APPENDIX B: KEY INFORMANT INTERVIEWS REPORT

Key Informant Interviews

**Access to Environmental Information:
Environmental Reporting in Toronto**
Gaps and Opportunities

January 2007

**Prepared for
Toronto Public Health**

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1. INTRODUCTION

Toronto Public Health (TPH) is currently considering ways for the City make environmental information more easily accessible. As a part of this work, in October 2006 Public Health retained Lura Consulting and Marshall Macklin Monaghan to assist it on a project contributing to Public Health's ongoing policy development work on environmental reporting and access to environmental information.

Specifically, the goal of this project is to aid in Public Health's understanding of the coverage, gaps and opportunities and challenges of accessible environmental reporting programs in Toronto. The project includes two key elements:

- A stakeholder consultation; and,
- A technical review.

The consultation and the technical review are designed to achieve the following objectives:

- Identify opportunities and challenges of current applicable and accessible environmental reporting programs, including a focus on success, barriers and gaps.
- Provide a gross estimate of the chemical use, storage, transfer and release by sector and chemicals in Toronto;
- Assess the completeness of coverage of existing accessible environmental reporting programs in Toronto by sector and chemicals covered;
- Identify successes and challenges of selected community right-to-know environmental reporting programs in other jurisdictions;
- Identify areas of agreement/disagreement, and paths forward around perceived barriers and opportunities for industry participating in mandatory and voluntary environmental a reporting programs; and,
- Obtain input on priority areas for enhancement of environmental reporting;

As a part of this project, a total of eleven interviews were held with key informants, who ranged from administrators of reporting programs, to representatives from environmental organizations and industry. The interviews focused on how reported environmental information is used, the benefits and weaknesses of reporting programs, and both the barriers and opportunities for the reporting and use of environmental information. This report summarizes the findings of the interviews.

The report provides the perspectives of those interviewed and it may not necessarily represent the opinion of their agency. Each key informant has their own perspective on environmental reporting and therefore a consensus was not sought. This report provides an overview of the responses to the questions.

2. EXPERIENCES WITH REPORTING PROGRAMS

2.1 Uses for Reporting Programs

There were a number of uses described for the data collected through environmental reporting programs. These uses generally consisted of the following:

- For advocacy on environmental and public health issues;
- To identify environmental performance trends among industry sectors;

- To providing direction on environmental policy among levels of government, such as setting standards for emission quantities or local planning;
- To use in reports to the public that depict environmental trends and to document progress in environmental programming (e.g., pollution reduction programs, etc);
- To provide information to businesses on their operations that would help them improve their environmental and economic performance; and
- For use in public awareness initiatives.

A key use of the information is by governments to assist them in their policy planning and development. For example, the data can be used to identify environmental performance trends among industry sectors, which helps to inform their decisions on environmental and industrial policy directions and adjust performance and other standards. It can also be used to help with local planning, such as identifying how close a jurisdiction is to reaching emission caps. Environmental reporting programs can also be used to demonstrate Canada's performance against international or trans-boundary agreements.

Another key use of the information is for public awareness and advocacy. For example, the Toronto Environmental Alliance (TEA) published a map of emissions in the City of Toronto based on the federal National Pollutant Release Inventory (NPRI) data. TEA used the Workplace Hazardous Materials Information System (WHMIS) material safety data sheets (MSDS) to help employees at a facility determine what chemicals they had been exposed to after a fuel spill. In another case, TEA obtained the MSDS for the inventory of a facility after it had caught fire and fire fighters at the scene had become sick.

Among industry, the reported information can be used internally by companies to help them improve the overall performance of their operations. The data is used to help lower companies' ecological footprint and their material and energy intensity, and this also helps to improve the economic performance of the business. One key informant noted that their company has improved the marketability of their products while cutting costs by reducing waste and emissions and implementing pollution prevention practices.

While the information can be used to improve the performance of businesses, there is also a concern that it may be used against them. There was a concern that companies that report their emissions and are proactive and open about their efforts to improve their environmental performance could be portrayed negatively if they do not achieve their better-than-regulation environmental targets.

2.2   Initial Perspectives of Programs

Administrators of the NPRI, the Ontario's ONAir program (Regulation 127) and the City of Toronto's Sewer-Use By-law programs were asked to provide stakeholder perspectives at the outset of these programs.

NPRI

When NPRI was initiated, businesses were originally not happy with its arrival. However, it has now become a part of doing business. Ongoing improvements (including streamlining reporting and adding new substances) to NPRI is a collaborative approach that is spearheaded by a working group, whose membership includes environmental non-government organizations, members from industry, and the federal government. Environmental groups are thought to see the NPRI as a useful tool for ensuring transparency and the reporting of pollution.

