

Attachment A - Table 1. Annual Respondent Burden and Cost of Recordkeeping and Reporting Requirements for Year 1 of the Final NESHAP for Area Sources: Asphalt Processing and Asphalt Roofing Manufacturing

Burden Item	Technical Hours per Occurrence	Number of Occurrences per Facility per Year	Technical Hours per Facility per Year	Number of Facilities	Technical Hours per Year (E=CxD)	Management Hours per Year (F=Ex0.05)	Clerical Hours per Year (G=Ex0.1)	Total Labor Costs per Year <sup>a</sup>	Total Non-Labor Costs per Year	Footnotes
	(A)	(B)	(C=AxB)	(D)	(E=CxD)	(F=Ex0.05)	(G=Ex0.1)			
1. Acquire and install recordkeeping technology and systems	4	1	4	38	150	7.5	15.0	\$7,623	\$5,340	b
2. Read and understand rule requirements	2	1	2	75	150	7.5	15.0	\$7,623		c
3. Required activities										
A. Initial performance tests	8	1	8	19	150	7.5	15.0	\$7,623	\$112,500	d, e
B. Engineering calculations	8	1	8	56	450	22.5	45.0	\$22,868		
C. Continuous parameter monitoring	0	0	0	75	0	0.0	0.0	\$0		f
4. Notification requirements										c
A. Initial notification that existing facilities are subject to the standard	2	1	2	75	150	7.5	15.0	\$7,623	\$563	g
B. Notifications for new area sources										
(1) Notification of intent to construct/reconstruct	4	0	0	75	0	0.0	0.0	\$0		h
(2) Notification of commencement of construction/reconstruction	4	0	0	75	0	0.0	0.0	\$0		h
(3) Notification of startup	4	0	0	75	0	0.0	0.0	\$0		h
C. Request for compliance extension	4	0	0	75	0	0.0	0.0	\$0		i
D. Notification of initial performance tests	2	1	2	19	38	1.9	3.8	\$1,906	\$141	
E. Notification of compliance status	2	1	2	75	150	7.5	15.0	\$7,623	\$563	
5. Recordkeeping requirements										
A. Plan activities	4	1	4	75	300	15.0	30.0	\$15,245		c
B. Implement activities										
(1) Record performance tests	1	1	1	19	19	0.9	1.9	\$953		c
(2) Record malfunctions	0.50	2	1	75	75	3.8	7.5	\$3,811		
(3) Continuous parameter monitoring calibration and maintenance	1	12	12	75	900	45.0	90.0	\$45,735		
C. Store, file, and maintain records	4	1	4	75	300	15.0	30.0	\$15,245		
6. Reporting requirements										
A. Gather information for semi-annual reports	4	2	8	75	600	30.0	60.0	\$30,490		
B. Semiannual compliance reports	4	2	8	75	600	30.0	60.0	\$30,490	\$1,125	k
7. Train personnel	8	1	8	75	600	30.0	60.0	\$30,490		l
8. Prepare for and participate in audits	0	0	0	75	0	0.0	0.0	\$0		m
<b>TOTALS</b>					4,631	232	463	\$235,345	\$120,231	
			<b>Total Hours</b>		<b>Total Labor Cost</b>		<b>Total Non-Labor Cost</b>		<b>Total Cost</b>	
		<b>Summary of Industry Burden</b>	5,326		\$235,345		\$120,231		\$355,575	
		<b>Total Annualized Capital</b>	0		\$0		\$0		\$0	
		<b>Summary of O&amp;M</b>	0		\$0		\$120,231		\$120,231	

<sup>a</sup> Labor costs are based upon the following hourly rates for 2007 from the Bureau of Labor Statistics (Technical \$19.98, Management \$29.81, and Clerical \$16.28) and an index loading factor of 1.2.

<sup>b</sup> Assumes 50 percent of existing facilities will need to purchase and install a pressure drop monitor. The remaining 50 percent are assumed to have recordkeeping technology and systems already in place at facilities for daily operations and to comply with existing regulations and permitting requirements.

<sup>c</sup> One-time activity for each facility in Year 1.

<sup>d</sup> Assumes initial performance tests are conducted by an emissions testing contractor at a cost of \$6,000 per piece of process equipment or PM control device.

