

# U.S. Environmental Protection Agency

## Information Collection Request

**Title:** NESHAP for Ethylene and Spandex (40 CFR Part 63, Subpart YY) (Renewal)

**OMB Control Number:** 2060-0489

**EPA ICR Number:** 1983.11

**Abstract:** The National Emission Standards for Hazardous Air Pollutants (NESHAP) for the regulations published at 40 CFR Part 63, Subpart YY were promulgated on July 12, 2002 (67 FR 46257), and amended on April 13, 2005 (70 FR 19266), July 6, 2020 (85 FR 40386), and November 19, 2020 (85 FR 73854). These regulations apply to existing and new carbon black, cyanide, ethylene, and spandex facilities that would be subject to the major source provisions specified under the Generic Maximum Achievable Control Technology (GMACT) NESHAP. A Risk and Technology Review (RTR) for ethylene production was proposed on October 9, 2019 and promulgated on July 6, 2020 (85 FR 40386). The RTR amendments to the ethylene production regulations corrected and clarified regulatory provisions related to emissions during periods of startup, shutdown, and malfunction; added requirements for electronic reporting of performance test results; added operational requirements for flares; added standards and monitoring requirements for pressure relief devices (PRDs); added requirements and clarifications for vent control bypasses, including bypass lines, in situ sampling systems, maintenance activities, and certain gaseous streams routed to a fuel gas system; added requirements for storage vessel degassing; and revised requirements for heat exchange systems. An RTR amendment for carbon black production (OMB Number 2060-0738, EPA ICR Number 2677.02) was finalized on November 19, 2021 (86 FR 66096) and an RTR amendment for cyanide production (OMB Number 2060-0739, EPA ICR Number 2678.02) was finalized on November 19, 2021 (86 FR 66096). Therefore, the burden for these requirements is not included in this renewal. New facilities include those that commenced construction or reconstruction after the date of proposal. This information is being collected to assure compliance with 40 CFR Part 63, Subpart YY for ethylene and spandex production facilities.

In general, all NESHAP standards require initial notifications, performance tests, and periodic reports by the owners/operators of the affected facilities. They are also required to maintain records of the occurrence and duration of any startup, shutdown, or malfunction in the operation of an affected facility or any period during which the monitoring system is inoperative. These notifications, reports, and records are essential in determining compliance, and are required of all affected facilities subject to NESHAP.

Any owner/operator subject to the provisions of this part shall maintain a file of these measurements, and retain the file for at least five years following the date of such measurements, maintenance reports, and records. All reports required to be submitted electronically are submitted through the EPA's Central Data Exchange (CDX), using the Compliance and Emissions Data Reporting Interface (CEDRI), where the delegated state or local authority can review them. In the event that there is no such delegated authority, the EPA regional office can review them. All other reports are sent to the delegated state or local authority. In the event that there is no such delegated authority, the reports are sent directly to

the EPA regional offices. The use of the term "Designated Administrator" throughout this document refers to the U.S. EPA or a delegated authority such as a state agency. The term "Administrator" alone refers to the U.S. EPA Administrator.

The "Affected Public" are those facilities engaged in the manufacture of ethylene and spandex. The burden to the "Affected Public" may be found in Table 1: Annual Respondent Burden and Cost – NESHAP for Ethylene and Spandex (40 CFR Part 63, Subpart YY) (Renewal). The burden to the "Federal Government" is attributed entirely to work performed by federal employees or government contractors and may be found in Table 2: Average Annual EPA Burden and Cost – NESHAP for Ethylene and Spandex (40 CFR Part 63, Subpart YY) (Renewal).

There are currently 34 existing facilities that are subject to 40 CFR 63 Subpart YY, consisting of 31 ethylene production facilities and three spandex production facilities, which are owned and operated by their respective industries. None of these 34 existing facilities in the United States are owned by state, local, tribal or the Federal government. They are all owned and operated by privately-owned, for-profit businesses. We assume that they will all respond.

Over the next three years, an average of 34 existing respondents will be subject to the standard, and no additional sources will become subject to the standard.

Based on our consultations with industry representatives, there is an average of one affected facility at each plant site and each plant site has only one respondent (i.e., the owner/operator of the plant site).

The previous ICR had the following Terms of Clearance (TOC):

"In accordance with 5 CFR 1320, the information collection is approved for three years. As terms of clearance, upon renewal of this collection, EPA is required to include the following in its supporting statement for this and other NESHAP ICRs: (1) a description of the regulatory text applicable to the ICR including submission specifications; (2) a clear description of the data elements being collected under the ICR; (3) screen shots of the electronic portal where the reporting requirements are submitted to EPA (with the control number and burden statement); (4) a detailed discussion of how information is submitted and the extent to which electronic reporting is available; (5) evidence of consultation with respondents (by actively reaching out to stakeholders as permitted by the PRA) to ensure the supporting statement's accuracy on availability of data, frequency of collection, clarity of instructions, accuracy of burden estimate, relevance of data elements, and similar PRA matters; and (6) discussion of how EPA addressed substantive concerns raised by respondents and other stakeholders during consultation and in response to comments received on FR notices. In addition, please convert the supporting statement to the standard 18 question SS-A format upon renewal."

The relevant regulatory text is referenced in section 12(b) of this document. We have created a supplementary document including the regulatory text that describes the ICR requirements as identified in section 12(b) of this document as requested. All electronic collection in this information collection is submitted through EPA's CEDRI or ERT, as discussed in section 12(b) of this document. Additional Paperwork Reduction Act requirements for CEDRI and ERT, including the burden statement and OMB control number, are available at: <https://www.epa.gov/electronic-reporting-air-emissions/paperwork-reduction-act-pra-cedri-and-ert>. We have created supplementary documents that include screenshots of

the electronic portal where the reporting requirements are submitted online to EPA, including the OMB burden statement on the electronic portal. The EPA conducted consultations with stakeholders as described in Section 8 below. Per the Terms of Clearance on the previous ICR, this supporting statement follows the standard 18-question format.

