# APPENDIX A

EPA categorized facilities as either production (operations primarily involving oil production) or storage (all other industry groups) facilities. This reflects differences in the estimated burden of compliance activities based on the nature of the facility’s operations.

Additionally, EPA categorizes facilities as either existing or new to reflect the differences in compliance activities between these two groups. For existing facilities that initiated operations prior to this ICR renewal period, EPA assumed that they have already prepared their SPCC Plans and have incurred all costs associated with initial Plan preparation and implementation. EPA assumes a portion of these facilities will incur costs to perform a five-year review, revise their SPCC Plan, submit information in the event of certain oil discharges, and maintain the Plan and keep records. New facilities will initiate operations during the ICR period and become existing facilities after their first year of operation.

|  |  |  |  |
| --- | --- | --- | --- |
| Exhibit A-1 | | | |
| SPCC-Regulated Facility Size Categories | | | |
| Size Category | Aggregate Capacity\* | New Facilities Burden Hours | Existing Facilities Burden Hours |
| I (Tier I) | Non-farm facilities: 1,321 to 10,000 U.S. gallons  *Farm facilities: 2,500\*\* to 19,999 U.S. gallons* | 12.7 | 3.5 |
| I | Non-farm facilities: 1,321 to 10,000 U.S. gallons  *Farm facilities: 2,500\*\* to 19,999 U.S. gallons* | 51.1 | 6.2 |
| II | Non-farm facilities: 10,001 to 42,000 U.S. gallons  *Farm facilities: 20,000 to 42,000 U.S. gallons* | 68.4 | 11.5 |
| III | All facilities: 42,001 to 1 million U.S. gallons | 121.3 | 19.0 |
| IV | All facilities: greater than 1 million U.S. gallons | 203.6 | 38.9 |
| \* EPA included farms with aggregate capacity up to 20,000 U.S. gallons in Category I in estimating the SPCC Rule burden because these facilities are assumed to self-certify their SPCC Plan.  \*\* This threshold is set by statute. | | | |

## Estimating Labor Costs

To estimate the per-facility costs to develop the SPCC Plan and comply with other information collection requirements for typical new and existing respondents in each facility size category, EPA multiplied unit labor estimates for management, technical, and clerical personnel by the fully loaded hourly wage rate for each labor category. In previous ICR renewals, EPA categorized Professional Engineer (PE) labor costs as O&M costs. EPA has reconsidered this classification in this ICR renewal and has determined that PE labor costs are more accurately categorized as a separate labor cost to facilities. This change is reflected in this ICR renewal.

Exhibit A-2 contains the wage rates for private industry derived from the December 2018 U.S. Department of Labor’s Employer Costs for Employee Compensation.[[1]](#footnote-2) The December 2018 wage rates include wages and salaries; benefit costs, including paid leave, supplemental pay, insurance, retirement and savings, and legally required benefits. These wage rates reflect private industry averages estimated by the Bureau of Labor Statistics (BLS) and reflect industry averages, which may underestimate or overestimate the actual wages received by some SPCC regulated facility personnel. The following items are the estimated loaded wage rates used in this analysis:

Exhibit A-2

Private Industry Hourly Wage Rates by Labor Category

|  |  |  |
| --- | --- | --- |
| Labor Category | Hourly Wage | Loaded Hourly Wage |
| Management | $69 | $81 |
| Technical | $69 | $80 |
| Clerical | $31 | $36 |
| 1 Overhead costs were computed separately from BLS data and were assumed to be an additional 17 percent of the total wage rate, which is composed of direct wages and salaries and employee benefits, as reported by BLS. Fully loaded wage rates are rounded here to nearest dollar. | | |

EPA assumed these labor rates would apply to all scenarios when facilities use in-house labor to satisfy requirements, such as preparing and certifying the SPCC Plan. When required or needed, EPA assumes that a portion of facilities will contract with an outside PE to develop and/or certify the Plan. A small facility might be more likely to hire outside engineers because it may not have the necessary in-house expertise. However, small facilities also may not have the resources to hire outside engineers and may be in a better position to use in-house labor because the owner may be closely involved with all operations. Similar arguments can also be made for larger facilities. Therefore, EPA assumed that 50 percent of the facilities of all size categories use in-house labor and the remaining 50 percent use outside PE labor.

EPA assumes that the cost to a facility owner or operator to retain an outside PE to certify the SPCC Plan varies by the size, complexity and location of the facility; for example, larger facility likely has a more complex SPCC Plan and Plan amendments than a smaller facility. Unless a facility meets the “qualified facility” criteria, certifying SPCC Plans and their amendments requires a PE. The fully loaded wages for PE labor used in this analysis are shown in Exhibit A-3.[[2]](#footnote-3),[[3]](#footnote-4)

Exhibit A-3

PE Hourly Wage Rates by Labor Category

|  |  |
| --- | --- |
| Labor Category | Loaded Hourly Wage |
| Management | $181 |
| Technical | $145 |
| Drafter | $90 |
| Clerical | $67 |

EPA expects some facilities will retain a PE to certify their SPCC Plans, along with any subsequent technical amendments that are made to the Plan. In certifying the Plan, the engineer attests to having examined the facility and determined that the Plan has been prepared in accordance with good engineering practices that satisfy the SPCC requirements (40 CFR part 112).

