

**Table 1: Annual Respondent Burden and Cost – NESHAP for Friction Materials Manufacturing (40 CFR Part 101)**

Burden item	(A)	(B)
	Person hours per occurrence	No. of occurrences per respondent per year
1. Applications	N/A	
2. Survey and Studies	N/A	
3. Acquisition, installation and utilization of technology and systems	54	1
4. Reporting requirements		
A. Familiarize with regulatory requirements <sup>c</sup>	0.5	1
B. Required activities		
Startup, shutdown, malfunction plan	32	1
C. Create information	See 4B	
D. Gather existing information	See 4E	
E. Write Report		
Notification of applicability	2	1
Notification of construction/reconstruction	2	1
Notification of anticipated startup	2	1
Notification of actual startup	2	1
Notification of compliance status	4	1
Semiannual report of deviation <sup>d</sup>	8	2
Semiannual report of no deviation <sup>e</sup>	8	2
Startup, shutdown, malfunction report <sup>f</sup>	8	2
<b>Subtotal for Reporting Requirements</b>		
5. Recordkeeping requirements		
A. Familiarize with regulatory requirements <sup>c</sup>	4	1
B. Plan activities	See 5E	
C. Implement activities	See 5E	
D. Develop record system	See 5E	
E. Time to enter information		
Records of solvent weight measurements <sup>g</sup>	0.033	2,600
Records of block average solvent weight <sup>h</sup>	2	52
Records of startup, shutdown, malfunction <sup>h</sup>	1	52
Copies of notifications/reports <sup>i</sup>	0.25	5
F. Time to train personnel <sup>j</sup>	20	1
G. Time to transmit or disclose information <sup>i</sup>	0.25	5
H. Time to audit	N/A	
<b>Subtotals for Recordkeeping Requirements</b>		
<b>TOTAL LABOR BURDEN AND COST (rounded) <sup>k</sup></b>		
<b>TOTAL CAPITAL AND O&amp;M COST (rounded) <sup>k</sup></b>		
<b>GRAND TOTAL (rounded) <sup>k</sup></b>		

**Assumptions:**

- <sup>a</sup> We have assumed that there are 2 existing sources, and that no additional new or reconstructed sources will become sources.
- <sup>b</sup> This ICR uses the following labor rates: \$144.33 per hour for Executive, Administrative, and Managerial labor; \$100 per hour for other labor.
- <sup>c</sup> We have assumed that all respondents will have to familiarize with the regulatory requirements each year.
- <sup>d</sup> We have assumed that 15 percent of respondents will report deviation.
- <sup>e</sup> We have assumed that 85 percent of respondents will report no deviation.
- <sup>f</sup> We have assumed that 10 percent of respondents will have a startup, shutdown, or malfunction occur that is not managed.

- <sup>g</sup> We have assumed that solvent weights are recorded once per hour (2 minutes [0.033 hr] per record) for 2,600 hours per year.
- <sup>h</sup> It is assumed that information would be entered once per week for 52 weeks per year.
- <sup>i</sup> We have assumed that a typical plant transmits the startup, shutdown, and malfunction plan semiannually; deviation records are transmitted annually.
- <sup>j</sup> We have assumed that it will take 20 hours per plant once a year to train personnel.
- <sup>k</sup> Totals have been rounded to 3 significant figures. Figures may not add exactly due to rounding.

63, Subpart QQQQ (Renewal)

