

Supporting Statement B

Ferrous Metals Surveys

OMB Control Number 1028-0068

Collections of Information Employing Statistical Methods

The agency should be prepared to justify its decision not to use statistical methods in any case where such methods might reduce burden or improve accuracy of results. When the question “Does this ICR contain surveys, censuses, or employ statistical methods?” is checked "Yes," the following documentation should be included in Supporting Statement B to the extent that it applies to the methods proposed:

- 1. Describe (including a numerical estimate) the potential respondent universe and any sampling or other respondent selection method to be used. Data on the number of entities (e.g., establishments, State and local government units, households, or persons) in the universe covered by the collection and in the corresponding sample are to be provided in tabular form for the universe as a whole and for each of the strata in the proposed sample. Indicate expected response rates for the collection as a whole. If the collection had been conducted previously, include the actual response rate achieved during the last collection.**

These canvasses are conducted as a complete census. No sampling is performed. The total universe is approximately 1,105 respondents that are business or other-for-profit institutions (Table 1 below). The sources used to create the sampling frame are trade periodicals (such as American Metal Market, Platt's Metal Week, Metal Bulletin, and Ryan's Notes), and U.S. Geological Survey (USGS) commodity specialists' direct contacts with industry specialists. Once a year, commodity specialists update the frame.

Table 1. Consolidated estimates of annual burden (private sector) ¹

| | | | PRIVATE SECTOR | | | |
|---------------|-----------|-----------|-----------------------|--------------|-----------------|--------------|
| | Form No. | Frequency | Number of Respondents | Responses | Completion Time | Burden Hours |
| 1 | 9-4044-A | Annually | 26 | 26 | 15 min | 7 |
| 2 | 9-4045-M | Monthly | 26 | 312 | 10 min | 52 |
| 3 | 9-4047-A | Annually | 125 | 125 | 30 min | 63 |
| 4 | 9-4048-A | Annually | 49 | 49 | 30 min | 25 |
| 5 | 9-4050-A | Annually | 16 | 16 | 30 min | 8 |
| 6 | 9-4064-M | Monthly | 10 | 120 | 60 min | 120 |
| 7 | 9-4071-MA | Monthly | 10 | 120 | 45 min | 90 |
| 8 | 9-4071-MA | Annually | 10 | 10 | 45 min | 8 |
| 9 | 9-4076-A | Annually | 10 | 10 | 60 min | 10 |
| 10 | 9-4077-A | Annually | 15 | 15 | 10 min | 3 |
| 11 | 9-4078-M | Monthly | 15 | 180 | 10 min | 30 |
| 12 | 9-4079-M | Monthly | 10 | 120 | 30 min | 60 |
| 13 | 9-4093-M | Monthly | 10 | 120 | 60 min | 120 |
| 14 | 9-4116-MA | Monthly | 61 | 732 | 30 min | 366 |
| 15 | 9-4116-MA | Annually | 551 | 551 | 30 min | 276 |
| 16 | 9-4120-A | Annually | 150 | 150 | 30 min | 75 |
| 17 | 9-4140-A | Annually | 11 | 11 | 30 min | 6 |
| TOTALS | | | 1,105 | 2,667 | | 1,319 |

¹ Based on 100% response rate. Actual response rate is lower.

The 76% response rate for this collection over the past 3 years is expected to continue, based on the number of establishments that have traditionally responded to this request for information.

The data collected on these forms are used to publish information on the mineral production for each state, including state rankings. Each state typically has only a limited number of establishments for each mineral commodity. In order to have accurate state rankings, it is necessary to canvass all of the establishments.

2. Describe the procedures for the collection of information including:

- * **Statistical methodology for stratification and sample selection,**
- * **Estimation procedure,**
- * **Degree of accuracy needed for the purpose described in the justification,**
- * **Unusual problems requiring specialized sampling procedures, and**
- * **Any use of periodic (less frequent than annual) data collection cycles to reduce burden.**

These canvasses do not employ sampling techniques. In some cases, individual establishments, by mutual agreement, have converted to reporting on an annual, rather than a monthly basis to reduce their burden. For those establishments, a monthly response is imputed from their annual response.

Data are imputed for all non-responses. The majority of published statistics are rounded to three significant digits. Estimation procedures for non-respondents are described in (3) below.

