

<h1 style="margin: 0;">Regulatory Analysis Form</h1> <p style="margin: 0;">(Completed by Promulgating Agency)</p>		<p><b><i>INDEPENDENT REGULATORY REVIEW COMMISSION</i></b></p>
<p><b>(All Comments submitted on this regulation will appear on IRRC's website)</b></p>		
<p>(1) Agency: Department of Environmental Protection</p>		<p><b>IRRC Number: 3292</b></p>
<p>(2) Agency Number: 7 Identification Number: 558</p>		
<p>(3) PA Code Cite: 25 Pa. Code §§ 208.375—208.376</p>		
<p>(4) Short Title: Prohibiting Electronic Liquid-Vaporizing Devices at Underground Bituminous Coal Mines</p>		
<p>(5) Agency Contacts (List Telephone Number and Email Address):                  Primary Contact: Laura Griffin, 717.783.8727, laurgriffi@pa.gov                  Secondary Contact: Brian Chalfant, 717.783.8727, bchalfant@pa.gov</p>		
<p>(6) Type of Rulemaking (check applicable box):</p> <p><input type="checkbox"/> Proposed Regulation</p> <p><input checked="" type="checkbox"/> Final Regulation</p> <p><input type="checkbox"/> Final Omitted Regulation</p>		<p><input type="checkbox"/> Emergency Certification Regulation;</p> <p><input type="checkbox"/> Certification by the Governor</p> <p><input type="checkbox"/> Certification by the Attorney General</p>
<p>(7) Briefly explain the regulation in clear and nontechnical language. (100 words or less)</p> <p>This final-form rulemaking amends the smoking prohibition at underground bituminous coal mines to expressly prohibit the use and/or possession of electronic liquid-vaporizing devices, including, but not limited to, electronic cigarettes, and will provide for the imposition of a penalty for violations of the prohibition.</p> <p>This final-form rulemaking also separately distinguishes the prohibition at surface work areas of underground bituminous coal mines from the prohibition in the underground areas of these mines. This addresses a safety hazard that the use and/or possession of these devices present at underground bituminous coal mining operations.</p>		
<p>(8) State the statutory authority for the regulation. Include <u>specific</u> statutory citation.</p> <p>The final-form rulemaking is authorized under section 106.1(a) of the Bituminous Coal Mine Safety Act (BCMSA) (52 P.S. § 690-106.1(a)), which grants the Board of Coal Mine Safety (Board) the authority to adopt regulations that are necessary or appropriate to implement the requirements of the BCMSA and to protect the health, safety and welfare of miners and other individuals in and about mines. Section 106.1(f)(2) of the BCMSA (52 P.S. § 690-106.1(f)(2)), further provides that regulations may address any hazards not addressed by existing safety standards. The Department is authorized to assess civil penalties under 52 P.S. § 690-105(16) (relating to Powers and Duties of the Department).</p>		

(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.

This final-form rulemaking is not mandated by any Federal or State law, court order, or Federal regulation.

(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.

Coal mine fires pose a constant danger to the safety of miners and to their livelihood. Underground mine fires pose an added hazard because of the confined environment with remote exits. The Federal government has enacted safety regulations for underground coal mines that have greatly improved the safety of miners. 30 CFR Part 75. However, mine fires and fire injuries remain serious hazards for all coal mining operations. The combination of an electronic cigarette and a lithium-ion battery is a new and unique hazard. There is no analogy among consumer products to the risk of a severe, acute injury presented by an e-cigarette. Fires or explosions caused by the batteries used in electronic cigarette are uncommon. However, the consequences can be devastating and life-altering for the victims. This is especially a concern in the underground mining environment, where explosions in underground mines are caused by accumulations of flammable gas and/or combustible dust mixed with air in the presence of an ignition source. While much progress has been made in preventing explosion disasters in coal mines, explosions still occur, sometimes producing multiple fatalities. Preventing fires is essential to the health and safety of mine workers.

To protect the health and safety of miners and other individuals, this final-form rulemaking amends the smoking prohibition at underground bituminous coal mines to expressly prohibit the use and/or possession of electronic liquid-vaporizing devices, including, but not limited to, electronic cigarettes, and impose a penalty for violations of the prohibition. By prohibiting the use of and/or possession of electronic liquid vaporizing devices at underground bituminous coal mines, this final-form rulemaking addresses both explosive and distraction hazards these devices present at underground bituminous coal mining operations. This final-form rulemaking also separately distinguishes the prohibition at surface work areas of underground bituminous coal mines from the prohibition inside these mines.