Sewer Use By-law

When the Sewer-Use By-law was implemented, there was some concern over the requirement to provide pollution plans through the sewer-use by-law, and that there would be some commercial establishments that would be unable to produce such a plan. It was viewed by businesses as an additional burden.

To help alleviate this issue, the City of Toronto conducted a wide outreach program. Best practices information was prepared and workshops were held. A pollution prevention helpline and an e-mail address were established to help answer questions and provide guidance. Stakeholder meetings were also held to help address their concerns.

Regulation 127

Regulation 127 has a stakeholder working group that provides feedback to the Province on how the program is working and on how it can be improved. The program initially duplicated many materials reported through NPRI, and the Province was advised to streamline the process to reduce Industry's reporting burden. Over the years, many chemicals in Regulation 127 have been harmonized with NPRI. There are 15 substances in Regulation 127 that are reported under the one window system that Ontario established with NPRI but are not included in NPRI reports.

City of Eugene Toxics Right to Know Database

Reporting entities to the City of Eugene's Toxics Right to Know database reportedly do not like the program, as in addition to submitting the data they also have to pay a fee. The program uses materials balance accounting, which measures material inputs and outputs. This is said to require more data and additional detail. The program is also said to be duplicative of other reporting programs.

3. STRENGTHS AND WEAKNESSES OF REPORTING PROGRAMS

The informants were asked for their opinion on the benefits and disadvantages of reporting programs. Their responses are described below.

3.1 Benefits

Informants were asked to provide insight into the benefits of reporting programs and the information they collect. In general, the main benefits were:

- <u>Information from the programs helps businesses and governments alike to facilitate pollution prevention and improved environmental performance</u> - The information helps businesses, levels of government, and non-government organizations (NGOs) work towards their environmental goals by helping them to establish performance baselines, set targets, and monitor and improve environmental performance. This information can also help government departments and agencies and non-governmental agencies assist businesses to reach their environmental goals.

- <u>Environmental reporting can help to inform public and worker health and safety protection policies and programs</u> – The availability of environmental information helps to protect human health by identifying environmental risks and hazards in communities. Health and safety in the workforce is improved as production materials are better tracked and appropriate handling procedures are put in place.

- <u>The data collected from the programs allows for more informed governmental planning and policy decisions</u> - The data can be used by all levels of government to analyse environmental performance within jurisdictions (including compliance with international agreements) and to assist with policy and program planning, particularly when it is used in conjunction with web-mapping software. The data can be used to identify trends and to show where more effort is required. Also, municipal governments can use the data to help with their emergency preparedness planning.

- <u>The information can be used for public education and outreach</u> – The information available through reporting programs can be used to help educate and inform the public on chemicals in their communities and on the progress that is being made in environmental protection. The information provides the public with the opportunity to make better-informed life decisions – this can be bolstered by positive dialogue between businesses and the community, which can then be used to help the public to better understand what chemicals are being used and emitted from nearby sites and what pollution prevention and chemical control procedures are in place. Through this type of dialogue and reporting programs, businesses can demonstrate that they are good corporate citizens and responsive to the needs of their customers. Additionally, public reporting of environmental information helps to build public trust by demonstrating the results of government, industry or other environmental programs.

- <u>Environmental reporting can help improve economic performance</u> – Businesses are able to improve inventory control and reduce stockpiles through close monitoring of chemicals used and stored. This also makes it easier to investigate more environmentally-friendly raw material substitutions.

  Environmental reporting was also thought to help encourage green sustainable business in Toronto and to ensure that Toronto maintains its manufacturing base, as communities continue to demand better environmental performance from the local companies. It was recognized that industry is needed in Toronto, but that

companies with poor environmental performances may face pressure to close. If their environmental information was collected and accessible, the City or other community groups could help them find ways to improve their environmental performance.

It was also argued that disclosure of what materials are kept on-site or are being emitted is a democratic concept, and that having this information improves democracy. It was felt that this information stimulates public debate and provides the public with the information they need to make informed decisions.

3.2   Disadvantages

There were also a number of disadvantages identified with respect to reporting programs. They are summarized as follows:

- There is duplication among reporting programs - Disharmonization was said to exist between many reporting programs, and businesses can be required to report similar information to a number of different programs.

- Data accuracy, quality and consistency is a concern - Accuracy and quality of data can be an issue, as some companies have the required skill sets in-house, while others have to retain help. There are a variety of estimation methods allowed, and one method may give a different value than another. It can be difficult to verify the data, as submission of the data is not uniform, and information on emissions and storage is not complete. Environment Canada has an enforcement group that addresses suspicious NPRI data and completes audits when needed, but it does not act proactively and enforcement is based on complaints. In most reporting programs, small businesses are not required to report, and thus only data from large companies is used. Also, the reporting does not take into account fluctuations in productivity.

