Textile Mills Industry Data Collection

PART B OF THE SUPPORTING STATEMENT

A. QUESTIONNAIRE RATIONALE

The census questionnaire and subsequent wastewater sampling program for textile manufacturing facilities will provide information essential to determining if there is a need for developing revised regulations under Section 304(m) of the Clean Water Act. These data are necessary for characterizing the nationwide status of textile manufacturing facilities' locations, types of operations, PFAS use, wastewater generation and management, wastewater characteristics, available pollution control technologies and practices.

a. Population of Interest

The EPA intends to use responses from the questionnaire and data collected through the wastewater sampling program to inform further and more detailed analyses in the future. The EPA first plans to administer a questionnaire as a census to all textile manufacturing facilities in the United States, regulated at 40 CFR Part 410, to determine a national population. Based on data collected by the EPA, the Agency has identified and compiled mailing addresses for approximately 2,200 textile manufacturing facilities in the United States. All active textile manufacturing facilities that conduct one or more of the specified operations will be required to complete the questionnaire regardless of size, geography, ownership, production, and whether the facility discharges wastewater directly to surface waters, indirectly to surface waters through POTWs, or does not discharge wastewater at all. To obtain valuable information on the industry's wastewater management practice as specifically regards PFAS, the EPA has tailored the questionnaire to require only a subset of facilities in the Textile Mills point source category that have used PFAS in textile manufacturing operations to provide a complete response.

A subset of textile manufacturing facilities that complete the questionnaire (up to 20) will also be required to collect wastewater samples and submit for analysis. The EPA will determine the specific facilities to participate in the wastewater sampling program based on technical information collected through the questionnaire.

b. Response Rate/No Response

The EPA's Office of Water plans to administer the data collection, including a one-time questionnaire and wastewater sampling program, under the authority of Section 308 of the Federal Water Pollution Control Act, 33 USC., Section 1318. All recipients of the questionnaire and wastewater sampling request will be required to participate and submit a complete response.

No response is relatively low for questionnaires sent under the authority of Clean Water Act Section 308. The typical no response rate for effluent guidelines questionnaires is 10 percent.

The EPA will employ several measures to reduce no response. The cover letter and instructions delivered to each recipient will explain the legal authority, responsibility to respond, reasons for the questionnaire, and penalty for no response. Delivery or nondelivery of cover letters will be tracked using United States Postal Service or other traceable delivery option; thus, signatures of the recipients will be required to confirm receipt. Email and phone helplines will be operated while the questionnaire is in the field so that technical, financial, and administrative questions can be addressed. Recipients not responding to the questionnaire by the deadline date may be phoned or notified again by mail to encourage response, to answer questions, and to determine the reason(s) for the no response.

To minimize no response, the EPA solicited comments on a draft list of questions and worked closely with industry experts to refine questions so that they are easy to understand with clearly defined and familiar terms, are formatted in a logical sequence, and request data that are readily available within the industry. In this manner, the EPA expects to minimize inaccurate or incomplete responses to questions that can occur due to misunderstanding and misinterpretation as well as the unintentional skipping of questions by respondents who respond via hardcopy (the electronic version of the questionnaire will prevent incomplete submissions).

The EPA will design and implement the questionnaire to reduce errors by:

- Reviewing question language for ambiguity and clarity.
- Using an easily followed sequence of questions and stopping points.
- Avoiding questions requiring an open-ended response.
- Providing limited number of carefully considered responses to each question.
- Providing clear definitions of units of measurement and of technical terms.
- Providing clear instructions with references to the definitions.
- Providing helplines via email and a toll-free number to assist respondents.
- Performing technical review of responses by engineers and scientists, who will phone respondents to obtain missing information and resolve problems and inconsistencies.
- Using a web-based questionnaire platform (Qualtrics) to require completion of all required questions.
- Requiring specific response formats (e.g., numeric values where a number is requested) and acceptable value ranges.
- Conducting a 100 percent check of manual data entry for hardcopy submittals.

B. COLLECTION OF INFORMATION

a. Stratification/Sample Selection

As the questionnaire is to be distributed as a census, no stratification or sampling scheme has been designed. The main data sources that contributed to the list of textile manufacturing facilities (recipients) are described in Part A, Section 4.

C. ESTIMATION PROCEDURE

As this questionnaire is designed as a census and response is mandatory, no sample size estimation is needed. However, there will be some no response, thus the EPA will not have perfect information and will analyze this after results are received.

