NOTICE OF FINAL-OMITTED RULEMAKING
DEPARTMENT OF ENVIRONMENTAL PROTECTION
ENVIRONMENTAL QUALITY BOARD
[25 PA CODE CH. 250]
Administration of the Land Recycling Program

Preamble

The Environmental Quality Board (Board) by this order amends 25 Pa. Code Chapter 250 (relating to Administration of Land Recycling Program) to correct transcription errors for Aldrin in Appendix A, Table 1, and toxicity values for beryllium and cadmium in Appendix A, Table 5B. These corrections affect the calculated medium-specific concentrations (MSCs) for beryllium and cadmium in Appendix A, Table 4A, which have also been corrected. These corrections are set forth in Annex A.

Notice of proposed rulemaking is omitted under section 204 of the act of July 31, 1968 (P.L. 769, No. 240) (45 P.S. § 1204), known as the Commonwealth Documents Law (CDL). Section 204 of the CDL provides that an agency may omit the notice of proposed rulemaking if "the agency for good cause finds… that the public notice and comment procedures specified in sections 201 and 202 are in the circumstances impracticable, unnecessary, or contrary to the public interest." 45 P.S. § 1204(3). Public notice and comment are unnecessary and contrary to the public interest for the amendments included in this rulemaking. The relevant MSCs are a product of a standard method of calculation that is set out in Chapter 250. The Board sought comments on this method during the prior rulemaking and no comments were received on this method (46 Pa.B. 5655 (August 27, 2016)). This rulemaking does not change the method by which the calculation is made. Instead, the rulemaking corrects an error that the Department of Environmental Protection (Department) made in the transcription of the result of the Aldrin calculation and corrects the inputs to the beryllium and cadmium calculations. Additional pubic notice and comment would not alter the need to correct these errors and is therefore unnecessary. In addition, these corrections will ensure that any remediation of Aldrin, beryllium, or cadmium conforms to current science relating to the protection of human health and is consistent with the regulatory provisions in Chapter 250, which is in the public interest.

This final-omitted rulemaking was adopted by the Board at its meeting of _____.

A. *Effective Date*

These amendments will be effective upon publication in the *Pennsylvania Bulletin* as a final rulemaking.

B. *Contact Persons*

For further information contact Troy Conrad, Program Manager, Land Recycling Program, P.O. Box 8471, Rachel Carson State Office Building, Harrisburg, PA 17105-8471, (717) 783-7816, or Keith Salador, Assistant Counsel, Bureau of Regulatory Counsel, P.O. Box 8464, Rachel Carson

State Office Building, Harrisburg, PA 17105-8464, (717) 783-8075. Persons with a disability may use the AT&T Relay Service by calling 1-800-654-5984 (TDD users) or 1-800-654-5988 (voice users). This rulemaking is available on the Department's website at www.dep.pa.gov (Select "Public Participation," then "Environmental Quality Board (EQB)").

C. *Statutory Authority*

This final-omitted rulemaking is being made under the authority of sections 104(a) and 303(a) of the Land Recycling and Environmental Remediation Standards Act (act) (35 P. S. §§ 6026.104(a) and 6026.303(a)), and section 1920-A of The Administrative Code of 1929 (71 P.S. § 510-20). Section 104(a) of the act authorizes the Board to adopt Statewide health standards and appropriate mathematically valid statistical tests to define compliance with the act. Section 303(a) of the act authorizes the Board to promulgate Statewide health standards for regulated substances for each environmental medium and methods used to calculate the standards. Section 1920-A of The Administrative Code of 1929 authorizes the Board to formulate, adopt and promulgate rules and regulations that are necessary for the proper work of the Department.

D. *Background and Purpose*

The Statewide health standard MSCs are listed in Appendix A of Chapter 250. Three errors in MSC values were discovered after the most recent regulatory amendments became effective on August 27, 2016.