## **Supporting Statement A**

### **1. NEED AND AUTHORITY FOR THE COLLECTION**

*Explain the circumstances that make the collection of information necessary. Identify any legal or administrative requirements that necessitate the collection.*

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The EPA is charged under Section 112 of the Clean Air Act, as amended, to establish standards of performance for each category or subcategory of major sources and area sources of hazardous air pollutants. These standards are applicable to new or existing sources of hazardous air pollutants and shall require the maximum degree of emission reduction. In addition, section 114(a) states that the Administrator may require any owner/operator subject to any requirement of this Act to:

(A) Establish and maintain such records; (B) make such reports; (C) install, use, and maintain such monitoring equipment, and use such audit procedures, or methods; (D) sample such emissions (in accordance with such procedures or methods, at such locations, at such intervals, during such periods, and in such manner as the Administrator shall prescribe); (E) keep records on control equipment parameters, production variables or other indirect data when direct monitoring of emissions is impractical; (F) submit compliance certifications in accordance with Section 114(a)(3); and (G) provide such other information as the Administrator may reasonably require.

In the Administrator's judgment, HAP emissions from ethylene production and spandex production sources cause or contribute to air pollution that may reasonably be anticipated to endanger public health or welfare. Therefore, the NESHAP were promulgated for this source category at 40 CFR Part 63, Subpart YY.

### **2. PRACTICAL UTILITY/USERS OF THE DATA**

*Indicate how, by whom, and for what purpose the information is to be used. Except for a new collection, indicate the actual use the agency has made of the information received from the current collection.*

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The recordkeeping and reporting requirements in the standards ensure compliance with the applicable regulations which were promulgated in accordance with the Clean Air Act. The collected information is also used for targeting inspections and as evidence in legal proceedings.

Performance tests are required in order to determine an affected facility's initial capability to comply with the emission standards. Continuous emission monitors are used to ensure compliance with the standards at all times. During the performance test a record of the operating parameters under which compliance was achieved may be recorded and used to determine compliance in place of a continuous emission monitor.

The notifications required in the standards are used to inform the Agency or delegated authority when a source becomes subject to the requirements of the regulations. The reviewing authority may then inspect the source to check if the pollution control devices are properly installed and operated, leaks are being detected and repaired, and the standards are being met. The performance test may also be observed.

The required semiannual reports are used to determine periods of excess emissions, identify problems at the facility, verify operation/maintenance procedures and for compliance determinations.

Additionally, the EPA is requiring electronic reporting for certain notifications or reports. The EPA is requiring that owners or operators of affected sources would submit electronic copies of initial notifications required in 40 CFR 63.9(b), notifications of change in information already provided required in 40 CFR 63.9(j), performance test reports required in 63.1110(a)(10)(i), notification of compliance status required in 63.1110(a)(4), and the flare management plan required in 63.1103(e)(4)(iii) through the EPA's Central Data Exchange (CDX), using the Compliance and Emissions Data Reporting Interface (CEDRI). For the notifications required in 40 CFR 63.9(b), 63.9(j), and 63.1110(a)(4), and the flare management plan required in 63.1103(e)(4)(iii), owners and operators would be required to upload a PDF of the required notifications.

CEDRI includes the Electronic Reporting Tool (ERT) software, which is used by facilities to generate electronic reports of performance tests and performance evaluations. EPA is also requiring that 40 CFR Part 63, Subpart YY performance test reports and performance evaluation data be submitted through the EPA's ERT. We have created supplementary documents that include screenshots of the electronic portal where the reporting requirements are submitted online to EPA, including the OMB burden statement on the electronic portal.

### **3. USE OF TECHNOLOGY**

*Describe whether, and to what extent, the collection of information involves the use of automated, electronic, mechanical, or other technological collection techniques or other forms of information technology, e.g., permitting electronic submission of responses, and the basis for the decision for adopting this means of collection. Also describe any consideration of using information technology to reduce burden.*

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Some of the respondents are using monitoring equipment that automatically records parameter data. Although personnel at the affected facility must still evaluate the data, internal automation has significantly reduced the burden associated with monitoring and recordkeeping at a plant site.

The rule was amended to include electronic reporting provisions on July 6, 2020 and November 19, 2020. Respondents are required to use the EPA's Electronic Reporting Tool (ERT) to develop performance test reports and submit them through the EPA's Compliance and Emissions Data Reporting Interface (CEDRI), which can be accessed through the EPA's Central Data Exchange (CDX) (<https://cdx.epa.gov/>). The ERT is an application rather than a form, and the requirement to use the ERT is applicable to numerous subparts. The splash screen of the ERT contains a link to the Paperwork Reduction Act (PRA) requirements, such as the OMB Control Number, expiration date, and burden estimate for this and other subparts.

Respondents are also required to submit electronic copies of notifications of compliance status required in 63.1110(a)(4) and the flare management plan required in 63.1103(e)(4)(iii) through EPA's CEDRI. These documents are an upload of their currently required notification in portable document format (PDF) file. Respondents are also required to use the EPA's CEDRI to submit notification in the event of reclassification to area source status and to sources that revert back to major source status. The notification is a one-time notification already required in 40 CFR 63.9(j) in the case where the facility is notifying of a change in major source status and is an upload of the currently required notification in portable document format (PDF) file. For purposes of this ICR, it is assumed that there is no additional burden associated with the requirement for respondents to submit the notifications and reports electronically.

Electronic copies of records may also be maintained in order to satisfy federal recordkeeping requirements. For additional information on the Paperwork Reduction Act requirements for CEDRI and ERT for this rule, see: <https://www.epa.gov/electronic-reporting-air-emissions/paperwork-reduction-act-pra-cedri-and-ert>.

Information contained in the reports is reported by state and local governments in the ICIS Air database, which is operated and maintained by EPA's Office of Compliance. EPA uses ICIS for tracking air pollution compliance and enforcement by local and state regulatory agencies, EPA regional offices and EPA headquarters. EPA and its delegated Authorities can edit, store, retrieve and analyze the data.

#### **4. EFFORTS TO IDENTIFY DUPLICATION**

*Describe efforts to identify duplication. Show specifically why any similar information already available cannot be used or modified for use for the purposes described in Item 2 above.*

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For reports required to be submitted electronically, the information is sent through the EPA's CDX, using CEDRI, where the appropriate EPA regional office can review it, as well as state and local agencies that have been delegated authority. If a state or local agency has adopted under its own authority its own standards for reporting or data collection, adherence to those non-Federal requirements does not constitute duplication.

For all other reports, if the subject standards have not been delegated, the information is sent directly to the appropriate EPA regional office. Otherwise, the information is sent directly to the delegated state or local agency. If a state or local agency has adopted its own standards to implement the Federal standards, a copy of the report submitted to the state or local agency can be sent to the Administrator in lieu of the report required by the Federal standards. Therefore, duplication does not exist.

