Data Entry for	PM25	Updated on	November 5, 2012
Overall Comment		Report Org	133

Sampling Schedule		Sampler Type		Spares	
1/1 (daily)	148	sequential	733	110	Sampling Platforms 975
1/3	585	single chanel	144	22	
1/6	270	single channel collocated	190		
seasonal	52	continuous	606	91	
Filter-Based Total	1055	speciation	198		
Avg Percent Sampled	39%	Analyzer Spare Factor	15.00%		

General Costs

Element 1 - Network Design	Years Amoritized	7	Comment					Year 1 2013			Year 2 2014			Year 3 2015			Average Yearly Costs Labor	Non Labor O & M	Equipment
a) Network Design (by Reporting Organization)							Per RO	Element 1 - Network Design			Element 1 - Network Design			Element 1 - Network Design					
								Per RO	Entire Network		Per RO	Entire Network		Per RO	Entire Network				
Labor Category	TEC1	TEC2	PRO1	PRO2	PRO3	PRO4	Total	Adjusted	Total	Yearly Cost	Adjusted	Total	Yearly Cost	Adjusted	Total	Yearly Cost			
Hours per RO	0	0	0	5	5	5	15	NA	1,995	285	NA	1,995	285	NA	1,995	285	285	NA	NA
Costs per RO	**0**	**0**	**0**	**246**	**277**	**293**	**$816**	**$978**	**$130,017**	**$18,574**	**$998**	**$132,730**	**$18,961**	**$1,018**	**$135,334**	**$19,333**	**$18,956**	**NA**	**NA**
b) Site Selection (Reporting Organization)																			
Hours per RO	0	0	2	2	2	0	6	NA	798	114	NA	798	114	NA	798	114	114	NA	NA
Costs per RO	**0**	**0**	**88**	**99**	**111**	**0**	**$298**	**$357**	**$47,482**	**$6,783**	**$364**	**$48,472**	**$6,925**	**$372**	**$49,424**	**$7,061**	**$6,923**	**NA**	**NA**
Sub Total - Hours	0	0	2	7	7	5	21	NA	2,793	399	NA	2,793	399	NA	2,793	399	399	NA	NA
Sub Total - Costs	**$0**	**$0**	**$88**	**$345**	**$388**	**$293**	**$1,114**	**$1,335**	**$177,498**	**$25,357**	**$1,362**	**$181,202**	**$25,886**	**$1,389**	**$184,758**	**$26,394**	**$25,879**	**NA**	**NA**

Element 2 - Site Installation		Years Amoritized	7	Comment					Element 2 - Site Installation			Element 2 - Site Installation			Element 2 - Site Installation					
	Unit cost	Year							Per Site	Entire Network		Per Site	Entire Network		Per Site	Entire Network				
Materials									Adjusted	Total	Yearly Cost	Adjusted	Total	Yearly Cost	Adjusted	Total	Yearly Cost			
Single-channel analyzers	**$7,000**	**2013**							**$8,386**	**$1,207,584**	**$172,512**	**$8,561**	**$1,232,784**	**$176,112**	**$8,729**	**$1,256,976**	**$179,568**	**NA**	**NA**	**$176,064**
Spare Single-channel analyzers	**$7,000**	**2013**							**$8,386**	**$181,138**	**$25,877**	**$8,561**	**$184,918**	**$26,417**	**$8,729**	**$188,546**	**$26,935**	**NA**	**NA**	**$26,410**
Collocated Single-channel analyzers	**$7,000**	**2013**							**$8,386**	**$1,593,340**	**$227,620**	**$8,561**	**$1,626,590**	**$232,370**	**$8,729**	**$1,658,510**	**$236,930**	**NA**	**NA**	**$232,307**
Seasonal Single-channel analyzers	**$11,000**	**2013**							**$13,178**	**$685,256**	**$97,894**	**$8,561**	**$445,172**	**$63,596**	**$8,729**	**$453,908**	**$64,844**	**NA**	**NA**	**$75,445**
Sequential Sampler	**$11,000**	**2013**							**$13,178**	**$9,659,474**	**$1,379,925**	**$13,453**	**$9,861,049**	**$1,408,721**	**$13,717**	**$10,054,561**	**$1,436,366**	**NA**	**NA**	**$1,408,337**
Spare Sequential Samplers	**$11,000**	**2013**							**$13,178**	**$1,448,921**	**$206,989**	**$13,453**	**$1,479,157**	**$211,308**	**$13,717**	**$1,508,184**	**$215,455**	**NA**	**NA**	**$211,251**
Continuous Sampler	**$18,300**	**2013**							**$21,923**	**$13,285,580**	**$1,897,940**	**$22,381**	**$13,562,825**	**$1,937,546**	**$22,820**	**$13,828,981**	**$1,975,569**	**NA**	**NA**	**$1,937,018**
Spare Continuous Samplers	**$18,300**	**2013**							**$21,923**	**$1,992,837**	**$284,691**	**$22,381**	**$2,034,424**	**$290,632**	**$22,820**	**$2,074,347**	**$296,335**	**NA**	**NA**	**$290,553**
Speciation Sampler	**$12,000**	**2013**							**$14,376**	**$2,846,448**	**$406,635**	**$14,676**	**$2,905,848**	**$415,121**	**$14,964**	**$2,962,872**	**$423,267**	**NA**	**NA**	**$415,008**
Data acquisition (laptop/PDA)	**$400**	**2013**							**$479**	**$536,225**	**$76,604**	**$489**	**$547,415**	**$78,202**	**$499**	**$558,157**	**$79,737**	**NA**	**NA**	**$78,181**
Sampling Platform	**$2,000**	**2013**							**$2,396**	**$2,336,100**	**$333,729**	**$2,446**	**$2,384,850**	**$340,693**	**$2,494**	**$2,431,650**	**$347,379**	**NA**	**NA**	**$340,600**