## Estimating Capital and O&M Costs

Facilities are required to maintain the Plan and keep records (40 CFR 112.3 and 112.7(e)), and to submit required information in the event of certain discharges of oil (40 CFR 112.4). However, EPA assumes that most facilities will maintain files electronically and that paper file storage will be minimal and impose no significant incremental cost relative to existing business practices. In the event of certain discharges, the owner or operator is required to submit information to the Regional Administrator and the state agency in charge of oil pollution control activities for the area where the discharge occurs. EPA assumes that submitting the information electronically will have negligible cost, thus reducing facility burden. Therefore, EPA assumes facilities will not incur ICR-related capital costs to comply with the rule. In previous ICR renewals, EPA considered PE labor costs to be O&M costs. EPA has reconsidered and has now determined that PE labor costs should be categorized as a separate labor category, rather than as O&M costs. Therefore, O&M costs are considered negligible. .

## Total Annual Cost per Average Respondent Summary

EPA calculated the unit cost for each information collection activity required by the SPCC rule performed by the average facility to estimate the per-respondent costs for existing and new facilities in each size category. Total annual cost per average facility for existing and new facilities are summarized in Exhibit A-4 and Exhibit A-5.

Existing facilities are those that have been in operation for longer than a year. Their costs include activities that occur continuously, such as recordkeeping, or once every several years, such as SPCC Plan review.[[4]](#footnote-5) Their estimated total annual costs for all information collection activities required by the SPCC rule are:

Exhibit A-4

Existing Facilities: Total Annual Cost Per Facility

|  |  |
| --- | --- |
| Facility Category | Total Annual Cost Per Facility |
| I (Tier 1) | $312 |
| I | $1,179 |
| II | $1,589 |
| III | $2,747 |
| IV | $5,109 |

New facilities will initiate operations during the ICR period and become existing facilities after the first year of operation. Therefore, each year a new set of facilities would incur the costs listed below. A typical SPCC-regulated facility would incur the costs for new facilities in Year 1 and incur the costs for existing facilities presented above in each subsequent year.

Exhibit A-5

New Facilities: Total Annual Cost Per Facility

|  |  |
| --- | --- |
| Facility Category | Total Annual Cost Per Facility |
| I (Tier 1) | $997 |
| I | $4,936 |
| II | $9,187 |
| III | $16,754 |
| IV | $28,739 |

Estimated annual costs for new facilities are higher than those for existing facilities because of the greater expenses associated with preparing a new SPCC Plan, which could include PE certification or developing an oil spill contingency plan, when necessary.

Exhibit A-6 through Exhibit A-10 provide detailed average cost estimates for existing and new facilities. To estimate the cost for each compliance activity performed by the average respondent facility in each size category under the rule, EPA multiplied the unit burden estimates for management, technical, and clerical personnel by the hourly wage rate for each labor category and then added the result to PE Labor costs For existing facilities, the estimates include the following activities: five-year plan review under §112.5(b); information submission in the event of certain oil discharges under §112.4(c); Plan modification under §112.5(a) and PE certifications of any technical amendment under §112.5(c); and recordkeeping. For newly regulated facilities, paperwork-related activities include SPCC Plan preparation under §112.3(a); oil spill contingency plan preparation under §112.7(d); information submission in the event of certain oil discharges under §112.4(c); Plan modification under §112.5(a) and PE certifications of any technical amendment under §112.5(c); and recordkeeping under §112.7(e).

