Table 1: Annual Respondent Burden and Cost – NESHAP for Phosphoric Acid Manufactı

Burden item	(A) Technical Hours per Occurrence	(B) Occurrences per respondent per year	(C) Person hours per respondent per year (C=AxB)
1. Applications	N/A		
2. Survey and Studies	N/A		
3. Reporting Requirements			
A. Familiarize with regulatory requirements <sup>c</sup>	4	1	4
B. Required activities			
Initial performance test	28	1	28
Repeat initial performance test	28	0.1	2.8
Startup, shutdown, malfunction plan	40	1	40
Annual performance test	28	1	28
Repeat annual performance test <sup>d</sup>	28	0.2	5.6
Mercury testing - Calciners <sup>e</sup>	10	1	10
TF testing			
a. Oxidation Reactors <sup>f</sup>	10	1	10
b. Calciners <sup>e</sup>	10	1	10
C. Create information	See 3B		
D. Gather existing information	See 3B		
E. Write report			
Notification of applicability	N/A		
Notification of construction./ reconstruction	2	1	2
Notification of actual startup	N/A		
Notification of compliance requirements	N/A		
Notification of performance test	2	1	2
Notification of compliance status	4	1	4
Report of performance test	see 3B		
Report monitoring exceedances <sup>g</sup>	16	4	64
Report of no excess emissions h	8	2	16
Startup/ shutdown/ malfunction report <sup>i</sup>	8	1	8
Develop monitoring plan <sup>j</sup>	15	1	15
Prepare gypsum stack management <sup>j</sup>	20	1	20
Subtotal for Reporting			
Recordkeeping Requirements			
A. Familiarize with regulatory requirements	See 3A		
B. Plan activities	See 4E		
C. Implement activities	See 4E		
D. Develop record system	See 4E		
E. Time to enter information			
Records of operating parameters <sup>k</sup>	1.5	52	78
I Or		_	_

Records of Hg testing <sup>e</sup>	3	1	3
Records of TF testing e, f	3	1	3
Records of BLDS alarm <sup>1</sup>	5	1	5
F. Time to train personnel	See 3B		
G. Time to comply with applicable requirements	See 3B		
H. Time for audits	N/A		
Subtotal for Recordkeeping			
TOTAL ANNUAL BURDEN and COST (rounded) <sup>m</sup>			
CAPITAL AND O&M COST (rounded) <sup>m</sup>			
GRAND TOTAL (rounded) <sup>m</sup>			

## Assumptions

- <sup>a</sup> Based on the 2015 RTR, we estimate that 12 phosphoric acid units and 11 phosphate fertilizers, for a total of 23 processing u
- <sup>b</sup> This ICR uses a labor rate of \$141.06 for managerial hours, \$120.27 for technical hours, and \$58.67 for clerical hours. We as
- <sup>c</sup> We assume that all respondents will have to familiarize with the regulatory requirements each year.
- <sup>d</sup> We have assumed that 7 percent of respondents will fail the performance test and must repeat it.
- <sup>e</sup> Based on the 2015 RTR, we estimate there are 6 phosphate rock calciners that are subject to Hg and TF testing.
- <sup>f</sup> Based on the 2015 RTR, we estimate there are 3 oxidation reactors subject to TF testing.
- <sup>g</sup> We have assumed that 10 percent of sources will report exceedances. Respondents are required to report quarterly.
- <sup>h</sup> We have assumed that 90 percent of sources will report no excess emissions semiannually.
- <sup>i</sup> No longer applies.
- <sup>j</sup> This is a one-time activity. We assume the burden was already incured during the first year of the amendment.
- <sup>k</sup> We have assumed that it will take 1.5 hours per respondent to enter information and that information is entered one-time per y
- <sup>1</sup> Records of BLDS alarms must be kept, we assume each fabric filter will warrant 5 hours of documenting for this requirement
- <sup>m</sup> Totals have been rounded to 3 significant figures. Figures may not add exactly due to rounding.

uring and Phosphate Fertilizers Production (40 CFR Part 63, Subparts AA and BB) (Renewal)

