NNSA/DOE P2 Questionnaire Date Sent: April 8, 2005

Compilation of responses received by April 21, 2005

About this questionnaire:

NNSA and DOE P2 staff have developed the following questionnaire. It is designed to gather information on the collection and use of P2 and waste generation data.

Please complete the questions to the best of your ability and return the document as an email attachment to Josh Silverman at josh.silverman@eh.doe.gov. Responses will be collected through **Friday**, **April 15**, **2005**. Results will be discussed at the P2 Workshop in May, and on subsequent P2 calls.

Questions? Call Josh Silverman at (202) 586-6535 or Bruce Campbell at (925) 423-3481. Thank you for your participation.

Section I: Questions Related to collection and use of waste generation and P2 data

- 1. In which venues does your site use waste gen. & P2 data? Please select all that apply, i.e., waste gen., P2 or both. Provide any comments about how you use the data that you think may be appropriate.
 - a. NEPA planning process

waste gen. Yes: 69.2% No: 30.8% P2 Yes: 53.8% No: 46.2%

Comments:

- [Site's] Environmental Review Checklist incorporates this information and concepts.
- Not directly used for the NEPA planning process. Planners don't have access to this information. This does not mean that we do not use waste min. and P2 concepts in our NEPA planning process.
- Sometimes we try to forecast the amount of waste that we expect to be generated by an activity using historical waste generation data.
- Interdisciplinary Team (IDT), Reporting and Environmental Scorecards, Annual Site Environmental (ASER) Report, Site EA
- [Contractor] uses project-specific anticipated activities and waste generation information compiled during the NEPA review to provide information on potential P2 activities that may apply to the specific project/activity.
- Waste gen and P2 always considered in NEPA planning.

b. Work/activity planning and design

waste gen. Yes: 83.3% No: 16.7% P2 Yes: 75% No: 25%

Comments:

- Again, this information is found on the Environmental Review Checklist as well as the Process Improvement Projects (PIPs) which is a part of the Six Sigma process.
- P2 considerations for work planning and design primarily focused on Environmentally Preferable Products Program and [Site] Environmental Management System aspects such as energy use, refrigerant specifications, and petroleum products usage.

- Not directly used for work/activity planning. Planners don't have access to this information. This does not mean that we do not use waste min. and P2 concepts in our work planning activities.
- Waste generation data is available to directorates and environmental analysts and could be used as background to help principle investigators predict waste generation associated with activities. We don't currently have an effective way of measuring this. One of our objectives in our ISO 14001 EMS improvements is to better document P2 successes and lessons learned and make this information available/accessible to line management and employees planning new work activities.
- Information is needed for Waste Management & P2 planning, staffing, budget and laboratory clean-outs.
- [Contractor] has established management requirements (instructions and procedures) concerning the implementation of P2, recycling, and affirmative procurement within [Site] work/activities.
- Waste Generation and P2 data is used to rate environmental aspects. Per an established procedure newly authorized work scope in the Annual Work Plan is reviewed for new or deleted Environmental Aspects.
- New acid neutralization system planning performed

c. Organizational self assessments & reports

waste gen. Yes: 92.3% No: 7.7% P2 Yes: 92.3% No: 7.7%

Comments:

- This information is incorporated into the site's Annual Report on Waste Generation and Pollution Prevention Progress (SEN 37) Report as well as the Annual Hazardous Waste Reduction Progress Report.
- Our own waste generation P2 data has been integrated into the [Site] Environmental Management System which establishes Objectives and Targets associated with [Site] Aspects
- ESH&QA quarterly performance report
- NNSA Reports
- Directorate Assurance Managers receive quarterly waste generation data and use this information in Self Assessment reporting and planning. P2 data is also used but we don't currently have an effective way of capturing/documenting and making P2 successes and lessons learned accessible.
- When applicable to the scope of specific organizational self assessments and reports, waste generation, affirmative procurement, and P2 information may be used.

d. Waste stream assessment for PPOA project selection

waste gen. Yes: 76.9% No: 23.1% P2 Yes: 76.9% No: 23.1%

Comments:

- The PIPs, which are a part of the Six Sigma process, incorporate this information.
- Yes, but not necessarily every year.
- We review waste generation figures by directorate quarterly. P2 historical records are read.