Exhibit A-6

|  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- |
| **Annual Burden and Unit Costs for All Required Information Collection Activities** | | | | | | | | |
| **Average Category I Facility (Tier I)** | | | | | | | | |
| Activity | | Annual Burden Hours1 | | | | Total Burden Hours | PE Costs  (2018$) | Annual Costs  (2018$)2 |
| Management | Technical | Drafter | Clerical |
| **Existing Facilities** | | | | | | | | |
| Review the SPCC Plan3 | 0.2 | | 0.6 | 0.0 | 0.0 | 0.8 | $0 | $94 |
| Submit Information in the Event of Certain Discharges of Oil6 | 0.0 | | 0.0 | 0.0 | 0.0 | 0.0 | $0 | $0 |
| Maintain the SPCC Plan and Keep Records | 0.0 | | 2.7 | 0.0 | 0.0 | 2.7 | $0 | $218 |
| **TOTAL** | 0.2 | | 3.3 | 0.0 | 0.0 | 3.5 | $0 | $312 |
| **New Facilities**4 | | | | | | | | |
| Prepare an SPCC Plan | 1.0 | | 3.0 | 0.0 | 0.0 | 4.0 | $0 | $469 |
| Prepare a Contingency Plan, if necessary5 | 0.7 | | 3.5 | 0.0 | 1.0 | 5.1 | $0 | $226 |
| Submit Information in the Event of Certain Discharges of Oil6 | 0.0 | | 0.0 | 0.0 | 0.0 | 0.0 | $0 | $0 |
| Revise the SPCC Plan | 0.0 | | 0.0 | 0.0 | 0.0 | 0.0 | $0 | $7 |
| Maintain the SPCC Plan and Keep Records | 0.0 | | 3.7 | 0.0 | 0.0 | 3.7 | $0 | $294 |
| **TOTAL** | 1.7 | | 10.1 | 0.0 | 1.0 | 12.7 | $0 | $997 |
| 1Unit burden estimates are weighted averages, rounded to the nearest tenth of an hour, based on the distribution of storage and production facilities and the number of facilities estimated to perform each activity during the one-year period. The numbers in this exhibit may not add precisely due to rounding.  2Annual costs are rounded to the nearest dollar.  3 The burden of reviewing and revising the SPCC Plan for a Tier I facility is assumed to be no more than that of preparing a new SPCC Plan using the Template and is assumed to occur once every five years  4New facilities include those facilities that will initiate operations during the ICR period. This analysis assumes that new facilities become existing facilities after the first year of operation. As a result, in each year of this ICR, a different set of new facilities will become operational.  5Note that this is not a routine requirement but is required if the owner/operator claims that installing secondary containment is impracticable.  6 The unit burden for a facility that needs to submit information because of a discharge is estimated to be one hour of management labor and one hour of technical labor, resulting in a total unit cost of $138. Because only 0.15 percent of all facilities are expected to meet the discharge criteria and submit information, the average unit burden is less than 0.05 hours, and is therefore indicated here as 0. However, the actual unit burden and cost estimates are used in later calculations. | | | | | | | | |
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Exhibit A-7

|  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- |
| **Annual Burden and Unit Costs for All Required Information Collection Activities** | | | | | | | |
| **Average Category I Facility** | | | | | | | |
| Activity | Annual Burden Hours1 | | | | Total Burden Hours | PE Costs  (2018$) | Annual Costs  (2018$)2 |
| Management | Technical | Drafter | Clerical |
| **Existing Facilities** | | | | | | | |
| Review the SPCC Plan3 | 0.4 | 2.8 | 0.0 | 0.4 | 3.5 | $0 | $381 |
| Submit Information in the Event of Certain Discharges of Oil6 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | $0 | $0 |
| Revise the SPCC Plan | 0.3 | 1.8 | 0.0 | 0.2 | 0.0 | $0 | $580 |
| Maintain the SPCC Plan and Keep Records | 0.0 | 2.7 | 0.0 | 0.0 | 2.7 | $0 | $218 |
| **TOTAL** | **0.7** | **7.3** | **0.0** | **0.6** | **6.2** | **$0** | **$1,179** |
| **New Facilities**4 | | | | | | | |
| Prepare an SPCC Plan | 1.8 | 27.0 | 10.0 | 3.6 | 42.4 | $0 | $4,409 |
| Prepare a Contingency Plan, if necessary5 | 0.7 | 3.5 | 0.0 | 1.0 | 5.1 | $0 | $226 |
| Submit Information in the Event of Certain Discharges of Oil6 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | $0 | $0 |
| Revise the SPCC Plan | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | **$0** | $7 |
| Maintain the SPCC Plan and Keep Records | 0.0 | 3.7 | 0.0 | 0.0 | 3.7 | $0 | $294 |
| **TOTAL** | **2.5** | **34.1** | **10.0** | **4.6** | **51.1** | **$0** | **$4,936** |
| 1Unit burden estimates are weighted averages, rounded to the nearest tenth of an hour, based on the distribution of storage and production facilities and the number of facilities estimated to perform each activity during the one-year period. The numbers in this exhibit may not add precisely due to rounding.  2Annual costs are rounded to the nearest dollar.  3 The burden of reviewing and revising the SPCC Plan for a Tier I facility is assumed to be no more than that of preparing a new SPCC Plan using the Template and is assumed to occur once every five years  4New facilities include those facilities that will initiate operations during the ICR period. This analysis assumes that new facilities become existing facilities after the first year of operation. As a result, in each year of this ICR, a different set of new facilities will become operational.  5Note that this is not a routine requirement but is required if the owner/operator claims that installing secondary containment is impracticable.  6 The unit burden for a facility that needs to submit information because of a discharge is estimated to be one hour of management labor and one hour of technical labor, resulting in a total unit cost of $138. Because only 0.15 percent of all facilities are expected to meet the discharge criteria and submit information, the average unit burden is less than 0.05 hours, and is therefore indicated here as 0. However, the actual unit burden and cost estimates are used in later calculations. | | | | | | | |
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Exhibit A-8