120.27 141.06 58.67

(D) (D) (Pethnical person hours per year user)         (E) (H) (H) (H) (H) (H) (H) (H) (H) (H) (H		120.27	141.06	58.67	
0       0       0       0       \$13       \$364       \$18.2       \$36.4       \$36.4       \$36.8       \$48,481.16       \$67.79       \$67.79       \$67.79       \$67.79       \$140       \$160	Respondents	Technical person hours per year	Managerial person hours per year	Clerical person hours per year	Total Cost per
0       0       0       0       \$13       \$364       \$18.2       \$36.4       \$36.4       \$36.8       \$48,481.16       \$67.79       \$67.79       \$67.79       \$67.79       \$140       \$160					
0       0       0       0       \$13       \$364       \$18.2       \$36.4       \$36.4       \$36.8       \$48,481.16       \$67.79       \$67.79       \$67.79       \$67.79       \$140       \$160					
0       0       0       0       \$13       \$364       \$18.2       \$36.4       \$36.4       \$36.8       \$48,481.16       \$67.79       \$67.79       \$67.79       \$67.79       \$140       \$160					
0       0       0       0       \$0         13       364       18.2       36.4       \$48,481.16         0.91       5.10       0.25       0.5       \$678.74         6       60       3       6       \$7,991.40         3       30       1.5       3       \$3,995.70         6       60       3       6       \$7,991.40         0       0       0       0       \$0         0       0       0       0       \$0         0       0       0       \$0       \$0         1.3       83.2       4.16       8.32       \$11,081.41         11.7       187.2       9.36       18.72       \$24,933.17         0       0       0       0       \$0         0       0       0       \$0       \$0         0       0       0       \$0       \$0         0       0       0       \$0       \$0         0       0       0       \$0       \$0         0       0       0       \$0       \$0         0       0       0       \$0       \$0         0       0	13	52	2.6	5.2	\$6,925.88
0       0       0       0       \$0         13       364       18.2       36.4       \$48,481.16         0.91       5.10       0.25       0.5       \$678.74         6       60       3       6       \$7,991.40         3       30       1.5       3       \$3,995.70         6       60       3       6       \$7,991.40         0       0       0       0       \$0         0       0       0       0       \$0         0       0       0       \$0       \$0         1.3       83.2       4.16       8.32       \$11,081.41         11.7       187.2       9.36       18.72       \$24,933.17         0       0       0       0       \$0         0       0       0       \$0       \$0         0       0       0       \$0       \$0         0       0       0       \$0       \$0         0       0       0       \$0       \$0         0       0       0       \$0       \$0         0       0       0       \$0       \$0         0       0					
0       0       0       \$0       \$0       \$13       \$364       \$18.2       \$36.4       \$48,481.16       \$48,481.16       \$0.91       \$5.10       \$0.25       \$0.5       \$678.74       \$6       \$6       \$6       \$3       \$6       \$7,991.40         3       30       1.5       3       \$3,995.70       \$3       \$6       \$7,991.40         0       0       0       0       \$0       \$50       \$10       \$	0	0	0	0	\$0
13       364       18.2       36.4       \$48,481.16         0.91       5.10       0.25       0.5       \$678.74         6       60       3       6       \$7,991.40         3       30       1.5       3       \$3,995.70         6       60       3       6       \$7,991.40         0       0       0       0       \$0         0       0       0       \$0       \$0         0       0       0       \$0       \$0         0       0       0       \$0       \$0         1.3       83.2       4.16       8.32       \$11,081.41         11.7       187.2       9.36       18.72       \$24,933.17         0       0       0       \$0       \$0         0       0       0       \$0       \$0         0       0       0       \$0       \$0         0       0       0       \$0       \$0         0       0       0       \$0       \$0         0       0       0       \$0       \$0         0       0       0       \$0       \$0         0 <t< td=""><td>0</td><td>0</td><td>0</td><td>0</td><td>\$0</td></t<>	0	0	0	0	\$0
