**SUPPORTING STATEMENT**

 **ENVIRONMENTAL PROTECTION AGENCY**

**Standards of Performance for Volatile Organic Liquid Storage Vessels (Including Petroleum Liquid Storage Vessels) for Which Construction, Reconstruction, or Modification Commenced After October 4, 2023 (40 CFR Part 60, Subpart Kc) (Proposed Rule)**

**1. Identification of the Information Collection**

**1(a) Title of the Information Collection**

Standards of Performance for Volatile Organic Liquid Storage Vessels (Including Petroleum Liquid Storage Vessels) for Which Construction, Reconstruction, or Modification Commenced After October 4, 2023 (40 CFR Part 60, Subpart Kc) (Proposed Rule), EPA ICR Number 2791.01, OMB Control Number 2060-NEW.

**1(b) Short Characterization/Abstract**

The EPA promulgated NSPS subpart K, specific to storage vessels for petroleum liquids, in 1974 (39 FR 9317, March 8, 1974). These standards were amended several times and eventually in 1980, the amendments were significant enough to establish revised NSPS for storage vessels for petroleum liquids as NSPS subpart Ka (45 FR 23379, April 4, 1980). On July 23, 1984, the U.S. Environmental Protection Agency (EPA) proposed updated new source performance standards (NSPS) to reduce volatile organic compound (VOC) emissions from storage vessels as 40 CFR Part 60, subpart Kb. These standards were promulgated on April 8, 1987 (see 52, FR 11429), amended several times, and last amended on January 19, 2021. These standards apply to storage vessels constructed after July 23, 1984, that that have capacity greater than or equal to 75 cubic meters (20,000 gallons) used to store volatile organic liquids (including petroleum liquids) with a true vapor pressure greater than or equal to 3.5 kilopascals (kPa) [or 0.5 pounds per square inch absolute (psia)]. NSPS subpart Kb also applies to organic liquid storage vessels between 20,000- and 40,000-gallons capacity for which the true vapor pressure of the stored liquid is greater than or equal to 15 kPa (2.2 psia). NSPS subpart Kb specifies monitoring requirements for all affected storage vessels. For storage vessels with a capacity of 20,000 gallons or more that store organic liquids with a true vapor pressure over 27.6 kPa (4.0 psia) and for storage vessels with a capacity of 40,000 gallons or more that store organic liquids with a true vapor pressure over 5.2 kPa (0.75 psia), NSPS subpart Kb requires the use of either an internal floating roof (IFR), an external floating roof (EFR), or a closed vent system to a control device.[[1]](#footnote-3) NSPS subpart Kb specifies inspection requirements for each control scenario.

The EPA proposed revisions to the NSPS for VOL storage vessels pursuant to the EPA’s review of NSPS subpart Kb. The EPA proposed to codify the NSPS revisions proposed in a new subpart NSPS subpart Kc, which could be applicable to sources that commence construction, reconstruction, or modification after October 4, 2023. In the proposed NSPS subpart Kc, VOL storage vessels subject to control requirements and used to store liquids with maximum true vapor pressures below 11.1 psia (76.6 kPa) can use either an internal floating roof (IFR), an external floating roof (EFR), or a closed vent system and a control device analogous to the control options in NSPS subpart Kb. Under NSPS subpart Kc, the EPA proposed specific primary and secondary seal, storage vessel construction, and gauge-hatch/sample port requirements for IFR storage vessels. The EPA projects that these additional requirements will increase the average control effectiveness of IFR storage vessels to 98 percent. The EPA also proposed to require that EFR storage vessels meet an equivalent control efficiency. For storage vessels using a closed vent system and a control device, the EPA proposed that the control device must achieve a 98 percent reduction in VOC emissions, which increased from 95 percent in NSPS subpart Kb. The revisions proposed in NSPS subpart Kc were determined to be cost effective and to reflect the application of the best system of emission reduction (BSER) for VOL storage vessels.

In general, all NSPS require initial notifications, performance tests, and periodic reports. Owners or operators are also required to maintain records of the occurrence and duration of any start-up, 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 sources subject to NSPS.

Any owner/operator subject to the provisions of this NSPS shall maintain records for at least five years. For each storage vessel affected facility, any owner/operator must keep records to the dimension of the storage vessel, an analysis showing the capacity of the storage vessel, and documentation of the maximum true vapor pressure of the stored VOL for the life of the source. Control device operating plans must be kept for the life of the control equipment. 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.

