

**A. Comments on the Survey:**

- Applicability of Shortened Survey for Gas Fired Units
- Content (Rational)
- Cost Estimates
- Need for new data
- Schedule
- Survey Recipient Pool
- Survey Respondent Exemptions
- Timeframe
- Web/Electronic Format – Internal review
- Content of Questions (Specific comments have been inserted in the actual survey)

Commenter	Category	Comments
CIBO  NCASI	Applicability of Shortened Survey for Gas-Fired Units	<ul style="list-style-type: none"> <li>- Does section for NG-fired boilers include boilers who meet the gaseous fuel subcategory definition of the vacated boiler standard (NG with D2 back-up)?</li> <li>- Separate the questions related to boilers vs. process heaters in this shortened survey section</li> <li>- Aggregate reporting of multiple units should only apply to units less than 10 mmBtu/hr</li> </ul>
ACC CIBO  NACAA	Content (Rationale)	<ul style="list-style-type: none"> <li>- Justify why EPA is asking for each pollutant in the survey</li> <li>- Justify/Clarify why EPA is asking for certain data on non-fossil fuels</li> <li>- Define and justify which units need to submit 129 data.</li> <li>- Provide more detail on how EPA will approach the new MACT std. process</li> <li>- Should not limit the request for all available data according to the pollutants considered in the vacated standard. EPA should simply ask for all available emission data (i.e., acid gas HAP, other metals, different forms of PM).</li> <li>- NACAA prefers that EPA ask for all data: emission, monitoring methods on new and existing units and that EPA will then decide on which sources fall where according to the definition of solid waste.</li> <li>- EPA should ask question to identify environmental and energy benefits of alternative “non-fossil” fuels with respect to fuel efficiency.</li> </ul>
CIBO	Cost Estimates	<ul style="list-style-type: none"> <li>- Depending on the applicability of the shortened survey version for gas units, EPA may need to reduce the number of units qualifying for a reduced burden.</li> </ul>
ACC	Need for new data	<ul style="list-style-type: none"> <li>- Data should be updated using an electronic format</li> </ul>

NACAA		<ul style="list-style-type: none"> <li>– Dataset from old rulemaking is obsolete and contains many errors. In addition many of the sources reported HAP emission were based on emission factors rather than source-specific tests.</li> </ul>
ACC FL Sugar CIBO	Schedule	<ul style="list-style-type: none"> <li>– 60 day response to survey if facilities have over a certain number of sources</li> <li>– 90 day response to survey</li> <li>– Request response schedule waiver for facilities that are shutdown. Some facilities will be shutdown for 4 to 6 weeks for model year changeover.</li> </ul>
NACAA  CIBO	Survey Recipient Pool	<ul style="list-style-type: none"> <li>– Send survey to all known major sources, not just sources that sent in notice prior to the vacated standard. Other sources include: Title V permits and applications, and state lists</li> <li>– How many facilities and units are there? Note discrepancy between boiler ICR and the 112(j) ICR.</li> </ul>
ACC CIBO Occidental  NACAA	Survey Respondent Exemptions	<ul style="list-style-type: none"> <li>– EPA should exempt facilities from responding if their process heaters or boilers are covered under another MACT standard</li> <li>– EPA should exempt facilities from responding if their process heaters or boilers were exempt from the vacated DDDDD standard</li> <li>– Exclude area sources</li> <li>– EPA should justify exemption of direct contact process heaters</li> </ul>
ACC  Alexander Baldwin FL Sugar	Time Frame	<ul style="list-style-type: none"> <li>– Specify a cut-off date to avoid submittal of older data (i.e., on or before 1999)</li> <li>– Survey should focus on unit configuration and data on or prior to 1/13/2003 (proposal of vacated standard). If you collect data on units or parameters since 1/13/2003, that data should not be used to calculate floors.</li> <li>– Need to define the date associated with boiler population on which to base the standard and collect data for: a) at time of proposed Boiler MACT; b) at time of promulgation; c) today; d) some other specified date (date of survey?).</li> </ul>
AF&PA NCASI ACC CIBO Occidental	Web/Electronic Format	<ul style="list-style-type: none"> <li>– Web survey should allow for a completed internal draft version to be downloaded before final submittal. Internal management structures and legal review requires this.</li> <li>– Harmonize spreadsheets and forms with online survey format to allow for easy transfer of data</li> <li>– Allow for alternate spreadsheet formats if the alternate formats contain similar data to the template spreadsheet.</li> <li>– Ensure that passwords are easily accessible and do not expire.</li> </ul>

