

## ATTACHMENT F

### Work Sheets used to Calculate Respondent Labor Costs

This attachment is available as part of the electronic docket EPA-HQ-OPP-2018-0423 and is part of the ICR's Supporting Statement.

#### Respondent Labor Costs:

##### Agriculture (NAICS 115000)

Item	Formula	Labor Category <sup>2</sup>	
		Certified Applicator*	Pesticide Handlers & Applicators
Unloaded Hourly Rate <sup>1</sup>	= W	\$25.47	\$18.58
Benefits Percentage <sup>3</sup>	Lb = B/W	46.5%	46.5%
Benefits per hour	B = W*Lb	\$11.84	\$8.63
Loaded Hourly Rate	Wb = W + B = W(1+Lb)	<b>\$37.31</b>	<b>\$27.21</b>

\*Scientists & Technicians labor rate used since these are more skilled workers.

- Source: Bureau of Labor Statistics, NAICS 115000– Agriculture, May 2017, <http://www.bls.gov/oes/current/naics>
- Standard Occupational Codes:  
 Management: 11-0000, Management Occupations  
 Technical: 19-0000, Life Physical, and Social Science Occupations  
 Administrative: 43-0000, Office, Clerical and Administrative Support Occupations
- Total benefits/wages based on May 2017 Employer costs for employee compensation, All Civilian nonfarm workers, <ftp://ftp.bls.gov/pub/special.requests/ocwc/ect/ececrtn.pdf>
- U.S. Environmental Protection Agency, *EPA Air Pollution Control Cost Manual, Sixth Edition*, EPA-452-02-001, January 2002, pp. 2-34. The loading for indirect costs is within the range of 20-70% of the loaded labor rate (wage + benefits) suggested in EPA guidance.

##### Registrants (Chemical Manufacturing) (NAICS: 3250A1)

State Government (NAICS 999200)				
Item	Formula	Labor Category <sup>2</sup>		
		Managerial	Technical	Clerical
Unloaded Hourly Rate <sup>1</sup>	= W	\$63.98	\$33.17	\$21.53
Benefits Percentage <sup>3</sup>	Lb = B/W	46.5%	46.5%	46.5%
Benefits per hour	B = W*Lb	\$29.73	\$15.41	\$10.00
Loaded Hourly Rate	Wb = W + B = W(1+Lb)	\$93.71	\$48.58	\$31.53
Overhead Percentage <sup>4</sup>	Lo = OH/Wb	50%	50%	50%
Overhead per hour	OH = Wb*Lo	\$46.86	\$24.29	\$15.77

Fully Loaded Hourly Rate	$W_f = W_b + OH$ $= W + B + OH$	<b>\$140.57</b>	<b>\$72.88</b>	<b>\$47.30</b>
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5. Source: Bureau of Labor Statistics, NAICS 3250A1 – Chemical Manufacturing, May 2017, <http://www.bls.gov/oes/current/naics>
6. Standard Occupational Codes:
  - Management: 11-0000, Management Occupations
  - Technical: 19-0000, Life Physical, and Social Science Occupations
  - Administrative: 43-0000, Office, Clerical and Administrative Support Occupations
7. Total benefits/wages based on May 2017 Employer costs for employee compensation, All Civilian nonfarm workers, <ftp://ftp.bls.gov/pub/special.requests/ocwc/ect/ececcqrtn.pdf>
8. U.S. Environmental Protection Agency, *EPA Air Pollution Control Cost Manual, Sixth Edition*, EPA-452-02-001, January 2002, pp. 2-34. The loading for indirect costs is within the range of 20-70% of the loaded labor rate (wage + benefits) suggested in EPA guidance.

### States, Tribes, Territories (NAICS 999200)

Item	Formula	Labor Category <sup>2</sup>		
		Managerial	Technical	Clerical
Unloaded Hourly Rate <sup>1</sup>	$= W$	\$42.17	\$29.54	\$19.88
Benefits Percentage <sup>3</sup>	$L_b = B/W$	46.5%	46.5%	46.5%
Benefits per hour	$B = W * L_b$	\$19.60	\$13.73	\$9.24
Loaded Hourly Rate	$W_b = W + B =$ $W(1+L_b)$	\$61.77	\$43.27	\$29.12
Overhead Percentage <sup>4</sup>	$L_o = OH/W_b$	50%	50%	50%
Overhead per hour	$OH = W_b * L_o$	\$30.88	\$21.63	\$14.56
Fully Loaded Hourly Rate	$W_f = W_b + OH$ $= W + B + OH$	<b>\$92.65</b>	<b>\$64.90</b>	<b>\$43.68</b>

9. Source: Bureau of Labor Statistics, NAICS 999200 – State Government, May 2017, <http://www.bls.gov/oes/current/naics>
10. Standard Occupational Codes:
  - Management: 11-0000, Management Occupations
  - Technical: 19-0000, Life Physical, and Social Science Occupations
  - Administrative: 43-0000, Office, Clerical and Administrative Support Occupations
11. Total benefits/wages based on May 2017 Employer costs for employee compensation, All Civilian nonfarm workers, <ftp://ftp.bls.gov/pub/special.requests/ocwc/ect/ececcqrtn.pdf>
12. U.S. Environmental Protection Agency, *EPA Air Pollution Control Cost Manual, Sixth Edition*, EPA-452-02-001, January 2002, pp. 2-34. The loading for indirect costs is within the range of 20-70% of the loaded labor rate (wage + benefits) suggested in EPA guidance.

**Work Sheets used to Calculate EPA and Federal Government Labor Costs**  
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**EPA / Federal Government Labor Costs (NAICS 999100)**

Item	Formula	Labor Category <sup>2</sup>		
		Managerial	Technical	Administrative
Unloaded Hourly Rate <sup>1</sup>	= W	\$59.10	\$38.92	\$21.93
Benefits Percentage <sup>3</sup>	Lb = B/W	46.5%	46.5%	46.5%
Benefits per hour	B = W*Lb	\$27.46	\$18.09	\$10.19
Loaded Hourly Rate	Wb = W+B = W(1+Lb)	\$86.56	\$57.01	\$32.12
Overhead Percentage <sup>4</sup>	Lo = OH/Wb	50%	50%	50%
Overhead per hour	OH = Wb*Lo	\$43.28	\$28.50	\$16.06
Fully Loaded Hourly Rate	Wf = Wb+OH = W+B+OH	<b>\$129.84</b>	<b>\$85.51</b>	<b>\$48.18</b>

1. Source: Bureau of Labor Statistics, NAICS 999100 – Federal Executive Branch, May 2017, <http://www.bls.gov/oes/current/naics>
2. Standard Occupational Codes:  
Management: 11-0000, Management Occupations  
Technical: 19-0000, Life Physical, and Social Science Occupations  
Administrative: 43-0000, Office, Clerical and Administrative Support Occupations
3. Total benefits/wages based on May 2017 Employer costs for employee compensation, All Civilian nonfarm workers, <ftp://ftp.bls.gov/pub/special.requests/ocwc/ect/ececcqrtn.pdf>
4. U.S. Environmental Protection Agency, *EPA Air Pollution Control Cost Manual, Sixth Edition*, EPA-452-02-001, January 2002, pp. 2-34. The loading for indirect costs is within the range of 20-70% of the loaded labor rate (wage + benefits) suggested in EPA guidance.