The EPA estimated approximately 240 new storage vessels become subject to NSPS subpart Kb each year. Using the lower vapor pressure thresholds in the proposed NSPS subpart Kc, the EPA projects that approximately 20 percent more storage vessels could become subject to the NSPS subpart Kc standards each year, totaling 288 new storage vessels each year. In addition, the EPA estimates a total of 30 storage vessels would become newly affected facilities due to modifications over the first 5 years after promulgation of NSPS subpart Kc. During the 3-year period covered by this ICR, the EPA estimates approximately 288 new storage vessels and 6 modified storage vessels will become subject to NSPS subpart Kc. The EPA projects that all of the new storage vessels will be floating roof storage vessels, with 5% being equipped with an external floating roof (14.4 storage vessels) and 95% being equipped with an internal floating roof (273.6 storage vessels). The EPA projects that 10% of the modified storage vessels would have an existing internal floating roof (0.6 storage vessels) and the other 90% would be fixed roof storage vessels without a floating roof (5.4 storage vessels).

The “Affected Public” are owners or operators of facilities that have volatile organic liquid storage vessels that meet the size and vapor pressure thresholds in the NSPS. None of the facilities in the United States are owned by either state, local, tribal or the Federal government. These are all privately-owned, for-profit businesses. The burden to the Affected Public may be found below in the following table: Table 1: Annual Respondent Burden and Cost – NSPS for Volatile Organic Liquid Storage Vessels (40 CFR Part 60, Subpart Kc) (Proposed Rule). The Federal Government’s burden is attributed to work performed by either Federal employees or government contractors and may be found below in Table 2: Average Annual EPA Burden and Cost – NSPS for Volatile Organic Liquid Storage Vessels (40 CFR Part 60, Subpart Kc) (Proposed Rule).

**2. Need for and Use of the Collection**

**2(a) Need/Authority for the Collection**

The EPA is charged under Section 111 of the Clean Air Act (CAA), as amended, to establish standards of performance for new stationary sources that reflect:

**. . .** application of the best technological system of continuous emissions reduction which (taking into consideration the cost of achieving such emissions reduction, or any non-air quality health and environmental impact and energy requirements) the Administrator determines has been adequately demonstrated.” Section 111(a)(l).

The Agency refers to this charge as selecting the best system of emission reduction (BSER). Section 111 also requires that the Administrator review and, if appropriate, revise such standards every eight years.

In the Administrator’s judgment, volatile organic chemical (VOC) emissions from storage vessels cause or contribute to air pollution that may reasonably be anticipated to endanger public health or welfare. Therefore, NSPS were promulgated for this source category initially at 40 CFR Part 60, subpart K followed by subparts Ka and Kb, and then were proposed at 40 CFR Part 60, subpart Kc.

Certain records and reports are necessary for the Administrator to confirm the compliance status of sources subject to NSPS, identify any new or reconstructed sources subject to the standards, and confirm that the standards are being achieved. These recordkeeping and reporting requirements are specifically authorized by section 114 of the CAA (42 U.S.C. 7414) and set out in the part 60 NSPS General Provisions (40 CFR Part 60, Subpart A). CAA 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.

**2(b) Practical Utility/Users of the Data**

Initial and subsequent periodic inspections are required in order to ensure the control systems are properly installed and operating effectively.

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.

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

Adequate monitoring, recordkeeping, and reporting are necessary to ensure compliance with these standards, as required by the CAA. The information collected from recordkeeping and reporting requirements is also used for targeting inspections and is of sufficient quality to be used as evidence in court.

**3. Non-duplication, Consultations, and Other Collection Criteria**

The requested recordkeeping and reporting are required under 40 CFR Part 60, Subpart Kc.

**3(a) Non-duplication**

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.

**3(b) Public Notice Required Prior to ICR Submission to OMB**

This section is not applicable because this is a rule-related ICR. Nevertheless, the ICR will be available for public review during the public comment period following publication of the proposed rule to 40 CFR Part 60, Subpart Kc, in the *Federal Register*.

**3(c) Consultations**

The Agency has consulted industry experts to better understand the source category. Stakeholder outreach occurred with industry groups, including the American Petroleum Institute, and International Liquid Terminals Association, and member companies of these organizations, including Marathon Petroleum Corporation and Motiva Enterprises. Further stakeholder and public input are expected through public comment following publication of the proposed rule to 40 CFR Part 60, Subpart Kc in the *Federal Register* and follow-up meetings with interested stakeholders.

**3(d) Effects of Less-Frequent Collection**

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 and the proposed rule was collected less-frequently, the proper operation and maintenance of control equipment and the possibility of detecting violations would be less likely.

**3(e) General Guidelines**

These reporting or recordkeeping requirements and the proposed rule 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. The retention of records allows EPA to establish the compliance history of a source, any pattern of non-compliance and to determine the appropriate level of enforcement action. In addition, the EPA would be prevented from pursuing the violators due to the destruction or nonexistence of essential records in the absence of a records maintenance requirement.