Labor	**TEC1**	**TEC2**	**PRO1**	**PRO2**	**PRO3**	**PRO4**	**Per Site Total**													
Procurement Hours per site	0	0	8	8	0	0	16		NA	34,327	4904	NA	34,327	4904	NA	34,327	4904	4,904	NA	NA
Cost per site	**0**	**0**	**353**	**394**	**0**	**0**	**$747**		**$895**	**$1,919,976**	**$274,282**	**$914**	**$1,960,042**	**$280,006**	**$932**	**$1,998,506**	**$285,501**	**$279,930**	**NA**	**NA**
Installation																				
a) Single Channel Hours per site	0	4	2	2	0	0	8		NA	2,672	382	NA	2,672	382	NA	2,672	382	382	NA	NA
Cost per site	**0**	**163**	**88**	**99**	**0**	**0**	**$350**		**$419**	**$140,046**	**$20,007**	**$428**	**$142,969**	**$20,424**	**$436**	**$145,774**	**$20,825**	**$20,419**	**NA**	**NA**
b) Sequential Hours per site	0	4	2	2	0	0	8		NA	5,864	838	NA	5,864	838	NA	5,864	838	838	NA	NA
Cost per site	**0**	**163**	**88**	**99**	**0**	**0**	**$350**		**$419**	**$307,347**	**$43,907**	**$428**	**$313,761**	**$44,823**	**$436**	**$319,918**	**$45,703**	**$44,811**	**NA**	**NA**
c) Seasonal Hours per site	0	4	2	2	0	0	8		NA	416	59	NA	416	59	NA	416	59	59	NA	NA
Cost per site	**0**	**163**	**88**	**99**	**0**	**0**	**$350**		**$419**	**$21,804**	**$3,115**	**$428**	**$22,259**	**$3,180**	**$436**	**$22,695**	**$3,242**	**$3,179**	**NA**	**NA**
d) Continuous Hours per site	0	2	3	3	0	0	8		NA	4,848	693	NA	4,848	693	NA	4,848	693	693	NA	NA
Cost per site	**0**	**82**	**132**	**148**	**0**	**0**	**$362**		**$434**	**$262,808**	**$37,544**	**$443**	**$268,292**	**$38,327**	**$451**	**$273,557**	**$39,080**	**$38,317**	**NA**	**NA**
e) Speciation Hours per site	0	2	8	2	0	0	12		NA	2,376	339	NA	2,376	339	NA	2,376	339	339	NA	NA
Cost per site	**0**	**82**	**353**	**99**	**0**	**0**	**$534**		**$640**	**$126,667**	**$18,095**	**$653**	**$129,310**	**$18,473**	**$666**	**$131,848**	**$18,835**	**$18,468**	**NA**	**NA**
Sub Total - Hours	0	16	17	11	0	0	44		NA	36,999	5,625	NA	36,999	5,625	NA	36,999	5,625	5,625	NA	NA
Sub Total - Costs	**$0**	**$653**	**$749**	**$544**	**$0**	**$0**	**$1,946**		**$129,016**	**$38,551,550**	**$5,507,364**	**$126,817**	**$39,101,664**	**$5,585,952**	**$129,305**	**$39,868,991**	**$5,695,570**	**$405,123**	**NA**	**$5,191,173**

Element 3 - Sampling and Analysis			Comment					Element 3 - Supplies and Site Visits			Element 3 - Supplies and Site Visits			Element 3 - Supplies and Site Visits					
								Per Site	Entire Network		Per Site	Entire Network		Per Site	Entire Network				
Supplies	**Unit cost**	**Year**						Adjusted	Total	Yearly Cost	Adjusted	Total	Yearly Cost	Adjusted	Total	Yearly Cost			
Filters	**$400**	**2013**						**$423**	**$446,375**	**$446,375**	**$432**	**$455,690**	**$455,690**	**$440**	**$464,632**	**$464,632**	**NA**	**$455,566**	**NA**
Speciation sampling national contract	**$7,057,204**	**2013**						**$8,454,530**	**$8,454,530**	**$8,454,530**	**$8,630,960**	**$8,630,960**	**$8,630,960**	**$8,800,333**	**$8,800,333**	**$8,800,333**	**NA**	**NA**	**$8,628,608**
Microbalance	**$3,000**	**2013**						**$3,594**	**$3,594**	**$513**	**$3,669**	**$3,669**	**$524**	**$3,741**	**$3,741**	**$534**	**NA**	**NA**	**$524**
Clean Room for Weighing	**$75,000**	**2013**						**$89,850**	**$89,850**	**$12,836**	**$91,725**	**$91,725**	**$13,104**	**$93,525**	**$93,525**	**$13,361**	**NA**	**NA**	**$13,100**
Routine visits	**TEC1**	**TEC2**	**PRO1**	**PRO2**	**PRO3**	**PRO4**	**Per Site Total**												
1/1, 1/3, and 1/6 sites Hours per site	0	80	80	20	0	0	180	NA	103,590	103,590	NA	103,590	103,590	NA	103,590	103,590	103,590	NA	NA
Cost per site	**0**	**3269**	**3530**	**985**	**0**	**0**	**$7,784**	**$9,325**	**$5,366,671**	**$5,366,671**	**$9,520**	**$5,478,663**	**$5,478,663**	**$9,707**	**$5,586,176**	**$5,586,176**	**$5,477,170**	**NA**	**NA**
Seasonal sites Hours per site	0	20	20	5	0	0	45	NA	2,340	2,340	NA	2,340	2,340	NA	2,340	2,340	2,340	NA	NA
Cost per site	**0**	**817**	**882**	**246**	**0**	**0**	**$1,945**	**$2,330**	**$121,166**	**$121,166**	**$2,379**	**$123,694**	**$123,694**	**$2,425**	**$126,122**	**$126,122**	**$123,661**	**NA**	**NA**
Continuous sites Hours per site	0	0	6	26	0	0	32	NA	19,392	19,392	NA	19,392	19,392	NA	19,392	19,392	19,392	NA	NA
