Regulatory Analysis Form (Completed by Promulgating Agency) **(All Comments submitted on this regulation will appear on IRRC's website)**	***INDEPENDENT REGULATORY REVIEW COMMISSION***
(1) Agency Environmental Protection	
(2) Agency Number: Identification Number: 7-529	**IRRC Number:** 3162
(3) PA Code Cite: 25 Pa. Code Chapter 121 and Chapter 126, Subchapter C	
(4) Short Title: Repeal of Gasoline Volatility Requirements	
(5) Agency Contacts (List Telephone Number and Email Address): Primary Contact: Laura Edinger, 783-8727, ledinger@pa.gov Secondary Contact: Jessica Shirley, 783-8727, jesshirley@pa.gov	
(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)

This final-form rulemaking addresses the legislative mandate of the Act of May 14, 2014, P.L. 674, No. 50 (Act 50 of 2014) which amended the Pennsylvania Air Pollution Control Act (APCA) to require the Department of Environmental Protection (Department, DEP) to "[W]ithin sixty (60) days of the effective date of this clause, initiate the process of amending the State implementation plan. Upon approval of a revision which demonstrates continued compliance with Federal national ambient air quality standards through utilization of commensurate emission reductions by the Environmental Protection Agency, the board shall promulgate regulations to repeal the provisions of 25 Pa. Code Ch. 126 Subch. C (relating to gasoline volatility requirements)." The paragraph was effective May 14, 2014, and added to the Air Pollution Control Act (APCA) as Section 4(18.3), 35 P.S. § 4004(18.3).

The proposed rulemaking recommended rescinding Chapter 126, Subchapter C (relating to gasoline volatility requirements) codified in §§ 126.301—126.303 (relating to compliant fuel requirement; recordkeeping and reporting; and compliance and test methods); however, rescission alone would not remove the ability to enforce these requirements under Federal law through the Commonwealth's EPA-approved SIP. The final-form rulemaking is a necessary component in changing that. The proposed rulemaking also recommended deleting several terms from § 121.1 that are used in Chapter 126, Subchapter C. The final-form rulemaking no longer includes these deletions, as the final-form rulemaking does not repeal Chapter 126, Subchapter C.

This final-form rulemaking amends Chapter 126, Subchapter C by adding language to § 126.301 that will make Chapter 126, Subchapter C no longer applicable to the Pittsburgh-Beaver Valley Area upon the effective date of approval by the U.S. Environmental Protection Agency (EPA) of the removal, suspension, or replacement of Chapter 126, Subchapter C as a part of the Commonwealth's State Implementation Plan (SIP).

Specifically, in accordance with Act 50 of 2014, the Department is preparing to submit to the EPA a Non-Interference Demonstration SIP revision seeking removal of §§ 126.301—126.303 from the Commonwealth's Federally approved SIP and demonstrating that commensurate emission reductions will ensure continued compliance with the Federal National Ambient Air Quality Standards (NAAQS) by this Commonwealth. This rulemaking will be submitted prior to or concurrent with the SIP revision, in order to obtain EPA approval of the SIP revision. Upon promulgation of this final-form rulemaking and EPA approval of the Non-Interference Demonstration SIP revision, Chapter 126, Subchapter C will no longer be applicable.

Coordination of these actions will ensure that affected entities will not be at risk of enforcement proceedings at either the Federal or the Commonwealth level upon the effective date of EPA approval of the Non-Interference Demonstration SIP revision and will achieve the objective of Act 50 of 2014. To meet the final requirement of Act 50 of 2014, the Department plans to pursue a rulemaking, upon EPA approval of the Non-Interference Demonstration SIP, to remove Chapter 126, Subchapter C from the *Pennsylvania Code* by repealing it.

(8) State the statutory authority for the regulation. Include <u>specific</u> statutory citation.

This final-form rulemaking is authorized under Section 5(a)(1) of the APCA (35 P.S. § 4005(a)(1)), which grants the Environmental Quality Board (Board, EQB) the authority to adopt rules and regulations for the prevention, control, reduction and abatement of air pollution in this Commonwealth; Section 5(a)(8) of the APCA (35 P.S. § 4005(a)(8)), which grants the Board the authority to adopt rules and regulations designed to implement the provisions of the Federal Clean Air Act (CAA); and Section 4(18.3) of the APCA (35 P.S. § 4004(18.3)), which requires the Department and the Board to take actions that result in the repeal of Chapter 126, Subchapter C.

(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.

Yes, this final-form rulemaking is mandated by Act 50 of 2014, which amended the APCA by adding Section 4(18.3), to require the Department and the Board to take actions that result in the repeal of Chapter 126, Subchapter C. The amendment to the APCA was effective May 14, 2014, and is quoted in response to Question #7, above. There are no relevant state or Federal court decisions relating to the final-form rulemaking.

(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.

On May 14, 2014, the Governor of Pennsylvania approved Act 50 of 2014 which added Section 4(18.3) to the APCA. Section 4(18.3) directs the Department to initiate the process of amending the Commonwealth's SIP. Upon approval by the EPA of a revision to the SIP which demonstrates continued compliance with Federal NAAQS through the use of commensurate emission reductions, the Board shall promulgate regulations to repeal the provisions of Chapter 126, Subchapter C.

This final-form rulemaking supports Section 4(18.3) of the APCA, which requires the Department to initiate the process of amending the SIP and to obtain approval from the EPA of a SIP revision which demonstrates continued compliance with Federal national ambient air quality standards through utilization of commensurate emission reductions. The requirement in Section 4(18.3) directing the Board, after EPA approval of the SIP revision, to promulgate regulations to remove the provisions of Chapter 126, Subchapter C from the *Pennsylvania Code* will be addressed in a separate rulemaking action that will repeal Chapter 126, Subchapter C and associated terms, to occur after EPA approval of this final-form rulemaking and the Non-Interference Demonstration SIP revision.

Chapter 126, Subchapter C sets forth the requirements for gasoline with a RVP of 7.8 pounds per square inch (psi) or less (low RVP gasoline) to be blended, mixed, stored, transferred, transported, exchanged, supplied, or sold in the Pittsburgh-Beaver Valley Area during the period of May 1 through September 15 of each year. More specifically, refiners, importers, distributors, resellers, terminal owners and operators and carriers may not sell, exchange, or supply non-compliant gasoline in the Pittsburgh-Beaver Valley area between May 1 and September 15 of each year. Retailers and wholesale purchaser-consumers may not sell, exchange or supply non-compliant gasoline in the Pittsburgh-Beaver Valley Area between June 1 and September 15 of each year. Both applicable periods are referred to as "summer months" in this document, with clarification as to which time constraint applies. The seven-county Pittsburgh-Beaver Valley Area includes Allegheny, Armstrong, Beaver, Butler, Fayette, Washington, and Westmoreland Counties.

The Chapter 126, Subchapter C requirements were promulgated on November 1, 1997 (27 Pa.B. 5601). These requirements were approved by the EPA on June 8, 1998 (63 FR 31116), as a revision to the Commonwealth's SIP codified in the Code of Federal Regulations (CFR) at 40 CFR 52.2020—52.2063 (Subpart NN – Pennsylvania), effective July 23, 1998, as an ozone precursor control measure necessary to attain and maintain the 1-hour Ozone NAAQS in the Pittsburgh-Beaver Valley Area to protect the public health and welfare. Gasoline vapors include volatile organic compound (VOC) emissions. VOCs are a precursor to the formation of ground-level ozone air pollution and fine particulate matter ($PM_{2.5}$), both hazards to public health and welfare. Gasoline formulated with an RVP of 7.8 psi or less has lower VOC emissions than gasoline formulated at higher RVP levels.

Senate Bill 1037, regular session of 2013-2014, was the enabling legislation for Act 50 of 2014. The Senate Co-Sponsorship Memorandum for Senate Bill 1037[1], dated June 5, 2013, states:

> "In the near future, we plan to introduce legislation amending the Air Pollution Control Act (Act 787 of 1959) to eliminate statutory requirements for low Reid Vapor Pressure (RVP) gasoline (Summer Gas) in Allegheny, Armstrong, Beaver, Butler, Fayette, Greene, and Washington

[1]Senate Co-Sponsorship Memoranda – Repeal of Summer RVP Gas. Pennsylvania State Senate. Accessed August 18, 2017. http://www.legis.state.pa.us//cfdocs/Legis/CSM/showMemoPublic.cfm?chamber=S&SPick=20130&cosponId=12920

Counties.

> In 1998, the Department of Environmental Protection adopted a 7.8 psi RVP fuel standard for southwestern Pennsylvania to address federal air pollution control measures. Since that time, ethanol became mandated by the federal government, increasing the RVP value of fuel. This resulted in an exclusive "boutique" fuel mandate for southwestern Pennsylvania. In recent years, we have seen higher gas prices averaging 10 to 15 cents higher in western Pennsylvania than in neighboring counties and also across the border in Ohio. In Pennsylvania, this boutique fuel is only required for the Pittsburgh region, and demand for the product is low. This equates to a hidden tax drivers must pay in southwestern Pennsylvania that is not required anywhere else."

The Senate Co-Sponsorship Memorandum indicates that the impetus for directing the Department to begin the process of revising the SIP was to reduce the costs of gasoline to the consumers in the southwestern Pennsylvania area.

Owners and operators of facilities and infrastructure in the gasoline supply chain, including refineries, bulk gasoline stations and terminals, other gasoline wholesale facilities, bulk petroleum storage facilities, gasoline stations with and without convenience stores, tanker trucks, and petroleum pipelines, may benefit from this final-form rulemaking financially and through reduced recordkeeping and reporting obligations. U.S. Census Bureau data indicates there are approximately 1,100 establishments in the Pittsburgh-Beaver Valley Area identified as belonging to one of these industry sectors, employing approximately 11,000 to 14,000 people. Please see the response to Question #15 for more detail on how the Department determined the number of affected facilities.

The Department's analysis of refining costs and terminal and retail prices shows that there may be a cost reduction for refiners and distributors and, possibly, gasoline retailers and consumers, if the upstream cost savings for not refining gasoline to an RVP of 7.8 psi are passed through the gasoline supply chain. The exact cost savings benefit that may result from the removal of the low RVP requirement is difficult to quantify due to the many factors used to establish the price of petroleum products, as well as the many intermediaries involved in the supply and transport chain from refiner to ultimate consumer. It should be further noted that in the most recent 5 years of retail pricing data evaluated by the Department, Pittsburgh metropolitan area average retail gasoline prices have been higher than the Pennsylvania statewide average retail gasoline prices in both summer and winter. Because of this higher average retail price year-round, it is unclear how much of the price differential in summer is due to the low RVP gasoline requirement and how much is due to local market forces and other factors.