- Compliance with reporting - While most companies appear to comply, compliance is still an issue. It is difficult for regulators to know who should be reporting but do not, or who is reporting falsely. Government agencies sometimes work with industry associations to help identify those companies that fall within the reporting requirement but fail to report.

- Environmental reporting can be costly and technically challenging - Monitoring and reporting of environmental information can be costly and is prohibitively expensive for smaller companies. Some businesses that participate in reporting programs have the necessary in-house expertise, but many do not and retain consultants. Small businesses would not have the expertise or equipment and likely could not afford it.

  There is also a cost to regulators for administering the programs. Government agencies face budget and human resource constraints that limit the amount of verification and outreach they are able to do. Managing a large database can also be costly.

- The portrayal of the data can be misleading or confusing - Providing the information in context can be a challenge, and the data can be easily misrepresented or misinterpreted. For example, quantity data on what chemicals or materials are released or stored will not discriminate between materials that are being handled properly or improperly, or if it is being released for recycling or for disposal. The otherwise good reputation of businesses can be put at risk for small or one-time infractions, even if they otherwise do well or are taking steps to improve their operations.

A concern was also expressed that an additional reporting burden in the City of Toronto could have a negative economic impact by encouraging businesses to locate or move to other nearby jurisdictions that do not have the same reporting requirements.

3.3 *Public Accessibility of Information*

It was generally agreed that Environmental Information should be accessible, but there were concerns from some over the level of detail that is provided. One key concern over environmental information on storage was the threat of terrorism, destruction of property or theft. It was suggested that the level of detail should be such that people are able to make any necessary decisions, but that security concerns are protected. To help protect public security and provide the context necessary for proper interpretation, it was suggested that the information be filtered through the City, a watchdog group or a multi-stakeholder partnership.

Another concern was the release of proprietary information. It was observed that many reporting programs protect information on proprietary substances from being accessible, but that these are rarely used, reportedly because of the additional administrative burden placed upon the business.

It was also suggested that the current level of access that is available to reporting programs should be promoted. It was felt that such promotion could stimulate public interest, promote corporate responsibility, and encourage corporate reporting.

4. PERCEIVED BARRIERS AND OPPORTUNITIES

The informants were asked for their insight into the barriers to participating in environmental reporting and to accessing and using environmental information. The reported barriers included:

Reporting Environmental Information
- A general lack of awareness among businesses of reporting requirements;
- The complexity of reporting programs and reporting requirements;
- The duplication of reporting efforts between programs;
- The lack of access to necessary technical expertise and the inability to measure some parameters, particularly among smaller businesses;
- The additional work and cost/resources required to monitor chemicals and emissions;

- The lack of consensus on monitoring methodologies;
- The fear of how the information will be used and interpreted by interest groups and the possible negative consequences for a business' reputation; and
- The view that companies are providing information that their competitors can use.

Accessing Environmental Information
- The difficult bureaucratic challenge of obtaining access to certain environmental information, as well as an inconsistency or lack of clarity over what information is allowed to be accessible;
- The complexity of environmental information and the lack of context; and
- The lack of public awareness that information on chemicals used and emitted in businesses is tracked.

Opportunities for overcoming these barriers included:

Improved Education for Businesses and the Public
- Use different educational tools to help assist businesses, such as training sessions, fact sheets, or best practice guides;
- Work with industry associations to both develop and distribute education tools to their memberships;
- Consult with industry stakeholders and publicize pollution prevention and environmental reporting efforts and successes;
- Use recognition programs that reward businesses and industry leaders for their positive efforts;
- Promote that this data is being tracked and promote public interest in it;
- Stimulate community dialogue and encourage local communities and businesses to work together, thereby fostering positive relationships between them;
- Make the regulations easier to understand so that it is clear if a facility is required to report or not; and
- Take steps to remove the fear of how the information could be used to damage a business' reputation.

Program Design
- Reduce or eliminate duplication of reporting requirements;
- Make it easy for businesses to report;
- Engage small businesses, but use modelling to estimate their emissions to reduce the cost and technical burden of monitoring;
- Identify priority chemicals of concern for resource-constrained businesses;
- Work with Industry associations to develop more consistent monitoring methodologies; and
- Keep the presentation of the reporting data simple and use context to explain it.

In addition to these opportunities to reduce barriers, engaging small businesses through the use of pilot projects and using social marketing and norm development were suggested as ways of encouraging participation.