**3(f) Confidentiality**

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 (CBI) (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).

**3(g) Sensitive Questions**

None of the reporting or recordkeeping requirements included in the proposed rule contain sensitive questions.

**4. The Respondents and the Information Requested**

**4(a) Respondents/SIC Codes**

The respondents to the recordkeeping and reporting requirements in the proposed NSPS subpart Kc are owners or operators of volatile organic liquid storage vessels. The United States Standard Industrial Classification (SIC) codes and the corresponding North American Industry Classification System (NAICS) codes for facilities likely to have volatile organic liquid storage vessels are provided in the following table.

| **All Referenced Subparts** | **SIC Codes** | **NAICS Codes** |
| --- | --- | --- |
| Plastics Material and Resin Manufacturing | 2821 | 325211 |
| Artificial and Synthetic Fibers and Filaments Manufacturing | 2824 | 325220 |
| Paint and Coating Manufacturing | 2851 | 325510 |
| Petrochemical Manufacturing | 2865, 2869 | 325110 |
| Synthetic Dye and Pigment Manufacturing | 2865 | 325130 |
| Cyclic Crude, Intermediate, and Gum and Wood Chemical Manufacturing | 2865 | 325194 |
| Ethyl Alcohol Manufacturing | 2869 | 325193 |
| Other Basic Organic Chemical Manufacturing | 2869, 2899 | 325199 |
| Petroleum Refineries | 2911 | 324110 |
| Asphalt Paving Mixture and Block Manufacturing | 2951 | 324121 |
| Asphalt Shingle and Coating Materials Manufacturing | 2952 | 324122 |
| Petroleum Lubricating Oil and Grease Manufacturing | 2992 | 324191 |
| All Other Petroleum and Coal Products Manufacturing | 2999 | 324199 |
| Specialized Freight (except Used Goods) Trucking, Local | 4212, 4214 | 48422 |
| General Freight Trucking, Long-Distance, Truckload | 4213 | 484121 |
| General Freight Trucking, Long-Distance, Less Than Truckload | 4213 | 484122 |
| Specialized Freight (except Used Goods) Trucking, Long-Distance | 4213 | 48423 |
| Refrigerated Warehousing and Storage | 4222, 4226 | 49312 |
| General Warehousing and Storage  | 4225, 4226 | 49311 |
| Other Warehousing and Storage | 4226 | 49319 |
| Other Support Activities for Road Transportation | 4231, 4785 | 48849 |
| Deep Sea Freight Transportation | 4412 | 483111 |
| Coastal and Great Lakes Freight Transportation | 4424, 4432 | 483113 |
| Inland Water Freight Transportation | 4449 | 483211 |
| Deep Sea Passenger Transportation | 4481 | 483112 |
| Coastal and Great Lakes Passenger Transportation | 4481, 4482 | 483114 |
| Inland Water Passenger Transportation | 4482, 4489 | 483212 |
| Scenic and Sightseeing Transportation, Water | 4489 | 48721 |
| Port and Harbor Operations | 4491 | 48831 |
| Marine Cargo Handling | 4491 | 48832 |
| Navigational Services to Shipping | 4492, 4499 | 48833 |
| Marinas | 4493 | 71393 |
| Commercial Air, Rail, and Water Transportation Equipment Rental and Leasing | 4499, 4741 | 532411 |
| Other Support Activities for Water Transportation | 4499, 4785 | 48839 |
| Pipeline Transportation of Refined Petroleum Products | 4613 | 486910 |
| Support Activities for Rail Transportation | 4741, 4789 | 48821 |
| Petroleum Bulk Stations and Terminals | 5171 | 424710 |
| Fuel Dealers | 5171 | 454310 |

**4(b) Information Requested**

**(i) Data Items**

All data in this ICR that are recorded and/or reported are required by the NSPS for Volatile Organic Liquid Storage Vessels (40 CFR Part 60, Subpart Kc).

A source must make the following notifications and reports:

