

**Supporting Statement for a Request for OMB Review under  
The Paperwork Reduction Act**

**1. IDENTIFICATION OF THE INFORMATION COLLECTION**

**1(a) Title of the Information Collection**

**TITLE:** Proposed Rule Related Addendum to the Existing EPA ICR Entitled:  
Chemical-Specific Rules, Toxic Substances Control Act Section 8(a)

**EPA ICR No.:** 2517.01      **OMB Control No:** 2070-NEW

**1(b) Short Characterization**

This information collection request (ICR) addendum covers reporting and recordkeeping requirements for persons who manufacture or process (defined by statute to include import) chemical substances as nanoscale materials (also referred to as “nanoscale materials” or “nanomaterials”) and is related to a proposed rule issued under the authority of section 8(a) of the Toxic Substances Control Act (TSCA). This ICR addendum will revise the existing approved ICR to incorporate reporting and recordkeeping requirements proposed in the TSCA section 8(a) rule for Certain Chemical Substances When Manufactured or Processed as Nanoscale Materials, identified under RIN 2070-AJ54 (Attachment A).

TSCA section 8(a) authorizes the Administrator of the EPA to promulgate rules that require persons who manufacture or process chemical substances and mixtures, or who propose to manufacture or process chemical substances and mixtures, to maintain such records and submit such reports to EPA as may be reasonably required. Information that may be collected under TSCA section 8(a) includes, but is not limited to, chemical names, categories of use, production volume, byproducts of chemical production, existing data on deaths and environmental effects, exposure data, and disposal information. These data are collected by the Office of Pollution Prevention and Toxics (OPPT) and may be used by other EPA offices and/or Federal agencies to ensure knowledge of specific practices that may affect human health and the environment.

Under TSCA section 8(a), EPA is proposing to establish reporting and recordkeeping requirements for certain chemical substances as nanoscale materials. The rule proposes that persons who manufacture or process these nanoscale materials notify EPA of certain information which includes production volume, methods of manufacture and processing, exposure and release information, and available health and safety data. The proposed reporting of these activities will provide EPA with an opportunity to evaluate the information and consider appropriate action under TSCA to reduce any risk to human health or the environment. The data will also inform EPA’s assessments of new chemical nanoscale materials submitted to EPA under section 5 of TSCA.

EPA’s OPPT, other EPA Offices and/or other Federal agencies will generally be the primary groups for which information will be collected. However, to the extent that reported

information is not considered to be confidential business information (CBI), environmental groups, environmental justice advocates, state and local government entities and other members of the public will have access to this information for their own use.

## **2. NEED FOR AND USE OF THE COLLECTION**

### **2(a) Need/Authority for the Collection**

Nanoscale materials or nanomaterials are chemical substances organized in structures in the scale of approximately 1 to 100 nanometers, and may have different organizations and properties than the same chemical substances in a larger size. Nanoscale materials can be found in electronics, sunscreens, cosmetics, automotive and medical products as well as paints and coatings, metal-cutting tools, sports equipment, stain-free clothing and mattresses, and ink. There are hundreds of products already on the market that utilize nanoscale materials. It is recognized that some of these substances, because of their small size, exhibit novel and enhanced properties not present in substances of larger dimensions. It is also widely recognized that there is limited data available on these types of substances.

Some nanoscale materials are recognized as new chemical substances subject to notification requirements under TSCA section 5 because they are not contained on the TSCA Inventory. Therefore, they are subject to review for potential human health and environmental risks before they are manufactured and enter commerce. EPA has identified over 160 nanoscale materials submitted as new chemicals under TSCA since January 2005. Other nanoscale materials have the same molecular identity as chemical substances which are already on the TSCA Inventory and as such are not subject to new chemical notification. The Agency has authority under TSCA section 8(a) to collect information regarding chemical substances in commerce.

EPA developed a voluntary Nanoscale Materials Stewardship Program (“NMSP” or “the program”) to complement and support its regulatory activities on nanoscale materials. For more details on the NMSP, read the program’s interim report which is available in the docket for the proposed rule. EPA initiated the NMSP to quickly learn about commercially available nanoscale materials by gathering existing data and information from manufacturers, processors, and users of nanoscale materials. In the January 2009 interim report, EPA identified data gaps for existing nanoscale material production, uses, and exposures, based on the information EPA received through the NMSP prior to the report publication. For example, EPA estimated that companies provided information on only about 10 percent of the nanomaterials that may be commercially available.

EPA is proposing this rule to address some of the data gaps identified in the NMSP interim report. The proposed reporting of information associated with nanoscale materials will provide EPA with data needed to determine appropriate action(s) under TSCA to reduce any risk to human health or the environment.

The legal authority for this information collection is TSCA section 8(a), 15 U.S.C. 2607(a). TSCA section 8(a) chemical-specific rules have been codified at 40 CFR 704, subpart B.

## **2(b) Use/Users of the Data**

The information collected through the proposed rule will provide important baseline information on health and environmental effects, exposures, risks, management practices, and data needs that will assist EPA and others in properly assessing and managing risks related to nanoscale materials.

Non-confidential portions of this information will also be made available to help the public understand how nanoscale materials are being used. Data collected through this proposed rule will be used by EPA scientists to assist in determining how and whether certain nanoscale materials may present risks to human health and the environment. If the hazard, exposure, and risk data submitted by participants indicate that potential unreasonable risks may exist, the data will be used by EPA and the manufacturer to determine the appropriate action necessary to avoid or mitigate the risks. Furthermore, such information could be used for risk management, hazard communication and right-to-know purposes, and product labels. EPA may also use the information to identify nanoscale materials that may not warrant future concerns or actions, or should otherwise be treated as a lower priority for further consideration.

The data may also be used by other Federal agencies. Non-confidential portions of this information may be used by the public, academics, states, local and tribal government, as well as foreign governments and international organizations.

## **3. NON-DUPLICATION, CONSULTATION, AND OTHER COLLECTION CRITERIA**

### **3(a) Non-Duplication**

Section 8(a)(2) of TSCA states, “To the extent feasible, the Administrator shall not require any reporting which is unnecessary or duplicative.” The NMSP described above is the only other effort that EPA has identified to systematically collect such comprehensive information. In the 8(a) rule EPA is proposing that persons that participated in the NMSP are not required to report any data already submitted to EPA. The rule also proposes that any person who submitted a TSCA new chemical notice on or after January 1, 2005 under 40 CFR part 720 or 723 for a nanoscale material subject that would be subject to the rule does not need to submit a report for the nanoscale material previously submitted.

### **3(b) Public Notice Required Prior to ICR Submission to OMB**

In proposing this ICR addendum, EPA is providing a 90-day public notice and comment period that coincides with the comment period for the proposed 8(a) rule.

### **3(c) Consultations**

During the comment period EPA will contact stakeholders and solicit comment on the estimates and findings in the ICR.