0.91       5.10       0.25       0.5       \$678.74         6       60       3       6       \$7,991.40         3       30       1.5       3       \$3,995.70         6       60       3       6       \$7,991.40         0       0       0       0       \$0         0       0       0       0       \$0         0       0       0       0       \$0         1.3       83.2       4.16       8.32       \$11,081.41         11.7       187.2       9.36       18.72       \$24,933.17         0       0       0       0       \$0         0       0       0       \$0       \$0         0       0       0       \$0       \$0         0       0       0       \$0       \$0         0       0       0       \$0       \$0         0       0       0       \$0       \$0         0       0       0       \$0       \$0         0       0       0       \$0       \$0         0       0       0       \$0       \$0         0       0	0	0	0	0	\$0
6       60       3       6       \$7,991.40         3       30       1.5       3       \$3,995.70         6       60       3       6       \$7,991.40         0       0       0       0       \$0         0       0       0       0       \$0         0       0       0       0       \$0         1.3       83.2       4.16       8.32       \$11,081.41         11.7       187.2       9.36       18.72       \$24,933.17         0       0       0       0       \$0         0       0       0       \$0       \$0         0       0       0       \$0       \$0         0       0       0       \$0       \$0         0       0       0       \$0       \$0         0       0       0       \$0       \$0         0       0       0       \$0       \$0         0       0       0       \$0       \$0         0       0       0       \$0       \$112,079	13	364	18.2	36.4	\$48,481.16
3 30 1.5 3 \$3,995.70 6 60 3 6 \$7,991.40  0 0 0 0 0 \$0  0 0 0 \$0  0 0 0 \$0  1.3 83.2 4.16 8.32 \$11,081.41  11.7 187.2 9.36 18.72 \$24,933.17  0 0 0 0 0 \$0  0 0 0 \$0  968 \$112,079	0.91	5.10	0.25	0.5	\$678.74
6       60       3       6       \$7,991.40         0       0       0       0       \$0         0       0       0       0       \$0         0       0       0       0       \$0         1.3       83.2       4.16       8.32       \$11,081.41         11.7       187.2       9.36       18.72       \$24,933.17         0       0       0       0       \$0         0       0       0       \$0       \$0         0       0       0       \$0       \$0         0       0       0       \$0       \$0         968       \$112,079	6	60	3	6	\$7,991.40
6       60       3       6       \$7,991.40         0       0       0       0       \$0         0       0       0       0       \$0         0       0       0       0       \$0         1.3       83.2       4.16       8.32       \$11,081.41         11.7       187.2       9.36       18.72       \$24,933.17         0       0       0       0       \$0         0       0       0       \$0       \$0         0       0       0       \$0       \$0         0       0       0       \$0       \$0         968       \$112,079					
0       0       0       0       \$0         0       0       0       0       \$0         0       0       0       0       \$0         0       0       0       0       \$0         1.3       83.2       4.16       8.32       \$11,081.41         11.7       187.2       9.36       18.72       \$24,933.17         0       0       0       0       \$0         0       0       0       \$0       \$0         0       0       0       \$0       \$0         0       0       0       \$0       \$0         968       \$112,079	3	30	1.5	3	\$3,995.70
0       0       0       0       \$0         0       0       0       0       \$0         1.3       83.2       4.16       8.32       \$11,081.41         11.7       187.2       9.36       18.72       \$24,933.17         0       0       0       0       \$0         0       0       0       \$0       \$0         0       0       0       \$0       \$0         0       0       0       \$0       \$0         968       \$112,079	6	60	3	6	\$7,991.40