Cost per site	**0**	**0**	**265**	**1281**	**0**	**0**	**$1,546**	**$1,852**	**$1,122,377**	**$1,122,377**	**$1,891**	**$1,145,799**	**$1,145,799**	**$1,928**	**$1,168,284**	**$1,168,284**	**$1,145,487**	**NA**	**NA**
Speciation Hours per site	0	0	90	90	0	0	180	NA	35,640	35,640	NA	35,640	35,640	NA	35,640	35,640	35,640	NA	NA
Cost per site	**0**	**0**	**3971**	**4434**	**0**	**0**	**$8,405**	**$10,069**	**$1,993,700**	**$1,993,700**	**$10,279**	**$2,035,304**	**$2,035,304**	**$10,481**	**$2,075,245**	**$2,075,245**	**$2,034,750**	**NA**	**NA**
Laboratory Hours per site	0	108	0	132	0	0	240	94.2	45,819	45,819	94.2	45,819	45,819	94.2	45,819	45,819	45,819	NA	NA
Cost per site	**0**	**4413**	**0**	**6503**	**0**	**0**	**$10,916**	**$13,077**	**$6,362,140**	**$6,362,140**	**$13,350**	**$6,494,905**	**$6,494,905**	**$13,612**	**$6,622,361**	**$6,622,361**	**$6,493,135**	**NA**	**NA**
Sub Total - Hours	0	208	196	273	0	0	677	NA	206,781	206,781	NA	206,781	206,781	NA	206,781	206,781	19,392	NA	NA
Sub Total - Costs	**$0**	**$8,499**	**$4,677**	**$9,015**	**$0**	**$0**	**$22,191**	**$8,491,608**	**$23,866,959**	**$23,866,959**	**$8,668,811**	**$24,365,017**	**$24,365,017**	**$8,838,927**	**$24,843,153**	**$24,843,153**	**$15,274,202**	**$455,566**	**$8,642,232**

Element 4 - Maintenance					Comment				Element 4 - Maintenance			Element 4 - Maintenance			Element 4 - Maintenance					
									Per Site	Entire Network		Per Site	Entire Network		Per Site	Entire Network				
Spare parts/supplies		**Unit cost**	**Year**						**Adjusted**	**Total**	**Yearly Cost**	**Adjusted**	**Total**	**Yearly Cost**	**Adjusted**	**Total**	**Yearly Cost**			
Sequential		**$300**	**2013**						**$359**	**$263,440**	**$263,440**	**$367**	**$268,938**	**$268,938**	**$374**	**$274,215**	**$274,215**	**NA**	**$268,864**	**NA**
Single channel		**$250**	**2013**						**$300**	**$100,033**	**$100,033**	**$306**	**$102,121**	**$102,121**	**$312**	**$104,125**	**$104,125**	**NA**	**$102,093**	**NA**
Seasonal		**$275**	**2013**						**$329**	**$17,131**	**$17,131**	**$336**	**$17,489**	**$17,489**	**$343**	**$17,832**	**$17,832**	**NA**	**$17,484**	**NA**
Continuous		**$155**	**2013**						**$186**	**$112,528**	**$112,528**	**$190**	**$114,876**	**$114,876**	**$193**	**$117,131**	**$117,131**	**NA**	**$114,845**	**NA**
Speciation		**$500**	**2013**						**$599**	**$118,602**	**$118,602**	**$612**	**$121,077**	**$121,077**	**$624**	**$123,453**	**$123,453**	**NA**	**$121,044**	**NA**
Remedial Repairs		**TEC1**	**TEC2**	**PRO1**	**PRO2**	**PRO3**	**PRO4**	**Per Site Total**												
Sequential	Hours per site	0	2	6	6	0	0	14	14	10,262	10,262	14	10,262	10,262	14	10,262	10,262	10,262	NA	NA
	Cost per site	**$0**	**$82**	**$265**	**$296**	**$0**	**$0**	**$643**	**$770**	**$564,640**	**$564,640**	**$786**	**$576,423**	**$576,423**	**$802**	**$587,735**	**$587,735**	**$576,266**	**NA**	**NA**
Single channel	Hours per site	0	2	2	4	0	0	8	8	2,672	2,672	8	2,672	2,672	8	2,672	2,672	2,672	NA	NA
	Cost per site	**$0**	**$82**	**$88**	**$197**	**$0**	**$0**	**$367**	**$440**	**$146,848**	**$146,848**	**$449**	**$149,913**	**$149,913**	**$458**	**$152,855**	**$152,855**	**$149,872**	**NA**	**NA**
Seasonal	Hours per site	0	2	6	6	0.0	0	14	14	728	728	14	728	728	14	728	728	728	NA	NA
	Cost per site	**$0**	**$82**	**$265**	**$296**	**$0**	**$0**	**$643**	**$770**	**$40,056**	**$40,056**	**$786**	**$40,892**	**$40,892**	**$802**	**$41,695**	**$41,695**	**$40,881**	**NA**	**NA**
Continuous	Hours per site	0	2	6	6	0.0	0	14	14	8,484	8,484	14	8,484	8,484	14	8,484	8,484	8,484	NA	NA
	Cost per site	**$0**	**$82**	**$265**	**$296**	**$0**	**$0**	**$643**	**$770**	**$466,810**	**$466,810**	**$786**	**$476,552**	**$476,552**	**$802**	**$485,904**	**$485,904**	**$476,422**	**NA**	**NA**
Speciation	Hours per site	0	0	4	6	4.0	0	14	14	2,772	2,772	14	2,772	2,772	14	2,772	2,772	2,772	NA	NA
	Cost per site	**$0**	**$0**	**$176**	**$296**	**$222**	**$0**	**$694**	**$831**	**$164,620**	**$164,620**	**$849**	**$168,055**	**$168,055**	**$865**	**$171,353**	**$171,353**	**$168,009**	**NA**	**NA**
Routine Maintenance		**TEC1**	**TEC2**	**PRO1**	**PRO2**	**PRO3**	**PRO4**	**Per Site Total**												
Sequential	Hours per site	0	2	6	8	0	0	16	16	11,728	11,728	16	11,728	11,728	16	11,728	11,728	11,728	NA	NA