#### **5. MINIMIZING BURDEN ON SMALL BUSINESSES AND SMALL ENTITIES**

*If the collection of information impacts small businesses or other small entities, describe any methods used to minimize burden.*

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A majority of the respondents are large entities (i.e., large businesses). However, the impact on small entities (i.e., small businesses) was taken into consideration during the development of the regulation. Due to technical considerations involving the process operations and the types of control equipment employed, the recordkeeping and reporting requirements are the same for both small and large entities. The Agency considers these to be the minimum requirements needed to ensure compliance and,

therefore, cannot reduce them further for small entities. To the extent that larger businesses can use economies of scale to reduce their burden, the overall burden will be reduced.

## **6. CONSEQUENCES OF LESS FREQUENT COLLECTION**

*Describe the consequence to Federal program or policy activities if the collection is not conducted or is conducted less frequently, as well as any technical or legal obstacles to reducing burden.*

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Less frequent information collection would decrease the margin of assurance that facilities are continuing to meet the standards. Requirements for information gathering and recordkeeping are useful techniques to ensure that good operation and maintenance practices are applied and emission limitations are met. If the information required by these standards was collected less frequently, the proper operation and maintenance of control equipment and the possibility of detecting violations would be less likely.

## **7. GENERAL GUIDELINES**

*Explain any special circumstances that require the collection to be conducted in a manner inconsistent with OMB guidelines.*

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These reporting or recordkeeping requirements do not violate any of the regulations promulgated by OMB under 5 CFR Part 1320, Section 1320.5.

These standards require the respondents to maintain all records, including reports and notifications for at least five years. This is consistent with the General Provisions as applied to the standards. EPA believes that the five-year records retention requirement is consistent with the Part 70 permit program and the five-year statute of limitations on which the permit program is based. The retention of records for five years allows EPA to establish the compliance history of a source, any pattern of non-compliance and to determine the appropriate level of enforcement action. EPA has found that the most flagrant violators have violations extending beyond five years. In addition, EPA would be prevented from pursuing the violators due to the destruction or nonexistence of essential records.

## **8. PUBLIC COMMENT AND CONSULTATIONS**

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### **8a. Public Comment**

*If applicable, provide a copy and identify the date and page number of publication in the Federal Register of the Agency's notice, required by 5 CFR 1320.8(d), soliciting comments on the information collection prior to submission to OMB. Summarize public comments received in response to that notice and describe actions taken by the Agency in response to these comments. Specifically address comments received on cost and hour burden.*

An announcement of a public comment period for the renewal of this ICR was published in the *Federal Register* (88 FR 31748) on May 18, 2023. No comments were received on the burden published in the *Federal Register* for this renewal.

### **8b. Consultations**

*Describe efforts to consult with persons outside the Agency to obtain their views on the availability of data, frequency of collection, the clarity of instructions and recordkeeping, disclosure, or reporting format (if any), and on the data elements to be recorded, disclosed, or reported. Consultation with representatives of those from whom information is to be obtained or those who must compile records should occur at least once every 3 years - even if the collection of information activity is the same as in prior periods. There may be circumstances that may preclude consultation in a specific situation. These circumstances should be explained.*

The Agency has consulted industry experts and internal data sources to project the number of affected facilities and industry growth over the next three years. The primary source of information as reported by industry, in compliance with the recordkeeping and reporting provisions in the standard, is the Integrated Compliance Information System (ICIS). ICIS is EPA's database for the collection, maintenance, and retrieval of compliance data for industrial and government-owned facilities. The growth rate for the industry is based on our consultations with the Agency's internal industry experts. Approximately 34 respondents will be subject to the standard over the three-year period covered by this ICR.

Industry trade association(s) and other interested parties were provided an opportunity to comment on the burden associated with the standard as it was being developed and the standard has been previously reviewed to determine the minimum information needed for compliance purposes. In developing this ICR, we contacted both the Continental Carbon Company at (800) 231-4594 and the Syngenta Corporation at (800) 334-9481. In this case, no comments were received.

It is our policy to respond after a thorough review of comments received since the last ICR renewal as well as those submitted in response to the first Federal Register notice. In this case, no comments were received.

## **9. PAYMENTS OR GIFTS TO RESPONDENTS**

*Explain any decisions to provide payments or gifts to respondents, other than remuneration of contractors or grantees.*

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No payments or gifts are made to respondents.

## **10. ASSURANCE OF CONFIDENTIALITY**

*Describe any assurance of confidentiality provided to respondents and the basis for the assurance in statute, regulation, or Agency policy. If the collection requires a systems of records notice (SORN) or privacy impact assessment (PIA), those should be cited and described here.*

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Any information submitted to the Agency for which a claim of confidentiality is made will be safeguarded according to the Agency policies set forth in Title 40, chapter 1, part 2, subpart B - Confidentiality of Business Information (see 40 CFR 2; 41 FR 36902, September 1, 1976; amended by 43 FR 40000, September 8, 1978; 43 FR 42251, September 20, 1978; 44 FR 17674, March 23, 1979).

## **11. JUSTIFICATION FOR SENSITIVE QUESTIONS**

*Provide additional justification for any questions of a sensitive nature, such as sexual behavior and attitudes, religious beliefs, and other matters that are commonly considered private. This justification should include the reasons why the Agency considers the questions necessary, the specific uses to be*

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made of the information, the explanation to be given to persons from whom the information is requested, and any steps to be taken to obtain their consent.

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The reporting or recordkeeping requirements in the standard do not include sensitive questions.

## 12. RESPONDENT BURDEN HOURS & LABOR COSTS

Provide estimates of the hour burden of the collection of information. The statement should:

- Indicate the number of respondents, frequency of response, annual hour burden, and an explanation of how the burden was estimated. Generally, estimates should not include burden hours for customary and usual business practices.
  - If this request for approval covers more than one form, provide separate hour burden estimates for each form and the aggregate the hour burdens.
  - Provide estimates of annualized cost to respondents for the hour burdens for collections of information, identifying and using appropriate wage rate categories. The cost of contracting out or paying outside parties for information collection activities should not be included here. Instead, this cost should be included as O&M costs under non-labor costs covered under question 13.
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### 12a. Respondents/NAICS Codes

The respondents to the recordkeeping and reporting requirements are ethylene and spandex production facilities. The United States Standard Industrial Classification (SIC) code for the respondents affected by the standards and their corresponding North American Industry Classification System (NAICS) codes are listed below:

Standard (40 CFR Part 63, Subpart YY)	SIC Codes	NAICS Codes
Petrochemical Manufacturing (Ethylene)	2869	325110
Artificial and Synthetic Fibers and Filaments Manufacturing (Spandex)	2824	325220

Based on our research for this ICR, on average over the next three years, approximately 34 existing respondents will be subject to the standard. It is estimated that no additional respondents per year will become subject. The overall average number of respondents, as shown below in the table Number of Respondents, is 34 per year. The number of respondents is calculated using the table Number of Respondents that addresses the three years covered by this ICR.

