

Appendix A

Appendix A. Assumptions for Developing Burden and Cost Estimates

Table 1 provides a list of the key data inputs used to determine burden hours and costs for the National Pretreatment Program ICR. This appendix provides a description of the source of these data elements. In addition, the ICR relied on several assumptions regarding the relative percentages of respondents performing various tasks. The appendix also summarizes these key assumptions.

Table 1 Data and Assumptions Used in Pretreatment ICR

	Pretreatment Program Data	Numbers
1.	Total Number of SIUs	22,827
2.	Number of CIUs	9,844
3.	Number of noncategorical-SIUs	12,983
4.	Number of Zero-Discharge NSCIUs	566
5.	Number of CIUs that Discharge > 0 and < 100 gpd	911
6.	Number of Non-Zero-Discharge NSCIUs	264
7.	Number of NSCIUs	830
8.	Number of Middle Tier CIUs	2,953
9.	Number of Middle Tier CIUs that reduce monitoring	856
10.	Number of State Run POTW Pretreatment Programs in 40 CFR §403.10(e) States	55
11.	Total Number of Approved Programs	1,548
12.	Number of 40 CFR §403.10(e) States	5
13.	Number of States with approved Pretreatment Programs	36
14.	Number of SIUs with POTWs as Control Authority	20,630
15.	Percentage of SIUs with POTWs as Control Authority	90.38%
16.	Number of SIUs with State/EPA as Control Authority	2,197
17.	Percentage of SIUs with State/EPA as Control Authority	9.62%
18.	Percentage of SIUs Resampling (for violations)	10%
19.	Hourly Rate for Federal employees (50% Overhead (OH))	38.97
20.	Hourly Rate for State employees (50% OH)	39.81
21.	Hourly Rate for POTW employees (50% OH)	29.44
22.	Hourly Rate for Private Industry employees (100% OH)	55.22
23.	Number of New Source CIUs	201
24.	Number of POTWs with EPA as Approval Authority	405
25.	Percentage of POTWs with EPA as Approval Authority	26.15%
26.	Number of POTWs with State as Approval Authority	1,143
27.	Percentage of POTWs with State as Approval Authority	73.85%
28.	Number of POTWs projected to develop a pretreatment program during the three-year ICR period	64
29.	Removal Credit Approval Requests	3

ICR Input Data

1. **Total Number of Significant Industrial Users (SIUs)** - This number is derived from Permit Compliance System (PCS) and Integrated Compliance Information System (ICIS) data, as obtained from an October 2010 query and updated/corrected through January 2011 with input from EPA headquarters and regional staff responsible for overseeing the pretreatment program.

2. **Number of Categorical Industrial Users (CIU)** - This number is derived from Permit Compliance System (PCS) and Integrated Compliance Information System (ICIS) data, as obtained from an October 2010 query and updated/corrected through January 2011 with input from EPA headquarters and regional staff responsible for overseeing the pretreatment program.
3. **Number of Non-Categorical SIUs** - The mathematical difference between 1 and 2 above.
4. **Number of Zero-Discharge NSCIUs** - The percentage of zero-discharge NSCIUs (5.75% is derived from data from annual Pretreatment Program Reports, Pretreatment Excellence Awards applications, and public comments on the proposed Streamlining Rule. This estimate is carried forward from the assumptions in the recalculation of the entire pretreatment program, which was done as part of the Streamlining Rule ICR (EPA ICR No. 0002.12) and is explained at the beginning of this section. The percentage is applied to the number of CIUs. All zero-discharge CIUs are assumed to be NSCIUs.
5. **Number of CIUs that Discharge > 0 and < 100 gpd** - The percentage of CIUs with flows of less than 100 gpd but greater than zero (9.26%) is derived from data from annual Pretreatment Program Reports, Pretreatment Excellence Awards applications, and public comments on the proposed Streamlining Rule. This estimate is carried forward from the assumptions in the recalculation of the entire pretreatment program, which was done as part of the Streamlining Rule ICR (EPA ICR No. 0002.12) and is explained at the beginning of this section. The percentage is applied to the number of CIUs.
6. **Number of Non-Zero Discharge NSCIUs** - The percentage of dischargers with flows of less than 100 gpd but greater than zero that will be deemed non-significant is based on data carried forward from the assumptions in the recalculation of the entire pretreatment program, which was done as part of the Streamlining Rule ICR (EPA ICR No. 0002.12) and is explained at the beginning of this section. on compliance reporting requirements in eight POTW programs. These data showed that 71% of small CIUs were required to monitor more than twice per year. It was assumed that compliance reporting requirements continued for these 71%. Twenty-nine percent (1 – 71%) were assumed to be NSCIUs. The percentage is applied to the number derived in Item 5.
7. **Number of NSCIUs** - This number was calculated by adding the number of zero discharging CIUs to the number of CIUs that discharge between 0 and 100 gallons per day that will be deemed NSCIUs.
8. **Number of Middle-Tier CIUs** - The percentage of Middle-Tier CIUs (approximately 30%) is derived from data from annual Pretreatment Program Reports combined with data from the Metal Products and Machinery Database. This estimate is carried forward from the assumptions in the recalculation of the entire pretreatment program, which was done as part of the Streamlining Rule ICR (EPA ICR No. 0002.12) and is explained at the beginning of this section. The percentage is applied to the number of CIUs.
9. **Number of Middle-Tier CIUs With Reduced Monitoring** - The percentage of Middle-Tier CIUs that will become subject to reduced compliance reporting requirements is based on data carried forward from the assumptions in the recalculation of the entire pretreatment program, which was done as part of the Streamlining Rule ICR (EPA ICR No. 0002.12) and is explained

at the beginning of this section. on compliance reporting requirements in eight POTW programs. These data showed that 71% of small CIUs were required to monitor more than twice per year. It was assumed that compliance reporting requirements continued for these 71%. Twenty-nine percent (1 – 71%) were assumed reduce monitoring frequency to once per year. The percentage is applied to the number derived in Item 8.

