Guidance on Submitting Data to the Pollution Prevention Results Data System

The P2 Results Task Force Quality Assurance Goal is that all P2 data and information gathered in the P2 Results Data System be of a high quality that meets the needs of EPA, NPPR, P2Rx, and each program's intended use of the data/information. There are currently over 90 P2 programs throughout the U.S. that are sharing their results through the P2 Results Data System. This document advises data providers on: (1) the necessary link between governmental efforts to promote P2 and what gets reported; (2) applicable metrics; and, (3) recommended data quality steps. All three aspects help the System meet the needs of data users. The P2 Results Task Force is committed to continually improving and updating the System and appreciates feedback and ideas from data providers.

Needs of Data Users

EPA's P2 Program currently uses the results to develop various reports. The Agency takes 10 percent of what remains after P2 and Source Reduction Assistance Grant results are subtracted from total National P2 Results System outcome results in its reports to Congress and the Office of Management and Budget (OMB). EPA reports this amount to account for its sphere of influence, beyond grants, in supporting state and tribal P2 efforts.

The P2 Results Taskforce uses the data from the P2 Results System to prepare three-year national reports on P2 results.

P2Rx Centers use P2 Results System data to develop regional presentations and profiles on the results of P2 program efforts. P2Rx Centers also co-manage with NPPR the P2 Results Task Force and help oversee the development of the System and the national reports. P2Rx Centers provide training for data providers in their Regions. NEWMOA's and PPRC's P2Rx Centers provide software and hardware support for the System.

State and local programs use the data from the System to help them estimate the impacts of their efforts and present those to funders, policy makers, clients, and other stakeholders.

Report Only Results That are Connected to P2 Activities

The P2 Results System is designed to collect data on activity, behavioral, environmental outcomes, and financial outcomes related to P2 activities supported by state, local, tribal, and university-based programs around the U.S. Some of these activities are funded by EPA and other federal agencies, and some are funded by the state, local, and tribal programs and other sources.

All results data must be associated with some program or activity that meets the EPA's definition of pollution prevention. Note that EPA's current P2 definition in its grant requests for proposals states that reuse and/or remanufacturing of hazardous secondary material, prior to being discarded, that is integral to the production of a product is considered source reduction, and may be conducted offsite under appropriate conditions. Offsite recycling of non-hazardous material is not considered P2. Programs should ensure that the P2 results they provide to the System are from the following types of activities or combination of activities:

- P2 planning requirements at the state or local level;

- Onsite technical, compliance, and/or small business assistance;
- Training activities, including onsite, workshops, meetings, and conferences;
- Dissemination of information in hard copy or through the internet or social media;
- P2 and environmental excellence awards programs;
- Grant programs;
- Recognition programs;
- Certification programs;
- Sector initiatives;
- Environmental leadership / stewardship program;
- Lean and green efforts;
- P2 efforts integrated into Environmental Management Systems;
- P2 related to environmentally preferable purchasing;
- P2 related to green chemistry, alternatives assessment, and safer chemicals activities;
- Compliance assistance;
- P2-related to Environmental Results Programs; and
- Multi-media and P2 integration in regulatory programs.

Reporting and Metrics Guidelines

- A [data dictionary](#) is available to help users with the definitions for the specific measures related to the following P2 results outcomes, as well activity and behavior metrics:
  - Hazardous and toxic materials use and waste reductions;
  - Solid (non-hazardous) materials and waste reductions;
  - Air pollutant reductions;
  - Water pollutant reductions;
  - Energy conservation and renewable energy development;
  - Water conservation;
  - Greenhouse gas reductions;
  - Sustainability metrics; and
  - Financial impacts.

- Submit data for EPA-funded projects separately from non-EPA funded projects so that reports can be generated that distinguish these sources of support.

- Pause before reporting results that may be beyond the reach of state and tribal P2 efforts, or that are driven by broader economic or other non-environmental factors beyond the scope of governmental and university P2 programs (even if reported to you through a leadership or similar program). Your consultation on these matters with the P2 Results Task Force Chairs – Andy Bray, NEWMOA ([abray@newmoa.org)](mailto:abray@newmoa.org) or Ken Grimm, PPRC (KGrimm@pprc.org) – would be greatly appreciated. These results may not be appropriate to submit to the P2 Results System as they might distort the portrayal of governmental and state university P2-related impacts. A strong indication of other factors being at work is a case with extremely large results that dwarf P2 results from past or present projects. Please consult the Task Force Chairs on any extremely large P2 outcome data.

- Data should be submitted separately for 2010 and 2011. Report the year in which the Program gathered the results and not the year in which the project or activity was started.

- Outcome results should reflect one year of impact and not multiple years.

