



Karen B. Salmon, Ph.D.
State Superintendent of Schools

TO: Members of the State Board of Education

FROM: Karen B. Salmon, Ph.D.

DATE: January 28, 2020

SUBJECT: COMAR 13A.04.17
Environmental Education Instructional Programs for Grades Prekindergarten-12
PERMISSION TO PUBLISH

PURPOSE:

The purpose of this item is to request permission to publish amendments to COMAR 13A.04.17 *Environmental Education Instructional Programs for Grades Prekindergarten-12*.

REGULATION PROMULGATION PROCESS:

Under Maryland law, a state agency, such as the State Board, may propose a new regulation whenever the circumstances arise to do so. After the State Board votes to propose such a regulation, the proposed regulation is sent to the Administrative, Executive, and Legislative Review (AELR) Committee for a 15-day review period. If the AELR Committee does not hold up the proposed regulation for further review, it is published in the Maryland Register for a 30-day public comment period. At the end of the comment period, the Maryland State Department of Education (MSDE) staff reviews and summarizes the public comments. Thereafter, MSDE staff will present a recommendation to the State Board of Education to either: (1) adopt the regulation in the form it was proposed; or (2) revise the regulation and adopt it as final because the suggested revision is not a substantive change; or (3) revise the regulation and re-propose it because the suggested revision is a substantive change. At any time during this process, the AELR Committee may stop the promulgation process and hold a hearing. Thereafter, it may recommend to the Governor that the regulation not be adopted as a final regulation or the AELR Committee may release the regulation for final adoption.

BACKGROUND/HISTORICAL PERSPECTIVE:

In 1989, Maryland became the first state to require a comprehensive, multidisciplinary program of environmental education. State standards for Environmental Literacy were adopted by the State Board and incorporated into COMAR 13A.04.17 in 1999. In 2008, then Governor Martin O'Malley issued an Executive Order establishing the Maryland Partnership for Children in Nature (CIN). This partnership led to the adoption and incorporation in 2009 of the current Standards for Environmental literacy to reflect recommendations made by CIN.

In accordance with the Regulatory Review and Evaluation Act, Article 10-130-139, Annotated Code of Maryland, the Maryland State Environmental Literacy Standards are due for review. Following the Board procedures enumerated in the May 23, 2017, Protocol for Developing and Revising Standards, the MSDE initiated a public survey to seek feedback on the current standards. A committee of teachers, district environmental literacy specialists, university representatives, and private citizens reviewed data from the survey. The committee recommended extensive revisions should be made to the existing Maryland Environmental Literacy Standards to remove existing redundancy with Maryland content standards from other disciplines including Maryland's Next Generation Science Standards, Social Studies, and Health. Based on these recommendations, the State Board in April 2019, granted permission for MSDE to revise COMAR 13A.04.17 *Environmental Education Instructional Programs for Grades Prekindergarten-12*. After completing the revisions, feedback was sought in regional meetings and from local school system science, environmental, health, and social studies supervisors. During that process, changes were also recommended for the COMAR language in which these standards are located. These changes include shifting from education to literacy and adjusting the student participation language so that it is consistent with COMAR for the other content areas.

EXECUTIVE SUMMARY:

The proposed amendments to Maryland's Environmental Education instructional program are the byproduct of consultation with the public, teachers, content supervisors, other state agencies, and non-profit environmental advocacy organizations. In addition, the other proposed amendments to COMAR 13A.04.17 *Environmental Education Instructional Programs for Grades Prekindergarten-12* bring clarity to the regulation.

ACTION:

Request permission to publish amendments to COMAR 13A.04.17 *Environmental Education Instructional Programs for Grades Prekindergarten-12*.

ATTACHMENTS:

COMAR 13A.04.17 *Environmental Literacy Instructional Programs for Grades Prekindergarten-12*.

13A.04.17.01

.01 Environmental [Education] Literacy Instructional Programs for Grades Pre-Kindergarten-12.

