13.2.K-2.E Discuss how time is structured at home and school.	13.2.3-5.E Develop a personal schedule based on activities and responsibilities at both home and school.	13.2.6-8.E Demonstrate effective time and project management strategies.	13.2.9-12.E Evaluate time and project management strategies and their application to both personal and work situations.
Entrepreneurial mindset	Intentionally blank	13.2.3-5.F List and describe several characteristics of the Entrepreneurial Mindset characteristics.	13.2.6-8.F Explain how Entrepreneurial Mindset characteristics and skills can help one be successful in their career.	13.2.9-12.F Apply Entrepreneurial Mindset characteristics and skills to school, work, and extracurricular environments.
3. Growth and Advancement				
Career growth	13.3.K-2.A Communicate an original opinion and describe the justification for that opinion.	13.3.3-5.A Identify situations that may require self-advocacy, such as: personal preference, values, etc.	13.3.6-8.A Identify factors that may inform decisions for career changes, such as loss of employment, lifestyle changes, workplace conflicts, work value changes, and job market changes.	13.3.9-12.A Develop strategies for navigating career and life transitions, such as coping with loss of employment, resigning from a job, negotiating a raise or promotion, and employing transferable skills.

Substrand	Kindergarten to Grade 2	Grades 3 to 5	Grades 6 to 8	Grades 9 to 12
Lifelong learning	<p>13.3.K-2.B Recognize the importance of improving skills and learning new ones.</p>	<p>13.3.3-5.B Reflect on skill improvement and identify opportunities to build new skills.</p>	<p>13.3.6-8.B Explain how decisions regarding education, skill building, and work impact other major life decisions.</p>	<p>13.3.9-12.B Identify sources of lifelong learning to strengthen existing skills, develop new skills, and maximize career growth.</p>
Strategic goals	<p>13.3.K-2.C Set and achieve a goal.</p>	<p>13.3.3-5.C Set and achieve S.M.A.R.T. goals.</p>	<p>13.3.6-8.C Practice feedback and personal reflection to evaluate success towards setting and completing goals.</p>	<p>13.3.9-12.C Incorporate feedback and personal reflection to evaluate success towards completing goals and determine a next course of action.</p>
Work ethic	<p>13.3.K-2.D Build an awareness of the importance of a positive work ethic as a means to learn and grow.</p>	<p>13.3.3-5.D Identify attributes of a positive work ethic.</p>	<p>13.3.6-8.D Demonstrate a positive work ethic.</p>	<p>13.3.9-12.D Analyze and reflect upon the efficacy of your work ethic.</p>

Substrand	Kindergarten to Grade 2	Grades 3 to 5	Grades 6 to 8	Grades 9 to 12
4. Personal Interests and Career Planning				
Develop a personal brand	13.4.K-2.A Describe qualities of people who are successful.	13.4.3-5.A Identify personal strengths and successes.	13.4.6-8.A Identify ways to market yourself as a job candidate.	13.4.9-12.A Strategically market yourself as a job candidate.
Identify personal interests	13.4.K-2.B Identify current interests and skills.	13.4.3-5.B Connect personal interests and abilities to potential career choices.	13.4.6-8.B Relate careers to personal interests, abilities, and aptitudes.	13.4.9-12.B Evaluate career options based on personal interests, abilities, aptitudes, achievements, and goals.
Research careers	Intentionally blank	13.4.3-5.C Discuss resources available in researching career opportunities.	13.4.6-8.C Evaluate a variety of methods to research careers that align with personal interests, values, strengths, and career goals.	13.4.9-12.C Use a variety of methods to research careers that align with personal interests, values, strengths, and career goals.
Understand a career path	13.4.K-2.D Explain how workers in their careers use what is learned in the classroom.	13.4.3-5.D Document personal interests, abilities, and academic strengths.	13.4.6-8.D Build a career plan to describe planned action steps that may include, but not be limited to: <ul style="list-style-type: none"> • Electives • Extracurricular activities • Coursework • Career interests • Strengths and abilities • Educational and training opportunities 	13.4.9-12.D Evolve career plan to enact additional action steps that may include, but not be limited to: <ul style="list-style-type: none"> • Electives • Extracurricular activities • Coursework • Career interests • Strengths and abilities • Educational and training opportunities • Work-based learning • Industry-recognized credentials

(Editor’s Note: Appendix F is proposed to apply beginning July 1, 2026.)

