

Summary of Comments and Responses: On September 29, 2010 (75 FR 60107), EPA solicited comment on this ICR, and we received seven comments during the comment period. We reviewed and considered each of these comments and, as a result, revised the ICR, as noted below and in the docket. We are addressing some of the general comments and concerns in this section of this notice, regardless of whether these comments have been incorporated into the revised ICR. The comments not specifically addressed in this notice were comments on particular sections of the ICR, and a table identifying these comments and how they were addressed, as well as a redline version of the ICR showing changes made from the proposed ICR has been placed in the docket (see Docket ID No. EPA-HQ-OAR-2010-0682). Any changes made to the ICR as a result of these comments are also reflected in the revised version of the ICR.

Commenters asserted that the ICR asks for more information than EPA needs in order to develop regulations over the next few years. One commenter stated that EPA has already conducted a review of the NSPS and a risk and technology review for Refinery MACT 1 and that EPA has not explained why additional data will provide any improvement to those previous reviews. One commenter requested that EPA identify the related regulation or statutory requirement for each question so that it is clear that sources not subject to that statutory requirement do not need to answer those questions. Commenters also stated that some questions do not seem to relate to any specific rulemaking effort, and EPA needs to explain why the ICR requests that information. One commenter stated that not providing that explanation is a violation of the Paperwork Reduction Act. One commenter also questioned why EPA needs to collect data on emissions points that are subject to recently-promulgated regulations (e.g., heat exchange systems), emissions points that will be subject to pending regulations (e.g., flares), and

emissions points that are not subject to refinery regulations (e.g., boilers, chemical manufacturing processes).

Contrary to the commenter's assertion, we have not completed the risk and technology review for Refinery MACT 1. On January 16, 2009, then Administrator Stephen Johnson signed a final rule amending the Refinery MACT 1, and the signed rule was made publicly available on EPA's Web site. However, the new Administration determined that the residual risk and technology review portions of the January 16, 2009, final rule may not accurately characterize the risk posed by this source category and that it is necessary to gather and consider additional information before making a final decision. Thus, we proposed to withdraw the residual risk and technology review portions of that action on October 28, 2009 (74 FR 55505). One reason for issuing this ICR is to collect the information we need to develop a more complete data set in order to perform a more robust analysis so that we can make a well-informed decision regarding what requirements are appropriate under CAA sections 112(d)(6) and (f)(2) for the Refinery MACT 1 risk and technology review.

As noted previously in this notice, we have other obligations under the CAA for petroleum refineries, including the risk and technology review for Refinery MACT 2 under CAA sections 112(d)(6) and (f)(2). We are also in the process of addressing all of the remaining issues that were raised in the petitions for administrative reconsideration for the NSPS under subpart Ja. To fully address some of these issues, such as reconsideration of the nitrogen oxide and particulate matter limits for fluid catalytic cracking units (FCCU), we need additional data to determine whether it is appropriate to amend subpart Ja. Another issue for which we granted reconsideration is regulating greenhouse gases (GHG) as part of the petroleum refinery NSPS. While the emissions estimates will be collected through the Mandatory Greenhouse Gas

Emissions Reporting Rule (74 FR 56260; 40 CFR part 98, subparts Y and C), the process data we are requesting through the ICR will not be collected through that rule, and will provide critical information that is needed so that we may correlate GHG emissions to process operation to develop appropriate standards. We note that on December 23, 2010, we agreed to a schedule to meet the obligation to act on the reconsideration of the NSPS under subpart Ja in a settlement with the States of New York, California, Connecticut, Delaware, Maine, New Hampshire, New Mexico, Oregon, Rhode Island, Vermont, and Washington, the Commonwealth of Massachusetts, the District of Columbia, and the City of New York (collectively “State Petitioners”) and Natural Resources Defense Council (NRDC), Sierra Club, and Environmental Integrity Project (EIP) (collectively “Environmental Petitioners”). In that agreement, we also indicated that we plan at the same time to meet our residual risk and technology review obligations under section 112 and to propose standards of performance for greenhouse gases (GHG) from affected facilities at refineries subject to specific NSPS, including boilers subject to 40 CFR part 60, subparts Db and Dc. We realize that we are asking for a substantial amount of information, but we expect that everything we are asking in the revised ICR will be relevant to these rulemaking efforts.