The population of the Pittsburgh-Beaver Valley Area was approximately 2,353,045 in 2015. Most gasoline consumers in the Pittsburgh-Beaver Valley Area likely use gasoline for operating gasoline-powered vehicles and nonroad equipment. Gasoline consumers in the Pittsburgh-Beaver Valley Area, consumers in the adjacent counties who purchase gasoline in the Pittsburgh-Beaver Valley Area, and consumers traveling through the Pittsburgh-Beaver Valley Area may benefit economically if cost savings experienced by refiners, terminals, and intermediate suppliers and transporters are passed through to the retail establishments and to the consumers.

The Department estimates that total gasoline consumption in the Pittsburgh-Beaver Valley Area for the summer months (May 1-September 15) of 2016 was approximately 352 million gallons.

The estimated potential cost savings for refiners if low RVP gasoline is no longer required for the Pittsburgh-Beaver Valley Area may be as much as $1,760,000, based on an average cost of 0.5 cents per

gallon (cpg) to refine gasoline to the 7.8 psi RVP level (0.5 cpg x 352 million gallons x $1/100 cents = $1,760,000). Actual cost savings for an individual refiner would be directly dependent on how much 7.8 psi RVP gasoline a refiner produces during the applicable time period.

The estimated potential total cost savings for retailers and wholesale purchaser-consumers if low RVP gasoline is no longer required for the Pittsburgh-Beaver Valley Area range from $4,928,000 to $11,264,000 (based on cost savings to these intermediate entities ranging from 1.4 cpg to 3.2 cpg) annually during the summer months (May 1-September 15), on the distribution of approximately 352 million gallons in the Pittsburgh-Beaver Valley Area. Actual cost savings for an individual retailer or wholesale purchaser-consumer would be directly dependent on how much gasoline a retailer or wholesale purchaser-consumer purchases from an entity subject to Chapter 126, Subchapter C during the applicable time-period.

The estimated potential total cost savings for the ultimate consumers if low RVP gasoline is no longer required for the Pittsburgh-Beaver Valley Area range from $5,632,000 to $32,384,000 (based on retail cost savings to consumers ranging from 1.6 cpg to 9.2 cpg) annually during the summer months (May 1-September 15), on a summer season fuel consumption estimate of approximately 352 million gallons in the Pittsburgh-Beaver Valley Area. This calculation is based on the assumption that consumers may be purchasing low RVP fuel as early as the May 1 compliance date for refiners and terminals, rather than the later June 1 compliance date for retailers and wholesale purchaser-consumers.

The estimated potential cost savings for an individual consumer would be based on the consumer's purchases of low RVP gasoline during the time period of June 1 through September 15; low RVP fuel may be available for purchase from retailers as early as May 1, which would increase the period in which consumers could experience cost savings from the removal of the Chapter 126, Subchapter C requirements. For example, a consumer that purchased a total of 100 gallons of low RVP gasoline during the time period could potentially save from $1.60 (1.6 cpg x $1/100 cents x 100 gallons) to $9.20 (9.2 cpg x $1/100 cents x 100 gallons) for the season. Actual cost savings would be directly dependent on how much gasoline a consumer purchases from an entity subject to Chapter 126, Subchapter C during the applicable time period, as well as on the cost savings per gallon due to the removal of the low RVP requirement.

Please see the response to Question #19 for more detail on how the Department calculated the potential cost savings estimates.

(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. Upon the effective date of approval by the EPA of the removal, suspension, or replacement of Chapter 126, Subchapter C as a Federally enforceable requirement in the Commonwealth's SIP, the final-form rulemaking amendment to § 126.301 will result in the RVP of gasoline exchanged, supplied, or sold in the Pittsburgh-Beaver Valley Area between May 1 and September 15 of each year reverting to the Federal gasoline volatility requirements specified in Section 211(h) of the CAA, (42 U.S.C.A. § 7545(h)) (relating to Reid Vapor Pressure requirements) and in the EPA's regulations adopted under Section 211(h) of the CAA as set forth at 40 CFR § 80.27 (relating to controls and prohibitions on gasoline volatility). The EPA regulations state that the gasoline RVP standard for Pennsylvania year-round is 9.0 psi except in those areas for which the EPA has approved a SIP revision with a lower RVP requirement. See 40 CFR § 80.27(a)(2). The EPA regulations also provide a 1.0 psi RVP allowance for gasoline containing ethanol at 9 to 10 volume percent (vol%), applicable to Pennsylvania, effectively allowing for a maximum RVP of 10

psi for gasoline in all areas of this Commonwealth, except the Philadelphia area where Federally mandated reformulated gasoline is required. See 40 CFR § 80.27(d)(1).

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

A review of surrounding states, including New York, Ohio, West Virginia, Virginia, Maryland, Delaware, and New Jersey, indicates that no other state currently requires low RVP gasoline. Ohio recently made its low volatility gasoline requirement no longer effective upon approval of an Ohio SIP revision by the EPA. As a result, Pennsylvania's existing low RVP gasoline requirement for the Pittsburgh-Beaver Valley Area is more stringent than the RVP gasoline requirements for all nearby counties located in the surrounding states. The retail cost difference attributable to low RVP gasoline compared to conventional gasoline is estimated to be 1.6 – 9.2 cpg. Please see the responses to Questions #19 and #23 for additional discussion on costs and savings.

This final-form rulemaking will help align Pennsylvania's gasoline RVP requirements with the requirements of the bordering states. This may enable Pennsylvania gasoline prices in the Pittsburgh-Beaver Valley Area to be more competitive with other states. It is important to note, however, that other factors affect the retail price of gasoline between states and localities, including state taxes and fees on the purchase of gasoline at the retail level. The total state gasoline taxes and fees in the surrounding states range from 15.80 – 36.90 cpg lower than Pennsylvania. Ohio state gasoline taxes and fees are 28.01 cpg, which is 31.29 cpg lower than Pennsylvania's current rate of taxes and fees of 59.30 cpg[2] on the retail purchase per gallon of gasoline. The Department does not have state-specific historic fuel price data for the surrounding states, but differences in state and local gasoline taxes likely have as much or more influence on the difference in gasoline prices across state borders as the influence of the low RVP gasoline requirements.

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

No other regulations promulgated by this agency or other state agencies would be affected.

(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 Air Quality Technical Advisory Committee (AQTAC) was briefed on this final-form rulemaking on June 15, 2017. Twelve of the 15 members of AQTAC present voted to concur with DEP's recommendation to move this final-form rulemaking forward to the Board for consideration. Two AQTAC members opposed moving the final-form rulemaking forward, but did not provide concerns or comments at the meeting. The remaining member abstained. When AQTAC reviewed the proposed rulemaking at its December 10, 2015, meeting, five AQTAC members did not concur with moving the proposed rulemaking forward to the Board based on concerns over the loss of emission reduction benefits as a result of the repeal, the calculation of emission reduction benefits, and the process that would be used by the

[2] Motor Fuel Taxes – State Gasoline Tax Reports – Interactive Gasoline Map (April 2017 version). American Petroleum Institute. Accessed August 17, 2017. http://www.api.org/oil-and-natural-gas/consumer-information/motor-fuel-taxes/gasoline-tax

Department to demonstrate continued compliance with Federal NAAQS through the use of commensurate emission reductions.

The Small Business Compliance Advisory Committee (SBCAC) was briefed on this final-form rulemaking on July 26, 2017. The members of the SBCAC voted unanimously to concur with DEP's recommendation to move this final-form rulemaking forward to the Board for consideration.

In addition, this final-form rulemaking was discussed with the Citizens Advisory Council (CAC) Policy and Regulatory Oversight Committee on June 27, 2017. On the recommendation of the Policy and Regulatory Oversight Committee, on September 19, 2017, the members of the CAC concurred with DEP's recommendation to forward this final-form rulemaking to the Board.

The AQTAC, SBCAC, and CAC meetings are advertised and open to the public, and there is an opportunity for public comment at each meeting

The proposed rulemaking was published in the *Pennsylvania Bulletin* on February 25, 2017, with a 66-day public comment period (47 Pa.B 1157). Three public hearings were held by the Board on March 28, 29, and 30, 2017, in Pittsburgh, Norristown, and Harrisburg, respectively. The public comment period closed on May 1, 2017. No testimony was provided at the public hearings. Written comments were received from members of the public, the regulated industry, and members of the Pennsylvania House of Representatives during the public comment period.

(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?

This final-form rulemaking applies to gasoline refiners, importers, distributors, resellers, terminal owners and operators, carriers, retailers, and wholesale purchaser-consumers that operate in, supply to, or sell gasoline in the Pittsburgh-Beaver Valley Area. These entities include owners and operators of facilities and infrastructure in the gasoline supply chain, such as bulk gasoline stations and terminals, other gasoline wholesale facilities, gasoline stations with and without convenience stores, tanker trucks, and petroleum pipelines.

Some industry sectors will be impacted more than others. The Department's analysis of potentially affected entities used U.S. Census Bureau data based on the North American Industry Classification System (NAICS) codes for the subject industry sectors; Department databases; and information provided by the Pennsylvania Small Business Development Center's Environmental Management Assistance Program (EMAP). The types and numbers of these businesses, and how they will likely be affected, are described below.

Businesses and employees

The Department's assessment of how many businesses and employees will potentially be affected by this final-form rulemaking began with searching the NAICS codes to identify the gasoline-related industry sectors performing activities currently subject to Chapter 126, Subchapter C. A complete and valid NAICS code contains six digits. See http://www.naics.com/frequently-asked-questions/, "*Why are some NAICS codes only 5-digits long?*" More information about the United States' portion of the NAICS is available at http://www.census.gov/eos/www/naics/.

Table 1 is a list of the NAICS codes and the relevant industry sectors included in those codes. Some of the NAICS codes also include industry sectors that are not affected by this final-form rulemaking; these industry sectors are not listed in the table. As a result, the number of potentially affected businesses shown in this Regulatory Analysis Form may be higher than the actual number of affected businesses. (Please see next page for Table 1.)

Table 1. List of Industry Sectors Related to Transport of Gasoline

NAICS	Relevant Industry Sector
424710	Bulk gasoline stations; Gasoline, bulk stations and terminals.
424720	Gasoline merchant wholesalers (except bulk stations, terminals).
447110	Convenience food with gasoline stations; Gasoline stations with convenience stores; Gasoline with convenience stores.
447190	Gasoline stations without convenience stores; Service gasoline stations; Truck stops.
484220	Tanker trucking (e.g. chemical, juice, milk, petroleum), local.
484230	Tanker trucking (e.g. chemical, juice, milk, petroleum), long distance.
486910	Gasoline pipeline transportation; Pipeline transportation, gasoline and other refined petroleum products.
493190	Bulk petroleum storage.

Once the NAICS were identified, additional information was obtained through American FactFinder, a web-based tool of the U.S. Census Bureau that allows users to search U.S. Census data obtained through annual surveys and censuses, including business information, at various geographic levels, from multiple databases. Table 2 lists the number of establishments and number of employees for each NAICS listed in Table 1 for the Pittsburgh-Beaver Valley Area, based on calendar year 2012 data from American FactFinder.