### **3(d) Effects of Less Frequent Collection**

The proposed 8(a) rule would require reporting only once for existing nanoscale materials and for new discrete nanoscale materials before they are manufactured or processed. As noted in the preamble EPA is considering periodic reporting of nanoscale materials identified in the rule similar to reporting that occurs under the Inventory Update Rule (IUR) at 40 CFR part 710. EPA will consider any comments received when proposing any further reporting for nanoscale materials under section 8(a).

### **3(e) General Guidelines**

This information collection activity is necessary to implement the statutory requirements of section 8(a) of TSCA and is consistent with the requirements of 5 CFR 1320.6.

### **3(f) Confidentiality**

Submitters may designate information as confidential, trade secret or proprietary. EPA has implemented procedures to protect any confidential, trade secret or proprietary information from disclosure. These procedures comply with EPA's confidentiality regulation, 40 CFR Part 2, Subpart B.

### **3(g) Sensitive Questions**

This section is not applicable. TSCA section 8(a) reporting rules do not include any questions of a sensitive nature.

## **4. THE RESPONDENTS AND THE INFORMATION REQUESTED**

### **4(a) Respondents/North American Industrial Classification System (NAICS) Codes**

Respondents affected by this collection activity primarily include those businesses that fall under the North American Industrial Classification System (NAICS) codes 325, Chemical Manufacturers and Processors, and 324110, Petroleum Refineries, 325130 Synthetic Dye and Pigment Manufacturing, 325180, Other Basic Inorganic Chemical Manufacturing, 331221, Rolled Steel Shape Manufacturing, 334413, Semiconductor and Related Device Manufacturing, 335991, Carbon and Graphite Product Manufacturing, 423330, Home Furnishing Merchant Wholesalers, 423330, Roofing, Sliding, and Insulation Material Merchant Wholesalers, 423510, Metal Service Centers and Other Metal Merchant Wholesalers. The NAICS codes have been provided to indicate which entities might be affected by this information collection activity. This listing is not intended to be exhaustive and other types of entities not listed in this table could also be affected.

### **4(b) Information Requested**

#### **4(b)(i) Data Items**

EPA is requiring that respondents provide all the information described below to the extent it is known or reasonably ascertainable. EPA is not requiring that respondents develop additional data for this information collection request.

1. Company name and other identifying information, address of company and site, technical contact and related information.
2. Common or trade name of the chemical substance.  
Chemical identity and molecular structure of substance.
3. The following physical and environmental fate properties:

- Physical state
- Vapor pressure
- Density
- Solubility in water or other solvents
- Melting temperature
- Boiling/sublimation temperature
- Spectra
- Dissociation constant
- Particle size distribution
- Octanol/water partition coefficient
- Henry's Law constant
- Volatilization from water
- pH
- Volatilization from soil
- Flammability
- Explodability
- Adsorption coefficient
- Shape
- Agglomeration state/dispersion state
- Crystal structure
- Chemical composition – including spatially averaged (bulk) and spatially resolved heterogeneous composition
- Surface area
- Surface chemistry
- Surface charge
- Porosity
- Surface reactivity average particle weight
- Average particle surface area rate of sorption
- Aggregation rate of diffusion
- Wet and dry transport rate of gravitational settling
- Bioaccumulation/biomagnification biodegradation
- Particle count rate of deposition
- Surface/volume ratio average aerodynamic diameter
- Mobility through soil

Influence of Redox and photochemical reaction

4. Description of all uses including expected consumer uses.
5. Estimate of the total amount of the chemicals substance to be manufactured including the amount for each use category.
6. Description of byproducts and impurities resulting from manufacture, process, use or disposal of the chemical substance.
7. For each type of workplace in the lifecycle, the same information requested on pp. 8-10 of the EPA PMN form (7710-25) would be helpful for releases and exposures, with the following additions.
8. A brief overview of the lifecycle including all workplaces that manufacture, process, or use the chemical substance and all expected consumer uses.
9. For each release point for which control technology is used, the rationale for selecting the control, and, if available, data and measurement methods of waste treatment or purification efficiency studies for the chemical substance.
10. Regarding worker exposure information, personal or area monitoring data (in mass concentrations, surface area per mass, number of particles, etc.) for the chemical substance, including the measurement method(s) used to generate the data.
11. For each protective equipment or engineering control listed as worker protection, the rationale for selecting the protective equipment or engineering controls, and data (and methods used to generate the data) that were used in making the selection or that may help to indicate the effectiveness of the protective equipment or engineering controls.
12. Information on cleaning/ reuse/ disposal of used protective equipment (gloves, respirator cartridges, etc.).
13. Additional procedures or other equipment intended to mitigate exposures to the chemical substance.
14. Description of worker training and hazard communication (MSDS, other) specific to the chemical substance.
15. Estimate of the total number of individuals other than workers exposed to the chemical substance and duration of exposure.
16. Manner or method of disposal for consumer use of products containing the chemical substance.

17. Any test data in the submitter's possession regarding information on health or environmental effects, environmental fate, worker safety, and material characterization, including any data related to characterization of the chemical substance in the subject organism and test medium.

To facilitate this information collection request, EPA has developed a form based on the PMN reporting form (EPA Form 7710-25). Copies of both the PMN form and the proposed form (EPA Form 7710-[tbd])(Attachment B) for this information collection request are attached. By supplying the information described in the form to the extent it is known or reasonably ascertainable, respondents do not incur the burden of providing unnecessary information. In addition, many of the potential respondents are familiar with the PMN form, thus further reducing the reporting burden.

EPA has limited the level of detail of information described in the form to the information which would be most useful in facilitating EPA's evaluation of the potential risks of the chemical substance. However, respondents may include additional or optional information that they believe EPA should consider when evaluating the chemical substance. For example, respondents may identify pollution prevention techniques being employed by the submitter that may be relevant to the Agency's assessment. EPA encourages submitters to provide information on the benefits of the chemical substance in comparison to existing chemical substances including macroscale forms of the same chemical substance, information on the substitutes, and any additional information available to them on waste management techniques.

#### 4(b)(ii) Respondent Activities

Activities a respondent may be required to perform as a result of TSCA section 8(a) chemical-specific rule are as follows:

##### Managerial Labor

- Identify listed chemical substances;
- Assign principal technical contact person;
- Identify by-product; impurities; physical properties
- Review marketing data;
- Research the date of the initiation of manufacture of the chemical substance;
- Research occupational exposure, environmental release, health and environmental data, disposal methods; risk management practices; and
- Process, compile, and review information for accuracy, substantiate a claim of confidential business information.

##### Technical Labor

- Identify chemical and trade name and chemical composition;
- Identify by-product; impurities; physical properties
- Describe use of the chemical substance;
- Report quantity manufactured;

- Research workplace exposures, environmental releases, health and environmental data, and disposal methods; risk management practices; and
- Provide occupational description.

#### Clerical Labor

- Format research on occupational exposures, environmental releases, health and environmental data; risk management practices;
- Format attachments;
- Prepare notice; and
- Recordkeeping.

