

# Regulatory Analysis Form

(Completed by Promulgating Agency)

**INDEPENDENT REGULATORY  
REVIEW COMMISSION**

(All Comments submitted on this regulation will appear on IRRC's website)

(1) Agency

Department of Environmental Protection

(2) Agency Number:

Identification Number: 7-486

IRRC Number:

(3) PA Code Cite:

Title 25. Chapter 250

(4) Short Title:

Administration of the Land Recycling Program

(5) Agency Contacts (List Telephone Number and Email Address):

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(6) Type of Rulemaking (check applicable box):

- Proposed Regulation  
 Final Regulation  
 Final Omitted Regulation

- Emergency Certification Regulation;  
 Certification by the Governor  
 Certification by the Attorney General

(7) Briefly explain the regulation in clear and nontechnical language. (100 words or less)

The Department of Environmental Protection (DEP)'s Land Recycling Program implements standards for the cleanup of soil and groundwater contamination from releases of various toxic and carcinogenic chemicals. The proposed amendment to the Land Recycling Program regulations will update one of the three cleanup standards, specifically the Statewide health cleanup standard, correct errors and omissions, and clarify certain established program policies. Existing regulation requires that every three years DEP evaluate new scientific information and propose changes as necessary to the Medium-specific concentrations (MSCs) that are a part of the Statewide health standard.

(8) State the statutory authority for the regulation. Include specific statutory citation.

This rulemaking is being made under the authority of sections 104(a) and 303(a) of the Land Recycling and Remediation Standards Act (the Land Recycling Act or Act 2) (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 Land Recycling Act authorizes the Environmental Quality Board (EQB) to adopt Statewide health standards, appropriate mathematically valid statistical tests to define compliance with the Land

Recycling Act and other regulations that may be needed to implement the provisions of the Land Recycling Act. Section 303(a) of the Land Recycling Act authorizes the EQB to promulgate Statewide health standards for regulated substances for each environmental medium and methods used to calculate the standards. Section 1920-A authorizes the EQB to formulate, adopt and promulgate rules and regulations that are necessary for the proper work of DEP.

(9) Is the regulation mandated by any federal or state law or court order, or federal regulation? Are there any relevant state or federal court decisions? If yes, cite the specific law, case or regulation as well as, any deadlines for action.

Section 303(a) of the Land Recycling Act (35 P.S. § 6026.101 et seq.) states: “The Environmental Quality Board shall promulgate Statewide health standards for regulated substances for each environmental medium.”

25 Pa. Code § 250.11 requires DEP to regularly review new scientific information that relates to the basis of the MSCs and to propose appropriate regulations to the EQB whenever necessary, but not later than 36 months from the effective date of the most recently promulgated regulations.

(10) State why the regulation is needed. Explain the compelling public interest that justifies the regulation. Describe who will benefit from the regulation. Quantify the benefits as completely as possible and approximate the number of people who will benefit.

The elimination of public health and environmental hazards on existing commercial and industrial land across the Commonwealth is vital to their use and reuse as sources of employment, housing, recreation and open-space areas. The reuse of industrial land is an important component of a sound land-use policy that will help prevent the needless development of prime farmland, open-space areas and natural areas and reduce public costs for installing new water, sewer and highway infrastructure.

The proposed Administration of the Land Recycling Program regulations provide standards used during the cleanup of contaminated sites in Pennsylvania. These standards apply to all releases of regulated substances that are addressed under the Land Recycling Act, the Hazardous Sites Cleanup Act (35 P.S. 6020.101 et seq.), the Solid Waste Management Act (35 P.S. §§ 6018.101 et seq.), the Storage Tank and Spill Prevention Act (35 P.S. §§ 6021.101 et seq.), and the Clean Streams Law (35 P.S. § 691.1 et seq.). Releases of regulated substances not only pose a threat to the environment, but also could affect the health of the general public if they are inhaled or ingested. With new research being conducted every day, it is necessary that the residents of Pennsylvania be adequately protected with site cleanup requirements based on the most up-to-date information.