|  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| **Annual Burden and Unit Costs for All Required Information Collection Activities** | | | | | | | | | |
| **Average Category II Facility** | | | | | | | | | |
| Activity | Annual Burden Hours1 | | | | Total Burden Hours | PE Costs  (2018$) | | Annual Costs (2018$)2 | |
| Management | Technical | Drafter | Clerical |
| **Existing Facilities** | | | | | | | | | |
| Review the SPCC Plan3 | 0.3 | 4.0 | 0.0 | 0.3 | 4.5 | $0 | | $497 | |
| Submit Information in the Event of Certain Discharges of Oil6 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | $0 | | $0 | |
| Revise the SPCC Plan | 0.4 | 2.6 | 0.0 | 0.3 | 3.4 | $430 | | $796 | |
| Maintain the SPCC Plan and Keep Records | 0.0 | 3.7 | 0.0 | 0.0 | 3.7 | $0 | | $296 | |
| TOTAL | **0.7** | **10.2** | **0.0** | **0.6** | **11.5** | **$430** | | **$1,589** | |
| **New Facilities**4 | | | | | | | | | |
| Prepare an SPCC Plan | 2.8 | 38.9 | 15.1 | 5.1 | 61.9 | | $2,376 | | $8,840 |
| Prepare a Contingency Plan, if necessary5 | 60.7 | 3.5 | 0.0 | 1.0 | 5.1 | | $0 | | $226 |
| Submit Information in the Event of Certain Discharges of Oil6 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | | $0 | | $0 |
| Revise the SPCC Plan | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | | $5 | | $9 |
| Maintain the SPCC Plan and Keep Records | 0.0 | 1.4 | 0.0 | 0.0 | 1.4 | | $0 | | $111 |
| TOTAL | **3.5** | **43.7** | **15.1** | **6.1** | **68.4** | | **$2,380** | | **$9,187** |
| 1Unit burden estimates are weighted averages, rounded to the nearest tenth of an hour, based on the distribution of storage and production facilities and the number of facilities estimated to perform each activity during the one-year period. The numbers in this exhibit may not add precisely due to rounding.  2Annual costs are rounded to the nearest dollar.  3 The burden of reviewing and revising the SPCC Plan for a Tier I facility is assumed to be no more than that of preparing a new SPCC Plan using the Template and is assumed to occur once every five years  4New facilities include those facilities that will initiate operations during the ICR period. This analysis assumes that new facilities become existing facilities after the first year of operation. As a result, in each year of this ICR, a different set of new facilities will become operational.  5Note that this is not a routine requirement but is required if the owner/operator claims that installing secondary containment is impracticable.  6 The unit burden for a facility that needs to submit information because of a discharge is estimated to be one hour of management labor and one hour of technical labor, resulting in a total unit cost of $138. Because only 0.15 percent of all facilities are expected to meet the discharge criteria and submit information, the average unit burden is less than 0.05 hours, and is therefore indicated here as 0. However, the actual unit burden and cost estimates are used in later calculations. | | | | | | | | | |
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Exhibit A-9

|  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- |
| **Annual Burden and Unit Costs for All Required Information Collection Activities** | | | | | | | |
| **Average Category III Facility** | | | | | | | |
| Activity | Annual Burden Hours1 | | | | Total Burden Hours | PE Costs  (2018$) | Annual Costs (2018$)2 |
| Management | Technical | Drafter | Clerical |
| **Existing Facilities** | | | | | | | |
| Review the SPCC Plan3 | 0.5 | 7.4 | 0.0 | 0.5 | 8.3 | $0 | $920 |
| Submit Information in the Event of Certain Discharges of Oil6 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | $0 | $0 |
| Revise the SPCC Plan | 0.8 | 4.8 | 0.0 | 0.6 | 6.2 | $791 | $1,468 |
| Maintain the SPCC Plan and Keep Records | 0.0 | 4.5 | 0.0 | 0.0 | 4.5 | $0 | $358 |
| **TOTAL** | **1.3** | **16.6** | **0.0** | **1.1** | **19.0** | **$791** | **$2,747** |
| **New Facilities**4 | | | | | | | |
| Prepare an SPCC Plan | 5.5 | 72.7 | 30.0 | 6.0 | 114.2 | $4,423 | $16,370 |
| Prepare a Contingency Plan, if necessary5 | 0.7 | 3.5 | 0.0 | 1.0 | 5.1 | $0 | $226 |
| Submit Information in the Event of Certain Discharges of Oil6 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | $0 | $0 |
| Revise the SPCC Plan | 0.0 | 0.1 | 0.0 | 0.0 | 0.1 | $0 | $0 |
| Maintain the SPCC Plan and Keep Records | 0.0 | 2.0 | 0.0 | 0.0 | 2.0 | $0 | $157 |
| **TOTAL** | **6.2** | **78.2** | **30.0** | **6.9** | **121.3** | **$4,423** | **$16,754** |
| 1Unit burden estimates are weighted averages, rounded to the nearest tenth of an hour, based on the distribution of storage and production facilities and the number of facilities estimated to perform each activity during the one-year period. The numbers in this exhibit may not add precisely due to rounding.  2Annual costs are rounded to the nearest dollar.  3 The burden of reviewing and revising the SPCC Plan for a Tier I facility is assumed to be no more than that of preparing a new SPCC Plan using the Template and is assumed to occur once every five years  4New facilities include those facilities that will initiate operations during the ICR period. This analysis assumes that new facilities become existing facilities after the first year of operation. As a result, in each year of this ICR, a different set of new facilities will become operational.  5Note that this is not a routine requirement but is required if the owner/operator claims that installing secondary containment is impracticable.  6 The unit burden for a facility that needs to submit information because of a discharge is estimated to be one hour of management labor and one hour of technical labor, resulting in a total unit cost of $138. Because only 0.15 percent of all facilities are expected to meet the discharge criteria and submit information, the average unit burden is less than 0.05 hours, and is therefore indicated here as 0. However, the actual unit burden and cost estimates are used in later calculations. | | | | | | | |
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Exhibit A-10