<sup>e</sup> Assumes that performance tests are required for 25 percent of the existing facilities to demonstrate compliance with the final emission limits. The assumption was made that the remaining 75 percent of the industry have existing performance tests that demonstrate compliance with the final emission limits.

<sup>f</sup> Equipped with equipment to monitor process and existing control device parameters.

<sup>g</sup> Existing facilities must submit notification that they are subject to the standard within 120 days of the effective date (in Year 1).

<sup>h</sup> No new sources are expected in Year 1 following promulgation.

<sup>i</sup> Assumes that compliance extensions will not be necessary.

<sup>j</sup> Non-labor costs include operation and maintenance (O&M) costs for photocopying and mailing reports (assumed to be \$7.50 per report).

<sup>k</sup> Based upon training for continuous parameter monitoring system.

<sup>l</sup> Assume audits will not be performed in Year 1 due to limited compliance history.

Attachment A - Table 2. Annual Respondent Burden and Cost of Recordkeeping and Reporting Requirements for Year 2 of the Final NESHAP for Area Sources: Asphalt Processing and Asphalt Roofing Manufacturing

Burden Item	Technical Hours per Occurrence	Number of Occurrences per Facility per Year	Technical Hours per Facility per Year	Number of Facilities	Technical Hours per Year	Management Hours per Year	Clerical Hours per Year	Total Labor Costs per Year <sup>a</sup>	Total Non-Labor Costs per Year	Footnotes
	(A)	(B)	(C=AxB)	(D)	(E=CxD)	(F=Ex0.05)	(G=Ex0.1)			
1. Acquire and install recordkeeping technology and systems	4	0	0	38	0	0.0	0.0	\$0	\$0	b
2. Read and understand rule requirements	2	0	0	75	0	0.0	0.0	\$0	\$0	b
3. Required activities										
A. Initial performance tests	8	0	0	19	0	0.0	0.0	\$0	\$0	b
B. Engineering calculations	8	0	0	56	0	0.0	0.0	\$0	\$0	
C. Continuous parameter monitoring	0	0	0	75	0	0.0	0.0	\$0	\$0	c
4. Notification requirements										b
A. Initial notification that existing facilities are subject to the standard	2	0	0	75	0	0.0	0.0	\$0	\$0	b
B. Notifications for new area sources										
(1) Notification of intent to construct/reconstruct	4	0	0	75	0	0.0	0.0	\$0	\$0	d
(2) Notification of commencement of construction/reconstruction	4	0	0	75	0	0.0	0.0	\$0	\$0	d
(3) Notification of startup	4	0	0	75	0	0.0	0.0	\$0	\$0	d
C. Request for compliance extension	4	0	0	75	0	0.0	0.0	\$0	\$0	i
D. Notification of initial performance tests	2	0	0	19	0	0.0	0.0	\$0	\$0	
E. Notification of compliance status	2	0	0	75	0	0.0	0.0	\$0	\$0	
5. Recordkeeping requirements										
A. Plan activities	4	0	0	75	0	0.0	0.0	\$0	\$0	c
B. Implement activities										
(1) Record performance tests	1	1	1	19	19	0.9	1.9	\$953	\$0	c
(2) Record malfunctions	0.50	2	1	75	75	3.8	7.5	\$3,811	\$0	
(3) Continuous parameter monitoring calibration and maintenance	1	12	12	75	900	45.0	90.0	\$45,735	\$0	
C. Store, file, and maintain records	4	1	4	75	300	15.0	30.0	\$15,245	\$0	
6. Reporting requirements										
A. Gather information for semi-annual reports	4	2	8	75	600	30.0	60.0	\$30,490	\$0	
B. Semiannual compliance reports	4	2	8	75	600	30.0	60.0	\$30,490	\$1,125	f
7. Train personnel	8	1	8	75	600	30.0	60.0	\$30,490	\$0	b
8. Prepare for and participate in audits	0	0	0	75	0	0.0	0.0	\$0	\$0	g
<b>TOTALS</b>					3,094	155	309	\$157,214	\$1,125	
					<b>Total Hours</b>	<b>Total Labor Cost</b>	<b>Total Non-Labor Cost</b>	<b>Total Cost</b>		
					3,558	\$157,214	\$1,125	\$158,339		
					<b>Total Annualized Capital</b>	<b>\$0</b>	<b>\$0</b>	<b>\$0</b>		
					<b>Summary of O&amp;M</b>	<b>\$0</b>	<b>\$1,125</b>	<b>\$1,125</b>		