5. VOLUNTARY AND REGULATORY APPROACHES

Informants were also asked for their perspectives on the merits of regulatory and voluntary programs. In general, regulatory approaches were said to be more reliable than voluntary approaches. Suggested advantages to the regulated approach included:

- It provides a better opportunity to obtain more complete, accurate and consistent data and to provide stronger public assurance;
- It ensures that all applicable businesses participate, rather than just those who are good corporate citizens;
- Regulated programs are better able to achieve the desired goals of the program; and
- They are more cost-effective because voluntary programs require more incentives to encourage participation.

However, it was also noted that a regulated approach does require monitoring and enforcement in order to achieve compliance and be effective, which in turn require resources.

Voluntary approaches were thought to play an important role, particularly in the incubation stage of a program. Voluntary approaches can be important when trying to stimulate progress in a new area and where there are new things to learn. It was suggested that a voluntary approach is preferred when the process involves a stepped change and when the impacts of a program are not fully understood. Once a program is established, mandatory measures can be phased in to ensure a level playing field among industry sector(s). Additionally, introducing programs voluntarily can provide an opportunity to demonstrate the program's benefits before entering the program's mandatory phase.

Additional benefits to voluntary approaches include that industry groups may be more receptive to working together as a team to help achieve targets and goals, and that collaborative voluntary approaches can generate goodwill among stakeholders.

It was noted that the NPRI works on a mixture of the regulated and voluntary approach. While the NPRI is regulated, it operates on a good-faith basis, and there is not as much regulatory action taken in comparison to the U.S. Toxics Release Inventory. One reported advantage of this approach is that industry is more willing to participate in consulting phases when stakeholder input is required. The combined approach was thought to help facilitate a good relationship among the NPRI stakeholders, which in turn has resulted in more transparency in the NPRI program. This is beneficial to the public and also to Industry, as they improve their operations. However, this transparency can be a drawback to those industry sectors or facilities that fail to improve on their operations.

Combined regulatory/voluntary approaches were said to have their own benefits; regulated reporting gets the attention of the industry and obtains the required information, while voluntary reporting is then used to obtain additional useful data without the burden of writing regulation. This information can be obtained through the participation of industry associations and can be used to fill gaps in the regulated data.

6. SUGGESTIONS FOR IMPROVEMENTS

The informants were asked how environmental reporting programs could be improved. In general, the suggested improvements consisted of the following:

- Improve accessibility to and communication of the environmental information - Provide contextual information to show what the data means, and provide a more detailed sector analysis. GIS can be incorporated into environmental information programs to show geographic distributions and to assist with planning. Make the website user-friendly, including easy-to-use search functions. Databases should be more robust so that analysis of confidence levels can be included. Monitor to see how the data is being used.

- Broaden the scope of reporting programs - Expand environmental reporting to include smaller businesses and other sectors (such as retail, etc), instead of just including large businesses. However, caution was recommended, as smaller companies require more support, and increasing the capture of smaller companies could create a disproportionate increase in resources required to support the program. It was suggested that small businesses could use modelling to provide emission estimates, which would reduce their disproportionate cost and technical burden of monitoring.

- Streamline the reporting process – Work with the relevant industry sectors and associations to identify opportunities for improving reporting systems and mechanisms, such as modifying submission forms and providing the forms online.

- Provide additional outreach to businesses – Provide outreach to help businesses develop pollution prevention plans and to meet their pollution prevention goals. Provide assistance (e.g., online, training workshops) on how to meet the reporting requirements and report correctly (it was cautioned that if the City were to provide assistance to smaller companies, larger industries would want similar treatment as well). City departments (such as Toronto Water and Toronto Public Health) could work together to coordinate outreach activities.

7. SUMMARY OF FINDINGS

Through the Key Informant Interviews, it was observed that environmental reporting and access to environmental information can have many benefits, particularly in the areas of public health and environmental protection. But there are many challenges to ensuring that a system providing this information meets the needs of all stakeholders involved.

Through the interviews, a number of key uses were identified, which included:

- For advocacy on environmental and public health issues;
- To identify environmental performance trends among industry sectors;
- To providing direction on environmental policy among levels of government, such as setting standards for emission quantities or local planning;

- To use in reports to the public that depict environmental trends and to document progress in environmental programming (e.g., pollution reduction programs, etc);
- To provide information to businesses on their operations that would help them improve their environmental and economic performance; and
- For use in public awareness initiatives.

These uses are reflected in what were identified as the benefits of an enhanced environmental reporting and information program, which can be summarized by the following:

- Information from the programs helps businesses and governments alike facilitate pollution prevention and improved environmental performance;
- Environmental reporting can help to protect public health and the health and safety of the workforce;
- The data collected from the programs allows for more informed governmental planning and policy decisions;
- The information can be used for public education and outreach; and
- Environmental reporting can help improve economic performance.