The total number of annual responses per year is calculated using the table Total Annual Responses shown below. The number of Total Annual Responses is 416.

### 12b. Information Requested

In this ICR, all the data that are recorded or reported is required by the NESHAP for Ethylene and Spandex Production (40 CFR Part 63, Subpart YY).

A source must make the following reports:



<b>Notifications</b>	
Notification and application of construction or reconstruction.	§63.5 §63.1110(a)
Notification of anticipated date of initial startup.	§63.5
Notification of actual date of initial startup (if not submitted under 63.5)	§63.1110(a)(1), §63.1110(b)
Initial Notification - identification of affected sources	§63.1110(a)(2), §63.1110(c)
Notification of performance evaluation and performance test dates	§63.1110(a)
Operating parameter value and rationale selection	§63.1110(a), §63.1111
Notification of compliance status (for flares and PRDs)	§63.1110(d)
Notification of changes in information (reclassification to area source status or to revert to major source status) (electronic submission)	§63.9(b), §63.9(j)

<b>Reports</b>	
Initial Compliance Status Report (electronic submission)	§63.1110(a)(4), §63.1110(d)
Semiannual reports	§63.1090, §63.1110(e)
Startup, shutdown, and malfunction (SSM) reports	§63.1110(a)(7), §§63.1111(b)-(c)
Excess emissions and CPMS performance summary report	§63.1110(a)
Periodic reports (for heat exchangers, flares, pressure relief devices, cracking furnace decoking operations, bypass lines, maintenance vents)	§63.1090(f), §63.1110(a)(5), §63.1110(e)
Performance test reports (electronic submission)	§§63.1110(a)(9)- (10), §63.987(c), §63.988(b), §63.997(a)

A source must keep the following records:

<b>Recordkeeping</b>	
Records of verification of DOT tank certification or Method 27 of appendix A to 40 CFR Part 60 testing	§63.1105(i)
Records of maintenance	§63.1109(a), §§63.1090(b)-(e)
Records of startup, shutdown and malfunction and actions taken	§63.998(d)
Records of continuous monitoring and compliance	§63.998(b), §63.998(c)
Records of non-flare control and recovery device regulated source monitoring	§63.998(c)
Records of closed vent systems	§63.998(d)
Records of storage vessel and transfer racks	§63.998(d)
Records of equipment leaks	§63.998(d)
Records of monitored parameters out of range	§63.998(d)
Records of malfunctioning or inoperative CPMS	§63.998(c)
Records of CPMS operation, adjustments, calibration checks, and maintenance	§63.998(c)
Records of performance test and performance evaluation results	§63.998(a)
Records of initial and compliance status notifications	§63.998(a)
General and specific equipment leak records	§§63.1038(b)-(c)
Records of vessel dimensions and capacity	§63.1065(a)
Records of floating roof inspection results for storage vessels (tanks)	§63.1065(b)
Records of floating roof landing	§63.1065(c)
Records of monitoring data required by 63.1086 on leak detection	§63.1089(a)
Records of leak repair, including the method or procedure and date of repair	§§63.1089(b)-(d)
Records of each notification and report	§63.1109(a)
Records of heat exchangers, storage vessel degassing, flares, maintenance vents, bypass lines, cracking furnace decoking operations, pressure relief devices	§63.1089(d), §63.1103(e)(10), §§63.1109(e)-(i)

### **12c. Respondent Activities**

<b>Respondent Activities</b>
Familiarization with the regulatory requirements.

<b>Respondent Activities</b>
Install, calibrate, maintain, and operate CMS for the control devices, flares, pressure relief devices, and heat exchangers.
Develop a flare management plan and maintenance vent opening procedures (ethylene facilities).
Perform initial performance test, Reference Method 1 or 1A, 2, 2A, 2C, 2D, 2F, or 2G, 4, 18, 21, 22, 25A, 26 or 26A, 27, 301, ASTM D1946-90 tests, and repeat performance tests if necessary.
Write the notifications and reports listed above.
Enter information required to be recorded above.
Submit the required reports developing, acquiring, installing, and utilizing technology and systems for collecting, validating, and verifying information.
Develop, acquire, install, and utilize technology and systems for processing and maintaining information.
Develop, acquire, install, and utilize technology and systems for disclosing and providing information.
Train personnel to be able to respond to a collection of information.
Transmit, or otherwise disclose the information.

**12d. Respondent Burden Hours and Labor Costs**

Table 1 documents the computation of individual burdens for the recordkeeping and reporting requirements applicable to the industry for the subpart included in this ICR. The individual burdens are expressed under standardized headings believed to be consistent with the concept of burden under the Paperwork Reduction Act. Where appropriate, specific tasks and major assumptions have been identified. Responses to this information collection are mandatory.

The average annual burden to industry over the next three years from these recordkeeping and reporting requirements is estimated to be 29,400 hours (Total Labor Hours from Table 1). These hours are based on Agency studies and background documents from the development of the regulation, Agency knowledge and experience with the NESHAP program, the previously approved ICR, and any comments received.

This ICR uses the following labor rates:

Managerial	\$163.17 (\$77.70 + 110%)
Technical	\$130.28 (\$62.04 + 110%)
Clerical	\$65.71 (\$31.29 + 110%)

These rates are from the United States Department of Labor, Bureau of Labor Statistics, September 2022, "Table 2. Civilian workers by occupational and industry group." The rates are from column 1,

“Total compensation.” The rates have been increased by 110 percent to account for varying industry wage rates and the additional overhead business costs of employing workers beyond their wages and benefits, including business expenses associated with hiring, training, and equipping their employees.