• When PPOAs are performed at [Site], material inputs and waste generation information related to the area to be assessed as well as implemented and potential P2 options are used and documented.

e. Determination of significant environmental aspects, objectives and targets

waste gen. Yes: 84.6% No: 15.4% P2 Yes: 76.9% No: 23.1%

Comments:

- The PIPs, which are a part of the Six Sigma process, incorporate this information.
- Waste generation and P2 data was used to help determine institutional significance of waste generation aspects by waste type. They are being/will be used to develop objectives and targets and measure progress.
- Both Waste Management and P2 use this data for completing baselines for EMS objectives and targets.
- Waste generation and P2 activities were integrated into the determination of [Contractor's] significant aspects, objectives, and targets.
- Significant environmental aspects, objectives and targets are identified per an established procedure. The results of this process is maintained in the online Environmental Aspects Baseline. Historical waste generation and pollutionprevention data support the identification of significant environmental aspects. The Environmental Aspects, Hazardous Waste Generation and Consumable Goods, both have an overall significance rating of medium.
- Maybe next year.

f. Tracking progress (continuous improvement) for waste related environmental aspects

waste gen. Yes: 69.2% No: 30.8% P2 Yes: 69.2% No: 30.8%

Comments:

- The PIPs within the Six Sigma process track this information.
- One of our objectives in our ISO 14001 EMS improvements is to better document P2 successes and lessons learned and make this information available/accessible to line management and employees planning new work activities. This information will flow up from activity planning/assessment, through the Directorate Self-Assessment process to the EMS annual assessment and report.
- Waste generation and P2 activities were integrated into the determination of [Contractor's] EMS planning process, objectives, targets and action plans, and therefore into the tracking of [Contractor's] related progress.
- [Site] does not have significant ongoing/continuous waste generating processes.

 Most of the processes are intermittent, e.g. short-term construction activities that are necessary to support ongoing operational needs, short duration scientific or engineering activities, and maintenance activities.
- Likely next year.

g. Institutional & line management reports

waste gen. Yes: 76.9% No: 23.1% P2 Yes: 69.2% No: 30.8%

Please describe these reports:

- [Contractor] maintains two databases to predict waste generation volumes over the lifecycle of EM activities. Actual waste volumes are maintained onsite at the facilities accepting those wastes. Those two databases are the Waste Generation Forecast System, which tracks life cycle estimates and the Waste Load Forecast which tracks daily/weekly transport estimates.
- Internal waste generation/recycling reports, Recycling/poll'n prevention rollup reports
- ESH& QA quarterly performance report
- Site-Wide Environmental Assessments, Environmental Scorecard (accomplishments for the quarter), and [Contractor] Waste Shipment Report.
- Waste generation and P2 activities are documented on [Contractor's] Internal Annual Pollution Prevention Report. [Contractor] waste generation and P2 information is also included in the [site-wide] ASER.

h. Contract performance measures

waste gen. Yes: 57.1% No: 42.9% P2 Yes: 64.3% No: 35.7%

Comments:

• DOE Order 450.1 is included in [Contractor's] contractual requirements.

i. Waste generator reports to State and Federal

waste gen. Yes: 100% No: 0% P2 Yes: 92.3% No: 7.7%

Please identify reports:

- Annual Report of Hazardous Waste Activities (RCRA) (state/federal); (2) Annual Report of Waste Generation and Pollution Prevention Progress (federal); (3) The [Site] Progress Report for the [State] Hazardous Waste Reduction Act for Calendar Year 2004
- Annual hazardous waste generator report, NYS.
- PA Act 101, Pennsylvania's "Municipal Waste Planning, Recycling, and Waste Reduction Act" Annual Report, PA Hazardous Waste Biennial Report, PA Residual Waste Biennial Report, WV Hazardous Waste Biennial Report
- Annual Facility Report (State), Bi-annual report (State), SB-14 (State), EPCRA Reporting, and Annual Site Environmental Report (ASER)
- Tennessee Hazardous Waste Reduction Act-required hazardous waste reduction plan compilation, annual review, and update as needed based on review (2 plans total [Site] and off-site analytical chemistry facility); (2) Tennessee Hazardous Waste Reduction Act annual summary reporting included in the Annual Hazardous Waste Report (RCRA Report) required by the Tennessee Hazardous Waste Regulations and RCRA (2 reports total [Site] and off-site analytical chemistry facility); (3) Tennessee Hazardous Waste Reduction Act annual hazardous waste reduction progress report (2 reports total [Site] and off-site analytical chemistry facility); (4) EPCRA/PPA TRI reporting and validation.
- Just to DOE.

j. Use for creating incentives to reduce, reuse and recycle waste

waste gen. Yes: 69.2% No: 30.8% P2 Yes: 69.2% No: 30.8%

Comments:

- Donations from aluminum can recycling has gone to local charities.
- Employee incentive program entitled "Bright Ideas"
- As stated above, waste generation data information is used in Self Assessment reporting and planning. P2 data is also used but we don't currently have an effective way of capturing/documenting and making P2 successes and lessons learned accessible.
- Waste generation and cost data used to support implementation of P2 projects/activities including source reduction, reuse, and recycle. P2 project data used to support various award nominations and awareness to provide additional incentive.
- [Site] does not routinely generate significant waste streams.

k. Other(s) (please describe)

Waste generation and P2 data are used to respond to various internal and external ad-hoc requests received by [Site].

2. Does your facility use waste generation and P2 data to:

a. Develop, calculate or monitor fee-for-service waste management?

Yes: 16.7% No: 83.3%

If so, how?

- [Site] has a waste chargeback system for charging generators for hazardous waste. Charges are based on difficulty of disposal.
- While [Site's] overall waste management is not based on fee-for-service, [Contractor] does charge specific generators for [Contractor] labor to manage specific activities related to specific wastes.
- Waste Chargeback System for the management and disposal of regulated waste.

b. Develop, calculate or monitor generator-set-aside fees?

Yes: 0% No: 100%

3. How does your site parse waste generation by PSO (e.g., by cost account, by percent of budget, etc?)

- Do Not/Not Applicable: 4 responses
- By project cost accounting charges are tracked and charged to individual projects
- By waste stream/type
- Budget percentage
- *By percent of budget by PSO in each directorate.*
- We are deemed a Defense Program laboratory (DP) so most of our waste generated, is reported into the DP category. Each project and task number is assigned a Budget and Reporting (B&R) number which will then correlate to the proper PSO category.

- Our Waste Information System (WIMS) includes project & task, and B& R numbers. Each line item of waste contains this information.
- [Contractor] is completely funded by NNSA. Waste generation data are extracted from other PSO data by division number and generator information available within the tracking system maintained by an EM-funded organization.
- Cost account.
- [Site] has a user pays waste management system. Waste generation is not parsed for reporting or budget purposes by PSO.

4. How often do you update parsing factors for allocation of waste to DOE PSOs?

- Never or Not Applicable: 8 responses
- Annually: 3 responses

5. Do your waste generation numbers reflect waste generated or waste shipped?

Generated:69.2% Shipped: 7.7%

Both: 23.1% (comments below):

- As generated: hazardous waste; As shipped: standard landfill/sanitary waste, radioactive waste, recyclables
- [Site] tracks waste generated in order to determine our EPA generator status, and we report waste disposed on a calender year basis
- Both. Waste can be tracked by generation or waste shipped.