### **5. THE INFORMATION COLLECTED -- AGENCY ACTIVITIES, COLLECTION METHODOLOGY AND INFORMATION MANAGEMENT**

#### **5(a) Agency Activities Inventory**

EPA will perform the following activities:

- review the data submitted;
- analyze submissions for confidentiality and provide appropriate protection for confidential data;
- file and store submissions;
- use the data to inform the assessment and management of any risks from nanoscale materials; and
- provide an aggregated report of the data submitted.

#### **5(b) Collection Methodology and Management**

An improved information technology to minimize burden of a TSCA section 8(a) chemical-specific rule has not been found. EPA has not been able to identify a more efficient, less expensive, or more flexible means of obtaining the required data than the one currently being used. To the extent data are not CBI, all information collected is made available to the public through the public docket office. EPA is requiring firms to submit this information on one standard reporting form. TSCA section 8(a) chemical-specific rules typically require one-time reporting. As future data needs arise, EPA will consider the use of electronic or other types of reporting methods. EPA believes the flexibility already allowed in the reporting structure significantly eases burden.

#### **5(c) Small Entity Flexibility**

The proposed rule would exempt some small manufacturers and processors. However, as described in the proposed rule some small manufacturers and processors would be required to report and keep records. Based on EPA's economic analysis for the rule, EPA has determined that the rule is not expected to have a significant adverse economic impact on a substantial number of small entities. All respondents to TSCA section 8(a) chemical-specific rules, including small businesses, are granted flexibility in their reporting methods.



#### **5(d) Collection Schedule**

This is a one-time collection of data. Respondents will have 6 months to collect and submit data for existing nanoscale materials and will report at least 135 days before new discrete nanoscale materials are manufactured or processed. As noted in the preamble to the proposed rule EPA is considering periodic reporting of nanoscale materials identified in the rule similar to reporting that occurs under the Inventory Update Rule (IUR) at 40 CFR part 710. EPA will consider any comments received when proposing any further reporting for nanoscale materials under section 8(a).

### **6. ESTIMATING THE BURDEN AND COST OF THE COLLECTION**

This section presents the burden and cost estimates incurred by all affected entities over the first three years of the rule as a result of the proposed reporting requirements for certain chemical substances as nanoscale materials under the authority of section 8(a) of TSCA. This supporting statement provides burden and cost estimates for the information collection and is incremental to the burden already accounted for in the existing, approved ICR, *Information Collection Request for Chemical Specific Rules, Toxic Substances Control Act Section 8(a) EPA ICR No: 1198.08, OMB Control No: 2070-0067*. All costs are presented in year 2013 dollars. The proposed information collection requires reporting at the company level. EPA estimates that a total of 295 respondents will respond to this information collection.

Burden and cost calculations are based on the assumption that EPA will receive 1,823 reports in the first three years of the rule. Each report is for a single nanomaterial/company combination. Each company is expected to submit an average of 5.06 reports in the first year and 0.56 reports in subsequent years. The average burden per respondent is estimated to be approximately 284 hours over the three year period.

#### **6(a) Estimating Respondent Burden**

The proposed rule requires manufacturers and processors of certain chemical substances as nanoscale materials to incur costs associated with rule familiarization, preparation of reports, and recordkeeping. While firms are expected to incur some recurring costs associated with maintaining their records, these costs are expected to be minimal; as a result, all costs are assumed to be one-time costs. In addition, rule familiarization costs are only incurred in the first year of the rule.

Companies will be required to report a variety of information about nanoscale materials including, chemical identity, physical properties, uses, human exposure and environmental release, production technology, and test data on nanomaterial's effects on health and the environment. Four procedural tasks are considered in the estimation of respondent burden. The four respondent activities include: rule familiarization; form completion; form submission; and recordkeeping. Rule familiarization requires that reporting entities learn the proposed 8(a) rule and its various requirements. Entities must then complete a form providing the information listed above. The third task requires reporting businesses to submit electronically to EPA via CDX, EPA's electronic system for environmental data exchange. Lastly, entities must maintain records

of the reported information in Table 1. Table 1 provides a detailed description of the related Information Collection that corresponds to each activity.

**Table 1: Cross-Walk between Industry Activities and Related Information Collections (ICs)**

Activity	Description	Related IC(s)
<b>Rule Familiarization</b>	Site staff must familiarize themselves with the requirements of the rule. This entails reading the rule, understanding the various reporting and administrative requirements, and determining the manner in which the reporting requirements will be met.	Rule Familiarization
<b>Preparation of Reports (Form Completion and Form Submission)</b>	Site staff must collect all required information regarding nanomaterial information, production technologies, and health / environmental impacts. Firms are required to submit one form for each nanomaterial. The information must be collected and reviewed internally before submission.	Prepare Report, Electronic Submission
<b>Recordkeeping</b>	Respondents must keep records supporting their submissions.	Prepare and Submit Report, and Maintain Records - Partial Report  Prepare and Submit Report, and Maintain Records- Full Report

The following descriptions provide an overview of the reporting activities for the three labor categories: managerial, technical and clerical. Table 2 lists more specifically the tasks within each activity group.

Managerial Labor

- Manufacturer identifies listed chemicals: specify the chemicals to report and include chemical identity information.
- Assign principal technical contact person: designate a representative from the technical labor category as primary contact for reporting.
- Identify by-product: list additional by-products and uses of the chemical.
- Review marketing data: provide producer/manufacturer business information.
- Research the date of the initiation of manufacture or importation of the chemical: find and report this initiation date.
- Research occupational exposure, environmental release, health and environmental data, disposal methods: a majority of the managerial staff’s burden includes a review of human exposure, environmental release information and associated physical properties after disposal.
- Process, compile, and review information for accuracy, substantiate a claim of confidential business information: collect and check for accurately reported information.
- Register for CDX, sign electronic signature agreements, and report compromised electronic signatures.

Technical Labor

- Identify chemical and trade name and chemical composition: find and report chemical identity information and physical properties.
- Identify by-product: list additional by-products.
- Describe use of chemical: report other uses or applications of the substance.
- Report quantity manufactured or imported: include volumes of the chemical.
- Research occupational exposures, environmental releases, health and environmental data, and disposal methods: a majority of the technical staff's burden entails researching and reporting the possibilities of human exposure and environmental release of the chemical as well as physical properties of the substance after release or exposure.
- Provide occupational description: outline worker exposure information and technologies used to mitigate the risk.
- Register for CDX for electronic reporting.
- Maintain records.

#### Clerical Labor

- Format research on occupational exposure, environmental releases, health and environmental data: a majority of the technical staff's burden includes researching and reporting human and environmental effects after release or exposure.
- Format attachments: organize additional reported information.
- Maintain records.

EPA calculated burden estimates for each element of the proposed collection form based on the *Supporting Statement for EPA ICR No. 2250.01: Information Collection in Support of EPA's Stewardship Program for Nanoscale Material* (EPA, 2007), economic analyses for other rules with similar requirements (such as the Premanufacture Notification Electronic Reporting final rule), and EPA's best professional judgment. More detailed information on the derivation of these estimates is found in the *Economic Analysis for the Proposed Reporting Requirements for Certain Nanoscale Materials* (EPA, 2015).