Chemical substances that can have toxic or carcinogenic effects as defined under Act 2 and the regulations promulgated thereunder are widespread in use and potential contamination of soil and groundwater from accidental spills and unlawful disposal can impact almost any citizen of the Commonwealth. Examples of substances that contain toxic or carcinogenic properties include gasoline and petroleum products, solvents, elements used in manufacture of metals and alloys, pesticides, herbicides, and some dielectric fluids previously contained in transformers and capacitors.

The Land Recycling Act requires the EQB to establish by regulation a uniform Statewide health standard that can be used to eliminate any substantial present or probable future risk to human health and the

environment. The original standard was promulgated in 1997 and codified in Chapter 250. Section 104(a) of the Land Recycling Act explicitly recognizes that this standard would need to be updated over time as better science became available and as the need for clarification or enhancement of the program became apparent. Updating the standard serves the public, as DEP is able to use the most up-to-date health and scientific information to establish the cleanup standard for exposure to substances that cause cancer or have other toxic effects on human health. The Statewide health standard is expressed as a list of MSCs, which apply to either soil, or groundwater contamination and to residential and non-residential exposure scenarios as authorized under the Land Recycling Act.

The changes in the MSCs in these amendments to Chapter 250 serve both the public and the regulated community as they provide clear information on what is required at 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. Because each site and situation is unique, it is necessary to provide different MSCs for: 1.) specific constituents in groundwater at points of compliance, 2.) specific constituents in soil, where there may be direct contact through ingestion or inhalation, and 3.) specific constituents in soil that may leech into groundwater. Each of these MSCs is based on the physical and toxicological properties of a specific regulated substance, which are based on scientific sources of information.

25 Pa. Code § 250.11 states; “ The Department will review new scientific information that relates to the basis of the MSCs as it becomes available and will propose appropriate changes for the consideration of the EQB as necessary, but in no case more than 36 months after the effective date of the most recently promulgated MSCs.” The most recently updated MSCs were promulgated January 2011.

(11) Are there any provisions that are more stringent than federal standards? If yes, identify the specific provisions and the compelling Pennsylvania interest that demands stronger regulations.

No provisions are more stringent than federal cleanup standards.

(12) How does this regulation compare with those of the other states? How will this affect Pennsylvania’s ability to compete with other states?

The Chapter 250 regulations provide a uniform Statewide health standard that is not available in many other states. These states and the federal government require a site specific risk analysis at every site to establish a numeric value that is used to determine the completion of soil and groundwater cleanup. The Land Recycling Act provides for a generic Statewide health standard that can be used as an efficient way to cleanup sites, particularly where small spills and releases contaminate soil. However, the ability to conduct a risk analysis to establish a cleanup value on an individual site basis is also available through the site-specific cleanup standard under Land Recycling Act, providing an additional option.

The regulations promote and facilitate the remediation and redevelopment of idled and underutilized commercial and industrial sites while protecting the public health and the environment. The proposed updates to Chapter 250 will not affect Pennsylvania’s ability to compete with other states.

(13) Will the regulation affect any other regulations of the promulgating agency or other state agencies? If yes, explain and provide specific citations.

No.

(14) Describe the communications with and solicitation of input from the public, any advisory council/group, small businesses and groups representing small businesses in the development and drafting of the regulation. List the specific persons and/or groups who were involved. (“Small business” is defined in Section 3 of the Regulatory Review Act, Act 76 of 2012.)

The Cleanup Standards Scientific Advisory Board (CSSAB) reviewed the proposed rulemaking twice. The CSSAB is a 13-member board authorized under the Land Recycling Act to assist the DEP and the EQB in developing Statewide health standards, determining the appropriate statistically and scientifically valid procedures to be used, determining the appropriate risk factors and providing other technical and scientific advice as needed. The proposal was discussed and approved unanimously, with one exception and one comment, at the CSSAB board meeting held on October 23, 2013.

Members of the CSSAB typically have a background in engineering, biology, hydrogeology, statistics, medicine, chemistry, toxicology, or other related scientific education or experience. Some members of the CSSAB represent small businesses and other members work as environment consultants and attorneys who can represent small business clients.