| **Requirement** | **Regulation Reference****(40 CFR Part 63)** |
| --- | --- |
| **Inspection Requirements** |
| IFR internal inspection | §60.113c(a)(1) and (2)(ii) |
| IFR visual inspection | §60.113c(a)(2)(i) |
| EFR gap measurement | §60.113c(b)(1) |
| EFR visual inspection | §60.113c(b)(7) |
| LEL monitoring | §60.113c(a)(3)(i) |
| **Notifications** |
| Notification of construction | §60.7(a)(1) |
| Notification of actual startup | §60.7(a)(3) |
| Notification of physical/operational changes | §60.7(a)(4) |
| Notification of malfunction | §60.7(b) |
| Notification of gap measurement inspection | §60.113c(b)(6) |
| Notification of IFR delay of repair/emptying | §60.113c(a)(2)(i) |
| Notification of EFR delay of repair/emptying | §60.113c(b)(5) |
| Notification of filling or refilling | §60.113c(a)(4) and (b)(7)(ii) |
| **Reports** |
| Semiannual report | §60.116c(b) |
| Report of IFR failure | §60.116c(b)(3) and (4) |
| EFR 1st seal gap measurement report | §60.116c(b)(5) |
| EFR 2nd seal gap measurement report | §60.116c(b)(5) |
| Report of EFR failure | §60.116c(b)(6) |
| CVS CPMS deviation | §60.116c(b)(7) |
| CVS flare deviation | §60.116c(b)(8) |
| **Recordkeeping** |
| Records retention policy (five years) | §60.116c(a) |
| Records of storage vessel parameters | §60.116c(b) |
| Records of IFR inspections | §60.116c(d)(1)(i) |
| Records of LEL monitoring | §60.116c(d)(1)(ii) |
| Records of EFR inspections | §60.116c(d)(2)(i) |
| Records of CVS operating plan | §60.116c(d)(3)(i) |
| Records of CVS parameters | §60.116c(d)(3)(ii) |
| Records of flare monitoring | §60.116c(d)(4)(i) |
| Records of flare visible emissions | §60.116c(d)(4)(ii) |
| Records of flare operations | §60.116c(d)(4)(iii)-(v) |
| Records of degassing events | §60.116c(e) |

**(ii) Respondent Activities**

| **Respondent Activities** |
| --- |
| Familiarization with the regulatory requirements. |
| Perform initial and ongoing inspections. |
| 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 the purpose of collecting, validating, and verifying information. |
| Develop, acquire, install, and utilize technology and systems for the purpose of processing and maintaining information. |
| Develop, acquire, install, and utilize technology and systems for the purpose of disclosing and providing information. |
| Adjust the existing ways to comply with any previously applicable instructions and requirements. |
| Train personnel to be able to respond to a collection of information. |
| Transmit, or otherwise disclose the information. |

**5. The Information Collected: Agency Activities, Collection Methodology, and Information Management**

**5(a) Agency Activities**

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

| **Agency Activities** |
| --- |
| Observe initial and ongoing inspections if necessary. |
| Review notifications and 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.  |

**5(b) Collection Methodology and Management**

Following notification of the startup, the reviewing authority could inspect the source to determine whether the pollution control devices are properly installed and operated. Performance test reports are used by the Agency to discern a source’s initial capability to comply with the emission standard and note the operating conditions under which compliance was achieved. Data and records maintained by the respondents are tabulated and published for use in compliance and enforcement programs. The inspection reports are used for problem identification, as a check on source operation and maintenance, and for compliance determinations.

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. ICIS is EPA’s database for the collection, maintenance, and retrieval of compliance data for industrial and government-owned facilities. 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.

 The records required by this regulation must be retained by the owner/operator for five years.

**5(c) Small Entity Flexibility**

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. The NSPS does not apply to small storage vessels (less than 20,000- or 40,000-gallons capacity, depending on vapor pressure of vessel contents). The EPA expects that small entities will be more likely to have storage vessels below the size threshold, resulting in reduced burden. 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 if they have affected sources. 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.

**5(d) Collection Schedule**

The specific frequency for each information collection activity within this request is shown below in Table 1: Annual Respondent Burden and Cost – NSPS for Volatile Organic Liquid Storage Vessels (40 CFR Part 60, Subpart Kc) (Proposed Rule).

**6. Estimating the Burden and Cost of the Collection**

Table 1 documents the computation of individual burdens for the recordkeeping and reporting requirements applicable to the industry for the subpart’s proposed rule 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 Agency may not conduct or sponsor, and a person is not required to respond to, a collection of information unless it displays a currently valid OMB Control Number.

**6(a) Estimating Respondent Burden**

The average annual burden to industry over the next three years from these recordkeeping and reporting requirements is estimated to be 16,860 hours (see Total Labor Hours from Table 1 below). These hours are based on Agency studies and background documents from the development of the regulation and Agency knowledge and experience with the NSPS program.