**Testing:**

- Cost Estimates
- Criteria for Selecting Test Sites
- De-couple from Survey
- Incentives/Competitive Edge
- Need for New Data
- Need for Paired Testing (Inlet/Outlet)
- Pollutants to be Tested For
- QAPP
- Schedule
- Solid Waste Definition
- Strata/Sample Design
- Submitting Test Data
- Test Plan
- Types of Sources to be Tested For (Authority/Justification)

Commenter	Category	Comments
ACC AF&PA CIBO Occidental Alexander Baldwin	Cost Estimates	<p>Missing Costs</p> <ul style="list-style-type: none"> <li>- Steam loss (many units never operate at maximum rate)</li> <li>- Cost to shut one boiler down and purchase electricity</li> <li>- Capital and Start-up costs associated with constructing ports, platforms and duct configuration, outages. CAMR rule ICR emphasized no capital/start-up costs which is not true in this ICR.</li> <li>- Collecting data on fuel feed rates, control device operating parameters (every 15 min.), opacity readings, CEMS data (assume full time staff person throughout test period)</li> <li>- Feedback and revisions on pre and post test reports</li> <li>- State/Local/Federal Agency attending random tests</li> <li>- Standby maintenance worker and process engineer, assuming overtime for 2 to 3 hours per day</li> <li>- If required to conduct inlet testing, or if facility doesn't have accessible ports:               <ul style="list-style-type: none"> <li>o Pre-test (most will not meet Method 1 requirements); \$6,200</li> <li>o If source must create a port, \$1,500 for scaffolding and \$2,250 for cutting the port</li> <li>o Waivers for test methods</li> <li>o May require spike with known pollutant quantities, similar to cost of hazardous waste trial burns</li> <li>o Rush orders from testing lab, due to short schedule</li> </ul> </li> </ul> <p>Underestimated Costs</p>

		<ul style="list-style-type: none"> <li>- Labor: 8-hour work day should be 10 to 12 hours</li> <li>- Outlet testing only for PCDD/PCDF/PAH, metals, PM, HCl = \$225,000</li> <li>- Analytical work for organic test methods estimated at \$100,000 per test, plus labor for 6 to 8 people if all pollutants are tested for.</li> <li>- \$33,500 is low compared to 2006 costs of inlet/outlet testing on two coal boilers</li> <li>- Estimate \$100,000 if both traditional and Section 129 pollutants must be tested for</li> <li>- \$150,000 compliance test for vacated DDDDD standard for both boiler stacks. The \$150,000 did not include tests for non-MACT pollutants.</li> <li>- \$30,000-50,000 for PM and CO testing only; 100 technical hours, 5 management, 3 legal</li> <li>- \$100,000 if you include additional tests; \$160,000 - \$170,000 if you require paired sampling</li> <li>- Cost to secure a vendor(s) is increased when you have multiple emissions tests</li> <li>- Fuel sampling should be 20 min/test run not 30 minutes total</li> <li>- Fuel analyses should include costs for HHV, S%, ash, moisture in addition to listed analyses</li> <li>- Dioxin/Furan testing could exceed \$100,000, an order of magnitude above the \$5,000. Precise estimate was not given</li> <li>- For facilities without automatic data recorders/trenders, additional labor needed to gather and aggregate data after the test.</li> </ul>
ACC Occidental Florida Sugar CIBO Amp-Ohio  NACAA	Criteria for Selecting Test Sites	<ul style="list-style-type: none"> <li>- Only test at facilities with units that have emission data gaps</li> <li>- Consider presence, accessibility of stack test ports, inlet duct dimensions, and locations and feasibility/safety of test at a certain site. ACC states not to ask for this data in the questionnaire component, as it would add significant cost. Instead let the smaller subset of potential test sites submit this data to EPA. Amp-Ohio requests that EPA include a question on available access points in the questionnaire.</li> <li>- Exclude units that are scheduled for shutdown</li> <li>- Exclude units that were already tested to support compliance with vacated standard</li> <li>- Common Stacks</li> <li>- A certain portion of tests should be dedicated to identifying a correlation between HAP emissions and HAP surrogates used in the vacated standard.</li> <li>- Limit testing to 2 random plants owned by any single entity (large or small)</li> </ul>
AF&PA CIBO Amp-Ohio	De-couple survey from testing component of the ICR.	<ul style="list-style-type: none"> <li>- Allow formal notice and comment on survey data, assessment of data gaps and test plan after compiling existing data from survey.</li> </ul>