### **13. RESPONDENT CAPITAL AND O&M COSTS**

*Provide an estimate for the total annual cost burden to respondents or record keepers resulting from the collection of information. (Do not include the cost of any hour burden already reflected on the burden worksheet).*

*The cost estimate should be split into two components: (a) a total capital and start-up cost component (annualized over its expected useful life) and (b) a total operation and maintenance and purchase of services component. The estimates should consider costs associated with generating, maintaining, and disclosing or providing the information. Include descriptions of methods used to estimate major cost factors including system and technology acquisition, expected useful life of capital equipment, the discount rate(s), and the period over which costs will be incurred. Capital and start-up costs include, among other items, preparations for collecting information such as purchasing computers and software; monitoring, sampling, drilling, and testing equipment; and record storage facilities. If cost estimates are expected to vary widely, agencies should present ranges of cost burdens and explain the reasons for the variance. The cost of purchasing or contracting out information collections services should be a part of this cost burden estimate.*

*Generally, estimates should not include purchases of equipment or services, or portions thereof, made: (1) prior to October 1, 1995, (2) to achieve regulatory compliance with requirements not associated with the information collection, (3) for reasons other than to provide information or keep records for the government, or (4) as part of customary and usual business or private practices.*

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The type of industry costs associated with the information collection activities in the subject standard(s) are both labor costs which are addressed elsewhere in this ICR and the costs associated with continuous monitoring. The capital/startup costs are one-time costs when a facility becomes subject to the regulation. The annual operation and maintenance costs are the ongoing costs to maintain the monitor(s) and other costs such as photocopying and postage.

The total capital/startup costs for this ICR are \$0. This is the total of column D shown below in the table Capital/Startup vs. Operation and Maintenance (O&M) Costs.

The total operation and maintenance (O&M) costs for this ICR are \$11,400,000. This is the total of column G shown below in the table Capital/Startup vs. Operation and Maintenance (O&M) Costs.

The average annual cost for capital/startup and operation and maintenance costs to industry over the next three years of the ICR is estimated to be \$11,400,000. These are recordkeeping costs.

### **14. AGENCY COSTS**

*Provide estimates of annualized costs to the Federal government. Also, provide a description of the method used to estimate cost, which should include quantification of hours, operational expenses (such as equipment, overhead, printing, and support staff), and any other expense that would not have been incurred without this collection of information.*

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#### **14a. Agency Activities**

The EPA conducts the following activities in connection with the acquisition, analysis, storage, and distribution of the required information.

- Review notifications and reports, including performance test reports, and excess emissions reports, required to be submitted by industry.
- Audit facility records.
- Input, analyze, and maintain data in the Enforcement and Compliance History Online (ECHO) and ICIS.

#### **14b. Agency Labor Cost**

The only costs to the Agency are those costs associated with analysis of the reported information. EPA's overall compliance and enforcement program includes activities such as the examination of records maintained by the respondents, periodic inspection of sources of emissions, and the publication and distribution of collected information. The average annual Agency burden and cost during the three years of the ICR is estimated to be 2,580 labor hours at a cost of \$137,000; see below in Table 2: Average Annual EPA Burden and Cost – NESHAP for Primary Lead Smelting (40 CFR Part 63, Subpart TTT) (Renewal).

This cost is based on the average hourly labor rate as follows:

Managerial	\$73.46 (GS-13, Step 5, \$45.91 + 60%)
Technical	\$54.51 (GS-12, Step 1, \$34.07 + 60%)
Clerical	\$29.50 (GS-6, Step 3, \$18.44 + 60%)

These rates are from the Office of Personnel Management (OPM), 2023 General Schedule, which excludes locality rates of pay. The rates have been increased by 60 percent to account for the benefit packages available to government employees. Details upon which this estimate is based appear at the end of this document in Table 2: Average Annual EPA Burden and Cost – NESHAP for Ethylene and Spandex (40 CFR Part 63, Subpart YY) (Renewal).

We assume that burdens for managerial tasks take 5% of the time required for technical tasks because the typical tasks for managers are to review and approve reports. Clerical burdens are assumed to take 10% of the time required for technical tasks because the typical duties of clerical staff are to proofread the reports, make copies and maintain records.

#### **14c. Agency Non-Labor Costs**

There are no non-labor costs to the Agency associated with this information collection.

### **15) REASONS FOR CHANGE IN BURDEN**

*Explain the reasons for any program changes or adjustments reported in the burden or capital/O&M cost estimates.*

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The decrease in burden from the most recently approved ICR is due to an adjustment(s). The adjustment decrease in burden from the most recently approved ICR is due to a decrease in the number of sources. While previous renewals included sources manufacturing carbon black and sources manufacturing cyanide, an RTR amendment for carbon black production (OMB Number 2060-0738) was finalized on November 19, 2021 (86 FR 66096) and an RTR amendment for cyanide production (OMB Number 2060-

0739) was finalized on November 19, 2021 (86 FR 66096). Now that these two subcategories are covered under separate ICRs, the burden for these requirements is not included in this renewal. Additionally, an RTR for ethylene production was finalized on July 6, 2020 (85 FR 40386). These requirements have been included in the burden calculations. While overall burden decreased, Capital/Startup and O&M costs have increased due to the additional requirements finalized for sources manufacturing ethylene.

#### **16) PUBLICATION OF DATA**

*For collections of information whose results will be published, outline plans for tabulation and publication. Address any complex analytical techniques that will be used. Provide the time schedule for the entire project, including beginning and ending dates of the collection of information, completion of report, publication dates, and other actions.*

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All non-CBI data submitted electronically to the Agency through CEDRI are available to the public for review and printing and are accessible using WebFIRE. Electronically submitted emissions data from performance testing or performance evaluations using the Electronic Reporting Tool or templates attached to CEDRI, as well as data from reports from regulations with electronic templates, are tabulated; data submitted as portable document format (PDF) files attached to CEDRI are neither tabulated nor subject to complex analytical techniques. Electronically submitted emissions data used to develop emissions factors undergo complex analytical techniques and the draft emissions factors are available on the Clearinghouse for Inventories and Emission Factors listserv at <https://www.epa.gov/chief/chief-listserv> for public review and printing. Electronically submitted emissions data, as well as other data, obtained from one-time or sporadic information collection requests often undergo complex analytical techniques; results of those activities are included in individual rulemaking dockets and are available at <https://www.regulations.gov/> for public review and printing.