Table 2. Number of Pittsburgh-Beaver Valley Area Establishments and Employees by NAICS Code U.S. Census Bureau American FactFinder 2012 Data

NAICS	Establishments	Employees
424710	31	445-771
424720	9	60-316
447110	643	6,133-6,531
447190	106	743-901
484220	235	2,391-2,689
484230	44	654-1,218
486910	3	40-198
493190	24	700-1,554
Totals	1,095	11,166-14,178

The Department also gathered information from the Environmental Facility Application Compliance Tracking System (eFACTS) database and the Air Information Management System (AIMS) database about

potentially affected facilities. These Department databases share data and interface with each other. The NAICS identifying code is inputted into eFACTS; the database contains records of permitted facilities and some previously inspected facilities for which permits are not required. Site-specific sources and air pollutant emissions, as well as site NAICS codes, are inputted into AIMS to maintain the air pollutant emission inventory. However, eFACTS and AIMS do not provide an exhaustive list of all facilities in this Commonwealth, but only those with which the Department has had contact and a reason to input their data; these are usually the largest emitters. Not all facilities subject to Chapter 126, Subchapter C are permitted by the Air Quality Program. If the facility owner or operator is not subject to other air quality regulations, the facility is not likely included in the AIMS database; the facility may be regulated by other programs within the Department, however, and be listed in eFACTS.

A search of the eFACTS database and the AIMS database, using the NAICS codes listed in Table 1, generated a list of 33 facilities in the Pittsburgh-Beaver Valley Area that are likely subject to Chapter 126, Subchapter C. Due to the low number of returns using the NAICS codes, the Department performed an additional search of the databases using Standard Industrial Classification (SIC) system codes. The SIC system classifies industries using a four-digit code. Established in the United States in 1937, it is used by government agencies to classify industry areas. Although this is an older classification system, SIC codes are still used in some Department database entries from various programs. The Department identified the SIC codes corresponding to the NAICS listed in Table 1 and searched the eFACTS and AIMS databases using the SIC codes.

The search by SIC codes generated a list of 152 facilities in the Pittsburgh-Beaver Valley Area that are likely subject to Chapter 126, Subchapter C. The NAICS and corresponding SIC codes are listed in Table 3, as well as the numbers of potentially affected facilities found in the Department databases for each code.

Table 3. NAICS and Corresponding SIC Code and Number of Potentially Affected Facilities in eFACTS and AIMS Databases

NAICS	Number of Facilities	SIC	Number of Facilities
424710	24	5171	60
424720	1	5172	4
447110	5	5411 and 5541	31
447190	0		
484220	0	4212 and 4214	23
484230	0	4213	20
486910	3	4613	7
493190	0	4226	7
TOTAL	**33**	**TOTAL**	**152**

Additionally, information was gathered from the Department's Discoverer database relating to Pennsylvania storage tanks. According to the Discoverer data, there are 1,252 active or temporarily out of service tanks that store gasoline in the Pittsburgh-Beaver Valley Area.

Small businesses

A review of the U.S. Small Business Administration (SBA) Small Business Size Regulations under 13 CFR Chapter 1, Part 121 (relating to small business size regulations) provided the standards used by the

Department for determining what constitutes a small business for these NAICS categories. The small business size standard for most of these NAICS categories is based on annual product sales in the millions of dollars, and ranges from $15 million to $29.5 million. In a few instances, the small business-size standard for the affected NAICS code is the number of employees and ranges from 200 to 1,500 employees; that is, the business could have 200 to 1,500 employees, depending on its NAICS, and be considered a small business. The Department requested that EMAP perform a query of the Hoovers database for a list of businesses, including annual sales and number of employees, for the eight NAICS codes listed above for the Pittsburgh-Beaver Valley Area. EMAP provided the Department with a list of 768 businesses for the requested NAICS codes. Table 4 shows the numbers of businesses found in the Pittsburgh-Beaver Valley for each NAICS code by EMAP and how many are identified as either a small business or not a small business, and for how many a small business status is not available.

Table 4. Number of Facilities per NAICS Code Identified by EMAP and SBA Small Business Status

NAICS	Industry Sector	EMAP	SBA Small Business		
			Yes	No	Not Available
424710	Bulk gasoline stations; Gasoline, bulk stations and terminals.	18	18	0	0
424720	Gasoline merchant wholesalers (except bulk stations, terminals).	83	83	0	0
447110	Convenience food with gasoline stations; Gasoline stations with convenience stores; Gasoline with convenience stores.	1	1	0	0
447190	Gasoline stations without convenience stores; Service gasoline stations; Truck stops.	500	384	0	116
484220	Tanker trucking (e.g. chemical, juice, milk, petroleum), local.	64	63	0	1
484230	Tanker trucking (e.g. chemical, juice, milk, petroleum), long distance.	20	19	0	1
486910	Gasoline pipeline transportation; Pipeline transportation, gasoline and other refined petroleum products.	4	4	0	0
493190	Bulk petroleum storage.	78	70	1	7
Totals		768	642	1	125

Of the 768 businesses identified by EMAP under NAICS 424710, 424720, 447110, 447190, 484220, 484230, 486910, and 493190, 642 qualified as small businesses based on number of employees or annual revenue. Of the remaining businesses, there was no sales data available for 125 businesses and one business did not qualify as a small business because its revenue was over the SBA small business threshold.

It is possible that this final-form rulemaking will also apply to owners and operators of other facilities that have not yet been identified, because NAICS codes are self-reported and facility owners and operators may not have identified themselves under the appropriate NAICS, even if they operate in the gasoline supply chain.

The difference in projected number of affected facilities between the 1,095 facilities identified in U.S. Census Bureau data, the Department's list of 33-152 potentially affected facilities from eFACTS and AIMS, the Department's list of 1,252 gasoline storage tanks, and the EMAP list of 768 potentially affected facility owners and operators is likely due to the Department's databases being for the owners and operators of previously and currently permitted (or inspected) facilities based on regulatory criteria for acquiring a permit (or being inspected), while the EMAP list is based on a self-reported classification of a facility by the facility owner or operator, including small-business-size status, and the U.S. Census Bureau and American FactFinder data is based on self-reporting National surveys and censuses. If this final-form rulemaking applies to the owners and operators of facilities that have not yet been identified, many, if not all, of the facilities will likely be small businesses, based on the fact that 84% of the 768 facilities identified by EMAP qualified as small businesses.

The Department assumes that all the identified businesses involved in the sale of gasoline in the Pittsburgh-Beaver Valley Area are affected by this final-form rulemaking. Businesses involved in the sale of gasoline, including gas stations, bulk gasoline terminals, and wholesalers, will likely see an economic benefit from the elimination of the requirement to obtain and sell gasoline with an RVP of 7.8 psi or less if the cost savings of blending, transporting, and storing the low RVP gasoline are passed down the gasoline supply chain from the refinery and terminal to the retail gas station. Distributors of gasoline products in the area will likely experience less need to segregate products among available storage tanks, which may create efficiencies in distribution and improve the flow of petroleum products. Recordkeeping requirements for all affected entities may be reduced or simplified since the businesses would not have to document the production and transfer of gasoline with an RVP of 7.8 psi. The ultimate consumer may or may not see a price reduction at the pump from eliminating the low RVP gasoline mandate depending on whether cost savings from removing the requirement to sell low RVP gasoline are passed through to the pump.

New legal, accounting, recordkeeping and reporting, or consulting procedures will not be required.

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

As explained in the response to Question #15, between 33 and 1,252 businesses may be subject to Chapter 126, Subchapter C. Upon publication of this final-form rulemaking action in the *Pennsylvania Bulletin* as final-form regulation, and upon the effective date of approval by the EPA of the removal, suspension, or replacement of the gasoline volatility requirements of Chapter 126, Subchapter C as a Federally enforceable requirement in the Commonwealth's SIP, these entities will no longer be required to comply with Chapter 126, Subchapter C. Of the potentially subject facilities identified by EMAP, 642 businesses were identified as small businesses under the SBA Small Business Size Regulations under 13 CFR Chapter 1, Part 121. Data was not available for 125 facilities to determine if the owners and operators were considered a small business, and one facility was not considered a small business because its revenue was over the small business-size threshold.

Individual facility data was not available for the 1,095 facilities identified in U.S. Census Bureau data. Employment and revenue data was not available for the Department's list of 33-152 potentially affected

facilities from eFACTS and AIMS or for the Department's list of 1,252 potentially affected facilities from the Discoverer database, except for those also identified by EMAP, to determine if these facilities qualified as small businesses. The owners and operators of subject facilities identified in the eFACTS, AIMS, and Discoverer databases are required to comply with Chapter 126, Subchapter C. The Department estimates that as many as 84% of the identified facility owners and operators may be small businesses, based on the fact that 84% of the 768 facilities identified by EMAP qualified as small businesses.

Please also see the response to Question #15.

(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.

This final-form rulemaking impacts the various segments of the gasoline supply chain differently. After promulgation of the final-form amendment and once Chapter 126, Subchapter C is made no longer effective, the first impacts will be seen at the oil refinery level. Currently, it costs refineries more to refine gasoline to meet the low RVP gasoline requirements than to meet the Federal RVP requirements for conventional gasoline. Please see the response to Question #19 for a cost analysis. Additionally, low RVP-compliant gasoline must be segregated from other fuels in storage and transport. Most refineries ship finished product through pipelines to off-site terminals, although some can ship products directly to local gas stations through their own on-site terminals. Making Chapter 126, Subchapter C no longer effective will likely reduce or eliminate the additional costs associated with refining low RVP-compliant gasoline. Implementation of this final-form rulemaking amendment may result in cost savings for refineries in transportation costs, as the refinery will not have to segregate and separately ship low RVP gasoline to terminals supplying the Pittsburgh-Beaver Valley Area. Cost savings may also be achieved from the elimination of the need for separate storage for the low RVP gasoline. Chapter 126, Subchapter C does not impose recordkeeping requirements on refineries, so no impact on recordkeeping by refinery owners and operators is expected from the implementation of this final-form amendment.

The next stage in the gasoline supply chain is the fuel terminal, also called the "rack." The price at the terminal is considered the wholesale price of fuel. Wholesale gasoline prices usually do not include taxes, transportation, or retailer costs (referred to as "below the rack" costs). Additionally, prices may fluctuate based on several factors, including National and regional gasoline supply, the price of crude oil, weather, market events (pipeline shutdown), or time of day. Cost savings may accrue to terminal owners and operators if refineries pass along any of their fuel-refining savings in the form of lower fuel or transportation costs to the terminals. Cost savings are anticipated for terminals from the elimination of the need to separately store and transport low RVP-compliant gasoline. Section 126.302 includes recordkeeping requirements for the transfer of gasoline from terminal to retailer (and all steps in between) that will also be made no longer effective after implementation of this final-form rulemaking upon the effective date of approval of a SIP revision by the EPA. This may or may not lead to cost savings, as the records kept are likely to continue to be kept for business purposes by terminals.