Aldrin

Toxicity values and physical/chemical properties from Tables 5A and 5B in Chapter 250 are used along with ingestion and inhalation exposure parameters presented in § 250.306 and § 250.307 to calculate the numeric values presented in Tables 1 through 4. The equations and methodology used to calculate ingestion and inhalation numeric values are also provided in § 250.306 and § 250.307, respectively. The equations from the regulation have been converted to formulas in an Excel spreadsheet which is used to calculate the numeric values in Tables 1 through 4. The calculated numeric values are transcribed from the Excel spreadsheet into Microsoft Word tables which are used for the rulemaking.

The MSC for Aldrin in groundwater for an aquifer with total dissolved solids (TDS) of less than or equal to 2,500 milligrams per liter (mg/l) used for residential purposes is 0.043 micrograms per liter (µ/L), but was incorrectly transcribed as 0.43 µ/L. The Aldrin MSC for groundwater under "Used Aquifers, TDS ≤ 2500, R" in Appendix A, Table 1 has been corrected.

Beryllium and Cadmium

Section 303(c) of Act 2 (35 P.S. § 6026.303(c)) requires the Department to develop risk-based Statewide health standards using valid scientific methods, reasonable exposure pathways assumptions and exposure factors for residential and nonresidential land use that are no more

stringent than the standard default exposure factors established by the U.S. Environmental Protection Agency (EPA). The Department calculates MSCs based on nationally recognized, peer-reviewed toxicological data from the sources listed in § 250.605. The toxicity value sources in § 250.605 are presented in a hierarchy of tiers where the first-tier source is preferred over the second-tier source and the second-tier source is preferred over the third. The third-tier consists of multiple sources which all have the same level of preference. The toxicity values are used along with the physical/chemical properties from Tables 5A and 5B and the ingestion and inhalation exposure parameters and equations from § 250.306 and § 250.307 to calculate the numeric values. The same procedure described for Aldrin using the Excel spreadsheet is used to calculate the numeric values for beryllium and cadmium. The calculated numeric values are transcribed from the Excel spreadsheet into Microsoft Word tables which are used for the rulemaking.

The toxicity value used for the ingestion model is the Oral Cancer Slope Factor (CSF_o), and the toxicity value used for the inhalation model is the Inhalation Unit Risk (IUR). IUR is calculated using an Inhalation Cancer Slope Factor (CSF_i) and accounts for the inhalation rate of a receptor. CSF_o values are based on oral exposure (ingestion) while CSF_i values are based on exposure from inhalation. These toxicity values are used along with current exposure parameters to calculate numeric values used to determine the MSCs. Exposure parameters, such as exposure frequency, soil and groundwater ingestion rates, body weight, etc., are specific to soil or groundwater exposure and to residential or non-residential exposure scenarios. The equations and methodology used to calculate ingestion and inhalation numeric values are provided in § 250.306 and § 250.307, respectively.

During the development of the MSCs for soil in the 2016 amendments to Chapter 250, the CSF_i values were incorrectly interpreted as CSF_o values for both beryllium and cadmium. This error resulted in the incorrect toxicity values to be posted in Appendix A, Table 5B, which resulted in the direct contact soil MSCs for these compounds to be artificially low.

Thus, the CSF_o values of 8.4 $(mg/kg/day)^{-1}$ and 15 $(mg/kg/day)^{-1}$ for beryllium and cadmium, respectively, have been removed from Table 5B because they are not actually oral toxicity values. Changes to Table 4A (direct contact numeric values for inorganic regulated substances in soil) include correcting the beryllium residential MSC value from 2 milligrams per kilogram (mg/kg) to 440 mg/kg and the non-residential surface soil MSC value from 11 mg/kg to 6,400 mg/kg. The cadmium residential MSC value changed from 1.2 mg/kg to 110 mg/kg, and the non-residential surface soil MSC value changed from 6 mg/kg to 1,600 mg/kg.