This rulemaking was also discussed with the Storage Tank Advisory Committee (STAC) on June 11 and Dec. 3, 2013. STAC is authorized by the Pennsylvania Tank Act to provide advice to DEP in regulations related to the Storage Tank and Spill Prevention Act. STAC discussed the proposed amendments to the regulation and voted to approve the rulemaking.

Members of STAC represent local government, Associated Petroleum Industries of Pennsylvania, the Pennsylvania Petroleum Association, the Petroleum Retailers and Auto Repair Association, the Pennsylvania Chemical Industry Council, Tank Installers of Pennsylvania, the Pennsylvania Environmental Council, a registered professional engineer, a hydrogeologist, and other members of the public.

(15) Identify the types and number of persons, businesses, small businesses (as defined in Section 3 of the Regulatory Review Act, Act 76 of 2012) and organizations which will be affected by the regulation. How are they affected?

These technical amendments to the Land Recycling regulations can affect property owners of contaminated sites, operators of commercial and industrial facilities where hazardous substances are spilled onto soil or are released into groundwater, and purchasers of historically contaminated brownfield sites that are intended for redevelopment. It can also affect members of the public and the business community that may be threatened with exposure to releases and spills.

The types of businesses affected could include gasoline service stations, fuel distribution facilities, commercial facilities that use toxic or carcinogenic chemicals, manufacturing operations, and

redevelopers of brownfield sites. There are about 12,000 facilities in the Commonwealth that contain regulated underground and above ground storage tanks, including gasoline stations and fuel distribution and storage facilities. Some of these facilities would include small gasoline station owners. Small businesses would also make up some of the commercial facilities that use toxic or carcinogenic substances. Because of the broad potential reach of this regulation and most of the activities will occur in the future, it is difficult for DEP to identify further specifics on the types and numbers of small businesses that would potentially be affected if they contaminate a property by releasing a regulated substance.

The proposed changes to the Chapter 250 regulations are not expected to increase costs or provide any significant savings for the regulated community. MSCs have been promulgated for 390 regulated substances. Under this proposal the MSC values for about 180 of the substances would be changed. About 10% of the values are being lowered, indicating a more stringent cleanup is required at a site. About 90% of the values are increasing which may indicate a less stringent cleanup at a site. However, values for many commonly encountered regulated substances, including those found in gasoline and in solvents are either not changing or are slightly increasing.

The cost impact on a given site remediation would depend on the specific regulated substances being remediated and the specific soil and groundwater conditions at the site. For example, a site with a tight clay soil profile may not allow contaminants to spread horizontally or vertically. Therefore, the amount of soil to be excavated in this situation will not significantly change to meet a lower or higher MSC value. However, it is important to note that the site remediator always has the option of using a site-specific cleanup standard.

Most small businesses DEP can identify as possibly being affected by this regulation are owners of gasoline stations. The proposed amendment will not affect these businesses because the MSC values are not changing for petroleum compounds. In addition, many of these businesses are required to participate in the Underground Storage Tank Indemnification Fund which provides insurance coverage for the costs to cleanup releases from their tanks, regardless of the MSC value used at the site. Overall, no type of person or business is expected to be adversely affected by the updates to Chapter 250.

Accordingly, the Department believes that there will be little if any adverse impact to small businesses.

(16) List the persons, groups or entities, including small businesses, that will be required to comply with the regulation. Approximate the number that will be required to comply.

These technical amendments to the Land Recycling regulations will affect owners, operators and purchasers of properties and facilities who volunteer or are required to perform remediation of contaminated sites pursuant to Chapter 250 standards.

The types of businesses that may need to comply with the regulations include gasoline service stations, fuel distribution facilities, commercial facilities that use toxic or carcinogenic chemicals, manufacturing operations, and redevelopers of brownfield sites. There are about 12,000 facilities in the Commonwealth that contain regulated underground and above ground storage tanks, including gasoline stations and fuel distribution and storage facilities. Some of these facilities would include small gasoline station owners. Small businesses would also make up some of the commercial facilities that use toxic or carcinogenic substances. Not all of these facilities have releases or accidental spills that result in a cleanup obligation.