Gasoline retailers and wholesale purchaser-consumers are the most visible sector of the gasoline supply chain. These include public gasoline service stations (with and without convenience stores) and fueling facilities for private and public fleets. Retail gasoline prices directly reflect rack prices, but include the "below the rack" costs, including taxes, transportation costs, credit card transaction fees, retailer overhead, and retailer net profit. As noted above, several factors may influence terminal prices. As a result, how and when gasoline is purchased from the terminal will significantly impact the price paid and margins realized

by retailers. Cost savings for retailers and wholesale purchaser-consumers may result if terminals pass along any of their savings in the form of lower fuel, transportation, or storage costs to retailers or wholesale purchaser-consumers. Also, as stated above, § 126.302 includes recordkeeping requirements for the transfer of gasoline from terminal to retailer (and all steps in between) that will be made no longer effective after implementation of this final-form rulemaking amendment upon the effective date of approval of a SIP revision by the EPA. This may or may not lead to cost savings, as records similar to those required by § 126.302 are likely to continue to be kept for business purposes by retailers and wholesale purchaser-consumers.

Transportation costs are intermingled throughout the gasoline supply chain. There is transport from the refineries to the terminals and from the terminals to the retailers or wholesale purchaser-consumers. Some of these costs may be affected by this final-form rulemaking while others will not. Implementation of this final-form rulemaking will likely reduce or eliminate costs for refineries and terminals that are a result of having to transport low RVP-compliant gasoline separately from conventional gasoline. Implementation may have a small effect on transport costs from the terminal to the retailer through the elimination of the segregation of the low RVP-compliant gasoline, but most of the terminal-to-retailer transportation costs are based on the volume of fuel being delivered, contracts with retailers, the transport fleet operator, and other shipping fees. Implementation of this final-form rulemaking amendment is not anticipated to have a significant impact on fuel consumption or vehicle miles traveled in the area. Without specific facility information regarding volume of fuel sold, and without knowledge of the contract terms between terminals, shippers, and retailers, the Department cannot determine the full impact of this final-form rulemaking amendment on transportation costs for gasoline in the Pittsburgh-Beaver Valley Area.

Implementation of this final-form rulemaking amendment may create economic opportunities for refineries, terminals, and retailers that serve the Pittsburgh-Beaver Valley Area. Refineries that do not produce low RVP-compliant gasoline will be able to sell conventional fuel in the Pittsburgh-Beaver Valley Area during the summer months (May 1-September 15). Terminals will be able to contract with those refineries to distribute conventional gasoline in the area. Retailers will have more choice of terminals to purchase from as they will not be restricted to only those terminals that stock low RVP-compliant gasoline.

From a social perspective, residents of the Pittsburgh-Beaver Valley area have a perception of paying significantly higher prices for summer gasoline due to the low RVP-compliant gasoline requirement. Implementation of this final-form rulemaking amendment will remove the cause of that perception, and retail cost variation will be due solely to local, regional, and National market forces, as well as state and local taxes and other applicable gasoline-blending requirements. A cost analysis of refinery, terminal, and retail prices is provided in the response to Question #19.

The financial impact of this final-form rulemaking will be comparable for individuals, small businesses, businesses and labor communities, and other public and private organizations. Costs or savings are directly related to the volume of gasoline used or consumed by each of these entities. This final-form rulemaking is unlikely to negatively impact employment, because the current employees involved with low RVP-compliant gasoline will likely still be needed to work on conventional fuel; the volume of fuel demand will likely not change significantly, just the type of fuel supplied. The Department anticipates a reduction in costs for most, if not all, of these entities.

Upon promulgation of this final-form rulemaking and approval by EPA of the Non-Interference SIP revision, entities subject to § 126.302 will no longer be required to comply with the current recordkeeping and reporting requirements, but changes to recordkeeping will likely be minimal because the records

required by § 126.302 are in line with what the industry currently tracks for inventory purposes or in current permits. The owner or operator of a facility subject to § 126.302 is required to maintain records sufficient to demonstrate compliance with the applicable requirements; records must be maintained on site, with some exceptions, for 2 years. This onsite record retention requirement will also be made no longer effective by implementation of this final-form rulemaking upon the effective date of approval of a SIP revision by the EPA.

Although the Department projects a small increase in VOC emissions in the near term from switching from low RVP gasoline to conventional RVP gasoline, implementation of this final-form rulemaking is not expected to have a significant adverse impact on ozone air quality or the public health and welfare in the Pittsburgh-Beaver Valley Area. To obtain approval from the EPA for the removal of the Chapter 126, Subchapter C requirements from the SIP, Pennsylvania must demonstrate non-interference with any applicable requirement of the CAA concerning attainment and reasonable further progress or any other applicable requirement of the CAA relating to any applicable NAAQS. DEP plans to do this by identifying equivalent emission reductions to offset the modeled increases of emissions of VOC and oxides of nitrogen (NO_X) that are expected to result from the removal of the requirement to sell low RVP-compliant gasoline in the Pittsburgh-Beaver Valley Area, in accordance with Pennsylvania Act 50 of 2014. The VOC emission reduction benefits from requiring low RVP gasoline in the Pittsburgh-Beaver Valley Area steadily decline in future years, decreasing from 1.63 tons per day in 2017 to 1.33 tons per day by 2030. The decline in benefits is due to lower-sulfur-containing gasoline being introduced Nationwide through Federal measures, as well as the increasing number of newer, less polluting vehicles in Pennsylvania. The Department is developing a Non-Interference Demonstration SIP revision separately from this final-form rulemaking to show that Pennsylvania will continue to comply with the applicable NAAQS without the VOC emission reduction benefits of the low RVP gasoline.

Please see the response to Question #18 for additional discussion of the environmental impact of making Chapter 126, Subchapter C no longer effective upon the effective date of approval of a SIP revision by the EPA.

Please see the response to Question #19 for additional discussion of cost savings.

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

The economic benefits of this final-form rulemaking in cost savings to the affected entities are expected to outweigh the potential short-term adverse environmental impacts of this final-form rulemaking. The ozone air quality in the Pittsburgh-Beaver Valley Area has consistently improved since the first Ozone NAAQS was implemented in 1979. While removal of the low RVP gasoline requirements will likely lead to small increases of vehicular VOC emissions in the near term for the Pittsburgh-Beaver Valley Area, the VOC emission reduction benefits of maintaining the low RVP gasoline requirements are expected to steadily decline in future years, decreasing from VOC emission reductions of 1.63 tons per summer day in 2017 to VOC emission reductions of 1.33 tons per summer day by 2030. Pennsylvania will need to offset these small increases in VOC emissions with VOC emission reductions achieved by other Federally enforceable control measures. Pennsylvania is required to ensure that the removal of the Chapter 126, Subchapter C requirements from the SIP complies with the Non-Interference Clause, CAA Section 110(l) (42 U.S.C.A. § 7410(l)). The Non-Interference Clause prohibits the EPA Administrator from approving a SIP revision if the revision would interfere with any applicable requirement of the CAA concerning attainment of a NAAQS or reasonable further progress in attaining a NAAQS, or any other applicable requirement of the CAA.

Therefore, even though expected amounts of VOC emission reductions achieved by the Chapter 126, Subchapter C requirements are projected to decrease steadily in coming years, the Department is required to demonstrate to the satisfaction of the EPA that non-interference with attainment, reasonable further progress, or any other applicable requirement of the CAA will not occur for the period of time in which emission reductions would have occurred, in order for the EPA to approve the removal of the low RVP gasoline requirements from the Commonwealth's Federally enforceable SIP. The Department is preparing to submit to the EPA a Non-Interference Demonstration SIP revision designed to demonstrate that "commensurate emission reductions," as mandated by Act 50 of 2014, will ensure continued compliance with both the Federal Ozone and $PM_{2.5}$ NAAQS by this Commonwealth if the low RVP gasoline requirements for the Pittsburgh-Beaver Valley Area are removed from the SIP. While Chapter 126, Subchapter C was promulgated primarily as a VOC reduction measure to attain the 1979 1-Hour Ozone NAAQS, Chapter 126, Subchapter C is included as a control measure in the Pittsburgh-Beaver Valley Area $PM_{2.5}$ Maintenance Plan due to the co-benefits of NO_X reductions; NO_X is a precursor pollutant for $PM_{2.5}$.

Pennsylvania has taken credit in two SIP revisions for VOC emission reductions resulting from the use of the low RVP gasoline in the Pittsburgh-Beaver Valley Area since Chapter 126, Subchapter C was incorporated into Pennsylvania's approved SIP on June 8, 1998. These two SIP revisions are:

1) The Pittsburgh-Beaver Valley Area Request for Redesignation as Attainment and Maintenance Plan for the 1-Hour Ozone NAAQS, approved by the EPA on October 19, 2001 (66 FR 53094); and
2) The Pittsburgh-Beaver Valley Area Request for Redesignation as Attainment, Maintenance Plan and Comprehensive Inventory for the 1997 and 2006 24-hour $PM_{2.5}$ NAAQS, approved by the EPA on October 2, 2015 (80 FR 59624).

The emission reduction benefits of Chapter 126, Subchapter C were not modeled separately in these two SIP revisions for the Pittsburgh-Beaver Valley Area; the requirements were included in the fuel specifications used for the mobile source modeling in the area. As a result, the modeled mobile source emissions included the emission reduction benefits of the low RVP gasoline program for the area.

Mobile source emissions include both on-road and nonroad emissions. There are several regulatory and technological developments that affect the future emission reduction impacts of Chapter 126, Subchapter C. One development is the EPA's Tier 3 Motor Vehicle Emission and Fuel Standards, which require compliance with stringent new vehicle emission standards beginning with model year 2017 vehicles; another is the new gasoline sulfur standards which became effective January 1, 2017 (79 FR 23414, April 28, 2014). The EPA's Tier 3 standards are expected to result in near zero exhaust and evaporative emissions from passenger cars, light-duty trucks, medium-duty passenger vehicles, and certain heavy-duty vehicles by 2025. The lowering of the sulfur content, from 30 parts per billion (ppb) average to 10 ppb average, in gasoline is expected to significantly reduce emissions of NO_X, VOC, direct $PM_{2.5}$, carbon monoxide, and air toxics (10 ppb Sulfur gasoline in Table 5). The lower sulfur content will allow the catalytic converters in both existing and new vehicles to operate more efficiently. In addition, Pennsylvania adopted California emission standards for new light-duty vehicles. New light-duty vehicles for model year 2015 and later sold in Pennsylvania have been meeting emission standards comparable to Tier 3. A consultant (Michael Baker International, Harrisburg Office) performed an analysis which identified the actual emission reduction benefits of the low RVP requirements in future years that will be lost by making Chapter 126, Subchapter C no longer applicable. The results are presented in Table 5.