0       0       0       0       \$0         0       0       0       0       \$0         1.3       83.2       4.16       8.32       \$11,081.41         11.7       187.2       9.36       18.72       \$24,933.17         0       0       0       0       \$0         0       0       0       \$0       \$0         0       0       0       \$0       \$0         0       0       0       \$0       \$0         968       \$112,079					
0       0       0       0       \$0         0       0       0       0       \$0         1.3       83.2       4.16       8.32       \$11,081.41         11.7       187.2       9.36       18.72       \$24,933.17         0       0       0       0       \$0         0       0       0       \$0       \$0         0       0       0       \$0       \$0         0       0       0       \$0       \$0         968       \$112,079					
0       0       0       0       \$0         0       0       0       0       \$0         1.3       83.2       4.16       8.32       \$11,081.41         11.7       187.2       9.36       18.72       \$24,933.17         0       0       0       0       \$0         0       0       0       \$0       \$0         0       0       0       \$0       \$0         0       0       0       \$0       \$0         968       \$112,079					
0       0       0       0       \$0         0       0       0       0       \$0         1.3       83.2       4.16       8.32       \$11,081.41         11.7       187.2       9.36       18.72       \$24,933.17         0       0       0       0       \$0         0       0       0       \$0       \$0         0       0       0       \$0       \$0         0       0       0       \$0       \$0         968       \$112,079					
0       0       0       \$0         1.3       83.2       4.16       8.32       \$11,081.41         11.7       187.2       9.36       18.72       \$24,933.17         0       0       0       0       \$0         0       0       0       \$0       \$0         0       0       0       \$0       \$0         968       \$112,079	0	0	0	0	\$0
0       0       0       \$0         1.3       83.2       4.16       8.32       \$11,081.41         11.7       187.2       9.36       18.72       \$24,933.17         0       0       0       0       \$0         0       0       0       \$0       \$0         0       0       0       \$0       \$0         968       \$112,079					
0       0       0       \$0         1.3       83.2       4.16       8.32       \$11,081.41         11.7       187.2       9.36       18.72       \$24,933.17         0       0       0       0       \$0         0       0       0       \$0       \$0         0       0       0       \$0       \$0         968       \$112,079					
1.3       83.2       4.16       8.32       \$11,081.41         11.7       187.2       9.36       18.72       \$24,933.17         0       0       0       0       \$0         0       0       0       \$0       \$0         0       0       0       \$0       \$0         0       0       0       \$0       \$0         968       \$112,079       \$112,079	0	0	0	0	\$0
11.7       187.2       9.36       18.72       \$24,933.17         0       0       0       0       \$0         0       0       0       0       \$0         0       0       0       \$0       \$0         968       \$112,079       \$112,079	0	0	0	0	\$0
11.7       187.2       9.36       18.72       \$24,933.17         0       0       0       0       \$0         0       0       0       0       \$0         0       0       0       \$0       \$0         968       \$112,079       \$112,079					
0 0 0 0 \$0 0 0 0 0 \$0 0 0 0 0 \$0 968 \$112,079	1.3	83.2	4.16	8.32	\$11,081.41
0 0 0 0 \$0 0 0 0 \$0 968 \$112,079	11.7	187.2	9.36	18.72	\$24,933.17
0 0 0 0 \$0 968 \$112,079	0	0	0	0	\$0
968 \$112,079	0	0	0	0	\$0
	0	0	0	0	\$0
13 1014 50.7 101.4 \$135,054.66			968		\$112,079
13 1014 50.7 101.4 \$135,054.66					
13 1014 50.7 101.4 \$135,054.66					
13 1014 50.7 101.4 \$135,054.66					
13 1014 50.7 101.4 \$135,054.66					
13 1014 50.7 101.4 \$135,054.66					
13 1014 50.7 101.4 \$135,054.66					
	13	1014	50.7	101.4	\$135,054.66

