Coalition for Responsible Waste Incineration

MEMBER COMPANIES

Dow Chemical U.S.A.
E. I. Du Pont de Nemours
Eastman Chemical Company
Eli Lilly and Company
INVISTA S.a.r.l.
3M
Ross Incineration Services, Inc.
Veolia ES Technical Services, LLC
Washington Demilitarization Co.

ASSOCIATE MEMBERS

Analytical Perspectives
B3 Systems
CEntry Constructors & Engineers
CH2M HILL
Compliance Strategies & Solutions
Coterie Environmental, LLC
Engineered Spiking Solutions, Inc.
ENSR
Focus Environmental, Inc.
Franklin Engineering Group, Inc.
Metco Environmental, Inc.
RMT, Inc.
SAFRISK, LC.
SAIC
Sigrist-Photometer AG
Strata-G LLC
TestAmerica Laboratories, Inc.
Trinity Consultants, Inc,
URS Corporation

INDIVIDUAL MEMBERS

Ronald E. Bastian, PE
Ronald O. Kagel, PhD

ACADEMIC MEMBERS
(Includes faculty from:)

Colorado School of Mines
Cornell University
Lamar University
Louisiana State University
Mississippi State University
New Jersey Institute of Technology
Rensselaer Polytechnic Institute
University of California – Berkeley
University of Dayton
University of Illinois at Chicago
University of Kentucky
University of Maryland
University of Utah

1615 L Street, NW, Suite 1350
Washington, DC 20036
Phone: 202 452-1241
Fax: 202 887-8044
E-mail: mel@crwi.org
Web Page: http://www.crwi.org

November 7, 2008

Office of Information and Regulatory Affairs
Office of Management and Budget
Attn: Desk Officer for EPA
725 17th Street NW
Washington, DC 20503

ICR Reference No. 200810-2060-006
EPA Tracking No. 2269.01

The Coalition for Responsible Waste Incineration (CRWI) appreciates the opportunity to submit comments on *Information Collection Request For Performance Specification 17 (PS-17) And Procedure 4 For Continuous Parameter Monitoring Systems* (EPA Tracking No. 2269.01, received October 15, 2008). CRWI is a trade association comprised of 28 members with interests in hazardous waste combustion. CRWI members operate incinerators, liquid fuel-fired boilers, solid fuel-fired boilers, and hydrochloric acid production furnaces and are regulated under a number of MACT standards. CRWI members also provide technical expertise and services to facilities that own and operate hazardous waste combustors. We appreciate the effort EPA has put into this proposed rule and the accompanying ICR. We look forward to working with the Agency to develop regulations that are consistent with the requirements of the Clean Air Act and good engineering practices.

CRWI members are primarily regulated under 40 CFR Part 63, Subpart EEE (among other Part 63 regulations), one of the source categories covered by this rule. In the process of reviewing this proposed rule and the accompanying ICR, we were surprised at the estimated cost per facility. EPA was gracious enough to supply us with the spreadsheets used to make these cost calculations and we appreciate their willingness to share these spreadsheets. Having these spreadsheets allowed us to partially determine how EPA derived the numbers and to offer some suggested changes that may make estimating the cost of these two procedures (PS-17 and Procedure 4) more accurate.

Our suggestions are divided into three parts. These are:

1. Modifications in the number and types of facilities covered;
2. Suggested changes in the number of sensors impacted per facility; and
3. Suggested changes in the amounts of time needed to make certain accuracy audits and visual inspections.

Modifications in the number and types of facilities covered

The current spreadsheet lists three types of combustors covered by 40 CFR Part 63, Subpart EEE: incinerators (INC); cement kilns; and lightweight aggregate kilns. With the promulgation of the 2005 rule, three new source categories were added to this Subpart: liquid fuel-fired boilers (LFB); solid fuel-fired boilers (SFB), and hydrochloric acid production furnaces (HCIPF). In addition the number of units listed for incinerators, cement kilns, and lightweight aggregate kilns is outdated and needs to be revised. The information in the table below is taken from the April 20, 2004 (69 FR 21353) proposed rule as modified by the October 12, 2005 (70 FR 59530) final rule. The current best estimate of the number of units regulated by EEE is as follows.

Source	ICR estimate	2005 Estimate
Incinerators	186	78
Cement kilns	33	26
Lightweight aggregate	10	7
Liquid fuel-fired boilers	--	99
Solid fuel-fired boilers	--	10
Hydrochloric acid furnaces	--	17

In addition, the initial spreadsheet indicated that all incinerators have baghouses as control devices. This is not correct. Incinerators have a number of different air pollution control devices depending upon the air pollutants that need to be controlled from that particular facility. Although we do not represent cement kilns, it is our understanding that this source category does not have any wet scrubbers. These incorrect assumptions are not problems in themselves as long as the numbers of different sensors impacted by this rule are properly listed.