Table 5 shows that the emission reduction benefits of the low RVP requirements diminish in future years, even approaching zero by 2030 for the co-benefit of NO_X emission reductions. In Table 5, the RVP of gasoline in the Commonwealth, except for the Pittsburgh-Beaver Valley and Philadelphia areas, is assumed to be 10.0 psi RVP, which is the maximum allowed RVP for gasoline blended with 9-10 vol% ethanol. This RVP assumption is different than the RVP of the baseline fuel in the Pechan study discussed in the response to Question #19. This difference in the assumed RVP content is a result of consultation with the EPA, in which the EPA stated that the Department's assumption of 8.7 psi RVP gasoline in the rest of the state did not reflect current average gasoline RVP values. Therefore, the Baker analysis used 10.0 psi RVP for the baseline fuel, and the results are listed below in Table 5. The use of the higher RVP value projects higher amounts of VOC and NO_X emissions that need to be offset by the commensurate emission reductions in the Non-Interference Demonstration SIP revision.

Table 5. Analysis of RVP Benefits[3]

	2017		2025		2030	
	VOC (t/d)	**NO_X (t/d)**	**VOC (t/d)**	**NO_X (t/d)**	**VOC (t/d)**	**NO_X (t/d)**
Regional Mobile Source Emissions - 7.8 RVP with 10% Ethanol & 10 ppb Sulfur	46.577	66.717	33.060	35.858	29.765	28.220
Regional Mobile Source Emissions - 10 RVP with 10% Ethanol & 10 ppb Sulfur	48.213	67.071	34.371	35.909	31.094	28.227
Low-RVP Program Benefits - 7.8 RVP Compared with 10.0 RVP	1.636	0.354	1.311	0.051	1.329	0.007

The wide-spread use of Onboard Refueling Vapor Recovery (ORVR) systems in gasoline-powered vehicles also impacts the future emission reduction benefits of low RVP gasoline. ORVR systems are designed to capture evaporative emissions on all model year 2007 and newer light-duty vehicles. The ORVR technology addresses the same issue as the low RVP gasoline regulations, specifically evaporative gasoline emissions, except that the ORVR technology captures all of the emissions that are formed during combustion, while the low RVP content prevents a certain amount, but not all, of the emissions from being formed during combustion. Capturing all the evaporative emissions prevents those emissions from contributing to the formation of ground-level ozone. The increasingly widespread implementation of the EPA Tier 3 standards, lower sulfur content gasoline, and ORVR technology will result in offsetting the small increases in VOC and NO_X emissions that will likely result in the near term from removing the low RVP gasoline requirements of Chapter 126, Subchapter C. The Department therefore does not expect the removal of the low RVP gasoline requirements from the Commonwealth's SIP to result in a violation of the applicable 8-hour Ozone NAAQS.

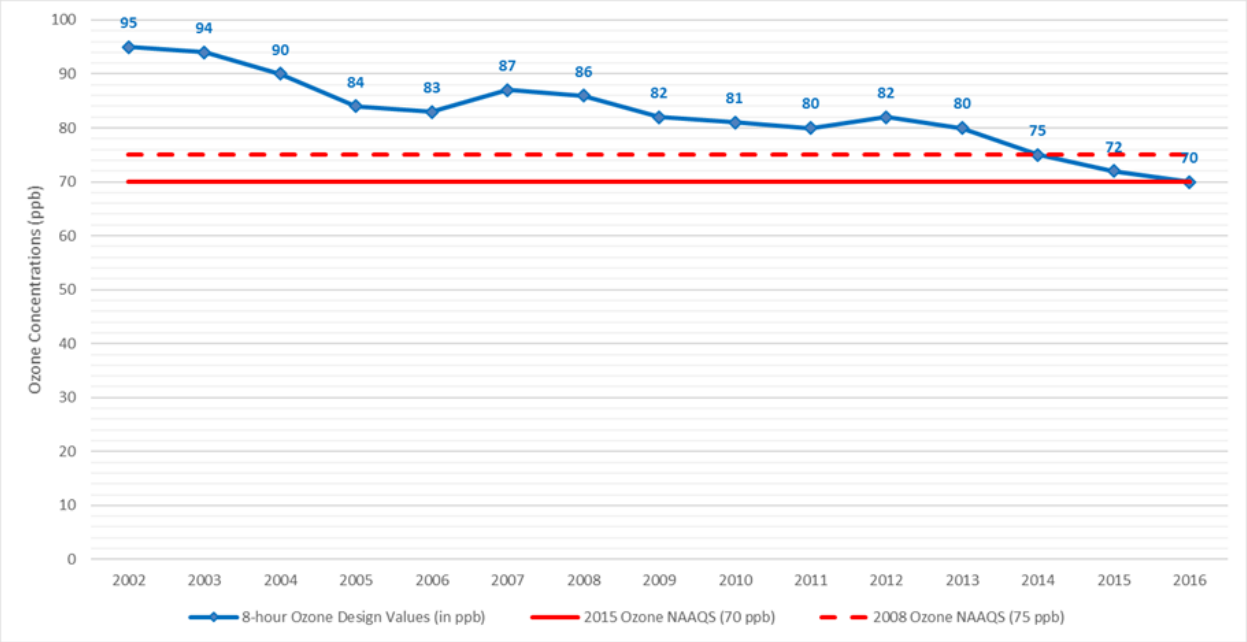
The Pittsburgh-Beaver Valley Area was designated nonattainment for the 1979 1-hour Ozone NAAQS as well as the 1997 and 2008 8-hour Ozone NAAQS. The area was redesignated as attainment for the 1-hour Ozone NAAQS and the EPA approved a 10-year maintenance plan for the area for the 1-hour Ozone NAAQS. The area was designated as nonattainment under the 1997 8-hour Ozone NAAQS and not redesignated as attainment. The 1997 standard, however, was revoked for all purposes in association with the EPA's adoption of the 2008 8-hour Ozone NAAQS and only anti-backsliding requirements apply. On

[3] *WO#14 Subtask A Deliverable (Revised Analyses)-Analysis of Low-RVP Impact in Pittsburgh Using MOVES2014: Technical Memorandum and Emission Tables*. February 2, 2016. Dan Szekeres and Ying-Tzu Chung, Michael Baker International.

May 4, 2016, the EPA published approval of a 1-year extension of the attainment date from July 20, 2015, to July 20, 2016, for the Pittsburgh-Beaver Valley Area under the 2008 8-hour Ozone NAAQS (81 FR 26697, 26698). On December 16, 2016, the EPA made a final determination that the Pittsburgh-Beaver Valley Area attained the 2008 8-hour Ozone NAAQS by the July 20, 2016, attainment date based on the 2013-2015 monitoring period (81 FR 87819). On October 26, 2015, the EPA published a final rule revising the 8-hour Ozone NAAQS from 0.075 parts per billion (ppb) to 0.070 ppb (2015 Ozone NAAQS) (80 FR 65291). The EPA published a final rule on November 16, 2017 (82 FR 54232) that designated ozone attainment areas under the 2015 Ozone NAAQS. In that final rule, EPA designated the Pittsburgh-Beaver Valley Area as an attainment area for the 2015 Ozone NAAQS.

However, the ambient air monitoring network in the Pittsburgh-Beaver Valley Area has monitored decreasing levels of ozone concentrations since 2002. The chart presented in Figure 1 shows the downward trend in ozone design values for the Pittsburgh-Beaver Valley Area for the years 2002 through 2016. The design value is the annual fourth-highest daily maximum 8-hour ozone concentration averaged over 3 years. The design values were determined using DEP and Allegheny County Health Department certified air monitoring data extracted from the EPA Air Quality System (AQS) database. In 2014 the Pittsburgh-Beaver Valley Area came into compliance with the 2008 Ozone NAAQS and in 2016 came into compliance with the 2015 Ozone NAAQS.

Figure 1. Chart displaying trend in 8-hour Ozone Design Values from 2002 through 2016 for the Pittsburgh-Beaver Valley Area



The ozone air quality in the area is expected to continue to improve due to technologies like onboard refueling vapor recovery (ORVR) and electric vehicles, as well as permanent and enforceable control measures established by the EPA Tier 3 fuel and vehicle standards, including low sulfur fuel content gasoline and new, lower vehicle emission standards. In addition to the emission reduction benefits of the mobile source control measures, permanent and enforceable control measures for industry and stationary sources have also contributed to the consistent downward trend in monitored ozone design values for the Pittsburgh-Beaver Valley Area. Therefore, the removal of the low RVP gasoline requirements as a control measure in the Commonwealth's SIP will likely not have an adverse impact on the public health and

welfare and will likely provide social and financial benefits, as discussed in the responses to Questions #17 and #19.

(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.

A study of the costs associated with refining gasoline blends required in Pennsylvania was completed by E.H. Pechan and Associates in March 2008[4]. The study summarizes the refining costs of the individual gasoline fuels, as well as the total 2009 costs of various gasoline blends for both the Pittsburgh-Beaver Valley Area and the whole Commonwealth. The summarized costs are for refining only and do not include transportation costs. The baseline gasoline used in the 2008 Pechan study of refinery costs was 8.7 psi RVP gasoline. The use of a baseline of 8.7 psi RVP gasoline in the Pechan study was based on the use of 8.7 psi RVP gasoline by the Department as a modeling input to model mobile source emissions for the purposes of Pennsylvania air quality inventory development and SIP revisions at the time of the study. The 2008 Pechan study concluded that the cost for 7.8 psi RVP fuel in the summer months of 2009 (identified as June 1 – September 15 in the study) was $1.65 million above the baseline gasoline fuel (8.7 psi RVP) costs in the Pittsburgh-Beaver Valley Area, based on refining costs and gasoline consumption in the area. (Until otherwise noted, "summer months" in this response refers to June 1 – September 15.) The cost of 7.8 psi RVP fuel with 10% ethanol in the summer months of 2009 was $14.88 million above the baseline fuel costs; that is, the cost of further refining the 7.8 psi RVP gasoline fuel with 10% ethanol was approximately $13.23 million above the cost of the 7.8 psi RVP gasoline fuel without 10% ethanol. Gasoline consumption in the Pittsburgh-Beaver Valley Area was estimated at 329.91 million gallons in the summer months of 2009.

The cost to refine the gasoline fuel from 8.7 psi RVP to 7.8 psi RVP is 0.5 cpg[5] ([$1.65 million / 329.91 million gallons] x 100 cents/$1.00) in the summer months . The cost to further refine the fuel from 7.8 psi RVP to 7.8 psi RVP with 10% ethanol (E-10) is approximately 4 cpg ([$13.23 million / 329.91 million gallons] x 100 cents/$1.00) in the summer months. Since the EPA requires an average 10% ethanol content in gasoline, the total cost, above the baseline gasoline fuel refining costs, to refine a compliant gasoline fuel for the Pittsburgh-Beaver Valley Area is 4.5 cpg ([$14.88 million / 329.91 million gallons] x 100 cents/$1.00) in the summer. Costs for adding 10% ethanol to the conventional 8.7 psi RVP fuel for use in the rest of the state (excluding Philadelphia, where different gasoline requirements apply), and during the winter months, were not calculated directly in the study but are approximately 3.3 cpg, based on the information provided about adding ethanol to the 7.8 psi RVP fuel.

