RTI INTERNATIONAL | Memorandum

Date: July 2, 2009

Subject: Revised MACT Floors, Data Variability Analysis, and Emission Limits for Existing and New HMIWI
EPA Contract No. EP-D-06-118; Work Assignment No. 3-09; SPPD No. 02/30
RTI Project No. 0210426.003.009

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I. Background

Sections 111 and 129 of the Clean Air Act (CAA), as amended November 1990, require the U.S. Environmental Protection Agency (EPA) to develop new source performance standards (NSPS) and emission guidelines limiting emissions of nine air pollutants and opacity from hospital/medical/infectious waste incinerators (HMIWI). The nine air pollutants are hydrogen chloride (HCl), carbon monoxide (CO), lead (Pb), cadmium (Cd), mercury (Hg), particulate matter (PM), dioxins/furans (CDD/CDF), nitrogen oxides (NO_X), and sulfur dioxide (SO_2).

The NSPS and emission guidelines are based on maximum achievable control technology (MACT). Consequently, as stated in section 129, the emissions standards for new HMIWI subject to the NSPS must be no less stringent than the average emissions limitation achieved in practice by the best-controlled similar unit in the category, and the emissions standards for existing HMIWI subject to the emission guidelines must be no less stringent than the average emissions limitation achieved in practice by the best-performing 12 percent of units in the category. Regulations for the HMIWI category were promulgated on September 15, 1997.

In a decision issued March 2, 1999, the U.S. Court of Appeals for the D.C. Circuit (the Court) remanded the standards to EPA for a better explanation of how the new and existing source MACT floors were derived from the information in the administrative record.[1] On February 6, 2007, EPA published a proposal that responded to the questions raised in the Court's remand. However, recent Court decisions that impacted that proposal, as well as issues raised in public comments on the proposal, necessitated a re-proposal of responses to the questions raised in the Court's remand and a re-development of the HMIWI regulation. MACT floors were determined for the re-proposal, with the results documented in a memorandum.[2]

EPA published its re-proposal on December 1, 2008 and solicited comment on its revised response to the remand.[3] Several public comments received on the re-proposal have raised additional issues that require EPA to re-determine the MACT floors for promulgation in 2009. Specifically, commenters requested that EPA consider new subcategories, address the issue of using post-compliance data to re-develop MACT standards (referred to as "MACT-on-MACT"), consider a different MACT floor ranking approach, and re-evaluate the statistical approach used to account for data variability in setting emission limits.[4]

The purpose of this memorandum is to present the methodology and results of the MACT floor re-determinations. As at re-proposal, we re-determined the MACT floors using data obtained over the last several years (initial and annual performance tests) for currently operating HMIWI. We ranked emission values for each HMIWI, calculated MACT floor averages, and conducted emissions data variability analyses. We determined the MACT floor emission limits based on the results of these analyses. The following sections address pollutant limits for existing and new sources, as well as opacity limits.

II. Pollutant Limits-Existing Sources

A. MACT Floors

1. Differences from 1997 MACT floor approach. In our MACT floor approach for the 1997 HMIWI standards, we compensated for the limited amount of HMIWI emissions data by using a database of HMIWI emissions limitations (e.g., permit limits, State emission limits) to establish the MACT floors for existing sources. In those cases where the number of HMIWI with emission limitations was less than 12 percent of the population, we included emission limitations for additional uncontrolled units equivalent to the highest individual test run value. In its remand decision regarding existing sources, the Court expressed concern about how EPA knew sources in the top 12 percent with permit data were not substantially overachieving their permit limits; the court also questioned how EPA knew that sources in the top 12 percent without permit data were uncontrolled.[1]

After reviewing the record and subsequent Court decisions, we determined that the more recent emissions data for HMIWI currently in operation would be used to re-establish the MACT floors for existing sources. We believe the regulatory limits used to establish the MACT floors for the 1997 rule are not representative of actual operation and do not account for non-technology factors.[5] Since the HMIWI regulations have been implemented, HMIWI have conducted both initial and annual performance tests. As a result, there are sufficient emissions data to re-establish MACT floors for existing sources.

There are 57 HMIWI currently in operation in the U.S.—52 existing HMIWI subject to the 1997 emission guidelines, and 5 HMIWI subject to the 1997 NSPS. Performance test data were obtained for all 57 of these units and compiled into a test data database.[6] We used this database to develop the MACT floors. We calculated a single emission value for each unit and each pollutant by determining the mean of the test averages for the specific unit and pollutant.

In developing the MACT floors for existing sources, we included both the 52 HMIWI subject to the 1997 emission guidelines and the 5 HMIWI subject to the 1997 NSPS. We did not include in the MACT floor calculations any of those units that have shut down since the 1997 standards. We found that more emissions data were available for large, medium, and small non-rural HMIWI compared to small rural HMIWI. Large, medium, and small non-rural units are required to conduct initial tests for seven pollutants (PM, CO, HCl, Pb, Cd, Hg, and CDD/CDF) and annual tests for three pollutants (PM, CO, HCl), while small rural units are only required to conduct initial tests for four pollutants (PM, CO, Hg, and CDD/CDF); no annual pollutant tests are required for small rural units. Opacity tests must be conducted initially and annually for all HMIWI. No testing for NO_X and SO_2 is currently required for any units, but some HMIWI also tested for these pollutants. This testing regime has also resulted in more emissions data available for some pollutants (PM, CO, and HCl) than others (Pb, Cd, Hg, CDD/CDF, NO_X, and SO_2).

In the MACT floor approach for the 1997 standards, the standard for 2,3,7,8-tetrachlorodibenzo-p-dioxin (TCDD) toxic equivalents (TEQ) was based on the TEQ performance level associated with the MACT floor control technology determined for total CDD/CDF. As at re-proposal, we have developed separate MACT floors for TEQ and total CDD/CDF, based on the data available for the best-performing 12 percent of sources for each.

The 1997 standards included percent reduction limits for HCl, Pb, Cd, and Hg and gave sources the option of demonstrating compliance by meeting the emission limits or the percent reduction limits. The percent reduction limits were developed using the pollutant concentrations at the inlet and outlet of a control device and reflected only the efficiency of the control device in reducing specific pollutants. As we noted at re-proposal, factors other than control technology (e.g., waste material quantity and composition, combustion conditions) also affect pollutant emissions from HMIWI, so it is inappropriate to provide percent reduction limits for the re-developed regulation based only on control technology performance. Consequently, we are not developing percent reduction limits for HCl and metals (Pb, Cd, and Hg) but are instead eliminating the continued use of the 1997 percent reduction limits after the compliance date of the re-developed regulation.

Commenters on the December 1, 2008 re-proposal argued that percent reduction limits should be retained for commercial HMIWI because their ability to reduce emissions is due almost exclusively to the effectiveness of the control equipment (and not waste segregation). The commenters stated that commercial units cannot practically control the waste that is put in the containers they process, and applicable regulations from the U.S. Occupational Safety and Health Adminstration (OSHA) preclude them from practicing waste segregation at the time of treatment.[4] While we agree that commercial HMIWI are limited in how much they can control the waste they receive, they are still able to educate their customers regarding waste segregation and should also have some control over the waste they receive based on the waste disposal contracts they negotiate with their customers. Consequently, we believe non-technology factors are still under their control to a limited extent, and, consequently, percent reduction limits would still be inappropriate.

2. <u>New subcategory options</u>. In their comments on the December 1, 2008 re-proposal, commenters suggested that EPA, in developing its MACT standards, consider a separate subcategory for commercial HMIWI and redistribute the HMIWI size categories to ensure a more even distribution in the number of HMIWI in each subcategory.[4] To evaluate these concerns, we developed three different subcategory options:

- Option 1—no change to existing HMIWI size categories
- Option 2—create a new commercial subcategory and redistribute the HMIWI size categories for the remaining HMIWI
- Option 3—redistribute the existing HMIWI size categories to more evenly distribute the number of HMIWI

The HMIWI size categories are based on waste charging capacity. Under Option 1, the HMIWI size distributions are unchanged from the 1997 rule. Large HMIWI are defined as units with waste charging capacities greater than 500 pounds per hour (lb/hr). Medium HMIWI are defined as units with waste charging capacities greater than 200 lb/hr and less than or equal to 500 lb/hr. Small HMIWI are defined as units with waste charging capacities less than or equal to 200 lb/hr. Small rural HMIWI are defined as small HMIWI located at least 50 miles from the nearest Metropolitan Statistical Area (MSA) boundary.

Under Option 2, HMIWI are subcategorized into commercial and captive HMIWI. Commercial HMIWI offer incineration services to a variety of HMI waste generators but do not generate any HMI waste themselves. Captive HMIWI are owned and operated by the HMI waste generators themselves (e.g., hospitals, universities, pharmaceutical facilities). The captive HMIWI are also subcategorized further. Large captive HMIWI are defined as units with waste charging capacities greater than 1,000 lb/hr. Medium captive HMIWI are defined as units with waste charging capacities greater than 500 lb/hr and less than or equal to 1,000 lb/hr. Small captive HMIWI are defined as units with waste charging capacities less than or equal to 500 lb/hr. Unlike Option 1, there is no further subcategorization of the small size category.

Under Option 3, the current HMIWI size categories are redistributed. Large HMIWI are defined as units with waste charging capacities greater than 1,500 lb/hr. Medium HMIWI are defined as units with waste charging capacities greater than 500 lb/hr and less than or equal to 1,500 lb/hr. Small HMIWI are defined as units with waste charging capacities less than or equal to 500 lb/hr. Similar to Option 1, the small size category is divided into small rural and non-rural subcategories, as defined under the 1997 rule.

For each pollutant, we conducted MACT floor analyses based on all three subcategory options, using the following methodology:

- Rank the emissions data for each unit from lowest to highest for each subcategory.
- Average the emissions data for the best-performing 12 percent of units in each subcategory to determine the MACT floor emissions level for each pollutant.

To determine the number of HMIWI in the best-performing 12 percent, we multiplied the number of sources in each subcategory by 12 percent and rounded up. For example, under Option 1, there are 36 large, 17 medium, 2 small non-rural, and 2 small rural HMIWI. The top 12 percent of sources in those subcategories were calculated to be 4.32 large, 2.04 medium, 0.24 small non-rural, and 0.24 small rural HMIWI. We determined that these values should be rounded up to 5 large, 3 medium, 1 small non-rural, and 1 small rural HMIWI to estimate the number of MACT floor units in each category. This rounding approach is consistent with the approach used by statisticians in survey sampling.[7]

Looked at another way, section 129 of the CAA refers to the MACT floor level as the "average emissions limitation achieved in practice by the best-performing 12 percent of units in the category" (emphasis added). If the number of units determined to be in the MACT floor is not rounded up from these calculated values (i.e., four large, two medium, and zero small rural and non-rural HMIWI are used to establish the MACT floor under Option 1), then the MACT floors for these categories would not meet the best-performing 12 percent criteria, because they would be based on less than 12 percent of the sources. Four large HMIWI would account for only 11.1 percent; two medium HMIWI would account for 11.8 percent; and zero small HMIWI (rural, non-rural) would account for 0 percent.

3. New MACT floor options. In their comments on the December 1, 2008 re-proposal, commenters argued that EPA's recalculation of the 1997 MACT floors using post-MACT compliance data resulted in MACT-on-MACT standards that could not be achieved.[4] Commenters also rejected EPA's pollutant-by-pollutant approach to choosing the best performing HMIWI. Under the pollutant-by-pollutant approach, MACT floors are established separately for each pollutant, and emission limits are determined directly from those MACT floor emission levels. The commenters argued that this approach essentially created a hypothetical "super unit" and resulted in the selection of MACT floors that no one existing source has achieved and that could not be simultaneously achieved by any of the best-performing sources.[4] The commenters suggested that EPA choose the best-performing sources on an overall basis, so that a certain portion of the existing sources could meet the existing source standards.[4] They suggested the following methodology:

- Establish rankings for how a HMIWI performs for each of the regulated pollutants.
- Sum the individual pollutant rankings to determine the overall (composite) ranking for each HMIWI.
- Rank the overall rankings from lowest to highest to determine the best-performing 12 percent of units for all regulated pollutants.
- Average the emissions data for the overall best-performing 12 percent of units in each subcategory to determine the MACT floor emissions level for each pollutant.

We evaluated this approach within the context of the three subcategory options mentioned above. Under each subcategory option, we created two additional options (Options A and B), with MACT floors under Option A determined using the pollutant-by-pollutant approach, and MACT floors under Option B determined using the approach outlined above by the commenters, which we will refer to as the "composite ranking approach." So, Options 1A and 1B would evaluate MACT floors for the current size categories using the pollutant-by-pollutant and composite ranking approaches, respectively. Options 2A and 2B would evaluate MACT floors for new commercial and captive subcategories using the pollutant-by-pollutant and composite ranking approaches, respectively. Options 3A and 3B would evaluate MACT floors for redistributed size categories using the pollutant-by-pollutant and composite ranking approaches, respectively.

Because the composite ranking approach sums up the rankings for all nine regulated pollutants for each HMIWI, this approach requires a complete dataset of all nine pollutants in order for an HMIWI to be considered in the MACT floor analysis. Otherwise, an HMIWI could have a more favorable (i.e., numerically lower) overall ranking because it does not include rankings for all of the regulated pollutants. This approach limits the number of HMIWI that can be considered for the MACT floor analysis.

Tables 1 through 6 below present summaries of the MACT floor results for Options 1A, 1B, 2A, 2B, 3A, and 3B. The MACT floor ranking tables for these options are presented in Appendices A through F at the end of this memorandum. Note: Those units in the ranking tables determined to be MACT floor units (i.e., the best-performing 12 percent of units) are highlighted in blue text in each ranking table.

In some cases, compliance data were unavailable to estimate MACT floors. No NO_X and SO_2 data were available for small non-rural units to estimate MACT floors for that subcategory under Option 1A. (Sources are not required to test for NO_X and SO_2 under the 1997 HMIWI regulation.) Because NO_X and SO_2 data were missing for small non-rural units, there was also not a complete dataset of all nine regulated pollutants, so it was not possible to estimate MACT floors for that subcategory under Option 1B. (As noted above, the composite ranking options require an HMIWI to have a complete dataset of all nine regulated pollutants in order to be considered in the MACT floor analysis.)

B. Data Variability

For the December 1, 2008 re-proposal, we accounted for pollutant-specific variability at the best-performing HMIWI by using emissions data for each test run conducted by the best performing 12 percent of HMIWI within each subcategory. A "test run" is defined in 40 CFR part 60 as the "net period of time during which an emission sample is collected," e.g., a PM emission sample collected during a PM compliance test. Most compliance tests include three test runs, although some tests conducted using continuous emissions monitors (e.g., CO, NO_X, SO_2) include more. Our variability calculations included only those test runs from compliance tests considered representative of the typical operation of the HMIWI.[6] We used test run data (as opposed to test averages or unit averages) because we believe each data point (each test run) should be viewed as a snapshot of actual performance, which gives information about the variation in emissions that would be expected to recur over time. We also thought it was important to be consistent across subcategories in how we estimated variability. For small rural and small non-rural HMIWI, it was imperative that we use test run data to estimate variability because we had only one best-performing unit in those subcategories and only one emission test per unit, and it was not possible to estimate variability based on one data point. For consistency, we thought it was important to take the same approach for those subcategories (medium and large HMIWI) where data were more plentiful.

At re-proposal, we assumed that the emissions data for the best-performing 12 percent of sources were normally distributed, and we determined that using a 99.9 percent upper confidence limit (UCL) would be an appropriate method of estimating variability. The UCL represents the statistical likelihood that a value, in this case an emission value from the average source in the best-performing 12 percent of sources, will fall at or below the UCL value. To calculate the UCL, we used the average (or sample mean) and sample standard deviation, which are two statistical measures calculated from the sample data. The average is the central value of a data set, and the standard deviation is the common measure of the dispersion of the data set around the average. We argued at re-proposal that the 99.9 percent UCL was appropriate for use because sources must meet the standards at all times, and because the limited amount of test data introduced a degree of uncertainty.[3]

Commenters on the December 1, 2008 re-proposal had concerns about the methods that EPA used to calculate statistical parameters. Specifically, the commenters argued that EPA should characterize emission data distributions before calculating statistics, instead of assuming all data are normally distributed. Otherwise, according to the commenters, it would be difficult to determine if the statistics are valid. When data are not normally distributed, the commenters recommended that EPA transform the data prior to conducting its statistical calculations.[4]

The commenters also noted that EPA used the NORMSINV function in Microsoft Excel to calculate the 99.9 percent UCL, which assumes that the actual mean and variance of a data set is known. According to the commenters, when the mean and variance are estimated from random samples or a small subset of the total population, such as stack test runs, the 99.9 percent UCL should be calculated with the Student t-statistic using the TINV function in Excel, not normal statistics.[4]

Another commenter questioned EPA's use of a 99.9 percent UCL to estimate individual units' variability, arguing that such a high UCL was a departure from EPA's approach in other rulemakings, which used a lower UCL, such as 99, 95, or 90 percent. The commenter suggested that EPA correct its floor approach to avoid such an overcompensation for variability.[4]

After reviewing the commenters' suggestions, we decided to take a closer look at our statistical approach. We agree with the commenters that assuming a normal distribution of the emissions data in every case was not an accurate depiction of the data's actual distribution. Emissions data are, in fact, often lognormally distributed. Consequently, we decided to determine the distribution of the emissions data for the best-performing 12 percent of units within each subcategory prior to calculating UCL values. Because normal distributions typically have a skewness of zero, we decided to use skewness as an indicator of whether the emissions data were normally distributed. Except as specified in the next paragraph, those datasets with a skewness value greater than zero (when rounded to whole numbers) were categorized as lognormal, and all other datasets were categorized as normal. Those data categorized as lognormal were transformed (by taking the natural log of the data) prior to the calculation of UCL values. In most cases, we found the larger datasets to be lognormally distributed. We believe this approach is more accurate and obtained more representative results than the more simplistic normal distribution assumption used at re-proposal.

For smaller datasets with only a few datapoints (e.g., most datasets for small HMIWI, which had only one emission test with three test runs), it was not possible to make a definitive determination that the data were distributed normally or lognormally. In fact, assuming a lognormal distribution for those data often resulted in UCL values (some exorbitant) that were substantially higher than the promulgated 1997 emission limits. In those cases, we decided to use the normal distribution in calculating UCL values, a conservative assumption which provided a more protective emission limit. Those cases are highlighted in green in Tables 1 through 6 below.

We also agree with the commenters that we have only a relatively small, random sample of emissions data available for our MACT floor analyses, which calls for the use of the Student's t-test. It should be noted that the Student's t-test has also been used in other EPA rulemakings, such as Portland Cement, in accounting for variability.

In light of the public comments we received on the 99.9 percent UCL used at re-proposal and the aforementioned changes in our statistical approach, we also decided to reevaluate the percentiles used with the UCL values. We evaluated four different percentiles (90, 95, 99, and 99.9 percent). See Tables 1 through 6 for the 90, 95, 99, and 99.9 percent UCL values calculated for each MACT floor option (1A, 1B, 2A, 2B, 3A, and 3B). The test run data used in the UCL analyses are presented in Appendices A through F at the end of this memorandum. (Note: The extra rows in the test run data tables are used to keep the number of rows the same for each subcategory across all pollutants, in order to facilitate the statistical calculations.)

The 99.9 percent UCL values estimated for the 2009 final rule are substantially higher than the highest test runs for the MACT floor units and frequently higher than the emission limits in the September 15, 1997 promulgated standards, indicating the 99.9^{th} percentile overcompensates for variability. Lower percentiles (e.g., 90, 95, and 99 percent) are inherently more stable than the 99.9^{th} percentile, with less uncertainty (less variability) than the 99.9^{th} percentile from a statistical standpoint. The 90 and 95 percent UCL values are frequently lower than the highest test runs for the MACT floor units and often lower than the stringent emission limits in the December 1, 2008 re-proposal, indicating that those percentiles insufficiently compensate for variability.

The 99 percent UCL values are somewhat higher than the stringent emission limits in the December 1, 2008 re-proposal but are also below the emission limits in the September 15, 1997 promulgated standards. The 99 percent UCL values are more in line with the highest test runs for the MACT floor units than the other percentiles, seldom falling below (like the 90^{th} and 95^{th} percentiles) but also not substantially exceeding (like the 99.9^{th} percentile). This finding suggests that the 99 percent UCL provides a more reasonable compensation for variability than the other percentiles, resulting in standards more representative of the level of emission reduction that sources are actually achieving on a daily basis. Accordingly, we have decided to use the 99 percent UCL to estimate emission limits for the 2009 final rule.

We calculated the 99 percent UCL values using the following Microsoft Excel equations, based on the test run data for those HMIWI in the best-performing 12 percent:

Normal distribution: 99% UCL = AVERAGE(Test Runs in Top 12%) + [STDEV(Test Runs in Top 12%) x TINV(2 x probability, n -1 degrees of freedom)], for a one-tailed t-value (with 2 x probability), probability of 0.01, and sample size of n

Lognormal distribution: 99% UCL = EXP{AVERAGE(Natural Log Values of Test Runs in Top 12%) + [STDEV(Natural Log Values of Test Runs in Top 12%) x TINV(2 x probability, n -1 degrees of freedom)]}, for a one-tailed t-value (with 2 x probability), probability of 0.01, and sample size of n

In those cases where MACT floor analyses could not be conducted (see end of previous section), we were unable to conduct data variability analyses. Those cases are addressed in the following section in the establishment of emission limits.

C. Emission Limits

We determined emission limits for each MACT floor option and pollutant by rounding up the UCL values to two significant figures, in accordance with standard engineering practices. For example, under Option 1A for large HMIWI, we determined the MACT floor emission limit for Hg by rounding up the 99 percent UCL value for Hg (0.0172 milligrams per dry standard cubic meter [mg/dscm]) to 0.018 mg/dscm. For the low concentrations we are looking at, we believe two significant figures provide the appropriate precision. It should be noted that if the UCL values were rounded down, then the possibility exists that the best-performing units that comprise the MACT floor may not be able to achieve the emission limit on an ongoing basis. In all cases, the significant figure approach and associated rounding does not meaningfully change the emission limits. The emission limits are summarized for each MACT floor option in Tables 1 through 6 below.

For a couple of options (1A and 1B), there were insufficient data to determine emission limits for small non-rural units based on the data for that subcategory alone. In those cases, we assigned emission limits to the small non-rural category based on the emission limits for a similar subcategory, specifically medium units. Those cases are highlighted in red in Tables 1 and 2.

In some cases, emission limits based on UCL values would be less stringent than the emission limits promulgated in 1997. In those cases, we substituted the 1997 promulgated limits in their place. Those cases are highlighted in yellow in Tables 1 through 6. We estimate that a substantial fraction (40 to 50 percent) of emission limits determined under the composite ranking options would be higher than the 1997 promulgated limits. Also, because not all pollutants are required to be tested (e.g., NO_X and SO_2), a substantial fraction of available emissions data would have to be discarded under the composite ranking options in order to rank only those HMIWI with a complete set of data for all nine regulated pollutants. Specifically, we would have to discard emissions data for 30 percent of large, 40 percent of medium, 100 percent of small non-rural, and 50 percent of small rural HMIWI in order to calculate MACT floors using the composite ranking options. For these reasons, we have decided not to use the composite ranking options (Options 1B, 2B, and 3B) to develop emission limits for the 2009 final rule.

Given the concerns that commenters expressed about the achievability of the standards, specifically "MACT-on-MACT" and the use of pollutant-by-pollutant ranking, we decided to evaluate the achievability of the remaining MACT floor options (1A, 2A, and 3A). Because the three remaining options are based on different subcategories, comparing emission limits between the options would be like comparing "apples to oranges." We developed another way of comparing the options by looking at the number of HMIWI expected to meet the emission limits under each option. We accomplished this by comparing the emission limits for each MACT floor option to the average emission estimates for each HMIWI. For further comparison, we also conducted the same exercise for the September 1997 promulgated limits, February 2007 proposal limits, and December 2008 re-proposal limits, comparing them to average emission estimates for each HMIWI. The results are presented in Tables 1 through 9 of Appendix G at the end of this memorandum. In each case, we estimated the total number of HMIWI expected to meet all nine limits, eight of the nine limits, seven of the nine limits, etc. These results are also presented in Table 10 and Figure 1 of Appendix G. Then, we estimated the cumulative number of HMIWI expected to meet <u>at least</u> nine, eight, seven limits, etc. These results are presented in Table 11 and

Figure 2 in Appendix G. As shown in Figure 2, more HMIWI are expected to meet the limits, on a cumulative basis, under Options 1A, 2A, and 3A compared to the limits under the 2008 re-proposal. Compared to Options 2A and 3A, Option 1A has similar (in fact, slightly higher) numbers of HMIWI expected to meet the limits.

As described previously, Options 2A and 3A explore new subcategory options, including a new commercial subcategory and/or redistributed size categories. We have concerns about these two options because we did not provide an opportunity for the public to comment on the issue of subcategories in the re-proposal. It could be argued that new subcategory options like Options 2A and 3A are not a logical outgrowth of the re-proposal, and any emission limits developed based on these options would be problematic. Given that Option 1A does not change subcategories and results in similar numbers of HMIWI expected to meet the limits compared to the other two options, we believe that Option 1A is the superior MACT floor option on which to base the emission limits for the 2009 final rule.

All HMIWI that complied with the NSPS as promulgated in 1997 (five units) would be considered "existing" sources under the 2009 revised emission guidelines. Those HMIWI would be required to meet the emission limits under the revised guidelines, except where the emission limits under the 1997 NSPS are more stringent. It should be noted that the HCl emission limit for small HMIWI and the PM emission limit for medium HMIWI are more stringent under the 1997 NSPS than under the revised EG.

III. Pollutant Limits-New Sources

A. MACT Floors

As noted previously, more recent emissions data for the HMIWI currently in operation were used to re-establish the MACT floors. The MACT floors for new sources were determined based on the emissions level achieved by the best-controlled similar unit for each pollutant and subcategory. In the 2009 final rule, new sources are defined as those installed since the 2008 re-proposal, consistent with how they were defined in the 1997 regulation, which defined new sources as those installed since the 1996 re-proposal.

As with existing sources, MACT floors for new sources were developed for all nine of the regulated pollutants, plus opacity, and separate MACT floors were developed for TEQ and total CDD/CDF. In developing the MACT floors for new sources, we looked at the emissions data associated with the 52 HMIWI subject to the 1997 emission guidelines and the 5 HMIWI subject to the 1997 NSPS. We did not include in the MACT floor analysis any of those units that have shut down since the 1997 regulation.

For the reasons given in the previous section, we decided to determine the MACT floors for new sources using Option 1A, which includes the same subcategories as before (large, medium, and small units). Because there is not a small rural HMIWI subcategory for new HMIWI, test data for the small rural HMIWI were not included in the ranking of best-controlled small units. Table 7 below presents a summary of the MACT floor results for Option 1A for new sources. The best-controlled similar units for Option 1A for each pollutant are presented in Appendix H at the end of this memorandum.

In two cases, compliance data were unavailable to estimate MACT floors. No NO_X and SO_2 data were available for small non-rural units to estimate MACT floors for those pollutants for the small HMIWI subcategory under Option 1A. (Sources are not required to test for NO_X and SO_2 under the 1997 HMIWI regulation.)

B. Data Variability

As with existing sources, we decided to account for pollutant-specific variability at the best-controlled similar unit by using emissions data for each test run conducted by the best-controlled similar units within each subcategory. The results of the data variability analyses are presented in Table 7 below. The test run data used in the analyses are presented in Appendix H at the end of this memorandum. As before, we also decided to determine the distribution of the emissions data for the best-controlled similar units within each subcategory, using skewness as an indicator of whether the emissions data were normally distributed. Those data categorized as lognormal were transformed (by taking the natural log of the data) prior to the calculation of UCL values. When there were only a few datapoints (e.g., one emission test with three test runs), we decided to conservatively assume a normal distribution in calculating UCL values. Those cases are highlighted in green in Table 7. We also used the Student's t-test in our UCL calculations, consistent with other EPA rulemakings (e.g., Portland Cement). In light of the percentile comparison we conducted for existing sources, we decided to also use a 99 percent UCL to estimate emission limits for new sources. We calculated the 99 percent UCL values using the following Microsoft Excel equations, based on the test run data for the best-controlled similar units (best performer):

Normal distribution: 99% UCL = AVERAGE(Test Runs for Best Performer) + [STDEV(Test Runs for Best Performer) x TINV(2 x probability, n -1 degrees of freedom)], for a one-tailed t-value (with 2 x probability), probability of 0.01, and sample size of n

Lognormal distribution: 99% UCL = EXP{AVERAGE(Natural Log Values of Test Runs for Best Performer) + [STDEV(Natural Log Values of Test Runs for Best Performer) x TINV(2 x probability, n -1 degrees of freedom)]}, for a one-tailed t-value (with 2 x probability), probability of 0.01, and sample size of n

In the two cases where MACT floor analyses could not be conducted (i.e., NO_X and SO_2), we were unable to conduct data variability analyses. Those cases are addressed in the following section in the establishment of emission limits.

C. Emission Limits

As with existing sources, we determined emission limits for Option 1A by rounding up the 99 percent UCL value for each pollutant to two significant figures, in accordance with standard engineering practices. The emission limits are summarized in Table 7 below.

In a couple of cases (NO_X and SO_2 limits for small HMIWI), there were insufficient data to determine an emission limit based on the data for that subcategory alone. In those cases, we assigned emission limits to the small subcategory based on the emission limits for a similar subcategory, specifically medium units. Those cases are highlighted in red in Table 7.

In several cases (CO, CDD/CDF, and NO_X limits for large HMIWI; HCl and Pb limits for medium HMIWI), MACT floor emission limits based on the 99 percent UCL for new HMIWI would be higher than the corresponding limits for existing HMIWI. This unusual situation occurred due to a difference in the size of the datasets used to determine the UCL values for existing and new HMIWI. The dataset for the best performer (used to determine the MACT floor for new sources) is smaller than the dataset for the best-performing 12 percent of sources (used to determine the MACT floor for existing sources) and has a higher standard deviation. Since the UCL calculation depends on both the average and standard deviation, the higher standard deviation resulted in the UCL value for the best performer being higher. In those cases, we decided to use existing source limits for new sources where they are lower than new source limits, and highlighted them in blue in Table 7.

In one case (HCl limit for small HMIWI), an emission limit based on the 99 percent UCL would be less stringent than the emission limit promulgated in 1997. In that case, we substituted the 1997 promulgated limits in its place. That case is highlighted in yellow in Table 7.

IV. Opacity Limits

In addition to the nine regulated pollutants, we are also developing a revised opacity standard for new and existing HMIWI, using Option 1A. Based on the average opacity values in our test data database, without any accounting for variability, the MACT floor for existing and new units would be 0 percent.[6] (See Appendix I at the end of this memorandum for the MACT floor rankings/units for existing and new sources.) We considered how to appropriately account for variability, given the differences in opacity testing versus testing for the nine regulated pollutants. Because the level of opacity can be impacted by the amount, type, and particle characteristics of PM in the gas stream, as well as process operation, we believe that opacity is an appropriate surrogate for PM emissions and using the highest opacity number from one of the best-performing HMIWI with respect to PM would be an appropriate method for determining the opacity level that has been achieved under variable conditions.

For the December 1, 2008 re-proposal, we based the MACT floor opacity limit for existing and new sources on the single highest opacity monitor reading (1.1 percent) for one of the HMIWI in the MACT floor for PM and rounded it up to 2 percent because we commonly set opacity standards based on whole numbers and could not round down without risking having the MACT floor unit not meet the standard.[3] Several commenters on the re-proposal argued that the proposed opacity limit failed to account for actual opacity monitoring capabilities and normal operational variability.[4] After reviewing the available opacity data in the record, we have determined that our analysis at re-proposal was incomplete. The analysis did not account for two other HMIWI in the MACT floor for PM that could more effectively account for variability for opacity. The maximum opacity averages for these two HMIWI are 5.87 and 4.17 percent.[6] The opacity data for these two HMIWI were measured using EPA Method 9. We have decided to establish an opacity limit of 6 percent for the 2009 final rule using the same approach that we used at re-proposal, by rounding up the highest opacity average of 5.87 percent to the nearest whole number.

V. References

1. United States Court of Appeals for the District of Columbia Circuit. 1999. *Sierra Club and Natural Resources Defense Council, Petitioners v. United States Environmental Protection Agency and Carol M. Browner, Administrator, United States Environmental Protection Agency, Respondents*. Argued November 9, 1998. Decided March 2, 1999. No. 97-1686.