Table 2 illustrates the burden for a typical respondent on a per-activity basis, including the time required to complete the form. EPA estimates the total burden for one firm to complete one form to be approximately 137 hours. Electronic submission of the form is expected to require approximately 2.4 hours the first year and 2.8 hours in each of the second and third years of the ICR, however, not all respondents will perform all activities related to electronic reporting in all years. Each of the 295 companies is expected to submit an average of 5.06 full reports in the first year and 0.56 full reports in all subsequent years, for a total of 1,823 reports over the three year period.

**Table 2: Industry Burden, by Activity**

Activity	Clerical Burden (hours)	Technical Burden (hours)	Managerial Burden (hours)	Total Burden (hours)
	(a)	(b)	(c)	(d) = (a)+(b)+(c)
<b><i>RULE FAMILIARIZATION (YEAR 1 ONLY)</i></b>				
Staff Reviews Rule 8(a) and its Various Requirements	0.00	0.55	0.27	0.82
<b>Total</b>	<b>0.00</b>	<b>0.55</b>	<b>0.27</b>	<b>0.82</b>
<b><i>FORM COMPLETION</i></b>				
Submitter Information	0.00	2.00	1.00	3.00
Chemical Identity Information	0.00	7.50	1.00	8.50
Physical Properties	0.00	2.00	0.50	2.50
Additional Physical Properties	0.00	4.00	1.00	5.00
Description of Uses	0.00	3.00	1.50	4.50
Amount of Substance to be Manufactures / Imported	0.00	1.00	1.50	2.50
Description of Byproducts	0.00	0.50	0.00	0.50
Human Exposure and Environmental Release	0.00	52.00	9.50	61.50
Physical Properties Related to Understanding and Assessing Exposures and Release	0.00	4.00	1.00	5.00
Overview of Lifecycles	0.00	10.00	2.00	12.00
Release Point Control Technology	0.00	2.00	0.40	2.40
Worker Exposure Information	0.00	2.00	0.40	2.40
Protective Equipment or Engineering Control	0.00	2.00	0.40	2.40
Information on Cleaning / Reuse / Disposal of Used Protective Equipment	0.00	1.00	0.20	1.20
Additional Procedures or Other Equipment Intended to Mitigate Exposure to Nanoscale Materials	0.00	1.00	0.20	1.20
Description of Worker Training and Hazardous Communication	0.00	1.00	0.20	1.20
Number of Individual Other than Workers Exposed to the Chemical or Duration of the Exposure	0.00	1.00	0.20	1.20
Manner or Method of Disposal for Consumer Use of Products	0.00	2.00	0.40	2.40
Test Data in the Submitter’s Possession of Information on Health / Environmental Effects	0.00	7.20	10.00	17.20
<b>Total</b>	<b>0.00</b>	<b>105.20</b>	<b>31.40</b>	<b>136.60</b>
<b><i>ELECTRONIC REPORTING</i></b>				
CDX Registration	0.00	0.67	0.17	0.84
Electronic Subscriber Agreement/Electronic Signature	0.00	0.00	0.25	0.25

Activity	Clerical Burden (hours)	Technical Burden (hours)	Managerial Burden (hours)	Total Burden (hours)
	(a)	(b)	(c)	(d) = (a)+(b)+(c)
Help Desk	0.00	0.24	0.06	0.30
Report Compromised Signature (Years 2 and 3 Only)	0.00	0.00	0.40	0.40
Problem Resolution	0.00	1.00	0.00	1.00
<b>Total Year 1</b>	<b>0.00</b>	<b>1.91</b>	<b>0.48</b>	<b>2.39</b>
<b>Total Year 2 and 3</b>	<b>0.00</b>	<b>1.91</b>	<b>0.88</b>	<b>2.79</b>
<b>RECORDKEEPING</b>				
Maintain Records of Collected Information	0.50	0.50	0.00	1.00
<b>Total</b>	<b>0.50</b>	<b>0.50</b>	<b>0.00</b>	<b>1.00</b>
<b>TOTAL BURDEN PER REPORT</b>				
<b>Year 1 Total</b>	<b>0.50</b>	<b>108.16</b>	<b>32.15</b>	<b>140.81</b>
<b>Year 2 and 3 Totals</b>	<b>0.50</b>	<b>107.61</b>	<b>32.28</b>	<b>140.39</b>

### 6(b) Estimating Cost

EPA multiplied burden estimates by standard wage rates for managerial, technical, and clerical levels developed from information published by the Bureau of Labor Statistics (BLS) and a method outlined in the document *Wage Rates for Economic Analyses of the Toxics Release Inventory Program* (EPA, 2002b). Wage data for the three occupational categories was gathered for manufacturing industries from *Employer Costs for Employee Compensation Supplemental Tables: December 2006 – March 2014* (BLS, 2014).

The cost of fringe benefits, such as health insurance and vacation, is taken for each labor category from the same ECEC series. Following the methodology outlined in (EPA, 2002b), fringe benefits are calculated as a percentage of total wages for each category. EPA added 17 percent to the wages in each category to account for overhead, based on information provided by the chemical industry and chemical industry trade associations in the *Revised Economic Analysis for the Amended Inventory Update Rule: Final Report* (EPA, 2002a) and *Wage Rates for Economic Analyses of the Toxics Release Inventory Program* (2002b). The wages for each of the three categories were then multiplied by benefits and overhead factors to estimate loaded, annual salaries in year 2013 dollars. Table 3 contains the loaded wage rates for the managerial, technical and clerical occupation categories.

**Table 3: Derivation of Loaded Wage Rates for the Private Manufacturing Sector in 2013\$**

	Wage <sup>1</sup>	Fringe Benefits <sup>1</sup>	Fringes as % of Wage	Overhead % of Wage <sup>2</sup>	Fringe + Overhead Factor	Loaded Wages
	(a)	(b)	(c) = (b)/(a)	(d)	(e)=(1)+(c)+(d)	(f) = (a) x (e)
<b>Managerial</b>	\$46.25	\$23.71	51%	17%	1.68	<b>\$77.82</b>
<b>Technical</b>	\$38.16	\$19.90	52%	17%	1.69	<b>\$64.55</b>
<b>Clerical</b>	\$18.05	\$9.23	51%	17%	1.68	<b>\$30.35</b>

**Sources:** <sup>1</sup> Employer Costs for Employee Compensation Supplementary Tables: December 2006-March 2014, US Bureau of Labor Statistics, June 11, 2014 (pp 29,33,37) (<http://www.bls.gov/ncs/ect/sp/ecsuphst.pdf>, accessed July 7, 2014).

<sup>2</sup> An overhead rate of 17 percent was estimated based on industry data gathered for the *Revised Economic Analysis for the Amended Inventory Update Rule: Final Report* (EPA, 2002a) and *Wage Rates for Economic Analyses of the Toxics Release Inventory Program*. (EPA, 2002b)

Table 4 contains the cost per activity of completing a form for one respondent. Burden hours presented in Table 2 were multiplied by the corresponding loaded wage rate in Table 3. EPA estimates that the total cost for reviewing the rule and completing and submitting one report is approximately \$9,499 in the first year and approximately \$9,473 in each of years 2 and 3 of the ICR. More information on the derivation of these costs is found in the *Economic Analysis for the Proposed Reporting Requirements for Certain Nanoscale Materials* (EPA, 2015).