|  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- |
| **Annual Burden and Unit Costs for All Required Information Collection Activities** | | | | | | | |
| **Average Category IV Facility** | | | | | | | |
| Activity | Annual Burden Hours1 | | | | Total Burden Hours | PE Costs  (2018$) | Annual Costs (2018$)2 |
| **Management** | **Technical** | **Drafter** | **Clerical** |
| **Existing Facilities** | | | | | | | |
| Review the SPCC Plan3 | 0.9 | 13.0 | 0.0 | 0.9 | 14.7 | $0 | $1,625 |
| Submit Information in the Event of Certain Discharges of Oil6 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | $0 | $0 |
| Revise the SPCC Plan | 1.4 | 8.4 | 0.0 | 1.1 | 10.9 | $1,403 | $2,595 |
| Maintain the SPCC Plan and Keep Records | 0.4 | 12.1 | 0.0 | 0.8 | 13.2 | $0 | $890 |
| **TOTAL** | **2.7** | **33.5** | **0.0** | **2.8** | **38.9** | **$1,403** | **$5,109** |
| New Facilities4 | | | | | | | |
| Prepare an SPCC Plan | 10.9 | 126.1 | 40.9 | 13.5 | 191.4 | $7,877 | $27,917 |
| Prepare a Contingency Plan, if necessary5 | 0.7 | 3.5 | 0.0 | 1.0 | 5.1 | $0 | $226 |
| Submit Information in the Event of Certain Discharges of Oil6 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | $0 | $0 |
| Revise the SPCC Plan | 0.0 | 0.1 | 0.0 | 0.0 | 0.1 | $16 | $29 |
| Maintain the SPCC Plan and Keep Records | 0.0 | 7.0 | 0.0 | 0.0 | 7.0 | $0 | $566 |
| **TOTAL** | **11.5** | **136.7** | **40.9** | **14.5** | **203.6** | **$7,893** | **$28,739** |
| 1Unit burden estimates are weighted averages, rounded to the nearest tenth of an hour, based on the distribution of storage and production facilities and the number of facilities estimated to perform each activity during the one-year period. The numbers in this exhibit may not add precisely due to rounding.  2Annual costs are rounded to the nearest dollar.  3 The burden of reviewing and revising the SPCC Plan for a Tier I facility is assumed to be no more than that of preparing a new SPCC Plan using the Template and is assumed to occur once every five years  4New facilities include those facilities that will initiate operations during the ICR period. This analysis assumes that new facilities become existing facilities after the first year of operation. As a result, in each year of this ICR, a different set of new facilities will become operational.  5Note that this is not a routine requirement but is required if the owner/operator claims that installing secondary containment is impracticable.  6 The unit burden for a facility that needs to submit information because of a discharge is estimated to be one hour of management labor and one hour of technical labor, resulting in a total unit cost of $138. Because only 0.15 percent of all facilities are expected to meet the discharge criteria and submit information, the average unit burden is less than 0.05 hours, and is therefore indicated here as 0. However, the actual unit burden and cost estimates are used in later calculations.. | | | | | | | |
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## Industry Growth Rates

To project the number of existing and new facilities regulated under the SPCC rule over the 2019 through 2021 ICR period, EPA used industry-specific growth rates for new and existing facilities.

To estimate industry-specific growth rates for existing facilities of all SPCC-related industry categories except farms and oil production, EPA used 2006 and 2016 U.S. Economic Census data on the number of establishments in each industry, identified by NAICS code.[[5]](#footnote-6) Where complete data did not exist for those years, EPA used 2011 and 2016 Economic Census data or the Department of Energy’s Commercial Buildings Energy Consumption Survey for 2003 and 2012. EPA used an extended time period to estimate industry-specific growth rates to attempt to account for diverse economic conditions under which SPCC-regulated industries operate. To estimate annual growth rates for agricultural establishments, EPA used data reported by the U.S. Department of Agriculture Census of Agriculture on the number of farms in the United States from 2007 and 2017.

EPA estimated the growth rates for new facilities using 2006 through 2016 Business Employment Dynamics (BDS) data from the BLS.[[6]](#footnote-7) The BDS classifies establishments that change hands as new establishments, but these establishments would not be expected to develop a new SPCC Plan. Instead, a new owner may amend the existing Plan. EPA assumed that 25 percent of the new establishments projected using the BDS rates would need to develop a new SPCC Plan and 75 percent would amend the existing Plan for the facility.