<sup>a</sup> Labor costs are based upon the following hourly rates for 2007 from the Bureau of Labor Statistics (Technical \$19.98, Management \$29.81, and Clerical \$16.28) and an index loading factor of 1.2.

<sup>b</sup> One-time activity for each facility in Year 1.

<sup>c</sup> There is no additional burden for monitoring equipment because add-on control devices are not expected to be needed to demonstrate compliance with the final emission limits and facilities are already equipped with equipment to monitor process and existing control device parameters.

<sup>d</sup> No new sources are expected in Year 2 following promulgation.

<sup>e</sup> Non-labor costs include operation and maintenance (O&M) costs for photocopying and mailing reports (assumed to be \$7.50 per report).

<sup>f</sup> Based upon training for continuous parameter monitoring system.

<sup>g</sup> Assume audits will not be performed in Year 2 due to limited compliance history.

Attachment A - Table 3. Annual Respondent Burden and Cost of Recordkeeping and Reporting Requirements for Year 3 of the Final NESHAP for Area Sources: Asphalt Processing and Asphalt Roofing Manufacturing

Burden Item	Technical Hours per Occurrence	Number of Occurrences per Facility per Year	Technical Hours per Facility per Year	Number of Facilities	Technical Hours per Year	Management Hours per Year	Clerical Hours per Year	Total Labor Costs per Year <sup>a</sup>	Total Non-Labor Costs per Year	Footnotes
	(A)	(B)	(C=AxB)	(D)	(E=CxD)	(F=Ex0.05)	(G=Ex0.1)			
1. Acquire and install recordkeeping technology and systems	4	0	0	38	0	0.0	0.0	\$0	\$0	b
2. Read and understand rule requirements	2	0	0	75	0	0.0	0.0	\$0		b
3. Required activities										
A. Initial performance tests	8	0	0	19	0	0.0	0.0	\$0	\$0	b
B. Engineering calculations	8	0	0	56	0	0.0	0.0	\$0		
C. Continuous parameter monitoring	0	0	0	75	0	0.0	0.0	\$0		c
4. Notification requirements										b
A. Initial notification that existing facilities are subject to the standard	2	0	0	75	0	0.0	0.0	\$0	\$0	b
B. Notifications for new area sources										
(1) Notification of intent to construct/reconstruct	4	0	0	75	0	0.0	0.0	\$0		d
(2) Notification of commencement of construction/reconstruction	4	0	0	75	0	0.0	0.0	\$0		d
(3) Notification of startup	4	0	0	75	0	0.0	0.0	\$0		d
C. Request for compliance extension	4	0	0	75	0	0.0	0.0	\$0		i
D. Notification of initial performance tests	2	0	0	19	0	0.0	0.0	\$0	\$0	
E. Notification of compliance status	2	0	0	75	0	0.0	0.0	\$0	\$0	
5. Recordkeeping requirements										
A. Plan activities	4	0	0	75	0	0.0	0.0	\$0		c
B. Implement activities										
(1) Record performance tests	1	1	1	19	19	0.9	1.9	\$953		c
(2) Record malfunctions	0.50	2	1	75	75	3.8	7.5	\$3,811		
(3) Continuous parameter monitoring calibration and maintenance	1	12	12	75	900	45.0	90.0	\$45,735		
C. Store, file, and maintain records	4	1	4	75	300	15.0	30.0	\$15,245		
6. Reporting requirements										
A. Gather information for semi-annual reports	4	2	8	75	600	30.0	60.0	\$30,490		
B. Semiannual compliance reports	4	2	8	75	600	30.0	60.0	\$30,490	\$1,125	f
7. Train personnel	8	1	8	75	600	30.0	60.0	\$30,490		b
8. Prepare for and participate in audits	0	0	0	75	0	0.0	0.0	\$0		g
<b>TOTALS</b>					3,094	155	309	\$157,214	\$1,125	
					<b>Total Labor Cost</b>	<b>Total Non-Labor Cost</b>	<b>Total Cost</b>			
					3,558	\$157,214	\$1,125	\$158,339		
					<b>Summary of Industry Burden</b>					
					<b>Total Annualized Capital</b>	\$0	\$0	\$0		
					<b>Summary of O&amp;M</b>	\$0	\$0	\$1,125	\$1,125	