**6(b) Estimating Respondent Costs**

**(i) Estimating Labor Costs**

This ICR uses the following labor rates:

|  |  |  |  |
| --- | --- | --- | --- |
| **Industry Worker Category a** | **Labor Rates, $/hr b** | **110% Overhead** | **Total, $/hr** |
| Managerial (11-0000) | $76.81 | $84.49 | $161.30 |
| Technical (17-2081; 49-0000)c | $42.91 | $47.20 | $90.11 |
| Clerical (43-0000) | $27.25 | $29.98 | $57.23 |

a Numbers in parenthesis are the specific BLS occupation codes used to estimate the hourly rates.

b Rates are mean hourly rates for May 2022 and are averaged between chemical manufacturing (https://www.bls.gov/oes/2022/may/naics3\_325000.htm) and petroleum and coal products manufacturing (https://www.bls.gov/oes/2022/may/naics3\_324000.htm) rates.

c Technical rates are blended rates between Environmental Engineer (BLS code 17-2081; 20 percent) and Installation, Maintenance, and Repair (BLS code 49-0000; 80 percent).

Labor rates and associated costs are based on the Bureau of Labor Statistics (BLS) data. Technical, management, and clerical average hourly rates for private industry workers were taken from the May 2022 National Industry-Specific Occupational Employment and Wage Estimates for NAICS 325000 (Chemical Manufacturing) and NAICS 326000 (Petroleum and Coal Products Manufacturing). The technical rates are further blended between environmental engineer (20 percent) and maintenance and repair staff (80 percent). The BLS rates represent base salaries and do not include the cost of fringe benefits and other overhead costs. The rates have been increased by 110 percent to account for the benefit packages available to those employed by private industry.

**(ii) Estimating Capital/Startup and Operation and Maintenance Costs**

The type of industry costs associated with the information collection activities in the subject standard are both labor costs, which are addressed elsewhere in this ICR, and the costs associated with operating and maintaining emission control and monitoring systems. There are no capital/startup or operation and maintenance costs.

**(iii) Capital/Startup vs. Operation and Maintenance (O&M) Costs**

The only type of industry costs associated with the information collection activity in the regulations are labor and monitoring costs. There are no capital/startup or operation and maintenance costs.

**6(c) Estimating Agency Burden and 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 cost during the three years of the ICR is estimated to be $209,549. This cost is based on the average hourly labor rate as follows:

|  |  |  |  |
| --- | --- | --- | --- |
| **Agency Worker Categories a** | **Labor Rates, $/hr a** | **60% Overhead** | **Total, $/hr** |
| Managerial (GS-13, step 5) | $44.10  | $26.46  | $70.56  |
| Technical (GS-12, step 1)  | $32.73  | $19.64  | $52.37  |
| Clerical (GS-6, step 3) | $17.71  | $10.63  | $28.34  |

a https://www.opm.gov/policy-data-oversight/pay-leave/salaries-wages/salary-tables/pdf/2022/GS\_h.pdf

These rates are from the Office of Personnel Management (OPM), 2022 General Schedule (incorporating the 2.2% general schedule increase; effective January 2022), 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 below in Table 2: Average Annual EPA Burden and Cost – NSPS for Volatile Organic Liquid Storage Vessels (40 CFR Part 60, Subpart Kc) (Proposed Rule).

**6(d) Estimating the Respondent Universe and Total Burden and Costs**

The number of respondents is calculated using the following table that addresses the three years covered by this ICR:

|  |
| --- |
|  **Number of Respondents**  |
|    |  Respondents That Submit Reports  |  Respondents That Do Not Submit Any Reports  |    |
|   Year  |  (A) Number of New Respondentsa |  (B) Number of Existing Respondents  |  (C) Number of Existing Respondents that keep records but do not submit reports  |  (D) Number of Existing Respondents That Are Also New Respondents  |  (E) Number of Respondentsb(E=A+B+C-D)  |
| 1  | 294 | 0 | 0 | 0 | 294 |
| 2  | 294 | 294 | 0 | 0 | 588 |
| 3  | 294 | 588 | 0 | 0 | 882 |
| Average  | 294 | 294 | 0 | 0 | 588 |

a New respondents include sources with constructed, reconstructed and modified affected facilities.

b Column D is subtracted to avoid double-counting respondents.

The total number of annual responses per year is calculated using the following table:

|  |
| --- |
|  **Total Annual Responses**  |
|  (A)  Information Collection Activity  |  (B)  Number of Respondents  |  (C)  Number of Responses  |  (D) Number of Existing Respondents That Keep Records But Do Not Submit Reports  |  (E) Total Annual Responses E=(BxC)+D  |
| Notification of construction | 288 | 1 | 0 | 288 |
| Notification of actual startup | 288 | 1 | 0 | 288 |
| Notification of physical/ operational changes | 0 | 1 | 0 | 0 |
| Notification of malfunction | 0 | 1 | 0 | 0 |
| Notification of gap measurement inspection | 17.28 | 1 | 0 | 17.28 |
| Notification of IFR delay of repair/emptying | 2.742 | 1 | 0 | 2.742 |
| Notification of EFR delay of repair/emptying | 0.0288 | 1 | 0 | 0.0288 |
| Notification of filling or refilling | 346.386 | 1 | 0 | 346.386 |
| Semiannual report | 588.00 | 2 | 0 | 1176 |
|   |   |   | Total  | 2,118 |

The number of Total Annual Responses is 2,118.