APPENDIX F

Academic Standards for Personal Finance

Grades K—12

Overview

Personal Finance focuses on the fundamentals of personal finance, income, spending, saving and investing, risk and insurance, and credit, with a goal to develop individuals who can manage their personal finances. Personal finance is also known as personal financial literacy and financial literacy. The standards are written as grade-banded standards built around the areas below and topics that make up the areas of study.

<i>Number</i>	<i>Areas</i>
17.1	Personal Finance Fundamentals
17.2	Income
17.3	Spending
17.4	Saving and Investing
17.5	Risk and Insurance
17.6	Credit

Grades 9 to 12

Grades 6 to 8

Grades 3 to 5

Kindergarten to Grade 2

1. Personal Finance Fundamentals

Financial goal setting and decision making	17.1.K-2.A Identify short-term financial goals and steps people can take to achieve them.	17.1.3-5.A Describe reasons people set financial goals.	17.1.6-8.A Compare short-, intermediate-, and long-term financial goals.	17.1.9-12.A Determine the financial impact of various long-term goals (e.g., lifestyle, family, education).
	17.1.K-2.B Explain how limited personal financial resources affect the choices people make.	17.1.3-5.B Identify the opportunity cost of various financial decisions, including ones related to earning, spending, and saving.	17.1.6-8.B Explain why the opportunity cost of a decision might differ from one person or situation to another.	17.1.9-12.B Apply a systematic decision-making process, including opportunity costs, to setting and achieving financial goals.
Financial mindset and behaviors	17.1.K-2.C Describe how friends and family can impact a person's attitudes toward money.	17.1.3-5.C Explain how life circumstances and experiences can alter attitudes toward money.	17.1.6-8.C Analyze how people differ in their attitudes toward money.	17.1.9-12.C Analyze the impact of various factors on a person's financial mindset and decisions.
	Intentionally blank	17.1.3-5.D Identify financial decisions people make that may not be in their best interest.	17.1.6-8.D Describe behavioral biases that can affect financial decisions.	17.1.9-12.D Evaluate strategies for dealing with behavioral biases and other obstacles to managing personal finances.
	Intentionally blank	17.1.3-5.E Describe conversations people have about money.	17.1.6-8.E Describe important financial conversations people have and with whom they have them.	17.1.9-12.E Assess the value of sharing financial goals and information with others.

	Kindergarten to Grade 2	Grades 3 to 5	Grades 6 to 8	Grades 9 to 12
Financial services	17.1.K-2.F Describe ways people use financial institutions (e.g., depositing money, obtaining cash).	17.1.3-5.F Identify products and services provided by financial institutions.	17.1.6-8.F Identify personal information needed to establish a financial account.	17.1.9-12.F Compare various financial service providers (e.g., banks, credit unions, check cashers, brokerage firms) and the types of accounts and services each provides.
	Intentionally blank	Intentionally blank	Intentionally blank	17.1.9-12.G Communicate the process of opening financial accounts and the factors to consider when selecting financial institutions and professionals.
Financial record keeping	Intentionally blank	Intentionally blank	Intentionally blank	17.1.9-12.H Evaluate the use of financial technology to access financial services and make financial decisions.
	Intentionally blank	Intentionally blank	17.1.6-8.I Describe information people document and track for their personal finances.	17.1.9-12.I Develop a system for documenting and organizing personal financial records, both paper and electronic.
	Intentionally blank	Intentionally blank	Intentionally blank	17.1.9-12.J Explain the financial implications of wills, powers of attorney, and naming beneficiaries for various accounts.
	Intentionally blank	Intentionally blank	Intentionally blank	

