Summary of the Results of a Survey by the Massachusetts Office of Technical Assistance of Companies in Massachusetts to Help Inform EMFACT

May 31, 2006

Total Number of Respondents: 60

Numeric Responses

1. Do you have a computer system for tracking or monitoring?

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57	95.0%	Currently Doing - Purchases
2	3.3%	Would Like To - Purchases
52	86.7%	Currently Doing - Inventory
7	11.7%	Would Like To - Inventory
40	66.7%	Currently Doing - MSDSs
15	25.0%	Would Like To - MSDSs
19	31.7%	Currently Doing - Discharges of Wastewater Constituents
11	18.3%	Would Like To - Discharges of Wastewater Constituents
39	65.0%	Currently Doing - Emissions of Air Pollutants
13	21.7%	Would Like To - Emissions of Air Pollutants
34	56.7%	Currently Doing - Hazardous Waste Shipments
15	25.0%	Would Like To - Hazardous Waste Shipments
33	55.0%	Currently Doing - Energy Use
17	28.3%	Would Like To - Energy Use
27	45.0%	Currently Doing - Water Use
18	30.0%	Would Like To - Water Use
24	40.0%	Currently Doing - Solid Waste Generation
18	30.0%	Would Like To - Solid Waste Generation
24	40.0%	Currently Doing - Emergency Response Incidents
13	21.7%	Would Like To - Emergency Response Incidents
37	61.7%	Currently Doing - Costs of Chemical Use
11	18.3%	Would Like To - Costs of Chemical Use
36	60.0%	Currently Doing - Defects and Rework, or Scrap
9	15.0%	Would Like To - Defects and Rework, or Scrap
32	53.3%	Currently Doing - Process Flow or Mapping
8	13.3%	Would Like To - Process Flow or Mapping
0	0.0%	Currently Doing - Other (please describe)
2	3.3%	Would Like To - Other (please describe)

2. Do you track the flow of hazardous chemicals comprehensively, from purchasing and inventory through process steps or facility divisions, to final disposition?

35 58.3% Y

25 41.7% N

3. Can you determine the amount that becomes waste, is emitted to the air, and is discharged as wastewater?

45 75.0% Y 14 23.3% N 1 1.7% ~nr~

4. Can you identify the points within the process where the materials become waste, are emitted to the air, or become part of the wastewater system?

- 29 48.3% Y
- 3 5.0% N 27 45.0% M
- 1 1.7% ~nr~

5. Have you developed your own homegrown software for any of the purposes listed above?

48 80.0% Software used for homegrown tools: Excel (and/or Access)
0 0.0% Software used for homegrown tools: Oracle
0 0.0% Software used for homegrown tools: Quattro
12 20.0% Software used for homegrown tools: Used: Other (please name)

6. How is the information that you track used by you or others in the company?

43 71.7%	Improving operational efficiency and saving money
14 23.3%	Comparing performance with other companies, facilities, divisions
55 91.7%	Regulatory compliance
18 30.0%	Voluntary reporting to the public on corporate responsibility
14 23.3%	To coordinate training
38 63.3%	To reduce chemical use
37 61.7%	To improve safety
38 63.3%	To monitor productivity or quality

4 6.7% Other (please describe)

7. If you left any of the "Currently Doing" column of question #1 blank, please tell us why.

13 21.7%	Don't see the need
31 51.7%	We do track these things – just not on computer
4 6.7%	Estimating without tracking works just fine
2 3.3%	Haven't found good software for doing it
7 11.7%	Too much work to collect the data, not enough time
9 15.0%	No regulatory requirements to do it
2 3.3%	Our material, energy and water use efficiency seems good enough
12 20.0%	Other (please describe)

8. [Optional] What kind of company are you?

- 23 38.3% 1-100 Number of employees?
- 21 35.0% 100-500
- 7 11.7% 501-1000
- 5 8.3% 1000-?

 40
 66.7% Y
 Privately owned?

 17
 28.3% N
 3
 5.0% ~nr~

 2
 3.3% Y
 Independent consultant?

 41
 68.3% N
 17
 28.3% ~nr~

Text Responses

5. Have you developed your own homegrown software for any of the purposes listed above? Other description for last choice

Air Force developed software Both home grown and commercially developed software Dbase programs Filemaker Honeywell LOTUS Microsoft Access Paradox Partly computerized system/home grown RBase SAP Syteline TERMS Database and SAP Visual Mfg.

Commercially available software purchased for any of the purposes listed in question #1, and specific use

Actio software for MSDS management

Essential Software used for tracking Leaks (LDAR) Leak detection and Repair: SAP IFS system for tracking req materials and inventory

IFS system for tracking requiraterials and inventory

Maximo- purchasing, inventory and maintenance activity tracking

MP2 now, going to MAXIMO for purchasing and inventory, GE NTDahs for air emissions MSDS software from imagewave

Platinum Software - Invoicing (AP/AR) Viso - Quality Management System (for ISO purposes) Process Pro

Purchases, inventory, defects, rework and scrape, process flow, energy, and costs of chemicals Real World (Old DOS based software)

SAP for a,b,k from question number 1

We have a HRMS system that has some purchasing capabilities

We use the internal inventory system and other various means to compile data...no one good system, that would be nice.

Website - Permit Management by Polar Controls for Air Emissions, OSHA, Task, Training, etc.

6. How is the information that you track used by you or others in the company? Other description for last choice

Proper disposal of HAZMAT materials This is new, for mass balance purposes in the R & D Laboratory. Track rejects and waste Track shipments and receipt of materials.

7. If you left any of the "Currently Doing" column of question #1 blank, please tell us why. Other description for last choice

Do not get involved with any wastewater disposal

Don't have the issues to record

4 x's N/A

No real good system to use via computer- yours just might be the answer! No waste water emissions No waste water other than restrooms Not a priority - not sufficient payback Some of the tracking is for discrete small waste or emission streams These items are tracked manually using spreadsheets, etc., however, not 'computerized systems.' TRI, TUR, DEP Permitting all based on materials purchased - have that data We have zero discharge and we reuse our process water

We run a pH adjustment IWW system and have no capability to sense presence of metals, etc... We recycle cardboard and paper, reducing our impact to the solid waste issue. We are a VSQG, generate minimal VOCs and utilize natural gas as a combustion fuel in our boilers.

8. What kind of company are you? [Optional]

Product or Service?

Adhesive coated materials Biotechnology Coatings, custom polyurethane and polycarbonates Contract manufacturing Department of Defense Diagnostics testing manufacturer Electrical wire and cable Electronics manufacturer Emblematic uniform insignia Fabricated metal products Food High priority chemicals High Tech R&D Injection molded tableware Instrument manufacturer, non TURA reporting Insulated wire & cable Internet service provider - telecom

2 x's Medical devices

Metal part manufacturing/plating Paints & coatings Paper converters Personal care products Pharmaceutical research

Photographic & electronic components Powder metal parts Power generation Precious metals alloy generation and fabrication (jewelry) Pressure treated lumber Protective coatings Sporting goods Steam generation & supply Surface finishing Textiles - fabric printing & finishing Trash to energy Vaccine development - biopharmaceutical Wafer fabrication for integrated circuit production

Other (please describe)

Periodic compliance audits Public company on the NYSE