

| Calculations for Paperwork Burden and Costs for Data Generation Activities |                            |                                |                                |                                 |                                |                               |                               |                              |                             |                          |
|--|----------------------------|--------------------------------|--------------------------------|---------------------------------|--------------------------------|-------------------------------|-------------------------------|------------------------------|-----------------------------|--------------------------|
| Assay  | Estimated Costs            |                                |                                |                                 |                                |                               | Estimated Burden              |                              |                             |                          |
|  | 2009 Assay Cost (\$) (a-1) | Adjusted Assay Cost (\$) (a-2) | Paperwork Burden Cost (\$) (b) | Management Burden Cost (\$) (c) | Technical Burden Cost (\$) (d) | Clerical Burden Cost (\$) (e) | Management Burden (Hours) (f) | Technical Burden (Hours) (g) | Clerical Burden (Hours) (h) | Total Burden (Hours) (i) |
| Amphibian Metamorphosis (Frog)   | 82,065.50                  | 87,780.79                      | 30,723.28                      | 6,144.66                        | 19,970.13                      | 4,608.49                      | 54.62                         | 359.89                       | 138.19                      | <b>552.70</b>            |
| Androgen Receptor Binding (Rat Prostrate)                                  | 23,814.00                  | 25,472.48                      | 8,915.37                       | 1,783.07                        | 5,794.99                       | 1,337.31                      | 15.85                         | 104.43                       | 40.10                       | <b>160.38</b>            |
| Aromatase (Human Recombinant)  | 29,800.00                  | 31,875.36                      | 11,156.38                      | 2,231.28                        | 7,251.64                       | 1,673.46                      | 19.84                         | 130.68                       | 50.18                       | <b>200.70</b>            |
| Estrogen Receptor Binding (Rat Uterine)                                    | 23,329.00                  | 24,953.70                      | 8,733.80                       | 1,746.76                        | 5,676.97                       | 1,310.07                      | 15.53                         | 102.31                       | 39.28                       | <b>157.12</b>            |
| Estrogen Receptor Transcriptional Activation (Human Cell Line)             | 23,867.00                  | 25,529.17                      | 8,935.21                       | 1,787.04                        | 5,807.89                       | 1,340.28                      | 15.89                         | 104.67                       | 40.19                       | <b>160.74</b>            |
| Fish Short-term Reproduction   | 111,230.50                 | 118,976.93                     | 41,641.93                      | 8,328.39                        | 27,067.25                      | 6,246.29                      | 74.04                         | 487.79                       | 187.30                      | <b>749.12</b>            |
| Hershberger (Rat)  | 45,583.00                  | 48,757.54                      | 17,065.14                      | 3,413.03                        | 11,092.34                      | 2,559.77                      | 30.34                         | 199.90                       | 76.75                       | <b>306.99</b>            |
| Female Pubertal (Rat)  | 96,967.00                  | 103,720.07                     | 36,302.02                      | 7,260.40                        | 23,596.32                      | 5,445.30                      | 64.54                         | 425.24                       | 163.28                      | <b>653.06</b>            |
| Male Pubertal (Rat)  | 100,350.00                 | 107,338.67                     | 37,568.53                      | 7,513.71                        | 24,419.55                      | 5,635.28                      | 66.79                         | 440.07                       | 168.97                      | <b>675.84</b>            |
| Steroidogenesis (Human Cell Line)  | 17,450.00                  | 18,665.27                      | 6,532.84                       | 1,306.57                        | 4,246.35                       | 979.93                        | 11.61                         | 76.52                        | 29.38                       | <b>117.52</b>            |
| Uterotrophic (Rat)   | 41,242.00                  | 44,114.22                      | 15,439.98                      | 3,088.00                        | 10,035.99                      | 2,316.00                      | 27.45                         | 180.86                       | 69.45                       | <b>277.76</b>            |
| <b>Total Burden and Costs:</b>   | <b>\$ 595,698.00</b>       | <b>\$ 637,184.20</b>           | <b>\$ 223,014.47</b>           | <b>\$ 44,602.89</b>             | <b>\$ 144,959.41</b>           | <b>\$ 33,452.17</b>           | <b>396.51</b>                 | <b>2,612.35</b>              | <b>1,003.06</b>             | <b>4,011.92</b>          |

(a-1) Estimated costs for these assays are from Table 8 in the EPA report entitled: "Laboratory Testing of Chemicals for Endocrine Disruption Potential - Analysis of Market Factors" (October 14, 2009) (Ref. 8). Shared costs in columns 3 & 4 of that table were divided by the tests included in the group, which include analytical chemistry where appropriate.

(a-2) The estimated costs for these assays were adjusted using an inflation factor to convert 2009\$ to 2012\$. Specifically, the estimated cost in (a-1) was entered into the online inflation calculator provided by US Department of Labor, Bureau of Labor and Statistics at

[http://www.bls.gov/data/inflation\\_calculator.htm](http://www.bls.gov/data/inflation_calculator.htm).

(b) Based on 35% of the total estimated test costs.

(c) Calculated as 20% of (b), which is 35% of the total estimated test costs.

(d) Calculated as 65% of (b), which is 35% of the total estimated test costs.

(e) Calculated as 15% of (b), which is 35% of the total estimated test costs.

(f) Based on total estimated managerial costs (j) divided by the loaded labor rate for managers (\$112.49).

(g) Based on total estimated technical costs (j) divided by the loaded labor rate for technical staff (\$55.49).

(h) Based on total estimated clerical costs (j) divided by the loaded labor rate for clerical staff (\$33.35).

(i) Total Burden Hours is used in Table 6 of this ICR for estimating the burden & costs related to data generation paperwork activities.