2. Memorandum from Thomas Holloway, RTI, to Mary Johnson, EPA. October 24, 2008. *MACT Floors, Data Variability Analysis, and Emission Limits for Existing and New HMIWI.*

3. U.S. Environmental Protection Agency. December 1, 2008. *Standards of Performance for New Stationary Sources and Emission Guidelines for Existing Sources: Hospital/Medical/Infectious Waste Incinerators.*

4. U.S. Environmental Protection Agency. Draft. *Standards of Performance for New Stationary Sources and Emission Guidelines for Existing Sources: Hospital/Medical/Infectious Waste Incinerators (40 CFR Part 60 Subparts Ec and Ce): Response to Public Comments.*

5. Memorandum from Thomas Holloway, RTI, to Mary Johnson, EPA. October 24, 2008. *Comparison of Regulatory Limits with Emissions Test Data.*

6. Memorandum from Thomas Holloway, RTI, to Mary Johnson, EPA. October 24, 2008. *Documentation of HMIWI Test Data Database.*

7. Cochran, William G. 1977. *Sampling Techniques.* Third Edition, John Wiley & Sons. Pages 72-87.

Table 1. Summary of MACT Floor Results for Option 1A for Existing Sources
Current Large, Medium, Small, Small Rural Subcategories / Pollutant-by-Pollutant Ranking (Determine Distribution, Use T-Test)

Parameters	HCl ppmvd	CO ppmvd	Pb mg/dscm	Cd mg/dscm	Hg mg/dscm	PM gr/dscf	CDD/CDF ng/dscm	TEQ ng/dscm	NO_X ppmvd	SO_2 ppmvd
LARGE HMIWI (>500 LB/HR HMIWI)										
No. of sources =	36	36	36	36	36	36	36	36	36	36
No. in MACT floor =	5	5	5	5	5	5	5	5	5	5
Avge of top 12% =	0.476	1.02	0.00290	0.000653	0.00182	0.00145	0.410	0.00786	72.6	0.938
Skewness =	2.55	1.86	1.91	3.92	3.34	1.37	1.31	1.77	1.44	1.34
Kurtosis =	7.10	3.84	5.08	19.92	13.80	1.46	1.56	4.42	3.57	3.43
Distribution =	L	L	L	L	L	L	L	L	L	L
Number of test runs =	60	45	33	42	27	52	36	42	36	45
Highest test run =	3.00	4.05	0.0150	0.00649	0.0124	0.00583	1.57	0.0336	145	3.00
90% UCL of top 12% (test runs) =	1.40	2.91	0.00890	0.00211	0.00519	0.00346	1.41	0.0177	98.0	2.40
Limit (based on 90% UCL) =	**1.5**	**3.0**	**0.0089**	**0.0022**	**0.0052**	**0.0035**	**1.5**	**0.018**	**99**	**2.4**
95% UCL of top 12% (test runs) =	2.37	4.53	0.0142	0.00349	0.00776	0.00512	2.66	0.0258	108	3.76
Limit (based on 95% UCL) =	**2.4**	**4.6**	**0.015**	**0.0035**	**0.0078**	**0.0052**	**2.7**	**0.026**	**110**	**3.8**
99% UCL of top 12% (test runs) =	6.54	10.7	0.0358	0.00919	0.0172	0.0109	9.25	0.0538	131	8.97
Limit (based on 99% UCL) =	**6.6**	**11**	**0.036**	**0.0092**	**0.018**	**0.011**	**9.3**	**0.054**	**140**	**9.0**
99.9% UCL of top 12% (test runs) =	21.4	29.6	0.110	0.0293	0.0459	0.0265	41.5	0.129	165	25.2
Limit (based on 99.9% UCL) =	**22**	**30**	**0.11**	**0.030**	**0.046**	**0.015**	**42**	**0.13**	**170**	**2.9**
MEDIUM HMIWI (>200, ≤500 LB/HR)										
No. of sources =	17	17	17	17	17	17	17	17	17	17
No. in MACT floor =	3	3	3	3	3	3	3	3	3	3
Avge of top 12% =	0.633	1.01	0.00429	0.00129	0.00153	0.00343	0.159	0.00338	62.5	0.579
Skewness =	3.25	2.57	3.31	2.41	3.60	2.16	1.90	1.12	-0.14	2.80
Kurtosis =	13.34	10.73	12.97	5.64	14.49	8.06	3.03	0.60	-1.90	12.45
Distribution =	L	L	L	L	L	L	L	L	N	L
Number of test runs =	40	32	33	33	21	48	36	36	9	70
Highest test run =	3.52	3.75	0.0219	0.00792	0.00980	0.0157	0.626	0.00888	120	4.10
90% UCL of top 12% (test runs) =	1.88	2.16	0.00781	0.00264	0.00429	0.00783	0.331	0.00732	122	1.88
Limit (based on 90% UCL) =	**1.9**	**2.2**	**0.0079**	**0.0027**	**0.0043**	**0.0079**	**0.34**	**0.0074**	**130**	**1.9**
95% UCL of top 12% (test runs) =	3.03	2.95	0.0102	0.00451	0.00765	0.0107	0.456	0.0103	141	2.47
Limit (based on 95% UCL) =	**3.1**	**3.0**	**0.011**	**0.0046**	**0.0077**	**0.011**	**0.46**	**0.011**	**150**	**2.5**
99% UCL of top 12% (test runs) =	7.69	5.44	0.0172	0.0129	0.0245	0.0196	0.848	0.0198	185	4.18
Limit (based on 99% UCL) =	**7.7**	**5.5**	**0.018**	**0.013**	**0.025**	**0.020**	**0.85**	**0.020**	**190**	**4.2**
99.9% UCL of top 12% (test runs) =	23.4	11.4	0.0325	0.0463	0.108	0.0400	1.80	0.0438	253	7.69
Limit (based on 99.9% UCL) =	**24**	**12**	**0.033**	**0.047**	**0.11**	**0.030**	**1.8**	**0.044**	**250**	**7.7**
SMALL NON-RURAL HMIWI (≤200 LB/HR)										
No. of sources =	2	2	2	2	2	2	2	2	2	2
No. in MACT floor =	1	1	1	1	1	1	1	1	1	1
Avge of top 12% =	1.03	2.27	0.0727	0.00256	0.00292	0.00760	2.89	0.00453	--	--
Skewness =	0.80	1.90	1.66	2.87	-1.13	1.36	-0.59	-1.34	--	--
Kurtosis =	-0.92	4.87	--	8.95	--	--	--	--	--	--
Distribution =	L	L	N	L	N	N	N	N	--	--

Table 1. Summary of MACT Floor Results for Option 1A for Existing Sources
Current Large, Medium, Small, Small Rural Subcategories / Pollutant-by-Pollutant Ranking (Determine Distribution, Use T-Test)

Parameters	HCl ppmvd	CO ppmvd	Pb mg/dscm	Cd mg/dscm	Hg mg/dscm	PM gr/dscf	CDD/CDF ng/dscm	TEQ ng/dscm	NO_X ppmvd	SO_2 ppmvd
Number of test runs =	12	12	3	12	3	3	3	3	--	--
Highest test run =	3.10	7.45	0.110	0.0113	0.00414	0.0109	4.50	0.00540		
90% UCL of top 12% (test runs) =	4.18	5.60	0.135	0.00543	0.00567	0.0131	6.18	0.00660	--	--
Limit (based on 90% UCL) =	**4.2**	**5.6**	**0.14**	**0.0055**	**0.0057**	**0.014**	**6.2**	**0.0067**	**130**	**1.9**
95% UCL of top 12% (test runs) =	8.86	8.28	0.169	0.00773	0.00718	0.0162	7.98	0.00774	--	--
Limit (based on 95% UCL) =	**8.9**	**8.3**	**0.17**	**0.0078**	**0.0072**	**0.017**	**8.0**	**0.0078**	**150**	**2.5**
99% UCL of top 12% (test runs) =	43.8	19.0	0.301	0.0164	0.0131	0.0280	15.0	0.0122	--	--
Limit (based on 99% UCL) =	**44**	**20**	**0.31**	**0.017**	**0.014**	**0.029**	**16**	**0.013**	**190**	**4.2**
99.9% UCL of top 12% (test runs) =	422	61.8	0.806	0.0475	0.0354	0.0730	41.9	0.02903	--	--
Limit (based on 99.9% UCL) =	**100**	**40**	**0.81**	**0.048**	**0.036**	**0.050**	**42**	**0.030**	**250**	**7.7**
SMALL RURAL HMIWI (≤200 LB/HR)										
No. of sources =	2	2	2	2	2	2	2	2	2	2
No. in MACT floor =	1	1	1	1	1	1	1	1	1	1
Avge of top 12% =	135	5.41	0.226	0.0380	0.00158	0.0128	29.6	0.618	95.1	22.6
Skewness =	1.11	-0.99	0.06	-0.89	1.85	1.20	1.63	1.72	0.70	-0.38
Kurtosis =	--	--	--	--	3.49	0.68	--	--	--	--
Distribution =	N	N	N	N	N	N	N	N	N	N
Number of test runs =	3	3	3	3	4	4	3	3	3	3
Highest test run =	241	7.21	0.265	0.0463	0.00269	0.0202	63.9	1.35	100	28.8
90% UCL of top 12% (test runs) =	316	9.34	0.299	0.0557	0.00281	0.0216	85.9	1.82	104	34.9
Limit (based on 90% UCL) =	**320**	**9.4**	**0.30**	**0.056**	**0.0029**	**0.022**	**86**	**1.9**	**110**	**35**
95% UCL of top 12% (test runs) =	416	11.5	0.339	0.0655	0.00335	0.0254	117	2.48	109	41.6
Limit (based on 95% UCL) =	**420**	**12**	**0.34**	**0.066**	**0.0034**	**0.026**	**120**	**2.5**	**110**	**42**
99% UCL of top 12% (test runs) =	805	19.9	0.496	0.104	0.00500	0.0371	238	5.06	129	68.0
Limit (based on 99% UCL) =	**810**	**20**	**0.50**	**0.11**	**0.0051**	**0.038**	**240**	**5.1**	**130**	**55**
99.9% UCL of top 12% (test runs) =	2,283	52.0	1.09	0.248	0.00929	0.0675	697	14.9	204	168
Limit (based on 99.9% UCL) =	**2,300**	**40**	**1.1**	**0.25**	**0.0093**	**0.068**	**700**	**15**	**210**	**55**

Notes:
1. Red shading - no complete set of data for existing small non-rural HMIWI available to conduct MACT analysis. Based limits on UCL for medium HMIWI.
2. Yellow shading - limits based on UCL would be less stringent than promulgated limits. Therefore, used promulgated limits instead.
3. Green shading - insufficient data to determine distribution, so conservatively assumed normal distribution (more protective).

Table 2. Summary of MACT Floor Results for Option 1B for Existing Sources
Current Large, Medium, Small, Small Rural Subcategories / Composite Ranking (Determine Distribution, Use T-Test)

Parameters	HCl ppmvd	CO ppmvd	Pb mg/dscm	Cd mg/dscm	Hg mg/dscm	PM gr/dscf	CDD/CDF ng/dscm	TEQ ng/dscm	NO_X ppmvd	SO_2 ppmvd
LARGE HMIWI (>500 LB/HR)										
No. of sources =	36	36	36	36	36	36	36	36	36	36
No. in MACT floor =	5	5	5	5	5	5	5	5	5	5
Avge of top 12% =	4.58	4.27	0.00868	0.00116	0.00536	0.00492	3.51	0.0342	88.0	1.39
Skewness =	3.00	4.01	2.99	3.10	3.36	2.64	2.24	2.18	1.19	3.01
Kurtosis =	14.21	21.50	10.17	12.25	11.57	7.85	6.45	4.14	1.37	9.99
Distribution =	L	L	L	L	L	L	L	L	L	L
Number of test runs =	81	81	54	54	54	81	44	42	60	60
Highest test run =	43.4	41.1	0.0865	0.0117	0.0620	0.0394	29.9	0.137	211	9.67
90% UCL of top 12% (test runs) =	17.1	12.0	0.0322	0.00375	0.0150	0.0198	17.9	0.0536	140	4.00
Limit (based on 90% UCL) =	**18**	**13**	**0.033**	**0.0038**	**0.016**	**0.015**	**18**	**0.054**	**140**	**4.0**
95% UCL of top 12% (test runs) =	32.3	23.2	0.0596	0.00668	0.0257	0.0365	45.0	0.0934	163	7.05
Limit (based on 95% UCL) =	**33**	**24**	**0.060**	**0.0067**	**0.026**	**0.015**	**46**	**0.094**	**170**	**7.1**
99% UCL of top 12% (test runs) =	109	81.1	0.195	0.0203	0.0720	0.117	271	0.274	220	20.9
Limit (based on 99% UCL) =	**100**	**40**	**0.20**	**0.021**	**0.073**	**0.015**	**125**	**0.28**	**230**	**21**
99.9% UCL of top 12% (test runs) =	444	346	0.788	0.0750	0.243	0.448	2,283	0.988	312	74.9
Limit (based on 99.9% UCL) =	**100**	**40**	**0.79**	**0.075**	**0.25**	**0.015**	**125**	**0.99**	**250**	**55**
MEDIUM HMIWI (>200, ≤500 LB/HR)										
No. of sources =	17	17	17	17	17	17	17	17	17	17
No. in MACT floor =	3	3	3	3	3	3	3	3	3	3
Avge of top 12% =	10.0	1.35	0.0942	0.00430	0.00583	0.0130	29.2	0.526	128	1.10
Skewness =	4.22	3.31	1.47	2.57	2.36	0.38	2.08	2.05	1.46	3.27
Kurtosis =	20.44	11.42	1.38	7.67	4.80	-0.99	2.88	2.72	4.72	13.77
Distribution =	L	L	L	L	L	N	L	L	L	L
Number of test runs =	38	83	27	24	30	38	28	28	74	70
Highest test run =	129	11.7	0.432	0.0270	0.0247	0.0338	92.7	1.63	265	5.05
90% UCL of top 12% (test runs) =	25.9	3.53	0.324	0.0129	0.0131	0.0260	22.2	0.396	165	2.26
Limit (based on 90% UCL) =	**26**	**3.6**	**0.33**	**0.013**	**0.014**	**0.027**	**23**	**0.40**	**170**	**2.3**
95% UCL of top 12% (test runs) =	64.0	5.04	0.545	0.0172	0.0219	0.0294	60.6	1.13	179	3.12
Limit (based on 95% UCL) =	**65**	**5.1**	**0.55**	**0.018**	**0.022**	**0.030**	**61**	**1.2**	**180**	**3.2**
99% UCL of top 12% (test runs) =	374	9.93	1.53	0.0304	0.0603	0.0359	438	8.94	210	5.78
Limit (based on 99% UCL) =	**100**	**10**	**1.2**	**0.031**	**0.061**	**0.030**	**125**	**2.3**	**220**	**5.8**
99.9% UCL of top 12% (test runs) =	3,125	21.8	5.46	0.0621	0.209	0.0438	5,025	115	253	11.9
Limit (based on 99.9% UCL) =	**100**	**22**	**1.2**	**0.063**	**0.21**	**0.030**	**125**	**2.3**	**250**	**12**
SMALL HMIWI (≤200 LB/HR)										
No. of sources =	2	2	2	2	2	2	2	2	2	2
No. in MACT floor =	1	1	1	1	1	1	1	1	1	1
Avge of top 12% =	--	--	--	--	--	--	--	--	--	--
Skewness =	--	--	--	--	--	--	--	--	--	--
Kurtosis =	--	--	--	--	--	--	--	--	--	--
Distribution =	--	--	--	--	--	--	--	--	--	--

Table 2. Summary of MACT Floor Results for Option 1B for Existing Sources
Current Large, Medium, Small, Small Rural Subcategories / Composite Ranking (Determine Distribution, Use T-Test)

Parameters	HCl ppmvd	CO ppmvd	Pb mg/dscm	Cd mg/dscm	Hg mg/dscm	PM gr/dscf	CDD/CDF ng/dscm	TEQ ng/dscm	NO_X ppmvd	SO_2 ppmvd
Number of test runs =	--	--	--	--	--	--	--	--	--	--
90% UCL of top 12% (test runs) =	--	--	--	--	--	--	--	--	--	--
Limit (based on 90% UCL) =	**26**	**3.6**	**0.33**	**0.013**	**0.014**	**0.027**	**23**	**0.40**	**170**	**2.3**
95% UCL of top 12% (test runs) =	--	--	--	--	--	--	--	--	--	--
Limit (based on 95% UCL) =	**65**	**5.1**	**0.55**	**0.018**	**0.022**	**0.030**	**61**	**1.2**	**180**	**3.2**
99% UCL of top 12% (test runs) =	--	--	--	--	--	--	--	--	--	--
Limit (based on 99% UCL) =	**100**	**10**	**1.2**	**0.031**	**0.061**	**0.036**	**125**	**2.3**	**220**	**5.8**
99.9% UCL of top 12% (test runs) =	--	--	--	--	--	--	--	--	--	--
Limit (based on 99.9% UCL) =	**100**	**22**	**1.2**	**0.063**	**0.21**	**0.044**	**125**	**2.3**	**250**	**12**
SMALL RURAL HMIWI (≤200 LB/HR)										
No. of sources =	2	2	2	2	2	2	2	2	2	2
No. in MACT floor =	1	1	1	1	1	1	1	1	1	1
Avge of top 12% =	298	5.41	0.226	0.0380	0.0906	0.0162	125	2.52	95.1	22.6
Skewness =	1.69	-0.99	0.06	-0.89	1.73	1.64	-0.33	0.81	0.70	-0.38
Kurtosis =	--	--	--	--	--	--	--	--	--	--
Distribution =	N	N	N	N	N	N	N	N	N	N
Number of test runs =	3	3	3	3	3	3	3	3	3	3
Highest test run =	398	7.21	0.265	0.0463	0.247	0.0215	235	5.46	100	28.8
90% UCL of top 12% (test runs) =	461	9.34	0.299	0.0557	0.347	0.0249	341	7.66	104	34.9
Limit (based on 90% UCL) =	**470**	**9.4**	**0.30**	**0.056**	**0.35**	**0.025**	**350**	**7.7**	**110**	**35**
95% UCL of top 12% (test runs) =	551	11.5	0.339	0.0655	0.487	0.0297	460	10.5	109	41.6
Limit (based on 95% UCL) =	**560**	**12.0**	**0.34**	**0.066**	**0.49**	**0.030**	**470**	**11**	**110**	**42**
99% UCL of top 12% (test runs) =	901	19.9	0.496	0.104	1.04	0.0485	924	21.5	129	68.0
Limit (based on 99% UCL) =	**910**	**20**	**0.50**	**0.11**	**1.1**	**0.049**	**800**	**15**	**130**	**55**
99.9% UCL of top 12% (test runs) =	2,232	52.0	1.09	0.248	3.12	0.120	2,688	63.4	204	168
Limit (based on 99.9% UCL) =	**2,300**	**40**	**1.1**	**0.25**	**3.2**	**0.086**	**800**	**15**	**210**	**55**

Notes:
1. Red shading - no complete set of data for existing small non-rural HMIWI available to conduct MACT analysis. Based limits on UCL for medium HMIWI.
2. Yellow shading - limits based on UCL would be less stringent than promulgated limits. Therefore, used promulgated limits instead.
3. Green shading - insufficient data to determine distribution, so conservatively assumed normal distribution (more protective).

Table 3. Summary of MACT Floor Results for Option 2A for Existing Sources
1 Commercial, 3 Captive Subcategories / Pollutant-by-Pollutant Ranking

Parameters	HCl ppmvd	CO ppmvd	Pb mg/dscm	Cd mg/dscm	Hg mg/dscm	PM gr/dscf	CDD/CDF ng/dscm	TEQ ng/dscm	NO_X ppmvd	SO_2 ppmvd
LARGE CAPTIVE HMIWI (>1,000 LB/HR)										
No. of sources =	11	11	11	11	11	11	11	11	11	11
No. in MACT floor =	2	2	2	2	2	2	2	2	2	2
Avge of top 12% =	0.983	1.12	0.00395	0.00102	0.00217	0.00133	2.03	0.0279	73.4	0.967
Skewness =	0.90	1.63	2.52	2.62	2.86	2.17	1.61	1.55	-0.97	-0.02
Kurtosis =	0.32	2.66	6.51	8.22	9.49	6.09	2.56	2.63	-0.61	0.73
Distribution =	L	L	L	L	L	L	L	L	N	N
Number of test runs =	24	18	30	30	15	21	18	18	9	12
Highest test run =	2.77	3.90	0.0345	0.00649	0.0124	0.00583	9.18	0.103	84.8	1.56
90% UCL of top 12% (test runs) =	2.11	2.91	0.0123	0.00346	0.00686	0.00332	7.57	0.0792	90.1	1.38
Limit (based on 90% UCL) =	**2.2**	**3.0**	**0.013**	**0.0035**	**0.0069**	**0.0034**	**7.6**	**0.080**	**91**	**1.4**
95% UCL of top 12% (test runs) =	2.90	4.51	0.0207	0.00610	0.0117	0.00508	15.6	0.127	96.3	1.54
Limit (based on 95% UCL) =	**2.9**	**4.6**	**0.021**	**0.0062**	**0.012**	**0.0051**	**16**	**0.13**	**97**	**1.6**
99% UCL of top 12% (test runs) =	5.44	11.0	0.0577	0.0186	0.0356	0.0119	67.6	0.334	110	1.87
Limit (based on 99% UCL) =	**5.5**	**12**	**0.058**	**0.019**	**0.036**	**0.012**	**68**	**0.34**	**120**	**1.9**
99.9% UCL of top 12% (test runs) =	12.0	35.3	0.203	0.0731	0.159	0.0353	459	1.18	131	2.33
Limit (based on 99.9% UCL) =	**12**	**36**	**0.21**	**0.074**	**0.16**	**0.015**	**125**	**1.2**	**140**	**2.4**
MEDIUM CAPTIVE HMIWI (>500, ≤1,000 LB/HR)										
No. of sources =	11	11	11	11	11	11	11	11	11	11
No. in MACT floor =	2	2	2	2	2	2	2	2	2	2
Avge of top 12% =	0.272	0.927	0.00249	0.000619	0.00117	0.00143	0.523	0.0103	72.0	1.76
Skewness =	0.73	1.35	0.88	1.21	-0.02	1.70	0.31	0.05	0.72	1.11
Kurtosis =	-0.42	5.40	0.34	0.97	-3.20	2.17	-0.63	-1.27	-0.34	0.36
Distribution =	L	L	L	L	N	L	N	N	L	L
Number of test runs =	23	18	9	15	6	18	9	12	6	6
Highest test run =	0.863	2.54	0.00905	0.00323	0.00169	0.00460	0.978	0.0210	76.1	3.43
90% UCL of top 12% (test runs) =	0.932	2.35	0.0121	0.00292	0.00193	0.00292	1.24	0.0189	75.8	3.40
Limit (based on 90% UCL) =	**0.94**	**2.4**	**0.013**	**0.0030**	**0.0020**	**0.0030**	**1.3**	**0.019**	**76**	**3.5**
95% UCL of top 12% (test runs) =	1.62	3.39	0.0230	0.00511	0.00221	0.00419	1.86	0.0216	80.8	4.52
Limit (based on 95% UCL) =	**1.7**	**3.4**	**0.023**	**0.0052**	**0.0023**	**0.0042**	**1.9**	**0.022**	**81**	**4.6**
99% UCL of top 12% (test runs) =	4.91	7.15	0.0976	0.0163	0.00291	0.00878	4.56	0.0273	95.0	9.23
Limit (based on 99% UCL) =	**5.0**	**7.2**	**0.098**	**0.017**	**0.0030**	**0.0088**	**4.6**	**0.028**	**96**	**9.3**
99.9% UCL of top 12% (test runs) =	19.8	18.9	0.914	0.0778	0.00422	0.0230	18.3	0.0355	129	35.1
Limit (based on 99.9% UCL) =	**20**	**19**	**0.92**	**0.078**	**0.0043**	**0.024**	**19**	**0.036**	**130**	**36**
SMALL CAPTIVE HMIWI (≤500 LB/HR)										
No. of sources =	21	21	21	21	21	21	21	21	21	21
No. in MACT floor =	3	3	3	3	3	3	3	3	3	3
Avge of top 12% =	0.633	1.01	0.00429	0.00129	0.00122	0.00343	0.159	0.00338	62.5	0.579
Skewness =	3.25	2.57	3.31	2.41	4.04	2.16	1.90	1.12	-0.14	2.80
Kurtosis =	13.34	10.73	12.97	5.64	17.64	8.06	3.03	0.60	-1.90	12.45
Distribution =	L	L	L	L	L	L	L	L	N	L

Table 3. Summary of MACT Floor Results for Option 2A for Existing Sources
1 Commercial, 3 Captive Subcategories / Pollutant-by-Pollutant Ranking

Parameters	HCl ppmvd	CO ppmvd	Pb mg/dscm	Cd mg/dscm	Hg mg/dscm	PM gr/dscf	CDD/CDF ng/dscm	TEQ ng/dscm	NO_X ppmvd	SO_2 ppmvd
Highest test run =	3.52	3.75	0.0219	0.00792	0.00980	0.0157	0.626	0.00888	120	4.10
Number of test runs =	40	32	33	33	22	48	36	36	9	70
90% UCL of top 12% (test runs) =	1.88	2.16	0.00781	0.00264	0.00376	0.00783	0.331	0.00732	122	1.88
Limit (based on 90% UCL) =	**1.9**	**2.2**	**0.0079**	**0.0027**	**0.0038**	**0.0079**	**0.34**	**0.0074**	**130**	**1.9**
95% UCL of top 12% (test runs) =	3.03	2.95	0.0102	0.00451	0.00648	0.0107	0.456	0.0103	141	2.47
Limit (based on 95% UCL) =	**3.1**	**3.0**	**0.011**	**0.0046**	**0.0065**	**0.011**	**0.46**	**0.011**	**150**	**2.5**
99% UCL of top 12% (test runs) =	7.69	5.44	0.0172	0.0129	0.0194	0.0196	0.848	0.0198	185	4.18
Limit (based on 99% UCL) =	**7.7**	**5.5**	**0.018**	**0.013**	**0.020**	**0.020**	**0.85**	**0.020**	**190**	**4.2**
99.9% UCL of top 12% (test runs) =	23.4	11.4	0.0325	0.0463	0.0774	0.0400	1.80	0.0438	253	7.69
Limit (based on 99.9% UCL) =	**24**	**12**	**0.033**	**0.047**	**0.078**	**0.030**	**1.8**	**0.044**	**250**	**7.7**
COMMERCIAL HMIWI										
No. of sources =	14	14	14	14	14	14	14	14	14	14
No. in MACT floor =	2	2	2	2	2	2	2	2	2	2
Avge of top 12% =	0.614	2.06	0.00419	0.000709	0.00930	0.00305	0.325	0.00592	80.4	0.838
Skewness =	2.28	2.42	2.20	0.76	2.53	2.71	1.94	0.97	1.90	2.79
Kurtosis =	4.34	5.48	5.90	-0.57	5.78	9.75	4.38	1.12	3.51	7.16
Distribution =	L	L	L	L	L	L	L	L	L	L
Number of test runs =	21	87	15	15	30	27	18	24	36	36
Highest test run =	3.00	10.1	0.0150	0.00148	0.0620	0.00993	1.57	0.0201	211	5.70
90% UCL of top 12% (test runs) =	1.88	4.80	0.00872	0.00131	0.0244	0.00451	1.42	0.0151	129	2.38
Limit (based on 90% UCL) =	**1.9**	**4.8**	**0.0088**	**0.0014**	**0.025**	**0.0046**	**1.5**	**0.016**	**130**	**2.4**
95% UCL of top 12% (test runs) =	3.36	7.86	0.0116	0.00162	0.0453	0.00589	3.19	0.0227	153	4.36
Limit (based on 95% UCL) =	**3.4**	**7.9**	**0.012**	**0.0017**	**0.046**	**0.0059**	**3.2**	**0.023**	**160**	**4.4**
99% UCL of top 12% (test runs) =	10.8	20.2	0.0210	0.00252	0.153	0.00999	16.5	0.0514	212	14.2
Limit (based on 99% UCL) =	**11**	**21**	**0.022**	**0.0026**	**0.16**	**0.010**	**17**	**0.052**	**220**	**15**
99.9% UCL of top 12% (test runs) =	47.5	59.9	0.0469	0.00455	0.681	0.0192	141	0.143	316	58.6
Limit (based on 99.9% UCL) =	**48**	**40**	**0.047**	**0.0046**	**0.55**	**0.020**	**125**	**0.15**	**250**	**55**

Notes:
1. Yellow shading - limits based on UCL would be less stringent than promulgated limits. Therefore, used promulgated limits instead.

Table 4. Summary of MACT Floor Results for Option 2B for Existing Sources
1 Commercial, 3 Captive Subcategories / Composite Ranking

Parameters	HCl ppmvd	CO ppmvd	Pb mg/dscm	Cd mg/dscm	Hg mg/dscm	PM gr/dscf	CDD/CDF ng/dscm	TEQ ng/dscm	NO_x ppmvd	SO_2 ppmvd
LARGE CAPTIVE HMIWI (>1,000 LB/HR)										
No. of sources =	11	11	11	11	11	11	11	11	11	11
No. in MACT floor =	2	2	2	2	2	2	2	2	2	2
Avge of top 12% =	3.99	1.76	0.00603	0.00164	0.00859	0.00206	5.24	0.176	97.1	1.74
Skewness =	0.70	1.13	2.87	1.47	2.38	1.76	3.24	1.90	1.35	0.87
Kurtosis =	-0.64	0.43	8.89	0.57	5.61	2.33	11.32	2.21	2.62	-0.62
Distribution =	L	L	L	L	L	L	L	L	L	L
Number of test runs =	21	21	21	21	21	21	15	21	21	21
Highest test run =	11.0	6.00	0.0493	0.00738	0.0545	0.00854	28.0	1.05	142	5.30
90% UCL of top 12% (test runs) =	25.3	5.61	0.0272	0.00427	0.0240	0.00901	80.8	1.20	156	5.73
Limit (based on 90% UCL) =	**26**	**5.7**	**0.028**	**0.0043**	**0.025**	**0.0091**	**81**	**1.3**	**160**	**5.8**
95% UCL of top 12% (test runs) =	53.7	9.85	0.0587	0.00825	0.0422	0.0171	222	2.84	180	9.37
Limit (based on 95% UCL) =	**54**	**9.9**	**0.059**	**0.0083**	**0.043**	**0.015**	**125**	**2.3**	**190**	**9.4**
99% UCL of top 12% (test runs) =	243	30.6	0.275	0.0311	0.130	0.0618	1,803	16.0	242	25.2
Limit (based on 99% UCL) =	**100**	**31**	**0.28**	**0.032**	**0.14**	**0.015**	**125**	**2.3**	**250**	**26**
99.9% UCL of top 12% (test runs) =	1,673	130	1.97	0.168	0.551	0.318	3.03E+04	145	353	88.8
Limit (based on 99.9% UCL) =	**100**	**40**	**1.2**	**0.16**	**0.55**	**0.015**	**125**	**2.3**	**250**	**55**
MEDIUM CAPTIVE HMIWI (>500, ≤1,000 LB/HR)										
No. of sources =	11	11	11	11	11	11	11	11	11	11
No. in MACT floor =	2	2	2	2	2	2	2	2	2	2
Avge of top 12% =	1.18	6.03	0.00789	0.00138	0.00258	0.00327	6.60	0.0575	89.7	2.08
Skewness =	1.10	3.95	3.10	2.29	3.67	0.95	1.19	1.04	-0.09	2.41
Kurtosis =	-0.44	17.62	10.38	5.92	13.83	1.30	2.31	-0.77	-1.92	4.84
Distribution =	L	L	L	L	L	L	L	L	N	L
Number of test runs =	30	30	15	15	15	30	17	9	15	15
Highest test run =	3.68	41.1	0.0865	0.0117	0.0203	0.00883	29.9	0.137	149	9.67
90% UCL of top 12% (test runs) =	6.01	13.2	0.0461	0.00599	0.0128	0.0209	96.2	0.236	157	9.71
Limit (based on 90% UCL) =	**6.1**	**14**	**0.047**	**0.0060**	**0.013**	**0.015**	**97**	**0.24**	**160**	**9.8**
95% UCL of top 12% (test runs) =	12.8	22.9	0.0982	0.0113	0.0224	0.0380	276	0.619	174	16.2
Limit (based on 95% UCL) =	**13**	**23**	**0.099**	**0.012**	**0.023**	**0.015**	**125**	**0.62**	**180**	**17**
99% UCL of top 12% (test runs) =	57.1	68.0	0.472	0.0418	0.0719	0.123	2,380	5.39	208	47.1
Limit (based on 99% UCL) =	**58**	**40**	**0.48**	**0.042**	**0.072**	**0.015**	**125**	**2.3**	**210**	**48**
99.9% UCL of top 12% (test runs) =	355	258	3.92	0.244	0.346	0.520	4.06E+04	154	255	198
Limit (based on 99.9% UCL) =	**100**	**40**	**1.2**	**0.16**	**0.35**	**0.015**	**125**	**2.3**	**250**	**55**
SMALL CAPTIVE HMIWI (≤500 LB/HR)										
No. of sources =	21	21	21	21	21	21	21	21	21	21
No. in MACT floor =	3	3	3	3	3	3	3	3	3	3
Avge of top 12% =	10.0	1.35	0.0942	0.00430	0.00583	0.0130	29.2	0.526	128	1.10
Skewness =	4.22	3.34	1.47	2.57	2.36	0.38	2.08	2.05	1.46	3.27
Kurtosis =	20.44	11.60	1.38	7.67	4.80	-0.99	2.88	2.72	4.72	13.77
Distribution =	L	L	L	L	L	N	L	L	L	L

Table 4. Summary of MACT Floor Results for Option 2B for Existing Sources
1 Commercial, 3 Captive Subcategories / Composite Ranking

Parameters	HCl ppmvd	CO ppmvd	Pb mg/dscm	Cd mg/dscm	Hg mg/dscm	PM gr/dscf	CDD/CDF ng/dscm	TEQ ng/dscm	NO_X ppmvd	SO_2 ppmvd
Number of test runs =	38	83	27	24	30	38	28	28	74	70
Highest test run =	129	11.7	0.432	0.0270	0.0247	0.0338	92.7	1.63	265	5.05
90% UCL of top 12% (test runs) =	25.9	3.50	0.324	0.0129	0.0131	0.0260	22.2	0.396	165	2.26
Limit (based on 90% UCL) =	**26**	**3.6**	**0.33**	**0.013**	**0.014**	**0.027**	**23**	**0.40**	**170**	**2.3**
95% UCL of top 12% (test runs) =	64.0	4.99	0.545	0.0172	0.0219	0.0294	60.6	1.13	179	3.12
Limit (based on 95% UCL) =	**65**	**5.0**	**0.55**	**0.018**	**0.022**	**0.030**	**61**	**1.2**	**180**	**3.2**
99% UCL of top 12% (test runs) =	374	9.79	1.53	0.0304	0.0603	0.0359	438	8.94	210	5.78
Limit (based on 99% UCL) =	**100**	**9.8**	**1.2**	**0.031**	**0.061**	**0.030**	**125**	**2.3**	**220**	**5.8**
99.9% UCL of top 12% (test runs) =	3,125	21.3	5.46	0.0621	0.209	0.0438	5,025	115	253	11.9
Limit (based on 99.9% UCL) =	**100**	**22**	**1.2**	**0.063**	**0.21**	**0.030**	**125**	**2.3**	**250**	**12**
COMMERCIAL HMIWI										
No. of sources =	14	14	14	14	14	14	14	14	14	14
No. in MACT floor =	2	2	2	2	2	2	2	2	2	2
Avge of top 12% =	8.17	3.41	0.0132	0.00111	0.00930	0.00825	0.325	0.00592	80.4	0.838
Skewness =	2.74	2.10	2.50	1.76	2.53	1.70	1.94	0.97	1.90	2.79
Kurtosis =	11.3	5.49	7.95	4.56	5.78	2.78	4.38	1.12	3.51	7.16
Distribution =	L	L	L	L	L	L	L	L	L	L
Number of test runs =	42	42	30	30	30	42	18	24	36	36
Highest test run =	43.4	22.2	0.0780	0.00500	0.0620	0.0394	1.57	0.0201	211	5.70
90% UCL of top 12% (test runs) =	21.7	13.5	0.0388	0.00321	0.0244	0.0404	1.42	0.0151	129	2.38
Limit (based on 90% UCL) =	**22**	**14**	**0.039**	**0.0033**	**0.025**	**0.015**	**1.5**	**0.016**	**129**	**2.4**
95% UCL of top 12% (test runs) =	32.5	30.9	0.0658	0.00524	0.0453	0.0887	3.19	0.0227	153	4.36
Limit (based on 95% UCL) =	**33**	**31**	**0.066**	**0.0053**	**0.046**	**0.015**	**3.2**	**0.023**	**160**	**4.4**
99% UCL of top 12% (test runs) =	71.6	153	0.186	0.0138	0.153	0.409	16.5	0.0514	212	14.2
Limit (based on 99% UCL) =	**72**	**40**	**0.19**	**0.014**	**0.16**	**0.015**	**17**	**0.052**	**220**	**15**
99.9% UCL of top 12% (test runs) =	183	1,031	0.667	0.0448	0.681	2.53	141	0.143	316	58.6
Limit (based on 99.9% UCL) =	**100**	**40**	**0.67**	**0.045**	**0.69**	**0.015**	**125**	**0.15**	**250**	**55**

Notes:

1. Yellow shading - limits based on UCL would be less stringent than promulgated limits. Therefore, used promulgated limits instead.