	Cost per site	**$0**	**$82**	**$265**	**$394**	**$0**	**$0**	**$741**	**$888**	**$650,697**	**$650,697**	**$906**	**$664,276**	**$664,276**	**$924**	**$677,312**	**$677,312**	**$664,095**	**NA**	**NA**
Single channel	Hours per site	0	2	4	6	0	0	12	12	4,008	4,008	12	4,008	4,008	12	4,008	4,008	4,008	NA	NA
	Cost per site	**$0**	**$82**	**$176**	**$296**	**$0**	**$0**	**$554**	**$664**	**$221,673**	**$221,673**	**$678**	**$226,299**	**$226,299**	**$691**	**$230,740**	**$230,740**	**$226,237**	**NA**	**NA**
Seasonal	Hours per site	0	2	6	8	0.0	0	16	16	832	832	16	832	832	16	832	832	832	NA	NA
	Cost per site	**$0**	**$82**	**$265**	**$394**	**$0**	**$0**	**$741**	**$888**	**$46,161**	**$46,161**	**$906**	**$47,125**	**$47,125**	**$924**	**$48,049**	**$48,049**	**$47,112**	**NA**	**NA**
Continuous	Hours per site	0	5	5	4	0.0	0	14	14	8,484	8,484	14	8,484	8,484	14	8,484	8,484	8,484	NA	NA
	Cost per site	**$0**	**$204**	**$221**	**$197**	**$0**	**$0**	**$622**	**$745**	**$451,565**	**$451,565**	**$761**	**$460,988**	**$460,988**	**$776**	**$470,034**	**$470,034**	**$460,862**	**NA**	**NA**
Speciation	Hours per site	0	0	4	12	0.0	0	16	16	3,168	3,168	16	3,168	3,168	16	3,168	3,168	3,168	NA	NA
	Cost per site	**$0**	**$0**	**$176**	**$591**	**$0**	**$0**	**$767**	**$919**	**$181,935**	**$181,935**	**$938**	**$185,732**	**$185,732**	**$956**	**$189,377**	**$189,377**	**$185,681**	**NA**	**NA**
Sub Total - Hours		0	19	49	66	4	0	138	138	53,138	53,138	138	53,138	53,138	138	53,138	53,138	53,138	NA	NA
Sub Total - Costs		**$0**	**$778**	**$2,162**	**$3,253**	**$222**	**$0**	**$6,415**	**$7,685**	**$3,546,741**	**$3,546,741**	**$7,846**	**$3,620,755**	**$3,620,755**	**$8,000**	**$3,691,808**	**$3,691,808**	**$2,995,438**	**$624,330**	**NA**

Element 5 - Data Management					Comment				Element 5 - Data Management			Element 5 - Data Management			Element 5 - Data Management					
								Per Site	**Per Site**	**Entire Network**		**Per Site**	**Entire Network**		**Per Site**	**Entire Network**				
Data aquisition/processing		**TEC1**	**TEC2**	**PRO1**	**PRO2**	**PRO3**	**PRO4**	**Total**	**Adjusted**	**Total**	**Yearly Cost**	**Adjusted**	**Total**	**Yearly Cost**	**Adjusted**	**Total**	**Yearly Cost**			
Sequential	Hours per site	0	18	54	18	0	0	90	90	65,970	65,970	90	65,970	65,970	90	65,970	65,970	65,970	NA	NA
	Cost per site	**0**	**735**	**2382**	**887**	**0**	**0**	**$4,004**	**$4,797**	**$3,516,049**	**$3,516,049**	**$4,897**	**$3,589,422**	**$3,589,422**	**$4,993**	**$3,659,860**	**$3,659,860**	**$3,588,444**	**NA**	**NA**
Single-channel	Hours per site	0	0	6	12	0	0	18	18	6,012	6,012	18	6,012	6,012	18	6,012	6,012	6,012	NA	NA
	Cost per site	**0**	**0**	**265**	**591**	**0**	**0**	**$856**	**$1,025**	**$342,513**	**$342,513**	**$1,047**	**$349,661**	**$349,661**	**$1,067**	**$356,522**	**$356,522**	**$349,565**	**NA**	**NA**
Seasonal	Hours per site	0	18	54	18	0	0	90	90	4,680	4,680	90	4,680	4,680	90	4,680	4,680	4,680	NA	NA
	Cost per site	**0**	**735**	**2382**	**887**	**0**	**0**	**$4,004**	**$4,797**	**$249,433**	**$249,433**	**$4,897**	**$254,638**	**$254,638**	**$4,993**	**$259,635**	**$259,635**	**$254,569**	**NA**	**NA**
Continuous	Hours per site	0	0	2.5	10.5	3	0	16	16	9,696	9,696	16	9,696	9,696	16	9,696	9,696	9,696	NA	NA
	Cost per site	**0**	**0**	**110**	**517**	**166**	**0**	**$793**	**$950**	**$575,708**	**$575,708**	**$970**	**$587,722**	**$587,722**	**$989**	**$599,256**	**$599,256**	**$587,562**	**NA**	**NA**
Data Reporting		**TEC1**	**TEC2**	**PRO1**	**PRO2**	**PRO3**	**PRO4**	**Total**	**Adjusted**	**Total**	**Yearly Cost**	**Adjusted**	**Total**	**Yearly Cost**	**Adjusted**	**Total**	**Yearly Cost**			
Sequential	Hours per site	0	4.5	13.5	4.5	0	0	22.5	23	16,493	16,493	23	16,493	16,493	22.5	16,493	16,493	16,493	NA	NA
	Cost per site	**0**	**184**	**596**	**222**	**0**	**0**	**$1,002**	**$1,200**	**$879,890**	**$879,890**	**$1,225**	**$898,252**	**$898,252**	**$1,249**	**$915,879**	**$915,879**	**$898,007**	**NA**	**NA**
Single-channel	Hours per site	0	1	2	1	2	0	6	6	2,004	2,004	6	2,004	2,004	6.0	2,004	2,004	2,004	NA	NA
	Cost per site	**0**	**41**	**88**	**49**	**111**	**0**	**$289**	**$346**	**$115,638**	**$115,638**	**$353**	**$118,051**	**$118,051**	**$360**	**$120,368**	**$120,368**	**$118,019**	**NA**	**NA**