The EPA estimated the response rate when calculating the sample size based on historic data and information from the ICR conducted in support of the previous ELGs. As noted previously in this supporting statement, the typical no response rate for ELGs questionnaires is 10 percent and the EPA expects the no response rate to this questionnaire to be similar.

D. ACCURACY/PRECISION

As this questionnaire is designed as a census and respondents are the best available sources of information and data for their facilities, accuracy and precision concerns are not an issue.

E. SPECIALIZED SAMPLING PROCEDURES

No special sampling procedures are planned for this questionnaire.

F. DATA COLLECTION

This will be a single incident data collection; no periodic data collection is planned. Under this ICR, the EPA intends to conduct a questionnaire of textile manufacturing facilities within the Textile Mills point source category. The collection methods for each of these efforts have been described previously in this supporting statement.

G. RESPONSE RATE/NO RESPONSE/DATA UTILITY

a. Response Rate

The EPA expects that the response rate will be relatively high for this mandatory questionnaire effort, which will be conducted under the authority of Section 308 of the Clean Water Act. The sample size for the questionnaire is 2,200 facilities. The typical no response rate for effluent guidelines questionnaires is 10 percent. The EPA would strive to improve the response rate by reminder letters, emails, and/or phone calls. Furthermore, after receiving the responses, the EPA intends to adjust the questionnaire weights based on the actual no response rate and to review publicly available information to determine if nonrespondents appear to have different

characteristics than respondents. The EPA would examine these characteristics both for the entire industry and for subgroups in the analyses. For any differences, the EPA intends to determine the major causes, and to incorporate appropriate adjustments for bias.¹

b. No Response

The EPA recognizes that some no response is unavoidable, and in past questionnaire efforts, the EPA has waived the duty to respond in extreme and rare cases (e.g., natural disasters) which also might occur for this survey effort. As noted throughout this supporting statement, the EPA will implement efforts to reduce no response, including use of an easy-to-use format, operating helplines, and following up with potential nonrespondents.

c. Burden Reduction

The EPA designed the questionnaire to include burden-reducing features. The questionnaire contains initial screening questions that direct respondents that do not qualify as textile manufacturing facilities to indicate their status and then submit their initial responses without the need to respond to the remaining questions. Additionally, the questionnaire will contain screening questions which direct respondents to skip questions or whole sections that reference activities or operations that are not conducted at the facility. The questionnaire also groups similar topic questions together and will offer drop-down menu and checkbox selections to simplify responses, thus minimizing the number of text responses requiring input.

The questionnaire consists of 43 questions and should not require a burden of more than 21 hours (on average) for each facility's respondents to complete, verify, and submit. The EPA will implement the questionnaire online which will facilitate access and completion.

For those respondents without internet access, the cover letter and instruction packet will inform the respondent on how to request a paper questionnaire that can then be completed and mailed to the EPA's contractor for input into the electronic system. The EPA therefore concludes that completing the questionnaire does not represent an overly burdensome task.

d. Data Utility

The data collected through this ICR will serve to update current information, fill in missing data, and profile the universe of textile manufacturing facilities in the United States with sufficient information to determine if revisions to ELGs are warranted. Subsequently, if the EPA pursues a rulemaking, data will be used to conduct further analyses of the Textile Mills point source category and support further studies, proposed and/or final rulemaking analyses.

¹ Bias is the difference between the expected value of an estimate and the true value of a parameter or quantity being estimated. If the data collection process generates estimates that are consistently (or on average) above or consistently below the true value, the data collection process is biased.

H. TESTS OF PROCEDURES

The EPA does not intend to pre-test the questionnaire. For more than 30 years, EAD has conducted surveys of numerous industrial sectors to collect information to support regulation development activities in the effluent guidelines program. While the EPA develops different questionnaires for each industry, there are common elements for all industries. The questionnaires collect the same basic data such as information about processes, treatment, and financial status. Thus, when the EPA develops a questionnaire for a particular industry, it generally tailors the questions for specific terms and processes used by that industry. In past years, the EPA has relied on active participation by trade groups and their members in reviewing the questionnaires. In the EPA's experience, such collaboration generally tends to better reflect the industry at large than pre-tests. As discussed in Part A of this supporting statement, the EPA has already engaged several trade associations regarding this data collection. The EPA expects to continue to discuss and refine this questionnaire with industry experts prior to implementation. For this reason, the EPA considers additional review through the pre-test process to be unnecessary for this industry.

I. CONTACT INFORMATION

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