Table 5. Summary of MACT Floor Results for Option 3A for Existing Sources
Redistributed Large, Medium, Small, Small Rural Subcategories / Pollutant-by-Pollutant Ranking

Parameters	HCl ppmvd	CO ppmvd	Pb mg/dscm	Cd mg/dscm	Hg mg/dscm	PM gr/dscf	CDD/CDF ng/dscm	TEQ ng/dscm	NO_X ppmvd	SO_2 ppmvd
LARGE HMIWI (>1,500 LB/HR)										
No. of sources =	14	14	14	14	14	14	14	14	14	14
No. in MACT floor =	2	2	2	2	2	2	2	2	2	2
Avge of top 12% =	1.62	1.12	0.00309	0.000870	0.00340	0.00180	0.254	0.00592	80.4	0.640
Skewness =	2.31	1.63	2.38	3.61	1.84	1.21	1.91	0.97	1.90	0.07
Kurtosis =	8.77	2.66	7.18	14.18	3.37	2.16	3.16	1.12	3.51	-1.60
Distribution =	L	L	L	L	L	L	L	L	L	N
Number of test runs =	36	18	18	18	15	24	18	24	36	27
Highest test run =	7.95	3.90	0.0150	0.00649	0.0124	0.00583	1.13	0.0201	211	1.35
90% UCL of top 12% (test runs) =	4.16	2.91	0.00905	0.00272	0.0113	0.00495	0.925	0.0151	129	1.15
Limit (based on 90% UCL) =	**4.2**	**3.0**	**0.0091**	**0.0028**	**0.012**	**0.0050**	**0.93**	**0.016**	**130**	**1.2**
95% UCL of top 12% (test runs) =	5.46	4.51	0.0153	0.00510	0.0198	0.00734	1.80	0.0227	153	1.33
Limit (based on 95% UCL) =	**5.5**	**4.6**	**0.016**	**0.0052**	**0.020**	**0.0074**	**1.8**	**0.023**	**160**	**1.4**
99% UCL of top 12% (test runs) =	9.29	11.0	0.0443	0.0184	0.0631	0.0161	6.97	0.0514	212	1.66
Limit (based on 99% UCL) =	**9.3**	**12**	**0.045**	**0.019**	**0.064**	**0.017**	**7.0**	**0.052**	**220**	**1.7**
99.9% UCL of top 12% (test runs) =	17.6	35.3	0.178	0.0981	0.301	0.0429	40.8	0.143	316	2.08
Limit (based on 99.9% UCL) =	**18**	**36**	**0.18**	**0.099**	**0.31**	**0.015**	**41**	**0.15**	**250**	**2.1**
MEDIUM HMIWI (>500, ≤1,500 LB/HR)										
No. of sources =	22	22	22	22	22	22	22	22	22	22
No. in MACT floor =	3	3	3	3	3	3	3	3	3	3
Avge of top 12% =	0.370	0.952	0.00278	0.000590	0.00120	0.00130	0.628	0.00946	70.6	1.18
Skewness =	3.31	1.34	0.83	1.59	-0.02	1.05	0.90	0.37	0.12	0.83
Kurtosis =	13.09	6.27	-0.12	2.41	-1.31	-0.08	0.81	-1.30	-1.38	-0.02
Distribution =	L	L	L	L	N	L	L	N	N	L
Number of test runs =	35	21	15	21	12	37	12	12	12	15
Highest test run =	2.80	2.54	0.00905	0.00323	0.00220	0.00414	1.41	0.0175	80.7	3.23
90% UCL of top 12% (test runs) =	1.17	2.26	0.00980	0.00220	0.00201	0.00314	1.40	0.0154	81.6	3.12
Limit (based on 90% UCL) =	**1.2**	**2.3**	**0.0098**	**0.0022**	**0.0021**	**0.0032**	**1.5**	**0.016**	**82**	**3.2**
95% UCL of top 12% (test runs) =	2.07	3.17	0.0159	0.00348	0.00227	0.00459	2.03	0.0176	86.5	4.74
Limit (based on 95% UCL) =	**2.1**	**3.2**	**0.016**	**0.0035**	**0.0023**	**0.0046**	**2.1**	**0.018**	**87**	**4.8**
99% UCL of top 12% (test runs) =	6.38	6.22	0.0436	0.00879	0.00280	0.00966	4.49	0.0223	97.2	11.3
Limit (based on 99% UCL) =	**6.4**	**6.3**	**0.044**	**0.0088**	**0.0029**	**0.0097**	**4.5**	**0.023**	**98**	**12**
99.9% UCL of top 12% (test runs) =	24.9	14.7	0.169	0.0286	0.00356	0.0236	13.8	0.0290	112	36.3
Limit (based on 99.9% UCL) =	**25**	**15**	**0.17**	**0.0290**	**0.0036**	**0.015**	**14**	**0.029**	**120**	**37**
SMALL NON-RURAL HMIWI (≤500 LB/HR)										
No. of sources =	19	19	19	19	19	19	19	19	19	19
No. in MACT floor =	3	3	3	3	3	3	3	3	3	3
Avge of top 12% =	0.633	1.01	0.00429	0.00129	0.00153	0.00343	0.159	0.00338	62.5	0.579
Skewness =	3.25	2.57	3.31	2.41	3.97	2.16	1.90	1.12	-0.14	2.80
Kurtosis =	13.34	10.73	12.97	5.64	16.34	8.06	3.03	0.60	-1.90	12.45
Distribution =	L	L	L	L	L	L	L	L	N	L

Table 5. Summary of MACT Floor Results for Option 3A for Existing Sources
Redistributed Large, Medium, Small, Small Rural Subcategories / Pollutant-by-Pollutant Ranking

Parameters	HCl ppmvd	CO ppmvd	Pb mg/dscm	Cd mg/dscm	Hg mg/dscm	PM gr/dscf	CDD/CDF ng/dscm	TEQ ng/dscm	NO_X ppmvd	SO_2 ppmvd
Number of test runs =	40	32	33	33	18	48	36	36	9	70
Highest test run =	3.52	3.75	0.0219	0.00792	0.00980	0.0157	0.626	0.00888	120	4.10
90% UCL of top 12% (test runs) =	1.88	2.16	0.00781	0.00264	0.00343	0.00783	0.331	0.00732	122	1.88
Limit (based on 90% UCL) =	**1.9**	**2.2**	**0.0079**	**0.0027**	**0.0035**	**0.0079**	**0.34**	**0.0074**	**130**	**1.9**
95% UCL of top 12% (test runs) =	3.03	2.95	0.0102	0.00451	0.00617	0.0107	0.456	0.0103	141	2.47
Limit (based on 95% UCL) =	**3.1**	**3.0**	**0.011**	**0.0046**	**0.0062**	**0.011**	**0.46**	**0.011**	**150**	**2.5**
99% UCL of top 12% (test runs) =	7.69	5.44	0.0172	0.0129	0.0203	0.0196	0.848	0.0198	185	4.18
Limit (based on 99% UCL) =	**7.7**	**5.5**	**0.018**	**0.013**	**0.021**	**0.020**	**0.85**	**0.020**	**190**	**4.2**
99.9% UCL of top 12% (test runs) =	23.4	11.4	0.0325	0.0463	0.0962	0.0400	1.80	0.0438	253	7.69
Limit (based on 99.9% UCL) =	**24**	**12**	**0.033**	**0.047**	**0.097**	**0.030**	**1.8**	**0.044**	**250**	**7.7**
SMALL RURAL HMIWI (≤500 LB/HR)										
No. of sources =	2	2	2	2	2	2	2	2	2	2
No. in MACT floor =	1	1	1	1	1	1	1	1	1	1
Avge of top 12% =	298	5.41	0.226	0.0380	0.00158	0.0128	29.6	0.618	95.1	22.6
Skewness =	1.69	-0.99	0.06	-0.89	1.85	1.20	1.63	1.72	0.70	-0.38
Kurtosis =	--	--	--	--	3.49	0.68	--	--	--	--
Distribution =	N	N	N	N	N	N	N	N	N	N
Number of test runs =	3	3	3	3	4	4	3	3	3	3
Highest test run =	398	7.21	0.265	0.0463	0.00269	0.0202	63.9	1.35	100	28.8
90% UCL of top 12% (test runs) =	461	9.34	0.299	0.0557	0.00281	0.0216	85.9	1.82	104	34.9
Limit (based on 90% UCL) =	**470**	**9.4**	**0.30**	**0.056**	**0.0029**	**0.022**	**86**	**1.9**	**110**	**35**
95% UCL of top 12% (test runs) =	551	11.5	0.339	0.0655	0.00335	0.0254	117	2.48	109	41.6
Limit (based on 95% UCL) =	**560**	**12**	**0.34**	**0.066**	**0.0034**	**0.026**	**120**	**2.5**	**110**	**42**
99% UCL of top 12% (test runs) =	901	19.9	0.496	0.104	0.00500	0.0371	238	5.06	129	68.0
Limit (based on 99% UCL) =	**910**	**20**	**0.50**	**0.11**	**0.0051**	**0.038**	**240**	**5.1**	**130**	**68**
99.9% UCL of top 12% (test runs) =	2,232	52.0	1.09	0.248	0.00929	0.0675	697	14.9	204	168
Limit (based on 99.9% UCL) =	**2,300**	**40**	**1.1**	**0.25**	**0.0093**	**0.068**	**700**	**15**	**210**	**55**

Notes:
1. Yellow shading - limits based on UCL would be less stringent than promulgated limits. Therefore, used promulgated limits instead.
2. Green shading - insufficient data to determine distribution, so conservatively assumed normal distribution (more protective).

Table 6. Summary of MACT Floor Results for Option 3B for Existing Sources
Redistributed Large, Medium, Small, Small Rural Subcategories / Composite Ranking

Parameters	HCl ppmvd	CO ppmvd	Pb mg/dscm	Cd mg/dscm	Hg mg/dscm	PM gr/dscf	CDD/CDF ng/dscm	TEQ ng/dscm	NO_X ppmvd	SO_2 ppmvd
LARGE HMIWI (>1,500 LB/HR)										
No. of sources =	14	14	14	14	14	14	14	14	14	14
No. in MACT floor =	2	2	2	2	2	2	2	2	2	2
Avge of top 12% =	4.76	2.66	0.00446	0.000871	0.00432	0.00552	1.93	0.0240	94.1	0.794
Skewness =	0.32	1.14	2.31	3.21	0.82	2.04	1.59	1.78	1.31	1.74
Kurtosis =	-1.21	0.30	6.82	12.46	-0.89	3.43	2.36	3.05	1.59	5.54
Distribution =	N	L	L	L	L	L	L	L	L	L
Number of test runs =	30	30	24	24	24	30	18	21	27	27
Highest test run =	13.2	10.1	0.0299	0.00649	0.0130	0.0394	9.18	0.103	211	3.00
90% UCL of top 12% (test runs) =	10.2	12.3	0.0159	0.00253	0.0149	0.0265	10.4	0.0651	154	2.21
Limit (based on 90% UCL) =	**11**	**13**	**0.016**	**0.0026**	**0.015**	**0.015**	**11**	**0.066**	**160**	**2.3**
95% UCL of top 12% (test runs) =	11.7	26.7	0.0286	0.00471	0.0257	0.0571	27.8	0.122	186	3.76
Limit (based on 95% UCL) =	**12**	**27**	**0.029**	**0.0048**	**0.026**	**0.015**	**28**	**0.13**	**190**	**3.8**
99% UCL of top 12% (test runs) =	14.8	122	0.0916	0.0162	0.0761	0.259	205	0.436	268	10.8
Limit (based on 99% UCL) =	**15**	**40**	**0.092**	**0.017**	**0.077**	**0.015**	**125**	**0.44**	**250**	**11**
99.9% UCL of top 12% (test runs) =	18.5	785	0.394	0.0764	0.297	1.65	2,768	2.20	422	39.5
Limit (based on 99.9% UCL) =	**19**	**40**	**0.40**	**0.077**	**0.30**	**0.015**	**125**	**2.3**	**250**	**40**
MEDIUM HMIWI (>500, ≤1,500 LB/HR)										
No. of sources =	22	22	22	22	22	22	22	22	22	22
No. in MACT floor =	3	3	3	3	3	3	3	3	3	3
Avge of top 12% =	6.32	4.89	0.00751	0.00132	0.00306	0.00276	6.97	0.0677	103	2.31
Skewness =	2.32	4.96	3.76	3.28	2.98	0.84	1.02	0.54	-0.37	1.83
Kurtosis =	6.59	28.81	16.94	13.46	10.10	1.18	1.50	-0.96	-0.71	2.20
Distribution =	L	L	L	L	L	L	L	L	N	L
Number of test runs =	42	51	36	36	36	43	35	27	36	36
Highest test run =	41.9	41.1	0.0865	0.0117	0.0203	0.00883	29.9	0.203	177	9.67
90% UCL of top 12% (test runs) =	15.7	6.82	0.0223	0.00396	0.00793	0.00718	29.5	0.241	163	4.95
Limit (based on 90% UCL) =	**16**	**6.9**	**0.023**	**0.0040**	**0.0080**	**0.0072**	**30**	**0.25**	**170**	**5.0**
95% UCL of top 12% (test runs) =	32.9	9.69	0.0378	0.00626	0.0111	0.0103	52.2	0.412	175	6.45
Limit (based on 95% UCL) =	**33**	**9.7**	**0.038**	**0.0063**	**0.012**	**0.011**	**53**	**0.42**	**180**	**6.5**
99% UCL of top 12% (test runs) =	139	19.1	0.106	0.0153	0.0214	0.0208	159	1.19	200	10.8
Limit (based on 99% UCL) =	**100**	**20**	**0.11**	**0.016**	**0.022**	**0.015**	**125**	**1.2**	**200**	**11**
99.9% UCL of top 12% (test runs) =	770	42.5	0.368	0.0449	0.0474	0.0479	613	4.44	230	20.2
Limit (based on 99.9% UCL) =	**100**	**40**	**0.37**	**0.045**	**0.048**	**0.015**	**125**	**2.3**	**230**	**21**
SMALL NON-RURAL HMIWI (≤500 LB/HR)										
No. of sources =	19	19	19	19	19	19	19	19	19	19
No. in MACT floor =	3	3	3	3	3	3	3	3	3	3
Avge of top 12% =	10.0	1.35	0.0942	0.00430	0.00583	0.0130	29.2	0.526	128	1.10
Skewness =	4.22	3.34	1.47	2.57	2.36	0.38	2.08	2.05	1.46	3.27
Kurtosis =	20.44	11.60	1.38	7.67	4.80	-0.99	2.88	2.72	4.72	13.77
Distribution =	L	L	L	L	L	N	L	L	L	L

Table 6. Summary of MACT Floor Results for Option 3B for Existing Sources
Redistributed Large, Medium, Small, Small Rural Subcategories / Composite Ranking

Parameters	HCl ppmvd	CO ppmvd	Pb mg/dscm	Cd mg/dscm	Hg mg/dscm	PM gr/dscf	CDD/CDF ng/dscm	TEQ ng/dscm	NO_X ppmvd	SO_2 ppmvd
Number of test runs =	38	83	27	24	30	38	28	28	74	70
Highest test run =	129	11.7	0.432	0.0270	0.0247	0.0338	92.7	1.63	265	5.05
90% UCL of top 12% (test runs) =	25.9	3.50	0.324	0.0129	0.0131	0.0260	22.2	0.396	165	2.26
Limit (based on 90% UCL) =	**26**	**3.6**	**0.33**	**0.013**	**0.014**	**0.027**	**23**	**0.40**	**170**	**2.3**
95% UCL of top 12% (test runs) =	64.0	4.99	0.545	0.0172	0.0219	0.0294	60.6	1.13	179	3.12
Limit (based on 95% UCL) =	**65**	**5.0**	**0.55**	**0.018**	**0.022**	**0.030**	**61**	**1.2**	**180**	**3.2**
99% UCL of top 12% (test runs) =	374	9.79	1.53	0.0304	0.0603	0.0359	438	8.94	210	5.78
Limit (based on 99% UCL) =	**100**	**9.8**	**1.2**	**0.031**	**0.061**	**0.030**	**125**	**2.3**	**220**	**5.8**
99.9% UCL of top 12% (test runs) =	3,125	21.3	5.46	0.0621	0.209	0.0438	5,025	115	253	11.9
Limit (based on 99.9% UCL) =	**100**	**22**	**1.2**	**0.063**	**0.21**	**0.030**	**125**	**2.3**	**250**	**12**
SMALL RURAL HMIWI (≤500 LB/HR)										
No. of sources =	2	2	2	2	2	2	2	2	2	2
No. in MACT floor =	1	1	1	1	1	1	1	1	1	1
Avge of top 12% =	298	5.41	0.226	0.0380	0.0906	0.0162	125	2.52	95.1	22.6
Skewness =	1.69	-0.99	0.06	-0.89	1.73	1.64	-0.33	0.81	0.70	-0.38
Kurtosis =	--	--	--	--	--	--	--	--	--	--
Distribution =	N	N	N	N	N	N	N	N	N	N
Number of test runs =	3	3	3	3	3	3	3	3	3	3
Highest test run =	398	7.21	0.265	0.0463	0.247	0.0215	235	5.46	100	28.8
90% UCL of top 12% (test runs) =	461	9.34	0.299	0.0557	0.347	0.0249	341	7.66	104	34.9
Limit (based on 90% UCL) =	**470**	**9.4**	**0.30**	**0.056**	**0.35**	**0.025**	**350**	**7.7**	**110**	**35**
95% UCL of top 12% (test runs) =	551	11.5	0.339	0.0655	0.487	0.0297	460	10.5	109	41.6
Limit (based on 95% UCL) =	**560**	**12**	**0.34**	**0.066**	**0.49**	**0.030**	**470**	**11**	**110**	**42**
99% UCL of top 12% (test runs) =	901	19.9	0.496	0.104	1.04	0.0485	924	21.5	129	68.0
Limit (based on 99% UCL) =	**910**	**20**	**0.50**	**0.11**	**1.1**	**0.049**	**800**	**15**	**130**	**55**
99.9% UCL of top 12% (test runs) =	2,232	52.0	1.09	0.248	3.12	0.120	2,688	63.4	204	168
Limit (based on 99.9% UCL) =	**2,300**	**40**	**1.1**	**0.25**	**3.2**	**0.086**	**800**	**15**	**210**	**55**

Notes:

1. Yellow shading - limits based on UCL would be less stringent than promulgated limits. Therefore, used promulgated limits instead.
2. Green shading - insufficient data to determine distribution, so conservatively assumed normal distribution (more protective).

Table 7. Summary of MACT Floor Results for Option 1A for New Sources
Current Large, Medium, Small Subcategories / Pollutant-by-Pollutant Ranking (Determine Distribution, Use T-Test)

Parameters	HCl ppmvd	CO ppmvd	Pb mg/dscm	Cd mg/dscm	Hg mg/dscm	PM gr/dscf	CDD/CDF ng/dscm	TEQ ng/dscm	NO_X ppmvd	SO_2 ppmvd
LARGE HMIWI (>500 LB/HR HMIWI)										
No. of sources =	1	1	1	1	1	1	1	1	1	1
Top performer =	0.190	0.87	0.00030	0.000106	0.00069	0.00106	0.152	0.00378	66.9	0.462
Skewness =	0.61	1.39	1.57	0.49	1.68	2.05	0.79	0.55	-1.14	0.54
Kurtosis =	-0.57	3.67	--	--	--	3.93	0.32	-1.53	--	-1.57
Distribution =	L	L	N	N	N	L	L	L	N	L
Number of test runs =	12	12	3	3	3	12	9	12	3	18
99% UCL of top 12% (test runs) =	5.07	11.3	0.000688	0.000128	0.00121	0.00800	12.8	0.0341	144	1.59
Limit (based on 99% UCL) =	**5.1**	**11**	**0.00069**	**0.00013**	**0.0013**	**0.0080**	**9.3**	**0.035**	**130**	**1.6**
MEDIUM HMIWI (>200, ≤500 LB/HR)										
No. of sources =	1	1	1	1	1	1	1	1	1	1
Top performer =	0.455	0.679	0.00397	0.00106	0.000836	0.00294	0.0973	0.00291	15.0	0.336
Skewness =	0.95	-0.17	1.88	2.42	1.73	0.21	2.61	1.81	-1.06	1.70
Kurtosis =	0.37	-1.40	4.00	4.70	--	-1.47	8.30	3.15	--	--
Distribution =	L	N	L	L	N	N	L	L	N	N
Number of test runs =	18	12	9	21	3	9	15	15	3	3
99% UCL of top 12% (test runs) =	13.6	1.71	0.0366	0.00975	0.00346	0.00940	0.467	0.0130	66.4	1.32
Limit (based on 99% UCL) =	**7.7**	**1.8**	**0.018**	**0.0098**	**0.0035**	**0.0095**	**0.47**	**0.014**	**67**	**1.4**
SMALL HMIWI (≤200 LB/HR)										
No. of sources =	1	1	1	1	1	1	1	1	1	1
Top performer =	1.03	2.27	0.0727	0.00256	0.00292	0.00760	2.89	0.00453	--	--
Skewness =	0.80	1.90	1.66	2.87	-1.13	1.36	-0.59	-1.34	--	--
Kurtosis =	-0.92	4.87	--	8.95	--	--	--	--	--	--
Distribution =	L	L	N	L	N	N	N	N	--	--
Number of test runs =	12	12	3	12	3	3	3	3	--	--
99% UCL of top 12% (test runs) =	43.8	19.0	0.301	0.0164	0.0131	0.0280	15.0	0.0122	--	--
Limit (based on 99% UCL) =	**15**	**20**	**0.31**	**0.017**	**0.014**	**0.029**	**16**	**0.013**	**67**	**1.4**

Notes:
1. Red shading - no complete set of data for existing small HMIWI available to conduct MACT analysis. Based limits on UCL for medium HMIWI.
2. Yellow shading - limits based on UCL would be less stringent than promulgated limits. Therefore, used promulgated limits instead.
3. Green shading - insufficient data to determine distribution, so conservatively assumed normal distribution (more protective).
4. Blue shading - limits for new sources less stringent than limits for existing sources. Therefore, used limits for existing sources instead.

Appendix A
MACT Floor Option 1A – Existing Sources / Current Subcategories / Pollutant-by-Pollutant Ranking
MACT Floor Rankings and Test Runs

Table 1. HCl MACT Floor Rankings for Option 1A - Current Subcategories / Pollutant-by-Pollutant Ranking

FACID	UNITID	Facility name	Unit number	City	State abbr	Cate-gory	APCD code	HCl ppmvd
LARGE HMIWI (>500 LB/HR)								
20	20--1	Fort Detrick	Unit 5	Fort Detrick	MD	L	WS	0.190
20	20--2	Fort Detrick	Unit 6	Fort Detrick	MD	L	WS	0.353
106	106	Stericycle, Inc.		Kansas City	KS	L	WS	0.567
44	44	Bethesda Memorial Hospital		Boynton Beach	FL	L	WS	0.608
94	94	Stericycle, Inc.		Warren	OH	L	WS	0.661
5	5	Merck & Company, Inc.		Rahway	NJ	L	DIFF	0.780
54	54	Bayfront Medical Center		St. Petersburg	FL	L	WS	0.947
43	43	Boca Raton Community Hospital		Boca Raton	FL	L	WS	0.986
48	48	Memorial Regional Hospital		Hollywood	FL	L	WS/WESP	1.02
65	65--1	Stericycle, Inc.	Unit 1	Clinton	IL	L	WS	1.12
46	46	Holy Cross Hospital		Fort Lauderdale	FL	L	WS	1.18
65	65--2	Stericycle, Inc.	Unit 2	Clinton	IL	L	WS	1.43
125	125	East Carolina University, Health Sciences Campus, HSC Utility Plant		Greenville	NC	L	HEPA/CA/WS	1.58
98	98--1	University of Texas Medical Branch		Galveston	TX	L	WS	2.12
71	71	Loyola University Medical Center		Maywood	IL	L	WS	2.22
51	51	Lakeland Regional Medical Center		Lakeland	FL	L	DIFF	2.68
77	77	Parkview Hospital		Fort Wayne	IN	L	WS	2.68
36	36--2	Merck & Company, Inc.	Unit 5	West Point (Upper Gwynedd Township)	PA	L	DIFF	3.75
59	59--2	Stericycle, Inc.	Unit 2	Haw River	NC	L	WS	3.88
110	110	Stericycle, Inc.		North Salt Lake	UT	L	DI-ESP/WS	3.93
36	36--1	Merck & Company, Inc.	Unit 2	West Point (Upper Gwynedd Township)	PA	L	DIFF	4.22
59	59--1	Stericycle, Inc.	Unit 1	Haw River	NC	L	WS	4.24
120	120--2	Waste Management Resource Recovery and Recycling Center	Unit 2	Anahuac	TX	L	DIFF	5.30
130	130	Department of Veterans Affairs Medical Center		Miami	FL	L	WS	8.32
120	120--1	Waste Management Resource Recovery and Recycling Center	Unit 1	Anahuac	TX	L	DIFF	11.0
55	55	St. Joseph's Hospital		Tampa	FL	L	DIFF/WS	12.5
84	84	Mayo Clinic, Waste Management Facility		Rochester	MN	L	DIFF	15.2
29	29	Hamot Medical Center		Erie	PA	L	DIFF/WS	16.6
87	87	MedCentral Health System, Mansfield Hospital		Mansfield	OH	L	DIFF	24.8
40	40	Charleston Area Medical Center, General Hospital		Charleston	WV	L	DIFF	26.6
42	42	Stericycle, Inc.		Apopka	FL	L	DIFF	27.1
60	60--1	BMWNC, Inc.	Unit 1	Matthews	NC	L	DIFF	38.8
1	1	Bristol-Myers Squibb Co.		Wallingford	CT	L	FF	65.7
109	109	Healthcare Environmental Services Inc.		Fargo	ND	L	DIFF	72.5
15	15--2	Curtis Bay Energy	Unit 2	Baltimore	MD	L	DIFF	76.9
15	15--1	Curtis Bay Energy	Unit 1	Baltimore	MD	L	DIFF	85.2
MEDIUM HMIWI (>200, ≤500 LB/HR)								
108	108--1	Rocky Mountain Laboratories, National Institute of Allergy and Infectious Diseases	Unit 1	Hamilton	MT	M	WS	0.455
13	13	University of Maryland at Baltimore, Environmental Health and Safety Facility		Baltimore	MD	M	WS	0.708
25	25	Holy Spirit Hospital		Camp Hill	PA	M	WS	0.736
111	111	Wyoming Medical Center		Casper	WY	M	WS	1.17
34	34	Pennsylvania State University, Animal Diagnostic Lab Incinerator		State College	PA	M	WS	1.27
16	16	Johns Hopkins Medical Institute, Department of Health, Safety, and Environment		Baltimore	MD	M	WS	1.39
18	18	Franklin Square Hospital Center		Baltimore	MD	M	WS	1.48
82	82	Good Samaritan Hospital		Vincennes	IN	M	WS	1.58
30	30	Riddle Memorial Hospital		Media	PA	M	WS	2.10
41	41	Thomas Memorial Hospital		South Charleston	WV	M	WS	2.62
88	88	Medina General Hospital		Medina	OH	M	WS	3.29
47	47	Malcolm Randall Veterans Affairs Medical Center		Gainesville	FL	M	WS	4.69
95	95	St. Joseph's Hospital		Marshfield	WI	M	DIFF	5.27
21	21	Washington County Hospital		Hagerstown	MD	M	WS	6.26

38	38	Wilkes-Barre General Hospital		Wilkes-Barre	PA	M	DIFF	8.95
81	81	South Bend Medical Foundation		South Bend	IN	M	WS	12.3
63	63	St. Jude Children's Research Hospital		Memphis	TN	M	DIFF	27.5
SMALL NON-RURAL HMIWI (≤200 LB/HR)								
86	86	Fairfield Medical Center		Lancaster	OH	S	WS	1.03
129	129	Centers for Disease Control and Prevention--Clifton, Building 18	Unit 3	Atlanta	GA	S	WS	1.30
SMALL RURAL HMIWI (≤200 LB/HR)								
115	115	Kona Community Hospital		Kealakekua	HI	SR	CC	135
116	116	Yukon-Kuskokwim Delta Regional Hospital		Bethel	AK	SR	CC	298

Table 2. CO MACT Floor Rankings for Option 1A - Current Subcategories / Pollutant-by-Pollutant Ranking

FACID	UNITID	Facility name	Unit number	City	State abbr	Cate-gory	APCD code	CO ppmvd
LARGE HMIWI (>500 LB/HR)								
20	20--1	Fort Detrick	Unit 5	Fort Detrick	MD	L	WS	0.871
1	1	Bristol-Myers Squibb Co.		Wallingford	CT	L	FF	0.983
130	130	Department of Veterans Affairs Medical Center		Miami	FL	L	WS	1.00
36	36--2	Merck & Company, Inc.	Unit 5	West Point (Upper Gwynedd Township)	PA	L	DIFF	1.07
20	20--2	Fort Detrick	Unit 6	Fort Detrick	MD	L	WS	1.17
48	48	Memorial Regional Hospital		Hollywood	FL	L	WS/WESP	1.17
15	15--1	Curtis Bay Energy	Unit 1	Baltimore	MD	L	DIFF	1.26
5	5	Merck & Company, Inc.		Rahway	NJ	L	DIFF	1.41
98	98--1	University of Texas Medical Branch		Galveston	TX	L	WS	1.73
84	84	Mayo Clinic, Waste Management Facility		Rochester	MN	L	DIFF	2.24
36	36--1	Merck & Company, Inc.	Unit 2	West Point (Upper Gwynedd Township)	PA	L	DIFF	2.46
29	29	Hamot Medical Center		Erie	PA	L	DIFF/WS	2.60
44	44	Bethesda Memorial Hospital		Boynton Beach	FL	L	WS	2.74
120	120--2	Waste Management Resource Recovery and Recycling Center	Unit 2	Anahuac	TX	L	DIFF	2.86
15	15--2	Curtis Bay Energy	Unit 2	Baltimore	MD	L	DIFF	2.91
59	59--1	Stericycle, Inc.	Unit 1	Haw River	NC	L	WS	3.95
120	120--1	Waste Management Resource Recovery and Recycling Center	Unit 1	Anahuac	TX	L	DIFF	3.96
94	94	Stericycle, Inc.		Warren	OH	L	WS	4.45
59	59--2	Stericycle, Inc.	Unit 2	Haw River	NC	L	WS	4.61
106	106	Stericycle, Inc.		Kansas City	KS	L	WS	4.62
87	87	MedCentral Health System, Mansfield Hospital		Mansfield	OH	L	DIFF	4.81
46	46	Holy Cross Hospital		Fort Lauderdale	FL	L	WS	4.91
65	65--2	Stericycle, Inc.	Unit 2	Clinton	IL	L	WS	5.77
55	55	St. Joseph's Hospital		Tampa	FL	L	DIFF/WS	5.85
77	77	Parkview Hospital		Fort Wayne	IN	L	WS	5.90
51	51	Lakeland Regional Medical Center		Lakeland	FL	L	DIFF	6.35
43	43	Boca Raton Community Hospital		Boca Raton	FL	L	WS	6.46
71	71	Loyola University Medical Center		Maywood	IL	L	WS	7.07
110	110	Stericycle, Inc.		North Salt Lake	UT	L	DI-ESP/WS	7.39
54	54	Bayfront Medical Center		St. Petersburg	FL	L	WS	9.36
125	125	East Carolina University, Health Sciences Campus, HSC Utility Plant		Greenville	NC	L	HEPA/CA/WS	10.7
42	42	Stericycle, Inc.		Apopka	FL	L	DIFF	10.7
40	40	Charleston Area Medical Center, General Hospital		Charleston	WV	L	DIFF	11.3
65	65--1	Stericycle, Inc.	Unit 1	Clinton	IL	L	WS	12.9
109	109	Healthcare Environmental Services Inc.		Fargo	ND	L	DIFF	14.7
60	60--1	BMWNC, Inc.	Unit 1	Matthews	NC	L	DIFF	15.1
MEDIUM HMIWI (>200, ≤500 LB/HR)								
63	63	St. Jude Children's Research Hospital		Memphis	TN	M	DIFF	0.679
41	41	Thomas Memorial Hospital		South Charleston	WV	M	WS	0.946
30	30	Riddle Memorial Hospital		Media	PA	M	WS	1.41
13	13	University of Maryland at Baltimore, Environmental Health and Safety Facility		Baltimore	MD	M	WS	1.50
25	25	Holy Spirit Hospital		Camp Hill	PA	M	WS	1.88
82	82	Good Samaritan Hospital		Vincennes	IN	M	WS	1.91
108	108--1	Rocky Mountain Laboratories, National Institute of Allergy and Infectious Diseases	Unit 1	Hamilton	MT	M	WS	1.97
81	81	South Bend Medical Foundation		South Bend	IN	M	WS	2.06
38	38	Wilkes-Barre General Hospital		Wilkes-Barre	PA	M	DIFF	2.08
34	34	Pennsylvania State University, Animal Diagnostic Lab Incinerator		State College	PA	M	WS	2.11
95	95	St. Joseph's Hospital		Marshfield	WI	M	DIFF	2.15
111	111	Wyoming Medical Center		Casper	WY	M	WS	3.28
18	18	Franklin Square Hospital Center		Baltimore	MD	M	WS	5.363
21	21	Washington County Hospital		Hagerstown	MD	M	WS	6.62

47	47	Malcolm Randall Veterans Affairs Medical Center		Gainesville	FL	M	WS	11.6
16	16	Johns Hopkins Medical Institute, Department of Health, Safety, and Environment		Baltimore	MD	M	WS	11.8
88	88	Medina General Hospital		Medina	OH	M	WS	14.1
SMALL NON-RURAL HMIWI (≤200 LB/HR)								
86	86	Fairfield Medical Center		Lancaster	OH	S	WS	2.27
129	129	Centers for Disease Control and Prevention--Clifton, Building 18	Unit 3	Atlanta	GA	S	WS	12.1
SMALL RURAL HMIWI (≤200 LB/HR)								
116	116	Yukon-Kuskokwim Delta Regional Hospital		Bethel	AK	SR	CC	5.41
115	115	Kona Community Hospital		Kealakekua	HI	SR	CC	7.00

Table 3. Pb MACT Floor Rankings for Option 1A - Current Subcategories / Pollutant-by-Pollutant Ranking

FACID	UNITID	Facility name	Unit number	City	State abbr	Cate-gory	APCD code	Pb mg/dscm
LARGE HMIWI (>500 LB/HR)								
125	125	East Carolina University, Health Sciences Campus, HSC Utility Plant		Greenville	NC	L	HEPA/CA/WS	0.000296
36	36--1	Merck & Company, Inc.	Unit 2	West Point (Upper Gwynedd Township)	PA	L	DIFF	0.00115
60	60--1	BMWNC, Inc.	Unit 1	Matthews	NC	L	DIFF	0.00335
40	40	Charleston Area Medical Center, General Hospital		Charleston	WV	L	DIFF	0.00468
15	15--1	Curtis Bay Energy	Unit 1	Baltimore	MD	L	DIFF	0.00504
29	29	Hamot Medical Center		Erie	PA	L	DIFF/WS	0.00675
15	15--2	Curtis Bay Energy	Unit 2	Baltimore	MD	L	DIFF	0.00769
120	120--2	Waste Management Resource Recovery and Recycling Center	Unit 2	Anahuac	TX	L	DIFF	0.00778
36	36--2	Merck & Company, Inc.	Unit 5	West Point (Upper Gwynedd Township)	PA	L	DIFF	0.0109
5	5	Merck & Company, Inc.		Rahway	NJ	L	DIFF	0.0155
109	109	Healthcare Environmental Services Inc.		Fargo	ND	L	DIFF	0.0171
120	120--1	Waste Management Resource Recovery and Recycling Center	Unit 1	Anahuac	TX	L	DIFF	0.0187
110	110	Stericycle, Inc.		North Salt Lake	UT	L	DI-ESP/WS	0.0309
51	51	Lakeland Regional Medical Center		Lakeland	FL	L	DIFF	0.0348
87	87	MedCentral Health System, Mansfield Hospital		Mansfield	OH	L	DIFF	0.0415
42	42	Stericycle, Inc.		Apopka	FL	L	DIFF	0.0434
130	130	Department of Veterans Affairs Medical Center		Miami	FL	L	WS	0.0435
46	46	Holy Cross Hospital		Fort Lauderdale	FL	L	WS	0.0618
55	55	St. Joseph's Hospital		Tampa	FL	L	DIFF/WS	0.0740
44	44	Bethesda Memorial Hospital		Boynton Beach	FL	L	WS	0.0774
43	43	Boca Raton Community Hospital		Boca Raton	FL	L	WS	0.0883
48	48	Memorial Regional Hospital		Hollywood	FL	L	WS/WESP	0.0928
54	54	Bayfront Medical Center		St. Petersburg	FL	L	WS	0.0976
20	20--1	Fort Detrick	Unit 5	Fort Detrick	MD	L	WS	0.126
106	106	Stericycle, Inc.		Kansas City	KS	L	WS	0.127
65	65--2	Stericycle, Inc.	Unit 2	Clinton	IL	L	WS	0.134
77	77	Parkview Hospital		Fort Wayne	IN	L	WS	0.177
71	71	Loyola University Medical Center		Maywood	IL	L	WS	0.178
20	20--2	Fort Detrick	Unit 6	Fort Detrick	MD	L	WS	0.182
65	65--1	Stericycle, Inc.	Unit 1	Clinton	IL	L	WS	0.200
59	59--1	Stericycle, Inc.	Unit 1	Haw River	NC	L	WS	0.206
59	59--2	Stericycle, Inc.	Unit 2	Haw River	NC	L	WS	0.206
94	94	Stericycle, Inc.		Warren	OH	L	WS	0.244
84	84	Mayo Clinic, Waste Management Facility		Rochester	MN	L	DIFF	0.291
1	1	Bristol-Myers Squibb Co.		Wallingford	CT	L	FF	0.319
98	98--1	University of Texas Medical Branch		Galveston	TX	L	WS	0.756
MEDIUM HMIWI (>200, ≤500 LB/HR)								
95	95	St. Joseph's Hospital		Marshfield	WI	M	DIFF	0.00397
38	38	Wilkes-Barre General Hospital		Wilkes-Barre	PA	M	DIFF	0.00406
63	63	St. Jude Children's Research Hospital		Memphis	TN	M	DIFF	0.00485
82	82	Good Samaritan Hospital		Vincennes	IN	M	WS	0.0261
111	111	Wyoming Medical Center		Casper	WY	M	WS	0.0496
108	108--1	Rocky Mountain Laboratories, National Institute of Allergy and Infectious Diseases	Unit 1	Hamilton	MT	M	WS	0.0996
34	34	Pennsylvania State University, Animal Diagnostic Lab Incinerator		State College	PA	M	WS	0.151
25	25	Holy Spirit Hospital		Camp Hill	PA	M	WS	0.155
21	21	Washington County Hospital		Hagerstown	MD	M	WS	0.164
30	30	Riddle Memorial Hospital		Media	PA	M	WS	0.178
47	47	Malcolm Randall Veterans Affairs Medical Center		Gainesville	FL	M	WS	0.227
18	18	Franklin Square Hospital Center		Baltimore	MD	M	WS	0.262
16	16	Johns Hopkins Medical Institute, Department of Health, Safety, and Environment		Baltimore	MD	M	WS	0.331
81	81	South Bend Medical Foundation		South Bend	IN	M	WS	0.539

88	88	Medina General Hospital		Medina	OH	M	WS	0.669
41	41	Thomas Memorial Hospital		South Charleston	WV	M	WS	0.723
13	13	University of Maryland at Baltimore, Environmental Health and Safety Facility		Baltimore	MD	M	WS	0.973
SMALL NON-RURAL HMIWI (≤200 LB/HR)								
129	129	Centers for Disease Control and Prevention--Clifton, Building 18	Unit 3	Atlanta	GA	S	WS	0.0727
86	86	Fairfield Medical Center		Lancaster	OH	S	WS	0.161
SMALL RURAL HMIWI (≤200 LB/HR)								
116	116	Yukon-Kuskokwim Delta Regional Hospital		Bethel	AK	SR	CC	0.226
115	115	Kona Community Hospital		Kealakekua	HI	SR	CC	