This final-omitted rulemaking was discussed with, and received the support of, the Cleanup Standards Scientific Advisory Board (CSSAB) at its November 16, 2016, meeting.

E. *Summary of the Final-Omitted Rulemaking*

Appendix A, Tables 1, 4A, and 5B.

The Aldrin MSC for groundwater under "Used Aquifers, TDS ≤ 2500, R" in Appendix A, Table 1 has been changed from 0.43 µ/L to 0.043 µ/L. Changes to Table 4A include

correcting the beryllium residential MSC value from 2 mg/kg to 440 mg/kg and the non-residential surface soil MSC value from 11 mg/kg to 6,400 mg/kg. The cadmium residential MSC value changed from 1.2 mg/kg to 110 mg/kg, and the non-residential surface soil MSC value changed from 6 mg/kg to 1,600 mg/kg. The CSF_o values of 8.4 $(mg/kg/day)^{-1}$ and 15 $(mg/kg/day)^{-1}$ for beryllium and cadmium, respectively, have been removed from Table 5B.

F. *Benefits, Costs and Compliance*

Benefits

Correcting errors in the toxicity values and the MSCs in these amendments to Chapter 250 serve both the public and the regulated community as they provide accurate information needed for remediating contaminated sites. Having access to that information allows the public to know the acceptable level of contamination at a site based on the intended use of the property, and it provides remediators with a uniform endpoint to the remediation process.

Compliance Costs

This rulemaking is not expected to add costs, overall, to the cleanup of contaminated sites under this program. The decrease in the Aldrin MSC will only impact ten sites. Remediators of these sites can use either the background standard or the site-specific standard if the reduction in the Aldrin MSC impacts their project. The beryllium and cadmium corrections result in increases in their respective MSC values and are not anticipated to have an adverse impact on the regulated community.

Compliance Assistance Plan

The Land Recycling Program will disseminate information concerning these corrections using the Department's website and emails to environmental consultants involved in the program.

Paperwork Requirements

These amendments do not require forms or reports.

G. *Pollution Prevention*

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

During remediation of a contaminated site, potential sources of pollution are often removed to attain the Act 2 standards, thus eliminating or minimizing the potential for continued migration.

H. *Sunset Review*

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

I. *Regulatory Review*

Under section 5(f) of the Regulatory Review Act (71 P. S. § 745.5(f)), on _____, the Department submitted a copy of this final rulemaking with notice of proposed rulemaking omitted to the Independent Regulatory Review Commission (IRRC) and the Chairpersons of the House and Senate Environmental Resources and Energy Committees. On the same date, the Department also submitted this rulemaking to the Office of Attorney General for review and approval under the Commonwealth Attorneys Act (71 P.S. §§ 732-101-732-506). In addition to the final rulemaking, IRRC and the Committees were provided with a copy of a detailed regulatory analysis form prepared by the Department.

J. *Findings of the Board*

The Board finds that:

(1) The amendments as set forth in Annex A are appropriate to implement the Land Recycling Program.

(2) Use of the omission of notice of proposed rulemaking procedure is appropriate because the notice of proposed rulemaking procedure specified in sections 201 and 202 of the Commonwealth Document Law (45 P.S. §§ 1201 and 1202) is, in this instance, both unnecessary and contrary to the public interest for the reasons stated above.

(3) These amendments are necessary and appropriate for administration and enforcement of the authorizing acts identified in section C of this preamble and in the public interest.

K. *Order of the Board*

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

(a) The regulations of the Department of Environmental Protection in 25 Pa. Code Chapter 250, Appendix A, are amended to read as set forth in Annex A.

(b) The Chairperson of the Board shall submit this order and Annex A to the Office of General Counsel and the Office of Attorney General for review and approval as to legality and form, as required by law.

(c) The Chairperson of the Board shall submit this order and Annex A to IRRC and the Senate and House Environmental Resources and Energy Committees as required by the Regulatory Review Act.

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

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

Patrick McDonnell
Chairperson
Environmental Quality Board