6	18	0.9	1.8	\$2,397.42
9	27	1.35	2.7	\$3,596.13
3	15	0.75	1.5	\$1,997.85
		1,235		\$143,046
		2,200		\$255,000
				\$186,000
				\$441,000

52 hr/response

nits, located at 13 facilities will be subject to the rule. No additional respondents will become subject the rule over the three-year peri sume managerial hours are 5 percent of technical hours, and clerical hours are 10 percent of technical hours.

week for 52 weeks per year.

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Table 2: Average Annual EPA Burden and Cost – NESHAP for Phosphoric Acid Manufacturing and Phosphate 49.44

Burden Item	(A) Person hours per occurrence	(B) Number of occurences per respondent per year	(C) Person hours per respondent per year (C=AxB)	(D) Respondents per year <sup>a</sup>	(E) Technical person hours per year (E=CxD)
Initial performance test	40	1	40	0	0
Repeat initial performance test					
Retesting preparation	8	1	8	0	0
Retesting	40	1	40	0	0
Excess emissions enforcement activities	N/A				
Report review					
Notification of applicability	2	1	2	0	0
Notification of construction./reconstruction	N/A				
Notification of anticipated startup	N/A				
Notification of actual startup	N/A				
Notification of special compliance requirements	N/A				
Notification of initial performance test	2	1	2	0	0
Notification of compliance status	2	1	2	0	0
Observe stack tests <sup>c</sup>	20	1	20	3	60
Annual performance test	40	1	40	13	520
Repeat annual performance test <sup>d</sup>	40	1	40	0.91	36.4
Excess emissions report <sup>e</sup>	20	4	80	1.3	104
No excess emissions report <sup>f</sup>	20	2	40	11.7	468
Review monitoring plan <sup>g</sup>	10	1	10	0	0
Review gypsum stack and cooling pond management plan <sup>g</sup>	8	1	8	0	0
Waiver application	N/A				
Startup, shutdown, malfunction report h	20	1	20	0	0
TOTAL ANNUAL BURDEN AND COST (rounded) i					

## Assumptions

- <sup>a</sup> Based on the 2015 RTR, we estimate that 12 phosphoric acid units and 11 phosphate fertilizers, for a total of 23 processing units, local
- b This cost is based on the following hourly labor rates times a 1.6 benefits multiplication factor to account for government overhead ex
- <sup>c</sup> Assumes EPA will attend 20 percent of stack tests. Only considers facilities with new emission points.
- <sup>d</sup> We have assumed that 7 percent of respondents will fail the initial performance test and must repeat it.
- e We have assumed that 10 percent of respondent will report exceedances. Respondents are required to report quarterly.
- $^{\rm f}$  We have assumed that 90 percent of existing respondents report no excess emissions semiannually.
- <sup>g</sup> This is a one-time activity. We assume the burden was already incured during the first year of the amendment.
- <sup>h</sup> No longer applies.
- <sup>1</sup> Totals have been rounded to 3 significant figures. Figures may not add exactly due to rounding.

## Fertilizers Production (40 CFR Part 63, Subparts AA and BB) (Renewal)

66.62 26.75

66.62	26./5	
(F) Managerial person hours per year (F=Ex0.05)	(G) Clerical person hours per year (G=Ex0.1)	(H) Total Cost per Year (\$) <sup>b</sup>
0	0	\$0
0	0	\$0
0	0	\$0
0	0	\$0
0	0	\$0
0	0	\$0
3	6	\$3,326.76
26	52	\$28,831.92
1.82	3.64	\$2,018.23
5.2	10.4	\$5,766.38
23.4	46.8	\$25,948.73
0	0	\$0
0	0	\$0
0	0	\$0.00
1,370		\$65,900

ted at 13 facilities will be subject to the rule. No additional respondents will become subject the rule over the three-year period of this ICl penses: \$66.62 for Managerial, \$49.44 for Technical and \$26.75 for Clerical. These rates are from the Office of Personnel Management (

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OPM) "2019 General Schedule" which excludes locality rates of pay.

Capital/Startup vs. Operation and Maintenance (O&M) Costs								
(A)	(B)	(C)	(D)	(E)	(F)	(G)		
Continuous Monitoring Device	Capital/Startup Cost for One Respondent	Number of New Respondents	Total Capital/Startup Cost, (B X C)	Annual O&M Costs for One Responden t	Number of Responden ts with	Total O&M,		
						(E X F)		
Temperature monitoring device	\$2,700	0	\$0	\$886	13	\$11,518		
Mercury testing	\$0	0	\$0	\$8,000	6	\$48,000		
TF testing	\$0	0	\$0	\$5,600	9	\$50,400		
Performance evaluation	\$0	0	\$0	\$2,000	23	\$46,000		
BLDS alarm	\$25,200	0	\$0	\$9,900	3	\$29,700		
Total			\$0			\$186,000		