The number of remediations completed can vary from year to year. The number of voluntary remediations completed under Act 2 each year ranges from 200 - 400. The number of remediations required under other statutes (mostly regulated storage tank sites) that are completed each year ranges from 400-600.

Please also see the response to item (15) above.

(17) Identify the financial, economic and social impact of the regulation on individuals, small businesses, businesses and labor communities and other public and private organizations. Evaluate the benefits expected as a result of the regulation.

The proposed amendments to the Statewide health MSCs reflect the latest toxicological data on human health effects when exposed to hazardous and toxic chemicals. This assures potentially affected citizens of the Commonwealth and persons interested in buying and redeveloping contaminated sites that the MSCs are protective of human health.

The proposed changes to the Chapter 250 regulations are not expected to increase costs or provide any significant savings for the regulated community. Under this proposal the MSC values for about 180 of the substances would be changed. About 10% of the values are being lowered, indicating a more stringent cleanup is required at a site. About 90% of the values are increasing which may indicate a less stringent cleanup at a site. However, values for many commonly encountered regulated substances, including those found in gasoline and in solvents are either not changing or are slightly increasing.

Persons conducting remediation under the Land Recycling Act can choose from three different cleanup standards, background, Statewide health or site-specific. Updating Statewide health standard MSCs will not affect cleanup options available to remediators under other cleanup standards.

The Department believes that there will be little if any adverse impact to small businesses.

(18) Explain how the benefits of the regulation outweigh any cost and adverse effects.

The proposed amendments to the Statewide health MSCs reflect the latest toxicological data on human health effects when exposed to hazardous and toxic chemicals. This assures potentially affected citizens of the Commonwealth and persons interested in buying and redeveloping contaminated sites that the MSCs are protective of human health.

The Department believes that there will be little if any adverse effects from this regulation. Please also see the response to item (15) above.

(19) Provide a specific estimate of the costs and/or savings to the **regulated community** associated with compliance, including any legal, accounting or consulting procedures which may be required. Explain how the dollar estimates were derived.

The proposed changes to the Chapter 250 regulations are not expected to increase costs or provide any significant savings for the regulated community. Please also see the response to item (15) above.

(20) Provide a specific estimate of the costs and/or savings to the **local governments** associated with

compliance, including any legal, accounting or consulting procedures which may be required. Explain how the dollar estimates were derived.

The proposed amendments are not expected to impact costs or savings for local governments. In some cases local governments are remediators; however, as with all other types of remediators, the proposed regulation is not expected to increase costs or result in significant savings. Please also see the response to item (15) above.

(21) Provide a specific estimate of the costs and/or savings to the **state government** associated with the implementation of the regulation, including any legal, accounting, or consulting procedures which may be required. Explain how the dollar estimates were derived.

The proposed amendments are not expected to impact costs or savings for state government agencies. In some cases state government agencies are remediators; however, as with all other types of remediators, the proposed regulation is not expected to increase costs or result in significant savings. Please also see the response to item (15) above.

(22) For each of the groups and entities identified in items (19)-(21) above, submit a statement of legal, accounting or consulting procedures and additional reporting, recordkeeping or other paperwork, including copies of forms or reports, which will be required for implementation of the regulation and an explanation of measures which have been taken to minimize these requirements.

The proposed amendments to Chapter 250 will not require any additional recordkeeping or paperwork.

(23) In the table below, provide an estimate of the fiscal savings and costs associated with implementation and compliance for the regulated community, local government, and state government for the current year and five subsequent years.

	<b>Current FY Year</b>	<b>FY +1 Year</b>	<b>FY +2 Year</b>	<b>FY +3 Year</b>	<b>FY +4 Year</b>	<b>FY +5 Year</b>
<b>SAVINGS:</b>	<b>\$0</b>	<b>\$0</b>	<b>\$0</b>	<b>\$0</b>	<b>\$0</b>	<b>\$0</b>
<b>Regulated Community</b>	0	0	0	0	0	0
<b>Local Government</b>	0	0	0	0	0	0
<b>State Government</b>	0	0	0	0	0	0
<b>Total Savings</b>	0	0	0	0	0	0
<b>COSTS:</b>	0	0	0	0	0	0
<b>Regulated Community</b>	0	0	0	0	0	0
<b>Local Government</b>	0	0	0	0	0	0
<b>State Government</b>	0	0	0	0	0	0
<b>Total Costs</b>	0	0	0	0	0	0
<b>REVENUE LOSSES:</b>	0	0	0	0	0	0
<b>Regulated Community</b>	0	0	0	0	0	0