- A. Each local school system shall provide in public schools a comprehensive, multi-disciplinary environmental [education] literacy program infused within current curricular offerings and aligned with the Maryland Environmental Literacy [Curriculum] Standards.
- B. The Maryland Environmental [Education] Literacy Program shall:
- (1) Provide a developmentally appropriate instructional program *with opportunities for outdoor learning experiences*;
 - (2) Advance students' knowledge, confidence, skills, and motivation to make decisions and take actions that [create and maintain an optimal relationship between themselves and the environment, and] preserve and protect the unique natural resources of Maryland, [particularly those of] the Chesapeake Bay, and its watershed[.];
 - (3) [This comprehensive instructional program shall] Provide for the diversity of student needs, abilities, and interests at the early, middle, and high school learning years[,], and shall include all of [the standards from]the Maryland Environmental Literacy [Curriculum] Standards as set forth in §C of this regulation.
- C. Maryland Environmental Literacy [Curriculum] Standards.
- (1) Environmental Issue[s] *Investigation & Action.* [The student shall:] *Environmentally literate students investigate environmental issues in order to develop and implement local actions that protect, sustain or restore the natural environment.*
 - (a) Investigate and analyze environmental issues ranging from local to global perspectives and;
 - (b) Develop and implement a local action project that protects, sustains, or enhances the natural environment.]
 - (2) [Interactions of Earth's Systems. The student shall analyze and apply the properties of systems thinking and modeling to the study of earth's systems.] *Human Dependence on Earth Systems and Natural Resources. Environmentally literate students construct and apply understanding of how Earth's systems and natural resources support human existence.*
 - (3) [Flow of Matter and Energy. The student shall analyze and explain:] *Environmental Impact of Human Activity. Environmentally literate students construct and apply*

understanding of the environmental impact of human activities on Earth's systems and resources.

[(a) The movement of matter and energy through interactions of each of the following earth systems:

(i) Biosphere;

(ii) Geosphere;

(iii) Hydrosphere;

(iv) Atmosphere; and

(v) Cryosphere; and

(b) The influence of this movement on weather patterns, climatic zones, and the distribution of life.]

(4) [Populations, Communities, and Ecosystems. The student shall use physical, chemical, biological, and ecological concepts to analyze and explain the interdependence of humans and organisms in populations, communities, and ecosystems.] *Consequences of Environmental Change on Human Health and Well-Being. Environmentally literate students construct and apply understanding of the consequences of human-induced environmental change on individual and collective health and well-being.*

(5) [Humans and Natural Resources. The student shall use concepts from chemistry, physics, biology, and ecology to analyze and interpret both positive and negative impacts of human activities on earth's natural systems and resources.] *Individual and Collective Responses to Environmental Change. Environmentally literate students construct and apply understanding of individual, collective, and societal responses to human-induced environmental change.*

[(6) Environment and Health. The student shall use concepts from science, social studies and health to analyze and interpret both positive and negative impacts of natural events and human activities on human health.

(7) Environment and Society. The student shall analyze how the interactions of heredity, experience, learning and culture influence social decisions and social change.

(8) Sustainability. The student shall:

(a) Make decisions that demonstrate understanding of natural communities and the ecological, economic, political, and social systems of human communities; and

(b) Examine how their personal and collective actions affect the sustainability of these interrelated systems.]

- D. Each local school system shall establish a support system to enable teachers and administrators to engage in high quality professional development in content knowledge, instructional materials, and methodology related to environmental [education] literacy.
- E. Student Participation. All students shall have the opportunity to participate in the comprehensive environmental [education] literacy program required by this chapter [regulation to meet their graduation requirement in environmental literacy].

COMAR 13A.04.17.02

.02 Certification Procedures.

By September 1, 2015 and each 5 years after, each local school superintendent of schools shall certify to the State Superintendent of Schools that the instructional program in environmental [education] literacy meets, at a minimum, the requirements set forth in Regulation .01 of this chapter.