	Kindergarten to Grade 2	Grades 3 to 5	Grades 6 to 8	Grades 9 to 12
Consumer protection	Intentionally blank	Intentionally blank	Intentionally blank	17.1.9-12.K Explain the role of various state and federal financial regulators and consumer protection agencies.
	Intentionally blank	Intentionally blank	Intentionally blank	17.1.9-12.L Describe the issues addressed by various laws and regulations that impact or safeguard a person's finances.
2. Income				
Sources of income	17.2.K-2.A Identify reasons people and households require income.	17.2.3-5.A Describe how people receive income (e.g., work, gifts, renting property to others).	17.2.6-8.A Compare compensation methods, including hourly wage, salary, commission, tips, and piecework.	17.2.9-12.A Explain various types of income (e.g., earned, unearned, passive, active) and their sources (e.g., work, rentals, investments, government programs).
	Intentionally blank	Intentionally blank	Intentionally blank	17.2.9-12.B Describe sources of retirement income and how they relate to individual investment choices, employer-sponsored retirement plans, and government programs.
Factors influencing income	17.2.K-2.C Predict the knowledge and skills needed for various jobs.	17.2.3-5.C Explain ways people improve their ability to earn income through education, training, and experience.	17.2.6-8.C Analyze connections between the amount individuals might earn in various careers and the education or training that is required.	17.2.9-12.C Use data to support an individual's decision to obtain or forgo post-secondary education based on the associated costs and anticipated future income.

Substrand	Kindergarten to Grade 2	Grades 3 to 5	Grades 6 to 8	Grades 9 to 12
	Intentionally blank	Intentionally blank	<p>17.2.6-8.D Compare ways people pay for education and training, including scholarships, grants, savings, military service, apprenticeships, and loans.</p>	<p>17.2.9-12.D Research options to pay for education and training, ways to reduce the total cost, and steps needed to obtain financial aid.</p>
	Intentionally blank	Intentionally blank	<p>17.2.6-8.E Explain factors that may impact a person's future income and employment status, including changes in technology, demand for workers, and the cost of post-secondary education.</p>	<p>17.2.9-12.E Evaluate the impacts of technology, labor markets, and economic conditions and trends on a person's employment potential.</p>
	Intentionally blank	Intentionally blank	Intentionally blank	<p>17.2.9-12.F Explain the impact of employee benefits (e.g., health insurance, retirement savings plans, education reimbursement programs) on an individual's finances.</p>
Self-employment and supplemental income	<p>17.2.K-2.G Identify ways people earn income through entrepreneurship.</p>	<p>17.2.3-5.G Describe how people earn income through entrepreneurial and supplemental employment.</p>	<p>17.2.6-8.G Compare various forms of self-employment.</p>	<p>17.2.9-12.G Analyze the financial impact of a person's decision to own a business, work as an independent contractor, or be employed.</p>
Income and payroll taxes	Intentionally blank	Intentionally blank	<p>17.2.6-8.H Interpret a pay statement and explain the relationship between gross pay, net pay, and payroll deductions.</p>	<p>17.2.9-12.H Calculate the impact of taxes and payroll deductions on income.</p>
	Intentionally blank	Intentionally blank	Intentionally blank	<p>17.2.9-12.I Complete various federal, state, and local tax forms.</p>

Substrand	Kindergarten to Grade 2	Grades 3 to 5	Grades 6 to 8	Grades 9 to 12
	3. Spending			
Spending decisions	<p>17.3.K-2.A Describe spending choices people make in everyday life and factors that influence them.</p>	<p>17.3.3-5.A Explain factors that influence a person's spending decisions and the impact these has on how they prioritize their wants.</p>	<p>17.3.6-8.A Demonstrate making an informed purchase decision by evaluating price, product claims, and information from a variety of sources.</p>	<p>17.3.9-12.A Develop a process for making informed spending decisions, including factors to consider (e.g., product features, price, durability, environmental or societal impact, reliability of information).</p>
	Intentionally blank	Intentionally blank	<p>17.3.6-8.B Apply mathematical skills to assess the impact of various ways retailers express prices (e.g., coupons, discounts, unit price).</p>	<p>17.3.9-12.B Compare ways people can lower the price they pay for goods and services (e.g., online tools, discount retailers, negotiating, secondhand items).</p>
Developing a budget	<p>17.3.K-2.C Differentiate between money that is received and money that is spent.</p>	<p>17.3.3-5.C Provide examples of household spending and sources of income.</p>	<p>17.3.6-8.C Compare ways people organize and track their spending and income.</p>	<p>17.3.9-12.C Develop a personal approach to keeping track of income and spending.</p>
	<p>17.3.K-2.D Describe how people use money for different purposes, including spending, saving, and sharing with others.</p>	<p>17.3.3-5.D Construct a simple budget (e.g., for a family, individual, or school event).</p>	<p>17.3.6-8.D Explain the components of a personal budget (e.g., income, expenses, planned savings) and how budgeting can help people achieve their financial goals.</p>	<p>17.3.9-12.D Evaluate various budgeting approaches (e.g., 50-30-20, zero-based) and methods (e.g., envelope system, spreadsheets, online tools).</p>
	Intentionally blank	Intentionally blank	Intentionally blank	<p>17.3.9-12.E Create a personal budget to allocate current or future income, including estimates for fixed and variable expenses.</p>