This final-form rulemaking will improve safety by expressly prohibiting the use and/or possession of electronic liquid-vaporizing devices, which present hazards. Miners, their families, mining companies, and others will benefit from the additional safety ensured by the avoided hazards associated with the use or possession of electronic liquid-vaporizing devices at underground bituminous coal mines. Additionally, miners, mine officials, mine operators, and the Department will benefit from clarity regarding how the use and possession of these devices are regulated at underground bituminous coal mines.

(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.

The relevant Federal standards do not expressly address the use or possession of electronic liquid-vaporizing devices. Therefore, the two provisions in this final-form rulemaking may be considered more stringent than Federal standards to the extent that the Federal standards do not expressly state whether they prohibit the use and/or possession of these devices.

Section 208.375 amends the existing smoking prohibition at surface work areas of underground bituminous coal mines to expressly prohibit electronic liquid-vaporizing devices and impose a penalty for violations of this section. The existing regulation incorporates the Federal standard under 30 CFR 77.1711. The penalty provided in this final-form rulemaking refers to the penalty imposed under Federal law, so as not to be more stringent. See 30 CFR 100.5(d), which is adopted and incorporated into the Department's regulations by reference. Pursuant to the Federal Civil Penalties Inflation Adjustment Act, the maximum penalty is updated every year to reflect inflation and is currently set at \$342.00 as of January 14, 2021. See 86 FR 2970. However, the penalty is not exclusive of any other enforcement option the Department believes is warranted under the particular circumstances of the violation.

Section 208.376 incorporates the smoking prohibition in underground bituminous coal mines from Section 268(b) of the BCMSA (52 P.S. § 690-268(b)). The final-form regulation expressly prohibits the use and possession of electronic liquid-vaporizing devices and imposes the same penalty for violations as explained above.

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

Other states have mine safety statutes or regulations prohibiting smoking and smoking articles, including West Virginia, Ohio, and Kentucky. Of these, only Kentucky expressly prohibits electronic liquid-vaporizing devices. See Section 352.170(3) of the Kentucky Revised Statutes (KRS 352.170(3)) ("... including but not limited to electronic cigarettes, cigars, or any component that heats liquid or other material to produce vapor").

This final-form rulemaking will not affect Pennsylvania's ability to compete with other states. Compliance with this final-form rulemaking does not impose any cost on operators and operators already prohibit their employees from carrying and/or using these devices in all 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, this final-form rulemaking does not affect any other regulations of the promulgating agency or other state agencies.

(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.)

This final-form rulemaking was prepared at the direction of the Board which was established pursuant to BCMSA. The seven-member Board is chaired by the Secretary of the Department of Environmental Protection and consists of three members who represent mine workers and three members who represent coal mine operators. Three of the members of the Board were nominated by the United Mine Workers of America (UMWA) to represent miners, and three were nominated by the Pennsylvania Coal Alliance (PCA) to represent coal mine operators.

The Board developed and drafted this final-form rulemaking with input and advice on the rulemaking from the regulated community. The three members of the Board nominated by the UMWA provided input on the regulations on behalf of mine workers. Likewise, the three representatives on the Board

nominated by PCA made recommendations on the regulation on behalf of the seven underground bituminous coal mining companies and affiliates that currently operate in Pennsylvania. As such, both UMWA and PCA participated in the decision of the Board to prepare this regulation.

The Board has determined that no small businesses, as that term is defined under Section 3 of the Regulatory Review Act, will be affected by this final-form rulemaking because this final-form rulemaking addresses the individual conduct of miners, mine officials, and other persons in and about mines and not the actual operations of a mine itself, which requires the expenditure of money. According to the Small Business Size Regulations under 13 CFR Part 121, for NAICS Code 212112 (bituminous coal underground mining) a small business is one that employs fewer than 500 persons. The Board determined that this rulemaking would apply to seven underground bituminous coal mining companies currently operating in Pennsylvania, four of which employ fewer than 500 persons. The Board made this determination by reviewing its own internal data and publicly available data from the companies.

It is also important to note that all underground mining operations are already subject to the Federal smoking prohibition under 40 CFR 75.1702. Under that provision companies are required to institute a program, approved by the U.S. Labor Secretary, to ensure that any person entering the underground area of the mine does not carry smoking materials, matches, or lighters. While this Federal prohibition does not extend to electronic liquid-vaporizing devices, extending this plan to include these devices will not increase costs.

(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?

