**Supporting Statement B**

**Mine, Development, and Mineral Exploration Supplement**

**OMB Control Number 1028-0060**

**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.**

The single canvass in this information collection is conducted as a complete census. No sampling is performed. The total universe is approximately 324 that are business or other for-profit institutions (Table 1 below). The sources used to create the sampling frame are industry directories (such as the annual Skillings North American Mining Directory) and trade periodicals (such as American Metal Market, Platt’s Metal Week, Metal Bulletin, North American Sulfur Services, 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 | 9-4000-A | Annually | 324 | 324 | 45 min | 243 |

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

The 90% 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 this form are used to publish information on the mine, development, and mineral exploration activities for each state, including state rankings. 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.**

This canvass does not employ sampling techniques. The majority of published statistics are rounded to three significant digits. Estimation procedures for non-respondents are described in item (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 mail-out and facsimile transmissions of 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, telephone, and electronic mail:

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:

Several sources of information are used to impute data for non-respondents. One important source of information is the data on the number of employees and employee hours that mining operations are required to submit to the **Mine Safety and Health Administration**. These employment data are closely related to production. Ratios of employee hours to production can be computed for companies that respond, and those ratios can be used to estimate production for non-respondents.

Forms 10-K or 10-Q filed with the **Securities and Exchange Commission** and company annual reports can also provide valuable sources of information. Publicly traded companies must file annual reports on Form 10-K (OMB Control Number 3235-0063) including comprehensive overviews of their business and financial conditions and audited financial statements. This form may also contain production and sales information. Publicly traded companies sometimes elect to send Form 10-K to shareholders in lieu of less detailed annual reports.

Publicly traded companies must also file Form 10-Q (OMB Control Number 3235-0070) quarterly. Firms include information for the final quarter of a firm’s fiscal year in the annual Form 10-K; therefore only three Form 10-Q filings are made each year. Form 10-Q contains similar information to the annual Form 10-K; however the information is generally less detailed, and the financial statements are generally unaudited.

The USGS also retrieves from company Web sites state-of-the-company annual shareholder reports containing financial data, results of continuing operations, market segment information, new product plans, subsidiary activities, and research and development activities on future programs.

The USGS believes that there is no significant non-response bias because actual mine development and exploration information is collected. This Information Collection Request does not contain a canvass of opinion.

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 single canvass in this information collection. USGS mineral commodity specialists are in frequent contact with companies by way of industry associations and conferences [for example, the National Mining Association, the National Lime Association, Inc., the Gypsum Association, Inc., the International Copper Study Group (ICSG), and the International Lead and Zinc Study Group (ILZSG); the USGS copper commodity specialist serves as the ICSG’s statistical chair, and USGS specialists participate in ILZSG’s Fall and Spring meetings; the USGS attends The Fertilizer Institute’s annual outlook meeting and the USGS participates in The Sulfur Institute’s market study group]. The information exchanged with these industry associations and at conferences includes trade, consumption, and production statistics, mine development and exploration activities, 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, Data Collection and Analysis Section, 703-648-7960, sosborne@usgs.gov.