#### **17) DISPLAY OF EXPIRATION DATE**

*If seeking approval to not display the expiration date for OMB approval of the information collection, explain the reasons that display would be inappropriate.*

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EPA will display the expiration date for OMB approval of the information collection.

#### **18) CERTIFICATION STATEMENT**

*Explain each exception to the topics of the certification statement identified in "Certification for Paperwork Reduction Act Submissions."*

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There are no exceptions to the topics of the certification statement.

**Table 1: Annual Respondent Burden and Cost - NESHAP for Ethylene and Spandex (40 CFR Part 63, Subpart YY) (Renewal)**

Burden Item	(A) Person hours per occurrence	(B) No. of occurrence s per respondent per year	(C) Person hours per respondent per year (C=AxB)	(D) Respondents per year <sup>a</sup>	(E) Technical person- hours per year (E=CxD)	(F) Managemen t person hours per year (Ex0.05)	(G) Clerical person hours per year (Ex0.1)	(H) Cost, \$ <sup>b</sup>
1. Applications	N/A							
2. Survey and Studies	N/A							
3. Reporting Requirements								
A. Familiarization with Regulatory Requirements <sup>c</sup>	1	1	1	34	34	1.7	3.4	\$4,930.32
B. Required Activities								
1. Initial Performance Tests <sup>d, e</sup>	57	1	57	0	0	0	0	\$0
2. Repeat of Performance Tests <sup>d, e</sup>	57	0.1	5.7	0	0	0	0	\$0
3. Startup, Shutdown and Malfunction Plan <sup>f</sup>	10	1	10	3	30	1.5	3	\$4,350.29
C. Create Information	See 3.B							
D. Gather Existing Information	See 3.B							
E. Report Preparation								
1. Initial Notification of Applicability <sup>d</sup>	2	1	2	0	0	0	0	\$0
2. Notification of Construction/Reconstructio n <sup>d</sup>	2	1	2	0	0	0	0.0	\$0
3. Notification of Anticipated startup <sup>d</sup>	2	1	2	0	0	0	0	\$0
4. Notification of Actual Startup <sup>d</sup>	2	1	2	0	0	0	0	\$0
5. Notification of Performance Test Dates <sup>d</sup>	2	1.1	2.2	0	0	0	0	\$0

6. Notification of Operating Parameter Value and Rationale Selection <sup>d</sup>	2	1	2	0	0	0	0	\$0
7. Notification of Compliance Status <sup>d</sup>	2	1	2	0	0	0	0	\$0
8. Report of Initial Performance Test Results <sup>d</sup>	8	1.1	8.8	0	0	0	0	\$0
9. Reporting Results of Continuous Monitoring System Performance Report and Summary Report	See 3.B							
10. Periodic and Semiannual Reports <sup>f</sup>	8	2	16	3	48	2.4	4.8	\$6,960.46
11. Excess Emissions and Continuous Monitoring System Performance Report and Summary Report <sup>g</sup>	8	2	16	34	544	27.2	54.4	\$78,885.17
12. Immediate Startup, Shutdown, Malfunction Reports <sup>h, f</sup>	4	1	4	0.15	0.6	0.03	0.06	\$87.01
13. Request for Waiver of Reporting and Recordkeeping	4	1	4	0	0	0	0	\$0
F. Report Preparation - Ethylene <sup>i</sup>								
1. Notification of Compliance Status								
a. Flares	5	1	5	31	155	7.75	15.5	\$22,476.47
b. PRDs	15	1	15	21	315	15.75	31.5	\$45,677.99
2. Periodic and Semiannual Reports								
a. Flares	5	2	10	31	310	15.5	31	\$44,952.95
b. PRDs	10	2	20	21	420	21	42	\$60,903.99
c. Decoking Operations	4	2	8	31	248	12.4	24.8	\$35,962.36
d. Maintenance Vents	4	2	8	31	248	12.4	24.8	\$35,962.36



e. Bypass Lines <sup>j</sup>	4	2	8	0	0	0	0	\$0
f. HEX El Paso Method	3	2	6	31	186	9.3	18.6	\$26,971.77
3. Submit Flare Management Plan <sup>d,k</sup>	2	1	2	0	0	0.0	0	\$0
<b>Reporting Subtotal</b>						<b>2919</b>		<b>\$368,121</b>
4. Recordkeeping Requirements								
A. Familiarization with Regulatory Requirements	See 3.A							
B. Plan Activities	See 3.B							
C. Implement Activities	See 3.B							
D. Develop Record System	N/A							
E. Time to Enter Information								
1. Records of SS&M <sup>f</sup>	1.5	52	78	3	234	11.7	23.4	\$33,932
2. Records of CMS	1	365	365	34	12410	620.5	1241	\$1,799,568
3. Collect and compile data	24	2	48	34	1632	81.6	163.2	\$236,656
4. Enter / verify information for semiannual reports	16	2	32	34	1088	54.4	108.8	\$157,770
F. Time to Enter Information - Ethylene <sup>i</sup>								
1. Daily Flame Impingement Inspection	0.083	365	30	31	939.145	47.0	93.9145	\$136,185
2. Decoking Control Measures	2	10	20	31	620	31.0	62	\$89,906
3. Flares	0.4	365	146	31	4526	226.3	452.6	\$656,313
4. PRDs	10	1	10	21	210	10.5	21	\$30,452
5. HEX El Paso Method	0	1	0	31	0	0	0	\$0
6. Maintenance Vents	25	1	25	31	775	39	77.5	\$112,382
7. Bypass Lines <sup>j</sup>	0	1	0	0	0	0	0	\$0
8. Flare Management Plan <sup>k</sup>	75	3	225	0	0	0	0	\$0
9. Degassing	3	1	3	2	6	0	0.6	\$870
G. Train Personnel <sup>i</sup>	20	1	20	31	620	31	62	\$89,906
H. Audits	N/A							
<b>Subtotal for Recordkeeping Requirements</b>						<b>26,519</b>		<b>\$3,343,940</b>

<b>Total Labor Burden and Costs (rounded) <sup>l</sup></b>		<b>29,400</b>	<b>\$3,710,000</b>
<b>Total Capital and O&amp;M Cost (rounded) <sup>l</sup></b>			<b>\$11,400,000</b>
<b>GRAND TOTAL (rounded) <sup>l</sup></b>			<b>\$15,100,000</b>

**Assumptions:**

<sup>a</sup>We assume that there are 34 existing respondents, consisting of 31 sources manufacturing ethylene, and 3 sources manufacturing spandex. We assume no additional respondents will be subject to the rule. Previous renewals included facilities manufacturing carbon black and facilities manufacturing cyanide, however, an RTR amendment for carbon black production (OMB Number 2060-0738, EPA ICR Number 2677.02) was finalized on November 19, 2021 (86 FR 66096) and an RTR amendment for cyanide production (OMB Number 2060-0739, EPA ICR Number 2678.02) was finalized on November 19, 2021 (86 FR 66096). Therefore, the burden for these requirements is not included in this renewal.