<b>Local Government</b>	0	0	0	0	0	0
<b>State Government</b>	0	0	0	0	0	0
<b>Total Revenue Losses</b>	0	0	0	0	0	0

(23a) Provide the past three year expenditure history for programs affected by the regulation.

<b>Program</b>	<b>FY 10-11</b>	<b>FY 11-12</b>	<b>FY -12-13</b>	<b>Current FY</b>
Industrial Land Recycling Fund	223,000	0	190,000	200,000
Hazardous Site Cleanup Fund	16,686,000	16,934,000	15,559,000	18,571,000
Storage Tank Fund	5,178,000	5,342,000	5,842,000	6,981,000
Underground Storage Tanks	1,250,000	1,750,000	1,750,000	1,750,000
Leaking Underground Storage Tanks	2,990,000	2,990,000	2,990,000	2,990,000

(24) For any regulation that may have an adverse impact on small businesses (as defined in Section 3 of the Regulatory Review Act, Act 76 of 2012), provide an economic impact statement that includes the following:

- (a) An identification and estimate of the number of small businesses subject to the regulation.

Please see the response to item (15) above. The types of businesses affected could include gasoline service stations, fuel distribution facilities, commercial facilities that use toxic or carcinogenic chemicals, manufacturing operations, and redevelopers of brownfield sites. There are about 12,000 facilities in the Commonwealth that contain regulated underground and above ground storage tanks, including gasoline stations and fuel distribution and storage facilities. Some of these facilities would include small gasoline station owners. Small businesses would also make up some of the commercial facilities that use toxic or carcinogenic substances. Because of the broad potential reach of this regulation, it is difficult for DEP to identify further specifics on the types and numbers of small businesses that would potentially be affected if they contaminate a property by releasing a regulated substance.

- (b) The projected reporting, recordkeeping and other administrative costs required for compliance with the proposed regulation, including the type of professional skills necessary for preparation of the report or record.

The proposed changes do not add any new procedures, recordkeeping or compliance efforts.

- (c) A statement of probable effect on impacted small businesses.

The proposed changes to the Chapter 250 regulations are not expected to increase costs or provide any significant savings for small businesses. MSCs have been promulgated for 390 regulated substances. Under this proposal the MSC values for about 180 of the substances would be changed. About 10% of



the values are being lowered, indicating a more stringent cleanup is required at a site. About 90% of the values are increasing which may indicate a less stringent cleanup at a site. However, values for many commonly encountered regulated substances, including those found in gasoline and in solvents are either not changing or are slightly increasing. The cost impact on a given site remediation would depend on the specific regulated substances being remediated and the specific soil and groundwater conditions at the site. For example, a site with a tight clay soil profile may not allow contaminants to spread horizontally or vertically. Therefore, the amount of soil to be excavated in this situation will not significantly change to meet a lower or a higher MSC value.

Most small businesses DEP can identify are small owners of gasoline stations. The proposed amendment will not affect these businesses because the MSC values are not changing for petroleum compounds. In addition, many of these businesses are required to participate in the Underground Storage Tank Indemnification Fund which provides insurance coverage for the costs to cleanup releases from their tanks, regardless of the MSC value used at the site.

Small businesses that handle hazardous substances can use pollution prevention techniques available through various assistance programs to prevent spills that would result in contamination of soil and groundwater. In addition, background and site specific cleanup standards are available and not affected by the proposed updates to the Statewide health MSCs.

Small businesses are eligible for brownfield financial assistance programs when they are not the ones responsible for the soil and groundwater contamination.

(d) A description of any less intrusive or less costly alternative methods of achieving the purpose of the proposed regulation.