The information in the preceding paragraph shows that most of the extra refining costs come from blending 10% ethanol into the gasoline (4 cpg / 4.5 cpg = 88%), rather than from blending the 7.8 psi RVP requirement (0.5 cpg / 4.5 cpg = 11%). Only the costs of refining the fuel from 8.7 psi RVP to 7.8 psi RVP, approximately 0.5 cpg, may be reduced or eliminated by the promulgation of this final-form rulemaking amendment to make the low RVP gasoline requirement no longer applicable upon the effective date of approval of a Non-Interference Demonstration SIP revision by the EPA. This final-form rulemaking does not eliminate costs for blending ethanol into gasoline. Some fuel assumptions have changed since the study was conducted, including the assumed RVP of conventional gasoline in Pennsylvania (currently 10.0 psi RVP with the 1 psi waiver allowed by the EPA). As a result, refining costs for 7.8 psi RVP fuel may currently be slightly higher than the 2008 Pechan study indicates, but those

[4] E.H. Pechan & Associates, Inc. "Fuel Costs for Pennsylvania Gasoline Blends". Pp 1-6, Appendix A. March 19, 2008.
[5] In 2007 dollars.

additional costs will still be reduced or eliminated by this final-form rulemaking amendment upon the effective date of approval of a Non-Interference Demonstration SIP revision by the EPA.

The Department obtained data from the Oil Price Information Service (OPIS), which provides average weekly gasoline prices at the terminal (rack) for the Pittsburgh metropolitan area and for Pennsylvania statewide. Weekly data was obtained from OPIS for most weeks between mid-June 2006 and October 2011. Table 6 compares the average summer and winter rack prices in the Pittsburgh metropolitan area and Pennsylvania statewide, and the average difference between the two values. A negative value in the average difference column indicates that the Pittsburgh metropolitan area average rack price was lower than the Pennsylvania statewide average rack price. A positive value indicates that the Pittsburgh metropolitan area average rack price was higher than the Pennsylvania statewide average rack price. Summer months for rack prices are defined as May 1 through September 15 of the initial year. Winter months for rack prices are defined as September 16 of the initial year through April 30 of the following year. The weekly data during the relevant time periods (summer or winter, as defined above) were averaged together to provide an average summer price and an average winter price for each year.

Table 6. Comparison of Terminal (Rack) Gasoline Prices in the Pittsburgh Metropolitan Area and Pennsylvania

	May 1 - Sept 15 Pittsburgh Metro	May 1 - Sept 15 PA	Average Difference Summer (PIT-PA=)	Sept 16 - April 30 Pittsburgh Metro	Sept 16 - April 30 PA	Average Difference Winter (PIT-PA=)
2006-2007	$2.170**	$2.266	-$0.095	$1.806	$1.823	-$0.017
2007-2008	$2.333	$2.317	$0.015	$2.585	$2.525	$0.060
2008-2009	$3.241	$3.227	$0.014	$1.513	$1.500	$0.013
2009-2010*						
2010-2011	$2.053**	$2.031**	$0.022**	$2.620	$2.621	-$0.001
2011-2012	$3.171	$3.139	$0.032	$2.816**	$2.819**	-$0.003**

*An evaluation of 2009-2010 data was not possible due to errors in the dataset.
**Data was not available for May 2006; May, June or July 2011; or after October 2011. These calculations are based on the limited data available for these timeframes.

Table 6 shows that during the summer months (May 1 – September 15), seasonal average rack prices in the Pittsburgh metropolitan area ranged from $0.095 below to $0.032 above the Pennsylvania statewide average rack prices. In the winter, seasonal average rack prices in the Pittsburgh metropolitan area ranged from $0.017 below to $0.060 above the Pennsylvania statewide average rack prices. There is not a clear correlation between the higher refinery costs for producing low RVP gasoline fuel and the rack prices in the Pittsburgh metropolitan area during the summer months (May 1 – September 15). For this analysis, however, the Department assumes that retailers and wholesale purchaser-consumers in the Pittsburgh metropolitan area will be paying the Pennsylvania statewide average rack gasoline prices for conventional gasoline if Chapter 126, Subchapter C is made no longer applicable. Based on the available data, retailers and wholesale purchaser-consumers may save between 1.4 cpg and 3.2 cpg. Actual cost savings are directly dependent on how much gasoline a retailer or wholesale purchaser-consumer purchases from an upstream entity subject to Chapter 126, Subchapter C during the applicable time period.

The Department also obtained OPIS data for average retail gasoline prices for the Pittsburgh metropolitan area and for Pennsylvania statewide. The data includes weekly average retail gasoline prices for April 2003 through December 2010, and monthly average retail gasoline prices for January 2011 through December 2015. Weekly average data was converted to monthly average data by averaging all weekly data for each month. Monthly data was then averaged for summer and winter. Summer months for retail pricing are defined as June 1 through September 30 of the initial year. Winter months are defined as October 1 of the initial year through May 31 of the following year. Table 7 compares average summer and winter retail gasoline prices in the Pittsburgh metropolitan area and Pennsylvania statewide, as well as the average difference between the two values for the last 10 years. A negative value in the average difference column indicates that the Pittsburgh metropolitan area average retail gasoline price was lower than the Pennsylvania statewide average retail gasoline price. A positive value indicates that the Pittsburgh metropolitan area average retail gasoline price was higher than the Pennsylvania statewide average retail gasoline price.

Table 7. Comparison of Retail Gasoline Prices in the Pittsburgh Metropolitan Area and Pennsylvania

	June-Sept Pittsburgh Metro	June-Sept PA	Average Difference Summer (PIT-PA=)	October-May Pittsburgh Metro	October-May PA	Average Difference Winter (PIT-PA=)
2005-2006	$2.425	$2.451	-$0.027	$2.491	$2.500	-$0.009
2006-2007	$2.810	$2.846	-$0.037	$2.453	$2.468	-$0.015
2007-2008	$2.894	$2.865	$0.028	$3.216	$3.213	$0.002
2008-2009	$3.865	$3.782	$0.083	$2.204	$2.103	$0.101
2009-2010	$2.634	$2.618	$0.016	$2.742	$2.750	-$0.007
2010-2011*	$2.701	$2.685	$0.016	$3.310	$3.305	$0.005
2011-2012	$3.689	$3.653	$0.036	$3.619	$3.609	$0.011
2012-2013	$3.656	$3.620	$0.036	$3.670	$3.621	$0.049
2013-2014	$3.623	$3.566	$0.056	$3.571	$3.542	$0.029
2014-2015	$3.704	$3.612	$0.092	$2.784	$2.729	$0.054

*Data was not available for June or July 2010. These calculations are based on the limited data available for that timeframe.

Table 7 shows that during the summer months (June 1 – September 15), seasonal average retail gasoline prices in the Pittsburgh metropolitan area ranged from $0.037 below to $0.092 above the Pennsylvania statewide average retail gasoline prices. In the winter, seasonal average retail gasoline prices in the Pittsburgh metropolitan area ranged from $0.015 below to $0.101 above the Pennsylvania statewide average retail gasoline prices. It should be noted that in the most recent 5 years of data, Pittsburgh metropolitan area average retail gasoline prices have been higher than the Pennsylvania statewide average retail gasoline prices in both summer and winter. Because both winter and summer prices have been higher, it is unclear how much of the summer price differential is due to the low RVP gasoline requirement and how much is due to local market forces and other factors. There is not a clear correlation between the higher refinery costs for producing low RVP gasoline fuel, the rack prices, and the retail gasoline prices in the Pittsburgh metropolitan area during the summer months. For this analysis, however, the Department assumes that consumers in the Pittsburgh metropolitan area will be paying the Pennsylvania statewide average retail gasoline prices for conventional gasoline if Chapter 126, Subchapter C is made no longer

applicable. Based on the 5 most recent years of available data, consumers may save between 1.6 cpg and 9.2 cpg. Actual cost savings are directly dependent on how much gasoline the consumer purchases from an entity subject to Chapter 126, Subchapter C during the applicable time period.

The Department estimates that total gasoline consumption in the Pittsburgh-Beaver Valley Area for the summer months (May 1-September 15) of 2016 was approximately 352 million gallons.

The estimated potential cost savings for refiners if low RVP gasoline is no longer required for the Pittsburgh-Beaver Valley Area may be as much as $1,760,000, based on an average cost of 0.5 cpg to refine gasoline to the 7.8 psi RVP level (0.5 cpg x 352 million gallons x $1/100 cents = $1,760,000). Actual cost savings for an individual refiner would be directly dependent on how much 7.8 psi RVP gasoline a refiner produces during the applicable time period.

The estimated potential total cost savings for retailers and wholesale purchaser-consumers if low RVP gasoline is no longer required for the Pittsburgh-Beaver Valley Area range from $4,928,000 to $11,264,000 (based on cost savings to these intermediate entities ranging from 1.4 cpg to 3.2 cpg) annually during the summer months (May 1-September 15), on the distribution of approximately 352 million gallons in the Pittsburgh-Beaver Valley Area. Actual cost savings for an individual retailer or wholesale purchaser-consumer would be directly dependent on how much gasoline a retailer or wholesale purchaser-consumer purchases from an entity subject to Chapter 126, Subchapter C during the applicable time period.

The estimated potential total cost savings for the ultimate consumers if low RVP gasoline is no longer required for the Pittsburgh-Beaver Valley Area range from $5,632,000 to $32,384,000 (based on retail cost savings to consumers ranging from 1.6 cpg to 9.2 cpg) annually during the summer months (May 1-September 15), on a summer season fuel consumption estimate of approximately 352 million gallons in the Pittsburgh-Beaver Valley Area. This calculation is based on the assumption that consumers may be purchasing low RVP fuel as early as the May 1 compliance date for refiners and terminals, rather than the later June 1 compliance date for retailers and wholesale purchaser-consumers.

The estimated potential cost savings for an individual consumer would be based on the consumer's purchases of low RVP gasoline during the time period of June 1 through September 15; low RVP fuel may be available for purchase from retailers as early as May 1, which would increase the period in which consumers could experience cost savings from the removal of the Chapter 126, Subchapter C requirements. For example, a consumer that purchased a total of 100 gallons of low RVP gasoline during the time period could potentially save from $1.60 (1.6 cpg x $1/100 cents x 100 gallons) to $9.20 (9.2 cpg x $1/100 cents x 100 gallons) for the season. Actual cost savings would be directly dependent on how much gasoline the consumer purchases from an entity subject to Chapter 126, Subchapter C during the applicable time period as well as on the cost savings per gallon due to the removal of the low RVP requirement.