Table 4. Cd MACT Floor Rankings for Option 1A - Current Subcategories / Pollutant-by-Pollutant Ranking

FACID	UNITID	Facility name	Unit number	City	State abbr	Cate-gory	APCD code	Cd mg/dscm
LARGE HMIWI (>500 LB/HR)								
125	125	East Carolina University, Health Sciences Campus, HSC Utility Plant		Greenville	NC	L	HEPA/CA/WS	0.000106
60	60--1	BMWNC, Inc.	Unit 1	Matthews	NC	L	DIFF	0.000532
36	36--1	Merck & Company, Inc.	Unit 2	West Point (Upper Gwynedd Township)	PA	L	DIFF	0.000853
15	15--1	Curtis Bay Energy	Unit 1	Baltimore	MD	L	DIFF	0.000887
120	120--2	Waste Management Resource Recovery and Recycling Center	Unit 2	Anahuac	TX	L	DIFF	0.000889
87	87	MedCentral Health System, Mansfield Hospital		Mansfield	OH	L	DIFF	0.00113
29	29	Hamot Medical Center		Erie	PA	L	DIFF/WS	0.00119
15	15--2	Curtis Bay Energy	Unit 2	Baltimore	MD	L	DIFF	0.00130
120	120--1	Waste Management Resource Recovery and Recycling Center	Unit 1	Anahuac	TX	L	DIFF	0.00132
40	40	Charleston Area Medical Center, General Hospital		Charleston	WV	L	DIFF	0.00186
55	55	St. Joseph's Hospital		Tampa	FL	L	DIFF/WS	0.00205
110	110	Stericycle, Inc.		North Salt Lake	UT	L	DI-ESP/WS	0.00214
36	36--2	Merck & Company, Inc.	Unit 5	West Point (Upper Gwynedd Township)	PA	L	DIFF	0.00242
5	5	Merck & Company, Inc.		Rahway	NJ	L	DIFF	0.00265
109	109	Healthcare Environmental Services Inc.		Fargo	ND	L	DIFF	0.00296
98	98--1	University of Texas Medical Branch		Galveston	TX	L	WS	0.00298
1	1	Bristol-Myers Squibb Co.		Wallingford	CT	L	FF	0.00364
51	51	Lakeland Regional Medical Center		Lakeland	FL	L	DIFF	0.00365
54	54	Bayfront Medical Center		St. Petersburg	FL	L	WS	0.00379
106	106	Stericycle, Inc.		Kansas City	KS	L	WS	0.00396
94	94	Stericycle, Inc.		Warren	OH	L	WS	0.00524
43	43	Boca Raton Community Hospital		Boca Raton	FL	L	WS	0.00537
48	48	Memorial Regional Hospital		Hollywood	FL	L	WS/WESP	0.00560
130	130	Department of Veterans Affairs Medical Center		Miami	FL	L	WS	0.00564
65	65--1	Stericycle, Inc.	Unit 1	Clinton	IL	L	WS	0.00572
20	20--2	Fort Detrick	Unit 6	Fort Detrick	MD	L	WS	0.00867
42	42	Stericycle, Inc.		Apopka	FL	L	DIFF	0.00886
44	44	Bethesda Memorial Hospital		Boynton Beach	FL	L	WS	0.00929
20	20--1	Fort Detrick	Unit 5	Fort Detrick	MD	L	WS	0.00992
84	84	Mayo Clinic, Waste Management Facility		Rochester	MN	L	DIFF	0.0101
65	65--2	Stericycle, Inc.	Unit 2	Clinton	IL	L	WS	0.0123
71	71	Loyola University Medical Center		Maywood	IL	L	WS	0.0152
46	46	Holy Cross Hospital		Fort Lauderdale	FL	L	WS	0.0168
59	59--2	Stericycle, Inc.	Unit 2	Haw River	NC	L	WS	0.0188
59	59--1	Stericycle, Inc.	Unit 1	Haw River	NC	L	WS	0.0233
77	77	Parkview Hospital		Fort Wayne	IN	L	WS	0.0802
MEDIUM HMIWI (>200, ≤500 LB/HR)								
38	38	Wilkes-Barre General Hospital		Wilkes-Barre	PA	M	DIFF	0.00106
95	95	St. Joseph's Hospital		Marshfield	WI	M	DIFF	0.00128
63	63	St. Jude Children's Research Hospital		Memphis	TN	M	DIFF	0.00152
81	81	South Bend Medical Foundation		South Bend	IN	M	WS	0.00176
82	82	Good Samaritan Hospital		Vincennes	IN	M	WS	0.00336
30	30	Riddle Memorial Hospital		Media	PA	M	WS	0.00366
34	34	Pennsylvania State University, Animal Diagnostic Lab Incinerator		State College	PA	M	WS	0.00408
108	108--1	Rocky Mountain Laboratories, National Institute of Allergy and Infectious Diseases	Unit 1	Hamilton	MT	M	WS	0.00773
88	88	Medina General Hospital		Medina	OH	M	WS	0.0109
21	21	Washington County Hospital		Hagerstown	MD	M	WS	0.0139
111	111	Wyoming Medical Center		Casper	WY	M	WS	0.0182
41	41	Thomas Memorial Hospital		South Charleston	WV	M	WS	0.0297
25	25	Holy Spirit Hospital		Camp Hill	PA	M	WS	0.0439
16	16	Johns Hopkins Medical Institute, Department of Health, Safety, and Environment		Baltimore	MD	M	WS	0.0472

18	18	Franklin Square Hospital Center		Baltimore	MD	M	WS	0.0474
47	47	Malcolm Randall Veterans Affairs Medical Center		Gainesville	FL	M	WS	0.0877
13	13	University of Maryland at Baltimore, Environmental Health and Safety Facility		Baltimore	MD	M	WS	0.122
SMALL NON-RURAL HMIWI (≤200 LB/HR)								
86	86	Fairfield Medical Center		Lancaster	OH	S	WS	0.00256
129	129	Centers for Disease Control and Prevention--Clifton, Building 18	Unit 3	Atlanta	GA	S	WS	0.00545
SMALL RURAL HMIWI (≤200 LB/HR)								
116	116	Yukon-Kuskokwim Delta Regional Hospital		Bethel	AK	SR	CC	0.0380
115	115	Kona Community Hospital		Kealakekua	HI	SR	CC	

Table 5. Hg MACT Floor Rankings for Option 1A - Current Subcategories / Pollutant-by-Pollutant Ranking

FACID	UNITID	Facility name	Unit number	City	State abbr	Cate-gory	APCD code	Hg mg/dscm
LARGE HMIWI (>500 LB/HR)								
1	1	Bristol-Myers Squibb Co.		Wallingford	CT	L	FF	0.000695
54	54	Bayfront Medical Center		St. Petersburg	FL	L	WS	0.00128
125	125	East Carolina University, Health Sciences Campus, HSC Utility Plant		Greenville	NC	L	HEPA/CA/WS	0.00164
51	51	Lakeland Regional Medical Center		Lakeland	FL	L	DIFF	0.00244
36	36--1	Merck & Company, Inc.	Unit 2	West Point (Upper Gwynedd Township)	PA	L	DIFF	0.00305
20	20--1	Fort Detrick	Unit 5	Fort Detrick	MD	L	WS	0.00324
5	5	Merck & Company, Inc.		Rahway	NJ	L	DIFF	0.00353
48	48	Memorial Regional Hospital		Hollywood	FL	L	WS/WESP	0.00374
29	29	Hamot Medical Center		Erie	PA	L	DIFF/WS	0.00400
40	40	Charleston Area Medical Center, General Hospital		Charleston	WV	L	DIFF	0.00418
130	130	Department of Veterans Affairs Medical Center		Miami	FL	L	WS	0.00542
120	120--2	Waste Management Resource Recovery and Recycling Center	Unit 2	Anahuac	TX	L	DIFF	0.00559
77	77	Parkview Hospital		Fort Wayne	IN	L	WS	0.00623
55	55	St. Joseph's Hospital		Tampa	FL	L	DIFF/WS	0.00730
20	20--2	Fort Detrick	Unit 6	Fort Detrick	MD	L	WS	0.00771
87	87	MedCentral Health System, Mansfield Hospital		Mansfield	OH	L	DIFF	0.00898
43	43	Boca Raton Community Hospital		Boca Raton	FL	L	WS	0.0119
120	120--1	Waste Management Resource Recovery and Recycling Center	Unit 1	Anahuac	TX	L	DIFF	0.0130
42	42	Stericycle, Inc.		Apopka	FL	L	DIFF	0.0132
36	36--2	Merck & Company, Inc.	Unit 5	West Point (Upper Gwynedd Township)	PA	L	DIFF	0.0141
71	71	Loyola University Medical Center		Maywood	IL	L	WS	0.0183
59	59--1	Stericycle, Inc.	Unit 1	Haw River	NC	L	WS	0.0389
84	84	Mayo Clinic, Waste Management Facility		Rochester	MN	L	DIFF	0.0445
98	98--1	University of Texas Medical Branch		Galveston	TX	L	WS	0.0482
46	46	Holy Cross Hospital		Fort Lauderdale	FL	L	WS	0.0504
60	60--1	BMWNC, Inc.	Unit 1	Matthews	NC	L	DIFF	0.0598
44	44	Bethesda Memorial Hospital		Boynton Beach	FL	L	WS	0.0739
110	110	Stericycle, Inc.		North Salt Lake	UT	L	DI-ESP/WS	0.0746
59	59--2	Stericycle, Inc.	Unit 2	Haw River	NC	L	WS	0.118
109	109	Healthcare Environmental Services Inc.		Fargo	ND	L	DIFF	0.129
15	15--1	Curtis Bay Energy	Unit 1	Baltimore	MD	L	DIFF	0.174
94	94	Stericycle, Inc.		Warren	OH	L	WS	0.239
15	15--2	Curtis Bay Energy	Unit 2	Baltimore	MD	L	DIFF	0.300
106	106	Stericycle, Inc.		Kansas City	KS	L	WS	0.375
65	65--2	Stericycle, Inc.	Unit 2	Clinton	IL	L	WS	0.377
65	65--1	Stericycle, Inc.	Unit 1	Clinton	IL	L	WS	0.415
MEDIUM HMIWI (>200, ≤500 LB/HR)								
21	21	Washington County Hospital		Hagerstown	MD	M	WS	0.000836
34	34	Pennsylvania State University, Animal Diagnostic Lab Incinerator		State College	PA	M	WS	0.00124
82	82	Good Samaritan Hospital		Vincennes	IN	M	WS	0.00251
95	95	St. Joseph's Hospital		Marshfield	WI	M	DIFF	0.00254
18	18	Franklin Square Hospital Center		Baltimore	MD	M	WS	0.00270
108	108--1	Rocky Mountain Laboratories, National Institute of Allergy and Infectious Diseases	Unit 1	Hamilton	MT	M	WS	0.00312
25	25	Holy Spirit Hospital		Camp Hill	PA	M	WS	0.00346
63	63	St. Jude Children's Research Hospital		Memphis	TN	M	DIFF	0.00361
16	16	Johns Hopkins Medical Institute, Department of Health, Safety, and Environment		Baltimore	MD	M	WS	0.00395
88	88	Medina General Hospital		Medina	OH	M	WS	0.00716
38	38	Wilkes-Barre General Hospital		Wilkes-Barre	PA	M	DIFF	0.00927
30	30	Riddle Memorial Hospital		Media	PA	M	WS	0.0108
47	47	Malcolm Randall Veterans Affairs Medical Center		Gainesville	FL	M	WS	0.0195
111	111	Wyoming Medical Center		Casper	WY	M	WS	0.0237

13	13	University of Maryland at Baltimore, Environmental Health and Safety Facility		Baltimore	MD	M	WS	0.0405
41	41	Thomas Memorial Hospital		South Charleston	WV	M	WS	0.109
81	81	South Bend Medical Foundation		South Bend	IN	M	WS	0.206
SMALL NON-RURAL HMIWI (≤200 LB/HR)								
129	129	Centers for Disease Control and Prevention--Clifton, Building 18	Unit 3	Atlanta	GA	S	WS	0.00292
86	86	Fairfield Medical Center		Lancaster	OH	S	WS	0.0114
SMALL RURAL HMIWI (≤200 LB/HR)								
115	115	Kona Community Hospital		Kealakekua	HI	SR	CC	0.00158
116	116	Yukon-Kuskokwim Delta Regional Hospital		Bethel	AK	SR	CC	0.0906

Table 6. PM MACT Floor Rankings for Option 1A - Current Subcategories / Pollutant-by-Pollutant Ranking

FACID	UNITID	Facility name	Unit number	City	State abbr	Cate-gory	APCD code	PM gr/dscf
LARGE HMIWI (>500 LB/HR)								
40	40	Charleston Area Medical Center, General Hospital		Charleston	WV	L	DIFF	0.00106
55	55	St. Joseph's Hospital		Tampa	FL	L	DIFF/WS	0.00111
36	36--1	Merck & Company, Inc.	Unit 2	West Point (Upper Gwynedd Township)	PA	L	DIFF	0.00156
29	29	Hamot Medical Center		Erie	PA	L	DIFF/WS	0.00174
1	1	Bristol-Myers Squibb Co.		Wallingford	CT	L	FF	0.00180
42	42	Stericycle, Inc.		Apopka	FL	L	DIFF	0.00203
51	51	Lakeland Regional Medical Center		Lakeland	FL	L	DIFF	0.00254
36	36--2	Merck & Company, Inc.	Unit 5	West Point (Upper Gwynedd Township)	PA	L	DIFF	0.00255
125	125	East Carolina University, Health Sciences Campus, HSC Utility Plant		Greenville	NC	L	HEPA/CA/WS	0.00323
5	5	Merck & Company, Inc.		Rahway	NJ	L	DIFF	0.00330
87	87	MedCentral Health System, Mansfield Hospital		Mansfield	OH	L	DIFF	0.00357
15	15--2	Curtis Bay Energy	Unit 2	Baltimore	MD	L	DIFF	0.00407
110	110	Stericycle, Inc.		North Salt Lake	UT	L	DI-ESP/WS	0.00449
60	60--1	BMWNC, Inc.	Unit 1	Matthews	NC	L	DIFF	0.00504
54	54	Bayfront Medical Center		St. Petersburg	FL	L	WS	0.00543
109	109	Healthcare Environmental Services Inc.		Fargo	ND	L	DIFF	0.00611
94	94	Stericycle, Inc.		Warren	OH	L	WS	0.00617
120	120--1	Waste Management Resource Recovery and Recycling Center	Unit 1	Anahuac	TX	L	DIFF	0.00702
59	59--1	Stericycle, Inc.	Unit 1	Haw River	NC	L	WS	0.00714
20	20--1	Fort Detrick	Unit 5	Fort Detrick	MD	L	WS	0.00721
20	20--2	Fort Detrick	Unit 6	Fort Detrick	MD	L	WS	0.00775
15	15--1	Curtis Bay Energy	Unit 1	Baltimore	MD	L	DIFF	0.00823
106	106	Stericycle, Inc.		Kansas City	KS	L	WS	0.00828
65	65--2	Stericycle, Inc.	Unit 2	Clinton	IL	L	WS	0.00878
65	65--1	Stericycle, Inc.	Unit 1	Clinton	IL	L	WS	0.00921
120	120--2	Waste Management Resource Recovery and Recycling Center	Unit 2	Anahuac	TX	L	DIFF	0.00947
44	44	Bethesda Memorial Hospital		Boynton Beach	FL	L	WS	0.00960
48	48	Memorial Regional Hospital		Hollywood	FL	L	WS/WESP	0.00973
59	59--2	Stericycle, Inc.	Unit 2	Haw River	NC	L	WS	0.0102
46	46	Holy Cross Hospital		Fort Lauderdale	FL	L	WS	0.0103
43	43	Boca Raton Community Hospital		Boca Raton	FL	L	WS	0.0104
71	71	Loyola University Medical Center		Maywood	IL	L	WS	0.0105
77	77	Parkview Hospital		Fort Wayne	IN	L	WS	0.0109
130	130	Department of Veterans Affairs Medical Center		Miami	FL	L	WS	0.0111
84	84	Mayo Clinic, Waste Management Facility		Rochester	MN	L	DIFF	0.0137
98	98--1	University of Texas Medical Branch		Galveston	TX	L	WS	0.0147
MEDIUM HMIWI (>200, ≤500 LB/HR)								
95	95	St. Joseph's Hospital		Marshfield	WI	M	DIFF	0.00294
111	111	Wyoming Medical Center		Casper	WY	M	WS	0.00336
38	38	Wilkes-Barre General Hospital		Wilkes-Barre	PA	M	DIFF	0.00399
63	63	St. Jude Children's Research Hospital		Memphis	TN	M	DIFF	0.00505
81	81	South Bend Medical Foundation		South Bend	IN	M	WS	0.01159
30	30	Riddle Memorial Hospital		Media	PA	M	WS	0.0124
13	13	University of Maryland at Baltimore, Environmental Health and Safety Facility		Baltimore	MD	M	WS	0.0126
82	82	Good Samaritan Hospital		Vincennes	IN	M	WS	0.0137
25	25	Holy Spirit Hospital		Camp Hill	PA	M	WS	0.0164
47	47	Malcolm Randall Veterans Affairs Medical Center		Gainesville	FL	M	WS	0.0173
21	21	Washington County Hospital		Hagerstown	MD	M	WS	0.0197
108	108--1	Rocky Mountain Laboratories, National Institute of Allergy and Infectious Diseases	Unit 1	Hamilton	MT	M	WS	0.0216
34	34	Pennsylvania State University, Animal Diagnostic Lab Incinerator		State College	PA	M	WS	0.0239
18	18	Franklin Square Hospital Center		Baltimore	MD	M	WS	0.0256

41	41	Thomas Memorial Hospital		South Charleston	WV	M	WS	0.0261
88	88	Medina General Hospital		Medina	OH	M	WS	0.0267
16	16	Johns Hopkins Medical Institute, Department of Health, Safety, and Environment		Baltimore	MD	M	WS	0.0294
SMALL NON-RURAL HMIWI (≤200 LB/HR)								
129	129	Centers for Disease Control and Prevention--Clifton, Building 18	Unit 3	Atlanta	GA	S	WS	0.00760
86	86	Fairfield Medical Center		Lancaster	OH	S	WS	0.0137
SMALL RURAL HMIWI (≤200 LB/HR)								
115	115	Kona Community Hospital		Kealakekua	HI	SR	CC	0.0128
116	116	Yukon-Kuskokwim Delta Regional Hospital		Bethel	AK	SR	CC	0.0162

Table 7. Total CDD/CDF MACT Floor Rankings for Option 1A - Current Subcategories / Pollutant-by-Pollutant Ranking

FACID	UNITID	Facility name	Unit number	City	State abbr	Cate-gory	APCD code	CDD/CDF ng/dscm
LARGE HMIWI (>500 LB/HR)								
120	120--2	Waste Management Resource Recovery and Recycling Center	Unit 2	Anahuac	TX	L	DIFF	0.152
84	84	Mayo Clinic, Waste Management Facility		Rochester	MN	L	DIFF	0.357
125	125	East Carolina University, Health Sciences Campus, HSC Utility Plant		Greenville	NC	L	HEPA/CA/WS	0.380
120	120--1	Waste Management Resource Recovery and Recycling Center	Unit 1	Anahuac	TX	L	DIFF	0.498
130	130	Department of Veterans Affairs Medical Center		Miami	FL	L	WS	0.665
65	65--2	Stericycle, Inc.	Unit 2	Clinton	IL	L	WS	0.837
65	65--1	Stericycle, Inc.	Unit 1	Clinton	IL	L	WS	1.24
40	40	Charleston Area Medical Center, General Hospital		Charleston	WV	L	DIFF	1.31
106	106	Stericycle, Inc.		Kansas City	KS	L	WS	2.40
59	59--1	Stericycle, Inc.	Unit 1	Haw River	NC	L	WS	2.82
110	110	Stericycle, Inc.		North Salt Lake	UT	L	DI-ESP/WS	3.37
36	36--1	Merck & Company, Inc.	Unit 2	West Point (Upper Gwynedd Township)	PA	L	DIFF	3.71
15	15--2	Curtis Bay Energy	Unit 2	Baltimore	MD	L	DIFF	5.47
59	59--2	Stericycle, Inc.	Unit 2	Haw River	NC	L	WS	5.48
60	60--1	BMWNC, Inc.	Unit 1	Matthews	NC	L	DIFF	6.10
36	36--2	Merck & Company, Inc.	Unit 5	West Point (Upper Gwynedd Township)	PA	L	DIFF	6.78
77	77	Parkview Hospital		Fort Wayne	IN	L	WS	7.10
29	29	Hamot Medical Center		Erie	PA	L	DIFF/WS	7.72
5	5	Merck & Company, Inc.		Rahway	NJ	L	DIFF	12.8
94	94	Stericycle, Inc.		Warren	OH	L	WS	14.7
42	42	Stericycle, Inc.		Apopka	FL	L	DIFF	24.3
15	15--1	Curtis Bay Energy	Unit 1	Baltimore	MD	L	DIFF	27.7
87	87	MedCentral Health System, Mansfield Hospital		Mansfield	OH	L	DIFF	29.8
1	1	Bristol-Myers Squibb Co.		Wallingford	CT	L	FF	36.9
54	54	Bayfront Medical Center		St. Petersburg	FL	L	WS	46.6
48	48	Memorial Regional Hospital		Hollywood	FL	L	WS/WESP	48.3
44	44	Bethesda Memorial Hospital		Boynton Beach	FL	L	WS	54.3
55	55	St. Joseph's Hospital		Tampa	FL	L	DIFF/WS	66.2
43	43	Boca Raton Community Hospital		Boca Raton	FL	L	WS	67.7
71	71	Loyola University Medical Center		Maywood	IL	L	WS	67.9
51	51	Lakeland Regional Medical Center		Lakeland	FL	L	DIFF	68.2
20	20--1	Fort Detrick	Unit 5	Fort Detrick	MD	L	WS	85.2
20	20--2	Fort Detrick	Unit 6	Fort Detrick	MD	L	WS	97.3
98	98--1	University of Texas Medical Branch		Galveston	TX	L	WS	98.1
109	109	Healthcare Environmental Services Inc.		Fargo	ND	L	DIFF	
46	46	Holy Cross Hospital		Fort Lauderdale	FL	L	WS	
MEDIUM HMIWI (>200, ≤500 LB/HR)								
34	34	Pennsylvania State University, Animal Diagnostic Lab Incinerator		State College	PA	M	WS	0.0973
41	41	Thomas Memorial Hospital		South Charleston	WV	M	WS	0.175
108	108--1	Rocky Mountain Laboratories, National Institute of Allergy and Infectious Diseases	Unit 1	Hamilton	MT	M	WS	0.206
13	13	University of Maryland at Baltimore, Environmental Health and Safety Facility		Baltimore	MD	M	WS	1.06
95	95	St. Joseph's Hospital		Marshfield	WI	M	DIFF	1.28
25	25	Holy Spirit Hospital		Camp Hill	PA	M	WS	3.47
81	81	South Bend Medical Foundation		South Bend	IN	M	WS	4.10
47	47	Malcolm Randall Veterans Affairs Medical Center		Gainesville	FL	M	WS	4.48
16	16	Johns Hopkins Medical Institute, Department of Health, Safety, and Environment		Baltimore	MD	M	WS	6.98
63	63	St. Jude Children's Research Hospital		Memphis	TN	M	DIFF	9.11
38	38	Wilkes-Barre General Hospital		Wilkes-Barre	PA	M	DIFF	16.3
88	88	Medina General Hospital		Medina	OH	M	WS	17.2
82	82	Good Samaritan Hospital		Vincennes	IN	M	WS	27.9
111	111	Wyoming Medical Center		Casper	WY	M	WS	74.0

21	21	Washington County Hospital		Hagerstown	MD	M	WS	76.2
30	30	Riddle Memorial Hospital		Media	PA	M	WS	78.2
18	18	Franklin Square Hospital Center		Baltimore	MD	M	WS	91.4
SMALL NON-RURAL HMIWI (≤200 LB/HR)								
86	86	Fairfield Medical Center		Lancaster	OH	S	WS	2.89
129	129	Centers for Disease Control and Prevention--Clifton, Building 18	Unit 3	Atlanta	GA	S	WS	
SMALL RURAL HMIWI (≤200 LB/HR)								
115	115	Kona Community Hospital		Kealakekua	HI	SR	CC	29.6
116	116	Yukon-Kuskokwim Delta Regional Hospital		Bethel	AK	SR	CC	125

Table 8. CDD/CDF TEQ MACT Floor Rankings for Option 1A - Current Subcategories / Pollutant-by-Pollutant Ranking

FACID	UNITID	Facility name	Unit number	City	State abbr	Cate-gory	APCD code	TEQ ng/dscm
LARGE HMIWI (>500 LB/HR)								
120	120--2	Waste Management Resource Recovery and Recycling Center	Unit 2	Anahuac	TX	L	DIFF	0.00378
125	125	East Carolina University, Health Sciences Campus, HSC Utility Plant		Greenville	NC	L	HEPA/CA/WS	0.00532
120	120--1	Waste Management Resource Recovery and Recycling Center	Unit 1	Anahuac	TX	L	DIFF	0.00807
65	65--1	Stericycle, Inc.	Unit 1	Clinton	IL	L	WS	0.0105
84	84	Mayo Clinic, Waste Management Facility		Rochester	MN	L	DIFF	0.0117
65	65--2	Stericycle, Inc.	Unit 2	Clinton	IL	L	WS	0.0126
40	40	Charleston Area Medical Center, General Hospital		Charleston	WV	L	DIFF	0.0153
130	130	Department of Veterans Affairs Medical Center		Miami	FL	L	WS	0.0160
106	106	Stericycle, Inc.		Kansas City	KS	L	WS	0.0176
36	36--1	Merck & Company, Inc.	Unit 2	West Point (Upper Gwynedd Township)	PA	L	DIFF	0.0442
59	59--1	Stericycle, Inc.	Unit 1	Haw River	NC	L	WS	0.0664
110	110	Stericycle, Inc.		North Salt Lake	UT	L	DI-ESP/WS	0.0824
59	59--2	Stericycle, Inc.	Unit 2	Haw River	NC	L	WS	0.0845
29	29	Hamot Medical Center		Erie	PA	L	DIFF/WS	0.0879
77	77	Parkview Hospital		Fort Wayne	IN	L	WS	0.0898
5	5	Merck & Company, Inc.		Rahway	NJ	L	DIFF	0.110
15	15--2	Curtis Bay Energy	Unit 2	Baltimore	MD	L	DIFF	0.115
60	60--1	BMWNC, Inc.	Unit 1	Matthews	NC	L	DIFF	0.149
36	36--2	Merck & Company, Inc.	Unit 5	West Point (Upper Gwynedd Township)	PA	L	DIFF	0.308
94	94	Stericycle, Inc.		Warren	OH	L	WS	0.341
15	15--1	Curtis Bay Energy	Unit 1	Baltimore	MD	L	DIFF	0.451
87	87	MedCentral Health System, Mansfield Hospital		Mansfield	OH	L	DIFF	0.560
71	71	Loyola University Medical Center		Maywood	IL	L	WS	0.630
1	1	Bristol-Myers Squibb Co.		Wallingford	CT	L	FF	0.659
42	42	Stericycle, Inc.		Apopka	FL	L	DIFF	0.748
20	20--1	Fort Detrick	Unit 5	Fort Detrick	MD	L	WS	0.762
54	54	Bayfront Medical Center		St. Petersburg	FL	L	WS	0.819
43	43	Boca Raton Community Hospital		Boca Raton	FL	L	WS	0.852
98	98--1	University of Texas Medical Branch		Galveston	TX	L	WS	1.06
44	44	Bethesda Memorial Hospital		Boynton Beach	FL	L	WS	1.21
20	20--2	Fort Detrick	Unit 6	Fort Detrick	MD	L	WS	1.26
48	48	Memorial Regional Hospital		Hollywood	FL	L	WS/WESP	1.29
51	51	Lakeland Regional Medical Center		Lakeland	FL	L	DIFF	1.29
55	55	St. Joseph's Hospital		Tampa	FL	L	DIFF/WS	1.35
109	109	Healthcare Environmental Services Inc.		Fargo	ND	L	DIFF	1.95
46	46	Holy Cross Hospital		Fort Lauderdale	FL	L	WS	2.23
MEDIUM HMIWI (>200, ≤500 LB/HR)								
34	34	Pennsylvania State University, Animal Diagnostic Lab Incinerator		State College	PA	M	WS	0.00291
108	108--1	Rocky Mountain Laboratories, National Institute of Allergy and Infectious Diseases	Unit 1	Hamilton	MT	M	WS	0.00300
41	41	Thomas Memorial Hospital		South Charleston	WV	M	WS	0.00424
25	25	Holy Spirit Hospital		Camp Hill	PA	M	WS	0.0299
81	81	South Bend Medical Foundation		South Bend	IN	M	WS	0.0409
95	95	St. Joseph's Hospital		Marshfield	WI	M	DIFF	0.0457
13	13	University of Maryland at Baltimore, Environmental Health and Safety Facility		Baltimore	MD	M	WS	0.0509
82	82	Good Samaritan Hospital		Vincennes	IN	M	WS	0.0967
47	47	Malcolm Randall Veterans Affairs Medical Center		Gainesville	FL	M	WS	0.111
16	16	Johns Hopkins Medical Institute, Department of Health, Safety, and Environment		Baltimore	MD	M	WS	0.151
63	63	St. Jude Children's Research Hospital		Memphis	TN	M	DIFF	0.160
38	38	Wilkes-Barre General Hospital		Wilkes-Barre	PA	M	DIFF	0.193
88	88	Medina General Hospital		Medina	OH	M	WS	0.458
18	18	Franklin Square Hospital Center		Baltimore	MD	M	WS	0.996

111	111	Wyoming Medical Center		Casper	WY	M	WS	1.12
21	21	Washington County Hospital		Hagerstown	MD	M	WS	1.32
30	30	Riddle Memorial Hospital		Media	PA	M	WS	1.42
SMALL NON-RURAL HMIWI (≤200 LB/HR)								
129	129	Centers for Disease Control and Prevention--Clifton, Building 18	Unit 3	Atlanta	GA	S	WS	0.00453
86	86	Fairfield Medical Center		Lancaster	OH	S	WS	0.0624
SMALL RURAL HMIWI (≤200 LB/HR)								
115	115	Kona Community Hospital		Kealakekua	HI	SR	CC	0.618
116	116	Yukon-Kuskokwim Delta Regional Hospital		Bethel	AK	SR	CC	2.52

Table 9. NO_X MACT Floor Rankings for Option 1A - Current Subcategories / Pollutant-by-Pollutant Ranking

FACID	UNITID	Facility name	Unit number	City	State abbr	Cate-gory	APCD code	NO_X ppmvd
125	125	East Carolina University, Health Sciences Campus, HSC Utility Plant		Greenville	NC	L	HEPA/CA/WS	66.9
46	46	Holy Cross Hospital		Fort Lauderdale	FL	L	WS	67.9
120	120--1	Waste Management Resource Recovery and Recycling Center	Unit 1	Anahuac	TX	L	DIFF	72.4
51	51	Lakeland Regional Medical Center		Lakeland	FL	L	DIFF	77.1
98	98--1	University of Texas Medical Branch		Galveston	TX	L	WS	78.9
130	130	Department of Veterans Affairs Medical Center		Miami	FL	L	WS	81.5
44	44	Bethesda Memorial Hospital		Boynton Beach	FL	L	WS	88.3
120	120--2	Waste Management Resource Recovery and Recycling Center	Unit 2	Anahuac	TX	L	DIFF	88.4
40	40	Charleston Area Medical Center, General Hospital		Charleston	WV	L	DIFF	92.7
36	36--2	Merck & Company, Inc.	Unit 5	West Point (Upper Gwynedd Township)	PA	L	DIFF	94.4
36	36--1	Merck & Company, Inc.	Unit 2	West Point (Upper Gwynedd Township)	PA	L	DIFF	99.8
60	60--1	BMWNC, Inc.	Unit 1	Matthews	NC	L	DIFF	104
71	71	Loyola University Medical Center		Maywood	IL	L	WS	107
5	5	Merck & Company, Inc.		Rahway	NJ	L	DIFF	112
1	1	Bristol-Myers Squibb Co.		Wallingford	CT	L	FF	119
55	55	St. Joseph's Hospital		Tampa	FL	L	DIFF/WS	123
29	29	Hamot Medical Center		Erie	PA	L	DIFF/WS	131
54	54	Bayfront Medical Center		St. Petersburg	FL	L	WS	140
48	48	Memorial Regional Hospital		Hollywood	FL	L	WS/WESP	142
42	42	Stericycle, Inc.		Apopka	FL	L	DIFF	149
84	84	Mayo Clinic, Waste Management Facility		Rochester	MN	L	DIFF	176
15	15--2	Curtis Bay Energy	Unit 2	Baltimore	MD	L	DIFF	180
15	15--1	Curtis Bay Energy	Unit 1	Baltimore	MD	L	DIFF	187
109	109	Healthcare Environmental Services Inc.		Fargo	ND	L	DIFF	207
110	110	Stericycle, Inc.		North Salt Lake	UT	L	DI-ESP/WS	228
87	87	MedCentral Health System, Mansfield Hospital		Mansfield	OH	L	DIFF	
20	20--1	Fort Detrick	Unit 5	Fort Detrick	MD	L	WS	
20	20--2	Fort Detrick	Unit 6	Fort Detrick	MD	L	WS	
43	43	Boca Raton Community Hospital		Boca Raton	FL	L	WS	
59	59--1	Stericycle, Inc.	Unit 1	Haw River	NC	L	WS	
59	59--2	Stericycle, Inc.	Unit 2	Haw River	NC	L	WS	
65	65--1	Stericycle, Inc.	Unit 1	Clinton	IL	L	WS	
65	65--2	Stericycle, Inc.	Unit 2	Clinton	IL	L	WS	
77	77	Parkview Hospital		Fort Wayne	IN	L	WS	
94	94	Stericycle, Inc.		Warren	OH	L	WS	
106	106	Stericycle, Inc.		Kansas City	KS	L	WS	
MEDIUM HMIWI (>200, ≤500 LB/HR)								
81	81	South Bend Medical Foundation		South Bend	IN	M	WS	15.0
18	18	Franklin Square Hospital Center		Baltimore	MD	M	WS	84.7
16	16	Johns Hopkins Medical Institute, Department of Health, Safety, and Environment		Baltimore	MD	M	WS	87.9
41	41	Thomas Memorial Hospital		South Charleston	WV	M	WS	94.4
13	13	University of Maryland at Baltimore, Environmental Health and Safety Facility		Baltimore	MD	M	WS	99.8
30	30	Riddle Memorial Hospital		Media	PA	M	WS	124
108	108--1	Rocky Mountain Laboratories, National Institute of Allergy and Infectious Diseases	Unit 1	Hamilton	MT	M	WS	128
63	63	St. Jude Children's Research Hospital		Memphis	TN	M	DIFF	131
111	111	Wyoming Medical Center		Casper	WY	M	WS	141
47	47	Malcolm Randall Veterans Affairs Medical Center		Gainesville	FL	M	WS	148
38	38	Wilkes-Barre General Hospital		Wilkes-Barre	PA	M	DIFF	
95	95	St. Joseph's Hospital		Marshfield	WI	M	DIFF	
21	21	Washington County Hospital		Hagerstown	MD	M	WS	
25	25	Holy Spirit Hospital		Camp Hill	PA	M	WS	

34	34	Pennsylvania State University, Animal Diagnostic Lab Incinerator		State College	PA	M	WS	
82	82	Good Samaritan Hospital		Vincennes	IN	M	WS	
88	88	Medina General Hospital		Medina	OH	M	WS	
SMALL NON-RURAL HMIWI (≤200 LB/HR)								
129	129	Centers for Disease Control and Prevention--Clifton, Building 18	Unit 3	Atlanta	GA	S	WS	
86	86	Fairfield Medical Center		Lancaster	OH	S	WS	
SMALL RURAL HMIWI (≤200 LB/HR)								
116	116	Yukon-Kuskokwim Delta Regional Hospital		Bethel	AK	SR	CC	95.1
115	115	Kona Community Hospital		Kealakekua	HI	SR	CC	

Table 10. SO_2 MACT Floor Rankings for Option 1A - Current Subcategories / Pollutant-by-Pollutant Ranking