**Table 4: Industry Cost, by Activity**

Activity	Clerical Burden (\$2013)	Technical Burden (\$2013)	Managerial Burden (\$2013)	Total Burden (\$2013)
	(a)	(b)	(c)	(d) = (a)+(b)+(c)
<b><i>RULE FAMILIARIZATION (YEAR 1 ONLY)</i></b>				
Staff Reviews Rule 8(a) and its Various Requirements	\$0.00	\$35.50	\$21.01	\$56.51
<b>Total</b>	<b>\$0.00</b>	<b>\$35.50</b>	<b>\$21.01</b>	<b>\$56.51</b>
<b><i>FORM COMPLETION</i></b>				
Submitter Information	\$0.00	\$129.09	\$77.82	\$206.92
Chemical Identity Information	\$0.00	\$484.10	\$77.82	\$561.93
Physical Properties	\$0.00	\$129.09	\$38.91	\$168.01
Additional Physical Properties	\$0.00	\$258.19	\$77.82	\$336.01
Description of Uses	\$0.00	\$193.64	\$116.73	\$310.38
Amount of Substance to be Manufactures / Imported	\$0.00	\$64.55	\$116.73	\$181.28
Description of Byproducts	\$0.00	\$32.27	\$0.00	\$32.27
Human Exposure and Environmental Release	\$0.00	\$3,356.45	\$739.31	\$4,095.77
Physical Properties Related to Understanding and Assessing Exposures and Release	\$0.00	\$258.19	\$77.82	\$336.01
Overview of Lifecycles	\$0.00	\$645.47	\$155.65	\$801.12
Release Point Control Technology	\$0.00	\$129.09	\$31.13	\$160.22
Worker Exposure Information	\$0.00	\$129.09	\$31.13	\$160.22
Protective Equipment or Engineering Control	\$0.00	\$129.09	\$31.13	\$160.22
Information on Cleaning / Reuse / Disposal of Used Protective Equipment	\$0.00	\$64.55	\$15.56	\$80.11
Additional Procedures or Other Equipment Intended to Mitigate Exposure to Nanoscale Materials	\$0.00	\$64.55	\$15.56	\$80.11
Description of Worker Training and Hazardous Communication	\$0.00	\$64.55	\$15.56	\$80.11
Number of Individual Other than Workers Exposed to the Chemical or Duration of the Exposure	\$0.00	\$64.55	\$15.56	\$80.11
Manner or Method of Disposal for Consumer Use of Products	\$0.00	\$129.09	\$31.13	\$160.22
Test Data in the Submitter’s Possession of Information on Health / Environmental Effects	\$0.00	\$464.74	\$778.23	\$1,242.96
<b>Total</b>	<b>\$0.00</b>	<b>\$6,790.37</b>	<b>\$2,443.63</b>	<b>\$9,233.99</b>
<b><i>ELECTRONIC SUBMISSION OF FORM</i></b>				
CDX Registration	\$0.00	\$43.25	\$13.23	\$56.48

Activity	Clerical Burden (\$2013)	Technical Burden (\$2013)	Managerial Burden (\$2013)	Total Burden (\$2013)
	(a)	(b)	(c)	(d) = (a)+(b)+(c)
Electronic Subscriber Agreement/Electronic Signature	\$0.00	\$0.00	\$19.46	\$19.46
Help Desk	\$0.00	\$15.49	\$4.67	\$20.16
Report Compromised Signature (Years 2 and 3 Only)	\$0.00	\$0.00	\$31.13	\$31.13
Problem Resolution	\$0.00	\$64.55	\$0.00	\$64.55
<b>Total Year 1</b>	<b>\$0.00</b>	<b>\$123.29</b>	<b>\$37.35</b>	<b>\$160.64</b>
<b>Total Years 2 and 3</b>	<b>\$0.00</b>	<b>\$123.29</b>	<b>\$68.48</b>	<b>\$191.77</b>
<b>RECORDKEEPING</b>				
Maintain Records of Collected Information	\$15.17	\$32.27	\$0.00	\$47.44
<b>Total</b>	<b>\$15.17</b>	<b>\$32.27</b>	<b>\$0.00</b>	<b>\$47.44</b>
<b>TOTAL BURDEN PER REPORT</b>				
<b>Year 1 Totals</b>	<b>\$15.17</b>	<b>\$6,981.43</b>	<b>\$2,501.99</b>	<b>\$9,498.59</b>
<b>Year 2 and 3 Totals</b>	<b>\$15.17</b>	<b>\$6,945.93</b>	<b>\$2,512.11</b>	<b>\$9,473.21</b>



**6(c) Estimating Agency Burden and Cost**

EPA is responsible for the following activities associated with administering the proposed Section 8(a) rule:

- Industry and public assistance;
- Data processing and systems support;

Costs related to EPA activities that involve using the data are not included.

Agency personnel are responsible for all tasks associated with the proposed rule, and none of the work is expected to be completed by contractor staff. EPA labor costs are based on annual federal wage rates published by the Office of Personnel Management for the Washington-Baltimore-Northern Virginia, DC-MD-PA-VA-WV Locality Pay Area for 2013 (OPM, 2013). Wages are presented in terms of GS-level and step, and a federal GS-13, Step 5 employee with an unloaded wage rate of \$100,904 for 2013 (OPM, 2013) will conduct the collection and administrative activities under the proposed rule. Following the methodology outlined in *Instructions for Preparing Information Collection Requests (ICRs)* (EPA, 1992), EPA added 60 percent to the wage rate to account for fringe benefits and overhead costs. Table 5 derives the loaded wage rates for Agency staff at the GS-13 Step 5 level.

**Table 5: Derivation of Loaded Agency Wage Rates (2013\$)**

Pay Grade	Annual Salary	Overhead and Fringe Benefits (% of wages)	Overhead and Fringe Benefit Cost	Total
<b>GS 13 Step 5</b>	\$100,904	60%	\$60,542	<b>\$161,446</b>

**Source:** The unloaded Federal salary for 2013 is from the Office of Personnel Management salary table for Washington-Baltimore-Northern Virginia (OPM, 2013).

Table 6 contains the burden and cost per report for all EPA staff activities. All activities performed by the GS-13 level staff member are dependent on the number of reports submitted to EPA. The burden for industry and public assistance is approximately 0.00060 FTE per report and the total cost per-report is approximately \$97. The burden for data processing and systems support is approximately 0.0015 FTE and the cost per-report is approximately \$242. The burden and cost of processing each form is derived in the *Economic Analysis for the Proposed Reporting Requirements for Certain Nanoscale Materials* (EPA, 2015).