- 3. Describe methods to maximize response rates and to deal with issues of non-response. The accuracy and reliability of information collected must be shown to be adequate for intended uses. For collections based on sampling, a special justification must be provided for any collection that will not yield "reliable" data that can be generalized to the universe studied.**

Paper forms:

Two weeks after the initial request, establishments not responding will receive another copy of the paper form in a second request for information. For larger establishments that still have not responded, statistical assistants or mineral commodity specialists will phone an alternative company contact.

On-line electronic forms:

Two weeks after the initial request, statistical assistants will phone establishments that have not responded. For larger establishments that still have not responded, statistical assistants or mineral commodity specialists will phone an alternative company contact.

Non-response:

Data are imputed for non-responses. For example, imputation of non-response data may use industry trend figures, measures of establishment size such as Mine Safety and Health Administration employee-hours data, or company annual reports.

Industry acceptance of these canvasses and response to the USGS publication of the data continue to be extremely positive.

- 4. Describe any tests of procedures or methods to be undertaken. Testing is encouraged as an effective means of refining collections of information to minimize burden and improve utility. Tests must be approved if they call for answers to identical questions from 10 or more respondents. A proposed test or set of tests may be submitted for approval separately or in combination with the main collection of information.**

Many of the USGS' information customers are also businesses that respond to the canvasses in this information collection. USGS mineral commodity specialists are in frequent contact with companies by way of industry associations and conferences (for example, the International Lime Association, the National Lime Association, Inc., the Barytes Association, the United Nations Conference on Trade and Development [Iron Ore Trust Fund], the American Iron and Steel Institute, the Cobalt Development Institute, the International Tungsten Association, the International Manganese Institute, and the International Chromium Development Association). The information exchanged with these industry associations and at conferences includes trade, consumption, and production statistics, as well as information on technology developments within the particular industry.

Informal communications during periodic contacts with our customers allow us to determine if the published canvass data are meeting their needs. Any feedback concerning this information collection discussed during these communications or non-response follow-up telephone contacts is used as suggestions that might facilitate clarification or ease respondent burden. Respondents are also encouraged to submit comments via a feedback link on the Web site at

<https://miforms.er.usgs.gov/General/FeedBackForm.asp>. An annual letter is sent to our voluntary canvass respondents thanking them for their support and encouraging them to view our data products. At present, no formal tests are in progress that would require clearance.

5. Provide the names and telephone numbers of individuals consulted on statistical aspects of the design and the name of the agency unit, contractor(s), grantee(s), or other person(s) who will actually collect and/or analyze the information for the agency.

For further information concerning this information collection, please contact:

- Jeffrey P. Busse, Statistician, 703-648-4914, jbusse@usgs.gov,
- Elizabeth S. Sangine, Chief, Mineral Commodities Section, 703-648-7720, escottsangine@usgs.gov,
or
- Shonta Osborne, Chief, Minerals Commodities Data Unit, Data Collection and Coordination Section, 703-648-7960, sosborne@usgs.gov.

List and Titles of Forms

| Form No. | Frequency | Canvass Code | Title |
|-----------------|------------------|---------------------|---|
| 9-4044-A | Annually | A02 | Iron Ore (containing less than 5% manganese) |
| 9-4045-M | Monthly | A03 | Iron Ore (Usable ore) |
| 9-4047-A | Annually | A06 | Nickel, Stocks, Purchases, and Consumption |
| 9-4048-A | Annually | A07 | Rhenium |
| 9-4050-A | Annually | A09 | Finished (Natural and Synthetic) Iron Oxide Pigments and Other Iron Oxide Materials |
| 9-4064-M | Monthly | C18 | Cobalt |
| 9-4071-MA | Monthly | C34 | Manganese Ore and Products |
| 9-4071-MA | Annually | C34 | Manganese Ore and Products |
| 9-4076-A | Annually | C41 | Niobium (Columbium) and Tantalum |
| 9-4077-A | Annually | C43 | Molybdenum Ore and Concentrate |
| 9-4078-M | Monthly | C44 | Molybdenum Concentrates |
| 9-4079-M | Monthly | C45 | Molybdenum Concentrate - Molybdenum Products |
| 9-4093-M | Monthly | C68 | Tungsten Concentrate and Tungsten Product |
| 9-4116-MA | Monthly | G01 | Iron and Steel Scrap and Pig Iron |
| 9-4116-MA | Annually | G01 | Iron and Steel Scrap and Pig Iron |
| 9-4120-A | Annually | G30 | Slag - Iron and Steel - Sold or Used |
| 9-4140-A | Annually | C48 | Production, Shipments, and Stocks of Reclaimed Nickel |