Substrand	Kindergarten to Grade 2	Grades 3 to 5	Grades 6 to 8	Grades 9 to 12
	Intentionally blank	Intentionally blank	Intentionally blank	<p>17.3.9-12.F Identify methods for adjusting a budget for unexpected expenses or loss of income.</p>
Payment methods	Intentionally blank	<p>17.3.3-5.G Explain various payment methods (e.g., cash, checks, gift cards, debit cards, credit cards).</p>	<p>17.3.6-8.G Describe the advantages and disadvantages of using various payment methods (e.g., cash, checks, gift cards, debit cards, credit cards, mobile payments).</p>	<p>17.3.9-12.G Compare the effects of using various payment methods when making purchases.</p>
	Intentionally blank	Intentionally blank	Intentionally blank	<p>17.3.9-12.H Compare various approaches to paying bills, including making automated payments and ensuring bills are paid on time.</p>
	Intentionally blank	Intentionally blank	Intentionally blank	<p>17.3.9-12.I Describe the impact of technology on payment methods and how it influences spending.</p>
Major life purchases	Intentionally blank	Intentionally blank	Intentionally blank	<p>17.3.9-12.J Analyze a housing decision, including comparing renting and buying, upfront and ongoing costs, and the process of obtaining a mortgage or a lease.</p>

Substrand	Kindergarten to Grade 2	Grades 3 to 5	Grades 6 to 8	Grades 9 to 12
	Intentionally blank	Intentionally blank	Intentionally blank	<p>17.3.9-12.K Justify the purchase or lease of a vehicle and the alternatives considered (e.g., new versus used, total cost of ownership or use).</p>
Sales and Property Taxes	Intentionally blank	<p>17.3.3-5.L Identify taxes applied to certain purchases.</p>	<p>17.3.6-8.L Calculate the sales tax for various types of purchases.</p>	<p>17.3.9-12.L Analyze the impact of paying sales, excise, and property taxes on financial decisions.</p>
Charitable Giving	<p>17.3.K-2.M Identify items people might give to someone else or donate to charity.</p>	<p>17.3.3-5.M Identify reasons people participate in fundraising efforts and the causes they support.</p>	<p>17.3.6-8.M Describe ways people support charitable organizations by donating money, items, and time.</p>	<p>17.3.9-12.M Justify a decision to participate in or forgo a fundraising effort based on the organization and cause.</p>
4. Saving and Investing				
Asset building	<p>17.4.K-2.A Describe things people own (e.g., toys, home, money).</p>	<p>17.4.3-5.A Identify items that might increase or decrease in value over time.</p>	<p>17.4.6-8.A Explain the change in value over time of various assets.</p>	<p>17.4.9-12.A Calculate a person's net worth given their assets and liabilities.</p>
Saving	<p>17.4.K-2.B Describe reasons people save money for the future rather than spend it now.</p>	<p>17.4.3-5.B Describe a variety of savings goals and the factors that influence them.</p>	<p>17.4.6-8.B Describe the process of creating, implementing, and adapting a personal savings plan.</p>	<p>17.4.9-12.B Develop a savings plan for accomplishing personal short- and long-term financial goals.</p>
	<p>17.4.K-2.C Identify ways children can keep their money safe and avoid losing it.</p>	<p>17.4.3-5.C Identify reasons people deposit money to be saved in accounts at financial institutions and factors they might consider when selecting a financial institution.</p>	<p>17.4.6-8.C Use different methods and tools to calculate the growth in savings given various scenarios (e.g., simple versus compound interest, starting age, years to save, and interest rates).</p>	<p>17.4.9-12.C Compare the features of various savings vehicles (e.g., savings accounts, certificates of deposit, money market accounts) and the interest rates offered by several institutions.</p>