As we noted as part of the settlement agreement, we believe it will be more effective to address pollutants from refineries in a comprehensive manner rather than just addressing pollutants from affected facilities subject to NSPS subparts J and Ja (or, similarly, just addressing pollutants from affected facilities subject to one of the Refinery MACT rules). To that end, we are not just requesting information for the emissions sources currently covered by the rules; we are also requesting information for other sources located at the facilities that perhaps should be regulated under the NSPS, MACT or other CAA programs. Examples would include developing

standards to address unregulated or underregulated sources or pollutants. We are also looking to clarify and consolidate requirements, where feasible.

We disagree with the commenters who suggest that we must identify the specific statutory authority under which we may regulate an emissions point for each question. There is no express requirement to do so in the PRA and the commenters cite no specific support for this claim. We believe it is appropriate to state broadly the authorities under which we anticipate we may regulate these emissions sources, as we have done in this notice and in the initial proposal.

We are requesting data from emissions sources that are subject to recently-promulgated regulations, may be subject to pending regulations, or are not subject to refinery regulations for various reasons. First, we expect that we will conduct a risk assessment for the entire facility as part of our residual risk analysis for Refinery MACT 1 and 2 (see 75 FR 65068, October 21, 2010). To conduct such an assessment, we need emissions estimates from all emissions sources located at each facility.

Second, to accomplish our stated intention of evaluating pollutants from refineries comprehensively, we need to consider individual emissions sources in a comprehensive manner (e.g., we need to consider the effect of reducing criteria pollutants on the HAP emissions from a source, and vice versa). The recently-promulgated regulations and pending regulations that the commenter provided as examples affect only the criteria pollutants or only the HAP from the affected facilities. For example, we promulgated standards for heat exchange systems in October 2009 as part of Refinery MACT 1, but we have not set new source performance standards for criteria pollutants from that emissions source. We recognize it has only been one year since promulgation of the heat exchange system requirements in Refinery MACT 1 and that existing sources are not required to demonstrate compliance with these standards for nearly two more

years; however, the information request related to cooling water is needed to assess whether additional VOC regulations for sources may be necessary or appropriate in the NSPS. A related issue is that some sources are covered by both NSPS and NESHAP but are affected differently. The most notable example of this is flares, which are considered affected facilities subject to emissions limitations under subparts J and Ja but are considered control devices under many NESHAP. We need sufficient data to ensure that there are not conflicts between the rules affecting similar sources such as flares.

Third, we need emissions and location data for every emissions source at each refinery for the risk assessment, and we are also asking for capacity and throughput data for every source so that we can conduct basic sensitivity analyses of the risk assessment results. However, we are limiting the additional process data we are collecting for some sources not currently subject to refinery regulations, particularly those that we know are covered under other regulations. For example, for sources such as chemical manufacturing processes located at a refinery, we are only asking for the steam demand and information on equipment leaks to supplement their emissions inventory data rather than the detailed process information requested for specific refinery process units. We have also revised the ICR instructions to be clear that sources not owned or operated by or under the common control of the refinery may be excluded from the ICR.¹

Thus, the data we are requesting in this ICR are necessary for us to complete reviews of existing rules, develop new standards, and otherwise meet our obligations under the CAA.

¹ It is important to recognize that different ownership is not the only criteria for this exclusion. A separately-owned facility that is under the common control of the refinery owner or operator is required to report the relevant information requested in the ICR. For more information on what constitutes common control, see EPA Region VII letter regarding “common control” in Docket ID No. EPA-HQ-OAR-2010-0682.

One commenter stated that EPA does not need to collect information through this ICR that is already available in periodic compliance reports, consent decree reports, operating permits, and other information collection requests.

As we state in “Standard Form 83-I Supporting Statement for OMB Review of EPA ICR No. 2411.01,” dated January 14, 2011 (see Docket ID No. EPA-HQ-OAR-2010-0682), the sources of information cited by the commenter do not contain all of the details necessary to completely characterize petroleum refinery affected sources for purposes of NSPS and NESHAP regulatory analyses, and there is no single, readily available source for title V and State air emissions permits or previously conducted emissions test results. Specifically, we note:

The Agency recognizes that some of the information requested in the information collection effort may already be included in the submittals made by individual companies, pursuant to State and national emissions inventories, operating permits applications, initial notification forms, and compliance reports. However, the complete extent of the data fields requested under this survey is not available in any consistent or usable format. . . In the absence of an industry data collection, EPA would be forced to try to obtain permits, compliance reports, and emissions test reports from States; extract information from these reports (which vary in detail and method of reporting); and then attempt to fill data gaps where information is not available from the reports obtained. This process of acquiring and extracting data from existing reports would require more time than an industry data collection, and ultimately would be expected to yield incomplete and inconsistent information.