**Table 6: EPA Staff Burden and Cost of Processing One Report**

Activity	Agency Burden per Activity (FTE)	Agency Burden per Activity (FTE)	Agency Cost per Activity (2013\$)
<b>GS-13 Step 5 per-Report Burden</b>			
Industry and public assistance	0.000601	1.25	\$97.02
Data processing and systems support	0.001505	3.13	\$242.14
<b>Total Agency Burden, per report</b>	<b>0.002106</b>	<b>4.38</b>	<b>\$338.84</b>

**Note:** Some burden estimate subtotals may not calculate due to rounding of unit burden estimates.

**6(d) Bottom-Line Industry Burden and Cost Estimates**

This section describes the estimated total social paperwork burden and cost of the proposed section 8(a) rule over its first three years.

***Respondent tally***

EPA estimated the number of U.S.-based nanomaterials manufacturers and processors using three sources:

- Lux Research: *Nanotech Report*<sup>TM</sup>, 5th ed. (2007)
- BCC Research: *Nanotechnology: A Realistic Market Assessment* (2008)
- Nanowerk: *Company & Labs Directory* (2009)

Once the universe of U.S. nanomaterial manufacturers and processors was estimated, EPA then calculated the number of companies that would be subject to the proposed rule. EPA estimated that approximately 295 firms will be subject to the proposed section 8(a) information collection. Each firm is expected to submit an average of 5.06 reports in the first year and 0.56 reports in subsequent years. More information of the derivation of these numbers can be found in the *Economic Analysis for the Proposed Reporting Requirements for Certain Nanoscale Materials* (EPA, 2015).

Affected facilities would incur burden and cost due to the electronic reporting requirements. This includes costs in the first year to complete a subscriber agreement and register with CDX. Some respondents will incur CDX costs in subsequent years due to employee turnover or compromised electronic signatures; therefore, response rate for some activities will vary across years. Table 7 shows the number of responses for the various activities for the three years.

**Table 7: Number of Responses per Activity**

Activity	Total Number of Companies	Response Rate	Number of Responses per Activity	No. of Responses/ Respondent	Total Number of Responses
<b>Year 1</b>					
<b>Rule Familiarization (per company)</b>	295	100%	1	1.00	295
<b>Form Completion (per report)</b>	295	100%	5.06	5.06	1,493
<b>Electronic Submission (Per Company)</b>	CDX Registration	295	100%	1	295
	Electronic Subscriber Agreement/Electronic Signature	295	100%	1	295
	Help Desk	295	100%	1	295
	Problem Resolution	295	3%	1	9
<b>Recordkeeping (per report)</b>	295	100%	5.06	5.06	1,493
<b>Years 2 and 3</b>					
<b>Rule Familiarization (per company)</b>	295	0%	1	0	0
<b>Form Completion (per report)</b>	295	100%	5.06	5.06	1,493
<b>Electronic Submission (Per Company)</b>	CDX Registration	295	10%	1	30
	Electronic Subscriber Agreement/Electronic Signature	295	10%	1	30
	Help Desk	295	10%	1	30
	Report Compromised Signature	295	1%	1	3
	Problem Resolution	295	3%	1	9
<b>Recordkeeping (per report)</b>	295	100%	5.06	5.06	1,493

Table 8 and Table 9 present the total estimated respondent burden and costs in the first year and subsequent years, respectively. As presented in Table 8, EPA estimates the total industry burden to be approximately 206,098 hours and the total industry cost to be approximately \$13.9 million in the first year of this ICR. Burden is estimated to be approximately 22,755 hours and the industry cost is estimated to be approximately \$1.5 million annually in second year and the third year of the ICR period. These estimates are presented in Table 9.

**Table 8: Total Estimated Annual Respondent Burden and Cost Associated with this ICR Addendum in First Year**

Activity	Total Number of Companies (a)	Total Burden per Activity (hours) (b)	Total Cost per Activity (c) (2013\$)	No. of Responses/ Respondent (e)	Total Number of Responses (a*e)	Total Burden (hours)	Total Cost (Millions 2013\$) <sup>1</sup>
<b>Rule Familiarization (per Company)</b>	295	<b>\$0.02</b>	\$56.51	1.00	295	<b>242</b>	<b>\$0.02</b>
<b>Report Completion</b>	295	<b>\$13.79</b>	\$9,233.94	5.06	1493	<b>203,944</b>	<b>\$13.47</b>
<b>Electronic Reporting</b>							
CDX Registration	295	<b>\$0.02</b>	\$56.48	1.00	295	<b>248</b>	<b>\$0.02</b>
Electronic Subscriber Agreement/Electronic Signature	295	<b>\$0.01</b>	\$17.68	1.00	295	<b>74</b>	<b>\$0.01</b>
Help Desk	295	<b>\$0.01</b>	\$20.16	1.00	295	<b>89</b>	<b>\$0.01</b>
Problem Resolution	295	<b>\$0.00</b>	\$64.55	0.03	9	<b>9</b>	<b>\$0.00</b>
<b>Recordkeeping</b>	295	<b>\$0.07</b>	\$47.44	5.06	1493	<b>1,493</b>	<b>\$0.07</b>
<b>Total</b>						<b>206,098</b>	<b>\$13.91</b>

**Table 9: Total Estimated Annual Respondent Burden and Cost Associated with this ICR Addendum in Second and Third Year**

Activity	Total Number of Companies	Total Burden per Activity (hours)	Total Cost per Activity (2013\$)	Number of Responses/ Respondent	Total Number of Responses	Total Burden (hours)	Total Cost (Millions 2013\$) <sup>1</sup>
<b>Rule Familiarization (per Company)</b>	295	0.82	\$56.51	0.00	0.00	<b>0</b>	<b>\$0.00</b>
<b>Form Completion</b>	295	136.60	\$9,233.94	0.56	165.00	<b>22,539</b>	<b>\$1.52</b>
<b>Electronic Reporting</b>							
CDX Registration	295	0.84	\$56.48	0.10	29.50	<b>24</b>	<b>\$0.00</b>
Electronic Subscriber Agreement/Electronic Signature	295	0.25	\$19.46	0.10	29.50	<b>9</b>	<b>\$0.00</b>
Help Desk	295	0.30	\$20.16	0.10	29.50	<b>9</b>	<b>\$0.00</b>
Report Compromised Signature	295	0.40	\$31.13	0.01	2.95	<b>0</b>	<b>\$0.00</b>
Problem Resolution	295	1.00	\$64.55	0.03	8.85	<b>9</b>	<b>\$0.00</b>
<b>Recordkeeping</b>	295	1.00	\$47.44	0.56	165.00	<b>165</b>	<b>\$0.01</b>
<b>Total</b>						<b>22,755</b>	<b>\$1.53</b>

Table 10 presents the estimated total and average annual burden and cost associated with this ICR addendum. EPA estimates the annual average burden and cost over three years at approximately 84,000 hours and 5.7 million dollars, respectively, with a total burden of approximately 252,000 hours and \$17.0 million over the three year period