Exhibit A-11 and Exhibit A-12 present the estimated number of existing and new SPCC-regulated facilities that are expected to incur a burden associated with the final amendments to the SPCC rule. The count of facilities includes facilities owned or operated by private entities, facilities owned or operated by state or local governments, and facilities owned or operated by the Federal government. Exhibit A-11 presents the number of facilities by facility type – storage and production facilities – for the first year of the ICR renewal period, 2019. Exhibit A-12 presents the number of facilities for the entire analysis period, 2019 through 2021.

Exhibit A-11

Number of Existing and New Facilities

(First Year of ICR: 2019)

|  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- |
| Facility Type | | Category I (1,320-10,000 U.S. gallons)1 | Category II (10,001-42,000 U.S. gallons) | Category III (42,001 to 1 million U.S. gallons) | Category IV (>1 million U.S. gallons) | Total |
|  | Storage | 187,800 | 76,600 | 34,800 | 2,888 | 302,100 |
| Existing | Production | 29,500 | 158,700 | 41,700 | 409 | 230,300 |
|  | **Total** | **217,200** | **235,300** | **76,600** | **3,297** | **532,400** |
|  | Storage | 5,318 | 2,497 | 1,114 | 83 | 9,012 |
| **New** | Production | 1,220 | 6,576 | 1,729 | 17 | 9,541 |
|  | **Total** | 6,538 | 9,072 | 2,843 | 100 | 18,600 |
| **Total** | | **223,800** | **244,400** | **79,400** | **3,398** | **550,900** |

Note: values may not total due torounding.

1 Category I includes farms with aggregate oil storage capacity up to 19,999 U.S. gallons.

Exhibit A-12

Number of Existing and New Facilities

(ICR Period: 2019 - 2021)

|  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- |
| Facility Type/ Year | | Category I  (1,320-10,000 U.S. gallons)1 | | Category II  (10,001-42,000 U.S. gallons) | Category III  (42,001 to 1 million U.S. gallons) | | Category IV  (>1 million U.S. gallons) | Total |
| **Tier I** | **All Others** |
| **Existing** | Year 1 – 2019 | 169,400 | 47,900 | 235,300 | | 76,600 | 3,297 | 532,400 |
| Year 2 – 2020 | 169,600 | 47,800 | 234,600 | | 76,400 | 3,290 | 531,800 |
| Year 3 – 2021 | 169,900 | 47,700 | 234,000 | | 76,300 | 3,284 | 531,200 |
| **New** | Year 1 – 2019 | 5,100 | 1,440 | 9,072 | | 2,843 | 100 | 18,600 |
| Year 2 – 2020 | 5,220 | 1,470 | 9,241 | | 2,899 | 103 | 18,900 |
| Year 3 – 2021 | 5,340 | 1,510 | 9,413 | | 2,956 | 105 | 19,300 |
| **Total** | Year 1 – 2019 | 174,500 | 49,300 | 244,400 | | 79,400 | 3,398 | 550,900 |
| Year 2 – 2020 | 174,800 | 49,300 | 243,900 | | 79,300 | 3,393 | 550,700 |
| Year 3 – 2021 | 175,200 | 49,300 | 243,400 | | 79,200 | 3,389 | 550,500 |

Note: values may not total due to rounding.

1 Category I includes farms with aggregate oil storage capacity up to 19,999 U.S. gallons.

The total cost for all respondents is estimated by multiplying the number of facilities in each size category by the unit costs for each compliance activity. The numbers of respondents in each category and total costs for all respondents in each category are presented in Exhibit A-13 through Exhibit A-17**.** for each facility size category. The annual average total cost is estimated at $858 million.

Exhibit A-13

|  |  |  |  |
| --- | --- | --- | --- |
| Total Respondents and Annual Costs for | | | |
| Average Category I Facilities (Tier I) | | | |
| Activity | Number of Respondents1 | PE Costs  (2018$) | Annual Costs  (2018$)2 |
| Existing Facilities | | | |
| Review the SPCC Plan and Revise as Needed3 |  | $0 | $15,902,000 |
| Submit Information in the Event of Certain Discharges of Oil |  | $0 | $41,000 |
| Maintain the SPCC Plan and Keep Records |  | $0 | $36,900,000 |
| TOTAL | **169,627** | **$0** | **$52,843,000** |
| **New Facilities** | | | |
| Prepare an SPCC Plan |  | $0 | $2,446,000 |
| Prepare a Contingency Plan |  | $0 | $1,182,000 |
| Submit Information in the Event of Certain Discharges of Oil |  | $0 | $1,263 |
| Revise the SPCC Plan |  | $0 | $34,900 |
| Maintain the SPCC Plan and Keep Records |  | $0 | $1,537,000 |
| **TOTAL** | **5,219** | **$0** | **$5,201,000** |
| 1 Average number of respondents over the three-year period. This is the total number of respondents over which EPA estimated costs, however not all respondents incur costs for each activity (e.g., EPA estimates that only 0.15 percent of facilities experience a reportable discharge of oil in any given year).  2 Annual costs are rounded to the three significant figures.  3 The burden of reviewing and revising the SPCC Plan for a Tier I facility is assumed to be no more than that of preparing a new SPCC Plan using the Template and is assumed to be incurred once every five years. | | | |