Approximately seven underground bituminous coal mine companies operate in Pennsylvania. Four of these seven companies are small businesses. This final-form rulemaking will not affect the actual operations of those underground bituminous coal mining companies and is limited to the conduct of certain individuals like miners, mine officials, and other persons in and about mines. This final-form rulemaking will affect individuals in and about mines to the extent that they engage in conduct that presents a safety hazard. It does not impact the actual operations of the mines by requiring operational or equipment requirements.

There are approximately 2,457 individual miners who could theoretically be subject to this final-form rulemaking. In practice, the impact of the rulemaking is expected to be negligible given the rarity of violating smoking safety rules. Over the past 20 years, only 2 miners have had their certifications revoked for a violation related to smoking materials.

(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.

Approximately seven underground bituminous coal mine companies operate in Pennsylvania. Four of these seven companies are small businesses. This final-form rulemaking will not impose any additional operational requirements on underground bituminous coal mining companies because it is limited to prohibit certain individual conduct by miners, mine officials, and other persons in and about mines. There are approximately 2,457 individual miners who will be required to comply with this regulation.

(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.

Smoking, and smoking related activities at underground bituminous coal mine companies are already prohibited under Federal law at 30 CFR 75.1702 and 77.1711. The inclusion of a regulatory prohibition on electronic liquid-vaporizing devices will not have any additional financial, economic, or social impact on the public or regulated community. The potential benefits of the final-form rulemaking include the continued prevention of bodily harm and loss of life at underground bituminous coal mine sites by ensuring the approximately 2,457 individual miners required to comply with this regulation avoid the explosive hazard and distraction hazard that these devices pose.

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

The benefits of this rulemaking include the protection of life and property. The combination of an electronic cigarette and a lithium-ion battery is a new and unique hazard. Fires or explosions caused by the batteries used in electronic cigarette are uncommon. However, the consequences can be devastating and life-altering for the victims. This is especially a concern in the underground mining environment, where explosions in underground mines are caused by accumulations of flammable gas and/or combustible dust mixed with air in the presence of an ignition source.

(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.

Costs and/or savings as the result of the implementation of this final-form rulemaking are not anticipated since the approximately 2,457 individual miners in and about mines must already comply with the relevant BCMSA provisions prohibiting smoking and possession of smoking materials. In practice, the impact of the regulation is expected to be negligible given the rarity of violating smoking safety rules. Over the past 20 years, only 2 miners have had their certifications revoked for a violation related to smoking materials.

Moreover, although the final-form rulemaking is intended to protect miners, it may also minimize unnecessary expenses to the regulated community by reducing the risk of accidents. Worker accidents can result in significant costs to a mine operator since it typically takes an operator time to resume operations after such accidents. This could lead to expenses for the mine operator incurred through lost wages, lost production capacity, payment for services associated with mine rescue operations, and other related expenses.

(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.

This question does not apply because local governments do not engage in underground bituminous coal mining.

(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 costs incurred by the state government as a result of this final-form rulemaking are expected to be negligible because the Commonwealth already conducts mine safety inspections. Nothing in this final-form rulemaking will alter current state government practices or costs.

(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.

This final-form rulemaking does not require any additional accounting or consulting procedures, additional reporting, recordkeeping, or other paperwork other than that which is already being performed on a routine basis as required under BCMSA requirements.

(22a) Are forms required for implementation of the regulation?

No new forms are required for implementation of the final-form rulemaking.

(22b) If forms are required for implementation of the regulation, **attach copies of the forms here**. If your agency uses electronic forms, provide links to each form or a detailed description of the information required to be reported. **Failure to attach forms, provide links, or provide a detailed description of the information to be reported will constitute a faulty delivery of the regulation.**

No new forms are required for implementation of the final-form rulemaking.

(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 2021-22</b>	<b>FY +1 2022-23</b>	<b>FY +2 2023-24</b>	<b>FY +3 2024-25</b>	<b>FY +4 2025-26</b>	<b>FY +5 2026-27</b>
<b>SAVINGS:</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>						
<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>						
<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-3 2018-19</b>	<b>FY-2 2019-20</b>	<b>FY-1 2020-21</b>	<b>Current FY 2021-22</b>
Environmental Program Management	\$30,932,000	\$27,920,000	\$32,041,000	\$34,160,000
Environmental Protection Operations	\$93,190,000	\$84,023,000	\$94,202,000	\$98,036,000

(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.

Four small businesses operate underground bituminous coal mines in Pennsylvania. The final-form rulemaking is not anticipated to have an adverse operational impact on these businesses.

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

No additional costs will be incurred with respect to reporting, recordkeeping, and other administrative costs required for compliance with the final-form rulemaking because this rulemaking does not require any additional reporting, recordkeeping, or other paperwork other than that which is already being performed on a routine basis as required under BCMSA requirements.