The total annual labor costs are $1,523,194. Details regarding these estimates may be found below in Table 1: Annual Respondent Burden and Cost – NSPS for Volatile Organic Liquid Storage Vessels (40 CFR Part 60, Subpart Kc) (Proposed Rule).

**6(e) Bottom Line Burden Hours and Cost Tables**

The detailed bottom line burden hours and cost calculations for the respondents and the Agency are shown in Tables 1 and 2, respectively, and summarized below.

**(i) Respondent Tally**

The total annual labor hours are 16,860 hours. Details regarding these estimates may be found below in Table 1. Annual Respondent Burden and Cost – NSPS for Volatile Organic Liquid Storage Vessels (40 CFR Part 60, Subpart Kc) (Proposed Rule).

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 compliance activities. Clerical burdens are assumed to take 10% of the time required for technical tasks because the typical duties of clerical staff are to support technical staff needs, make copies and maintain records.

The total annual capital/startup and O&M costs to the regulated entities are $0, as discussed in Section 6(b)(iii), Capital/Startup vs. Operation and Maintenance (O&M) Costs.

**(ii) The Agency Tally**

The average annual Agency burden and cost over next three years is estimated to be 1,335 labor hours at a cost of $209,549; see below in Table 2: Average Annual EPA Burden and Cost – NSPS for Volatile Organic Liquid Storage Vessels (40 CFR Part 60, Subpart Kc) (Proposed Rule).

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.

**6(f) Reasons for Change in Burden**

This ICR is prepared for proposed rule, NSPS for Volatile Organic Liquid Storage Vessels (40 CFR Part 60, Subpart Kc). This proposed rule includes inspection requirements for IFR and EFR storage vessels; monitoring requirements for closed vent systems; and electronic submittal of notifications, semiannual reports, performance tests, and performance evaluations. Burden estimates include review of the rule requirements, review of electronic reporting forms, and development of recordkeeping processes to ensure data needed to complete the reporting forms are collected in the proper format. Burden estimates also account for semiannual reporting requirements.

**6(g) Burden Statement**

The annual public reporting and recordkeeping burden for this collection of information is estimated to average 7.96 hours per response. “Burden” means the total time, effort, or financial resources expended by persons to generate, maintain, retain, or disclose or provide information to or for a Federal agency. This includes the time needed to review instructions; develop, acquire, install, and utilize technology and systems for the purposes of collecting, validating, and verifying information, processing and maintaining information, and disclosing and providing information; adjust the existing ways to comply with any previously applicable instructions and requirements; train personnel to be able to respond to a collection of information; search data sources; complete and review the collection of information; and transmit or otherwise disclose the information.

An agency may neither conduct nor sponsor, and a person is not required to respond to, a collection of information unless it displays a valid OMB Control Number. The OMB Control Numbers for EPA regulations are listed at 40 CFR Part 9 and 48 CFR Chapter 15.

 To comment on the Agency's need for this information, the accuracy of the provided burden estimates, and any suggested methods for minimizing respondent burden, including the use of automated collection techniques, EPA has established a public docket for this ICR under Docket ID Number EPA-HQ-OAR-2023-0358. An electronic version of the public docket is available at <http://www.regulations.gov/>, which may be used to obtain a copy of the draft collection of information, submit or view public comments, access the index listing of the contents of the docket, and to access those documents in the public docket that are available electronically. When in the system, select “search,” then key in the docket ID number identified in this document. We encourage the public to submit comments via *https://www.regulations.gov/* or email, as there may be a delay in processing mail and faxes. For further information on EPA Docket Center services and the current status, please visit us online at *https://www.epa.gov/dockets*. The telephone number for the Reading Room is (202) 566-1744, and the telephone number for the docket center is (202) 566-1752. Also, you can send comments to the Office of Information and Regulatory Affairs, Office of Management and Budget, Attention: Desk Officer for EPA, 725 17th Street, NW, Washington, DC 20503. Please include the EPA Docket ID Number EPA-HQ-OAR-2023-0358 and OMB Control Number #### in any correspondence.

**Part B of the Supporting Statement**

This part is not applicable because no statistical methods were used in collecting this information.