Exhibit A-14

|  |  |  |  |
| --- | --- | --- | --- |
| **Total Respondents and Annual Costs for All Other Facilities** | | | |
| **Average Category I Facilities** | | | |
| Activity | Number of Respondents1 | PE Costs  (2018$) | Annual Costs  (2018$)2 |
| Existing Facilities | | | |
| Review the SPCC Plan |  | $0 | $18,228,000 |
| Submit Information in the Event of Certain Discharges of Oil |  | $0 | $11,600 |
| Revise the SPCC Plan |  | $0 | $27,728,000 |
| Maintain the SPCC Plan and Keep Records |  | $0 | $10,395,000 |
| **TOTAL** | **47,804** | **$0** | **$56,362,000** |
| **New Facilities** | | | |
| Prepare an SPCC Plan |  | $0 | $6,502,000 |
| Prepare a Contingency Plan |  | $0 | $334,000 |
| Submit Information in the Event of Certain Discharges of Oil |  | $0 | $357 |
| Revise the SPCC Plan |  | $0 | $9,857 |
| Maintain the SPCC Plan and Keep Records |  | $0 | $434,000 |
| **TOTAL** | **1,474** | **$0** | **$7,281,000** |
| 1 Average number of respondents over the three-year period. Note, however, that not all respondents incur costs for each activity (e.g., EPA estimates that only 0.15 percent of facilities experience a reportable discharge of oil in any given year).  2 Annual costs are rounded to the three significant figures. | | | |

Exhibit A-15

|  |  |  |  |
| --- | --- | --- | --- |
| **Total Respondents and Annual Costs for All Facilities** | | | |
| **Average Category II Facilities** | | | |
| Activity | Number of Respondents1 | PE Costs  (2018$) | Annual Costs  (2018$)2 |
| Existing Facilities | | | |
| Review the SPCC Plan |  | $0 | $116,643,000 |
| Submit Information in the Event of Certain Discharges of Oil |  | $0 | $56,800 |
| Revise the SPCC Plan |  | $100,936,000 | $186,783,000 |
| Maintain the SPCC Plan and Keep Records |  | $0 | $69,377,000 |
| **TOTAL** | **234,655** | **$100,936,000** | **$372,860,000** |
| **New Facilities** | | | |
| Prepare an SPCC Plan |  | $21,950,000 | $81,683,000 |
| Prepare a Contingency Plan |  | $0 | $2,093,000 |
| Submit Information in the Event of Certain Discharges of Oil |  | $0 | $2,236 |
| Revise the SPCC Plan |  | $44,000 | $81,500 |
| Maintain the SPCC Plan and Keep Records |  | $0 | $1,023,000 |
| **TOTAL** | **9,242** | **$21,994,000** | **$84,882,000** |
| 1 Average number of respondents over the three-year period. Note, however, that not all respondents incur costs for each activity (e.g., EPA estimates that only 0.15 percent of facilities experience a reportable discharge of oil in any given year).  2 Annual costs are rounded to the three significant figures. | | | |

Exhibit A-16

|  |  |  |  |
| --- | --- | --- | --- |
| **Total Respondents and Annual Costs for All Facilities** | | | |
| **Average Category III Facilities** | | | |
| Activity | Number of Respondents1 | PE Costs  (2018$) | Annual Costs  (2018$)2 |
| Existing Facilities | | | |
| Review the SPCC Plan |  | $0 | $70,351,000 |
| Submit Information in the Event of Certain Discharges of Oil |  | $0 | $18,500 |
| Revise the SPCC Plan |  | $60,522,000 | $112,298,000 |
| Maintain the SPCC Plan and Keep Records |  | $0 | $27,389,000 |
| **TOTAL** | **76,407** | **$60,522,000** | **$210,056,000** |
| **New Facilities** | | | |
| Prepare an SPCC Plan |  | $12,830,000 | $47,474,000 |
| Prepare a Contingency Plan |  | $0 | $657,000 |
| Submit Information in the Event of Certain Discharges of Oil |  | $0 | $702 |
| Revise the SPCC Plan |  | $53 | $0 |
| Maintain the SPCC Plan and Keep Records |  | $0 | $457,000 |
| **TOTAL** | **2,899** | **$12,830,000** | **$48,588,000** |
| 1 Average number of respondents over the three-year period. Note, however, that not all respondents incur costs for each activity (e.g., EPA estimates that only 0.15 percent of facilities experience a reportable discharge of oil in any given year).  2 Annual costs are rounded to the three significant figures. | | | |

