**Attachment D**

**Work Sheets used to Calculate Industry Labor Costs**

This attachment is available as part of the electronic **docket EPA-HQ-OPP-2018-0266** and is part of the ICR’s Supporting Statement.

**NAICS: 3250A1**

**Chemical Manufacturing (3251, 3252, 3253, and 3259 only)**

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| Labor Category: | Formula | Managerial | Technical | Clerical |
| Unloaded Hourly Rate1 | = W | $58.18 | $30.26 | $19.92 |
| Benefits Percentage2 | Lb = B/W | 46.5% | 46.5% | 46.5% |
| Benefits per hour | B = W\*Lb | $27.04 | $14.06 | $9.26 |
| Loaded Hourly Rate | Wb = W + B = W(1+Lb) | $85.22 | $44.32 | $29.18 |
| Overhead Percentage3 | Lo = OH/Wb | 50% | 50% | 50% |
| Overhead per hour | OH = Wb\*Lo | $42.61 | $22.16 | $14.59 |
| Fully Loaded Hourly Rate | Wf = Wb + OH  = W + B + OH | $127.82 | $66.48 | $43.76 |

1. Data Source: BLS <http://www.bls.gov/oes/current/naics4_3250A1.htm> May 2017 data

NAICS 3250A1 - Chemical Manufacturing (3251, 3252, 3253, and 3259 only)

Standard Occupational Codes:

Management: 11-0000, Management Occupations

Technical: 19-0000, Life, Physical, and Social Science Occupations

Clerical: 43-0000, Office and Administrative Support Occupations

2. Fringe benefits/wage per hour.

3. U. S. Environmental Protection Agency, *EPA Air Pollution Control Cost Manual, Sixth Edition*, EPA-452-02-001, January 2002, pg. 2-34. The loading for indirect costs is within the range of 20-70% of the load labor rate (wage + benefits) suggested in EPA guidance.