FACID	UNITID	Facility name	Unit number	City	State abbr	Cate-gory	APCD code	SO_2 ppmvd
LARGE HMIWI (>500 LB/HR)								
120	120--2	Waste Management Resource Recovery and Recycling Center	Unit 2	Anahuac	TX	L	DIFF	0.462
71	71	Loyola University Medical Center		Maywood	IL	L	WS	0.819
98	98--1	University of Texas Medical Branch		Galveston	TX	L	WS	1.12
36	36--1	Merck & Company, Inc.	Unit 2	West Point (Upper Gwynedd Township)	PA	L	DIFF	1.13
46	46	Holy Cross Hospital		Fort Lauderdale	FL	L	WS	1.16
120	120--1	Waste Management Resource Recovery and Recycling Center	Unit 1	Anahuac	TX	L	DIFF	1.21
54	54	Bayfront Medical Center		St. Petersburg	FL	L	WS	1.25
125	125	East Carolina University, Health Sciences Campus, HSC Utility Plant		Greenville	NC	L	HEPA/CA/WS	1.45
84	84	Mayo Clinic, Waste Management Facility		Rochester	MN	L	DIFF	1.45
42	42	Stericycle, Inc.		Apopka	FL	L	DIFF	1.50
40	40	Charleston Area Medical Center, General Hospital		Charleston	WV	L	DIFF	2.07
51	51	Lakeland Regional Medical Center		Lakeland	FL	L	DIFF	2.13
36	36--2	Merck & Company, Inc.	Unit 5	West Point (Upper Gwynedd Township)	PA	L	DIFF	2.35
5	5	Merck & Company, Inc.		Rahway	NJ	L	DIFF	2.72
29	29	Hamot Medical Center		Erie	PA	L	DIFF/WS	2.78
110	110	Stericycle, Inc.		North Salt Lake	UT	L	DI-ESP/WS	3.35
48	48	Memorial Regional Hospital		Hollywood	FL	L	WS/WESP	3.41
44	44	Bethesda Memorial Hospital		Boynton Beach	FL	L	WS	4.62
60	60--1	BMWNC, Inc.	Unit 1	Matthews	NC	L	DIFF	7.03
130	130	Department of Veterans Affairs Medical Center		Miami	FL	L	WS	7.58
109	109	Healthcare Environmental Services Inc.		Fargo	ND	L	DIFF	20.2
15	15--1	Curtis Bay Energy	Unit 1	Baltimore	MD	L	DIFF	23.0
1	1	Bristol-Myers Squibb Co.		Wallingford	CT	L	FF	29.9
15	15--2	Curtis Bay Energy	Unit 2	Baltimore	MD	L	DIFF	34.7
55	55	St. Joseph's Hospital		Tampa	FL	L	DIFF/WS	
87	87	MedCentral Health System, Mansfield Hospital		Mansfield	OH	L	DIFF	
20	20--1	Fort Detrick	Unit 5	Fort Detrick	MD	L	WS	
20	20--2	Fort Detrick	Unit 6	Fort Detrick	MD	L	WS	
43	43	Boca Raton Community Hospital		Boca Raton	FL	L	WS	
59	59--1	Stericycle, Inc.	Unit 1	Haw River	NC	L	WS	
59	59--2	Stericycle, Inc.	Unit 2	Haw River	NC	L	WS	
65	65--1	Stericycle, Inc.	Unit 1	Clinton	IL	L	WS	
65	65--2	Stericycle, Inc.	Unit 2	Clinton	IL	L	WS	
77	77	Parkview Hospital		Fort Wayne	IN	L	WS	
94	94	Stericycle, Inc.		Warren	OH	L	WS	
106	106	Stericycle, Inc.		Kansas City	KS	L	WS	
MEDIUM HMIWI (>200, ≤500 LB/HR)								
30	30	Riddle Memorial Hospital		Media	PA	M	WS	0.336
13	13	University of Maryland at Baltimore, Environmental Health and Safety Facility		Baltimore	MD	M	WS	0.469
108	108--1	Rocky Mountain Laboratories, National Institute of Allergy and Infectious Diseases	Unit 1	Hamilton	MT	M	WS	0.932
34	34	Pennsylvania State University, Animal Diagnostic Lab Incinerator		State College	PA	M	WS	1.22
111	111	Wyoming Medical Center		Casper	WY	M	WS	1.80
38	38	Wilkes-Barre General Hospital		Wilkes-Barre	PA	M	DIFF	1.90
63	63	St. Jude Children's Research Hospital		Memphis	TN	M	DIFF	2.02
41	41	Thomas Memorial Hospital		South Charleston	WV	M	WS	2.46
47	47	Malcolm Randall Veterans Affairs Medical Center		Gainesville	FL	M	WS	2.54
16	16	Johns Hopkins Medical Institute, Department of Health, Safety, and Environment		Baltimore	MD	M	WS	2.88
18	18	Franklin Square Hospital Center		Baltimore	MD	M	WS	10.9
81	81	South Bend Medical Foundation		South Bend	IN	M	WS	11.7
95	95	St. Joseph's Hospital		Marshfield	WI	M	DIFF	
21	21	Washington County Hospital		Hagerstown	MD	M	WS	

25	25	Holy Spirit Hospital		Camp Hill	PA	M	WS	
82	82	Good Samaritan Hospital		Vincennes	IN	M	WS	
88	88	Medina General Hospital		Medina	OH	M	WS	
SMALL NON-RURAL HMIWI (≤200 LB/HR)								
129	129	Centers for Disease Control and Prevention--Clifton, Building 18	Unit 3	Atlanta	GA	S	WS	
86	86	Fairfield Medical Center		Lancaster	OH	S	WS	
SMALL RURAL HMIWI (≤200 LB/HR)								
116	116	Yukon-Kuskokwim Delta Regional Hospital		Bethel	AK	SR	CC	22.6
115	115	Kona Community Hospital		Kealakekua	HI	SR	CC	

Table 11. HCl MACT Floor Test Runs for Option 1A - Current Subcategories / Pollutant-by-Pollutant Ranking

FACID	UNITID	Facility name	Unit number	City	State abbr	Cate-gory	APCD code	Parameter	HCl test date	HCl ppmvd	ln(HCl)
LARGE HMIWI (>500 LB/HR)											
20	20--1	Fort Detrick	Unit 5	Fort Detrick	MD	L	WS	Run 1	8/15/00	0.551	-0.59627
20	20--1	Fort Detrick	Unit 5	Fort Detrick	MD	L	WS	Run 2	8/15/00	0.314	-1.15705
20	20--1	Fort Detrick	Unit 5	Fort Detrick	MD	L	WS	Run 3	8/15/00	0.372	-0.98949
20	20--1	Fort Detrick	Unit 5	Fort Detrick	MD	L	WS	Run 1	8/13/02	0.0130	-4.34377
20	20--1	Fort Detrick	Unit 5	Fort Detrick	MD	L	WS	Run 2	8/13/02	0.0220	-3.81659
20	20--1	Fort Detrick	Unit 5	Fort Detrick	MD	L	WS	Run 3	8/13/02	0.0251	-3.68461
20	20--1	Fort Detrick	Unit 5	Fort Detrick	MD	L	WS	Run 1	8/4/03-8/5/03	0.24	-1.42712
20	20--1	Fort Detrick	Unit 5	Fort Detrick	MD	L	WS	Run 2	8/4/03-8/5/03	0.29	-1.23787
20	20--1	Fort Detrick	Unit 5	Fort Detrick	MD	L	WS	Run 3	8/4/03-8/5/03	0.30	-1.20397
20	20--1	Fort Detrick	Unit 5	Fort Detrick	MD	L	WS	Run 1	8/14/06-8/15/06	0.03	-3.50656
20	20--1	Fort Detrick	Unit 5	Fort Detrick	MD	L	WS	Run 2	8/14/06-8/15/06	0.01	-4.60517
20	20--1	Fort Detrick	Unit 5	Fort Detrick	MD	L	WS	Run 3	8/14/06-8/15/06	0.11	-2.20727
20	20--2	Fort Detrick	Unit 6	Fort Detrick	MD	L	WS	Run 1	8/21/00-8/24/00	0.404	-0.9069
20	20--2	Fort Detrick	Unit 6	Fort Detrick	MD	L	WS	Run 2	8/21/00-8/24/00	0.373	-0.98486
20	20--2	Fort Detrick	Unit 6	Fort Detrick	MD	L	WS	Run 3	8/21/00-8/24/00	0.863	-0.1476
20	20--2	Fort Detrick	Unit 6	Fort Detrick	MD	L	WS	Run 1	8/14/02-8/15/02	0.0895	-2.4138
20	20--2	Fort Detrick	Unit 6	Fort Detrick	MD	L	WS	Run 2	8/14/02-8/15/02	0.0358	-3.32853
20	20--2	Fort Detrick	Unit 6	Fort Detrick	MD	L	WS	Run 3	8/14/02-8/15/02	0.0451	-3.09981
20	20--2	Fort Detrick	Unit 6	Fort Detrick	MD	L	WS	Run 1	8/6/03	0.39	-0.94161
20	20--2	Fort Detrick	Unit 6	Fort Detrick	MD	L	WS	Run 2	8/6/03	0.63	-0.46204
20	20--2	Fort Detrick	Unit 6	Fort Detrick	MD	L	WS	Run 3	8/6/03	0.68	-0.38566
20	20--2	Fort Detrick	Unit 6	Fort Detrick	MD	L	WS	Run 1	8/8/06	0.11	-2.20727
20	20--2	Fort Detrick	Unit 6	Fort Detrick	MD	L	WS	Run 2	8/8/06	0.00	
20	20--2	Fort Detrick	Unit 6	Fort Detrick	MD	L	WS	Run 3	8/8/06	0.62	-0.47804
106	106	Stericycle, Inc.		Kansas City	KS	L	WS	Run 1	7/30/02-7/31/02	0.290	-1.23928
106	106	Stericycle, Inc.		Kansas City	KS	L	WS	Run 2	7/30/02-7/31/02	0.250	-1.38674
106	106	Stericycle, Inc.		Kansas City	KS	L	WS	Run 3	7/30/02-7/31/02	0.221	-1.50992
106	106	Stericycle, Inc.		Kansas City	KS	L	WS	Run 1	7/29/03	2.8	1.029619
106	106	Stericycle, Inc.		Kansas City	KS	L	WS	Run 2	7/29/03	1.7	0.530628
106	106	Stericycle, Inc.		Kansas City	KS	L	WS	Run 3	7/29/03	0.5	-0.69315
106	106	Stericycle, Inc.		Kansas City	KS	L	WS	Run 1	7/27/04	0.4	-0.91629
106	106	Stericycle, Inc.		Kansas City	KS	L	WS	Run 2	7/27/04	0.4	-0.91629
106	106	Stericycle, Inc.		Kansas City	KS	L	WS	Run 3	7/27/04	0.2	-1.60944
106	106	Stericycle, Inc.		Kansas City	KS	L	WS	Run 1	7/12/07	0.0159	-4.14144
106	106	Stericycle, Inc.		Kansas City	KS	L	WS	Run 2	7/12/07	0.0159	-4.14144
106	106	Stericycle, Inc.		Kansas City	KS	L	WS	Run 3	7/12/07	0.0168	-4.08638
44	44	Bethesda Memorial Hospital		Boynton Beach	FL	L	WS	Run 1	10/23/01	0.156	-1.85903
44	44	Bethesda Memorial Hospital		Boynton Beach	FL	L	WS	Run 2	10/23/01	0.0790	-2.53795
44	44	Bethesda Memorial Hospital		Boynton Beach	FL	L	WS	Run 3	10/23/01	0.156	-1.85858
44	44	Bethesda Memorial Hospital		Boynton Beach	FL	L	WS	Run 1	3/25/03	0.156	-1.8579
44	44	Bethesda Memorial Hospital		Boynton Beach	FL	L	WS	Run 2	3/25/03	0.477	-0.74024
44	44	Bethesda Memorial Hospital		Boynton Beach	FL	L	WS	Run 3	3/25/03	0.422	-0.86275
44	44	Bethesda Memorial Hospital		Boynton Beach	FL	L	WS	Run 1	3/19/04	0.216	-1.53265
44	44	Bethesda Memorial Hospital		Boynton Beach	FL	L	WS	Run 2	3/19/04	0.216	-1.53259
44	44	Bethesda Memorial Hospital		Boynton Beach	FL	L	WS	Run 3	3/19/04	0.233	-1.4549
44	44	Bethesda Memorial Hospital		Boynton Beach	FL	L	WS	Run 1	3/30/05	0.0209	-3.86834

44	44	Bethesda Memorial Hospital		Boynton Beach	FL	L	WS	Run 2	3/30/05	1.27	0.239017
44	44	Bethesda Memorial Hospital		Boynton Beach	FL	L	WS	Run 3	3/30/05	1.91	0.647103
44	44	Bethesda Memorial Hospital		Boynton Beach	FL	L	WS	Run 1	3/21/06	1.28	0.24686
44	44	Bethesda Memorial Hospital		Boynton Beach	FL	L	WS	Run 2	3/21/06	1.29	0.254642
44	44	Bethesda Memorial Hospital		Boynton Beach	FL	L	WS	Run 3	3/21/06	1.24	0.215111
94	94	Stericycle, Inc.		Warren	OH	L	WS	Run 1	11/14/02-11/15/02	0.280	-1.27261
94	94	Stericycle, Inc.		Warren	OH	L	WS	Run 2	11/14/02-11/15/02	0.244	-1.41228
94	94	Stericycle, Inc.		Warren	OH	L	WS	Run 3	11/14/02-11/15/02	0.227	-1.48494
94	94	Stericycle, Inc.		Warren	OH	L	WS	Run 1	11/13/03	3.0	1.098612
94	94	Stericycle, Inc.		Warren	OH	L	WS	Run 2	11/13/03	0.6	-0.51083
94	94	Stericycle, Inc.		Warren	OH	L	WS	Run 3	11/13/03	0.4	-0.91629
94	94	Stericycle, Inc.		Warren	OH	L	WS	Run 1	11/10/04	0.6	-0.51083
94	94	Stericycle, Inc.		Warren	OH	L	WS	Run 2	11/10/04	0.5	-0.69315
94	94	Stericycle, Inc.		Warren	OH	L	WS	Run 3	11/10/04	0.1	-2.30259
MEDIUM HMIWI (>200, ≤500 LB/HR)											
108	108--1	Rocky Mountain Laboratories, National Institute of Allergy and Infectious Diseases	Unit 1	Hamilton	MT	M	WS	Run 1	10/01/02-10/03/02	0.266	-1.32522
108	108--1	Rocky Mountain Laboratories, National Institute of Allergy and Infectious Diseases	Unit 1	Hamilton	MT	M	WS	Run 2	10/01/02-10/03/02	0.535	-0.62577
108	108--1	Rocky Mountain Laboratories, National Institute of Allergy and Infectious Diseases	Unit 1	Hamilton	MT	M	WS	Run 3	10/01/02-10/03/02	1.00	0.002944
108	108--1	Rocky Mountain Laboratories, National Institute of Allergy and Infectious Diseases	Unit 1	Hamilton	MT	M	WS	Run 1	9/23/03-9/25/03	0.4	-0.91629
108	108--1	Rocky Mountain Laboratories, National Institute of Allergy and Infectious Diseases	Unit 1	Hamilton	MT	M	WS	Run 2	9/23/03-9/25/03	0.45	-0.79851
108	108--1	Rocky Mountain Laboratories, National Institute of Allergy and Infectious Diseases	Unit 1	Hamilton	MT	M	WS	Run 3	9/23/03-9/25/03	0.4	-0.91629
108	108--1	Rocky Mountain Laboratories, National Institute of Allergy and Infectious Diseases	Unit 1	Hamilton	MT	M	WS	Run 1	9/28/04-9/30/04	0.63	-0.46204
108	108--1	Rocky Mountain Laboratories, National Institute of Allergy and Infectious Diseases	Unit 1	Hamilton	MT	M	WS	Run 2	9/28/04-9/30/04	1.35	0.300105
108	108--1	Rocky Mountain Laboratories, National Institute of Allergy and Infectious Diseases	Unit 1	Hamilton	MT	M	WS	Run 3	9/28/04-9/30/04	0.61	-0.4943
108	108--1	Rocky Mountain Laboratories, National Institute of Allergy and Infectious Diseases	Unit 1	Hamilton	MT	M	WS	Run 1	8/31/05-9/1/05	0.47	-0.75502
108	108--1	Rocky Mountain Laboratories, National Institute of Allergy and Infectious Diseases	Unit 1	Hamilton	MT	M	WS	Run 2	8/31/05-9/1/05	1.27	0.239017
108	108--1	Rocky Mountain Laboratories, National Institute of Allergy and Infectious Diseases	Unit 1	Hamilton	MT	M	WS	Run 3	8/31/05-9/1/05	0.49	-0.71335
108	108--1	Rocky Mountain Laboratories, National Institute of Allergy and Infectious Diseases	Unit 1	Hamilton	MT	M	WS	Run 1	8/15/06-8/17/06	0.02	-3.91202
108	108--1	Rocky Mountain Laboratories, National Institute of Allergy and Infectious Diseases	Unit 1	Hamilton	MT	M	WS	Run 2	8/15/06-8/17/06	0.02	-3.91202
108	108--1	Rocky Mountain Laboratories, National Institute of Allergy and Infectious Diseases	Unit 1	Hamilton	MT	M	WS	Run 3	8/15/06-8/17/06	0.02	-3.91202
108	108--1	Rocky Mountain Laboratories, National Institute of Allergy and Infectious Diseases	Unit 1	Hamilton	MT	M	WS	Run 1	9/17/07-9/19/07	0.0180	-4.01827
108	108--1	Rocky Mountain Laboratories, National Institute of Allergy and Infectious Diseases	Unit 1	Hamilton	MT	M	WS	Run 2	9/17/07-9/19/07	0.0155	-4.16573
108	108--1	Rocky Mountain Laboratories, National Institute of Allergy and Infectious Diseases	Unit 1	Hamilton	MT	M	WS	Run 3	9/17/07-9/19/07	0.223	-1.49861
13	13	University of Maryland at Baltimore, Environmental Health and Safety Facility		Baltimore	MD	M	WS	Run 1	9/24/03-9/25/03	0.559	-0.58105
13	13	University of Maryland at Baltimore, Environmental Health and Safety Facility		Baltimore	MD	M	WS	Run 2	9/24/03-9/25/03	0.738	-0.30327
13	13	University of Maryland at Baltimore, Environmental Health and Safety Facility		Baltimore	MD	M	WS	Run 3	9/24/03-9/25/03	2.11	0.746784
13	13	University of Maryland at Baltimore, Environmental Health and Safety Facility		Baltimore	MD	M	WS	Run 1	9/14/04	0.5	-0.69315
13	13	University of Maryland at Baltimore, Environmental Health and Safety Facility		Baltimore	MD	M	WS	Run 2	9/14/04	0.5	-0.69315
13	13	University of Maryland at Baltimore, Environmental Health and Safety Facility		Baltimore	MD	M	WS	Run 3	9/14/04	0.7	-0.35667
13	13	University of Maryland at Baltimore, Environmental Health and Safety Facility		Baltimore	MD	M	WS	Run 4	9/14/04	0.7	-0.35667
13	13	University of Maryland at Baltimore, Environmental Health and Safety Facility		Baltimore	MD	M	WS	Run 1	9/21/05	0.316	-1.15253
13	13	University of Maryland at Baltimore, Environmental Health and Safety Facility		Baltimore	MD	M	WS	Run 2	9/21/05	0.457	-0.78332
13	13	University of Maryland at Baltimore, Environmental Health and Safety Facility		Baltimore	MD	M	WS	Run 3	9/21/05	0.390	-0.94056
25	25	Holy Spirit Hospital		Camp Hill	PA	M	WS	Run 1	4/23/02	0.409	-0.89449
25	25	Holy Spirit Hospital		Camp Hill	PA	M	WS	Run 2	4/23/02	0.365	-1.00816
25	25	Holy Spirit Hospital		Camp Hill	PA	M	WS	Run 3	4/23/02	0.554	-0.5903
25	25	Holy Spirit Hospital		Camp Hill	PA	M	WS	Run 1	4/24/03	0.42	-0.8675
25	25	Holy Spirit Hospital		Camp Hill	PA	M	WS	Run 2	4/24/03	0.47	-0.75502
25	25	Holy Spirit Hospital		Camp Hill	PA	M	WS	Run 3	4/24/03	0.46	-0.77653
25	25	Holy Spirit Hospital		Camp Hill	PA	M	WS	Run 1	4/15/04	0.34	-1.07881
25	25	Holy Spirit Hospital		Camp Hill	PA	M	WS	Run 2	4/15/04	0.37	-0.99425
25	25	Holy Spirit Hospital		Camp Hill	PA	M	WS	Run 3	4/15/04	0.31	-1.17118

25	25	Holy Spirit Hospital		Camp Hill	PA	M	WS	Run 1	5/30/07	0.86	-0.15082
25	25	Holy Spirit Hospital		Camp Hill	PA	M	WS	Run 2	5/30/07	3.52	1.258461
25	25	Holy Spirit Hospital		Camp Hill	PA	M	WS	Run 3	5/30/07	0.76	-0.27444

SMALL NON-RURAL HMIWI (≤200 LB/HR)											
86	86	Fairfield Medical Center		Lancaster	OH	S	WS	Run 1	11/5/02	1.83	0.606995
86	86	Fairfield Medical Center		Lancaster	OH	S	WS	Run 2	11/5/02	0.210	-1.55957
86	86	Fairfield Medical Center		Lancaster	OH	S	WS	Run 3	11/5/02	0.275	-1.29269
86	86	Fairfield Medical Center		Lancaster	OH	S	WS	Run 1	10/28/03	2.6	0.955511
86	86	Fairfield Medical Center		Lancaster	OH	S	WS	Run 2	10/28/03	2.1	0.741937
86	86	Fairfield Medical Center		Lancaster	OH	S	WS	Run 3	10/28/03	3.1	1.131402
86	86	Fairfield Medical Center		Lancaster	OH	S	WS	Run 1	12/1/04	0.3	-1.20397
86	86	Fairfield Medical Center		Lancaster	OH	S	WS	Run 2	12/1/04	0.5	-0.69315
86	86	Fairfield Medical Center		Lancaster	OH	S	WS	Run 3	12/1/04	1.3	0.262364
86	86	Fairfield Medical Center		Lancaster	OH	S	WS	Run 1	11/29/07	0.034	-3.38139
86	86	Fairfield Medical Center		Lancaster	OH	S	WS	Run 2	11/29/07	0.035	-3.35241
86	86	Fairfield Medical Center		Lancaster	OH	S	WS	Run 3	11/29/07	0.033	-3.41125
SMALL RURAL HMIWI (≤200 LB/HR)											
115	115	Kona Community Hospital		Kealakekua	HI	SR	CC	Run 1	1/9/02-1/10/02	241	5.484797
115	115	Kona Community Hospital		Kealakekua	HI	SR	CC	Run 2	1/9/02-1/10/02	109	4.691348
115	115	Kona Community Hospital		Kealakekua	HI	SR	CC	Run 3	1/9/02-1/10/02	53.7	3.983413

Table 12. CO MACT Floor Test Runs for Option 1A - Current Subcategories / Pollutant-by-Pollutant Ranking

FACID	UNITID	Facility name	Unit number	City	State abbr	Cate-gory	APCD code	Parameter	CO test date	CO ppmvd	ln(CO)
LARGE HMIWI (>500 LB/HR)											
20	20--1	Fort Detrick	Unit 5	Fort Detrick	MD	L	WS	Run 1	8/15/00	0.0550	-2.89952
20	20--1	Fort Detrick	Unit 5	Fort Detrick	MD	L	WS	Run 2	8/15/00	0.116	-2.1556
20	20--1	Fort Detrick	Unit 5	Fort Detrick	MD	L	WS	Run 3	8/15/00	1.0	0
20	20--1	Fort Detrick	Unit 5	Fort Detrick	MD	L	WS	Run 1	8/13/02	0.793	-0.23227
20	20--1	Fort Detrick	Unit 5	Fort Detrick	MD	L	WS	Run 2	8/13/02	1.13	0.122383
20	20--1	Fort Detrick	Unit 5	Fort Detrick	MD	L	WS	Run 3	8/13/02	2.54	0.932681
20	20--1	Fort Detrick	Unit 5	Fort Detrick	MD	L	WS	Run 1	8/4/03-8/5/03	1.0	0
20	20--1	Fort Detrick	Unit 5	Fort Detrick	MD	L	WS	Run 2	8/4/03-8/5/03	0.29	-1.23787
20	20--1	Fort Detrick	Unit 5	Fort Detrick	MD	L	WS	Run 3	8/4/03-8/5/03	1.0	0
20	20--1	Fort Detrick	Unit 5	Fort Detrick	MD	L	WS	Run 1	8/14/06-8/15/06	0.53	-0.63488
20	20--1	Fort Detrick	Unit 5	Fort Detrick	MD	L	WS	Run 2	8/14/06-8/15/06	1.0	0
20	20--1	Fort Detrick	Unit 5	Fort Detrick	MD	L	WS	Run 3	8/14/06-8/15/06	1.0	0
1	1	Bristol-Myers Squibb Co.		Wallingford	CT	L	FF	Run 1	1/14/03-1/16/03	1.0	0
1	1	Bristol-Myers Squibb Co.		Wallingford	CT	L	FF	Run 2	1/14/03-1/16/03	1.0	0
1	1	Bristol-Myers Squibb Co.		Wallingford	CT	L	FF	Run 3	1/14/03-1/16/03	1.0	0
1	1	Bristol-Myers Squibb Co.		Wallingford	CT	L	FF	Run 1	12/9/04	1.0	0
1	1	Bristol-Myers Squibb Co.		Wallingford	CT	L	FF	Run 2	12/9/04	1.0	0
1	1	Bristol-Myers Squibb Co.		Wallingford	CT	L	FF	Run 3	12/9/04	0.9	-0.10536
130	130	Department of Veterans Affairs Medical Center		Miami	FL	L	WS	Run 1	5/7/08-5/8/08	1.0	0
130	130	Department of Veterans Affairs Medical Center		Miami	FL	L	WS	Run 2	5/7/08-5/8/08	1.0	0
130	130	Department of Veterans Affairs Medical Center		Miami	FL	L	WS	Run 3	5/7/08-5/8/08	1.0	0
36	36--2	Merck & Company, Inc.	Unit 5	West Point (Upper Gwynedd Township)	PA	L	DIFF	Run 1	8/2/01-8/3/01	1.20	0.182322
36	36--2	Merck & Company, Inc.	Unit 5	West Point (Upper Gwynedd Township)	PA	L	DIFF	Run 2	8/2/01-8/3/01	3.90	1.360977
36	36--2	Merck & Company, Inc.	Unit 5	West Point (Upper Gwynedd Township)	PA	L	DIFF	Run 3	8/2/01-8/3/01	3.30	1.193922
36	36--2	Merck & Company, Inc.	Unit 5	West Point (Upper Gwynedd Township)	PA	L	DIFF	Run 1	5/24/02	0.2	-1.60944
36	36--2	Merck & Company, Inc.	Unit 5	West Point (Upper Gwynedd Township)	PA	L	DIFF	Run 2	5/24/02	0.2	-1.60944
36	36--2	Merck & Company, Inc.	Unit 5	West Point (Upper Gwynedd Township)	PA	L	DIFF	Run 3	5/24/02	0.2	-1.60944
36	36--2	Merck & Company, Inc.	Unit 5	West Point (Upper Gwynedd Township)	PA	L	DIFF	Run 1	4/24/03-4/25/03	1.0	0
36	36--2	Merck & Company, Inc.	Unit 5	West Point (Upper Gwynedd Township)	PA	L	DIFF	Run 2	4/24/03-4/25/03	0.2	-1.60944
36	36--2	Merck & Company, Inc.	Unit 5	West Point (Upper Gwynedd Township)	PA	L	DIFF	Run 3	4/24/03-4/25/03	0.2	-1.60944
36	36--2	Merck & Company, Inc.	Unit 5	West Point (Upper Gwynedd Township)	PA	L	DIFF	Run 1	4/23/04	1.6	0.470004
36	36--2	Merck & Company, Inc.	Unit 5	West Point (Upper Gwynedd Township)	PA	L	DIFF	Run 2	4/23/04	0.7	-0.35667
36	36--2	Merck & Company, Inc.	Unit 5	West Point (Upper Gwynedd Township)	PA	L	DIFF	Run 3	4/23/04	0.1	-2.30259
20	20--2	Fort Detrick	Unit 6	Fort Detrick	MD	L	WS	Run 1	8/21/00-8/24/00	0.0421	-3.1672
20	20--2	Fort Detrick	Unit 6	Fort Detrick	MD	L	WS	Run 2	8/21/00-8/24/00	0.0458	-3.08294
20	20--2	Fort Detrick	Unit 6	Fort Detrick	MD	L	WS	Run 3	8/21/00-8/24/00	1.0	0
20	20--2	Fort Detrick	Unit 6	Fort Detrick	MD	L	WS	Run 1	8/14/02-8/15/02	4.05	1.398502
20	20--2	Fort Detrick	Unit 6	Fort Detrick	MD	L	WS	Run 2	8/14/02-8/15/02	1.0	0
20	20--2	Fort Detrick	Unit 6	Fort Detrick	MD	L	WS	Run 3	8/14/02-8/15/02	1.31	0.269286
20	20--2	Fort Detrick	Unit 6	Fort Detrick	MD	L	WS	Run 1	8/6/03	2.54	0.932164
20	20--2	Fort Detrick	Unit 6	Fort Detrick	MD	L	WS	Run 2	8/6/03	1.0	0
20	20--2	Fort Detrick	Unit 6	Fort Detrick	MD	L	WS	Run 3	8/6/03	1.0	0
20	20--2	Fort Detrick	Unit 6	Fort Detrick	MD	L	WS	Run 1	8/8/06	0.05	-2.99573
20	20--2	Fort Detrick	Unit 6	Fort Detrick	MD	L	WS	Run 2	8/8/06	1.0	0
20	20--2	Fort Detrick	Unit 6	Fort Detrick	MD	L	WS	Run 3	8/8/06	1.0	0

MEDIUM HMIWI (>200, ≤500 LB/HR)											
63	63	St. Jude Children's Research Hospital		Memphis	TN	M	DIFF	Run 1	10/24/02	1.0	0
63	63	St. Jude Children's Research Hospital		Memphis	TN	M	DIFF	Run 2	10/24/02	0.234	-1.45128
63	63	St. Jude Children's Research Hospital		Memphis	TN	M	DIFF	Run 3	10/24/02	0.332	-1.10351
63	63	St. Jude Children's Research Hospital		Memphis	TN	M	DIFF	Run 1	10/22/03	0.81	-0.21072
63	63	St. Jude Children's Research Hospital		Memphis	TN	M	DIFF	Run 2	10/22/03	1.0	0
63	63	St. Jude Children's Research Hospital		Memphis	TN	M	DIFF	Run 3	10/22/03	0.06	-2.81341
63	63	St. Jude Children's Research Hospital		Memphis	TN	M	DIFF	Run 1	9/23/04	1.12	0.113329
63	63	St. Jude Children's Research Hospital		Memphis	TN	M	DIFF	Run 2	9/23/04	0.61	-0.4943
63	63	St. Jude Children's Research Hospital		Memphis	TN	M	DIFF	Run 3	9/23/04	0.38	-0.96758
63	63	St. Jude Children's Research Hospital		Memphis	TN	M	DIFF	Run 1	9/19/07	1.21	0.19062
63	63	St. Jude Children's Research Hospital		Memphis	TN	M	DIFF	Run 2	9/19/07	0.47	-0.75502
63	63	St. Jude Children's Research Hospital		Memphis	TN	M	DIFF	Run 3	9/19/07	0.92	-0.08338
41	41	Thomas Memorial Hospital		South Charleston	WV	M	WS	Run 1	9/12/01	1.18	0.165301
41	41	Thomas Memorial Hospital		South Charleston	WV	M	WS	Run 2	9/12/01	0.584	-0.5378
41	41	Thomas Memorial Hospital		South Charleston	WV	M	WS	Run 3	9/12/01	0.584	-0.5378
41	41	Thomas Memorial Hospital		South Charleston	WV	M	WS	Run 1	10/2/02-10/3/02	1.0	0
41	41	Thomas Memorial Hospital		South Charleston	WV	M	WS	Run 2	10/2/02-10/3/02	1.0	0
41	41	Thomas Memorial Hospital		South Charleston	WV	M	WS	Run 3	10/2/02-10/3/02	1.0	0
41	41	Thomas Memorial Hospital		South Charleston	WV	M	WS	Run 1	9/1/03	1.0	0
41	41	Thomas Memorial Hospital		South Charleston	WV	M	WS	Run 2	9/1/03	1.0	0
41	41	Thomas Memorial Hospital		South Charleston	WV	M	WS	Run 3	9/1/03	1.0	0
41	41	Thomas Memorial Hospital		South Charleston	WV	M	WS	Run 1	11/28/06	1.0	0
41	41	Thomas Memorial Hospital		South Charleston	WV	M	WS	Run 2	11/28/06	1.0	0
41	41	Thomas Memorial Hospital		South Charleston	WV	M	WS	Run 3	11/28/06	1.0	0
30	30	Riddle Memorial Hospital		Media	PA	M	WS	Run 1	3/13/03	0.0854	-2.46098
30	30	Riddle Memorial Hospital		Media	PA	M	WS	Run 2	3/13/03	0.986	-0.01403
30	30	Riddle Memorial Hospital		Media	PA	M	WS	Run 3	3/13/03	0.515	-0.66309
30	30	Riddle Memorial Hospital		Media	PA	M	WS	Run 1	5/20/04	0.832	-0.18437
30	30	Riddle Memorial Hospital		Media	PA	M	WS	Run 2	5/20/04	1.46	0.380597
30	30	Riddle Memorial Hospital		Media	PA	M	WS	Run 3	5/20/04	3.75	1.320944
30	30	Riddle Memorial Hospital		Media	PA	M	WS	Run 1	5/19/05	1.9	0.641854
30	30	Riddle Memorial Hospital		Media	PA	M	WS	Run 2	5/19/05	1.5	0.405465

SMALL NON-RURAL HMIWI (≤200 LB/HR)											
86	86	Fairfield Medical Center		Lancaster	OH	S	WS	Run 1	11/5/02-11/6/02	0.278	-1.28013
86	86	Fairfield Medical Center		Lancaster	OH	S	WS	Run 2	11/5/02-11/6/02	7.45	2.00876
86	86	Fairfield Medical Center		Lancaster	OH	S	WS	Run 3	11/5/02-11/6/02	0.681	-0.3849
86	86	Fairfield Medical Center		Lancaster	OH	S	WS	Run 1	10/28/03	2.29	0.828552
86	86	Fairfield Medical Center		Lancaster	OH	S	WS	Run 2	10/28/03	1.05	0.04879
86	86	Fairfield Medical Center		Lancaster	OH	S	WS	Run 3	10/28/03	0.56	-0.57982
86	86	Fairfield Medical Center		Lancaster	OH	S	WS	Run 1	12/1/04	1.71	0.536493
86	86	Fairfield Medical Center		Lancaster	OH	S	WS	Run 2	12/1/04	2.12	0.751416
86	86	Fairfield Medical Center		Lancaster	OH	S	WS	Run 3	12/1/04	3.06	1.118415
86	86	Fairfield Medical Center		Lancaster	OH	S	WS	Run 1	11/29/07	3.35	1.20896
86	86	Fairfield Medical Center		Lancaster	OH	S	WS	Run 2	11/29/07	2.76	1.015231
86	86	Fairfield Medical Center		Lancaster	OH	S	WS	Run 3	11/29/07	1.93	0.65752
SMALL RURAL HMIWI (≤200 LB/HR)											
116	116	Yukon-Kuskokwim Delta Regional Hospital		Bethel	AK	SR	CC	Run 1	10/23/01	7.21	1.975109
116	116	Yukon-Kuskokwim Delta Regional Hospital		Bethel	AK	SR	CC	Run 2	10/23/01	5.89	1.773662
116	116	Yukon-Kuskokwim Delta Regional Hospital		Bethel	AK	SR	CC	Run 3	10/23/01	3.12	1.137964

Table 13. Pb MACT Floor Test Runs for Option 1A - Current Subcategories / Pollutant-by-Pollutant Ranking