Substrand	Kindergarten to Grade 2	Grades 3 to 5	Grades 6 to 8	Grades 9 to 12
Investing	Intentionally blank	Intentionally blank	<p>17.4.6-8.D Describe similarities and differences between saving and investing.</p> <p>17.4.6-8.E Identify publicly traded companies, the goods and services they produce, and their current stock prices.</p> <p>17.4.6-8.F Identify factors influencing investment planning (e.g., age, income, debt, assets, goals, family size, risk tolerance).</p> <p>17.4.6-8.G Describe how people make money through investing (e.g., buying low and selling high, earning dividends, buy and hold).</p>	<p>17.4.9-12.D Explain factors that contribute to rates of return for various investments, including risk, inflation, and taxes.</p> <p>17.4.9-12.E Explain the similarities and differences between stocks, bonds, mutual funds, and exchange-traded funds, and the factors that influence price fluctuations for each.</p> <p>17.4.9-12.F Describe factors to consider when selecting sources of investment advice and trading methods (e.g., online trading platforms, financial advisors, robo-advisors).</p> <p>17.4.9-12.G Explain how popular benchmark indices are used.</p> <p>17.4.9-12.H Recommend an investment portfolio diversified to meet specific goals, including purpose, starting age, time horizon, and tolerance for risk.</p>

	Kindergarten to Grade 2	Grades 3 to 5	Grades 6 to 8	Grades 9 to 12
	Intentionally blank	Intentionally blank	Intentionally blank	17.4.9-12.I Compare retirement-specific investment options, including employer-sponsored plans, Roth and traditional individual retirement accounts, and accounts available to people who are self-employed.
Investing risk tolerance	Intentionally blank	Intentionally blank	17.4.6-8.J Assess the impact of values and attitudes, including tolerance for risk, on saving and investing decisions.	17.4.9-12.J Analyze personal attitudes towards risk and how these might impact future investment decisions and outcomes.
	Intentionally blank	Intentionally blank	Intentionally blank	17.4.9-12.K Describe methods to avoid or counteract the potentially negative impacts of behavioral biases on investment decisions.
5. Risk and Insurance				
Risk identification and management	17.5.K-2.A Identify risks in everyday situations.	17.5.3-5.A Describe how unexpected events could impact a person's finances (e.g., floods, automobile accidents, illness).	17.5.6-8.A Provide examples of financial risks people face (e.g., losing a job, needing to replace damaged property, paying medical expenses).	17.5.9-12.A Evaluate a person's potential for financial risk (e.g., loss of personal property, reduction in income, liability).
	17.5.K-2.B Explain ways to avoid or reduce risks.	17.5.3-5.B Explain how emergency savings can be used to offset losses from unexpected events.	17.5.6-8.B Describe how people manage the risk of financial loss through risk avoidance, reduction, retention, and transfer.	17.5.9-12.B Critique approaches to avoiding, reducing, retaining, and transferring risk given a particular scenario.