<sup>b</sup> This ICR uses the following labor rates: Managerial \$163.17 (\$77.70 + 110%); Technical \$130.28 (\$62.04 + 110%); and Clerical \$65.71 (\$31.29 + 110%). These rates are from the United States Department of Labor, Bureau of Labor Statistics, September 2022, "Table 2. Civilian Workers, by occupational and industry group." The rates are from column 1, "Total compensation." The rates have been increased by 110 percent to account for the benefit packages available to those employed by private industry.

<sup>c</sup> EPA assumes that all sources will re-familiarize with the regulatory requirements each year.

<sup>d</sup> This is a one time cost that applies to new facilities manufacturing ethylene.

<sup>e</sup> We assume that the rate of failed performance tests is 10%.

<sup>f</sup> The final RTR for Ethylene Production (85 FR 40386) removed SSM requirements for ethylene facilities. SSM requirements remain for the 3 spandex facilities. The Periodic and Semiannual Reports for ethylene facilities are shown in Rows F.2.a through F.2.f.

<sup>g</sup> All sources subject to Subpart YY file these reports. For Spandex sources, this also includes the periodic startup, shutdown and malfunction report.

<sup>h</sup> We assume that only 5% ( $3 \times 0.05 = 1.5$ ) respondents per year will need to submit an immediate SSM report. Ethylene facilities are not required to submit SSM reports.

<sup>i</sup> This ICR incorporates the requirements of the RTR for Ethylene Production sources (85 FR 40386) promulgated on July 6, 2020. Values for the number of respondents in each category are taken from Year 3 of the Ethylene Production RTR.

<sup>j</sup> The final RTR for Ethylene Production (85 FR 40386) assumed that bypass lines were not used during the 3-year period, so no bypass line periodic reports would be submitted.

<sup>k</sup> As new ethylene production sources are constructed, they will prepare and submit a flare management plan to EPA for review.

<sup>l</sup> Totals have been rounded to 3 significant figures. Figures may not add exactly due to rounding.

**Table 2: Average Annual EPA Burden and Cost - NESHAP for Ethylene and Spandex (40 CFR Part 63, Subpart YY) (Renewal)**

Burden item	(A) Person hours per occurrence	(B) No. of occurrences per respondent per year	(C) Person hours per respondent per year (C=AxB)	(D) Respondents per year <sup>a</sup>	(E) Technical person- hours per year (E=CxD)	(F) Managemen t person hours per year (Ex0.05)	(G) Clerical person hours per year (Ex0.1)	(H) Cost, \$ <sup>b</sup>
1. Initial Performance Tests								
A. New or Modified Facility <sup>c</sup>	5	1	5	0	0	0	0	\$0
B. Repeat of Performance Tests <sup>c</sup>	5	0.1	0.5	0	0	0	0	\$0
2. Excess Emissions - Enforcement Activities								
3. Report Review								
A. Notification of Applicability <sup>c</sup>	2	1	2	0	0	0	0	\$0
B. Notification of Construction/Reconstruction <sup>c</sup>	2	1	2	0	0	0.0	0	\$0
C. Notification of Anticipated Startup <sup>c</sup>	2	1	2	0	0	0	0	\$0
D. Notification of Actual Startup <sup>c</sup>	2	1	2	0	0	0	0	\$0
E. Request for Extension of Compliance <sup>c</sup>	2	1	2	0	0	0	0	\$0
F. Notification of Special Compliance Requirements <sup>c</sup>	2	1	2	0	0	0	0	\$0
G. Notification of Performance Test Dates <sup>c</sup>	2	1.1	2.2	0	0	0	0	\$0
H. Notification of Operating Parameter Value and Rationale Selection <sup>c</sup>	2	1	2	0	0	0	0	\$0
I. Notification of Compliance Status <sup>c</sup>	2	1	2	0	0	0	0	\$0
J. Review Report of Initial Performance Test <sup>c</sup>	5	1.1	5.5	0	0	0	0	\$0
K. Review Reporting Results of Continuous Monitoring System Performance Report and Summary	Included in Review of Performance Test Report							

Report								
L. Review Periodic & Semiannual Reports	5	2	10	3	30	2	3	\$1,834
M. Review Excess Emission Report and Continuous Monitoring System Performance Report and Summary Report <sup>d</sup>	20	2	40	34	1,360	68	136	\$83,141
N. Review Immediate Startup, Shutdown, Malfunction Report <sup>e</sup>	8	1	8	0.15	1	0	0.12	\$73
O. Review Request for Waiver of Reporting and Recordkeeping	2	1	2	0	0	0	0	\$0
4. Report Review - Ethylene <sup>f</sup>								
A. Review notification of compliance status								
1. Flares	5	1	5	31	155	8	15.5	\$9,476
2. PRDs	5	1	5	21	105	5	10.5	\$6,419
B. Review compliance reports								
1. Flares	2	2	4	31	124	6	12.4	\$7,580
2. PRDs	2	2	4	21	84	4	8.4	\$5,135
3. Decoking Operations	2	2	4	31	124	6	12.4	\$7,580
4. Maintenance Vents	2	2	4	31	124	6	12.4	\$7,580
5. HEX El Paso Method	2	2	4	31	124	6	12.4	\$7,580
C. Review flare management plan <sup>g</sup>	5	2	10	0	0	0	0	\$0
5. Prepare annual summary report	10	1	10	1	10	1	1	\$611
<b>TOTAL (rounded) <sup>h</sup></b>						<b>2,580</b>		<b>\$137,000</b>

**Assumptions:**

<sup>a</sup> We assume that there are 34 existing respondents, consisting of 31 sources manufacturing ethylene, and 3 sources manufacturing spandex. We assume no additional respondents will be subject to the rule. Previous renewals included facilities manufacturing carbon black and facilities manufacturing cyanide, however, an RTR amendment for carbon black production (OMB Number 2060-0738, EPA ICR Number 2677.02) was finalized on November 19, 2021 (86 FR 66096) and an RTR amendment for cyanide production (OMB Number 2060-0739, EPA ICR Number 2678.02) was finalized on November 19, 2021 (86 FR 66096). Therefore, the burden for these requirements is not included in this renewal.