<sup>a</sup> Labor costs are based upon the following hourly rates for 2007 from the Bureau of Labor Statistics (Technical \$19.98, Management \$29.81, and Clerical \$16.28) and an index loading factor of 1.2.

<sup>b</sup> One-time activity for each facility in Year 1.

<sup>c</sup> There is no additional burden for monitoring equipment because add-on control devices are not expected to be needed to demonstrate compliance with the final emission limits and facilities are already equipped with equipment to monitor process and existing control device parameters.

<sup>d</sup> No new sources are expected in Year 3 following promulgation.

<sup>e</sup> Non-labor costs include operation and maintenance (O&M) costs for photocopying and mailing reports (assumed to be \$7.50 per report).

<sup>f</sup> Based upon training for continuous parameter monitoring system.

<sup>g</sup> Assume audits will not be performed in Year 3 due to limited compliance history.

**Attachment A - Table 4. Summary of Respondent Burden for the Final NESHAP for Area Sources (Years 1 through 3): Asphalt Processing and Asphalt Roofing Manufacturing**

Year	Technical Hours	Management Hours	Clerical Hours	Total Hours	Labor Costs	Non-Labor Costs	Total Costs
1	4,631	231.6	463.1	5,326	\$235,345	\$120,231	\$355,575
2	3,094	154.7	309.4	3,558	\$157,214	\$1,125	\$158,339
3	3,094	154.7	309.4	3,558	\$157,214	\$1,125	\$158,339
Total	10,819	541	1,082	12,442	\$549,773	\$122,481	\$672,254
Average	3,606	180	361	4,147	\$183,258	\$40,827	\$224,085

Attachment B - Table 1. Annual Federal Government Burden and Cost of Recordkeeping and Reporting Requirements for Year 1 of the Final NESHAP for Area Sources: Asphalt Processing and Asphalt Roofing Manufacturing

Burden Item	Technical Hours per Occurrence	Number of Occurrences per Year	Technical Hours per Year	Management Hours per Year	Clerical Hours per Year	Total Labor Costs per Year <sup>a</sup>	Total Non-Labor Costs per Year	Footnotes
	(A)	(B)	(C=AxB)	(D=Cx0.05)	(E=CX0.1)			
1. Read and understand rule requirements	2	25	50	2.5	5.0	\$2,939		b, c
2. Required activities								
A. Observe initial performance tests	8	10	80	4.0	8.0	\$4,702	\$1,000	d, e
B. Review initial performance test reports, engineering calculations, and operating parameters	4	5	19	0.9	1.9	\$1,102		f
C. Enter and update information into agency recordkeeping system	1	5	5	0.2	0.5	\$275		
3. Excess emissions - enforcement activities	0	0	0	0.0	0.0	\$0		g
4. Notification requirements								
A. Review initial notification that existing facilities are subject to the standard	1	75	75	3.8	7.5	\$4,408		h
B. Notifications for new area sources								
(1) Review notification of intent to construct/reconstruct	4	0	0	0.0	0.0	\$0		i
(2) Review notification of commencement of construction/reconstruction	2	0	0	0.0	0.0	\$0		i
(3) Review notification of startup	2	0	0	0.0	0.0	\$0		i
C. Review request for compliance extension	2	0	0	0.0	0.0	\$0		j
D. Review notification of initial performance tests	1	5	5	0.2	0.5	\$275		k
E. Review notification of compliance status	4	19	75	3.8	7.5	\$4,408		k
5. Reporting requirements - review semiannual compliance reports	4	19	75	3.8	7.5	\$4,408		l
<b>TOTALS</b>			383	19.2	38.3	\$22,517	\$1,000	
			<b>Total Hours</b>	<b>Total Labor Cost</b>	<b>Total Non-Labor Cost<sup>m</sup></b>	<b>Total Cost</b>		
<b>Summary of Agency Burden</b>			441	\$22,517	\$1,000	\$23,517		
<b>Total Annualized Capital</b>			0	\$0	\$0	\$0		
<b>Summary of O&amp;M</b>			441	\$22,517	\$1,000	\$23,517		

Labor costs are based on the following loaded hourly rates for 2000 from the Office of Personnel Management (loading factor = 0.6): Technical \$51.60, Management \$85.28, and Clerical \$29.04.