Substrand	Kindergarten to Grade 2	Grades 3 to 5	Grades 6 to 8	Grades 9 to 12
Insurance	Intentionally blank	<p>17.5.3-5.C Provide examples of insurance people buy in order to transfer financial risk (e.g., health, auto, flood).</p>	<p>17.5.6-8.C Compare various types of insurance and what is typically covered by each.</p>	<p>17.5.9-12.C Formulate insurance recommendations based on individual needs, situations, and preferences, including but not limited to automotive, homeowners, renters, health, life, and disability, as justified.</p>
	Intentionally blank	Intentionally blank	<p>17.5.6-8.D Describe factors that impact the amount an individual can expect to pay for insurance (e.g., coverage types and amounts, age, location, driving record).</p>	<p>17.5.9-12.D Use information from various sources to compare insurance providers, plans, and prices.</p>
	Intentionally blank	Intentionally blank	<p>17.5.6-8.E Defend decisions to purchase or forgo insurance, extended warranties, and service contracts.</p>	<p>17.5.9-12.E Formulate a process of comparing insurance products, determining out-of-pocket costs, and filing claims.</p>
	Intentionally blank	Intentionally blank	<p>17.5.6-8.F Describe how insurance works by pooling the premiums of many policyholders in order to pay for claims.</p>	<p>17.5.9-12.F Describe circumstances in which a person may be required to show proof of insurance or obtain a minimum amount of coverage.</p>
	Intentionally blank	Intentionally blank	Intentionally blank	<p>17.5.9-12.G Evaluate the impact of public insurance programs for individuals facing financial hardship (e.g., Medicare, Medicaid, and unemployment).</p>

	Kindergarten to Grade 2	Grades 3 to 5	Grades 6 to 8	Grades 9 to 12
Financial fraud and identity theft	17.5.K-2.H Give examples of personal information that should be kept private.	17.5.3-5.H Predict the financial consequences of sharing personal information.	17.5.6-8.H Describe strategies people can use to protect their personally identifiable information.	17.5.9-12.H Analyze trends in financial fraud and strategies to avoid becoming a victim.
	Intentionally blank	Intentionally blank	Intentionally blank	17.5.9-12.I Research the agencies individuals can contact and steps they can take to address financial fraud and scams, including identity theft.
6. Credit				
Credit use and benefits	17.6.K-2.A Describe the process of borrowing items or money from someone else.	17.6.3-5.A Identify traits that could impact a person's ability to borrow items or money.	17.6.6-8.A Explain how credit is established and tracked over time for an individual.	17.6.9-12.A Evaluate pathways to obtaining credit and what lenders look for in a borrower (e.g., character, capacity, capital, collateral).
	Intentionally blank	Intentionally blank	Intentionally blank	17.6.9-12.B Describe how credit reports and scores are determined, used, and improved.
Types of credit	Intentionally blank	17.6.3-5.C Identify goods and services people often pay for over time using credit.	17.6.6-8.C Discuss various forms of credit and their uses (e.g., credit cards, home loans, auto loans, student loans).	17.6.9-12.C Compare various forms of credit and how each is used (e.g., secured and unsecured loans, installment and revolving credit, service credit).

Substrand	Kindergarten to Grade 2	Grades 3 to 5	Grades 6 to 8	Grades 9 to 12
	Intentionally blank	<p>17.6.3-5.D Describe how using a credit card is a form of borrowing.</p>	<p>17.6.6-8.D Summarize the differences between credit cards and debit cards.</p>	<p>17.6.9-12.D Analyze the use of loans to finance higher education and home purchases, how they are obtained, and options for paying them back.</p>
Costs of credit	<p>17.6.K-2.E Identify potential advantages and disadvantages of borrowing from others.</p>	<p>17.6.3-5.E Explain why borrowers might be asked to repay more than they initially borrowed (e.g., interest, fees).</p>	<p>17.6.6-8.E Analyze factors that influence the total cost of paying with credit, including interest rates, fees, repayment period, and source of credit.</p>	<p>17.6.9-12.E Calculate the total cost of credit given a variety of situations (e.g., making minimum payments, paying fees, using alternative financial service providers).</p>
	Intentionally blank	Intentionally blank	<p>17.6.6-8.F Explain why potential borrowers could reach different conclusions about the use of credit, including how much debt constitutes overborrowing.</p>	<p>17.6.9-12.F Describe the consequences of failing to repay debts and sources of debt management assistance.</p>
Credit rights and responsibilities	Intentionally blank	Intentionally blank	<p>17.6.6-8.G Explain why lenders must provide borrowers with certain information (e.g., interest rates, annual percentage rates, fees, terms, conditions).</p>	<p>17.6.9-12.G Evaluate various rights and laws related to credit and their impact on consumers.</p>