**Table 10: Estimated Annual Average Burden and Cost Associated with this ICR Addendum**

Activity	Year 1		Year 2		Year 3		Three Year Average			
	Annual Burden (hours)	Annual Cost (Millions 2013\$)	Annual Burden (hours)	Annual Cost (Millions 2013\$)	Annual Burden (hours)	Annual Cost (Millions 2013\$)	Total Burden (hours)	Total Cost (Millions 2013\$)	Average Burden (hours)	Average Cost (Millions 2013\$)
<b>Rule Familiarization (per Company)</b>	242	\$0.02	0	\$0.00	0	\$0.00	242	\$0.02	81	\$0.01
<b>Form Completion</b>	203,944	\$13.79	22,539	\$1.520	22,539	\$1.52	249,022	\$16.83	83,007	\$5.61
<b>Electronic Reporting</b>	419	\$0.04	51	\$0.003	51	\$0.003	521	\$0.05	174	\$0.02
<b>Recordkeeping</b>	1,493	\$0.07	165	\$0.01	165	\$0.01	1,823	\$0.09	608	\$0.03
<b>Total</b>							<b>251,608</b>	<b>\$16.99</b>	<b>83,870</b>	<b>\$5.67</b>

As shown in Table 11, the Agency estimates the typical respondent burden for this information collection activity over all three years to be 853 hours. The Agency estimates the annual average burden for the information collection activity to be 284 hours. This burden estimate assumes that each respondent will submit an average of 5.06 reports in the first year and 0.56 reports in subsequent years.

**Table 11: Average Burden per Company**

Activity	Burden Hours			Total Hours per Activity	No. of Responses / Respondent			Total Burden (hours per average site)	Average Annual Burden (hours per average site)
	Clerical	Technical	Managerial		Year 1	Year 2	Year 3		
<b>Rule Familiarization.</b>	0.00	0.55	0.27	0.82	1.00	0	0	<b>0.82</b>	<b>0.27</b>
<b>Form Completion (per Report)</b>	0.00	105.20	31.40	136.60	5.06	0.56	0.56	<b>844.19</b>	<b>281.40</b>
<b>Electronic Reporting</b>									
CDX Registration	0.00	0.67	0.17	0.84	1.00	0.10	0.10	<b>1.01</b>	<b>0.34</b>
Electronic Subscriber Agreement/Electronic Signature	0.00	0.00	0.25	0.25	1.00	0.10	0.10	<b>0.30</b>	<b>0.10</b>
Help Desk	0.00	0.24	0.06	0.30	1.00	0.10	0.10	<b>0.36</b>	<b>0.12</b>
Report Compromised Signature	0.00	0.00	0.40	0.40	0.00	0.01	0.01	<b>0.01</b>	<b>0.00</b>
Problem Resolution	0.00	1.00	0.00	1.00	0.03	0.03	0.03	<b>0.09</b>	<b>0.03</b>
<b>Recordkeeping</b>	0.50	0.50	0.00	1.00	5.06	0.56	0.56	<b>6.18</b>	<b>2.06</b>
<b>Total Hours</b>								<b>852.96</b>	<b>284.32</b>

Table 12 presents the average cost per site, by activity, for completion of a reporting form. EPA estimates that the average site will submit 5.06 reports in the first year and 0.56 reports in subsequent years and incur a cost of approximately \$57,500 over the three year collection period. The Agency estimates that a site will incur an average annual cost of approximately \$19,200. Table 13 presents the burden hours, organized by information collection, for the proposed rule.

**Table 12: Average Cost per Company**

Activity	Cost			Total Cost per Activity	No. of Responses / Respondent			Total Cost (\$2013)	Average Annual Cost (\$2013)
	Clerical	Technical	Managerial		Year 1	Year 2	Year 3		
<b>Rule Familiarization.</b>	\$0.00	\$35.50	\$21.01	\$56.51	1	0	0	\$57	\$19
<b>Form Completion (per Report)</b>	\$0.00	\$6,790.34	\$2,443.60	\$9,234.00	5.06	0.56	0.56	\$57,066	\$19,022
<b>Electronic Reporting</b>									
CDX Registration	\$0.00	\$43.25	\$13.23	\$56.48	1.00	0.10	0.10	\$68	\$23
Electronic Subscriber Agreement/Electronic Signature	\$0.00	\$0.00	\$19.46	\$19.46	1.00	0.10	0.10	\$23	\$8
Help Desk	\$0.00	\$15.49	\$4.67	\$20.16	1.00	0.10	0.10	\$19	\$6
Report Compromised Signature	\$0.00	\$0.00	\$31.13	\$31.13	0.00	0.01	0.01	\$1	\$0
Problem Resolution	\$0.00	\$64.55	\$0.00	\$64.55	0.03	0.03	0.03	\$6	\$2
<b>Recordkeeping</b>	\$15.17	\$32.27	\$0.00	\$47.44	5.06	0.56	0.56	\$293	\$98
<b>Total Cost</b>								<b>\$57,533</b>	<b>\$19,178</b>

Note: Base wages are estimated in the ECEC Supplemental Tables (BLS, 2014). Some burden estimate subtotals may not calculate due to rounding of unit burden estimates

**Table 13: Information Collection Tally**

Information Collection	No. of	No. of	Responses Subtotal	Burden Hours per Response	Burden Hours Subtotal
	Respondents	Responses / Respondent			
<b>First 1</b>					
Rule Familiarization	295	1.00	295	0.82	242
Prepare Form	295	5.06	1493	136.60	203,944
<b>Electronic Reporting</b>					
CDX Registration	295	1.00	295	0.84	248
Electronic Subscriber Agreement/Electronic Signature	295	1.00	295	0.25	74
Help Desk	295	1.00	295	0.30	89
Problem Resolution	295	0.03	9.00	1.00	9
Maintain Records	295	5.06	1,493	1.00	1,493
<b>Total</b>			<b>4,175</b>	<b>141</b>	<b>206,098</b>
<b>Years 2 and 3</b>					
Rule Familiarization	295	0.00	0	0.82	0
Prepare Form	295	0.56	165	136.60	22,539
<b>Electronic Reporting</b>					
CDX Registration	295	0.10	30	0.84	25
Electronic Subscriber Agreement/Electronic Signature	295	0.10	30	0.25	8
Help Desk	295	0.10	30	0.06	9
Report Compromised Signature	295	0.01	3	0.400	0
Problem Resolution	295	0.03	9	1.00	9
Maintain Records	295	0.56	165	1.00	165
<b>Total</b>			<b>459</b>	<b>141</b>	<b>22,755</b>
<b>Average Burden for ICR Addendum Period</b>					
<b>Rule Familiarization</b>	295	<b>0.33</b>	<b>97</b>	<b>0.82</b>	<b>81</b>
<b>Prepare Form</b>	295	<b>2.06</b>	<b>608</b>	<b>136.60</b>	<b>83,007</b>
<b>Electronic Reporting</b>	295	<b>0.27</b>	<b>80</b>	<b>0.54</b>	<b>174</b>
<b>Maintain Records</b>	295	<b>2.06</b>	<b>608</b>	<b>1.00</b>	<b>608</b>
<b>Total</b>			<b>1,393</b>	<b>139</b>	<b>83,870</b>

**Note:** Some burden estimate subtotals may not calculate due to rounding of unit burden estimates.



**Agency Tally**

Table 14 presents the Agency costs in the first year. EPA multiplied the costs per report by the total number of reports to calculate the total burden and cost associated with the number of reports EPA expects to be submitted. The total Agency burden for year one is approximately 3.15 FTEs and the total cost is \$0.51 million.

