

ICR ATTACHMENT 11

**Derivation of Industry Wage Rates
and Agency Costs**

1. DERIVATION OF INDUSTRY WAGE RATES

This attachment provides a brief discussion of the methods that were used to derive the final “fully loaded” wages used in the calculation of quantified costs. Base hourly wages for relevant labor categories were loaded with factors for benefits and overhead to derive a loaded hourly rate. The derivation of fully loaded wages in year 2007 dollars, for each of the labor categories used in this ICR, is discussed in Section 1 and is summarized in Table 4-1.

The basic method used to derive loaded wage rates for technical, managerial, and clerical personnel is described more fully in *Wage Rates for Economic Analysis of the Toxics Release Inventory Program* (EPA, 2002).

December 2007 average wages for technical, managerial, and clerical labor were taken from the Employer Costs for Employee Compensation (ECEC) report from the Bureau of Labor Statistics for all goods-producing, private industries, white collar occupations (BLS, 2007).

The additional cost of benefits, such as paid leave and insurance (“fringe benefits”), specific to each labor category, is also taken from the same BLS series. Fringe benefit as a percentage of wage is then calculated separately for each labor category. For example, the average wage rate in December 2007 for technical labor was \$32.52, and the average fringe benefit was 40.9 percent of the wage, or \$13.30. An additional loading factor of 17 percent is applied to wages for overhead. This overhead loading factor is added to the benefits loading factor, and the total is then applied to the base wage to derive the fully loaded wage. The fully loaded wage for technical labor, for example, is $\$32.52 \times (1 + 0.409 + 0.17) = \$32.52 \times (1.611) = \$51.35$. Fully loaded costs for managerial and clerical labor were calculated in a similar manner.

Table 4-1. Derivation of Loaded Wage Rates

Labor Category	Data Sources	Uninflated wages and fringes / hour			Fringe benefits as % of wage	Overhead as % of wage ¹	Fringe + Overhead factor	Loaded Wage Rate (2007\$)
		Date	Wages (\$)	Fringe benefits (\$)				
Managerial	<i>BLS Employer Costs for Employee Compensation.</i> Private industry, goods-producing industries, white collar occupations. Management, business and financial [BLS, 2007]	Dec. 2007	\$36.44	\$16.07	44.1%	17%	1.579	\$58.71
Technical	<i>BLS Employer Costs for Employee Compensation.</i> Private industry, goods-producing industries, white collar occupations. Professional and related. [BLS, 2007]	Dec 2007	\$32.52	\$13.30	40.9%	17%	1.611	\$51.35
Clerical	<i>BLS Employer Costs for Employee Compensation.</i> Private industry, goods-producing industries, white collar occupations. Office and administrative support.[BLS, 2007]	Dec 2007	\$15.78	\$8.28	44.9%	17%	1.619	\$25.54

¹An overhead rate of 17 percent applied to wages is used for consistency with recent EPAB economic analyses for two major rulemakings: *Wage Rates for Economic Analyses of the Toxics Release Inventory Program*, June 10, 2002, and the *Revised Economic Analysis for the Amended Inventory Update Rule: Final Report*, August 2002.

Note: Calculations are based on unrounded values, so the total may not equal the product of the rounded factors.

2. AGENCY COSTS

EPA's costs to review and process industry submissions (SNUNs, requests to modify SNUR, and requests for equivalency determination) are assumed to be the same as EPA costs to review PMNs. The previous ICR calculated an average of the annual salaries for GS-12 Steps 1 and 10 for Washington, DC. However, to be consistent with the New Chemicals ICR and the Economic Analysis for the proposed e-PMN rule, Agency wage rate data used to calculate labor costs were gathered from the U.S. Office of Personnel Management Salary Table 2007-DCB, for a GS-13, step 5 employee in the Washington, D.C. (OPM, 2008). A loading factor of 1.6 was applied to the base salary of \$89,985 to arrive at the 2007 loaded salary of \$143,976. The final loaded hourly wage of \$69.22 was calculated by dividing the loaded salary by the 2,080 hours associated with a full-time employee to arrive at the 2007 loaded wage rate of \$143,976. This loaded hourly wage was used in calculations of Agency cost.

Examples of the activities EPA undertakes in reviewing and processing SNUNs include prenotice consultation; conducting an administrative prescreen, and processing the notice and user fee; conducting engineering/exposure and exposure/fate reviews; holding internal decision-making meetings; developing, negotiating, and then reviewing data submitted from a consent order; and reviewing Notices of Commencement.

EPA uses extramural contractor labor to assist in some of the SNUN-related activities. The cost of extramural labor in this process is estimated to be \$814 for SNUNs submitted via CDX, and \$975 for non-CDX submissions. The non-CDX extramural cost is from the *Premanufacture Review Reporting and Exemption Requirements for New Chemical Substances and Significant New Use Reporting Requirements for Chemical Substances*, EPA ICR No: 0574.12, OMB Control No.: 2070-0012. It was updated to 2007\$ using the Bureau of Labor Statistics Producer Price Index data for the chemical manufacturing industry (BLS series 325).