Despite the many benefits of environmental reporting and information programs, there are also disadvantages, which are summarized by the following:

- There is duplication among reporting programs;
- Data accuracy, quality and consistency is a concern;
- Compliance with reporting is a concern;
- Environmental reporting can be costly and technically challenging; and
- The portrayal of the data can be misleading or confusing.

A number of barriers were identified that discourage or prevent businesses from participating in environmental reporting programs. These barriers identified included:

- A general lack of awareness among businesses of reporting requirements;
- The complexity of reporting programs and reporting requirements;
- The duplication of reporting efforts between programs;
- The lack of access to necessary technical expertise and the inability to measure some parameters, particularly among smaller businesses;
- The additional work and cost/resources required to monitor chemicals and emissions;
- The lack of consensus on monitoring methodologies;
- The fear of how the information will be used and interpreted by interest groups and the possible negative consequences for a business' reputation; and
- The view that companies are providing information that their competitors can use.

Barriers to accessing the environmental information included:

- The difficult bureaucratic challenge of obtaining access to certain environmental information, as well as an inconsistency or lack of clarity over what information is allowed to be accessible;

- The complexity of environmental information and the lack of context; and
- The lack of public awareness that information on chemicals used and emitted in businesses is tracked.

A number of solutions were proposed to help address these barriers, which can be summarized into the following two broad activities:

- Improve education and awareness for both the businesses participating in the reporting program and the public trying to access the information; and
- Make it easier to for businesses to report environmental information.

APPENDIX A: LIST OF KEY INFORMANT AGENCIES

- Toronto Water

- Pollution Data Division - Environnent Canada

- Office of Policy, Economics and Innovation - United States Environmental Protection Agency

- Air Modeling and Emissions Unit. Ministry of the Environment

- City of Eugene, Oregon

- Teknion Corporation

- Canadian Petroleum Products Institute

- Toronto Industry Network Community Right to Know working group

- Rohm and Haas

- Toronto Environmental Alliance

- Canadian Centre for Pollution Prevention

- Ontario Centre for Environmental Technology Advancement

APPENDIX C: INTERNAL STAKEHOLDER SESSION REPORT

MEETING REPORT
Internal Stakeholder Consultation Session

Access to Environmental Information:
Environmental Reporting in
Toronto: Gaps and Opportunities

November 17, 2006
1:30 – 3:30 p.m.

Prepared for
Toronto Public Health

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1   Welcome and Introductions

Sally Leppard, Lura Consulting, welcomed participants and outlined the purpose of the meeting, which was to:

- Provide an outline of Toronto Public Health's (TPH) current plans relating to its investigations around Access to Environmental Information and Environmental Reporting;
- Consult with stakeholders and conduct a technical analysis that will contribute to TPH's understanding of the coverage, gaps, opportunities and challenges of accessible environmental reporting programs in Toronto;
- Discuss the Toronto Board of Health's recommended principles to guide the City's development of a strategy to make environmental information more accessible; and
- Identify challenges, opportunities and next steps from the perspective of participants.

A list of participants is attached in appendix A.

2   Background to the Project

Carol Mee, TPH, described the background to the project. She noted that the City of Toronto has been involved in this issue for over six years with the endorsement of the City's Environmental Plan. Prior to this, the former City of Toronto made efforts in the 1980s to enhance environmental reporting.   Since then, the most notable initiatives have been the introduction of WHMIS regulations and the National Pollutant Release Inventory (NPRI).   More background on Access to Environmental Information – also known as "community right-to-know" (CRTK) – can be found in two recent reports on TPH's website (http://www.toronto.ca/health/hphe/enviro_info.htm).

TPH has now been given the mandate by the Board of Health to conduct a technical analysis of current environmental reporting coverage and gaps within Toronto and to engage stakeholders (both internal City stakeholders and external organizations) in discussions around Access to Environmental Information. The outcome of this work will be to generate a deeper understanding of priority chemicals and of the reporting programs currently in place in Toronto, to develop a gross estimate of emissions, to identify where reporting gaps currently exist, and to identify potential opportunities for developing a "made-in-Toronto" access to information and environmental reporting program. Toronto Public Health may consider a range of policy options, such as voluntary pollution prevention programs, promotion and education, and/or a by-law. TPH is looking for feedback on policy options to inform the next stage of work.

A team of consultants has been hired to assist TPH in conducting this work. Lura Consulting is leading the contract, supported by Marshall Macklin Monaghan who are undertaking the technical analysis, and Dr. Harvey Shear from the University of Toronto, who is undertaking a peer review of the technical methodology.

In addition to these stakeholder consultations, Ms. Mee described the on-going work of an Internal Staff Working Group. The working group is identifying what environmental information currently held by the City could be shared within the corporation and what could be made available to the public. The Working Group is developing and

implementing plans to make this information more easily available and accessible. Several members of the Working Group were present at this consultation meeting.