<sup>b</sup> Facilities subject to the final standards are located in each of the 10 EPA Regions.

<sup>c</sup> One-time only costs.

<sup>d</sup> Based upon 1 EPA technical personnel in each Region attending the initial performance test for 1 area source facility in Year 1.

<sup>e</sup> Travel expenses for attending initial performance tests = [(1 person)(1 day)(\$100 per diem per person)+(\$600 airfare per round trip)](no. of trips)

<sup>f</sup> Assumes EPA technical personnel will review 25% of the performance test and monitoring parameter reports in Year 1.

<sup>g</sup> Assume no enforcement activities will be conducted in Year 1.

<sup>h</sup> Existing area source facilities must submit notification that they are subject to the standard within 120 days of the effective date (in Year 1).

<sup>i</sup> No new sources are expected in Year 1 following promulgation.

<sup>j</sup> Assumes that compliance extensions will not be necessary.

<sup>k</sup> Assumes that EPA technical personnel will review 25% of the initial performance test and compliance status notifications in Year 1.

<sup>l</sup> Assumes EPA technical personnel review will 25% of the semiannual compliance reports in Year 1.

Attachment B - Table 2. Annual Federal Government Burden and Cost of Recordkeeping and Reporting Requirements for Year 2 of the Final NESHP for Area Sources:  
Asphalt Processing and Asphalt Roofing Manufacturing

Burden Item	Technical Hours per Occurrence	Number of Occurrences per Year	Technical Hours per Year	Management Hours per Year	Clerical Hours per Year	Total Labor Costs per Year <sup>a</sup>	Total Non-Labor Costs per Year	Footnotes
	(A)	(B)	(C=AxB)	(D=Cx0.05)	(E=CX0.1)			
1. Read and understand rule requirements	2	0	0	0.0	0.0	\$0		b
2. Required activities								
A. Observe initial performance tests	8	0	0	0.0	0.0	\$0	\$0	b
B. Review initial performance test reports, engineering calculations, and operating parameters	4	0	0	0.0	0.0	\$0		b
C. Enter and update information into agency recordkeeping system	1	0	0	0.0	0.0	\$0		
3. Excess emissions - enforcement activities	0	0	0	0.0	0.0	\$0		c
4. Notification requirements								
A. Review initial notification that existing facilities are subject to the standard	1	0	0	0.0	0.0	\$0		c
B. Notifications for new area sources								
(1) Review notification of intent to construct/reconstruct	4	0	0	0.0	0.0	\$0		d
(2) Review notification of commencement of construction/reconstruction	2	0	0	0.0	0.0	\$0		d
(3) Review notification of startup	2	0	0	0.0	0.0	\$0		d
C. Review request for compliance extension	2	0	0	0.0	0.0	\$0		e
D. Review notification of initial performance tests	1	0	0	0.0	0.0	\$0		b
E. Review notification of compliance status	4	0	0	0.0	0.0	\$0		b
5. Reporting requirements - review semiannual compliance reports	4	19	75	3.8	7.5	\$4,408		f
<b>TOTALS</b>			75	3.8	7.5	\$4,408	\$0	
			<b>Total Hours</b>	<b>Total Labor Cost</b>	<b>Total Non-Labor Cost<sup>m</sup></b>	<b>Total Cost</b>		
<b>Summary of Agency Burden</b>			<b>86</b>	<b>\$4,408</b>	<b>\$0</b>	<b>\$4,408</b>		
<b>Total Annualized Capital</b>			<b>0</b>	<b>\$0</b>	<b>\$0</b>	<b>\$0</b>		
<b>Summary of O&amp;M</b>			<b>86</b>	<b>\$4,408</b>	<b>\$0</b>	<b>\$4,408</b>		

<sup>a</sup> \$85.28, and Clerical \$29.04.