Seasonal	Hours per site	0	4.5	13.5	4.5	0	0	22.5	23	1,170	1,170	23	1,170	1,170	22.5	1,170	1,170	1,170	NA	NA
	Cost per site	**0**	**184**	**596**	**222**	**0**	**0**	**$1,002**	**$1,200**	**$62,421**	**$62,421**	**$1,225**	**$63,723**	**$63,723**	**$1,249**	**$64,974**	**$64,974**	**$63,706**	**NA**	**NA**
Continuous	Hours per site	0	0	4	6	2	0	12	12	7,272	7,272	12	7,272	7,272	12.0	7,272	7,272	7,272	NA	NA
	Cost per site	**0**	**0**	**176**	**296**	**111**	**0**	**$583**	**$698**	**$423,251**	**$423,251**	**$713**	**$432,083**	**$432,083**	**$727**	**$440,563**	**$440,563**	**$431,966**	**NA**	**NA**
Data Validation		**TEC1**	**TEC2**	**PRO1**	**PRO2**	**PRO3**	**PRO4**	**Total**	**Adjusted**	**Total**	**Yearly Cost**	**Adjusted**	**Total**	**Yearly Cost**	**Adjusted**	**Total**	**Yearly Cost**			
Sequential	Hours per site	0	9	9	18	27	0	63	63	46,179	46,179	63	46,179	46,179	63.0	46,179	46,179	46,179	NA	NA
	Cost per site	**0**	**368**	**397**	**887**	**1498**	**0**	**$3,150**	**$3,774**	**$2,766,122**	**$2,766,122**	**$3,852**	**$2,823,846**	**$2,823,846**	**$3,928**	**$2,879,261**	**$2,879,261**	**$2,823,076**	**NA**	**NA**
Single-channel	Hours per site	0	0	4	6	2	0	12	12	3,340	3,340	12	3,340	3,340	12.0	3,340	3,340	3,340	NA	NA
	Cost per site	**0**	**0**	**176**	**296**	**111**	**0**	**$583**	**$698**	**$233,277**	**$233,277**	**$713**	**$238,145**	**$238,145**	**$727**	**$242,818**	**$242,818**	**$238,080**	**NA**	**NA**
Seasonal	Hours per site	0	9	9	13.5	27	0	58.5	59	3,042	3,042	59	3,042	3,042	58.5	3,042	3,042	3,042	NA	NA
	Cost per site	**0**	**368**	**397**	**665**	**1498**	**0**	**$2,928**	**$3,508**	**$182,403**	**$182,403**	**$3,581**	**$186,209**	**$186,209**	**$3,651**	**$189,863**	**$189,863**	**$186,158**	**NA**	**NA**
Continuous	Hours per site	0	0	5	5	2	1	13	13	9,529	9,529	13	9,529	9,529	13.0	9,529	9,529	9,529	NA	NA
	Cost per site	**0**	**0**	**221**	**246**	**111**	**59**	**$637**	**$763**	**$462,454**	**$462,454**	**$779**	**$472,105**	**$472,105**	**$794**	**$481,369**	**$481,369**	**$471,976**	**NA**	**NA**
Data Distribution		**TEC1**	**TEC2**	**PRO1**	**PRO2**	**PRO3**	**PRO4**	**Total**	**Adjusted**	**Total**	**Yearly Cost**	**Adjusted**	**Total**	**Yearly Cost**	**Adjusted**	**Total**	**Yearly Cost**			
Sequential	Hours per site	0	0	0	9	9	0	18	18	13,194	13,194	18	13,194	13,194	18.0	13,194	13,194	13,194	NA	NA
	Cost per site	**0**	**0**	**0**	**443**	**499**	**0**	**$942**	**$1,129**	**$827,202**	**$827,202**	**$1,152**	**$844,464**	**$844,464**	**$1,175**	**$861,036**	**$861,036**	**$844,234**	**NA**	**NA**
Single-channel	Hours per site	0	0	0	1	1	0	2	2	668	668	2	668	668	2.0	668	668	668	NA	NA
	Cost per site	**0**	**0**	**0**	**49**	**55**	**0**	**$104**	**$125**	**$41,614**	**$41,614**	**$127**	**$42,482**	**$42,482**	**$130**	**$43,316**	**$43,316**	**$42,471**	**NA**	**NA**
Seasonal	Hours per site	0	0	0	9	9	0	18	18	936	936	18	936	936	18.0	936	936	936	NA	NA
	Cost per site	**0**	**0**	**0**	**443**	**499**	**0**	**$942**	**$1,129**	**$58,683**	**$58,683**	**$1,152**	**$59,907**	**$59,907**	**$1,175**	**$61,083**	**$61,083**	**$59,891**	**NA**	**NA**
Continuous	Hours per site	0	0	0	3	2	0	5	5	3,030	3,030	5	3,030	3,030	5.0	3,030	3,030	3,030	NA	NA
	Cost per site	**0**	**0**	**0**	**148**	**111**	**0**	**$259**	**$310**	**$188,031**	**$188,031**	**$317**	**$191,955**	**$191,955**	**$323**	**$195,722**	**$195,722**	**$191,902**	**NA**	**NA**
Sub Total - Hours		0	64	177	139	86	1	467	467	193,215	193,215	467	193,215	193,215	467	193,215	193,215	193,215	NA	NA
Sub Total - Costs		**$0**	**$2,615**	**$7,786**	**$6,848**	**$4,770**	**$59**	**$22,078**	**$26,449**	**$10,924,689**	**$10,924,689**	**$27,001**	**$11,152,667**	**$11,152,667**	**$27,531**	**$11,371,525**	**$11,371,525**	**$11,149,627**	**NA**	**NA**

Element 6 - Quality Assurance									Element 6 - Quality Assurance			Element 6 - Quality Assurance			Element 6 - Quality Assurance			Labor	Non Labor O & M	Equipment
				Comment					Per Site	Entire Network		Per Site	Entire Network		Per Site	Entire Network				
		Years Amoritized		7																
		Unit cost	Year						Adjusted	Total	Yearly Cost	Adjusted	Total	Yearly Cost	Adjusted	Total	Yearly Cost			