NACAA		<ul style="list-style-type: none"> <li>– Redraft the supporting document to provide EPA the ability to structure the testing program in a manner that makes sense considering the responses received from the initial EPA survey.</li> </ul>
ACC CIBO Occidental  Amp-Ohio	Incentives/Competitive Edge	<p>If a facility is selected or volunteers for a stack test:</p> <ul style="list-style-type: none"> <li>– Exempt from another performance test to demonstrate compliance if test met final standard</li> <li>– Opt out of testing if facility’s test cost estimate exceeds EPA’s cost estimate by XX%</li> <li>– EPA funded test program for small entities</li> <li>– EPA funded program or method to spreading the costs among all potentially affected sources</li> <li>– Waive all or part of compliance test with new rule</li> <li>– Enforcement discretion</li> <li>– Certified compliance status for a certain amount of time</li> <li>– Number of tests should be proportional to the size of the business</li> </ul>
AF&PA ACC	Need for new data	<ul style="list-style-type: none"> <li>– Not necessary. Provided extensive data in preparation for the 2004 rule.</li> <li>– Encourage the use of stack tests completed since 2004 in order to reduce the need for new stack tests.</li> </ul>
ACC FL Sugar CIBO	Need for Paired Testing (Inlet/Outlet)	<ul style="list-style-type: none"> <li>– Identify where outlet only is sufficient.</li> <li>– Inlet is only applicable for semivolatiles</li> <li>– Inlet is unnecessary and overly burdensome. MACT is based on controlled emissions, not % reductions.</li> <li>– Request to explain the need for inlet testing.</li> </ul>
AF&PA  CIBO	Pollutants to be Tested For (What)	<ul style="list-style-type: none"> <li>– Should test for HAP or potential surrogates for HAP</li> <li>– Should test for 129 pollutants only when a potential waste material is combusted</li> <li>– Why are you testing for CO2 and O2? Using current rationale of combustion efficiency, CO2 and O2 should be tested for at the burner instead of the stack. Additional CO2 and O2 measurements at full capacity stack tests are not indicative of normal operation.</li> <li>– Specify the number and types of tests required for each strata</li> <li>– Should justify and limit testing for HCB and PCB to non-fossil fuels only</li> </ul>
CIBO	QAPP	<ul style="list-style-type: none"> <li>– Does the generic QAPP have to go to OMB for approval along with the other ICR components?</li> <li>– Request for EPA to specify a QAPP modification process with deadlines for response and resolution of disagreements.</li> </ul>