**Table 14: Total Cost and Burden of Agency Activities in the First Year (2013\$)**

Activity	Staff	Total Burden per Activity (FTE)	Total Number of Units	Total Cost per Activity (2013\$)	Total Burden (FTE)	Total Cost (Millions 2013\$)
Industry/Public Assistance	EPA Employee (GS-13 Step 5)	0.000601	1,493	\$97	0.90	\$0.14
Data Processing and System Support Personnel		0.001505	1,493	\$243	2.25	\$0.36
<b>Total Cost and Burden</b>					<b>3.15</b>	<b>\$0.51</b>

**Note:** Some burden estimate subtotals may not calculate due to rounding of unit burden estimates.

Table 15 presents the Agency costs associated with the proposed rule in the second and third year. EPA multiplied the costs per report by the total number of reports to calculate the total burden and cost associated with the number of reports EPA expects to be submitted. The total Agency burden for the second and third year is approximately 0.35 FTEs and the total cost is \$0.06 million.

**Table 15: Total Cost and Burden of Agency Activities in the Second and Third Year (2013\$)**

Activity	Staff	Total Burden per Activity (FTE)	Total Number of Units	Total Cost per Activity (2013\$)	Total Burden (FTE)	Total Cost (Millions 2013\$)
Industry/Public Assistance	EPA Employee (GS-13 Step 5)	0.000601	165	\$97	0.10	\$0.02
Data Processing and System Support Personnel		0.001505	165	\$243	0.25	\$0.045
<b>Total Cost and Burden</b>					<b>0.35</b>	<b>\$0.06</b>

**Note:** Some burden estimate subtotals may not calculate due to rounding of unit burden estimates.

Table 16 presents the Agency’s estimated annual average burden and cost associated with this ICR addendum. The three year average annual burden, from 2012 to 2014, is approximately 1.28 FTEs and average annual cost is approximately \$0.21 million.

**Table 16: Estimated Annual Average Burden and Cost Associated with this ICR Addendum**

Activity	2012		2013		2014		2012-2014 Average	
	Annual Burden (FTE)	Annual Cost (Millions 2013\$)	Annual Burden (FTE)	Annual Cost (Millions 2013\$)	Annual Burden (FTE)	Annual Cost (2011\$)	Average Burden (FTE)	Average Cost (Millions 2013\$)
Document receipt, tracking, and data entry	0.90	0.14	0.10	0.02	0.10	\$0.02	0.37	\$0.06
Quality Control of Data	2.25	0.36	0.25	0.04	0.25	\$0.04	0.91	\$0.15
<b>Total</b>							<b>1.28</b>	<b>\$0.21</b>

**6(e) Reasons for Change in Burden**

EPA estimates that industry will incur an increase of 83,870 hours in annual burden for a total burden of 84,145 hours. This increase solely due program changes that result from the new proposed reporting requirements for manufacturers and processors of certain chemical substances as nanoscale materials.

**Table 17: Total Estimate of Annual Burden Hours and Annualized Cost Comparisons**

	Annual Burden Hours
Current OMB Inventory	275
Change in Burden due to Adjustments	0
Change in Burden due to Program Changes	83,870
<b>Total Change in Burden</b>	<b>83,870</b>
<b>Total Burden</b>	<b>84,145</b>

**6(f) Burden Statement**

The annual public burden for this collection of information is estimated to average 137 hours per response, and with an estimated 5 responses per respondent, the average per respondent burden is estimated to be 284 hours over the three year period covered by this ICR. According to the Paperwork Reduction Act, “burden” means the total time, effort, or financial resources expended by persons to generate, maintain, retain, or disclose or provide information to or for a Federal agency. For this collection it includes the time needed to review and understand instructions; prepare and submit reports

(including searching data sources); complete and review the collection of information; transmit the information; and keep records.

An agency may not conduct or sponsor, and a person is not required to respond to, a collection of information unless it displays a currently valid OMB control number. The OMB control number for this information collection appears above. The OMB control numbers for EPA's regulations in title 40 of the CFR, after appearing in the Federal Register when approved, are listed in 40 CFR Part 9, are displayed either by publication in the Federal Register or by other appropriate means, such as on the related collection instrument or form, if applicable. The display of OMB control numbers in certain EPA regulations is consolidated in 40 CFR Part 9.

To comment on the Agency's need for this information, the accuracy of the provided burden estimates, and any suggested methods for minimizing respondent burden, including the use of automated collection techniques, EPA has established a docket for this ICR under Docket ID No. EPA-HQ-OPPT-2010-0572 which is available for public viewing at the Pollution Prevention and Toxics Docket in the EPA Docket Center (EPA/DC), EPA West, Room B102, 1301 Constitution Ave., NW, Washington, DC. The EPA Docket Center Public Reading Room is open from 8:30 a.m. to 4:30 p.m., Monday through Friday, excluding legal holidays. The telephone number for the Reading Room is (202) 566-1544 and the telephone number for the Pollution Prevention and Toxics Docket is (202) 566-0280.

An electronic version of this docket is available at <http://www.regulations.gov/>. Use the federal government wide electronic docket and comment system at [www.regulations.gov](http://www.regulations.gov) to submit or view public comments, access the index listing of the docket contents, and to access those documents in the docket that are available electronically. Once in the system, select "advance search," then key in the docket ID number identified above. Also, you can send comments to the Office of Information and Regulatory Affairs, Office of Management and Budget, 725 17th Street, NW, Washington, DC 20503, Attention: Desk Office for EPA. Please include the EPA Docket ID No. EPA-HQ-OPPT-2010-0572 and OMB control number 2070-0162 in any correspondence.

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## 8. Attachments to the Supporting Statement

All of the attachments listed below can be found in the docket for this ICR; accessible electronically through <http://regulations.gov>. On the main page, select **Advanced Search** from the menu bar at the top and select **Docket Search**. Enter the Docket ID Number, **EPA-HQ-OPPT-2010-0572** in the **Docket ID** field. Click on the **Submit button**. From the results page, you will be able to link to the docket view or directly open select documents found in the docket.

**Attachment A:** 2015. EPA. Chemical Substances When Manufactured or Processed as Nanoscale Materials; TSCA Reporting and Recordkeeping Requirements; Proposed Rule. (Pending publication in the Federal Register, XX FR XX, DATE).

**Attachment B:** EPA Form 7710-[tbd] - TSCA §8(a) Reporting For Chemical Substances When Manufactured or Processed as Nanoscale Materials; Data Submission Form (Draft).