Filter-based calibration kit		**$120**	**2013**						$144	$151,667	$4,333	$147	$154,832	$4,424	$150	$157,870	$4,511	NA	NA	$4,423
Continuous calibration kit		**$75**	**2013**						$90	$54,449	$1,556	$92	$55,585	$1,588	$94	$56,676	$1,619	NA	NA	$1,588
								Per Site	**Per Site**	**Entire Network**		**Per Site**	**Entire Network**		**Per Site**	**Entire Network**				
Audits		**TEC1**	**TEC2**	**PRO1**	**PRO2**	**PRO3**	**PRO4**	**Total**	**Adjusted**	**Total**	**Yearly Cost**	**Adjusted**	**Total**	**Yearly Cost**	**Adjusted**	**Total**	**Yearly Cost**			
Sequential	Hours per site	0	2	6	2	0	0	10	10.0	7,330	7,330	10.0	7,330	7,330	10.0	7,330	7,330	7,330	NA	NA
	Cost per site	**0**	**82**	**265**	**99**	**0**	**0**	**$446**	**$534**	**$391,648**	**$391,648**	**$545**	**$399,821**	**$399,821**	**$556**	**$407,667**	**$407,667**	**$399,712**	**NA**	**NA**
Single-channel	Hours per site	0	2	6	2	0	0	10	10	3,340	3,340	10	3,340	3,340	10	3,340	3,340	3,340	NA	NA
	Cost per site	**0**	**82**	**265**	**99**	**0**	**0**	**$446**	**$534**	**$178,459**	**$178,459**	**$545**	**$182,183**	**$182,183**	**$556**	**$185,758**	**$185,758**	**$182,133**	**NA**	**NA**
Seasonal	Hours per site	0	2	6	2	0	0	10	10	520	520	10	520	520	10	520	520	520	NA	NA
	Cost per site	**0**	**82**	**265**	**99**	**0**	**0**	**$446**	**$534**	**$27,784**	**$27,784**	**$545**	**$28,364**	**$28,364**	**$556**	**$28,920**	**$28,920**	**$28,356**	**NA**	**NA**
Continuous	Hours per site	0	3	5	2	0	0	10	10	6,060	6,060	10	6,060	6,060	10	6,060	6,060	6,060	NA	NA
	Cost per site	**0**	**123**	**221**	**99**	**0**	**0**	**$443**	**$531**	**$321,613**	**$321,613**	**$542**	**$328,324**	**$328,324**	**$552**	**$334,767**	**$334,767**	**$328,235**	**NA**	**NA**
Reporting		**TEC1**	**TEC2**	**PRO1**	**PRO2**	**PRO3**	**PRO4**	**Total**	**Adjusted**	**Total**	**Yearly Cost**	**Adjusted**	**Total**	**Yearly Cost**	**Adjusted**	**Total**	**Yearly Cost**			
Sequential	Hours per site	0	0	0	2	2	0	4	4	2,932	2,932	4	2,932	2,932	4	2,932	2,932	2,932	NA	NA
	Cost per site	**0**	**0**	**0**	**99**	**111**	**0**	**$210**	**$252**	**$184,408**	**$184,408**	**$257**	**$188,256**	**$188,256**	**$262**	**$191,951**	**$191,951**	**$188,205**	**NA**	**NA**
Single-channel	Hours per site	0	0	0	2	2	0	4	4	3,340	3,340	4	3,340	3,340	4	3,340	3,340	3,340	NA	NA
	Cost per site	**0**	**0**	**0**	**99**	**111**	**0**	**$210**	**$252**	**$84,028**	**$84,028**	**$257**	**$85,781**	**$85,781**	**$262**	**$87,465**	**$87,465**	**$85,758**	**NA**	**NA**
Seasonal	Hours per site	0	0	0	2	2	0	4	4	208	208	4	208	208	4	208	208	208	NA	NA
	Cost per site	**0**	**0**	**0**	**99**	**111**	**0**	**$210**	**$252**	**$13,082**	**$13,082**	**$257**	**$13,355**	**$13,355**	**$262**	**$13,617**	**$13,617**	**$13,352**	**NA**	**NA**
Continuous	Hours per site	0	0	0	2	2	0	4	4	2,424	2,424	4	2,424	2,424	4	2,424	2,424	2,424	NA	NA
	Cost per site	**0**	**0**	**0**	**99**	**111**	**0**	**$210**	**$252**	**$152,457**	**$152,457**	**$257**	**$155,639**	**$155,639**	**$262**	**$158,693**	**$158,693**	**$155,597**	**NA**	**NA**
Implementation/coordination		**TEC1**	**TEC2**	**PRO1**	**PRO2**	**PRO3**	**PRO4**	**Total**	**Adjusted**	**Total**	**Yearly Cost**	**Adjusted**	**Total**	**Yearly Cost**	**Adjusted**	**Total**	**Yearly Cost**			
Sequential	Hours per site	0	5	5	2	1	0	13	13	9,529	9,529	13	9,529	9,529	13	9,529	9,529	9,529	NA	NA
	Cost per site	**0**	**204**	**221**	**99**	**55**	**0**	**$579**	**$694**	**$508,440**	**$508,440**	**$708**	**$519,050**	**$519,050**	**$722**	**$529,236**	**$529,236**	**$518,908**	**NA**	**NA**
Single-channel	Hours per site	0	5	5	2	1	0	13	13	3,340	3,340	13	3,340	3,340	13	3,340	3,340	3,340	NA	NA
	Cost per site	**0**	**204**	**221**	**99**	**55**	**0**	**$579**	**$694**	**$231,676**	**$231,676**	**$708**	**$236,511**	**$236,511**	**$722**	**$241,152**	**$241,152**	**$236,447**	**NA**	**NA**
Seasonal	Hours per site	0	5	5	2	1	0	13	13	676	676	13	676	676	13	676	676	676	NA	NA
	Cost per site	**0**	**204**	**221**	**99**	**55**	**0**	**$579**	**$694**	**$36,069**	**$36,069**	**$708**	**$36,822**	**$36,822**	**$722**	**$37,545**	**$37,545**	**$36,812**	**NA**	**NA**
Continuous	Hours per site	0	0	5	5	2	1	13	13	7,878	7,878	13	7,878	7,878	13	7,878	7,878	7,878	NA	NA