FACID	UNITID	Facility name	Unit number	City	State abbr	Cate-gory	APCD code	Parameter	Pb test date	Pb mg/dscm	ln(Pb)
LARGE HMIWI (>500 LB/HR)											
125	125	East Carolina University, Health Sciences Campus, HSC Utility Plant		Greenville	NC	L	HEPA/CA/WS	Run 1	1/20/00-1/21/00	0.000361	-7.9274
125	125	East Carolina University, Health Sciences Campus, HSC Utility Plant		Greenville	NC	L	HEPA/CA/WS	Run 2	1/20/00-1/21/00	0.000256	-8.2695
125	125	East Carolina University, Health Sciences Campus, HSC Utility Plant		Greenville	NC	L	HEPA/CA/WS	Run 3	1/20/00-1/21/00	0.000272	-8.20865
36	36--1	Merck & Company, Inc.	Unit 2	West Point (Upper Gwynedd Township)	PA	L	DIFF	Run 1	10/24/01-10/26/01	0.00494	-5.31026
36	36--1	Merck & Company, Inc.	Unit 2	West Point (Upper Gwynedd Township)	PA	L	DIFF	Run 2	10/24/01-10/26/01	0.00180	-6.32121
36	36--1	Merck & Company, Inc.	Unit 2	West Point (Upper Gwynedd Township)	PA	L	DIFF	Run 3	10/24/01-10/26/01	0.000752	-7.19291
36	36--1	Merck & Company, Inc.	Unit 2	West Point (Upper Gwynedd Township)	PA	L	DIFF	Run 1	5/4/04-5/7/04	0.000311	-8.07502
36	36--1	Merck & Company, Inc.	Unit 2	West Point (Upper Gwynedd Township)	PA	L	DIFF	Run 2	5/4/04-5/7/04	0.000270	-8.21699
36	36--1	Merck & Company, Inc.	Unit 2	West Point (Upper Gwynedd Township)	PA	L	DIFF	Run 3	5/4/04-5/7/04	0.000169	-8.68361
36	36--1	Merck & Company, Inc.	Unit 2	West Point (Upper Gwynedd Township)	PA	L	DIFF	Run 1	4/25/06-5/3/06	0.00133	-6.62465
36	36--1	Merck & Company, Inc.	Unit 2	West Point (Upper Gwynedd Township)	PA	L	DIFF	Run 2	4/25/06-5/3/06	0.000320	-8.04604
36	36--1	Merck & Company, Inc.	Unit 2	West Point (Upper Gwynedd Township)	PA	L	DIFF	Run 3	4/25/06-5/3/06	0.000435	-7.74065
60	60--1	BMWNC, Inc.	Unit 1	Matthews	NC	L	DIFF	Run 1	7/24/01	0.00205	-6.18825
60	60--1	BMWNC, Inc.	Unit 1	Matthews	NC	L	DIFF	Run 2	7/24/01	0.00273	-5.90334
60	60--1	BMWNC, Inc.	Unit 1	Matthews	NC	L	DIFF	Run 3	7/24/01	0.00111	-6.80752
60	60--1	BMWNC, Inc.	Unit 1	Matthews	NC	L	DIFF	Run 1	9/24/03-9/25/03	0.00521	-5.25718
60	60--1	BMWNC, Inc.	Unit 1	Matthews	NC	L	DIFF	Run 2	9/24/03-9/25/03	0.00136	-6.60027
60	60--1	BMWNC, Inc.	Unit 1	Matthews	NC	L	DIFF	Run 3	9/24/03-9/25/03	0.00762	-4.87698
40	40	Charleston Area Medical Center, General Hospital		Charleston	WV	L	DIFF	Run 1	1/10/01-1/11/01	0.00322	-5.73954
40	40	Charleston Area Medical Center, General Hospital		Charleston	WV	L	DIFF	Run 2	1/10/01-1/11/01	0.00905	-4.70487
40	40	Charleston Area Medical Center, General Hospital		Charleston	WV	L	DIFF	Run 3	1/10/01-1/11/01	0.00204	-6.19696
40	40	Charleston Area Medical Center, General Hospital		Charleston	WV	L	DIFF	Run 1	2/7/06	0.00578	-5.15335
40	40	Charleston Area Medical Center, General Hospital		Charleston	WV	L	DIFF	Run 2	2/7/06	0.00495	-5.30837
40	40	Charleston Area Medical Center, General Hospital		Charleston	WV	L	DIFF	Run 3	2/7/06	0.00306	-5.78934
15	15--1	Curtis Bay Energy	Unit 1	Baltimore	MD	L	DIFF	Run 1	2/27/02	0.00454	-5.39557
15	15--1	Curtis Bay Energy	Unit 1	Baltimore	MD	L	DIFF	Run 2	2/27/02	0.00267	-5.92603
15	15--1	Curtis Bay Energy	Unit 1	Baltimore	MD	L	DIFF	Run 3	2/27/02	0.00271	-5.91063
15	15--1	Curtis Bay Energy	Unit 1	Baltimore	MD	L	DIFF	Run 1	2/18/04-2/19/04	0.0150	-4.19675
15	15--1	Curtis Bay Energy	Unit 1	Baltimore	MD	L	DIFF	Run 2	2/18/04-2/19/04	0.00242	-6.02487
15	15--1	Curtis Bay Energy	Unit 1	Baltimore	MD	L	DIFF	Run 3	2/18/04-2/19/04	0.00206	-6.183
15	15--1	Curtis Bay Energy	Unit 1	Baltimore	MD	L	DIFF	Run 1	2/23/06-2/24/06	0.00651	-5.03442
15	15--1	Curtis Bay Energy	Unit 1	Baltimore	MD	L	DIFF	Run 2	2/23/06-2/24/06	0.00417	-5.47984
15	15--1	Curtis Bay Energy	Unit 1	Baltimore	MD	L	DIFF	Run 3	2/23/06-2/24/06	0.00520	-5.2591

MEDIUM HMIWI (>200, ≤500 LB/HR)											
95	95	St. Joseph's Hospital		Marshfield	WI	M	DIFF	Run 1	7/14/00	0.00101	-6.90237
95	95	St. Joseph's Hospital		Marshfield	WI	M	DIFF	Run 2	7/14/00	0.000848	-7.0725
95	95	St. Joseph's Hospital		Marshfield	WI	M	DIFF	Run 3	7/14/00	0.00129	-6.65248
95	95	St. Joseph's Hospital		Marshfield	WI	M	DIFF	Run 1	8/17/04	0.00396	-5.5318
95	95	St. Joseph's Hospital		Marshfield	WI	M	DIFF	Run 2	8/17/04	0.00277	-5.8893
95	95	St. Joseph's Hospital		Marshfield	WI	M	DIFF	Run 3	8/17/04	0.00416	-5.48109
95	95	St. Joseph's Hospital		Marshfield	WI	M	DIFF	Run 1	8/15/06	0.00625	-5.07562
95	95	St. Joseph's Hospital		Marshfield	WI	M	DIFF	Run 2	8/15/06	0.00277	-5.8893
95	95	St. Joseph's Hospital		Marshfield	WI	M	DIFF	Run 3	8/15/06	0.0127	-4.36613
38	38	Wilkes-Barre General Hospital		Wilkes-Barre	PA	M	DIFF	Run 1	10/9/01-10/10/01	0.00536	-5.22917
38	38	Wilkes-Barre General Hospital		Wilkes-Barre	PA	M	DIFF	Run 2	10/9/01-10/10/01	0.00423	-5.46505
38	38	Wilkes-Barre General Hospital		Wilkes-Barre	PA	M	DIFF	Run 3	10/9/01-10/10/01	0.00216	-6.13842
38	38	Wilkes-Barre General Hospital		Wilkes-Barre	PA	M	DIFF	Run 1	9/10/02-9/11/02	0.0048	-5.33914
38	38	Wilkes-Barre General Hospital		Wilkes-Barre	PA	M	DIFF	Run 2	9/10/02-9/11/02	0.0038	-5.57275
38	38	Wilkes-Barre General Hospital		Wilkes-Barre	PA	M	DIFF	Run 3	9/10/02-9/11/02	0.0031	-5.77635
38	38	Wilkes-Barre General Hospital		Wilkes-Barre	PA	M	DIFF	Run 1	10/14/03-10/16/03	0.0024	-6.03229
38	38	Wilkes-Barre General Hospital		Wilkes-Barre	PA	M	DIFF	Run 2	10/14/03-10/16/03	0.0015	-6.50229
38	38	Wilkes-Barre General Hospital		Wilkes-Barre	PA	M	DIFF	Run 3	10/14/03-10/16/03	0.0021	-6.16582
38	38	Wilkes-Barre General Hospital		Wilkes-Barre	PA	M	DIFF	Run 1	9/14/04-9/15/04	0.0049	-5.31852
38	38	Wilkes-Barre General Hospital		Wilkes-Barre	PA	M	DIFF	Run 2	9/14/04-9/15/04	0.0021	-6.16582
38	38	Wilkes-Barre General Hospital		Wilkes-Barre	PA	M	DIFF	Run 3	9/14/04-9/15/04	0.0011	-6.81245
38	38	Wilkes-Barre General Hospital		Wilkes-Barre	PA	M	DIFF	Run 1	9/13/05-9/14/05	0.00395	-5.53477
38	38	Wilkes-Barre General Hospital		Wilkes-Barre	PA	M	DIFF	Run 2	9/13/05-9/14/05	0.00173	-6.35727
38	38	Wilkes-Barre General Hospital		Wilkes-Barre	PA	M	DIFF	Run 3	9/13/05-9/14/05	0.00334	-5.70087
38	38	Wilkes-Barre General Hospital		Wilkes-Barre	PA	M	DIFF	Run 1	9/19/06-9/20/06	0.0219	-3.82273
38	38	Wilkes-Barre General Hospital		Wilkes-Barre	PA	M	DIFF	Run 2	9/19/06-9/20/06	0.00381	-5.57031
38	38	Wilkes-Barre General Hospital		Wilkes-Barre	PA	M	DIFF	Run 3	9/19/06-9/20/06	0.00322	-5.73987
38	38	Wilkes-Barre General Hospital		Wilkes-Barre	PA	M	DIFF	Run 1	10/2/07-10/3/07	0.0039	-5.54678
38	38	Wilkes-Barre General Hospital		Wilkes-Barre	PA	M	DIFF	Run 2	10/2/07-10/3/07	0.0031	-5.77635
38	38	Wilkes-Barre General Hospital		Wilkes-Barre	PA	M	DIFF	Run 3	10/2/07-10/3/07	0.0028	-5.87814
63	63	St. Jude Children's Research Hospital		Memphis	TN	M	DIFF	Run 1	10/24/02	0.00912	-4.69763
63	63	St. Jude Children's Research Hospital		Memphis	TN	M	DIFF	Run 2	10/24/02	0.00392	-5.54206
63	63	St. Jude Children's Research Hospital		Memphis	TN	M	DIFF	Run 3	10/24/02	0.00151	-6.4963

SMALL NON-RURAL HMIWI (≤200 LB/HR)											
129	129	Centers for Disease Control and Prevention--Clifton, Building 18	Unit 3	Atlanta	GA	S	WS	Run 1	12/7/06-12/8/06	0.0569	-2.86611
129	129	Centers for Disease Control and Prevention--Clifton, Building 18	Unit 3	Atlanta	GA	S	WS	Run 2	12/7/06-12/8/06	0.0507	-2.98143
129	129	Centers for Disease Control and Prevention--Clifton, Building 18	Unit 3	Atlanta	GA	S	WS	Run 3	12/7/06-12/8/06	0.110	-2.20346
SMALL RURAL HMIWI (≤200 LB/HR)											
116	116	Yukon-Kuskokwim Delta Regional Hospital		Bethel	AK	SR	CC	Run 1	10/25/01	0.265	-1.32845
116	116	Yukon-Kuskokwim Delta Regional Hospital		Bethel	AK	SR	CC	Run 2	10/25/01	0.187	-1.67496
116	116	Yukon-Kuskokwim Delta Regional Hospital		Bethel	AK	SR	CC	Run 3	10/25/01	0.225	-1.48999

Table 14. Cd MACT Floor Test Runs for Option 1A - Current Subcategories / Pollutant-by-Pollutant Ranking

FACID	UNITID	Facility name	Unit number	City	State abbr	Cate-gory	APCD code	Parameter	Cd test date	Cd mg/dscm	ln(Cd)
LARGE HMIWI (>500 LB/HR)											
125	125	East Carolina University, Health Sciences Campus, HSC Utility Plant		Greenville	NC	L	HEPA/CA/WS	Run 1	1/20/00-1/21/00	0.000105	-9.15996
125	125	East Carolina University, Health Sciences Campus, HSC Utility Plant		Greenville	NC	L	HEPA/CA/WS	Run 2	1/20/00-1/21/00	0.000102	-9.18579
125	125	East Carolina University, Health Sciences Campus, HSC Utility Plant		Greenville	NC	L	HEPA/CA/WS	Run 3	1/20/00-1/21/00	0.000109	-9.12494
60	60--1	BMWNC, Inc.	Unit 1	Matthews	NC	L	DIFF	Run 1	7/24/01	0.000492	-7.61747
60	60--1	BMWNC, Inc.	Unit 1	Matthews	NC	L	DIFF	Run 2	7/24/01	0.000377	-7.88221
60	60--1	BMWNC, Inc.	Unit 1	Matthews	NC	L	DIFF	Run 3	7/24/01	0.000442	-7.72381
60	60--1	BMWNC, Inc.	Unit 1	Matthews	NC	L	DIFF	Run 1	9/24/03-9/25/03	0.000449	-7.70849
60	60--1	BMWNC, Inc.	Unit 1	Matthews	NC	L	DIFF	Run 2	9/24/03-9/25/03	0.000253	-8.28212
60	60--1	BMWNC, Inc.	Unit 1	Matthews	NC	L	DIFF	Run 3	9/24/03-9/25/03	0.00118	-6.74224
36	36--1	Merck & Company, Inc.	Unit 2	West Point (Upper Gwynedd Township)	PA	L	DIFF	Run 1	10/24/01-10/26/01	0.00649	-5.03784
36	36--1	Merck & Company, Inc.	Unit 2	West Point (Upper Gwynedd Township)	PA	L	DIFF	Run 2	10/24/01-10/26/01	0.000458	-7.6885
36	36--1	Merck & Company, Inc.	Unit 2	West Point (Upper Gwynedd Township)	PA	L	DIFF	Run 3	10/24/01-10/26/01	0.000270	-8.21601
36	36--1	Merck & Company, Inc.	Unit 2	West Point (Upper Gwynedd Township)	PA	L	DIFF	Run 1	5/4/04-5/7/04	0.000117	-9.05585
36	36--1	Merck & Company, Inc.	Unit 2	West Point (Upper Gwynedd Township)	PA	L	DIFF	Run 2	5/4/04-5/7/04	0.0000732	-9.52194
36	36--1	Merck & Company, Inc.	Unit 2	West Point (Upper Gwynedd Township)	PA	L	DIFF	Run 3	5/4/04-5/7/04	0.000183	-8.60565
36	36--1	Merck & Company, Inc.	Unit 2	West Point (Upper Gwynedd Township)	PA	L	DIFF	Run 1	4/25/06-5/3/06	0.0000229	-10.6851
36	36--1	Merck & Company, Inc.	Unit 2	West Point (Upper Gwynedd Township)	PA	L	DIFF	Run 2	4/25/06-5/3/06	0.0000458	-9.99195
36	36--1	Merck & Company, Inc.	Unit 2	West Point (Upper Gwynedd Township)	PA	L	DIFF	Run 3	4/25/06-5/3/06	0.0000183	-10.9082
15	15--1	Curtis Bay Energy	Unit 1	Baltimore	MD	L	DIFF	Run 1	2/27/02	0.00135	-6.60802
15	15--1	Curtis Bay Energy	Unit 1	Baltimore	MD	L	DIFF	Run 2	2/27/02	0.000657	-7.32858
15	15--1	Curtis Bay Energy	Unit 1	Baltimore	MD	L	DIFF	Run 3	2/27/02	0.000546	-7.51204
15	15--1	Curtis Bay Energy	Unit 1	Baltimore	MD	L	DIFF	Run 1	2/18/04-2/19/04	0.00148	-6.51534
15	15--1	Curtis Bay Energy	Unit 1	Baltimore	MD	L	DIFF	Run 2	2/18/04-2/19/04	0.00112	-6.78999
15	15--1	Curtis Bay Energy	Unit 1	Baltimore	MD	L	DIFF	Run 3	2/18/04-2/19/04	0.000497	-7.60672
15	15--1	Curtis Bay Energy	Unit 1	Baltimore	MD	L	DIFF	Run 1	2/23/06-2/24/06	0.000674	-7.30228
15	15--1	Curtis Bay Energy	Unit 1	Baltimore	MD	L	DIFF	Run 2	2/23/06-2/24/06	0.000820	-7.10621
15	15--1	Curtis Bay Energy	Unit 1	Baltimore	MD	L	DIFF	Run 3	2/23/06-2/24/06	0.000830	-7.09408
120	120--2	Waste Management Resource Recovery and Recycling Center	Unit 2	Anahuac	TX	L	DIFF	Run 1	9/20/02	0.000193	-8.5504
120	120--2	Waste Management Resource Recovery and Recycling Center	Unit 2	Anahuac	TX	L	DIFF	Run 2	9/20/02	0.000203	-8.50258
120	120--2	Waste Management Resource Recovery and Recycling Center	Unit 2	Anahuac	TX	L	DIFF	Run 3	9/20/02	0.000117	-9.05212
120	120--2	Waste Management Resource Recovery and Recycling Center	Unit 2	Anahuac	TX	L	DIFF	Run 1	10/15/02-10/16/02	0.00101	-6.90195
120	120--2	Waste Management Resource Recovery and Recycling Center	Unit 2	Anahuac	TX	L	DIFF	Run 2	10/15/02-10/16/02	0.00124	-6.68931
120	120--2	Waste Management Resource Recovery and Recycling Center	Unit 2	Anahuac	TX	L	DIFF	Run 3	10/15/02-10/16/02	0.00130	-6.64871
120	120--2	Waste Management Resource Recovery and Recycling Center	Unit 2	Anahuac	TX	L	DIFF	Run 1	1/17/03	0.0000979	-9.23186
120	120--2	Waste Management Resource Recovery and Recycling Center	Unit 2	Anahuac	TX	L	DIFF	Run 2	1/17/03	0.000105	-9.16324
120	120--2	Waste Management Resource Recovery and Recycling Center	Unit 2	Anahuac	TX	L	DIFF	Run 3	1/17/03	0.0000759	-9.48562
120	120--2	Waste Management Resource Recovery and Recycling Center	Unit 2	Anahuac	TX	L	DIFF	Run 1	11/10/04	0.001	-6.90776
120	120--2	Waste Management Resource Recovery and Recycling Center	Unit 2	Anahuac	TX	L	DIFF	Run 2	11/10/04	0.001	-6.90776
120	120--2	Waste Management Resource Recovery and Recycling Center	Unit 2	Anahuac	TX	L	DIFF	Run 3	11/10/04	0.001	-6.90776
120	120--2	Waste Management Resource Recovery and Recycling Center	Unit 2	Anahuac	TX	L	DIFF	Run 1	12/4/06-12/9/06	0.002	-6.21461
120	120--2	Waste Management Resource Recovery and Recycling Center	Unit 2	Anahuac	TX	L	DIFF	Run 2	12/4/06-12/9/06	0.002	-6.21461
120	120--2	Waste Management Resource Recovery and Recycling Center	Unit 2	Anahuac	TX	L	DIFF	Run 3	12/4/06-12/9/06	0.002	-6.21461

MEDIUM HMIWI (>200, ≤500 LB/HR)											
38	38	Wilkes-Barre General Hospital		Wilkes-Barre	PA	M	DIFF	Run 1	10/9/01-10/10/01	0.000326	-8.02819
38	38	Wilkes-Barre General Hospital		Wilkes-Barre	PA	M	DIFF	Run 2	10/9/01-10/10/01	0.000368	-7.90828
38	38	Wilkes-Barre General Hospital		Wilkes-Barre	PA	M	DIFF	Run 3	10/9/01-10/10/01	0.000267	-8.2272
38	38	Wilkes-Barre General Hospital		Wilkes-Barre	PA	M	DIFF	Run 1	9/10/02-9/11/02	0.00020	-8.51719
38	38	Wilkes-Barre General Hospital		Wilkes-Barre	PA	M	DIFF	Run 2	9/10/02-9/11/02	0.00019	-8.56849
38	38	Wilkes-Barre General Hospital		Wilkes-Barre	PA	M	DIFF	Run 3	9/10/02-9/11/02	0.00026	-8.25483
38	38	Wilkes-Barre General Hospital		Wilkes-Barre	PA	M	DIFF	Run 1	10/14/03-10/16/03	0.00015	-8.80488
38	38	Wilkes-Barre General Hospital		Wilkes-Barre	PA	M	DIFF	Run 2	10/14/03-10/16/03	0.00006	-9.72117
38	38	Wilkes-Barre General Hospital		Wilkes-Barre	PA	M	DIFF	Run 3	10/14/03-10/16/03	0.00013	-8.94798
38	38	Wilkes-Barre General Hospital		Wilkes-Barre	PA	M	DIFF	Run 1	9/14/04-9/15/04	0.00469	-5.36232
38	38	Wilkes-Barre General Hospital		Wilkes-Barre	PA	M	DIFF	Run 2	9/14/04-9/15/04	0.00642	-5.04834
38	38	Wilkes-Barre General Hospital		Wilkes-Barre	PA	M	DIFF	Run 3	9/14/04-9/15/04	0.00792	-4.83836
38	38	Wilkes-Barre General Hospital		Wilkes-Barre	PA	M	DIFF	Run 1	9/13/05-9/14/05	0.0000951	-9.26046
38	38	Wilkes-Barre General Hospital		Wilkes-Barre	PA	M	DIFF	Run 2	9/13/05-9/14/05	0.0000559	-9.79126
38	38	Wilkes-Barre General Hospital		Wilkes-Barre	PA	M	DIFF	Run 3	9/13/05-9/14/05	0.0000557	-9.79522
38	38	Wilkes-Barre General Hospital		Wilkes-Barre	PA	M	DIFF	Run 1	9/19/06-9/20/06	0.000299	-8.11461
38	38	Wilkes-Barre General Hospital		Wilkes-Barre	PA	M	DIFF	Run 2	9/19/06-9/20/06	0.000158	-8.75552
38	38	Wilkes-Barre General Hospital		Wilkes-Barre	PA	M	DIFF	Run 3	9/19/06-9/20/06	0.000200	-8.51566
38	38	Wilkes-Barre General Hospital		Wilkes-Barre	PA	M	DIFF	Run 1	10/2/07-10/3/07	0.00018	-8.62255
38	38	Wilkes-Barre General Hospital		Wilkes-Barre	PA	M	DIFF	Run 2	10/2/07-10/3/07	0.00016	-8.74034
38	38	Wilkes-Barre General Hospital		Wilkes-Barre	PA	M	DIFF	Run 3	10/2/07-10/3/07	0.00014	-8.87387
95	95	St. Joseph's Hospital		Marshfield	WI	M	DIFF	Run 1	7/14/00	0.000321	-8.0434
95	95	St. Joseph's Hospital		Marshfield	WI	M	DIFF	Run 2	7/14/00	0.000339	-7.98879
95	95	St. Joseph's Hospital		Marshfield	WI	M	DIFF	Run 3	7/14/00	0.000831	-7.09276
95	95	St. Joseph's Hospital		Marshfield	WI	M	DIFF	Run 1	8/17/04	0.00139	-6.5808
95	95	St. Joseph's Hospital		Marshfield	WI	M	DIFF	Run 2	8/17/04	0.00236	-6.05036
95	95	St. Joseph's Hospital		Marshfield	WI	M	DIFF	Run 3	8/17/04	0.00288	-5.84881
95	95	St. Joseph's Hospital		Marshfield	WI	M	DIFF	Run 1	8/15/06	0.000291	-8.14349
95	95	St. Joseph's Hospital		Marshfield	WI	M	DIFF	Run 2	8/15/06	0.00284	-5.86481
95	95	St. Joseph's Hospital		Marshfield	WI	M	DIFF	Run 3	8/15/06	0.000281	-8.17549
63	63	St. Jude Children's Research Hospital		Memphis	TN	M	DIFF	Run 1	10/24/02	0.00109	-6.81917
63	63	St. Jude Children's Research Hospital		Memphis	TN	M	DIFF	Run 2	10/24/02	0.00223	-6.10533
63	63	St. Jude Children's Research Hospital		Memphis	TN	M	DIFF	Run 3	10/24/02	0.00123	-6.6981

SMALL NON-RURAL HMIWI (≤200 LB/HR)											
86	86	Fairfield Medical Center		Lancaster	OH	S	WS	Run 1	11/6/02-11/7/02	0.00118	-6.7413
86	86	Fairfield Medical Center		Lancaster	OH	S	WS	Run 2	11/6/02-11/7/02	0.00147	-6.52168
86	86	Fairfield Medical Center		Lancaster	OH	S	WS	Run 3	11/6/02-11/7/02	0.00158	-6.45044
86	86	Fairfield Medical Center		Lancaster	OH	S	WS	Run 1	10/28/03	0.0113	-4.48295
86	86	Fairfield Medical Center		Lancaster	OH	S	WS	Run 2	10/28/03	0.0036	-5.62682
86	86	Fairfield Medical Center		Lancaster	OH	S	WS	Run 3	10/28/03	0.0024	-6.03229
86	86	Fairfield Medical Center		Lancaster	OH	S	WS	Run 1	12/1/04	0.0012	-6.72543
86	86	Fairfield Medical Center		Lancaster	OH	S	WS	Run 2	12/1/04	0.0014	-6.57128
86	86	Fairfield Medical Center		Lancaster	OH	S	WS	Run 3	12/1/04	0.0006	-7.41858
86	86	Fairfield Medical Center		Lancaster	OH	S	WS	Run 1	11/29/07	0.000567	-7.47515
86	86	Fairfield Medical Center		Lancaster	OH	S	WS	Run 2	11/29/07	0.00313	-5.76672
86	86	Fairfield Medical Center		Lancaster	OH	S	WS	Run 3	11/29/07	0.00225	-6.09683
SMALL RURAL HMIWI (≤200 LB/HR)											
116	116	Yukon-Kuskokwim Delta Regional Hospital		Bethel	AK	SR	CC	Run 1	10/25/01	0.0399	-3.22143
116	116	Yukon-Kuskokwim Delta Regional Hospital		Bethel	AK	SR	CC	Run 2	10/25/01	0.0277	-3.58601
116	116	Yukon-Kuskokwim Delta Regional Hospital		Bethel	AK	SR	CC	Run 3	10/25/01	0.0463	-3.07364

Table 15. Hg MACT Floor Test Runs for Option 1A - Current Subcategories / Pollutant-by-Pollutant Ranking

FACID	UNITID	Facility name	Unit number	City	State abbr	Cate-gory	APCD code	Parameter	Hg test date	Hg mg/dscm	ln(Hg)
LARGE HMIWI (>500 LB/HR)											
1	1	Bristol-Myers Squibb Co.		Wallingford	CT	L	FF	Run 1	1/14/03-1/16/03	0.000658	-7.32664
1	1	Bristol-Myers Squibb Co.		Wallingford	CT	L	FF	Run 2	1/14/03-1/16/03	0.000781	-7.15549
1	1	Bristol-Myers Squibb Co.		Wallingford	CT	L	FF	Run 3	1/14/03-1/16/03	0.000646	-7.34484
54	54	Bayfront Medical Center		St. Petersburg	FL	L	WS	Run 1	11/7/00	0.000366	-7.91299
54	54	Bayfront Medical Center		St. Petersburg	FL	L	WS	Run 2	11/7/00	0.000610	-7.40219
54	54	Bayfront Medical Center		St. Petersburg	FL	L	WS	Run 3	11/7/00	0.00129	-6.65492
54	54	Bayfront Medical Center		St. Petersburg	FL	L	WS	Run 1	9/20/05-9/22/05	0.0016	-6.43775
54	54	Bayfront Medical Center		St. Petersburg	FL	L	WS	Run 2	9/20/05-9/22/05	0.0016	-6.43775
54	54	Bayfront Medical Center		St. Petersburg	FL	L	WS	Run 3	9/20/05-9/22/05	0.0022	-6.1193
125	125	East Carolina University, Health Sciences Campus, HSC Utility Plant		Greenville	NC	L	HEPA/CA/ WS	Run 1	1/20/00-1/21/00	0.00163	-6.41912
125	125	East Carolina University, Health Sciences Campus, HSC Utility Plant		Greenville	NC	L	HEPA/CA/ WS	Run 2	1/20/00-1/21/00	0.00159	-6.44495
125	125	East Carolina University, Health Sciences Campus, HSC Utility Plant		Greenville	NC	L	HEPA/CA/ WS	Run 3	1/20/00-1/21/00	0.00169	-6.3841
51	51	Lakeland Regional Medical Center		Lakeland	FL	L	DIFF	Run 1	8/29/00	0.00204	-6.1954
51	51	Lakeland Regional Medical Center		Lakeland	FL	L	DIFF	Run 2	8/29/00	0.00174	-6.35192
51	51	Lakeland Regional Medical Center		Lakeland	FL	L	DIFF	Run 3	8/29/00	0.00105	-6.85607
51	51	Lakeland Regional Medical Center		Lakeland	FL	L	DIFF	Run 1	8/8/05	0.0019	-6.2659
51	51	Lakeland Regional Medical Center		Lakeland	FL	L	DIFF	Run 2	8/8/05	0.0029	-5.84304
51	51	Lakeland Regional Medical Center		Lakeland	FL	L	DIFF	Run 3	8/8/05	0.005	-5.29832
36	36--1	Merck & Company, Inc.	Unit 2	West Point (Upper Gwynedd Township)	PA	L	DIFF	Run 1	10/24/01-10/26/01	0.000105	-9.16344
36	36--1	Merck & Company, Inc.	Unit 2	West Point (Upper Gwynedd Township)	PA	L	DIFF	Run 2	10/24/01-10/26/01	0.00154	-6.4781
36	36--1	Merck & Company, Inc.	Unit 2	West Point (Upper Gwynedd Township)	PA	L	DIFF	Run 3	10/24/01-10/26/01	0.000290	-8.14581
36	36--1	Merck & Company, Inc.	Unit 2	West Point (Upper Gwynedd Township)	PA	L	DIFF	Run 1	5/4/04-5/7/04	0.00277	-5.8893
36	36--1	Merck & Company, Inc.	Unit 2	West Point (Upper Gwynedd Township)	PA	L	DIFF	Run 2	5/4/04-5/7/04	0.00336	-5.69466
36	36--1	Merck & Company, Inc.	Unit 2	West Point (Upper Gwynedd Township)	PA	L	DIFF	Run 3	5/4/04-5/7/04	0.000195	-8.54503
36	36--1	Merck & Company, Inc.	Unit 2	West Point (Upper Gwynedd Township)	PA	L	DIFF	Run 1	4/25/06-5/3/06	0.00412	-5.49214
36	36--1	Merck & Company, Inc.	Unit 2	West Point (Upper Gwynedd Township)	PA	L	DIFF	Run 2	4/25/06-5/3/06	0.0124	-4.39352
36	36--1	Merck & Company, Inc.	Unit 2	West Point (Upper Gwynedd Township)	PA	L	DIFF	Run 3	4/25/06-5/3/06	0.00275	-5.8976

MEDIUM HMIWI (>200, ≤500 LB/HR)											
21	21	Washington County Hospital		Hagerstown	MD	M	WS	Run 1	8/13/03-8/14/03	0.000614	-7.39597
21	21	Washington County Hospital		Hagerstown	MD	M	WS	Run 2	8/13/03-8/14/03	0.000623	-7.38108
21	21	Washington County Hospital		Hagerstown	MD	M	WS	Run 3	8/13/03-8/14/03	0.00127	-6.66848
34	34	Pennsylvania State University, Animal Diagnostic Lab Incinerator		State College	PA	M	WS	Run 1	4/12/00	0.000882	-7.03321
34	34	Pennsylvania State University, Animal Diagnostic Lab Incinerator		State College	PA	M	WS	Run 2	4/12/00	0.000745	-7.20254
34	34	Pennsylvania State University, Animal Diagnostic Lab Incinerator		State College	PA	M	WS	Run 3	4/12/00	0.000921	-6.99006
34	34	Pennsylvania State University, Animal Diagnostic Lab Incinerator		State College	PA	M	WS	Run 1	3/15/01-3/16/01	0.000780	-7.15643
34	34	Pennsylvania State University, Animal Diagnostic Lab Incinerator		State College	PA	M	WS	Run 2	3/15/01-3/16/01	0.000939	-6.97094
34	34	Pennsylvania State University, Animal Diagnostic Lab Incinerator		State College	PA	M	WS	Run 3	3/15/01-3/16/01	0.00980	-4.62534
34	34	Pennsylvania State University, Animal Diagnostic Lab Incinerator		State College	PA	M	WS	Run 1	4/16/02-4/18/02	0.000277	-8.19189
34	34	Pennsylvania State University, Animal Diagnostic Lab Incinerator		State College	PA	M	WS	Run 2	4/16/02-4/18/02	0.000771	-7.1676
34	34	Pennsylvania State University, Animal Diagnostic Lab Incinerator		State College	PA	M	WS	Run 3	4/16/02-4/18/02	0.000252	-8.2872
34	34	Pennsylvania State University, Animal Diagnostic Lab Incinerator		State College	PA	M	WS	Run 1	4/23/03-4/24/03	0.00165	-6.40427
34	34	Pennsylvania State University, Animal Diagnostic Lab Incinerator		State College	PA	M	WS	Run 2	4/23/03-4/24/03	0.0000252	-10.5898
34	34	Pennsylvania State University, Animal Diagnostic Lab Incinerator		State College	PA	M	WS	Run 3	4/23/03-4/24/03	0.0000229	-10.6851
34	34	Pennsylvania State University, Animal Diagnostic Lab Incinerator		State College	PA	M	WS	Run 1	4/13/04-4/14/04	0.000101	-9.20032
34	34	Pennsylvania State University, Animal Diagnostic Lab Incinerator		State College	PA	M	WS	Run 2	4/13/04-4/14/04	0.00103	-6.87659
34	34	Pennsylvania State University, Animal Diagnostic Lab Incinerator		State College	PA	M	WS	Run 3	4/13/04-4/14/04	0.000372	-7.8975
82	82	Good Samaritan Hospital		Vincennes	IN	M	WS	Run 1	1/17/02	0.00192	-6.25538
82	82	Good Samaritan Hospital		Vincennes	IN	M	WS	Run 2	1/17/02	0.00318	-5.75131
82	82	Good Samaritan Hospital		Vincennes	IN	M	WS	Run 3	1/17/02	0.00242	-6.02507

SMALL NON-RURAL HMIWI (≤200 LB/HR)												
129	129	Centers for Disease Control and Prevention--Clifton, Building 18	Unit 3	Atlanta	GA	S	WS	Run 1	12/7/06-12/8/06	0.00131	-6.63773
129	129	Centers for Disease Control and Prevention--Clifton, Building 18	Unit 3	Atlanta	GA	S	WS	Run 2	12/7/06-12/8/06	0.00332	-5.70779
129	129	Centers for Disease Control and Prevention--Clifton, Building 18	Unit 3	Atlanta	GA	S	WS	Run 3	12/7/06-12/8/06	0.00414	-5.48706
SMALL RURAL HMIWI (≤200 LB/HR)												
115	115	Kona Community Hospital		Kealakekua	HI	SR	CC	Run 1	1/9/02-1/11/02	0.00269	-5.91711
115	115	Kona Community Hospital		Kealakekua	HI	SR	CC	Run 2	1/9/02-1/11/02	0.00136	-6.60389
115	115	Kona Community Hospital		Kealakekua	HI	SR	CC	Run 3	1/9/02-1/11/02	0.00119	-6.73197
115	115	Kona Community Hospital		Kealakekua	HI	SR	CC	Run 4	1/9/02-1/11/02	0.00106	-6.8493

Table 16. PM MACT Floor Test Runs for Option 1A - Current Subcategories / Pollutant-by-Pollutant Ranking