6. Does your site use waste generation and P2 data to evaluate and measure continuous improvement? Yes: 72.7% No: 26.3%

Comments:

- Not to any great extent. The nature of cleanup activities renders waste generation data as an unacceptable method of determining continuous improvement. With years of lots of activity; waste generation can be high. For cleanup operations this is actually good. Not a good method for metrics on a clean up site.
- Lab Management was using waste generation and P2 to measure progress related to the Secretarial Goals until they were removed from the Contract Performance Measures. Waste Generation and P2 became less visible to management after that. Several Waste Types have been identified as significant environmental aspects under ISO 14001, are having objectives and targets developed for them and will be evaluated for continuous improvement. P2 Accomplishments ans lessons-learned will be documented and employed for education and incentive.
- No. If so, only as identified in performance measures.
 - 7. How do you (or how would you) report internally on continuous improvement progress related to your site's significant environmental aspects?

- Through the Six Sigma process and tracking activities associated with individual PIPs
- Annual update to the site's EMS and/or Pollution Prevention/Waste Minimization Program
- Integrated into the NETL EMS Performance Metrics are quarterly status reports in a table format and annual reports into a consolidated Metrics for Environmental Management Action Plans which presents graphical representations of performance. Both are published on the ESH/ISM Intranet page.
- Semi-annual EMS Surveillance conducted by outside independent auditor and annual internal comprehensive EMS audit. ICARE program tracks corrective actions for continuous improvement.
- Significant institutional aspects will be identified in work activity planning documentation and performance reported through the Directorate and Institutional Self-Assessment process. Progress on directorate and institutional significant aspects, their objectives, and targets will be rolled up into an annual EMS report along with assessment of operational and environmental continuous improvement for management review
- ASER, Environmental Scorecard and Self-assessment.
- Through [Site's] established EMS and ISMS performance metric tracking system.
- [Site] has one significant environmental aspect. Progress towards meeting [related] requirements is reported weekly.
- Continuous improvement progress is tracked as part of a "Balanced Score Card" for the Environmental Management Services Department. Periodic management reviews of the [Site] Environmental Management System includes a discussion of progress on key continues improvement metrics.
- Reporting plans may be identified in our new EMS management procedures. If identified to report to Lab, it could be through the Lab's On Target newsletter or the electronic On Target briefs.
 - 8. How do you (or how would you) report waste avoided as a result of employing good engineering management practices that conserve resources, and other priorities that reduce pollution, such as employment of measures to reduce occupational exposure?
- Through the Six Sigma process and tracking activities associated with individual PIPs
- Annual DOE Waste Generation/P2 report
- This is a "soft" number that is difficult to track.
- Internal Pollution Prevention Opportunity Assessments and P2 Award Nominations.
- This data will be recorded and documented in the self assessment process
- ASER. Environmental Scorecard, SB-14
- [Site] obtains raw data from P2 project contacts and then compiles data in the [Site] Pollution Prevention Information Management System (P2IMS).
- Reporting is generally dependent upon others self-identifying their successes. No formal reporting mechanism has been established as this time.
- These items are not reported automatically, but rather only when someone brings them to our attention and we are able to connect waste avoidance to the action taken. Otherwise our waste generation trends are used to demonstrate the successful application new processes.

• Radioactive waste avoidance has been recorded through a previous performance measure. The Facilities Management Department employs these practices in the design of some planned structures. Lab employs ALARA principles to keep radiation exposures to a minimum.

Section II: Questions related to P2 Data System

- 1. Have you used the EH P2 data entry system (at http://www.eh.doe.gov/p2)? Yes: 85.7% No: 14.3%
- 2. How many years have you entered data into this system? Average: 5.92 years
- **3. Do you find the entry screens easy to use?** (1 not easy -5 very easy) Average: 3.8

Comments:

- The data entry screens are relatively easy to use. The time-consuming activity is compiling the data that is ultimately entered into the system.
- It is a problem to write real time since the system will "time out" after a few minutes which causes lost of unsaved data.
 - **4.** Are the categories relevant and/or appropriate? (1 not relevant 5 very relevant) Average: 3.4

Comments:

- Sanitary waste is not a relevant section
- For the Annual Report on Waste Generation & P2 Progress not all the reporting categories have been available for use. I needed to call Don Lentzen for direction on which would be the most appropriate category to use, i.e. ME, NA.
- Some just not relevant to [Site].
 - 5. Do you have to enter the same information multiple times?