	Cost per site	**0**	**0**	**221**	**246**	**111**	**59**	**$637**	**$763**	**$462,454**	**$462,454**	**$779**	**$472,105**	**$472,105**	**$794**	**$481,369**	**$481,369**	**$471,976**	**NA**	**NA**
Training		**TEC1**	**TEC2**	**PRO1**	**PRO2**	**PRO3**	**PRO4**	**Total**	**Adjusted**	**Total**	**Yearly Cost**	**Adjusted**	**Total**	**Yearly Cost**	**Adjusted**	**Total**	**Yearly Cost**			
Sequential	Hours per site	0	0	3	2	1	0	6	6	4,398	4,398	6	4,398	4,398	6	4,398	4,398	4,398	NA	NA
	Cost per site	**0**	**0**	**132**	**99**	**55**	**0**	**$286**	**$343**	**$251,146**	**$251,146**	**$350**	**$256,387**	**$256,387**	**$357**	**$261,419**	**$261,419**	**$256,317**	**NA**	**NA**
Single-channel	Hours per site	0	0	3	2	1	0	6	6	3,340	3,340	6	3,340	3,340	6	3,340	3,340	3,340	NA	NA
	Cost per site	**0**	**0**	**132**	**99**	**55**	**0**	**$286**	**$343**	**$114,438**	**$114,438**	**$350**	**$116,826**	**$116,826**	**$357**	**$119,118**	**$119,118**	**$116,794**	**NA**	**NA**
Seasonal	Hours per site	0	0	3	2	1	0	6	6	312	312	6	312	312	6	312	312	312	NA	NA
	Cost per site	**0**	**0**	**132**	**99**	**55**	**0**	**$286**	**$343**	**$17,817**	**$17,817**	**$350**	**$18,188**	**$18,188**	**$357**	**$18,545**	**$18,545**	**$18,183**	**NA**	**NA**
Continuous	Hours per site	0	0	3	2	1	0	6	6	3,636	3,636	6	3,636	3,636	6	3,636	3,636	3,636	NA	NA
	Cost per site	**0**	**0**	**132**	**99**	**55**	**0**	**$286**	**$343**	**$207,633**	**$207,633**	**$350**	**$211,965**	**$211,965**	**$357**	**$216,125**	**$216,125**	**$211,908**	**NA**	**NA**
QA Plan preparation		**Years Amoritized**		5				**Per RO**				**Per RO**	**Entire Network**		**Per RO**	**Entire Network**				
	Hours per RO	0	0	5	5	5	0	15	NA	1995	399	NA	1995	399	NA	1995	399	399	NA	NA
	Cost per RO	0	0	221	246	277	0	$744	$891	$118,544	$23,709	$910	$121,018	$24,204	$928	$123,393	$24,679	$24,197	NA	NA
QA Plan review (annual)		**TEC1**	**TEC2**	**PRO1**	**PRO2**	**PRO3**	**PRO4**	**Labor per RO**				**Adjusted per RO**	**Total**	**Yearly Cost**	**Adjusted per RO**	**Total**	**Yearly Cost**			
	Hours per RO	0	0	0	5	5	5	15	NA	1,995	1,995	NA	1,995	1,995	NA	1,995	1,995	1,995	NA	NA
	Cost	0	0	0	246	277	293	$816	$978	$130,017	$26,003	$998	$132,730	$26,546	$1,018	$135,334	$27,067	$26,539	NA	NA
Sub Total - Hours		0	24	60	45	27	6	162	132	59,263	59,263	132	59,263	59,263	132	59,263	59,263	59,263	NA	NA
Sub Total - Costs		**$0**	**$981**	**$2,649**	**$2,223**	**$1,494**	**$352**	**$7,699**	**$9,223**	**$3,637,829**	**$3,238,753**	**$9,416**	**$3,713,743**	**$3,306,340**	**$9,601**	**$3,786,621**	**$3,371,223**	**$3,361,085**	**$0**	**$6,010**

Element 7 - Supervision									Element 7 - Supervision			Element 7 - Supervision			Element 7 - Supervision					
				Comment																
								Per Site	**Per Site**	**Entire Network**		**Per Site**	**Entire Network**		**Per Site**	**Entire Network**				
Planning/coordination		**TEC1**	**TEC2**	**PRO1**	**PRO2**	**PRO3**	**PRO4**	**Total**	**Adjusted**	**Total**	**Yearly Cost**	**Adjusted**	**Total**	**Yearly Cost**	**Adjusted**	**Total**	**Yearly Cost**			
Sequential	Hours per site	0	6	3	3	0	0	12	NA	8,796	8,796	NA	8,796	8,796	NA	8,796	8,796	8,796	NA	NA
	Cost per site	**0**	**245**	**132**	**148**	**0**	**0**	**$525**	**$629**	**$461,020**	**$461,020**	**$642**	**$470,641**	**$470,641**	**$655**	**$479,877**	**$479,877**	**$470,513**	**NA**	**NA**
Single Channel	Hours per site	0	6	3	3	0	0	12	NA	1,728	1,728	NA	1,728	1,728	NA	1,728	1,728	1,728	NA	NA
	Cost per site	**0**	**245**	**132**	**148**	**0**	**0**	**$525**	**$629**	**$90,569**	**$90,569**	**$642**	**$92,459**	**$92,459**	**$655**	**$94,273**	**$94,273**	**$92,434**	**NA**	**NA**
Seasonal	Hours per site	0	6	3	3	0	0	12	NA	624	624	NA	624	624	NA	624	624	624	NA	NA
	Cost per site	**0**	**245**	**132**	**148**	**0**	**0**	**$525**	**$629**	**$32,705**	**$32,705**	**$642**	**$33,388**	**$33,388**	**$655**	**$34,043**	**$34,043**	**$33,379**	**NA**	**NA**
Continuous	Hours per site	0	0	0	12	24	0	36	NA	21,816	21,816	NA	21,816	21,816	NA	21,816	21,816	21,816	NA	NA
	Cost per site	**0**	**0**	**0**	**591**	**1331**	**0**	**$1,922**	**$2,303**	**$1,395,349**	**$1,395,349**	**$2,351**	**$1,424,467**	**$1,424,467**	**$2,397**	**$1,452,421**	**$1,452,421**	**$1,424,079**	**NA**	**NA**