Additional details regarding the difficulty of compiling the information in the manner suggested by the commenter are included in the August 10, 2010, version of the supporting statement as

well as the supporting statement developed for the revised ICR (see Docket ID No. EPA-HQ-OAR-2010-0682).

We do agree that in cases where the petroleum refining industry has already answered specific questions in a comprehensive information collection effort, there is little reason to ask those questions again. We did compare this ICR to the ICR for the Boiler and Process Heater source category (add cite here), and we removed questions from this ICR that unnecessarily duplicated questions in the Boiler and Process Heater ICR.

Commenters stated that EPA's estimate of the cost and number of hours required to complete the ICR is significantly underestimated. They stated that EPA should reduce the amount of information requested and provide the respondents with additional time to complete the survey components. Conversely, another commenter stated that EPA's proposed schedule is reasonable because respondents should already have most of the emissions estimates for the inventory available. One commenter stated that EPA should reverse the order in which the components must be completed; EPA should require the new emissions tests first and then allow refiners to use those test results to develop the emissions inventory later.

We do not believe that the significant additional time requested by the commenters, double the amount of time provided by the proposed deadlines in some cases, is necessary. However, we did determine that some revisions to the ICR were needed to reduce the burden on the respondents and that some of the deadlines should be revised based on the comments we received. For example, we have decided to ask for 2010 data (rather than 2009) and delay the submittal of the emissions inventory by one month, to June 30, 2011, so that facilities may be able to coordinate the development of their TRI report with the emissions inventory requested by this ICR, thereby reducing the additional burden associated with this ICR compared to requesting

inventory data for a different year or on a shorter time frame than the TRI report. We have also simplified the crude oil sampling to require three samples of the feed to the distillation column rather than requiring sampling of every crude oil received by the refinery, and we are extending the deadline for the distillation feed sampling (relative to the former crude oil sampling requirement) to provide adequate time to identify appropriate sampling locations, identify suitable laboratory services, collect the samples, and obtain the analytical results. As revised, we have determined that the schedule for reporting the different ICR components is reasonable for the respondents and provides the information needed by EPA to fulfill its regulatory obligations in a timely manner.

Although we revised the ICR in many cases to reduce the respondents' burden, we increased our estimate of the number of hours it will take to complete certain portions of the questionnaire based on the public comments received. We note that while we have increased the number of hours to complete the inventory, we do not think that the number of hours should be increased further as suggested by the commenters because we are not requesting that facilities prepare a completely new inventory; rather, we are asking facilities to make adjustments to the inventories they are currently developing for TRI and State inventories as necessary to match the Refinery Emissions Protocol methodologies. Our revised estimate of the number of hours and cost to complete the ICR was presented earlier in this notice.

One commenter noted that EPA has not explained how asking respondents to use new methods to develop emissions estimates (i.e., follow the Refinery Emissions Protocol) meets the PRA requirement to request information compatible with the existing reporting and recordkeeping procedures of the responders. Another commenter expressed concern that the ICR does not require refineries to report sufficiently accurate or detailed data. For example, the

commenter noted that the ICR references the Refinery Emissions Protocol but does not require use of the highest Methodology Rank, which would provide the best quality data.

For the most part, the Refinery Emissions Protocol is based on existing methodologies, including continuous monitoring, site-specific emission factors based on stack tests, and default emission factors. For most emissions sources, the Refinery Emissions Protocol simply ranks the various emissions measurement and estimation methods specific to that source in order of preference and provides one preferred default emission factor per pollutant. By requiring use of the Refinery Emissions Protocol, we are asking respondents to use the best available data to estimate emissions. As noted in the Refinery Emissions Protocol, we expect respondents to use the highest Refinery Emissions Protocol methodology rank for which they have available data (e.g., emission sources that have continuous monitors must use them to estimate emissions for this ICR). Further, we are asking respondents to identify the Refinery Emissions Protocol methodology rank used to develop the emissions estimates, which will ensure that we know how respondents estimated or calculated emissions.