- In submitting data on cost saving, data providers should distinguish savings from reduced solid (non-hazardous) waste from other savings.

- For greenhouse gas reductions, if you report any pounds of CO_2e reductions, please be sure to enter the energy-reduction components (i.e., electricity and fuels) AND convert those energy components to pounds of CO_2e. This makes the conversion more transparent, which data users can check for data quality purposes.

- If you do not report any pounds of CO_2e, enter just the energy-reduction components. The lack of entry for pounds CO_2e will make transparent that no conversion to CO_2e was done, which cues those preparing the National P2 Results Reports to perform the conversion when compiling the data.

Guidance on Data Quality Management Practices
The P2 Results System relies on the integrity of the P2 programs that are sharing data to have effective data quality assurance and management practices in place. The validity of this voluntary system depends on the ability of the participating programs to ensure that their data is of high quality and the process used to arrive at the data is transparent and reproducible. The P2 Results Task Force Quality Assurance Goal is that all P2 data and information gathered in the P2 Results Data System be of high quality that meets the needs of EPA, NPPR, P2Rx, and each program's intended use of the data/information.

The policies are:
- All environmental data generated for or by the System is of known and acceptable quality. Participating programs design data quality oversight and the associated level of effort in their quality assurance (QA) activities to meet the needs of the intended uses of the data.
- Programs document their QA approaches and steps.
- Programs develop and implement an acceptable and cost-effective program of QA activities at the onset of their P2 results data collection to help ensure that the necessary level of data quality will be achieved.
- Programs work toward developing Standard Operating Procedures (SOPs) that specify the procedures needed to assure an appropriate level of data quality.
- All P2 projects that support externally-generated environmental data through contracts, grants, or interagency agreements ensure that acceptable QA measures are included in the appropriate agreement documents, and that these external parties follow acceptable data quality management practices.

Sources of Outcome Data & Methodologies

There are various sources of data used by programs to arrive at the outcome data they report to the P2 Results Data System, including:

- *Mandatory state pollution prevention reporting requirements.* A number of states, including New Jersey, Massachusetts, Washington, and others require companies that use or release a certain amount of hazardous materials, pollutants, or wastes to submit regular reports to them. These reports are certified by the firms as to their accuracy and state P2 program staff review them for completeness.

- *On-site assistance by P2 program staff professionals, interns, or volunteer retirees.* This data is reported by the firm through the technical assistance provider. Often the company or the technical assistance provider is able to use direct measures, such as energy and water use captured through utility bills, metering, or other onsite techniques for measuring changes. Visit http://www.newmoa.org/prevention/projects/datacol/ for examples of tools that technical assistance programs use to collect data from their clients.

- *P2 awards, grants, recognition, leadership designation, or certification programs.* Data reported by businesses, communities, and institutions on their P2 accomplishments that are submitted to state or state-affiliated programs on applications for P2 awards, recognition, leadership designation, or certifications. Often these applications require a certification on the part of the firm regarding the accuracy of the information. Some programs check the reported results before providing the award, recognition, or certification. Some P2 programs provide grants or contracts to support source reduction projects, and the recipients provide results on the activities they conducted with those funds.

Methods used to obtain the data include:

- *Direct measures captured by meters, monitors, sensors, or other measuring devices.* These results are reported to state or state-affiliated programs by businesses, communities, and institutions. Technical assistance providers may assist their clients with capturing them.

- *Estimates calculated using reputable, peer-reviewed methodologies.* Outcome results estimated by firms, communities, institutions, and/or technical assistance providers, who are able to utilize reported behavioral change outcomes (such as number of bulbs converted to LEDs or number of water saving devices installed) combined with reputable, peer-reviewed tools or algorithms for calculating the associated environmental and financial outcomes.

- *Estimates calculated using methodologies that have not undergone peer review.* Outcomes estimated using methodologies that are based on converting reported behavioral changes to environmental or financial outcomes using methodologies that have not undergone peer review.

The Task Force recognizes that P2 outcome data gathered or estimated through the first two methods outlined above is preferred yet acknowledge that such measures can sometimes be difficult to come by. The group cautions against using methodologies that have not been peer reviewed for arriving at estimations and strongly encourages data providers to consult with the Task Force or participate in its conference calls. These calls can provide a forum for methodology discussion and review.

The P2 Results Task Force provides oversight on the development of the P2 Results System and helps train data submitters on its use. The Task Force also reviews all Reports that pull data from the System into the three-year national summaries. These Reports are extensively reviewed for data quality and result in ongoing data quality improvements to the System.

For more information, contact the P2 Results Task Force Co-Chairs –
Andy Bray, NEWMOA (abray@newmoa.org) (or Ken Grimm, PPRC (KGrimm@pprc.org).