**Table 1: Annual Respondent Burden and Cost – NSPS for Volatile Organic Liquid Storage Vessels (40 CFR Part 60, Subpart Kc) (Proposed Rule)**

|  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- |
| **Burden item** | **(A)** | **(B)** | **(C)** | **(D)** | **(E)** | **(F)** | **(G)** | **(H)** |
| **Person hours per occurrence** | **No. of occurrences per respondent per year** | **Person hours per respondent per year** | **Respondents per year a** | **Technical person- hours per year** | **Management person hours per year** | **Clerical person hours per year** | **Total Cost per year,($) b** |
|   |   | **(C=AxB)** |   | **(E=CxD)** | **(F=Ex0.05)** | **(G=Ex0.1)** |   |
| 1. Applications | N/A |   |   |   |   |   |   |   |
| 2. Surveys and studies | N/A |   |   |   |   |   |   |   |
| 3. Reporting requirements |   |   |   |   |   |   |   |   |
|  a. Familiarize with regulatory requirements | 1 | 1 | 1 | 294 | 294 | 14.7 | 29.4 | $30,546  |
| b. Required activities |   |   |   |   |   |   |   |   |
| Notifications |   |   |   |   |   |   |   |   |
| Notification of construction | 2 | 1 | 2 | 288 | 576 | 28.8 | 57.6 | $59,845  |
| Notification of actual startup | 2 | 1 | 2 | 288 | 576 | 28.8 | 57.6 | $59,845  |
| Notification of physical/ operational changes | N/A |   |   |   |   |   |   |   |
| Notification of malfunction | N/A |   |   |   |   |   |   |   |
| Notification of gap measurement inspection | 2 | 1 | 2 | 17.28 | 34.56 | 1.728 | 3.456 | $3,591  |
| Notification of IFR delay of repair/emptying | 4 | 1 | 4 | 2.742 | 10.968 | 0.5484 | 1.0968 | $1,140  |
| Notification of EFR delay of repair/emptying | 4 | 1 | 4 | 0.0288 | 0.1152 | 0.00576 | 0.01152 | $12  |
| Notification of filling or refilling | 2 | 1 | 2 | 346.386 | 692.772 | 34.6386 | 69.2772 | $71,978  |
| Semiannual report |   |   |   |   |   |   |   |   |
| Compile semiannual report | 4 | 2 | 8 | 588.00 | 4704 | 235.2 | 470.4 | $488,736  |
| Report of IFR failure | 2 | 1 | 2 | 27.42 | 54.84 | 2.742 | 5.484 | $5,698  |
| Report of EFR failure | 2 | 1 | 2 | 0.29 | 0.576 | 0.0288 | 0.0576 | $60  |
| EFR 1st seal gap measurement | 4 | 1 | 4 | 14.4 | 57.6 | 2.88 | 5.76 | $5,985  |
| EFR 2nd seal gap measurement | 2 | 1 | 2 | 14.4 | 28.8 | 1.44 | 2.88 | $2,992  |
| CVS CPMS deviation | 2 | 10 | 20 | 10.80 | 216 | 10.8 | 21.6 | $22,442  |
| CVS flare deviation | 2 | 10 | 20 | 0.00 | 0 | 0 | 0 | $0  |
|   |   |   |   |   |   |   |   |   |
| **Subtotal for Reporting Requirements** |   |   |   |   |  7,246  |  362  |  725  |  $ 752,869  |
| 4. Recordkeeping requirements |   |   |   |   |   |   |   |   |
| A. Read instructions | 1 | 1 | 1 | 294 | 294 | 14.7 | 29.4 | $30,546  |
| B. Gather and record information |   |   |   |   | 0 | 0 | 0 | $0  |
| Vessel volumes, liquid vapor pressures, flares | 1 | 1 | 1 | 588.00 | 588.00 | 29.40 | 58.80 | $61,092  |
| IFR internal inspection | 12 | 1 | 12 | 301.62 | 3619.44 | 180.97 | 361.94 | $376,053  |
| IFR external inspection | 4 | 1 | 4 | 246.78 | 987.12 | 49.36 | 98.71 | $102,560  |
| EFR gap measurement | 12 | 1 | 12 | 17.28 | 207.36 | 10.37 | 20.74 | $21,544  |
| EFR internal inspection | 12 | 1 | 12 | 0.29 | 3.46 | 0.17 | 0.35 | $359 |
| LEL monitoring | 0.75 | 1 | 0.75 | 548.40 | 411.30 | 20.57 | 41.13 | $42,733  |
| CVS operating plan | 4 | 1 | 4 | 5.40 | 21.60 | 1.08 | 2.16 | $2,244  |
| Flare monitoring | 2 | 52 | 104 | 0.00 | 0.00 | 0.00 | 0.00 | $0  |
| Flare visible emissions events | 2 | 1 | 2 | 0.00 | 0.00 | 0.00 | 0.00 | $0  |
| Flare operations | 2 | 1 | 2 | 0.00 | 0.00 | 0.00 | 0.00 | $0  |
| Degassing events | 2 | 1 | 2 | 52.39 | 104.77 | 5.24 | 10.48 | $10,886  |
| C. Develop record system (5 year retention) | 10 | 1 | 10 | 5.40 | 54.00 | 2.70 | 5.40 | $5,610  |
| D. Time to enter information |   |   |   |   | 0 | 0 | 0 | $0  |
| CVS parameter records | 2 | 52 | 104 | 10.8 | 1123.2 | 56.16 | 112.32 | $116,698  |
| E. Train personnel | N/A |   |   |   | 0 | 0 | 0 | $0  |
| F. Audits | N/A |   |   |   | 0 | 0 | 0 | $0  |
| **Subtotal for Recordkeeping Requirements** |   |   |   |   | 7,414.2 | 370.7 | 741.4 | $770,326 |
| **TOTAL LABOR BURDEN AND COST** |   |   |   |   | **16,860** |  |  | **$1,523,194** |
| **Capital O&M Cost** |   |   |   |   |   |   |   | $0  |
| **GRAND TOTAL** |   |   |   |   |  |  |  | **$1,523,194** |