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

This final-form rulemaking is not expected to have any effect on the four small businesses subject to this regulation because this final-form rulemaking addresses the individual conduct of miners, mine officials, and other persons in and about mines and not the operational activities of the mine companies.

According to the Small Business Size Regulations under 13 CFR Part 121, for NAICS Code 212112 (bituminous coal underground mining) a small business is one that employs fewer than 500 persons. Four of the seven underground bituminous coal mining companies currently operating in Pennsylvania employ fewer than 500 persons.

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

Alternative methods for achieving the purpose of the final-form rulemaking were analyzed only with respect to the penalty of the violation. The basis for the violation, carrying and/or using smoking articles, including liquid vaporizing devices, is based upon similar existing BCMSA authority. Regarding the penalty, the Department analyzed whether a person violating the regulation should receive an automatic suspension rather than a penalty. The Department determined that an automatic suspension would not aid in deterring or enforcing the violation because not all persons at mines have credentials that may be suspended.

It is also important to note that all underground mining operations are already subject to the Federal smoking prohibition under 40 CFR 75.1702. Under that provision companies are required to institute a program, approved by the U.S. Labor Secretary, to ensure that any person entering the underground area of the mine does not carry smoking materials, matches, or lighters. While this Federal prohibition does not extend to electronic liquid-vaporizing devices, extending this plan to include these devices will not increase costs.

(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.

No special provisions were developed to meet the particular needs of affected groups or persons because the Board was unable to identify any such groups.

(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.

Alternative regulatory provisions were not considered because this rulemaking is based on the current statutory provisions under Chapter 208 of the BCMSA, which prohibit smoking and the possession of smoking materials.

(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 performance 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.

According to the Small Business Size Regulations under 13 CFR Part 121, for NAICS Code 212112 (bituminous coal underground mining) a small business is one that employs fewer than 500 persons. Four of the seven underground bituminous coal mining companies currently operating in Pennsylvania employ fewer than 500 persons. This final-form rulemaking is not expected to have any effect on the four small businesses subject to the regulation because this proposed rulemaking addresses the



individual conduct of miners, mine officials, and other persons in and about mines, and not that of the operation of those small businesses.

- a) Less stringent compliance and reporting requirements were not considered because this final-form rulemaking does not impose additional compliance or reporting requirements.
- b) Less stringent schedules or deadlines for compliance or reporting requirements were not considered because this final-form rulemaking does not impose any schedules or deadlines for compliance or reporting.
- c) The consolidation or simplification of compliance or reporting requirements for small business was not considered because this final-form rulemaking does not impose any compliance or reporting requirements.
- d) The establishment of performing standards for small businesses to replace design or operational standards required in the regulation was not considered because this final-form rulemaking does not impose design or operational standards.
- e) The exemption of small businesses from all or any part of the requirements contained in the regulation was not considered because this final-form rulemaking does not apply to the businesses' conduct, only that of individuals in and about the mine.

(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.

While this regulation did not rely on any data there are numerous studies detailing the hazards of mine fires and the explosive risks related to electronic liquid-vaporizing devices. Two examples of such studies include - Electronic Cigarette Fires and Explosions in the United States 2009 – 2016, July 2017, U.S. Fire Administration, Federal Emergency Management Agency, available at [https://www.usfa.fema.gov/downloads/pdf/publications/electronic\\_cigarettes.pdf](https://www.usfa.fema.gov/downloads/pdf/publications/electronic_cigarettes.pdf); and Explosion Prevention in United States Coal Mines, Jürgen F. Brune, Kenneth L. Cashdollar and R. Karl Zipf, available at <https://www.cdc.gov/niosh/mining/UserFiles/works/pdfs/epius.pdf>.

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

- |                                                                                               |                                                      |
|-----------------------------------------------------------------------------------------------|------------------------------------------------------|
| A. The length of the public comment period:                                                   | <u>30 days</u>                                       |
| B. The date or dates on which any public meetings or hearings will be held:                   | <u>None held</u>                                     |
| C. The expected date of delivery of the final-form regulation:                                | <u>Quarter 2, 2022</u>                               |
| D. The expected effective date of the final-form regulation:                                  | <u>Upon publication in the Pennsylvania Bulletin</u> |
| E. The expected date by which compliance with the final-form regulation will be required:     | <u>Upon publication in the Pennsylvania Bulletin</u> |
| F. The expected date by which required permits, licenses or other approvals must be obtained: | <u>Not applicable</u>                                |

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

The Department will continue to closely monitor these regulations for their effectiveness and recommend updates as necessary.