Yes: 30% No: 70%

If so, identify the location(s):

- Waste sections require duplicate entries
- Certain accomplishments are also entered in the AP report may want to consider having a check box instead on the accomplishments homepage to designate it as one to also include in the AP report. (2) Total recycled materials are entered in the AP report, which is the total of the recycled materials reported in the Annual Report on Waste Generation and Pollution Prevention Progress. (3) Contact information for the Annual Report on Waste Generation and Pollution Prevention Progress and the AP Report – but all sites may not have the same contacts for both reports.
 - **6. Does the site ask you for unnecessary data elements?** Yes: 10% No: 90% If so, identify the element(s): none identified

7. What kind of reports and rollup data would you like to pull from the system that currently is not available?

a) Waste Generation:

- If possible, it would be useful if sites could pull trend graphs and tables by waste type, recycled material, etc. for their site, across NNSA, across DOE, etc. for comparison, for identifying areas for future emphasis, etc.
- Sanitary Waste generation numbers
- Tried to access information on the P2 website under Waste Generation/Reduction for Environmental Release Reduction Projects and Return-on-Investment Savings/Cost Avoidance but either could not find the link or it was not there.
- Perhaps a report (if it does not already exist), broken down by PSO, that compares waste generation forecasts with actual waste generation volumes.

b) EPP:

- If possible, it would be useful if sites could pull trend graphs and tables by material type, etc. for their site, across NNSA, across DOE, etc. for comparison, for identifying areas for future emphasis, etc. Also having a summary table generated as part of the report would be very useful since we currently pull and calculate that separately at this time.
- Suggestions- a print button that allows me to print one section at a time would be helpful for checking data. The fonts are different for several sections, would like to be able to choose one font. Have not noticed an option for spell check. I usually have to cut and paste data to look for errors. Would like to have a summary spreadsheet that is automatically populated when data is added, i.e. % of justified versus not justified for each category. Would like to have a button which lets me notify the reporting system that I have finished and that my report is complete and ready for review.

c) P2 Awards:

- There are often mistakes in the info on the main screen
- Program basically follows Whitehouse Closing the Circle Awards criteria, which makes sense. So no comments at this time.
- Historical awards information is difficult to find. IT would be nice to have one list of FEMP Energy/Water, DOE P2 various, and OFEE Closing the Circle awards that included Year, Award Type, Title, Winning Organization, and Names on Application. Having an abstract or the award nomination would also be useful.
- Award and short description

8. What other types of information would be valuable to track? What reports do you want to generate from that information?

- Class I ODS quantities. There is no formal reporting mechanism to document progress towards meeting these goals for ODS.
- While having every site report on every P2 project they implemented would be an extreme burden on the sites and on DOE to examine the information, DOE may want

to consider having the sites, as a voluntary option, each report the annual total number of P2 projects it implemented reducing how many metric tons of waste and resulting in what cost avoidance. While each site may use its own method for determining the number of projects implemented or cost avoidance, it would give DOE an idea of the overall activities at the sites and give the sites ideas about what other sites to contact to see what projects they are implementing.

• EMS Performance, EMS performance may be difficult to measure. Maybe some discussion on this topic would be helpful.

9. Would it be helpful to build in reminders (ticklers) into the new system that are automatically sent before mandatory deadlines? Yes: 54.5% No: 45.5%

Comments in Favor:

- *All areas (twice)*
- One for each main reporting category
- Around due dates

Comments Opposed:

- But may want to consider having the data entry deadlines shown on the input screens on the homepage, etc.
- Send a pre-notification e-mail two months prior to required submittal.