<p>AF&amp;PA ACC CIBO</p> <p>Amp-Ohio FL Sugar Alexander Baldwin</p>	<p>Schedule</p>	<p>Schedule unrealistic too short</p> <ul style="list-style-type: none"> <li>– Request 180 days for test</li> <li>– Request waiver for 60 days if sources already have scheduled shutdowns, changeovers</li> <li>– Request revised timeframe and systematic process for identifying seasonally-operated units</li> <li>– Request 120 days for test – must go through public procurement process to select test company</li> <li>– Request 6 months (especially for seasonal units)</li> <li>– 60 days is impossible for seasonal or normal operating units</li> <li>– Nationally, only 20 test firms with enough resources to do tests, less than 5 of these have capability to do semivolatile tests</li> <li>– CAMR ICR was 3 tests over 1-year period for mercury only. Boiler ICR is multi-pollutant in 60 days.</li> <li>– State/Local oversight required in some areas for testing. Minimum notice prior to testing is required. Indiana: 35 days. Other states 60 days.</li> <li>– Test timeline: Stack test contractor 2 months prior to test, test notification sent to EPA 30 days before test, conduct test, 21-30 days analysis, 7 to 14 day review. Request 60 days to submit test report from time test is complete. Request 120 day minimum, 6 month maximum.</li> <li>– Request</li> </ul>
<p>AF&amp;PA CIBO ACC</p>	<p>Solid Waste Definition</p>	<p>Solid Waste Definition proposal should come before units are required to test; ideally the definition should be promulgated. If not possible:</p> <ul style="list-style-type: none"> <li>– Allow for opt-out if a ceases to burn possible waste material in order to avoid compliance costs associated with 129 compared with 112. Process to opt-out could include a trade-off analysis of fuel cost, testing cost, 129 compliance cost.</li> <li>–</li> </ul>
<p>AF&amp;PA FL Sugar CIBO ACC</p>	<p>Strata/Sample Design</p>	<ul style="list-style-type: none"> <li>– Number of facilities required to test should be a function of the number of unit subcategories EPA anticipates</li> <li>– Strata should include combustor type, size, and fuel. Note that within a multi-fuel category the blends can have a very large range.</li> <li>– Add a strata category “coal/wood/NFF liquid/NFFsolid/FF liquid”</li> <li>– Sample size should be identified according to units within each strata, not on entire boiler population</li> <li>– Selection should not be random. Industry will assist in identifying statistically</li> </ul>

NACAA		<p>significant pools of units that meet specific criteria. Industry agrees that they will not self select individual units.</p> <ul style="list-style-type: none"> <li>– Define strata prior to test program</li> <li>– Maintain a random selection of test sites to avoid industry-self selection</li> <li>– Clearly indicate items that the Agency anticipates may need to be modified after the Phase I survey results are analyzed.</li> </ul>
CIBO	Submitting Test Data	Do not use the Electronic Reporting Tool (ERT) for submitting test data. Currently undergoing beta testing and industry finds it inaccessible, and not user-friendly.
AF&PA	Test Plan	<ul style="list-style-type: none"> <li>– Request that the tests are done at 3 common operation conditions, spaced over two or more weeks, for each unit tested. Cited Brick MACT decision and EPA’s authority to look at intra-unit variability.</li> <li>– Request that EPA develop a HAP testing plan as it has done for CISWI units</li> </ul>
ACC Occidental Amp-Ohio  NACAA and NDRC	Types of Sources to be Tested For (Authority/Justification)	<ul style="list-style-type: none"> <li>– Clarify and justify what types of units will be considered for stack tests</li> <li>– Limit testing to units firing non-fossil fuels either alone or in conjunction with other fuels</li> <li>– List the specific facilities to be required to test</li> <li>– EPA has authority to request for stack test data from 112 units. Noted the minimum amount of data: at least five data sources for small subcategories (&lt;30 sources). Implies that it must have at least five data sources for small, then additional data sources would be justified for larger subcategories. Also listed explicit authority under Section 114.</li> <li>– EPA should test units that were modified to attain compliance with the vacated Boiler MACT.</li> </ul>

### **Other Comments/Questions:**

- Request Sector-tailored survey (AF&PA)
- Consider fuel variability data submitted under the vacated DDDDD standard in addition to emission variability (AF&PA)
- More specific subcategories (FL. Sugar, AF&PA, Alexander Baldwin)
  - o If consideration is given for bagasse subcategory, industry will provide test plan and boiler selection criteria for their affected units.
- Consider if NSPS approach for co-fired units has applicability for emission limits in MACT subcategories (FL Sugar)
- Do we need to submit the Section 114 letter to OMB for approval?
- Specify stack exit detection limits for each HAP of interest (CIBO)
- Clarify if it will be EPA inspectors or state inspectors that audit tests (CIBO)
- NACAA will be submitting data it has collected as soon as it has been QA'd (NACAA).
- MACT Floor for existing units should be based off of units that were operational at the proposal of the vacated standard. Newer data for those units is acceptable as long as facility indicates that the data is representative of boiler operations and emissions in 2003. MACT Floor for new units should be based off of all units that began operation/reconstruction since the proposed rule. (FL Sugar and CIBO).
- EPA should evaluate both boiler efficiency and emission per heat input when evaluating rule impacts. CIBO would like EPA to put more emphasis on environmental and energy benefits of alternative fuels.