Implementation of this final-form rulemaking may possibly have an adverse impact on fuel efficiency that would not be directly reflected in the retail price but could indirectly affect vehicle operating costs. Gasoline with a lower RVP typically has a higher energy content than higher RVP gasoline. A higher RVP value is obtained when additives such as butane or ethanol are added to the fuel. Butane is added in the winter months to aid vehicle starting in cold weather. Ethanol contains about 70% and butane contains about 80% of the energy content of traditional hydrocarbon gasoline constituents. Per an article in the Association for Convenience and Fuel Retailing, www.nacsonline.com, summer gasoline has about 1.8% more energy content than winter gasoline, but the difference can be as much as 7.8%. The difference in energy content between 7.8 psi RVP summer gasoline and 10.0 psi RVP summer gasolines should not be

as great as the difference in energy content between summer and winter gasolines, but it is impossible to determine exactly the difference in energy content without more information about what will be added to the gasoline to obtain 10.0 psi RVP.

Further, fuel efficiency is dependent on many factors that are difficult to quantify accurately including make and model of vehicle, maintenance of vehicle, tire pressure, and operator behavior including braking and acceleration. However, keeping all variables constant except the energy content of the gasoline, the Department did a simple calculation to demonstrate the possible impact this could have on consumers. Assuming a gasoline retail price of $2.50 per gallon, every 1.0% decrease in energy content would correspond to a $0.025 per gallon loss to the consumer in fuel efficiency. Given that gasoline sales potentially affected by this final-form rulemaking may total as much as 352 million gallons per year, consumers purchasing gasoline in the Pittsburgh-Beaver Valley Area could collectively experience a total increase of as much as $8,800,000 in costs for every 1% decrease in energy content that occurs during the summer driving season.

Implementation of the final-form rulemaking will also likely result in more evaporative emissions from vehicle gas tanks leading to less gasoline being combusted in vehicles. Increases in evaporative emissions from highway and nonroad equipment are estimated to total about 1.63 tons or 3260 pounds per day. Based on a gasoline density of 6.3 pounds per gallon, this increase in evaporative emissions could result in collective gasoline losses of as much as 517 gallons per day. Over the 120-day summer driving season, at a price of $2.50 gallon, the cost to consumers would likely not exceed $155,000 annually for the entire Pittsburgh-Beaver Valley Area.

New legal, accounting, recordkeeping and reporting, or consulting procedures will not be required.

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

No gasoline refiners, importers, distributors, resellers, terminals or carriers have been identified as being owned by local government agencies. Local government agencies may be considered a retailer or wholesale purchaser-consumer of gasoline in certain circumstances (for example. local government owned refueling facilities for local government fleet vehicles). If a local government agency does, however, own or operate a gasoline refinery, importer, distributor, reseller, terminal, or carrier, savings commensurate with those for the private sector, as set forth above in the responses to Questions #17 and #19, may be experienced.

(21) Provide a specific estimate of the costs and/or savings to 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.

No gasoline refiners, importers, distributors, resellers, terminals or carriers have been identified as being owned by state government agencies. State government agencies may be considered a retailer or wholesale purchaser-consumer of gasoline in certain circumstances (for example, state government owned refueling facilities for state fleet vehicles). If a state government agency does, however, own or operate a gasoline refinery, importer, distributor, reseller, terminal, or carrier, savings commensurate with those for the private sector, as set forth above in the responses to Questions #17 and #19, may be experienced. State

government will also save money from the elimination of the costs to test gasoline for compliance with Chapter 126, Subchapter C.

Upon development of a rulemaking to rescind Chapter 126, Subchapter C after removal of Chapter 126, Subchapter C from the SIP, the Department will rescind policy document number 273-4000-008, "Policy for Sampling and Determination of Compliance with Low RVP Gasoline Requirements in the Pittsburgh-Beaver Valley Ozone Nonattainment Area," as it will no longer be needed.

(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.

No additional legal, accounting, recordkeeping and reporting, or consulting procedures are expected for the groups identified in the responses to Questions #19-21 above.

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

No forms are required to implement the regulation.

(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.**

Not applicable.

(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.

The Department estimates that total gasoline consumption in the Pittsburgh-Beaver Valley Area for the summer months (May 1-September 15) of 2016 was approximately 352 million gallons.

The estimated potential cost savings for refiners if low RVP gasoline is no longer required for the Pittsburgh-Beaver Valley Area may be as much as $1,760,000, based on an average cost of 0.5 cpg to refine gasoline to the 7.8 psi RVP level (0.5 cpg x 352 million gallons x $1/100 cents = $1,760,000). Actual cost savings for an individual refiner would be directly dependent on how much 7.8 psi RVP gasoline a refiner produces during the applicable time period.

The estimated potential total cost savings for retailers and wholesale purchaser-consumers if low RVP gasoline is no longer required for the Pittsburgh-Beaver Valley Area range from $4,928,000 to $11,264,000 (based on cost savings to these intermediate entities ranging from 1.4 cpg to 3.2 cpg) annually during the summer months (May 1-September 15), on the distribution of approximately 352 million gallons in the Pittsburgh-Beaver Valley Area. Actual cost savings for an individual retailer or wholesale purchaser-consumer would be directly dependent on how much gasoline a retailer or wholesale purchaser-consumer purchases from an entity subject to Chapter 126, Subchapter C during the applicable time period.

The estimated potential total cost savings for the ultimate consumers if low RVP gasoline is no longer required for the Pittsburgh-Beaver Valley Area range from $5,632,000 to $32,384,000 (based on retail cost savings to consumers ranging from 1.6 cpg to 9.2 cpg) annually during the summer months (May 1-September 15), on a summer season fuel consumption estimate of approximately 352 million gallons in the Pittsburgh-Beaver Valley Area. This calculation is based on the assumption that consumers may be purchasing low RVP fuel as early as the May 1 compliance date for refiners and terminals, rather than the later June 1 compliance date for retailers and wholesale purchaser-consumers.

The estimated potential cost savings for an individual consumer would be based on the consumer's purchases of low RVP gasoline during the time-period of June 1 through September 15; low RVP fuel may be available for purchase from retailers as early as May 1, which would increase the period in which consumers could experience cost savings from the removal of the Chapter 126, Subchapter C requirements. For example, a consumer that purchased a total of 100 gallons of low RVP gasoline during the time period could potentially save from $1.60 (1.6 cpg x $1/100 cents x 100 gallons) to $9.20 (9.2 cpg x $1/100 cents x 100 gallons) for the season. Actual cost savings would be directly dependent on how much gasoline the consumer purchases from an entity subject to Chapter 126, Subchapter C during the applicable time period as well as on the cost savings per gallon due to the removal of the low RVP requirements.

	Current FY Year 17/18	**FY+1 Year 18/19**	**FY+2 Year 19/20**	**FY+3 Year 20/21**	**FY+4 Year 21/22**	**FY+5 Year 22/23**
SAVINGS:	**$**	**$**	**$**	**$**	**$**	**$**
Regulated Community	0.5 – 3.2 cpg	0.5 – 3.2 cpg	0.5 – 3.2 cpg	0.5 – 3.2 cpg	0.5 – 3.2 cpg	0.5 – 3.2 cpg
Refineries	0.5 cpg	0.5 cpg	0.5 cpg	0.5 cpg	0.5 cpg	0.5 cpg
Retailers/ Wholesale Purchaser-Consumers	1.4 – 3.2 cpg	1.4 – 3.2 cpg	1.4 – 3.2 cpg	1.4 – 3.2 cpg	1.4 – 3.2 cpg	1.4 – 3.2 cpg
Local Government	1.6 – 9.2 cpg	1.6 – 9.2 cpg	1.6 – 9.2 cpg	1.6 – 9.2 cpg	1.6 – 9.2 cpg	1.6 – 9.2 cpg
State Government	1.6 – 9.2 cpg	1.6 – 9.2 cpg	1.6 – 9.2 cpg	1.6 – 9.2 cpg	1.6 – 9.2 cpg	1.6 – 9.2 cpg
Public Consumers	1.6 – 9.2 cpg	1.6 – 9.2 cpg	1.6 – 9.2 cpg	1.6 – 9.2 cpg	1.6 – 9.2 cpg	1.6 – 9.2 cpg
Total Savings	0.5 – 9.2 cpg	0.5 – 9.2 cpg	0.5 – 9.2 cpg	0.5 – 9.2 cpg	0.5 – 9.2 cpg	0.5 – 9.2 cpg
COSTS:	**$**	**$**	**$**	**$**	**$**	**$**
Regulated Community	0.00	0.00	0.00	0.00	0.00	0.00
Local Government	0.00	0.00	0.00	0.00	0.00	0.00
State Government	0.00	0.00	0.00	0.00	0.00	0.00
Public Consumers						
Total Costs	0.00	0.00	0.00	0.00	0.00	0.00

REVENUE LOSSES:	$	$	$	$	$	$
Regulated Community	0.00	0.00	0.00	0.00	0.00	0.00
Local Government	0.00	0.00	0.00	0.00	0.00	0.00
State Government	0.00	0.00	0.00	0.00	0.00	0.00
Total Revenue Losses	0.00	0.00	0.00	0.00	0.00	0.00

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

Program	FY-3 (14/15)	FY-2 (15/16)	FY-1 (16/17)	Current FY (17/18)
Environmental Program Management (161-10382)	$28,517,000	$28,277,000	$26,885,000	$30,054,000
Clean Air Fund Major Emission Facilities (215-20077)	$16,870,000	$17,373,000	$16,931,000	$18,786,000
Clean Air Fund Mobile and Area Facilities (233-20084)	$9,811,000	$10,142,000	$8,228,000	$10,886,000

(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.

This final-form rulemaking applies to gasoline refiners, importers, distributors, resellers, terminal owners and operators, and carriers, that sell, exchange, or supply gasoline to the Pittsburgh-Beaver Valley Area between May 1 and September 15 of each year. It also applies to retailers and wholesale purchaser-consumers that sell, exchange, or supply gasoline to the Pittsburgh-Beaver Valley Area between June 1 and September 15 of each year.

EMAP provided the Department with a list of 768 businesses for the requested NAICS codes. Of the potentially subject facilities, 642 businesses were identified as small businesses under the SBA Small Business Size Regulations under 13 CFR Chapter 1, Part 121. Data was not available for 125 facilities to determine if the owners and operators were considered a small business, and one facility was not considered a small business because its revenue was over the small business threshold.

It is possible that this final-form rulemaking will also apply to owners and operators of other facilities that have not yet been identified. If this final-form rulemaking does apply to the owners and operators of facilities that have not yet been identified, the Department estimates that as many as 84% of the unidentified facilities may be small businesses, based on the fact that 84% of the 768 facilities identified by EMAP qualified as small businesses.

A more complete discussion of the numbers of potentially affected small businesses is provided in the response to Question #15.

(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.

