

**Appendix D:  
Summary of Labor Rate Derivation**

Subpart (1)	ICR Labor Category	Labor Rates for the 2015 Renewal ICR (Proposal)				
		BLS Citation	Benefits Loading Factor (4)	Overhead Loading Factor (5)	Wages & Salaries (2014\$ Q2)	Loaded Hourly Rates for Renewal ICR (2014\$ Q2) (6)
All (2)	Technical	SOC 17-2112 (Industrial Engineer), top-level	0.4489	0.17	\$40.92	\$66.25
	Managerial	SOC 11-3051 (Industrial Production Manager), top-level	0.4539	0.17	\$48.87	\$79.36
	Clerical (3)	N/A	0.4829	0.17	\$17.23	\$28.48
	Legal	NAICS 541100 (Legal Services); SOC 23-1011 (Lawyer)	0.4539	0.17	\$66.88	\$108.61
W	Middle Manager	NAICS 211 (Oil and Gas Extraction); SOC 11-3051 (Industrial Production Managers)	0.4539	0.17	\$73.19	\$118.86
	Senior Manager	NAICS 211 (Oil and Gas Extraction); SOC 11-1021 (Gen & Op Mngr)	0.4829	0.17	\$78.55	\$129.83
	Engineers	NAICS 211 (Oil and Gas Extraction); SOC 17-2112 (Ind. Engineers)	0.4489	0.17	\$61.26	\$99.18
	Technicians	NAICS 211 (Oil and Gas Extraction); SOC 17-3024 (Electro-Mechanical Technicians)	0.4489	0.17	\$32.64	\$52.84
RR / UU	Geoscientists (7)	N/A	NA	NA	\$86.15	\$137.84

(1) Technical, Manager, Clerical, and Legal are used for all subparts. In addition to these rates, specialized rates are used for subparts W, RR, and UU.

(2) The base hourly wages & salaries (not including benefits & overhead) for all categories except clerical and geoscientist are from Bureau of Labor and Statistics (BLS) May 2014 National Industry-Specific Occupational Employment and Wage Estimates (<http://www.bls.gov/oes/current/oessrci.htm>).

(3) The base hourly wages & salaries (not including benefits & overhead) for clerical is from BLS's Employer Costs for Employee Compensation (ECEC) (<http://www.bls.gov/news.release/ecec.t09.htm>) for May 2014 (All workers, goods-producing industries," "Sales and office").

(4) From BLS's ECEC (<http://www.bls.gov/ect/home.htm>) for June of 2014, Table 2, using the ratio of wages and benefits to calculate the loading factor. For Technical, Engineers, and Technicians, used "Professional and related." For Managerial, Middle Manager, and Senior Manager, used "Management, business, and financial." For Clerical, used "Office and administrative support."

(5) The overhead loading factor is from Rice, Cody 2002. "Wage Rates for Economic Analyses of the Toxics Release Inventory Program," Analytical Support Branch, Environmental Analysis Division, Office of Environmental Information, U.S. EPA, June 10, 2002.

(6) The loaded hourly rate = Wages & Salaries + (Wages & Salaries \* Benefits Loading Factor) + (Wages & Salaries \* Overhead Loading Factor)

(7) The geoscientist rate is from the American Association of Petroleum Geologists' (AAPG's) 2013 annual salary survey. Assuming 15-19 years of experience, the hourly rate is \$86.15 (based on an annual salary of \$179,200). See <http://www.aapg.org/publications/news/explorer/details/articleid/8464/salaries-rise-and-experience-really-pays>. A loading factor of 1.6 was applied, as suggested by EPA's 2009 ICR Handbook, to account for overhead and benefits.