# Information Collection Request Supporting Statement Part B

United States Environmental Protection Agency Chromium Finishing Industry Data Collection

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#### PART B OF THE SUPPORTING STATEMENT

#### 1. QUESTIONNAIRE RATIONALE

The census questionnaire and subsequent wastewater sampling program for chromium finishing facilities will provide information essential to establishing a need for and developing, as necessary, revised regulations under Section 304(m) of the Clean Water Act. These data are necessary for characterizing the nationwide and industry-specific status of chromium finishing facilities' locations, types of operations, PFAS use, wastewater generation and management, wastewater characteristics, available pollution control technologies and practices, and for assessing the financial status of the industry potentially affected by proposed regulations.

## 1(a) Population of Interest

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. To obtain valuable information on the industry's wastewater management practice as specifically regards PFAS, EPA has targeted a subset of facilities in the Metal Finishing and Electroplating Point Source Categories conducting certain chromium operations, including chromium plating, chromium anodizing, chromic acid etching, and chromate conversion coating operations.

EPA first plans to administer a questionnaire as a census to all likely chromium finishing facilities in the United States, a subset the metal finishing and electroplating industry regulated at 40 CFR Part 433 or 40 CFR Part 413. Based on data collected by EPA, the Agency has identified and compiled mailing addresses for approximately 2,035 chromium finishing facilities in the United States. All active metal finishing and electroplating facilities that conduct one or more of the specified chromium finishing 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.

A subset of chromium finishing facilities that complete the questionnaire (no more than 20) will also be required to collect and submit for analyze wastewater characterization samples. EPA will determine the specific facilities to participate in the wastewater sampling program based on technical information collected through the questionnaire.

## 1(b) Response Rate/No Response

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 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. 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, 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, 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 design and implementation of the questionnaire will employ several quality assurance techniques to reduce the frequency of such errors. These techniques include the following:

- Review of question language for ambiguity and clarity.
- Use of an easily followed sequence of questions and stopping points.
- Avoidance of questions requiring an open-ended response.
- Provision of a limited number of carefully considered responses to each question.
- Provision of clear definitions of units of measurement and of technical terms.
- Provision of clear instructions with references to the definitions.
- Provision of helplines via email and a toll-free number to assist respondents.
- Review of questions by engineers, scientists, and economists who will phone respondents to obtain missing information and resolve problems and inconsistencies.
- Use of a web-based questionnaire platform (Qualtrics) to require completion of all required questions.
- Provision of the Qualtrics platform to require specific response formats (e.g., numeric values where a number is requested) and acceptable value ranges.
- Use of double-entry keypunch verification on any hardcopy submittals.

#### 2. COLLECTION OF INFORMATION

#### 2(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 likely chromium finishing facilities (recipients) are described in Part A, Section Error: Reference source not found.

#### 3. 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 EPA will not have perfect information and will analyze this after results are received.

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 EPA expects the no response rate to this questionnaire to be similar.

#### 4. 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.

#### 5. SPECIALIZED SAMPLING PROCEDURES

No special sampling procedures are planned for this questionnaire.

#### 6. DATA COLLECTION

This will be a single incident data collection; no periodic data collection is planned at this stage. Under this ICR, EPA intends to conduct a questionnaire of chromium finishing facilities within the Metal Finishing and Electroplating Point Source Categories. The collection methods for each of these efforts have been described previously in this supporting statement.

#### RESPONSE RATE/NO RESPONSE/DATA UTILITY

#### 7(a) Response Rate

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 2,035 facilities. The typical no response rate for effluent guidelines questionnaires is 10 percent. EPA would strive to improve the response rate by reminder letters, emails, and/or phone calls. Furthermore, after receiving the responses, 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. EPA would examine these characteristics both for the entire industry and for subgroups in the analyses. For any differences, EPA intends to determine the major causes, and to incorporate appropriate adjustments for bias.<sup>1</sup>

#### 7(b) No Response

EPA recognizes that some no response is unavoidable, and in past questionnaire efforts, 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, EPA will implement efforts to reduce no response, including use of an easy-to-use format, operating helplines, and following up with potential nonrespondents.

#### 7(c) Burden Reduction

EPA designed the questionnaire to include burden-reducing features. The questionnaire contains initial screening questions that direct respondents that do not qualify as chromium finishing 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 74 questions and should not require a burden of more than 30 hours (on average) for each facility's respondents to complete, verify, and submit. 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 EPA's contractor for input into the electronic system. EPA therefore concludes that completing the questionnaire does not represent an overly burdensome task.

#### 7(d) Data Utility

The data collected through this ICR will serve to update current information, fill in missing data, and profile the universe of chromium finishing facilities in the United States with sufficient information to support ELG revisions. Subsequently, if EPA pursues a rulemaking, data will be used to conduct further analyses of the Metal Finishing and Electroplating Point Source Categories and support proposed and/or final rulemaking analyses.

<sup>&</sup>lt;sup>1</sup> 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

#### 8. TESTS OF PROCEDURES

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 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 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, EPA has relied predominantly on active participation by trade groups and their members in reviewing the questionnaires. In 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, EPA has already engaged several trade associations and industry experts regarding this data collection. EPA expects to continue to discuss and refine this questionnaire with industry experts prior to implementation. For this reason, EPA considers additional review through the pre-test process to be unnecessary for this industry.

#### 9. CONTACT INFORMATION

EPA: Phillip Flanders Flanders.phillip@epa.gov