Speciation	Hours per site	0	0	0	7	7	0	14	NA	2,772	2,772	NA	2,772	2,772	NA	2,772	2,772	2,772	NA	NA
	Cost per site	**0**	**0**	**0**	**345**	**388**	**0**	**$733**	**$878**	**$173,871**	**$173,871**	**$896**	**$177,499**	**$177,499**	**$914**	**$180,982**	**$180,982**	**$177,451**	**NA**	**NA**
Supervision/review																				
Sequential	Hours per site	0	0	5	5	10	10	30	NA	21,990	21,990	NA	21,990	21,990	NA	21,990	21,990	21,990	NA	NA
	Cost per site	0	0	221	246	555	586	$1,608	$1,926	$1,412,039	$1,412,039	$1,967	$1,441,506	$1,441,506	$2,005	$1,469,794	$1,469,794	$1,441,113	NA	NA
Single Channel	Hours per site	0	0	5	5	10	10	30	NA	4,320	4,320	NA	4,320	4,320	NA	4,320	4,320	4,320	NA	NA
	Cost per site	0	0	221	246	555	586	$1,608	$1,926	$277,399	$277,399	$1,967	$283,188	$283,188	$2,005	$288,745	$288,745	$283,111	NA	NA
Seasonal	Hours per site	0	0	0	5	2	2	9	NA	468	468	NA	468	468	NA	468	468	468	NA	NA
	Cost per site	0	0	0	246	111	117	$474	$568	$29,528	$29,528	$580	$30,145	$30,145	$591	$30,736	$30,736	$30,136	NA	NA
Continuous	Hours per site	0	0	0	12	8	4	24	NA	14,544	14,544	NA	14,544	14,544	NA	14,544	14,544	14,544	NA	NA
	Cost per site	0	0	0	591	444	234	$1,269	$1,520	$921,279	$921,279	$1,552	$940,504	$940,504	$1,582	$958,960	$958,960	$940,248	NA	NA
Speciation	Hours per site	0	0	0	2	8	4	14	NA	2,772	2,772	NA	2,772	2,772	NA	2,772	2,772	2,772	NA	NA
	Cost per site	0	0	0	99	444	234	$777	$931	$184,308	$184,308	$950	$188,154	$188,154	$969	$191,846	$191,846	$188,102	NA	NA
Sub Total - Hours		0	18	19	57	69	30	193	NA	79,830	79,830	NA	79,830	79,830	NA	79,830	79,830	79,830	NA	NA
Sub Total - Costs		**$0**	**$735**	**$838**	**$2,808**	**$3,828**	**$1,757**	**$9,966**	**NA**	**$4,978,067**	**$4,978,067**	**NA**	**$5,081,950**	**$5,081,950**	**NA**	**$5,181,678**	**$5,181,678**	**$5,080,565**	**NA**	**NA**

Summary by Element		PM25							Year 1	2013		Year 2	2014		Year 3	2015				
		TEC1	TEC2	PRO1	PRO2	PRO3	PRO4	Total	Adjusted	Total	Yearly Cost	Adjusted	Total	Yearly Cost	Adjusted	Total	Yearly Cost			
1 - Network Design	Hours	0	0	2	7	7	5	21	NA	2,793	399	NA	2,793	399	NA	2,793	399	399		
	Costs	$0	$0	$88	$345	$388	$293	$1,114	$1,335	$177,498	$25,357	$1,362	$181,202	$25,886	$1,389	$184,758	$26,394	$25,879	NA	NA
2 - Site Installation	Hours	0	16	17	11	0	0	44	NA	36,999	5,625	NA	36,999	5,625	NA	36,999	5,625	5,625		
	Costs	$0	$653	$749	$544	$0	$0	$1,946	$129,016	$38,551,550	$5,507,364	$126,817	$39,101,664	$5,585,952	$129,305	$39,868,991	$5,695,570	$405,123	NA	$5,191,173
3 - Supplies & site visits	Hours	0	208	196	273	0	0	677	NA	206,781	206,781	NA	206,781	206,781	NA	206,781	206,781	19,392	NA	NA
	Costs	$0	$8,499	$4,677	$9,015	$0	$0	$22,191	$8,491,608	$23,866,959	$23,866,959	$8,668,811	$24,365,017	$24,365,017	$8,838,927	$24,843,153	$24,843,153	$15,274,202	$455,566	$8,642,232
4 - Maintenance	Hours	0	19	49	66	4	0	138	138	53,138	53,138	138	53,138	53,138	138	53,138	53,138	53,138		
	Costs	$0	$778	$2,162	$3,253	$222	$0	$7,685	#REF!	$3,546,741	$3,546,741	$7,846	$3,620,755	$3,620,755	$8,000	$3,691,808	$3,691,808	$2,995,438	$624,330	NA
5 - Data Managment	Hours	0	64	176.5	139	86	1	466.5	467	193,215	193,215	467	193,215	193,215	467	193,215	193,215	193,215	NA	NA
	Costs	$0	$2,615	$7,786	$6,848	$4,770	$59	$22,078	$26,449	$10,924,689	$10,924,689	$27,001	$11,152,667	$11,152,667	$27,531	$11,371,525	$11,371,525	$11,149,627	NA	NA
6 - Quality Assurance	Hours	0	24	60	45	27	6	162	132	59263	59263	132	59263	59263	132	59263	59263	59263	NA	NA
	Costs	$0	$981	$2,649	$2,223	$1,494	$352	$7,699	$9,223	$3,637,829	$3,238,753	$9,416	$3,713,743	$3,306,340	$9,601	$3,786,621	$3,371,223	$3,361,085	$0	$6,010
7 - Supervision	Hours	0	18	19	57	69	30	193	NA	79830	79830	NA	79830	79830	NA	79830	79830	79830	NA	NA
	Costs	$0	$735	$838	$2,808	$3,828	$1,757	$9,966	NA	$4,978,067	$4,978,067	NA	$5,081,950	$5,081,950	NA	$5,181,678	$5,181,678	$5,080,565	NA	NA
Total		TEC1	TEC2	PRO1	PRO2	PRO3	PRO4	Total	Adjusted	Total	Yearly Cost	Adjusted	Total	Yearly Cost	Adjusted	Total	Yearly Cost			
	Hours	0	349	520	598	193	42	1,702	NA	572,755	598,250	NA	572,755	598,250	NA	572,755	598,250	410,862		NA
	Costs	$0	$14,261	$18,949	$25,036	$10,702	$2,461	$72,679	NA	82,045,505	$52,087,931	NA	83,503,255	$53,138,567	NA	85,141,913	$54,181,351	$38,291,920	$1,079,896	$13,839,415

$53,211,231