FACID	UNITID	Facility name	Unit number	City	State abbr	Cate-gory	APCD code	Parameter	PM test date	PM gr/dscf	ln(PM)
LARGE HMIWI (>500 LB/HR)											
40	40	Charleston Area Medical Center, General Hospital		Charleston	WV	L	DIFF	Run 1	1/10/01-1/11/01	0.00132	-6.63077
40	40	Charleston Area Medical Center, General Hospital		Charleston	WV	L	DIFF	Run 2	1/10/01-1/11/01	0.000975	-6.9333
40	40	Charleston Area Medical Center, General Hospital		Charleston	WV	L	DIFF	Run 3	1/10/01-1/11/01	0.000362	-7.92329
40	40	Charleston Area Medical Center, General Hospital		Charleston	WV	L	DIFF	Run 1	11/21/05-11/22/05	0.000297	-8.12178
40	40	Charleston Area Medical Center, General Hospital		Charleston	WV	L	DIFF	Run 2	11/21/05-11/22/05	0.000303	-8.10178
40	40	Charleston Area Medical Center, General Hospital		Charleston	WV	L	DIFF	Run 3	11/21/05-11/22/05	0.000714	-7.24463
40	40	Charleston Area Medical Center, General Hospital		Charleston	WV	L	DIFF	Run 1	11/2/06	0.000282	-8.1736
40	40	Charleston Area Medical Center, General Hospital		Charleston	WV	L	DIFF	Run 2	11/2/06	0.00265	-5.9332
40	40	Charleston Area Medical Center, General Hospital		Charleston	WV	L	DIFF	Run 3	11/2/06	0.000578	-7.45594
40	40	Charleston Area Medical Center, General Hospital		Charleston	WV	L	DIFF	Run 1	11/14/07	0.00414	-5.48706
40	40	Charleston Area Medical Center, General Hospital		Charleston	WV	L	DIFF	Run 2	11/14/07	0.000795	-7.13717
40	40	Charleston Area Medical Center, General Hospital		Charleston	WV	L	DIFF	Run 3	11/14/07	0.000308	-8.08541
55	55	St. Joseph's Hospital		Tampa	FL	L	DIFF/WS	Run 1	8/6/02	0.000415	-7.7875
55	55	St. Joseph's Hospital		Tampa	FL	L	DIFF/WS	Run 2	8/6/02	0.000378	-7.88193
55	55	St. Joseph's Hospital		Tampa	FL	L	DIFF/WS	Run 3	8/6/02	0.000511	-7.57986
55	55	St. Joseph's Hospital		Tampa	FL	L	DIFF/WS	Run 1	7/17/03	0.0009	-7.01312
55	55	St. Joseph's Hospital		Tampa	FL	L	DIFF/WS	Run 2	7/17/03	0.0004	-7.82405
55	55	St. Joseph's Hospital		Tampa	FL	L	DIFF/WS	Run 3	7/17/03	0.0004	-7.82405
55	55	St. Joseph's Hospital		Tampa	FL	L	DIFF/WS	Run 1	7/16/04	0.0011	-6.81245
55	55	St. Joseph's Hospital		Tampa	FL	L	DIFF/WS	Run 2	7/16/04	0.0018	-6.31997
55	55	St. Joseph's Hospital		Tampa	FL	L	DIFF/WS	Run 3	7/16/04	0.003	-5.80914
55	55	St. Joseph's Hospital		Tampa	FL	L	DIFF/WS	Run 1	7/24/06	0.0019	-6.2659
55	55	St. Joseph's Hospital		Tampa	FL	L	DIFF/WS	Run 2	7/24/06	0.0022	-6.1193
55	55	St. Joseph's Hospital		Tampa	FL	L	DIFF/WS	Run 3	7/24/06	0.0003	-8.11173
36	36--1	Merck & Company, Inc.	Unit 2	West Point (Upper Gwynedd Township)	PA	L	DIFF	Run 1	10/24/01-10/26/01	0.00236	-6.04784
36	36--1	Merck & Company, Inc.	Unit 2	West Point (Upper Gwynedd Township)	PA	L	DIFF	Run 2	10/24/01-10/26/01	0.00583	-5.14475
36	36--1	Merck & Company, Inc.	Unit 2	West Point (Upper Gwynedd Township)	PA	L	DIFF	Run 3	10/24/01-10/26/01	0.00164	-6.4116
36	36--1	Merck & Company, Inc.	Unit 2	West Point (Upper Gwynedd Township)	PA	L	DIFF	Run 1	5/4/04-5/7/04	0.0008	-7.1309
36	36--1	Merck & Company, Inc.	Unit 2	West Point (Upper Gwynedd Township)	PA	L	DIFF	Run 2	5/4/04-5/7/04	0.0001	-9.21034
36	36--1	Merck & Company, Inc.	Unit 2	West Point (Upper Gwynedd Township)	PA	L	DIFF	Run 3	5/4/04-5/7/04	0.0001	-9.21034
36	36--1	Merck & Company, Inc.	Unit 2	West Point (Upper Gwynedd Township)	PA	L	DIFF	Run 1	4/25/06-5/3/06	0.0017	-6.37713
36	36--1	Merck & Company, Inc.	Unit 2	West Point (Upper Gwynedd Township)	PA	L	DIFF	Run 2	4/25/06-5/3/06	0.0010	-6.90776
36	36--1	Merck & Company, Inc.	Unit 2	West Point (Upper Gwynedd Township)	PA	L	DIFF	Run 3	4/25/06-5/3/06	0.0005	-7.6009
29	29	Hamot Medical Center		Erie	PA	L	DIFF/WS	Run 1	2/15/02	0.00389	-5.54872
29	29	Hamot Medical Center		Erie	PA	L	DIFF/WS	Run 2	2/15/02	0.00214	-6.14727
29	29	Hamot Medical Center		Erie	PA	L	DIFF/WS	Run 3	2/15/02	0.00201	-6.20726
29	29	Hamot Medical Center		Erie	PA	L	DIFF/WS	Run 4	2/15/02	0.00290	-5.84425
29	29	Hamot Medical Center		Erie	PA	L	DIFF/WS	Run 1	2/13/03	0.00048	-7.64172
29	29	Hamot Medical Center		Erie	PA	L	DIFF/WS	Run 2	2/13/03	0.00019	-8.56849
29	29	Hamot Medical Center		Erie	PA	L	DIFF/WS	Run 3	2/13/03	0.00019	-8.56849
29	29	Hamot Medical Center		Erie	PA	L	DIFF/WS	Run 1	2/10/04-2/12/04	0.00135	-6.60765
29	29	Hamot Medical Center		Erie	PA	L	DIFF/WS	Run 2	2/10/04-2/12/04	0.00016	-8.75926
29	29	Hamot Medical Center		Erie	PA	L	DIFF/WS	Run 3	2/10/04-2/12/04	0.00048	-7.6459
29	29	Hamot Medical Center		Erie	PA	L	DIFF/WS	Run 1	2/9/06	0.00387	-5.55492
29	29	Hamot Medical Center		Erie	PA	L	DIFF/WS	Run 2	2/9/06	0.00396	-5.53035
29	29	Hamot Medical Center		Erie	PA	L	DIFF/WS	Run 3	2/9/06	0.00195	-6.23913

1	1	Bristol-Myers Squibb Co.		Wallingford	CT	L	FF	Run 1	1/14/03-1/16/03	0.00460	-5.38209
1	1	Bristol-Myers Squibb Co.		Wallingford	CT	L	FF	Run 2	1/14/03-1/16/03	0.00107	-6.83895
1	1	Bristol-Myers Squibb Co.		Wallingford	CT	L	FF	Run 3	1/14/03-1/16/03	0.00217	-6.13379
1	1	Bristol-Myers Squibb Co.		Wallingford	CT	L	FF	Run 1	12/9/04	0.00120	-6.72399
1	1	Bristol-Myers Squibb Co.		Wallingford	CT	L	FF	Run 2	12/9/04	0.00125	-6.68477
1	1	Bristol-Myers Squibb Co.		Wallingford	CT	L	FF	Run 3	12/9/04	0.000533	-7.53674
MEDIUM HMIWI (>200, ≤500 LB/HR)											
95	95	St. Joseph's Hospital		Marshfield	WI	M	DIFF	Run 1	7/12/00	0.000386	-7.85849
95	95	St. Joseph's Hospital		Marshfield	WI	M	DIFF	Run 2	7/12/00	0.000554	-7.49795
95	95	St. Joseph's Hospital		Marshfield	WI	M	DIFF	Run 3	7/12/00	0.000558	-7.49145
95	95	St. Joseph's Hospital		Marshfield	WI	M	DIFF	Run 1	8/18/04	0.006	-5.116
95	95	St. Joseph's Hospital		Marshfield	WI	M	DIFF	Run 2	8/18/04	0.003	-5.80914
95	95	St. Joseph's Hospital		Marshfield	WI	M	DIFF	Run 3	8/18/04	0.004	-5.52146
95	95	St. Joseph's Hospital		Marshfield	WI	M	DIFF	Run 1	8/15/06	0.004	-5.52146
95	95	St. Joseph's Hospital		Marshfield	WI	M	DIFF	Run 2	8/15/06	0.006	-5.116
95	95	St. Joseph's Hospital		Marshfield	WI	M	DIFF	Run 3	8/15/06	0.002	-6.21461
111	111	Wyoming Medical Center		Casper	WY	M	WS	Run 1	12/4/01	0.00407	-5.50379
111	111	Wyoming Medical Center		Casper	WY	M	WS	Run 2	12/4/01	0.00481	-5.33656
111	111	Wyoming Medical Center		Casper	WY	M	WS	Run 3	12/4/01	0.00407	-5.50441
111	111	Wyoming Medical Center		Casper	WY	M	WS	Run 1	11/18/03	0.0095	-4.65646
111	111	Wyoming Medical Center		Casper	WY	M	WS	Run 2	11/18/03	0.0033	-5.71383
111	111	Wyoming Medical Center		Casper	WY	M	WS	Run 3	11/18/03	0.0035	-5.65499
111	111	Wyoming Medical Center		Casper	WY	M	WS	Run 1	11/23/04	0.0006	-7.41858
111	111	Wyoming Medical Center		Casper	WY	M	WS	Run 2	11/23/04	0.0019	-6.2659
111	111	Wyoming Medical Center		Casper	WY	M	WS	Run 3	11/23/04	0.0025	-5.99146
111	111	Wyoming Medical Center		Casper	WY	M	WS	Run 1	11/22/05	0.0026	-5.95224
111	111	Wyoming Medical Center		Casper	WY	M	WS	Run 2	11/22/05	0.0029	-5.84304
111	111	Wyoming Medical Center		Casper	WY	M	WS	Run 3	11/22/05	0.0041	-5.49677
111	111	Wyoming Medical Center		Casper	WY	M	WS	Run 1	11/28/06	0.0023	-6.07485
111	111	Wyoming Medical Center		Casper	WY	M	WS	Run 2	11/28/06	0.0039	-5.54678
111	111	Wyoming Medical Center		Casper	WY	M	WS	Run 3	11/28/06	0.0028	-5.87814
111	111	Wyoming Medical Center		Casper	WY	M	WS	Run 1	11/21/07	0.0021	-6.16582
111	111	Wyoming Medical Center		Casper	WY	M	WS	Run 2	11/21/07	0.0023	-6.07485
111	111	Wyoming Medical Center		Casper	WY	M	WS	Run 3	11/21/07	0.0032	-5.7446
38	38	Wilkes-Barre General Hospital		Wilkes-Barre	PA	M	DIFF	Run 1	10/9/01-10/10/01	0.00567	-5.17301
38	38	Wilkes-Barre General Hospital		Wilkes-Barre	PA	M	DIFF	Run 2	10/9/01-10/10/01	0.00781	-4.85297
38	38	Wilkes-Barre General Hospital		Wilkes-Barre	PA	M	DIFF	Run 3	10/9/01-10/10/01	0.00575	-5.15801
38	38	Wilkes-Barre General Hospital		Wilkes-Barre	PA	M	DIFF	Run 1	9/10/02-9/11/02	0.0047	-5.36019
38	38	Wilkes-Barre General Hospital		Wilkes-Barre	PA	M	DIFF	Run 2	9/10/02-9/11/02	0.0157	-4.15409
38	38	Wilkes-Barre General Hospital		Wilkes-Barre	PA	M	DIFF	Run 3	9/10/02-9/11/02	0.0047	-5.36019
38	38	Wilkes-Barre General Hospital		Wilkes-Barre	PA	M	DIFF	Run 1	10/14/03-10/16/03	0.00489	-5.32056
38	38	Wilkes-Barre General Hospital		Wilkes-Barre	PA	M	DIFF	Run 2	10/14/03-10/16/03	0.00427	-5.45614
38	38	Wilkes-Barre General Hospital		Wilkes-Barre	PA	M	DIFF	Run 3	10/14/03-10/16/03	0.00431	-5.44682
38	38	Wilkes-Barre General Hospital		Wilkes-Barre	PA	M	DIFF	Run 1	11/10/04	0.00108	-6.83079

38	38	Wilkes-Barre General Hospital		Wilkes-Barre	PA	M	DIFF	Run 2	11/10/04	0.00111	-6.8034
38	38	Wilkes-Barre General Hospital		Wilkes-Barre	PA	M	DIFF	Run 3	11/10/04	0.00105	-6.85897
38	38	Wilkes-Barre General Hospital		Wilkes-Barre	PA	M	DIFF	Run 1	9/13/05-9/14/05	0.00372	-5.59395
38	38	Wilkes-Barre General Hospital		Wilkes-Barre	PA	M	DIFF	Run 2	9/13/05-9/14/05	0.00533	-5.23449
38	38	Wilkes-Barre General Hospital		Wilkes-Barre	PA	M	DIFF	Run 3	9/13/05-9/14/05	0.00536	-5.22931

38	38	Wilkes-Barre General Hospital		Wilkes-Barre	PA	M	DIFF	Run 1	9/19/06-9/20/06	0.000699	-7.2662
38	38	Wilkes-Barre General Hospital		Wilkes-Barre	PA	M	DIFF	Run 2	9/19/06-9/20/06	0.00102	-6.88675
38	38	Wilkes-Barre General Hospital		Wilkes-Barre	PA	M	DIFF	Run 3	9/19/06-9/20/06	0.000606	-7.40852
38	38	Wilkes-Barre General Hospital		Wilkes-Barre	PA	M	DIFF	Run 1	10/1/07	0.002	-6.21461
38	38	Wilkes-Barre General Hospital		Wilkes-Barre	PA	M	DIFF	Run 2	10/1/07	0.003	-5.80914
38	38	Wilkes-Barre General Hospital		Wilkes-Barre	PA	M	DIFF	Run 3	10/1/07	0.001	-6.90776
SMALL NON-RURAL HMIWI (≤200 LB/HR)											
129	129	Centers for Disease Control and Prevention--Clifton, Building 18	Unit 3	Atlanta	GA	S	WS	Run 1	12/8/06	0.0053	-5.24005
129	129	Centers for Disease Control and Prevention--Clifton, Building 18	Unit 3	Atlanta	GA	S	WS	Run 2	12/8/06	0.0066	-5.02069
129	129	Centers for Disease Control and Prevention--Clifton, Building 18	Unit 3	Atlanta	GA	S	WS	Run 3	12/8/06	0.0109	-4.51899
SMALL RURAL HMIWI (≤200 LB/HR)											
115	115	Kona Community Hospital		Kealakekua	HI	SR	CC	Run 1	1/9/02-1/11/02	0.00843	-4.77581
115	115	Kona Community Hospital		Kealakekua	HI	SR	CC	Run 2	1/9/02-1/11/02	0.0133	-4.3202
115	115	Kona Community Hospital		Kealakekua	HI	SR	CC	Run 3	1/9/02-1/11/02	0.0202	-3.90097
115	115	Kona Community Hospital		Kealakekua	HI	SR	CC	Run 4	1/9/02-1/11/02	0.00942	-4.66439

Table 17. Total CDD/CDF MACT Floor Test Runs for Option 1A - Current Subcategories / Pollutant-by-Pollutant Ranking

FACID	UNITID	Facility name	Unit number	City	State abbr	Cate-gory	APCD code	Parameter	CDD/CDF test date	CDD/CDF ng/dscm	ln(CDD/CDF)
LARGE HMIWI (>500 LB/HR)											
120	120--2	Waste Management Resource Recovery and Recycling Center	Unit 2	Anahuac	TX	L	DIFF	Run 1	9/18/02-9/20/02	0.187	-1.674335227
120	120--2	Waste Management Resource Recovery and Recycling Center	Unit 2	Anahuac	TX	L	DIFF	Run 2	9/18/02-9/20/02	0.150	-1.89654478
120	120--2	Waste Management Resource Recovery and Recycling Center	Unit 2	Anahuac	TX	L	DIFF	Run 3	9/18/02-9/20/02	0.0975	-2.327463006
120	120--2	Waste Management Resource Recovery and Recycling Center	Unit 2	Anahuac	TX	L	DIFF	Run 1	10/15/02-10/17/02	0.431	-0.842606671
120	120--2	Waste Management Resource Recovery and Recycling Center	Unit 2	Anahuac	TX	L	DIFF	Run 2	10/15/02-10/17/02	0.275	-1.291209018
120	120--2	Waste Management Resource Recovery and Recycling Center	Unit 2	Anahuac	TX	L	DIFF	Run 3	10/15/02-10/17/02	0.206	-1.581695989
120	120--2	Waste Management Resource Recovery and Recycling Center	Unit 2	Anahuac	TX	L	DIFF	Run 1	11/10/04	0.009	-4.710530702
120	120--2	Waste Management Resource Recovery and Recycling Center	Unit 2	Anahuac	TX	L	DIFF	Run 2	11/10/04	0.004	-5.521460918
120	120--2	Waste Management Resource Recovery and Recycling Center	Unit 2	Anahuac	TX	L	DIFF	Run 3	11/10/04	0.005	-5.298317367
84	84	Mayo Clinic, Waste Management Facility		Rochester	MN	L	DIFF	Run 1	2/20/01-2/21/01	0.954	-0.047380572
84	84	Mayo Clinic, Waste Management Facility		Rochester	MN	L	DIFF	Run 2	2/20/01-2/21/01	1.13	0.123815043
84	84	Mayo Clinic, Waste Management Facility		Rochester	MN	L	DIFF	Run 3	2/20/01-2/21/01	0.486	-0.720603092
84	84	Mayo Clinic, Waste Management Facility		Rochester	MN	L	DIFF	Run 1	7/1/03	0.297	-1.212389187
84	84	Mayo Clinic, Waste Management Facility		Rochester	MN	L	DIFF	Run 2	7/1/03	0.0915	-2.391044183
84	84	Mayo Clinic, Waste Management Facility		Rochester	MN	L	DIFF	Run 3	7/1/03	0.0915	-2.391044183
84	84	Mayo Clinic, Waste Management Facility		Rochester	MN	L	DIFF	Run 1	12/20/06-12/21/06	0.074	-2.603690186
84	84	Mayo Clinic, Waste Management Facility		Rochester	MN	L	DIFF	Run 2	12/20/06-12/21/06	0.041	-3.194183212
84	84	Mayo Clinic, Waste Management Facility		Rochester	MN	L	DIFF	Run 3	12/20/06-12/21/06	0.043	-3.146555163
125	125	East Carolina University, Health Sciences Campus, HSC Utility Plant		Greenville	NC	L	HEPA/CA/WS	Run 1	1/20/00-1/21/00	0.456	-0.784824429
125	125	East Carolina University, Health Sciences Campus, HSC Utility Plant		Greenville	NC	L	HEPA/CA/WS	Run 2	1/20/00-1/21/00	0.247	-1.397586829
125	125	East Carolina University, Health Sciences Campus, HSC Utility Plant		Greenville	NC	L	HEPA/CA/WS	Run 3	1/20/00-1/21/00	0.232	-1.462720818
125	125	East Carolina University, Health Sciences Campus, HSC Utility Plant		Greenville	NC	L	HEPA/CA/WS	Run 1	2/4/02-2/5/02	0.978	-0.021834268
125	125	East Carolina University, Health Sciences Campus, HSC Utility Plant		Greenville	NC	L	HEPA/CA/WS	Run 2	2/4/02-2/5/02	0.311	-1.169167625
125	125	East Carolina University, Health Sciences Campus, HSC Utility Plant		Greenville	NC	L	HEPA/CA/WS	Run 3	2/4/02-2/5/02	0.0558	-2.885579712
120	120--1	Waste Management Resource Recovery and Recycling Center	Unit 1	Anahuac	TX	L	DIFF	Run 1	10/9/02-10/10/02	0.849	-0.163606674
120	120--1	Waste Management Resource Recovery and Recycling Center	Unit 1	Anahuac	TX	L	DIFF	Run 2	10/9/02-10/10/02	0.532	-0.630444399
120	120--1	Waste Management Resource Recovery and Recycling Center	Unit 1	Anahuac	TX	L	DIFF	Run 3	10/9/02-10/10/02	0.309	-1.17578205
120	120--1	Waste Management Resource Recovery and Recycling Center	Unit 1	Anahuac	TX	L	DIFF	Run 1	10/21/02-10/23/02	1.57	0.449759759
120	120--1	Waste Management Resource Recovery and Recycling Center	Unit 1	Anahuac	TX	L	DIFF	Run 2	10/21/02-10/23/02	0.443	-0.814620574
120	120--1	Waste Management Resource Recovery and Recycling Center	Unit 1	Anahuac	TX	L	DIFF	Run 3	10/21/02-10/23/02	0.749	-0.289190551
120	120--1	Waste Management Resource Recovery and Recycling Center	Unit 1	Anahuac	TX	L	DIFF	Run 1	10/27/04	0.008	-4.828313737
120	120--1	Waste Management Resource Recovery and Recycling Center	Unit 1	Anahuac	TX	L	DIFF	Run 2	10/27/04	0.009	-4.710530702
120	120--1	Waste Management Resource Recovery and Recycling Center	Unit 1	Anahuac	TX	L	DIFF	Run 3	10/27/04	0.017	-4.074541935
130	130	Department of Veterans Affairs Medical Center		Miami	FL	L	WS	Run 1	5/7/08-5/8/08	0.716	-0.334075112
130	130	Department of Veterans Affairs Medical Center		Miami	FL	L	WS	Run 2	5/7/08-5/8/08	0.682	-0.382725621
130	130	Department of Veterans Affairs Medical Center		Miami	FL	L	WS	Run 3	5/7/08-5/8/08	0.598	-0.514164525

MEDIUM HMIWI (>200, ≤500 LB/HR)											
34	34	Pennsylvania State University, Animal Diagnostic Lab Incinerator		State College	PA	M	WS	Run 1	4/12/00-4/13/00	0.0856	-2.457636568
34	34	Pennsylvania State University, Animal Diagnostic Lab Incinerator		State College	PA	M	WS	Run 2	4/12/00-4/13/00	0.0766	-2.569691166
34	34	Pennsylvania State University, Animal Diagnostic Lab Incinerator		State College	PA	M	WS	Run 3	4/12/00-4/13/00	0.0394	-3.23313516
34	34	Pennsylvania State University, Animal Diagnostic Lab Incinerator		State College	PA	M	WS	Run 1	3/15/01-3/16/01	0.150	-1.898092649
34	34	Pennsylvania State University, Animal Diagnostic Lab Incinerator		State College	PA	M	WS	Run 2	3/15/01-3/16/01	0.142	-1.949872062
34	34	Pennsylvania State University, Animal Diagnostic Lab Incinerator		State College	PA	M	WS	Run 3	3/15/01-3/16/01	0.0771	-2.562184793
34	34	Pennsylvania State University, Animal Diagnostic Lab Incinerator		State College	PA	M	WS	Run 1	4/16/02-4/18/02	0.0906	-2.401094519
34	34	Pennsylvania State University, Animal Diagnostic Lab Incinerator		State College	PA	M	WS	Run 2	4/16/02-4/18/02	0.0952	-2.35182347
34	34	Pennsylvania State University, Animal Diagnostic Lab Incinerator		State College	PA	M	WS	Run 3	4/16/02-4/18/02	0.0918	-2.388547303
34	34	Pennsylvania State University, Animal Diagnostic Lab Incinerator		State College	PA	M	WS	Run 1	4/22/03-4/24/03	0.027	-3.595016988
34	34	Pennsylvania State University, Animal Diagnostic Lab Incinerator		State College	PA	M	WS	Run 2	4/22/03-4/24/03	0.023	-3.777338544
34	34	Pennsylvania State University, Animal Diagnostic Lab Incinerator		State College	PA	M	WS	Run 3	4/22/03-4/24/03	0.355	-1.03649852
34	34	Pennsylvania State University, Animal Diagnostic Lab Incinerator		State College	PA	M	WS	Run 1	4/13/04-4/15/04	0.0687	-2.678726256
34	34	Pennsylvania State University, Animal Diagnostic Lab Incinerator		State College	PA	M	WS	Run 2	4/13/04-4/15/04	0.0458	-3.084191364
34	34	Pennsylvania State University, Animal Diagnostic Lab Incinerator		State College	PA	M	WS	Run 3	4/13/04-4/15/04	0.0915	-2.391044183
41	41	Thomas Memorial Hospital		South Charleston	WV	M	WS	Run 1	9/10/01-9/11/01	0.159	-1.838683039
41	41	Thomas Memorial Hospital		South Charleston	WV	M	WS	Run 2	9/10/01-9/11/01	0.230	-1.468011421
41	41	Thomas Memorial Hospital		South Charleston	WV	M	WS	Run 3	9/10/01-9/11/01	0.134	-2.006239737
108	108--1	Rocky Mountain Laboratories, National Institute of Allergy and Infectious Diseases	Unit 1	Hamilton	MT	M	WS	Run 1	10/01/02-10/03/02	0.0588	-2.832863156
108	108--1	Rocky Mountain Laboratories, National Institute of Allergy and Infectious Diseases	Unit 1	Hamilton	MT	M	WS	Run 2	10/01/02-10/03/02	0.105	-2.256629306
108	108--1	Rocky Mountain Laboratories, National Institute of Allergy and Infectious Diseases	Unit 1	Hamilton	MT	M	WS	Run 3	10/01/02-10/03/02	0.0892	-2.416939601
108	108--1	Rocky Mountain Laboratories, National Institute of Allergy and Infectious Diseases	Unit 1	Hamilton	MT	M	WS	Run 1	9/23/03	0.0802	-2.523231764
108	108--1	Rocky Mountain Laboratories, National Institute of Allergy and Infectious Diseases	Unit 1	Hamilton	MT	M	WS	Run 2	9/23/03	0.156	-1.857899272
108	108--1	Rocky Mountain Laboratories, National Institute of Allergy and Infectious Diseases	Unit 1	Hamilton	MT	M	WS	Run 3	9/23/03	0.177	-1.729348209
108	108--1	Rocky Mountain Laboratories, National Institute of Allergy and Infectious Diseases	Unit 1	Hamilton	MT	M	WS	Run 1	9/28/04	0.626	-0.46904409
108	108--1	Rocky Mountain Laboratories, National Institute of Allergy and Infectious Diseases	Unit 1	Hamilton	MT	M	WS	Run 2	9/28/04	0.515	-0.663394222
108	108--1	Rocky Mountain Laboratories, National Institute of Allergy and Infectious Diseases	Unit 1	Hamilton	MT	M	WS	Run 3	9/28/04	0.140	-1.963259787
108	108--1	Rocky Mountain Laboratories, National Institute of Allergy and Infectious Diseases	Unit 1	Hamilton	MT	M	WS	Run 1	8/30/05	0.303	-1.194022473
108	108--1	Rocky Mountain Laboratories, National Institute of Allergy and Infectious Diseases	Unit 1	Hamilton	MT	M	WS	Run 2	8/30/05	0.55	-0.597837001
108	108--1	Rocky Mountain Laboratories, National Institute of Allergy and Infectious Diseases	Unit 1	Hamilton	MT	M	WS	Run 3	8/30/05	0.373	-0.986176859
108	108--1	Rocky Mountain Laboratories, National Institute of Allergy and Infectious Diseases	Unit 1	Hamilton	MT	M	WS	Run 1	8/15/06-8/17/06	0.083	-2.488914671
108	108--1	Rocky Mountain Laboratories, National Institute of Allergy and Infectious Diseases	Unit 1	Hamilton	MT	M	WS	Run 2	8/15/06-8/17/06	0.094	-2.364460497
108	108--1	Rocky Mountain Laboratories, National Institute of Allergy and Infectious Diseases	Unit 1	Hamilton	MT	M	WS	Run 3	8/15/06-8/17/06	0.187	-1.676646662
108	108--1	Rocky Mountain Laboratories, National Institute of Allergy and Infectious Diseases	Unit 1	Hamilton	MT	M	WS	Run 1	9/17/07, 9/19/07	0.0623	-2.775547012
108	108--1	Rocky Mountain Laboratories, National Institute of Allergy and Infectious Diseases	Unit 1	Hamilton	MT	M	WS	Run 2	9/17/07, 9/19/07	0.0839	-2.478684933
108	108--1	Rocky Mountain Laboratories, National Institute of Allergy and Infectious Diseases	Unit 1	Hamilton	MT	M	WS	Run 3	9/17/07, 9/19/07	0.0206	-3.8805412

SMALL NON-RURAL HMIWI (≤200 LB/HR)											
86	86	Fairfield Medical Center		Lancaster	OH	S	WS	Run 1	11/6/02-11/7/02	3.12	1.137556501
86	86	Fairfield Medical Center		Lancaster	OH	S	WS	Run 2	11/6/02-11/7/02	4.50	1.505129441
86	86	Fairfield Medical Center		Lancaster	OH	S	WS	Run 3	11/6/02-11/7/02	1.04	0.036692592
SMALL RURAL HMIWI (≤200 LB/HR)											
115	115	Kona Community Hospital		Kealakekua	HI	SR	CC	Run 1	1/9/02-1/11/02	15.8	2.760857592
115	115	Kona Community Hospital		Kealakekua	HI	SR	CC	Run 2	1/9/02-1/11/02	9.05	2.203085949
115	115	Kona Community Hospital		Kealakekua	HI	SR	CC	Run 3	1/9/02-1/11/02	63.9	4.156901807

Table 18. CDD/CDF TEQ MACT Floor Test Runs for Option 1A - Current Subcategories / Pollutant-by-Pollutant Ranking

FACID	UNITID	Facility name	Unit number	City	State abbr	Cate-gory	APCD code	Parameter	TEQ test date	TEQ ng/dscm	ln(TEQ)
LARGE HMIWI (>500 LB/HR)											
120	120--2	Waste Management Resource Recovery and Recycling Center	Unit 2	Anahuac	TX	L	DIFF	Run 1	9/18/02-9/20/02	0.00517	-5.26506
120	120--2	Waste Management Resource Recovery and Recycling Center	Unit 2	Anahuac	TX	L	DIFF	Run 2	9/18/02-9/20/02	0.00892	-4.71941
120	120--2	Waste Management Resource Recovery and Recycling Center	Unit 2	Anahuac	TX	L	DIFF	Run 3	9/18/02-9/20/02	0.00329	-5.71716
120	120--2	Waste Management Resource Recovery and Recycling Center	Unit 2	Anahuac	TX	L	DIFF	Run 1	10/15/02-10/17/02	0.00725	-4.92661
120	120--2	Waste Management Resource Recovery and Recycling Center	Unit 2	Anahuac	TX	L	DIFF	Run 2	10/15/02-10/17/02	0.00612	-5.09595
120	120--2	Waste Management Resource Recovery and Recycling Center	Unit 2	Anahuac	TX	L	DIFF	Run 3	10/15/02-10/17/02	0.00817	-4.80724
120	120--2	Waste Management Resource Recovery and Recycling Center	Unit 2	Anahuac	TX	L	DIFF	Run 1	11/10/04	0.001	-6.90776
120	120--2	Waste Management Resource Recovery and Recycling Center	Unit 2	Anahuac	TX	L	DIFF	Run 2	11/10/04	0.001	-6.90776
120	120--2	Waste Management Resource Recovery and Recycling Center	Unit 2	Anahuac	TX	L	DIFF	Run 3	11/10/04	0.001	-6.90776
120	120--2	Waste Management Resource Recovery and Recycling Center	Unit 2	Anahuac	TX	L	DIFF	Run 1	12/4/06-12/9/06	0.00121	-6.71713
120	120--2	Waste Management Resource Recovery and Recycling Center	Unit 2	Anahuac	TX	L	DIFF	Run 2	12/4/06-12/9/06	0.00114	-6.77673
120	120--2	Waste Management Resource Recovery and Recycling Center	Unit 2	Anahuac	TX	L	DIFF	Run 3	12/4/06-12/9/06	0.00104	-6.86853
125	125	East Carolina University, Health Sciences Campus, HSC Utility Plant		Greenville	NC	L	HEPA/CA/WS	Run 1	1/20/00-1/21/00	0.00408	-5.50061
125	125	East Carolina University, Health Sciences Campus, HSC Utility Plant		Greenville	NC	L	HEPA/CA/WS	Run 2	1/20/00-1/21/00	0.00450	-5.40298
125	125	East Carolina University, Health Sciences Campus, HSC Utility Plant		Greenville	NC	L	HEPA/CA/WS	Run 3	1/20/00-1/21/00	0.00267	-5.92695
125	125	East Carolina University, Health Sciences Campus, HSC Utility Plant		Greenville	NC	L	HEPA/CA/WS	Run 1	2/4/02-2/5/02	0.0132	-4.32419
125	125	East Carolina University, Health Sciences Campus, HSC Utility Plant		Greenville	NC	L	HEPA/CA/WS	Run 2	2/4/02-2/5/02	0.00539	-5.22311
125	125	East Carolina University, Health Sciences Campus, HSC Utility Plant		Greenville	NC	L	HEPA/CA/WS	Run 3	2/4/02-2/5/02	0.00201	-6.21094
120	120--1	Waste Management Resource Recovery and Recycling Center	Unit 1	Anahuac	TX	L	DIFF	Run 1	10/9/02-10/10/02	0.0116	-4.45396
120	120--1	Waste Management Resource Recovery and Recycling Center	Unit 1	Anahuac	TX	L	DIFF	Run 2	10/9/02-10/10/02	0.0105	-4.55811
120	120--1	Waste Management Resource Recovery and Recycling Center	Unit 1	Anahuac	TX	L	DIFF	Run 3	10/9/02-10/10/02	0.00991	-4.61374
120	120--1	Waste Management Resource Recovery and Recycling Center	Unit 1	Anahuac	TX	L	DIFF	Run 1	10/21/02-10/23/02	0.0201	-3.90698
120	120--1	Waste Management Resource Recovery and Recycling Center	Unit 1	Anahuac	TX	L	DIFF	Run 2	10/21/02-10/23/02	0.0100	-4.60292
120	120--1	Waste Management Resource Recovery and Recycling Center	Unit 1	Anahuac	TX	L	DIFF	Run 3	10/21/02-10/23/02	0.0115	-4.46928
120	120--1	Waste Management Resource Recovery and Recycling Center	Unit 1	Anahuac	TX	L	DIFF	Run 1	10/27/04	0.003	-5.80914
120	120--1	Waste Management Resource Recovery and Recycling Center	Unit 1	Anahuac	TX	L	DIFF	Run 2	10/27/04	0.001	-6.90776
120	120--1	Waste Management Resource Recovery and Recycling Center	Unit 1	Anahuac	TX	L	DIFF	Run 3	10/27/04	0.002	-6.21461
120	120--1	Waste Management Resource Recovery and Recycling Center	Unit 1	Anahuac	TX	L	DIFF	Run 2	11/28/06-12/2/06	0.00767	-4.87044
120	120--1	Waste Management Resource Recovery and Recycling Center	Unit 1	Anahuac	TX	L	DIFF	Run 3	11/28/06-12/2/06	0.00112	-6.79443
120	120--1	Waste Management Resource Recovery and Recycling Center	Unit 1	Anahuac	TX	L	DIFF	Run 4	11/28/06-12/2/06	0.00839	-4.78071
65	65--1	Stericycle, Inc.	Unit 1	Clinton	IL	L	WS	Run 1	6/24/02-6/25/02	0.00585	-5.14165
65	65--1	Stericycle, Inc.	Unit 1	Clinton	IL	L	WS	Run 2	6/24/02-6/25/02	0.0131	-4.3371
65	65--1	Stericycle, Inc.	Unit 1	Clinton	IL	L	WS	Run 3	6/24/02-6/25/02	0.0125	-4.38395
84	84	Mayo Clinic, Waste Management Facility		Rochester	MN	L	DIFF	Run 1	2/20/01-2/21/01	0.0192	-3.95275
84	84	Mayo Clinic, Waste Management Facility		Rochester	MN	L	DIFF	Run 2	2/20/01-2/21/01	0.0336	-3.39191
84	84	Mayo Clinic, Waste Management Facility		Rochester	MN	L	DIFF	Run 3	2/20/01-2/21/01	0.0148	-4.21576
84	84	Mayo Clinic, Waste Management Facility		Rochester	MN	L	DIFF	Run 1	7/1/03	0.0183	-4.00048
84	84	Mayo Clinic, Waste Management Facility		Rochester	MN	L	DIFF	Run 2	7/1/03	0.00458	-5.38678
84	84	Mayo Clinic, Waste Management Facility		Rochester	MN	L	DIFF	Run 3	7/1/03	0.00458	-5.38678
84	84	Mayo Clinic, Waste Management Facility		Rochester	MN	L	DIFF	Run 1	12/20/06-12/21/06	0.006	-5.116
84	84	Mayo Clinic, Waste Management Facility		Rochester	MN	L	DIFF	Run 2	12/20/06-12/21/06	0.002	-6.21461
84	84	Mayo Clinic, Waste Management Facility		Rochester	MN	L	DIFF	Run 3	12/20/06-12/21/06	0.002	-6.21461