3   Presentation of Work Plan and Approach

The consulting team delivered a presentation on the work plan and approach, a summary of which is outlined below.

Through research, workshops, key informant interviews, and focus groups, TPH and its consulting team will:

- Identify and confirm relevant chemicals of concern;
- Identify types of businesses and industries that store, use, emit, and/or transfer these substances (a preliminary table was presented for discussion). Industries will be sorted by NAICS code (North American Industry Classification System);
- Develop gross estimates of potential emissions;
- Review current environmental reporting processes for these sectors/substances;
- Identify gaps in reporting in sectors/chemicals of concern;
- From lessons learned in Toronto and other communities, identify what works well, what challenges have been experienced, and what are the opportunities around developing an environmental reporting approach for Toronto; and
- Document the findings of the consultation and technical work programs in a comprehensive report.

The final report would provide a basis for TPH's report to the Board of Health in early 2007.

4   Discussion on Scope and Methodology

NOTE: *Unless specifically noted otherwise, the perspectives of stakeholders that are presented in this report should not be considered to be consensus opinions among stakeholders*

Participants noted that the transportation sector is an important source of pollution in the City, including salt, contaminants in run-off, road markings, and tail pipe emissions.

TPH clarified that the scope of the study was stationary sources and excluded area sources such as residential buildings, but emissions from construction activities, including road construction, will be considered.

5   Discussion on Board of Health Guiding Principles

Participants reviewed the Toronto Board of Health's recommended principles to guide the City's development of a Community Right to Know strategy (attached as Appendix B). The discussion that followed used the Principles as a basis for commenting on TPH's initiative. For reporting purposes, the discussion has been grouped into two categories: considerations in developing an environmental information and reporting system and issues to be considered when designing an environmental information and reporting system.

5.1 Considerations in Developing an Environmental Information and Reporting System

Key points included:

- **Focus on improving existing reporting systems by making this information more accessible** (e.g. Certificates of Approval, Sewer Use By-Law).

- There is potential for **streamlining and coordinating** reporting. Information is collected by many Divisions in the City in different formats and improved coordination would be needed. Be careful not to duplicate reporting programs. Consider working with the Federal Government to harmonize reporting such as the project between NPRI and OnAir Reg 127 called Owners, the One Window to National Environmental Reporting System.

- It is important to **be selective** and determine what information would be useful and beneficial. TPH should define the **chemicals of concern** and focus on them.

- Consider the potential for **liability relating to errors and omissions**, **inaccuracies of information** and the extent of public reliance on the information.

- There are differing **levels of information** that could be made available, depending upon certain conditions (e.g. security issues). An enhanced system could cascade or tier information accessibility. The system should provide a context for the information (i.e. what the information means and how it may impact the community).

- Include the principle of **fairness and equity** – reporting requirements for different operations and chemicals should be treated uniformly across the GTA/province.

- Consider the **planning and development implications** of disclosure of environmental information.

- Consider a "carrot and stick" approach (e.g., an **incentives and regulatory framework**) may be the only way to get action from non-participants. It may not be necessary to apply the "stick", but it needs to be there.

5.2 Issues to be Considered when Designing the System

Key points included:

- There is potential for **public security** risks should chemical storage information be publicized.

- The **economic competitiveness** of Toronto businesses could be impacted vis a vis businesses in neighbouring Regions. Toronto should consider aligning with other GTA regions to level the playing field.

- The **administrative and resource costs** of implementing a system may be high, such as the costs associated with enforcing by-laws, monitoring programs, etc.

- Recognize that some environmental **information may be inaccurate or incomplete** and therefore its' usefulness is doubtful. For example, WHMIS reporting (i.e. Material Safety Data Sheets) is difficult to keep up to date. Companies can be reluctant to provide proprietary information. Users such as the Fire Department and EMS need to have up-to-date, accurate information.

While most participants generally supported the principles, they had concerns about the implications for their work and the practicalities of implementing an enhanced environmental information and reporting system. Toronto staff wants to provide appropriate information for the public (such as is the water safe, is the air safe). But it was suggested that the public at large may be uninterested in specific data or they may be unable to interpret it. There is a need to ensure a context for the information (i.e. what the information means).

6   Discussion on Opportunities

The facilitator led a discussion around potential opportunities that may arise with an environmental information and reporting system. TPH pointed out that the Internal Staff Working Group is developing an inventory of what information is currently collected across City Divisions. They are considering the potential benefits of sharing information within and among the divisions as well as potential benefits of improving public accessibility to information. The following points summarize the benefits to the staff and public with an enhanced environmental information system.

Key points included:

- Information on environmental information could be mapped and made available. The City's Information Technology department suggested it could provide this service.