108.28                      144.33                      53.34

(C)	(D)	(E)	(F)	(G)	(H)
Person hours per respondent per year (C=AxB)	Respondents per year <sup>a</sup>	Technical person- hours per year (E=CxD)	Management person hours per year (F=Ex0.05)	Clerical person hours per year (G=Ex0.1)	Total Annual Cost, \$ <sup>b</sup>
54	0	0	0	0	\$0
0.5	2	1	0.05	0.1	\$120.83
32	0	0	0	0	\$0
2	0	0	0	0	\$0
2	0	0	0	0	\$0
2	0	0	0	0	\$0
2	0	0	0	0	\$0
4	0	0	0	0	\$0
16	0.3	4.8	0.24	0.48	\$579.99
16	1.7	27.2	1.36	2.72	\$3,286.59
16	0.2	3.2	0.16	0.32	\$386.66
			<b>42</b>		<b>\$4,374</b>
4	2	8	0.4	0.8	\$966.64
85.8	2	171.6	8.58	17.16	\$20,734.51
104	2	208	10.4	20.8	\$25,132.74
52	2	104	5.2	10.4	\$12,566.37
1.25	2	2.5	0.125	0.25	\$302.08
20	2	40	2	4	\$4,833.22
1.25	2	2.5	0.125	0.25	\$302.08
			<b>617</b>		<b>\$64,838</b>
			<b>659</b>		<b>\$69,200</b>
					<b>\$544</b>
					<b>\$69,700</b>

responses  
4

138400

subject to the rule over the next three years.  
3.28 per hour for Technical labor, and \$53.34 per hour for Clerical labor. These rates are from the United States Department of

igned according to the regulation.

per year (industry average annual operating hours for solvent mixers).

report once a year; and no deviation report semiannually for a total of five times per year.

hr/response  
165

f Labor, Bureau of Labor Statistics, September 2016, Table 2. Civilian Workers, by Occupational and Industry group. The rate

s are from column 1, Total Compensation. The rates have been increased by 110 percent to account for the benefit packages av

available to those employed by private industry.

**Table 2: Average Annual EPA Burden and Cost – NESHAP for Friction Materials Manufactu**

Activity	(A)	(B)	(C)	(D)
	EPA person-hours per occurrence	No. of occurrences per plant per year	EPA person-hours per plant per year (C=AxB)	Plants per year <sup>a</sup>
1. Excess emissions enforcement activities <sup>c</sup>	48	1	48	0.1
2. Report review				
Notification of applicability	2	1	2	0
Notification of construction/ reconstruction	2	1	2	0
Notification of anticipated startup	2	1	2	0
Notification of actual startup	2	1	2	0
Notification of compliance status	40	1	40	0
Semiannual report of deviation <sup>d</sup>	20	2	40	0.3
Semiannual report of no deviation <sup>e</sup>	2	2	4	1.7
Startup, shutdown, malfunction report <sup>f</sup>	20	2	40	0.2
<b>TOTAL ANNUAL BURDEN AND COST (rounded) <sup>g</sup></b>				

**Assumptions:**

- <sup>a</sup> We have assumed that there are 2 existing sources, and that no additional new or reconstructed sources will become s
- <sup>b</sup> This cost is based on the following labor rates which have been increased by 60 percent to account for the benefit pac
- <sup>c</sup> We have assumed that 5 percent of plants will be involved in excess emissions enforcement activities.
- <sup>d</sup> We have assumed that 15 percent of respondents will report deviation.
- <sup>e</sup> We have assumed that 85 percent of respondents will report no deviation.
- <sup>f</sup> We have assumed that 10 percent of respondents will have a startup, shutdown, or malfunction occur that is not mana
- <sup>g</sup> Totals have been rounded to 3 significant figures. Figures may not add exactly due to rounding.

**iring (40 CFR Part 63, Subpart QQQQ) (Renewal)**

48.08                  64.8                  26.02

(E)	(F)	(G)	(H)
Technical person-hours per year (E=CxD)	Management person-hours per year (F=Ex0.05)	Clerical person-hours per year (G=Ex0.1)	Cost, \$ b
4.8	2.4	0.48	\$398.79
0	0	0	\$0
0	0	0	\$0
0	0	0	\$0
0	0	0	\$0
0	0	0	\$0
12	6	1.2	\$996.98
6.8	3.4	0.68	\$564.96
8	4	0.8	\$664.66
<b>51</b>			<b>\$2,630</b>

subject to the rule over the next three years.

Package available to government employees: \$64.80 Managerial rate (GS-13, Step 5, \$40.50 + 60%), \$48.08 Technical

ged according to the regulation.

rate (GS-12, Step 1, \$30.05+ 60%), and \$26.02 Clerical rate (GS-6, Step 3, \$16.26 + 60). These rates are from the Offic

e of Personnel Management (OPM) 2017 General Schedule which excludes locality rates of pay.