a  The average number of respondents per year over the first three years of this ICR.

b This ICR uses the following labor rates from the United States Department of Labor, Bureau of Labor Statistics, May 2022, national mean labor rates for Management Occupations (11-0000), Environmental Engineers (17-2081), Maintenance/Inspections (49-0000), and Office and Administrative Support (43-0000) for the Chemical Manufacturing and Petroleum and Coal Products Manufacturing industries. The rates have been increased by 110 percent to account for the benefit packages available to those employed by private industry. Using an average of the two industries, fully burdened hourly rates are: $146.81 for management; $72.67 for technical (20% engineer and 80% maintenance/inspection); and $49.82 for clerical.

**Table 2: Average Annual EPA Burden and Cost – NSPS for Volatile Organic Liquid Storage Vessels (40 CFR Part 60, Subpart Kc) (Proposed Rule)**

|  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- |
| **Activity** | **(A) EPA person-hours per occurrence** | **(B) No. of occurrences per plant per year** | **(C) EPA person hours per plant per year (AxB)** | **(D) Plants per year**  | **(E) Technical person-hours per year (CxD)** | **(F) Management person-hours per year (Ex0.05)** | **(G) Clerical person-hours per year (Ex0.1)** | **(H) Cost, $ a** |
| Report review: New plant |   |   |   |   |   |   |   |   |
| Notification of construction | 2 | 1 | 2 | 288 | 576 | 29 | 58 | $33,828  |
| Notification of actual startup | 1 | 1 | 1 | 288 | 288 | 14 | 29 | $16,914  |
| Notification of gap measurement inspection | 1 | 1 | 1 | 14.4 |   |   |   |   |
| Notification of filling or refilling | 1 | 1 | 1 | 294 | 294 | 15 | 29 | $17,267  |
| Report review: Existing plant |   |   |   |   |   |   |   |   |
| Notification of physical/ operational changes | 1 | 1 | 1 | 0 | 0 | 0 | 0 | $0  |
| Notification of malfunction | 1 | 1 | 1 | 0 | 0 | 0 | 0 | $0  |
| Notification of gap measurement inspection | 1 | 1 | 1 | 2.88 | 3 | 0 | 0 | $169  |
| Notification of IFR delay of repair/emptying | 1 | 1 | 1 | 2.742 | 3 | 0 | 0 | $161  |
| Notification of EFR delay of repair/emptying | 1 | 1 | 1 | 0.0288 | 0 | 0 | 0 | $2  |
| Notification of filling or refilling | 1 | 1 | 1 | 52.386 | 52 | 3 | 5 | $3,077  |
| Semiannual report | 2 | 2 | 4 | 588.00 | 2,352 | 118 | 235 | $138,132  |
| **TOTAL BURDEN AND COST** |   |   |   |   | **1,335** | **$209,549**  |

a This cost is based on the following 2022 labor rates which incorporates a 1.6 benefits multiplication factor to account for government overhead expenses: $70.56 Managerial rate (GS-13, Step 5), $52.37 Technical rate (GS-12, Step 1), and $28.34 Clerical rate (GS-6, Step 3). These rates are calculated from the hourly rates included in the Office of Personnel Management (OPM) 2022 General Schedule which excludes locality rates of pay; the rates have been increased by 60 percent to account for benefit packages available to government employees.

1. All affected storage vessels storing organic liquids with a true vapor pressure of 76.6 kPa (11.1 psia) or more must use a closed vent system to a control device. [↑](#footnote-ref-3)