- There is value in sharing information between city divisions.

- Knowing the location of chemical storage sites would be useful for police, intelligence and emergency planning/service departments.

- An accessible information and reporting system would reduce the number of Municipal Freedom of Information and Protection of Privacy Act (MFIPPA) requests, thereby reducing workload on staff.

- Environmental reporting can stimulate pollution prevention/reduction activities. It was noted that City's Print shop is completing a pollution prevention audit and predicted that it will result in improving business practices.

- There would be a number of potential benefits to developing a *publicly* accessible environmental information system: There are opportunities for:

    o Educational value.
    o Promotion of Toronto's environmental initiatives.
    o Proactive publication of data, thus allowing Toronto to provide a coherent picture on environmental conditions in Toronto.
    o Showcasing businesses that are implementing pollution prevention programs

Other more general points of discussion included:

- To provide context to the information, the City could consider providing a phone number so that a staff person would be available to answer questions from the public. They could communicate fact-based information, and interpret what it means. It was noted that the 311 Customer Service Strategy telephone system could be expanded to support this initiative.

- It would be useful to find out what type of environmental information is currently given out to the public.

- There is potential utility in publicizing businesses that have pollution prevention plans in place, and/or that are not in compliance with the sewer use by-law. The utility and viability of this option needs to be further explored.

6.1 Summary of Discussion of Opportunities

Some participants believed that there would be considerable advantages to their work if they were aware of what information is currently is being collected and/or reported by City Divisions. The IT Division identified opportunities for communicating information via mapping and web sites. Opportunities to showcase Toronto's environmental initiatives were identified.

7 Summary of Stakeholder Meeting

The November 17 staff workshop on Access to Environmental Information provided an opportunity for TPH to learn about the issue from the perspective of the City of Toronto divisions. While there was general support for the Board of Health's guiding principles, staff has concerns over how best to implement them and to meet the City's and public's need for useful information. Several possible mechanisms were suggested for sharing information internally and to the public. The workshop allowed participants to share their unique insights into the challenges and opportunities for enhancing access to environmental information, and this will contribute to TPH's ongoing consultation.

Appendix A: List of Participants

Name		Division
Andrew	Heit	Solid Waste
Bob	Leek	Fire Services
Cara	Webster	Parks, Forestry & Recreation
Steve	Irwin	Toronto Police
Bill	Needles	Toronto Police
Graham	Rempe	Legal Services Office
Eddie	Hansraj	City Clerk's Office
Ian	Cameron	Economic Development
Ilze	Andzans	Toronto Water
Joanne	Di Caro	Toronto Water
John	Alderdice	Economic Development
Jonathan	Feldgajer	Toronto Water
Karen	Frizzell	Toronto Water
Katie	Tulk	Solid Waste
Kevin	Tierney	Technical Services – Survey & Mapping
Kim	Peters	Environmental Services
Marco	Vittiglio	Toronto Public Health – Planning & Policy
Monica	Campbell	Toronto Public Health – Environmental Protection Office
Richard	Ng	Land Information Toronto - Geospatial Data Management
Vesna	Stevanovic-Britico	Transportation
Vito	Farella	City Clerk's Office
Veronica	Cruz	Toronto Public Health

Appendix B: Guiding Principles for a Community Right to Know Strategy

Toronto Board of Health endorsed the following principles to guide the City's development of a Community Right To Know (CRTK) strategy, which strategy will:

    (a)   provide consistent and timely information on toxic chemicals used, stored and released in Toronto by location and facility;

    (b)   encourage and support economically and environmentally sustainable business practices through pollution prevention planning and toxic use reduction activities;

    (c)   focus on toxic chemicals that contribute to one or more of the following:

        (i)   occupational and environmental cancer;
        (ii)   poor air quality in Toronto;
        (iii)   damaging children's health; and
        (iv)   prevalence of Persistent Organic Pollutants in our environment;

    (d)   generate information disclosure from facilities that are highly likely to use and/or release toxic chemicals based on the above criteria and are located where people live; and

    (e)   ensure an efficient, effective system for reporting and retrieving information such as a searchable web-based database.

APPENDIX D: EXTERNAL STAKEHOLDER SESSION REPORT

**MEETING REPORT
External Stakeholder Consultation
Session**

**Access to Environmental Information:
Environmental Reporting in
Toronto: Gaps and Opportunities**

**November 21, 2006
1:30 – 4:30 p.m.**

**Prepared for
Toronto Public Health**

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1   Welcome and Introductions

Sally Leppard, Lura Consulting, welcomed participants and outlined the purpose of the meeting which was to:

- Provide an outline of Toronto Public Health's (TPH) current plans relating to its investigations around Access to Environmental Information and Environmental Reporting;
- Consult with stakeholders and conduct a technical analysis that will contribute to TPH's understanding of the coverage, gaps, opportunities and challenges of accessible environmental reporting programs in Toronto;
- Discuss the Toronto Board of Health's recommended principles to guide the City's development of a strategy to make environmental information more accessible; and,
- Identify challenges, opportunities and next steps from the perspective of participants.