Suggested changes in the number of sensors impacted per facility

In the introductory table, EPA lists temperature as the only parameter for incinerators that will be impacted by this rule. When our members went through

the parameters that are required to be monitored by EEE and would be impacted by this rule, we found a much different list.

Category	Unit No.	Temp.	Pressure	Flow	pH	Conduct.	Total number of instruments
INC							
	1	9	14	39	2	0	64
	2	6	11	36	1	0	54
	3	2	6	28	2	0	38
	4	1	2	2	0	0	5
	5	3	4	5	0	0	12
	6	5	3	8	0	1	17
	7	5	3	7	0	1	16
	8	9	10	10	0	1	30
LFB							
	1	1	1	3	0	0	5
	2	2	4	6	0	0	12
	3	4	10	34	4	0	52
	5	2	3	10	2	0	17
	6	3	2	23	2	0	30
	7	1	1	5	0	0	7
	8	3	3	9	0	0	15
	9	1	3	11	2	0	17
	10	2	2	12	1	0	17
	11	4	4	13	1	0	22
SFB							
	1	7	5	1	0	0	13
	2	7	5	1	0	0	13
	3	7	5	5	0	0	17
	4	7	5	5	0	0	17
HCIPF							
	1	2	4	8	2	0	16
	2	1	3	12	2	0	18
	3	1	2	11	2	0	16
	4	1	4	5	1	0	11
	5	1	4	3	1	0	9
Total							577

As you can see from the above table, listing a single temperature measurement as the only impact of this rule is a significant underestimate of the number that

Coalition for Responsible Waste Incineration

will be impacted. In addition, this table is only a small subset of the total sources regulated by Part 63 subpart EEE, or approximately 12% (28 out of 237 sources). If all of the sources regulated by this one subpart were included, the number of underestimated instruments would be even more glaring. EPA's current cost analysis is based on one instrument per source or 28 sensors for this subset. However, our estimates are that this group would have 577 instruments impacted by the rule. This represents an underestimation of 2100%. CRWI cannot estimate if this degree of error would carry over into some or all of the sources regulated by Part 60, 61, and 63, but the error for Part 63 subpart EEE alone is more than significant.

In addition, the initial costs associated with the requirements for PS-17 section 8.1(2) for installing work platforms, test ports, pressure taps, valves, fittings, etc. are not included. Depending on the specific installation, these costs can range from minimal (4.5 hours for adding a pressure tap) to in excess of several 10s of thousands of dollars if a work platform plus valves and piping changes are required. If a platform (potentially 60 feet above grade) is necessary, it may require support steel and possibly foundations, depending upon the specific installation. It also assumes that the test gear, which has not been fully identified, can be carried up or down stairs by a single individual. If a crane or other lifting device is required to meet OSHA requirements, additional costs will be incurred.

Also not included in the quarterly costs is the potential loss of production. If the audits can not be conducted while the facility is operating, as is suggested by many of the methods, the source will have to cease operations while conducting the accuracy audits. It could take a day to shutdown, and a day to startup, with several days to conduct the testing, for a total outage of 3-6 days. Many facilities use natural gas or another fossil fuel to return to the operating window, and this cost is not included.

<u>Suggested changes in the amounts of time needed to make certain accuracy audits and visual inspections</u>

In the Cost Summary spreadsheets, EPA lists 40 hours as the appropriate time to develop a QC program in the "Input for Supporting Statement" section. We agree. However, in the spreadsheets, EPA has the number of occurrences as zero (0). Even though sources subject to 40 CFR 63.8(d) already have a QC program, it will likely require extensive modification as a result of this proposed rule, so this occurrence should not be zero (0). In addition for subpart EEE sources, the development of the QC program is not a one-time event but involves periodic review and modification, so the periodic revisions could also be affected

by this rule. We assume this is an oversight and that the number should be one (1) at the very least. In addition, this line in the table is not carried up into the "Summary of Compliance Costs by Year" section. Again, we assume this is simply an oversight. Also, the number of occurrences per year for visual inspections is zero (0). Procedure 4 requires monthly visual inspections for pressure, flow, and pH instruments and quarterly visual inspections for temperature and conductivity instruments. Although sources are doing inspections already (e.g., daily CPMS system response as per 63.8(c)(6) and possibly others), in most cases these inspections do not involve the level of scrutiny that Procedure 4 would mandate (e.g., disassembly of an instrument to inspect electrical connections or the removal of a flow constriction). We are not sure whether the number in the spreadsheets should be 4 or 12 but we are fairly sure it should not be zero. Again, we believe that this is simply an oversight by the Agency. The database used to develop these costs is very large and it is very easy to overlook specific entries.