<sup>b</sup> One-time only costs.

<sup>c</sup> Assume no enforcement activities will be conducted in Year 2.

<sup>d</sup> No new sources are expected in Year 2 following promulgation.

<sup>e</sup> Assumes that compliance extensions will not be necessary.

<sup>f</sup> Assumes EPA technical personnel review will 25% of the semiannual compliance reports in Year 2.

Attachment B - Table 3. Annual Federal Government Burden and Cost of Recordkeeping and Reporting Requirements for Year 3 of the Final NESHAP for Area Sources: Asphalt Processing and Asphalt Roofing Manufacturing

Burden Item	Technical Hours per Occurrence	Number of Occurrences per Year	Technical Hours per Year	Management Hours per Year	Clerical Hours per Year	Total Labor Costs per Year <sup>a</sup>	Total Non-Labor Costs per Year	Footnotes
	(A)	(B)	(C=AxB)	(D=Cx0.05)	(E=CX0.1)			
1. Read and understand rule requirements	2	0	0	0.0	0.0	\$0		b
2. Required activities								
A. Observe initial performance tests	8	0	0	0.0	0.0	\$0	\$0	b
B. Review initial performance test reports, engineering calculations, and operating parameters	4	0	0	0.0	0.0	\$0		b
C. Enter and update information into agency recordkeeping system	1	0	0	0.0	0.0	\$0		
3. Excess emissions - enforcement activities	0	0	0	0.0	0.0	\$0		c
4. Notification requirements								
A. Review initial notification that existing facilities are subject to the standard	1	0	0	0.0	0.0	\$0		c
B. Notifications for new area sources								
(1) Review notification of intent to construct/reconstruct	4	0	0	0.0	0.0	\$0		d
(2) Review notification of commencement of construction/reconstruction	2	0	0	0.0	0.0	\$0		d
(3) Review notification of startup	2	0	0	0.0	0.0	\$0		d
C. Review request for compliance extension	2	0	0	0.0	0.0	\$0		e
D. Review notification of initial performance tests	1	0	0	0.0	0.0	\$0		b
E. Review notification of compliance status	4	0	0	0.0	0.0	\$0		b
5. Reporting requirements - review semiannual compliance reports	4	19	75	3.8	7.5	\$4,408		f
<b>TOTALS</b>			75	3.8	7.5	\$4,408	\$0	
			<b>Total Hours</b>	<b>Total Labor Cost</b>	<b>Total Non-Labor Cost<sup>m</sup></b>	<b>Total Cost</b>		
<b>Summary of Agency Burden</b>			86	\$4,408	\$0	\$4,408		
<b>Total Annualized Capital</b>			0	\$0	\$0	\$0		
<b>Summary of O&amp;M</b>			86	\$4,408	\$0	\$4,408		

<sup>a</sup> \$85.28, and Clerical \$29.04.

<sup>b</sup> One-time only costs.

<sup>c</sup> Assume no enforcement activities will be conducted in Year 3.

<sup>d</sup> No new sources are expected in Year 3 following promulgation.

<sup>e</sup> Assumes that compliance extensions will not be necessary.

<sup>f</sup> Assumes EPA technical personnel review will 25% of the semiannual compliance reports in Year 3.

**Attachment B - Table 4. Summary of Federal Government Burden for the Final NESHAP for Area Sources  
(Years 1 through 3): Asphalt Processing and Asphalt Roofing Manufacturing**

Year	Technical Hours	Management Hours	Clerical Hours	Total Hours	Labor Costs	Non-Labor Costs	Total Costs
1	383	19.2	38.3	441	\$22,517	\$1,000	\$23,517
2	75	3.8	7.5	86	\$4,408	\$0	\$4,408
3	75	3.8	7.5	86	\$4,408	\$0	\$4,408
Total Burden	533	27	53	613	\$31,333	\$1,000	\$32,333
Average Burden	178	9	18	204	\$10,444	\$333	\$10,778