We are not requiring use of a specific Methodology Rank (i.e., we are not stating that every respondent must use Methodology Rank 1 for every emissions source) to develop the 2010 inventory for two reasons. First, respondents may not have available data to estimate emissions using that methodology rank. For example, if Methodology Rank 1 for a particular emissions source is to use a continuous monitor, but a continuous monitor was not installed on that source in 2010, the respondent cannot estimate emissions using Methodology Rank 1; rather, the respondent would use the next highest Methodology Rank for which data are available to estimate emissions. Second, it is impractical in terms of cost and schedule to require continuous monitors to be installed and used to develop emissions estimates for some future year for all

emissions sources at the refinery. In other words, requiring use of Methodology Rank 1 for the emissions inventory would place a significant burden on the industry, and the earliest year for which we could request an emissions inventory would be 2012 (so we would not receive data until around the middle of 2013).

Furthermore, it is important that default emission factors are consistent between different reporters so we can properly compare the results. Inconsistency in estimation methodologies between refineries makes it difficult to draw proper conclusions about the appropriate performance levels and thus whether, and if so which, controls are necessary and appropriate. If, for example, one facility uses a flare destruction efficiency of 99.5 percent and another uses 98 percent for essentially identical streams, we could incorrectly conclude that one facility is flaring 4 times as much as the other. Without knowing the basis for the emissions estimates, we could establish emission limitations or work practices for different emissions sources that are not appropriate or not achievable simply because we misinterpreted the reported data.

There are limited cases where the Refinery Emissions Protocol includes a methodology for estimating emissions that refiners may not be using currently; the most notable of these is the refinery wastewater emission tool (RWET) for wastewater treatment. However, the RWET calculations are based on AP-42 and peer-reviewed journals, so the methodology is not completely new. We expect that the emissions estimates developed for this ICR will be different in some cases from the estimates developed using a method mandated by the different States, but we need the emissions estimates collected by this ICR to be consistent and of the best quality possible.

In summary, we are asking respondents to follow the Refinery Emissions Protocol to develop emissions estimates. Use of the Refinery Emissions Protocol is needed to ensure the

emissions estimates are of the highest possible quality and that the information is presented consistently. Reporting of the Methodology Rank used for each inventory estimate will allow us to understand the uncertainties associated with each estimate and will allow proper assessment of the data as additional data are collected (e.g., if additional or revised emission factors become available as a result of test data).

One commenter stated that emissions testing is a larger burden on small refineries than large refineries due to competition for testers, process changes needed to meet testing requirements, and difficulty meeting the requirement for simultaneous testing. Another commenter stated that for facilities located on an island located far from the continental United States (e.g., St. Croix), emissions testing requires significant additional logistical costs and time compared to emissions testing in the continental United States.

We acknowledge these commenters' concerns, and we kept these considerations in mind when developing our list of units for which we are requesting emissions testing. We have tried to minimize the number of small refineries asked to conduct emissions testing where possible. Generally, the more complex and costly testing programs were limited to larger refineries. However, there are certain types of units for which we have limited data and that are only located at a few refineries, some of them small refineries. To fill our data gaps, we are requiring testing of these types of units, and in some cases, it is necessary to require units at small refineries to be tested so that we can collect sufficient data for that type of unit. In addition, island refineries have operational differences due to their location, and we are interested in determining whether those differences result in differences in emissions. Our proposed list of units to be tested is located in the docket.

One commenter expressed concern that the ICR does not require emissions testing using rigorous enough methodologies, does not require enough emissions tests to provide data from a representative sample of process units, and does not require enough tests from process units for which current estimation methods typically underestimate emissions. The commenter also requested that EPA require additional testing for process heaters and requested optical sensing testing for sources such as flares and storage vessels.

We designed the emissions testing program for this ICR to test a variety of sources and configurations while balancing burden to industry. We focused the emissions testing program on sources and pollutants for which we need additional data in order to fulfill our regulatory obligations. We disagree with the comment suggesting that the ICR does not require emissions testing using rigorous enough methodologies. We are specific and detailed in our testing requirements and we are using high quality methods to obtain test results. We have increased the number of fluid catalytic cracking units to be tested from 8 to 10 to better represent different control configurations as well as operational differences. As revised, we consider the number of tests to be adequate to characterize these emissions sources.

The Boiler and Process Heater ICR required testing of some process heaters, and we are not duplicating those tests as part of this ICR. We also note that consistent methodologies for optical sensing testing are still being developed and are still very costly and thus, we are not requiring additional optical sensing testing as part of this ICR. We know that this type of testing is ongoing at specific refineries, and we are continuing to participate in the testing and analysis process by performing critical reviews of those tests and the accompanying process data. Additional insights gained as a result of these optical sensing testing programs will be considered as we review the various standards for petroleum refineries.