Exhibit A-17

|  |  |  |  |
| --- | --- | --- | --- |
| **Total Respondents and Annual Costs for All Facilities** | | | |
| **Average Category IV Facilities** | | | |
| Activity | Number of Respondents1 | PE Costs  (2018$) | Annual Costs  (2018$)2 |
| Existing Facilities | | | |
| Review the SPCC Plan |  | $0 | $5,356,000 |
| Submit Information in the Event of Certain Discharges of Oil |  | $0 | $796 |
| Revise the SPCC Plan |  | $4,625,000 | $8,555,000 |
| Maintain the SPCC Plan and Keep Records |  | $0 | $2,899,000 |
| **TOTAL** | **3,291** | **$4,625,000** | **$16,812,000** |
| **New Facilities** | | | |
| Prepare an SPCC Plan |  | $809,000 | $2,865,000 |
| Prepare a Contingency Plan |  | $0 | $23,200 |
| Submit Information in the Event of Certain Discharges of Oil |  | $0 | $25 |
| Revise the SPCC Plan |  | $1,634 | $3,023 |
| Maintain the SPCC Plan and Keep Records |  | $0 | $58,300 |
| **TOTAL** | **103** | **$810,000** | **$2,950,000** |
| 1 Average number of respondents over the three-year period. Note, however, that not all respondents incur costs for each activity (e.g., EPA estimates that only 0.15 percent of facilities experience a reportable discharge of oil in any given year).  2 Annual costs are rounded to the three significant figures. | | | |

Exhibit A-18

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| Total Estimated Annual Burden and Costs Comparison: Private Facilities | | | | |
|  | Total Requested | Currently Approved | Change Due to EPA Discretion | Due to EPA Estimate |
| Annual Responses | 549,218 | 541,600 | 0 | 7,6181 |
| Annual Hour Burden | 6,306,549 | 6,177,300 | 0 | 129,2491 |
| Annual Cost Burden (Including PE labor costs) | $201,002,128 | $197,119,2002 | $0 | $3,882,900 |
| 1 Annual Responses and Annual Hour Burden values in the Exhibit “Total Estimated Annual Burden and Costs Comparison: All Respondent Facilities” do not equal the sums of these values in Exhibit A-18 and Exhibit A-19 for private facilities and state and local government facilities, respectively, because the Currently Approved values are rounded while Total Requested values are not. This creates a small discrepancy when the private and state and local government figures are summed, and the total is compared to the All Respondent Facilities totals in Exhibit 5 of the Supporting Statement. .  2 Currently approved cost burden was adjusted to $2018 from the 2016 ICR, which had a total requested value of $183,160,300 in $2015. The value was adjusted using the Employment Cost Index with an inflation rate of 7.6 percent. | | | | |

Exhibit A-19

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| Total Estimated Annual Burden and Costs Comparison:  **State and Local Government Facilities** | | | | |
|  | Total Requested | Currently Approved | Change Due to EPA Discretion | Due to EPA Estimate |
| Annual Responses | 566 | 528 | 0 | 381 |
| Annual Hour Burden | 2,974 | 2,767 | 0 | 2071 |
| Annual Cost Burden (Including PE labor costs) | $0 | $0 | $0 | $0 |
| 1 Annual Responses and Annual Hour Burden values in Exhibit 5 “Total Estimated Annual Burden and Costs Comparison: All Respondent Facilities” do not equal the sums of these values in Exhibit A-18 and Exhibit A-19 for private facilities and state and local government facilities, respectively, because the Currently Approved values are rounded while Total Requested values are not. This creates a small discrepancy when the private and state and local government figures are summed, and the total is compared to the All Respondent Facilities totals in Exhibit 5 of the Supporting Statement. | | | | |

1. United States Department of Labor, Bureau of Labor Statistics, Employer Costs for Employee Compensation, December 2018. Available at [https://www.bls.gov/web/ecec/ecsuphst.pdf](%20https:/www.bls.gov/web/ecec/ecsuphst.pdf). [↑](#footnote-ref-2)
2. Source: SCS Engineers, a professional engineering firm adjusted with BLS wage rates for December 2018 published April 2019. [↑](#footnote-ref-3)
3. Values updated in 2018 using United States Department of Labor, Bureau of Labor Statistics, Employer Costs for Employee Compensation, December 2018. Available at [https://www.bls.gov/web/ecec/ecsuphst.pdf.](%20https:/www.bls.gov/web/ecec/ecsuphst.pdf.) [↑](#footnote-ref-4)
4. The cost estimates in the Exhibits present average annual costs for each facility, e.g., the annual cost estimate for Plan review represents the total cost for Plan review divided by five. [↑](#footnote-ref-5)
5. In the 2016 Economic Census, the U.S. Census Bureau did not include establishment numbers for NAICS code 482. This was left out of the industry growth rate calculations. [↑](#footnote-ref-6)
6. Previous analyses relied on the D&B Market Spectrum database (2005). EPA matched nine BDS sectors with SPCC industry classifications (Exhibit 10), and averaged annual rate of entry data over 10 years. [↑](#footnote-ref-7)