Also, in the "Input for Supporting Statement" section, EPA uses a value of 2.0 as the number of person hours needed to complete an accuracy audit. We believe this length of time is too short. Our members estimate that it would take at least 5.5 hours to do a single accuracy audit for pressure and temperature devices. This time difference would introduce another source of error for the cost estimates of approximately 275%. This estimate is based using the comparison to a calibrated device method and on the following information. The rule states that for every accuracy audit, you are required to take 3 readings, each at least an hour apart. We estimate that it will take one hour to plan the job (print forms, procedure review, schedule, assign priorities, assign manpower, provide lineup, etc.), one hour to mobilize (get tools, walk to job site, set up, coordinate with production, etc.), 2 hours to run the test, one hour to demobilize (take down set up, return from job site, coordinate completion with production, etc.), and half an hour for recordkeeping (print data, file, update computer tracking systems, etc.). We consider this to be a minimum timetable since it does not allow for any problems (forgetting a wrench, not being able to run the three tests in 2 hours, etc.). For some of these accuracy audits, we are simply not sure how to do them yet, given the requirements and restrictions in Procedure 4. Some may require redesign of piping and connections. We are not far enough along in developing our comments to know most or all of the answers. We are still working on the time needed to do accuracy audits for pH and conductivity meters and for the various types of flow meters. However, one type of flowmeter (differential pressure device using a constriction such as an orifice) has the requirement to remove the constriction for inspection each time the accuracy audit is performed. That single requirement to remove the constriction would add significantly to our 5.5 hour time estimate and would only magnify the degree of error in the cost

estimate. An additional product loss penalty will be incurred for these installations.

The number of hours for visual inspections in the spreadsheet is listed as 0.25 hours (15 minutes). This may be adequate for visual inspections for devices that are easily accessible. However, in our facilities, there are a number of devices that require visual inspection that are not easily accessible. For example, Procedure 4 of the proposed rule requires that the visual inspection include a check of electrical connections for oxidation and galvanic corrosion. The time required for that component of the inspection alone is significant, since instruments would have to be disassembled to some degree in order to perform the inspection. Workers doing this inspection would likely spend at least 15 minutes just getting safety permission to access the electrical connections, much less inspecting them. If any instrument also includes connections with something other than low voltage in a standard electrical classification area (e.g., Class I Division 2), the safety precautions would be even longer. Even if this inspection item only adds 10 minutes (a conservative estimate) to the time required, this time difference would introduce yet another source of error of 67%.

Since these two sources of error (time to perform an accuracy audit and time to inspect) would be repeated over of a multitude of instruments and over a multitude of audits and inspections, the annual cost difference for a single source would be significant.

Conclusions

Since we have not had the time to fully understand the ramifications of simply plugging the numbers into the spreadsheet, we are reluctant to do so. The numbers we would generate doing so may not be correct. As soon as possible, we will make those determinations, discuss them with EPA and provide you with updated spreadsheets for this. However at a minimum, we have provided reliable information for three rather large sources of error (2100%, 275%, and 67%) that would greatly impact the cost estimate, and provided potential costs (initial and on-going production losses) that we believe when developed will show two other large sources of error.

We understand that our industry is only a small part of this rulemaking. However, it appears that what EPA is proposing will have a major impact on how we do accuracy audits and inspections in the future. It appears that there are significant inaccuracies in how EPA developed the cost estimates for our industry sector. We do not have the knowledge to look at other industry sectors but suggest that

Coalition for Responsible Waste Incineration

it would be appropriate for Office of Information and Regulatory Affairs to make sure that the best estimates of cost are available before approving this ICR.

We will continue to work on refining the estimates of the number of sensors impacted by this rule, the estimated time necessary to perform the tasks proposed, and the modification of the frequency these regulations will require if promulgated as proposed. These, along with our comments on the technical aspects of the rule will be submitted to EPA during the comment period.

Thank you for considering these comments. Please contact me if you have questions (202-452-1241 or mel@crwi.org).

Sincerely yours,

Melvin E. Keener, Ph.D.
Executive Director

cc: B. Parker – EPA
CRWI members