MEDIUM HMIWI (>200, ≤500 LB/HR)											
34	34	Pennsylvania State University, Animal Diagnostic Lab Incinerator		State College	PA	M	WS	Run 1	4/12/00-4/13/00	0.00184	-6.29847
34	34	Pennsylvania State University, Animal Diagnostic Lab Incinerator		State College	PA	M	WS	Run 2	4/12/00-4/13/00	0.00154	-6.47719
34	34	Pennsylvania State University, Animal Diagnostic Lab Incinerator		State College	PA	M	WS	Run 3	4/12/00-4/13/00	0.000982	-6.92595
34	34	Pennsylvania State University, Animal Diagnostic Lab Incinerator		State College	PA	M	WS	Run 1	3/15/01-3/16/01	0.00277	-5.89012
34	34	Pennsylvania State University, Animal Diagnostic Lab Incinerator		State College	PA	M	WS	Run 2	3/15/01-3/16/01	0.00232	-6.06478
34	34	Pennsylvania State University, Animal Diagnostic Lab Incinerator		State College	PA	M	WS	Run 3	3/15/01-3/16/01	0.00176	-6.34245
34	34	Pennsylvania State University, Animal Diagnostic Lab Incinerator		State College	PA	M	WS	Run 1	4/16/02-4/18/02	0.00421	-5.47016
34	34	Pennsylvania State University, Animal Diagnostic Lab Incinerator		State College	PA	M	WS	Run 2	4/16/02-4/18/02	0.00391	-5.54343
34	34	Pennsylvania State University, Animal Diagnostic Lab Incinerator		State College	PA	M	WS	Run 3	4/16/02-4/18/02	0.00650	-5.03612
34	34	Pennsylvania State University, Animal Diagnostic Lab Incinerator		State College	PA	M	WS	Run 1	4/22/03-4/24/03	0.00103	-6.87843
34	34	Pennsylvania State University, Animal Diagnostic Lab Incinerator		State College	PA	M	WS	Run 2	4/22/03-4/24/03	0.00098	-6.92389
34	34	Pennsylvania State University, Animal Diagnostic Lab Incinerator		State College	PA	M	WS	Run 3	4/22/03-4/24/03	0.00888	-4.72409
34	34	Pennsylvania State University, Animal Diagnostic Lab Incinerator		State College	PA	M	WS	Run 1	4/13/04-4/15/04	0.00215	-6.1418
34	34	Pennsylvania State University, Animal Diagnostic Lab Incinerator		State College	PA	M	WS	Run 2	4/13/04-4/15/04	0.00225	-6.09504
34	34	Pennsylvania State University, Animal Diagnostic Lab Incinerator		State College	PA	M	WS	Run 3	4/13/04-4/15/04	0.00247	-6.00389
108	108--1	Rocky Mountain Laboratories, National Institute of Allergy and Infectious Diseases	Unit 1	Hamilton	MT	M	WS	Run 1	10/01/02-10/03/02	0.00181	-6.31718
108	108--1	Rocky Mountain Laboratories, National Institute of Allergy and Infectious Diseases	Unit 1	Hamilton	MT	M	WS	Run 2	10/01/02-10/03/02	0.00201	-6.2111
108	108--1	Rocky Mountain Laboratories, National Institute of Allergy and Infectious Diseases	Unit 1	Hamilton	MT	M	WS	Run 3	10/01/02-10/03/02	0.00198	-6.22466
108	108--1	Rocky Mountain Laboratories, National Institute of Allergy and Infectious Diseases	Unit 1	Hamilton	MT	M	WS	Run 1	9/23/03	0.0012	-6.72543
108	108--1	Rocky Mountain Laboratories, National Institute of Allergy and Infectious Diseases	Unit 1	Hamilton	MT	M	WS	Run 2	9/23/03	0.0028	-5.87814
108	108--1	Rocky Mountain Laboratories, National Institute of Allergy and Infectious Diseases	Unit 1	Hamilton	MT	M	WS	Run 3	9/23/03	0.0031	-5.77635
108	108--1	Rocky Mountain Laboratories, National Institute of Allergy and Infectious Diseases	Unit 1	Hamilton	MT	M	WS	Run 1	9/28/04	0.0058	-5.1499
108	108--1	Rocky Mountain Laboratories, National Institute of Allergy and Infectious Diseases	Unit 1	Hamilton	MT	M	WS	Run 2	9/28/04	0.004	-5.52146
108	108--1	Rocky Mountain Laboratories, National Institute of Allergy and Infectious Diseases	Unit 1	Hamilton	MT	M	WS	Run 3	9/28/04	0.0009	-7.01312
108	108--1	Rocky Mountain Laboratories, National Institute of Allergy and Infectious Diseases	Unit 1	Hamilton	MT	M	WS	Run 1	8/30/05	0.0012	-6.72543
108	108--1	Rocky Mountain Laboratories, National Institute of Allergy and Infectious Diseases	Unit 1	Hamilton	MT	M	WS	Run 2	8/30/05	0.0078	-4.85363
108	108--1	Rocky Mountain Laboratories, National Institute of Allergy and Infectious Diseases	Unit 1	Hamilton	MT	M	WS	Run 3	8/30/05	0.0071	-4.94766
108	108--1	Rocky Mountain Laboratories, National Institute of Allergy and Infectious Diseases	Unit 1	Hamilton	MT	M	WS	Run 1	8/15/06-8/17/06	0.0026	-5.95224
108	108--1	Rocky Mountain Laboratories, National Institute of Allergy and Infectious Diseases	Unit 1	Hamilton	MT	M	WS	Run 2	8/15/06-8/17/06	0.0027	-5.9145
108	108--1	Rocky Mountain Laboratories, National Institute of Allergy and Infectious Diseases	Unit 1	Hamilton	MT	M	WS	Run 3	8/15/06-8/17/06	0.0059	-5.1328
108	108--1	Rocky Mountain Laboratories, National Institute of Allergy and Infectious Diseases	Unit 1	Hamilton	MT	M	WS	Run 1	9/17/07, 9/19/07	0.00213	-6.15385
108	108--1	Rocky Mountain Laboratories, National Institute of Allergy and Infectious Diseases	Unit 1	Hamilton	MT	M	WS	Run 2	9/17/07, 9/19/07	0.000882	-7.03366
108	108--1	Rocky Mountain Laboratories, National Institute of Allergy and Infectious Diseases	Unit 1	Hamilton	MT	M	WS	Run 3	9/17/07, 9/19/07	0.0000700	-9.56752
41	41	Thomas Memorial Hospital		South Charleston	WV	M	WS	Run 1	9/10/01-9/11/01	0.00523	-5.25381
41	41	Thomas Memorial Hospital		South Charleston	WV	M	WS	Run 2	9/10/01-9/11/01	0.00463	-5.37617
41	41	Thomas Memorial Hospital		South Charleston	WV	M	WS	Run 3	9/10/01-9/11/01	0.00287	-5.85336

SMALL NON-RURAL HMIWI (≤200 LB/HR)											
129	129	Centers for Disease Control and Prevention--Clifton, Building 18	Unit 3	Atlanta	GA	S	WS	Run 1	1/11/07-1/12/07	0.0049	-5.31852
129	129	Centers for Disease Control and Prevention--Clifton, Building 18	Unit 3	Atlanta	GA	S	WS	Run 2	1/11/07-1/12/07	0.0033	-5.71383
129	129	Centers for Disease Control and Prevention--Clifton, Building 18	Unit 3	Atlanta	GA	S	WS	Run 3	1/11/07-1/12/07	0.0054	-5.22136
SMALL RURAL HMIWI (≤200 LB/HR)											
115	115	Kona Community Hospital		Kealakekua	HI	SR	CC	Run 1	1/9/02-1/11/02	0.273	-1.29731
115	115	Kona Community Hospital		Kealakekua	HI	SR	CC	Run 2	1/9/02-1/11/02	0.227	-1.48389
115	115	Kona Community Hospital		Kealakekua	HI	SR	CC	Run 3	1/9/02-1/11/02	1.35	0.303153

Table 19. NO_X MACT Floor Test Runs for Option 1A - Current Subcategories / Pollutant-by-Pollutant Ranking

FACID	UNITID	Facility name	Unit number	City	State abbr	Cate-gory	APCD code	Parameter	NO_X test date	NO_X ppmvd	$ln(NO_X)$
LARGE HMIWI (>500 LB/HR)											
125	125	East Carolina University, Health Sciences Campus, HSC Utility Plant		Greenville	NC	L	HEPA/CA/WS	Run 1	1/20/00-1/21/00	54.7	4.002327
125	125	East Carolina University, Health Sciences Campus, HSC Utility Plant		Greenville	NC	L	HEPA/CA/WS	Run 2	1/20/00-1/21/00	70.0	4.247934
125	125	East Carolina University, Health Sciences Campus, HSC Utility Plant		Greenville	NC	L	HEPA/CA/WS	Run 3	1/20/00-1/21/00	76.1	4.332252
46	46	Holy Cross Hospital		Fort Lauderdale	FL	L	WS	Run 1	10/16/02-10/17/02	80.7	4.390783
46	46	Holy Cross Hospital		Fort Lauderdale	FL	L	WS	Run 2	10/16/02-10/17/02	80.7	4.390783
46	46	Holy Cross Hospital		Fort Lauderdale	FL	L	WS	Run 3	10/16/02-10/17/02	80.7	4.390783
46	46	Holy Cross Hospital		Fort Lauderdale	FL	L	WS	Run 1	11/10/05	63.2	4.146304
46	46	Holy Cross Hospital		Fort Lauderdale	FL	L	WS	Run 2	11/10/05	48.1	3.873282
46	46	Holy Cross Hospital		Fort Lauderdale	FL	L	WS	Run 3	11/10/05	53.8	3.985273
120	120--1	Waste Management Resource Recovery and Recycling Center	Unit 1	Anahuac	TX	L	DIFF	Run 1	10/8/02-10/9/02	58.1	4.06143
120	120--1	Waste Management Resource Recovery and Recycling Center	Unit 1	Anahuac	TX	L	DIFF	Run 2	10/8/02-10/9/02	47.0	3.849233
120	120--1	Waste Management Resource Recovery and Recycling Center	Unit 1	Anahuac	TX	L	DIFF	Run 3	10/8/02-10/9/02	63.2	4.146122
120	120--1	Waste Management Resource Recovery and Recycling Center	Unit 1	Anahuac	TX	L	DIFF	Run 1	10/21/02	42.7	3.753151
120	120--1	Waste Management Resource Recovery and Recycling Center	Unit 1	Anahuac	TX	L	DIFF	Run 2	10/21/02	62.1	4.129352
120	120--1	Waste Management Resource Recovery and Recycling Center	Unit 1	Anahuac	TX	L	DIFF	Run 3	10/21/02	67.8	4.215969
120	120--1	Waste Management Resource Recovery and Recycling Center	Unit 1	Anahuac	TX	L	DIFF	Run 2	10/27/04	78.0	4.356709
120	120--1	Waste Management Resource Recovery and Recycling Center	Unit 1	Anahuac	TX	L	DIFF	Run 3	10/27/04	98.1	4.585987
120	120--1	Waste Management Resource Recovery and Recycling Center	Unit 1	Anahuac	TX	L	DIFF	Run 4	10/27/04	145	4.976044
120	120--1	Waste Management Resource Recovery and Recycling Center	Unit 1	Anahuac	TX	L	DIFF	Run 1	12/12/05-12/15/05	54.2	3.992681
120	120--1	Waste Management Resource Recovery and Recycling Center	Unit 1	Anahuac	TX	L	DIFF	Run 2	12/12/05-12/15/05	60.1	4.09601
120	120--1	Waste Management Resource Recovery and Recycling Center	Unit 1	Anahuac	TX	L	DIFF	Run 3	12/12/05-12/15/05	56.6	4.036009
120	120--1	Waste Management Resource Recovery and Recycling Center	Unit 1	Anahuac	TX	L	DIFF	Run 2	11/28/06-12/2/06	74.6	4.312275
120	120--1	Waste Management Resource Recovery and Recycling Center	Unit 1	Anahuac	TX	L	DIFF	Run 4	11/28/06-12/2/06	100	4.607068
120	120--1	Waste Management Resource Recovery and Recycling Center	Unit 1	Anahuac	TX	L	DIFF	Run 5	11/28/06-12/2/06	91.4	4.514917
120	120--1	Waste Management Resource Recovery and Recycling Center	Unit 1	Anahuac	TX	L	DIFF	Run 1	11/28/07-11/30/07	72.97	4.290048
120	120--1	Waste Management Resource Recovery and Recycling Center	Unit 1	Anahuac	TX	L	DIFF	Run 3	11/28/07-11/30/07	77.47	4.349891
120	120--1	Waste Management Resource Recovery and Recycling Center	Unit 1	Anahuac	TX	L	DIFF	Run 4	11/28/07-11/30/07	53.16	3.973306
51	51	Lakeland Regional Medical Center		Lakeland	FL	L	DIFF	Run 1	8/29/00	59.8	4.091387
51	51	Lakeland Regional Medical Center		Lakeland	FL	L	DIFF	Run 2	8/29/00	59.8	4.091387
51	51	Lakeland Regional Medical Center		Lakeland	FL	L	DIFF	Run 3	8/29/00	62.9	4.141243
51	51	Lakeland Regional Medical Center		Lakeland	FL	L	DIFF	Run 1	8/8/05	109	4.687671
51	51	Lakeland Regional Medical Center		Lakeland	FL	L	DIFF	Run 2	8/8/05	93.9	4.54223
51	51	Lakeland Regional Medical Center		Lakeland	FL	L	DIFF	Run 3	8/8/05	77.8	4.354141
98	98--1	University of Texas Medical Branch		Galveston	TX	L	WS	Run 1	3/11/03-3/12/03	73.8	4.300785
98	98--1	University of Texas Medical Branch		Galveston	TX	L	WS	Run 2	3/11/03-3/12/03	78.2	4.359317
98	98--1	University of Texas Medical Branch		Galveston	TX	L	WS	Run 3	3/11/03-3/12/03	84.8	4.440796

MEDIUM HMIWI (>200, ≤500 LB/HR)											
81	81	South Bend Medical Foundation		South Bend	IN	M	WS	Run 1	2/21/01	21.2	3.056222
81	81	South Bend Medical Foundation		South Bend	IN	M	WS	Run 2	2/21/01	16.8	2.823556
81	81	South Bend Medical Foundation		South Bend	IN	M	WS	Run 3	2/21/01	6.85	1.923704
18	18	Franklin Square Hospital Center		Baltimore	MD	M	WS	Run 1	1/22/02-1/23/02	98.8	4.59342
18	18	Franklin Square Hospital Center		Baltimore	MD	M	WS	Run 2	1/22/02-1/23/02	35.0	3.555263
18	18	Franklin Square Hospital Center		Baltimore	MD	M	WS	Run 3	1/22/02-1/23/02	120	4.789959
16	16	Johns Hopkins Medical Institute, Department of Health, Safety, and Environment		Baltimore	MD	M	WS	Run 1	11/27/01-11/28/01	94.3	4.546967
16	16	Johns Hopkins Medical Institute, Department of Health, Safety, and Environment		Baltimore	MD	M	WS	Run 2	11/27/01-11/28/01	84.6	4.438138
16	16	Johns Hopkins Medical Institute, Department of Health, Safety, and Environment		Baltimore	MD	M	WS	Run 3	11/27/01-11/28/01	84.9	4.441211

SMALL NON-RURAL HMIWI (≤200 LB/HR)											
SMALL RURAL HMIWI (≤200 LB/HR)											
116	116	Yukon-Kuskokwim Delta Regional Hospital		Bethel	AK	SR	CC	Run 1	10/23/01	90.6	4.506536
116	116	Yukon-Kuskokwim Delta Regional Hospital		Bethel	AK	SR	CC	Run 2	10/23/01	94.3	4.546251
116	116	Yukon-Kuskokwim Delta Regional Hospital		Bethel	AK	SR	CC	Run 3	10/23/01	100	4.607952

Table 20. SO_2 MACT Floor Test Runs for Option 1A - Current Subcategories / Pollutant-by-Pollutant Ranking

FACID	UNITID	Facility name	Unit number	City	State abbr	Cate-gory	APCD code	Parameter	SO_2 test date	SO_2 ppmvd	$ln(SO_2)$
LARGE HMIWI (>500 LB/HR)											
120	120--2	Waste Management Resource Recovery and Recycling Center	Unit 2	Anahuac	TX	L	DIFF	Run 1	9/20/02	0.896	-0.11024
120	120--2	Waste Management Resource Recovery and Recycling Center	Unit 2	Anahuac	TX	L	DIFF	Run 2	9/20/02	0.886	-0.1205
120	120--2	Waste Management Resource Recovery and Recycling Center	Unit 2	Anahuac	TX	L	DIFF	Run 3	9/20/02	0.933	-0.06947
120	120--2	Waste Management Resource Recovery and Recycling Center	Unit 2	Anahuac	TX	L	DIFF	Run 1	10/15/02-10/16/02	0.952	-0.04913
120	120--2	Waste Management Resource Recovery and Recycling Center	Unit 2	Anahuac	TX	L	DIFF	Run 2	10/15/02-10/16/02	0.943	-0.05868
120	120--2	Waste Management Resource Recovery and Recycling Center	Unit 2	Anahuac	TX	L	DIFF	Run 3	10/15/02-10/16/02	1.02	0.021819
120	120--2	Waste Management Resource Recovery and Recycling Center	Unit 2	Anahuac	TX	L	DIFF	Run 1	11/10/04	0.2	-1.60944
120	120--2	Waste Management Resource Recovery and Recycling Center	Unit 2	Anahuac	TX	L	DIFF	Run 2	11/10/04	0.2	-1.60944
120	120--2	Waste Management Resource Recovery and Recycling Center	Unit 2	Anahuac	TX	L	DIFF	Run 3	11/10/04	0.2	-1.60944
120	120--2	Waste Management Resource Recovery and Recycling Center	Unit 2	Anahuac	TX	L	DIFF	Run 1	12/5/05-12/8/05	0.2	-1.60944
120	120--2	Waste Management Resource Recovery and Recycling Center	Unit 2	Anahuac	TX	L	DIFF	Run 2	12/5/05-12/8/05	0.2	-1.60944
120	120--2	Waste Management Resource Recovery and Recycling Center	Unit 2	Anahuac	TX	L	DIFF	Run 3	12/5/05-12/8/05	0.2	-1.60944
120	120--2	Waste Management Resource Recovery and Recycling Center	Unit 2	Anahuac	TX	L	DIFF	Run 2	12/4/06-12/9/06	0.02	-3.91202
120	120--2	Waste Management Resource Recovery and Recycling Center	Unit 2	Anahuac	TX	L	DIFF	Run 3	12/4/06-12/9/06	1.26	0.231112
120	120--2	Waste Management Resource Recovery and Recycling Center	Unit 2	Anahuac	TX	L	DIFF	Run 4	12/4/06-12/9/06	0.02	-3.91202
120	120--2	Waste Management Resource Recovery and Recycling Center	Unit 2	Anahuac	TX	L	DIFF	Run 1	12/3/07-12/5/07	0.06	-2.81341
120	120--2	Waste Management Resource Recovery and Recycling Center	Unit 2	Anahuac	TX	L	DIFF	Run 2	12/3/07-12/5/07	0.06	-2.81341
120	120--2	Waste Management Resource Recovery and Recycling Center	Unit 2	Anahuac	TX	L	DIFF	Run 3	12/3/07-12/5/07	0.06	-2.81341
71	71	Loyola University Medical Center		Maywood	IL	L	WS	Run 1	11/13/01-11/15/01	1.0	0
71	71	Loyola University Medical Center		Maywood	IL	L	WS	Run 2	11/13/01-11/15/01	0.209	-1.56682
71	71	Loyola University Medical Center		Maywood	IL	L	WS	Run 3	11/13/01-11/15/01	0.784	-0.24281
71	71	Loyola University Medical Center		Maywood	IL	L	WS	Run 1	11/13/01-11/15/01	1.0	0
71	71	Loyola University Medical Center		Maywood	IL	L	WS	Run 2	11/13/01-11/15/01	1.01	0.013034
71	71	Loyola University Medical Center		Maywood	IL	L	WS	Run 3	11/13/01-11/15/01	1.35	0.300824
71	71	Loyola University Medical Center		Maywood	IL	L	WS	Run 1	11/2/04-11/3/04	0.46	-0.77653
71	71	Loyola University Medical Center		Maywood	IL	L	WS	Run 2	11/2/04-11/3/04	0.78	-0.24846
71	71	Loyola University Medical Center		Maywood	IL	L	WS	Run 3	11/2/04-11/3/04	0.77	-0.26136
98	98--1	University of Texas Medical Branch		Galveston	TX	L	WS	Run 1	3/11/03-3/12/03	1.00	0.0018
98	98--1	University of Texas Medical Branch		Galveston	TX	L	WS	Run 2	3/11/03-3/12/03	1.56	0.443967
98	98--1	University of Texas Medical Branch		Galveston	TX	L	WS	Run 3	3/11/03-3/12/03	0.787	-0.23979
36	36--1	Merck & Company, Inc.	Unit 2	West Point (Upper Gwynedd Township)	PA	L	DIFF	Run 1	10/24/01	1.0	0
36	36--1	Merck & Company, Inc.	Unit 2	West Point (Upper Gwynedd Township)	PA	L	DIFF	Run 2	10/24/01	0.143	-1.94282
36	36--1	Merck & Company, Inc.	Unit 2	West Point (Upper Gwynedd Township)	PA	L	DIFF	Run 3	10/24/01	1.0	0
36	36--1	Merck & Company, Inc.	Unit 2	West Point (Upper Gwynedd Township)	PA	L	DIFF	Run 1	5/4/04-5/7/04	3.0	1.098612
36	36--1	Merck & Company, Inc.	Unit 2	West Point (Upper Gwynedd Township)	PA	L	DIFF	Run 2	5/4/04-5/7/04	1.0	0
36	36--1	Merck & Company, Inc.	Unit 2	West Point (Upper Gwynedd Township)	PA	L	DIFF	Run 3	5/4/04-5/7/04	1.0	0
36	36--1	Merck & Company, Inc.	Unit 2	West Point (Upper Gwynedd Township)	PA	L	DIFF	Run 1	4/25/06-5/3/06	1.0	0
36	36--1	Merck & Company, Inc.	Unit 2	West Point (Upper Gwynedd Township)	PA	L	DIFF	Run 2	4/25/06-5/3/06	1.0	0
36	36--1	Merck & Company, Inc.	Unit 2	West Point (Upper Gwynedd Township)	PA	L	DIFF	Run 3	4/25/06-5/3/06	1.0	0
46	46	Holy Cross Hospital		Fort Lauderdale	FL	L	WS	Run 1	10/16/02	1.48	0.392817
46	46	Holy Cross Hospital		Fort Lauderdale	FL	L	WS	Run 2	10/16/02	0.911	-0.09269
46	46	Holy Cross Hospital		Fort Lauderdale	FL	L	WS	Run 3	10/16/02	0.304	-1.1913
46	46	Holy Cross Hospital		Fort Lauderdale	FL	L	WS	Run 1	11/10/05	2.59	0.951658
46	46	Holy Cross Hospital		Fort Lauderdale	FL	L	WS	Run 2	11/10/05	0.39	-0.94161
46	46	Holy Cross Hospital		Fort Lauderdale	FL	L	WS	Run 3	11/10/05	1.31	0.270027

MEDIUM HMIWI (>200, ≤500 LB/HR)											
30	30	Riddle Memorial Hospital		Media	PA	M	WS	Run 1	3/11/03, 3/13/03-3/14/03	0.264	-1.33324
30	30	Riddle Memorial Hospital		Media	PA	M	WS	Run 2	3/11/03, 3/13/03-3/14/03	0.499	-0.6952
30	30	Riddle Memorial Hospital		Media	PA	M	WS	Run 3	3/11/03, 3/13/03-3/14/03	0.246	-1.40235
13	13	University of Maryland at Baltimore, Environmental Health and Safety Facility		Baltimore	MD	M	WS	Run 1	9/24/03-9/25/03	1.0	0
13	13	University of Maryland at Baltimore, Environmental Health and Safety Facility		Baltimore	MD	M	WS	Run 2	9/24/03-9/25/03	0.101	-2.29536
13	13	University of Maryland at Baltimore, Environmental Health and Safety Facility		Baltimore	MD	M	WS	Run 3	9/24/03-9/25/03	0.305	-1.18582
108	108--1	Rocky Mountain Laboratories, National Institute of Allergy and Infectious Diseases	Unit 1	Hamilton	MT	M	WS	Run 1	10/01/02	0.366	-1.0057
108	108--1	Rocky Mountain Laboratories, National Institute of Allergy and Infectious Diseases	Unit 1	Hamilton	MT	M	WS	Run 2	10/01/02	1.0	0
108	108--1	Rocky Mountain Laboratories, National Institute of Allergy and Infectious Diseases	Unit 1	Hamilton	MT	M	WS	Run 3	10/01/02	0.136	-1.99308
108	108--1	Rocky Mountain Laboratories, National Institute of Allergy and Infectious Diseases	Unit 1	Hamilton	MT	M	WS	Run 4	10/01/02	0.545	-0.60679
108	108--1	Rocky Mountain Laboratories, National Institute of Allergy and Infectious Diseases	Unit 1	Hamilton	MT	M	WS	Run 5	10/01/02	0.724	-0.32302
108	108--1	Rocky Mountain Laboratories, National Institute of Allergy and Infectious Diseases	Unit 1	Hamilton	MT	M	WS	Run 6	10/01/02	1.0	0
108	108--1	Rocky Mountain Laboratories, National Institute of Allergy and Infectious Diseases	Unit 1	Hamilton	MT	M	WS	Run 7	10/01/02	0.158	-1.84545
108	108--1	Rocky Mountain Laboratories, National Institute of Allergy and Infectious Diseases	Unit 1	Hamilton	MT	M	WS	Run 8	10/01/02	0.625	-0.47045
108	108--1	Rocky Mountain Laboratories, National Institute of Allergy and Infectious Diseases	Unit 1	Hamilton	MT	M	WS	Run 9	10/01/02	0.474	-0.74684
108	108--1	Rocky Mountain Laboratories, National Institute of Allergy and Infectious Diseases	Unit 1	Hamilton	MT	M	WS	Run 1	9/24/03	1.0	0
108	108--1	Rocky Mountain Laboratories, National Institute of Allergy and Infectious Diseases	Unit 1	Hamilton	MT	M	WS	Run 2	9/24/03	1.0	0
108	108--1	Rocky Mountain Laboratories, National Institute of Allergy and Infectious Diseases	Unit 1	Hamilton	MT	M	WS	Run 3	9/24/03	1.0	0
108	108--1	Rocky Mountain Laboratories, National Institute of Allergy and Infectious Diseases	Unit 1	Hamilton	MT	M	WS	Run 4	9/24/03	1.0	0
108	108--1	Rocky Mountain Laboratories, National Institute of Allergy and Infectious Diseases	Unit 1	Hamilton	MT	M	WS	Run 5	9/24/03	1.0	0
108	108--1	Rocky Mountain Laboratories, National Institute of Allergy and Infectious Diseases	Unit 1	Hamilton	MT	M	WS	Run 6	9/24/03	1.0	0
108	108--1	Rocky Mountain Laboratories, National Institute of Allergy and Infectious Diseases	Unit 1	Hamilton	MT	M	WS	Run 7	9/24/03	1.0	0
108	108--1	Rocky Mountain Laboratories, National Institute of Allergy and Infectious Diseases	Unit 1	Hamilton	MT	M	WS	Run 1	9/28/04	1.0	0
108	108--1	Rocky Mountain Laboratories, National Institute of Allergy and Infectious Diseases	Unit 1	Hamilton	MT	M	WS	Run 2	9/28/04	1.0	0
108	108--1	Rocky Mountain Laboratories, National Institute of Allergy and Infectious Diseases	Unit 1	Hamilton	MT	M	WS	Run 3	9/28/04	1.0	0
108	108--1	Rocky Mountain Laboratories, National Institute of Allergy and Infectious Diseases	Unit 1	Hamilton	MT	M	WS	Run 4	9/28/04	0.2	-1.60944
108	108--1	Rocky Mountain Laboratories, National Institute of Allergy and Infectious Diseases	Unit 1	Hamilton	MT	M	WS	Run 5	9/28/04	1.0	0
108	108--1	Rocky Mountain Laboratories, National Institute of Allergy and Infectious Diseases	Unit 1	Hamilton	MT	M	WS	Run 6	9/28/04	1.0	0
108	108--1	Rocky Mountain Laboratories, National Institute of Allergy and Infectious Diseases	Unit 1	Hamilton	MT	M	WS	Run 7	9/28/04	1.0	0
108	108--1	Rocky Mountain Laboratories, National Institute of Allergy and Infectious Diseases	Unit 1	Hamilton	MT	M	WS	Run 8	9/28/04	0.8	-0.22314
108	108--1	Rocky Mountain Laboratories, National Institute of Allergy and Infectious Diseases	Unit 1	Hamilton	MT	M	WS	Run 9	9/28/04	4.1	1.410987
108	108--1	Rocky Mountain Laboratories, National Institute of Allergy and Infectious Diseases	Unit 1	Hamilton	MT	M	WS	Run 10	9/28/04	1.0	0
108	108--1	Rocky Mountain Laboratories, National Institute of Allergy and Infectious Diseases	Unit 1	Hamilton	MT	M	WS	Run 11	9/28/04	1.0	0
108	108--1	Rocky Mountain Laboratories, National Institute of Allergy and Infectious Diseases	Unit 1	Hamilton	MT	M	WS	Run 12	9/28/04	1.0	0
108	108--1	Rocky Mountain Laboratories, National Institute of Allergy and Infectious Diseases	Unit 1	Hamilton	MT	M	WS	Run 14	9/28/04	1.0	0
108	108--1	Rocky Mountain Laboratories, National Institute of Allergy and Infectious Diseases	Unit 1	Hamilton	MT	M	WS	Run 15	9/28/04	2.5	0.916291
108	108--1	Rocky Mountain Laboratories, National Institute of Allergy and Infectious Diseases	Unit 1	Hamilton	MT	M	WS	Run 1	8/30/05	1.0	0

108	108--1	Rocky Mountain Laboratories, National Institute of Allergy and Infectious Diseases	Unit 1	Hamilton	MT	M	WS	Run 2	8/30/05	1.0	0
108	108--1	Rocky Mountain Laboratories, National Institute of Allergy and Infectious Diseases	Unit 1	Hamilton	MT	M	WS	Run 3	8/30/05	0.4	-0.91629
108	108--1	Rocky Mountain Laboratories, National Institute of Allergy and Infectious Diseases	Unit 1	Hamilton	MT	M	WS	Run 4	8/30/05	1.0	0
108	108--1	Rocky Mountain Laboratories, National Institute of Allergy and Infectious Diseases	Unit 1	Hamilton	MT	M	WS	Run 5	8/30/05	1.0	0
108	108--1	Rocky Mountain Laboratories, National Institute of Allergy and Infectious Diseases	Unit 1	Hamilton	MT	M	WS	Run 6	8/30/05	1.0	0

108	108--1	Rocky Mountain Laboratories, National Institute of Allergy and Infectious Diseases	Unit 1	Hamilton	MT	M	WS	Run 7	8/30/05	1.6	0.470004
108	108--1	Rocky Mountain Laboratories, National Institute of Allergy and Infectious Diseases	Unit 1	Hamilton	MT	M	WS	Run 8	8/30/05	0.5	-0.69315
108	108--1	Rocky Mountain Laboratories, National Institute of Allergy and Infectious Diseases	Unit 1	Hamilton	MT	M	WS	Run 9	8/30/05	0.2	-1.60944
108	108--1	Rocky Mountain Laboratories, National Institute of Allergy and Infectious Diseases	Unit 1	Hamilton	MT	M	WS	Run 10	8/30/05	1.0	0
108	108--1	Rocky Mountain Laboratories, National Institute of Allergy and Infectious Diseases	Unit 1	Hamilton	MT	M	WS	Run 11	8/30/05	0.4	-0.91629
108	108--1	Rocky Mountain Laboratories, National Institute of Allergy and Infectious Diseases	Unit 1	Hamilton	MT	M	WS	Run 12	8/30/05	1.0	0
108	108--1	Rocky Mountain Laboratories, National Institute of Allergy and Infectious Diseases	Unit 1	Hamilton	MT	M	WS	Run 1	8/15/06-8/17/06	1.0	0
108	108--1	Rocky Mountain Laboratories, National Institute of Allergy and Infectious Diseases	Unit 1	Hamilton	MT	M	WS	Run 2	8/15/06-8/17/06	1.0	0
108	108--1	Rocky Mountain Laboratories, National Institute of Allergy and Infectious Diseases	Unit 1	Hamilton	MT	M	WS	Run 3	8/15/06-8/17/06	0.1	-2.30259
108	108--1	Rocky Mountain Laboratories, National Institute of Allergy and Infectious Diseases	Unit 1	Hamilton	MT	M	WS	Run 4	8/15/06-8/17/06	1.0	0
108	108--1	Rocky Mountain Laboratories, National Institute of Allergy and Infectious Diseases	Unit 1	Hamilton	MT	M	WS	Run 5	8/15/06-8/17/06	1.0	0
108	108--1	Rocky Mountain Laboratories, National Institute of Allergy and Infectious Diseases	Unit 1	Hamilton	MT	M	WS	Run 6	8/15/06-8/17/06	1.0	0
108	108--1	Rocky Mountain Laboratories, National Institute of Allergy and Infectious Diseases	Unit 1	Hamilton	MT	M	WS	Run 7	8/15/06-8/17/06	1.0	0
108	108--1	Rocky Mountain Laboratories, National Institute of Allergy and Infectious Diseases	Unit 1	Hamilton	MT	M	WS	Run 8	8/15/06-8/17/06	1.0	0
108	108--1	Rocky Mountain Laboratories, National Institute of Allergy and Infectious Diseases	Unit 1	Hamilton	MT	M	WS	Run 9	8/15/06-8/17/06	1.0	0
108	108--1	Rocky Mountain Laboratories, National Institute of Allergy and Infectious Diseases	Unit 1	Hamilton	MT	M	WS	Run 10	8/15/06-8/17/06	1.0	0
108	108--1	Rocky Mountain Laboratories, National Institute of Allergy and Infectious Diseases	Unit 1	Hamilton	MT	M	WS	Run 11	8/15/06-8/17/06	1.0	0
108	108--1	Rocky Mountain Laboratories, National Institute of Allergy and Infectious Diseases	Unit 1	Hamilton	MT	M	WS	Run 12	8/15/06-8/17/06	1.0	0
108	108--1	Rocky Mountain Laboratories, National Institute of Allergy and Infectious Diseases	Unit 1	Hamilton	MT	M	WS	Run 13	8/15/06-8/17/06	1.0	0
108	108--1	Rocky Mountain Laboratories, National Institute of Allergy and Infectious Diseases	Unit 1	Hamilton	MT	M	WS	Run 14	8/15/06-8/17/06	1.0	0
108	108--1	Rocky Mountain Laboratories, National Institute of Allergy and Infectious Diseases	Unit 1	Hamilton	MT	M	WS	Run 1	9/17/07-9/19/07	0.104	-2.26595
108	108--1	Rocky Mountain Laboratories, National Institute of Allergy and Infectious Diseases	Unit 1	Hamilton	MT	M	WS	Run 2	9/17/07-9/19/07	1.0	0
108	108--1	Rocky Mountain Laboratories, National Institute of Allergy and Infectious Diseases	Unit 1	Hamilton	MT	M	WS	Run 3	9/17/07-9/19/07	1.0	0
108	108--1	Rocky Mountain Laboratories, National Institute of Allergy and Infectious Diseases	Unit 1	Hamilton	MT	M	WS	Run 4	9/17/07-9/19/07	1.0	0
108	108--1	Rocky Mountain Laboratories, National Institute of Allergy and Infectious Diseases	Unit 1	Hamilton	MT	M	WS	Run 5	9/17/07-9/19/07	1.0	0
108	108--1	Rocky Mountain Laboratories, National Institute of Allergy and Infectious Diseases	Unit 1	Hamilton	MT	M	WS	Run 6	9/17/07-9/19/07	0.431	-0.84163
108	108--1	Rocky Mountain Laboratories, National Institute of Allergy and Infectious Diseases	Unit 1	Hamilton	MT	M	WS	Run 7	9/17/07-9/19/07	0.386	-0.95163
108	108--1	Rocky Mountain Laboratories, National Institute of Allergy and Infectious Diseases	Unit 1	Hamilton	MT	M	WS	Run 8	9/17/07-9/19/07	3.09	1.127811
SMALL NON-RURAL HMIWI (≤200 LB/HR)											
SMALL RURAL HMIWI (≤200 LB/HR)											
116	116	Yukon-Kuskokwim Delta Regional Hospital		Bethel	AK	SR	CC	Run 1	10/23/01	15.8	2.759228
116	116	Yukon-Kuskokwim Delta Regional Hospital		Bethel	AK	SR	CC	Run 2	10/23/01	23.1	3.140538
116	116	Yukon-Kuskokwim Delta Regional Hospital		Bethel	AK	SR	CC	Run 3	10/23/01	28.8	3.360127