<sup>b</sup> This cost is based on the average hourly labor rate as follows: Managerial \$73.46 (GS-13, Step 5, \$45.91 + 60%); Technical \$54.51 (GS-12, Step 1, \$34.07 +

60%); and Clerical \$29.50 (GS-6, Step 3, \$18.44 + 60%). This ICR assumes that Managerial hours are 5 percent of Technical hours, and Clerical hours are 10 percent of Technical hours. These rates are from the Office of Personnel Management (OPM), 2023 General Schedule, which excludes locality, rates of pay. The rates have been increased by 60 percent to account for the benefit packages available to government employees.

<sup>c</sup>This is a one time cost that applies to new facilities manufacturing ethylene.

<sup>d</sup>All sources subject to Subpart YY file these reports. For Spandex sources, this also includes the periodic startup, shutdown and malfunction report.

<sup>e</sup>We assume that only 5% ( $3 \text{ spandex} \times 0.05 = 1.55$ ) respondents per year will need to submit an immediate SSM report. Ethylene facilities are not required to submit SSM reports.

<sup>f</sup>This ICR incorporates the requirements of the RTR for Ethylene Production sources (85 FR 40386) promulgated on July 6, 2020. Values for the number of respondents in each category are taken from Year 3 of the Ethylene Production RTR

<sup>g</sup>As new ethylene production sources are constructed, they will prepare and submit a flare management plan to EPA for review.

<sup>h</sup>Totals have been rounded to 3 significant figures. Figures may not add exactly due to rounding.

Number of Respondents					
	Respondents That Submit Reports		Respondents That Do Not Submit Any Reports		
	(A)	(B)	(C)	(D)	(E)
Year	Number of New Respondents <sup>a</sup>	Number of Existing Respondents	Number of Existing Respondents that keep records but do not submit reports	Number of Existing Respondents That Are Also New Respondents	Number of Respondents (E=A+B+C-D)
1	0	34	0	0	34
2	0	34	0	0	34
3	0	34	0	0	34
Average	0	34	0	0	<b>34</b>

<sup>a</sup> New respondents include sources with constructed and reconstructed affected facilities. We assume that there are 34 existing respondents, consisting of 31 sources manufacturing ethylene, and 3 sources manufacturing spandex. We assume no additional respondents will be subject to the rule. Previous renewals included facilities manufacturing carbon black and facilities manufacturing cyanide, however, an RTR amendment for carbon black production (OMB Number 2060-0738, EPA ICR Number 2677.02) was finalized on November 19, 2021 (86 FR 66096) and an RTR amendment for cyanide production (OMB Number 2060-0739, EPA ICR Number 2678.02) was finalized on November 19, 2021 (86 FR 66096). Therefore, the burden for these requirements is not included in this renewal.

<b>Total Annual Responses</b>				
(A)	(B)	(C)	(D)	(E)
Information Collection Activity	Number of Respondents <sup>a</sup>	Number of Responses	Number of Existing Respondents That Keep Records But Do Not Submit Reports	Total Annual Responses E=(BxC)+D
Initial Notification of Applicability	0	1	0	0
Notification of Construction/Reconstruction	0	1	0	0
Notification of Anticipated startup	0	1	0	0
Notification of Actual Startup	0	1	0	0
Notification of Performance Test Dates	0	1.1	0	0
Notification of Operating Parameter Value and Rationale Selection	0	1	0	0
Notification of Compliance Status	0	1	0	0
Report of Initial Performance Test Results	0	1.1	0	0
Periodic and Semiannual Reports: Spandex	3	2	0	6
Excess Emissions and Continuous Monitoring System Performance Report and Summary Report	34	2	0	68
Immediate Startup, Shutdown, Malfunction Reports	0.15	1	0	0.15
Notification of Compliance Status: Ethylene: Flares	31	1	0	31
Notification of Compliance Status: Ethylene: PRDs	21	1	0	21
Periodic and Semiannual Reports: Ethylene: Flares	31	2	0	62
Periodic and Semiannual Reports: Ethylene: PRDs	21	2	0	42

Periodic and Semiannual Reports: Ethylene: Decoking Operations	31	2	0	62
Periodic and Semiannual Reports: Ethylene: Maintenance Vents	31	2	0	62
Periodic and Semiannual Reports: Ethylene: HEX El Paso Method	31	2	0	62
Submit Flare Management Plan	0	1	0	0
			<b>Total</b>	<b>416</b>

<b>Capital/Startup vs. Operation and Maintenance (O&amp;M) Costs</b>						
<b>(A)</b>	<b>(B)</b>	<b>(C)</b>	<b>(D)</b>	<b>(E)</b>	<b>(F)</b>	<b>(G)</b>
<b>Source Category w/ Continuous Monitoring Device</b>	<b>Capital/Startup Cost for One Respondent</b>	<b>Number of New Respondents</b>	<b>Total Capital/Startup Cost, (B X C)</b>	<b>Annual O&amp;M Costs for One Respondent</b>	<b>Number of Respondents with O&amp;M <sup>a</sup></b>	<b>Total O&amp;M, (E X F)</b>
Spandex CMS	\$0	0	\$0	\$12,059	3	\$36,178
Ethylene Flare Monitors	\$1,979,094	0	\$0	\$359,960	31	\$11,158,752
Ethylene PRD Monitors	\$62,959	0	\$0	\$8,486	21	\$178,201
Ethylene Heat Exchangers - El Paso Method	\$6,022	0	\$0	\$1,232	31	\$38,186
<b>Totals (rounded) <sup>b</sup></b>			<b>\$0</b>			<b>\$11,400,000</b>

<sup>a</sup> Ethylene Production facilities have additional capital and O&M costs as a result of the Ethylene production RTR (85 FR 40386) promulgated on July 6, 2020. These costs have been averaged out over the three-year period of this ICR. The Ethylene RTR assumed that 31 facilities would have flares and heat exchangers, while 21 facilities would have PRDs.

<sup>b</sup> Totals have been rounded to 3 significant digits. Figures may not add exactly due to rounding.