The Department believes that there will be little if any adverse effects from this regulation. The Department is unaware of any less intrusive or less costly alternative methods of achieving the purpose of the proposed regulation, which is to update various MSCs based on current scientific information. Background and site-specific cleanup standards are available and not affected by the proposed updates to the Statewide health MSCs.

(25) List any special provisions which have been developed to meet the particular needs of affected groups or persons including, but not limited to, minorities, the elderly, small businesses, and farmers.

These proposed amendments to Chapter 250 do not include special provisions developed to meet the needs of any groups listed because they are not expected to adversely affect any listed group. Please see the responses to items (15), (17) and (24) above.

(26) Include a description of any alternative regulatory provisions which have been considered and rejected and a statement that the least burdensome acceptable alternative has been selected.

The Land Recycling Act and the Chapter 250 regulations require the periodic update of the Statewide health standard. The only other alternative is to not update the standard. Therefore, the least burdensome

acceptable alternative has been selected. Background and site-specific cleanup standards are available and not affected by the proposed updates to the Statewide health MSCs.

(27) In conducting a regulatory flexibility analysis, explain whether regulatory methods were considered that will minimize any adverse impact on small businesses (as defined in Section 3 of the Regulatory Review Act, Act 76 of 2012), including:

- a) The establishment of less stringent compliance or reporting requirements for small businesses;
- b) The establishment of less stringent schedules or deadlines for compliance or reporting requirements for small businesses;
- c) The consolidation or simplification of compliance or reporting requirements for small businesses;
- d) The establishment of performing standards for small businesses to replace design or operational standards required in the regulation; and
- e) The exemption of small businesses from all or any part of the requirements contained in the regulation.

The proposed amendments are not expected to have any adverse impact on small businesses; therefore, no regulatory methods were considered to minimize any adverse impact on small businesses.

Background and site-specific cleanup standards are available and not affected by the proposed updates to the Statewide health MSCs

(28) If data is the basis for this regulation, please provide a description of the data, explain in detail how the data was obtained, and how it meets the acceptability standard for empirical, replicable and testable data that is supported by documentation, statistics, reports, studies or research. Please submit data or supporting materials with the regulatory package. If the material exceeds 50 pages, please provide it in a searchable electronic format or provide a list of citations and internet links that, where possible, can be accessed in a searchable format in lieu of the actual material. If other data was considered but not used, please explain why that data was determined not to be acceptable.

The Land Recycling Act and the Chapter 250 regulations require the periodic update of the Statewide health standard to be based on nationally recognized, peer-reviewed toxicological data, including

reference dose, reference concentrations, cancer slope and unit risk factors published under the Integrated Risk Information System (IRIS), the National Center for Environmental Assessment, Provisional Peer-Reviewed Toxicity Values (PPRTV), the Health Effects Assessment Summary Tables, Agency for Toxic Substances and Disease Registry (ATSDR) Toxicological Profiles, and California EPA Cancer Potency Factors and Chronic Reference Exposure Levels.

This information is extensively published by the United States Environmental Protection Agency ([www.epa.gov](http://www.epa.gov)) and the United States Center for Disease Control ([www.cdc.gov](http://www.cdc.gov)) and is used by all state environmental and health departments in the country for conducting risk assessments for potential exposure to contaminants in soil and groundwater.

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(29) Include a schedule for review of the regulation including:

- |   |             |
|---|-------------|
| A. The date by which the agency must receive public comments:                               | Spring 2014 |
| B. The date or dates on which public meetings or hearings will be held: CSSAB Meeting       | Spring2014  |
| C. The expected date of promulgation of the proposed regulation as a final-form regulation: | Fall 2014   |
| D. The expected effective date of the final-form regulation:                                | Fall 2014   |
| E. The date by which compliance with the final-form regulation will be required:            | Fall 2014   |
| F. The date by which required permits, licenses or other approvals must be obtained:        | NA          |

(30) Describe the plan developed for evaluating the continuing effectiveness of the regulations after its implementation.

DEP evaluates the effectiveness of the Land Recycling Program and the Chapter 250 regulations on an ongoing basis. The efforts include ongoing tracking of remediations completed under the program and an annual program report. Once effective, DEP will be required to review the MSCs and update, if necessary, within three years.