There are no projected reporting, recordkeeping, or other administrative costs required for compliance with this final-form rulemaking. Upon the effective date of approval by the EPA of the removal, suspension, or replacement of Chapter 126, Subchapter C as a Federally enforceable requirement in the Commonwealth's SIP, this final-form rulemaking amendment to § 126.301 will make the provisions of Chapter 126, Subchapter C for the Pittsburgh-Beaver Valley Area no longer applicable.

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

Implementation of this final-form rulemaking amendment should have minimal adverse economic impact on the owners and operators of affected small business-sized facilities and businesses. It will likely reduce the recordkeeping and reporting requirements for those businesses, and may reduce some costs associated with purchasing, storing, or transporting gasoline.

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

There are no less intrusive or less costly alternative methods available. The Department and the Board must comply with Act 50 of 2014. Upon the effective date of approval by the EPA of the removal, suspension, or replacement of Chapter 126, Subchapter C as a Federally enforceable requirement in the Commonwealth's SIP, this final-form rulemaking amendment to § 126.301 will make Chapter 126, Subchapter C no longer applicable for the Pittsburgh-Beaver Valley Area.

(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.

Minorities, the elderly, small businesses, and farmers who are not owners or operators of a gasoline supply chain facility or business will not be adversely affected by this final-form rulemaking. For those that might be owners or operators of a subject facility or business, no special provisions are necessary. These same people may be positively impacted as consumers by this final-form rulemaking, if implementation results in lower gasoline prices in the Pittsburgh-Beaver Valley Area.

(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 proposed rulemaking recommended rescinding Chapter 126, Subchapter C; however, rescission alone would not remove the ability to enforce the requirements of Chapter 126, Subchapter C under Federal law through the Commonwealth's EPA-approved SIP. The final-form rulemaking is designed to ensure that Chapter 126, Subchapter C will not be applicable under Commonwealth or Federal law when the EPA approves the Non-Interference Demonstration SIP revision to the Commonwealth's approved SIP. No other alternative regulatory provisions were considered to comply with Act 50 of 2014. This final-form

rulemaking is the least burdensome approach to make Chapter 126, Subchapter C no longer applicable in a timely manner to meet the goals of Act 50 of 2014.

(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.

Upon the effective date of approval by the EPA of the removal, suspension, or replacement of Chapter 126, Subchapter C as a Federally enforceable requirement in the Commonwealth's SIP, this final-form rulemaking amendment to § 126.301 will eliminate compliance and reporting requirements for small businesses involved in the gasoline supply chain.

(b) The establishment of less stringent schedules or deadlines for compliance or reporting requirements for small businesses.

Upon the effective date of approval by the EPA of the removal, suspension, or replacement of Chapter 126, Subchapter C as a Federally enforceable requirement in the Commonwealth's SIP, this final-form rulemaking amendment to § 126.301 will eliminate compliance and reporting requirements for small businesses involved in the gasoline supply chain.

(c) The consolidation or simplification of compliance or reporting requirements for small businesses.

Upon the effective date of approval by the EPA of the removal, suspension, or replacement of Chapter 126, Subchapter C as a Federally enforceable requirement in the Commonwealth's SIP, this final-form rulemaking amendment to § 126.301 will eliminate certain compliance and reporting requirements for small businesses involved in the gasoline supply chain.

(d) The establishment of performance standards for small businesses to replace design or operational standards required in the regulation.

The establishment of performance standards for small businesses is not necessary. Upon the effective date of approval by the EPA of the removal, suspension, or replacement of Chapter 126, Subchapter C as a Federally enforceable requirement in the Commonwealth's SIP, this final-form rulemaking amendment to § 126.301 will result in the elimination of any design or operational standards currently required.

(e) The exemption of small businesses from all or any part of the requirements contained in the regulation.

An exemption of small businesses is not necessary. Upon the effective date of approval by the EPA of the removal, suspension, or replacement of Chapter 126, Subchapter C as a Federally enforceable requirement in the Commonwealth's SIP, this final-form rulemaking amendment to § 126.301 will make Chapter 126, Subchapter C no longer applicable for the Pittsburgh-Beaver Valley Area at both the Federal and the Commonwealth levels.

(28) If data is the basis for this regulation, please provide a description of the data, explain <u>in detail</u> 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.

Data and information from various sources was used to determine the number of potentially affected sources, area population, and the costs and benefits of this final-form rulemaking. Explanations of how the data was used are included throughout the document where the data source is cited.

The Department reviews its own ambient air quality ozone monitoring data for purposes of reporting to the EPA to establish attainment and maintenance of the NAAQS for all areas of this Commonwealth as discussed in the response to Question 18. The Commonwealth's Ambient Air Monitoring Network is operated in accordance with all network design, siting, monitoring and quality assurance requirements set forth in 40 CFR Part 58 (relating to ambient air quality surveillance). All ozone concentration data measured during the ozone monitoring season, which runs from April to October, are subject to comparison with the ozone NAAQS set forth in 40 CFR Part 50 (relating to National primary and secondary ambient air quality standards). Specific guidance on the requirements for quality assurance and quality control of the ozone monitoring network can be found in the EPA's Quality Assurance Handbook for Air Pollution Measurement Systems, Volume II, Ambient Air Quality Monitoring Program, EPA-454/B-17-001, January 2017. The QA Handbook is available on the EPA web site at https://www3.epa.gov/ttnamti1/files/ambient/pm25/qa/Final%20Handbook%20Document%201_17.pdf.

The following list provides more complete citations for data sources referenced in this Regulatory Analysis Form:

Air Information Management System (AIMS) Database Search of the Pittsburgh-Beaver Valley Area by NAICS and SIC. Pennsylvania Department of Environmental Protection. Generated by PA DEP Bureau of Air Quality staff. Received as Excel spreadsheet via email May 11, 2016, and May 24, 2016.

American FactFinder 2012 Economic Census EC1200A1. U.S. Census Bureau. Generated by PA DEP Bureau of Air Quality staff using American FactFinder. Downloaded as PDF and Excel spreadsheet on May 3, 2016. http://factfinder2.census.gov/.

Annual Estimates of the Resident Population: April 1, 2010 to July 1, 2015. U.S. Census Bureau, Population Division. Release date March 2016. Pennsylvania, all counties. Downloaded as PDF on May 10, 2016. http://factfinder.census.gov/faces/tableservices/jsf/pages/productview.xhtml?src=bkmk.

Discoverer Database Search of the Pittsburgh-Beaver Valley Area for Active and Temporarily Inactive Storage Tanks Storing Gasoline. Pennsylvania Department of Environmental Protection. Generated by PA DEP Bureau of Environmental Cleanup and Brownfields staff. Received as Excel spreadsheets via email June 8, 2016.

Environmental Facility Application Compliance Tracking System (eFACTS) Database Search of the Pittsburgh-Beaver Valley Area by NAICS and SIC. Pennsylvania Department of Environmental Protection.

Generated by PA DEP Bureau of Air Quality staff. Received as Excel spreadsheet via email May 11, 2016, and May 24, 2016.

Hoover's Database Search for Small Businesses in the Pittsburgh-Beaver Valley Area by NAICS. Pennsylvania Small Business Development Centers Environmental Management Assistance Program (EMAP). Generated by EMAP on May 13, 2016. Received as Excel spreadsheet via email May 13, 2016. http://www.hoovers.com/

Figure 1. Chart displaying trend in 8-hour Ozone Design Values from 2002 through 2016 for the Pittsburgh-Beaver Valley Area. The source of the data was DEP and ACHD certified air monitoring data extracted from the EPA Air Quality System (AQS) database.

Fuel Costs for Pennsylvania Gasoline Blends. E.H. Pechan & Associates, Inc. March 19, 2008.

Gas Price Data – Data Download Monthly Average Gasoline Prices January 2011 – December 2015 for Pittsburgh and Pennsylvania. Gas Price Data by GasBuddy.com. Accessed May 24, 2016. https://www.gaspricedata.com/

Mobile Vehicle Emissions Simulator Model (MOVES Model), MOVES2014a and MOVES2014b, United States Environmental Protection Agency.

Motor Fuel Taxes – State Gasoline Tax Reports – Interactive Gasoline Map (April 2017 version). American Petroleum Institute. Accessed August 17, 2017. http://www.api.org/oil-and-natural-gas/consumer-information/motor-fuel-taxes/gasoline-tax

North American Industry Classification Standards. http://www.census.gov/eos/www/naics/ and http://www.naics.com/.

Oil Price Information Service (OPIS) Weekly Wholesale Rack Gasoline Prices June 2006 – October 2011. OPIS. Received as Excel spreadsheet via email April 22, 2016.

Oil Price Information Service (OPIS) Weekly Retail Gasoline Prices April 2003 – October 2011. OPIS. Received as Excel spreadsheet via email April 22, 2016.

Standard Industrial Classification (SIC) System. https://www.osha.gov/pls/imis/sicsearch.html and https://www.osha.gov/pls/imis/sic_manual.html.

Summertime When the Livin' Is Easy and MPG May Increase. 2013 NACS Retail Fuels Report. http://www.nacsonline.com/YourBusiness/FuelsReports/GasPrices_2013/Pages/Summertime-When-the-Livin%E2%80%99-Is-Easy-and-MPG-May-Increase.aspx

What is the Difference Between Summer- and Winter-Blend Gasoline. American Automobile Association, NewsRoom. June 10, 2013. http://newsroom.aaa.com/2013/06/what-is-the-difference-between-summer-and-winter-blend-gasoline/

WO#14 Subtask A Deliverable (Revised Analyses)-Analysis of Low-RVP Impact in Pittsburgh Using MOVES2014: Technical Memorandum and Emission Tables. February 2, 2016. Dan Szekeres and Ying-Tzu Chung, Michael Baker International.

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

A. The length of the public comment period: 66 days

B. The dates on which public meetings or hearings were held: March 28, 29, and 30, 2017

C. The expected date of delivery of the final-form regulation: 1st Quarter 2018

D. The expected effective date of the final-form regulation: Upon publication in the *Pennsylvania Bulletin* as final-form rulemaking.

E. The date by which compliance with the final-form regulation will be required: Entities subject to the gasoline volatility requirements of Chapter 126, Subchapter C for low RVP gasoline will no longer be required to comply with these requirements upon the effective date of approval by the EPA of the removal, suspension, or replacement of Chapter 126, Subchapter C as a Federally enforceable requirement of the Commonwealth's SIP.

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.

This final-form rulemaking amends Chapter 126, Subchapter C by adding language to § 126.301 that will make Chapter 126, Subchapter C no longer applicable upon the effective date of approval by the EPA of the removal, suspension, or replacement of Chapter 126, Subchapter C as a part of the Commonwealth's SIP. Upon the effective date of approval by the EPA of the removal, suspension, or replacement of Chapter 126, Subchapter C as a Federally enforceable requirement in the Commonwealth's SIP, this final-form rulemaking amendment to § 126.301 will make Chapter 126, Subchapter C no longer applicable for the Pittsburgh-Beaver Valley Area at both the Federal and the Commonwealth levels.