10. **Number of State-Run POTW Pretreatment Programs in 40 CFR 403.10(e) States** - This number was estimated by dividing the total number of SIUs regulated by States/EPA (and not by approved POTW Pretreatment Programs) by the average number of SIUs per approved pretreatment program.
11. **Total Number of Approved Programs** - This number is derived from Permit Compliance System (PCS) and Integrated Compliance Information System (ICIS) data, as obtained from an October 2010 query and updated/corrected through January 011 with input from EPA headquarters and regional staff responsible for overseeing the pretreatment program.
12. **Number of 40 CFR 403.10(e) States** - Five: Alabama, Connecticut, Mississippi, Nebraska, and Vermont.
13. **Number of States with Approved Pretreatment Programs** - 36, per EPA Headquarters.
- 15.-16 **Number and Percentage of SIUs with POTWs as Control Authority** – This number is derived from Permit Compliance System (PCS) and Integrated Compliance Information System (ICIS) data, as obtained from an October 2010 query and updated/corrected through January 2011 with input from EPA headquarters and regional staff responsible for overseeing the pretreatment program.
- 17.-18 **Number and Percent of SIUs with State/EPA as Control Authority** - This number is derived from Permit Compliance System (PCS) and Integrated Compliance Information System (ICIS) data, as obtained from an October 2010 query and updated/corrected through January 2011 with input from EPA headquarters and regional staff responsible for overseeing the pretreatment program. It includes SIUs in 40 CFR 403.10(e) States, as well as SIUs regulated by States/EPA in non-pretreatment cities.
19. **Percentage of SIUs Resampling** - This assumption is carried forward from the recalculation of the entire pretreatment program, which was done as part of the Streamlining Rule ICR (EPA ICR No. 0002.12) and is explained at the beginning of this section.
20. **Hourly Rate for Federal Employees** - The hourly employment cost of federal employees was determined using methodology established in previous ICRs. According to the U.S. Office of Personnel Management, January 2010 General Schedule (2007-GS), the average annual salary of a government employee at the GS-9, Step 10 level is \$54,028. At 2,080 hours per year, the hourly wage would be \$25.98. Assuming overhead costs of 50 percent, or \$12.99 per hour, the fully loaded cost of employment for a federal employee would be \$38.97.
21. **Hourly Rate for State Employees** - The average hourly rate for municipal employees as determined by the Bureau of Labor Statistics in the Employer Costs for Employee Compensation, *Table 3- Employer costs per hour worked for employee compensation and costs as a percent of total compensation: state and local government, by selected characteristics (June*

2010), adjusted to a March 2010 dollars using the Employment Cost Index (ECI). A 50 percent overhead rate was added to this rate to arrive at an hourly rate of \$39.81.

22. **Hourly Rate for POTW Employees** - The average hourly rate for municipal employees, which account for all POTW costs, as determined by the U.S. Department of Labor, Bureau of Labor Statistics, is \$29.44 (including overhead). Updated rates are derived from the U.S. Department of Labor, Bureau of Labor Statistics, in a table entitled *May 2009 National Industry-Specific Occupational Employment and Wage Estimates* and adjusted to March 2010 dollars using the ECI.
23. **Hourly Rate for Private Sector Employees** - EPA used the median industrial engineer wage of \$36.11 per hour. After adjusting this rate for inflation, compensation, and overhead the rate is \$55.22 per hour.
24. **Number of New Source CIUs** - Assumed a 2 percent annual increase in the number of operational CIUs. This assumption is based on US Census Bureau data and is carried forward from the recalculation of the entire pretreatment program, which was done as part of the Streamlining Rule ICR (EPA ICR No. 0002.12) and is explained at the beginning of this section.
- 25-26. **Number and Percentage of POTWs with EPA as Approval Authority** - These numbers are derived from Permit Compliance System (PCS) data, as obtained from a October 2010 query, GPRA data from October 2010, and input from EPA headquarters and regional staff responsible for overseeing the pretreatment program. This is based on the number of POTWs in non-approved states.
- 27-28. **Number and Percentage of POTWs with State as Approval Authority** - These numbers are derived from Permit Compliance System (PCS) data, as obtained from a October 2010 query, GPRA data from October 2010, and input from EPA headquarters and regional staff responsible for overseeing the pretreatment program. This is based on the number of POTWs in approved states.
29. **Number of POTWs projected to develop a Pretreatment Program during the life of this ICR** – Based on projections from EPA regional offices.
30. **Removal Credit Approval Requests** – EPA estimates four respondents per year. Based on projections from EPA regional offices.