A list of participating organizations is attached in appendix A.

2   Background to the Project

Carol Mee, TPH, described the background to the project. She noted that the City of Toronto has been involved in this issue for over six years with the endorsement of the City's Environmental Plan. Prior to this, the former City of Toronto made efforts in the 1980s to enhance environmental reporting.   Since then, the most notable initiatives have been the introduction of WHMIS regulations and the National Pollutant Release Inventory (NPRI).   More background on access to environmental information – also known as "community right-to-know" (CRTK) – can be found in two recent reports on TPH's website (http://www.toronto.ca/health/hphe/enviro_info.htm).

TPH has now been given the mandate by the Board of Health to conduct a technical analysis of current environmental reporting coverage and gaps within Toronto and to engage stakeholders (both internal City stakeholders and external organizations) in discussions around access to environmental information. The outcome of this work will be to generate a deeper understanding of priority chemicals and of the reporting programs currently in place in Toronto, to develop a gross estimate of emissions, to identify where reporting gaps currently exist, and to identify potential opportunities for developing a "made-in-Toronto" access to information and environmental reporting program. Toronto Public Health may consider a range of policy options, such as voluntary pollution prevention programs, promotion and education, and/or a by-law. TPH is looking for feedback on policy options to inform the next stage of work.

A team of consultants has been hired to assist TPH in conducting this work. Lura Consulting is leading the contract, supported by Marshall Macklin Monaghan who are undertaking the technical analysis, and Dr. Harvey Shear from the University of Toronto, who is undertaking a peer review of the technical methodology.

In addition to these stakeholder consultations, Ms. Mee described the on-going work of an Internal City Staff Working Group. The working group is identifying what environmental information currently held by the City could be shared within the

corporation and what could be made available to the public. The Working Group is developing and implementing plans to make this information more easily available and accessible.

3   Presentation of Work Plan and Approach

The consulting team delivered a presentation on the work plan and approach, a summary of which is outlined below.

Through research, workshops, key informant interviews, and focus groups, TPH and its consulting team will:

- Identify and confirm relevant chemicals of concern;
- Identify types of businesses and industries that store, use, emit, and/or transfer these substances (a preliminary table was presented for discussion). Industries will be sorted by NAICS code (North American Industry Classification System);
- Develop gross estimates of potential emissions;
- Review current environmental reporting processes for these sectors/substances;
- Identify gaps in reporting in sectors/chemicals of concern;
- From lessons learned in Toronto and other communities, identify what works well, what challenges have been experienced, and what are the opportunities around developing an environmental reporting approach for Toronto; and
- Document the findings of the consultation and technical work programs in a comprehensive report.

The final report would provide a basis for TPH's report to the Board of Health in early 2007.

4   Discussion on Work Plan Scope and Methodology

Note: Unless specifically noted otherwise, the perspectives of stakeholders that are presented in this report should not be considered to be consensus opinions among stakeholders.

A number of points were raised by the workshop participants relating to the scope of the consultation program and the technical work and are presented below *(TPH and Consulting Team responses are identified in italics)*:

- Stakeholder Consultation:
    - An increase in participating businesses and industries would provide a more balanced representation. Delegations at this meeting appear to be weighted on the side of development, economics and policy. *(Lura: Over 150 organizations were invited, and we are interested in ideas from all sectors).*
    - The time frame for the consultations is too restrictive and more notice for meetings is needed. *(TPH: Due to budget constraints this part of the Access to Environmental Information project needs to be substantially completed by the end of the year. However, a second workshop is scheduled for January 2007. There will be other opportunities to provide feedback, if not in this part, then later in the program's development).*

- Scope of Research:
    - o Consideration is needed on how transboundary emissions and diffuse sources (such as diesel trucks) will be included in the study.
    - o Consider expanding geographic boundaries and include the 905 telephone exchange areas to level the playing field amongst businesses.

5   Discussion on Board of Health Guiding Principles

Participants reviewed the Toronto Board of Health Guiding Principles for "Access to Environmental Information and Reporting" that were supported by the Board of Health in June 2006 (attached as Appendix B). The discussion is summarized below and is organized into the following topics: comments on the rationale for the project, comments on the methodology, industry perspectives, community perspectives, labour perspectives, and a general summary.

5.1   Comments on Rationale for the Project

- Environmental reporting will assist with municipal planning decisions and help in determining where residential developments should be located.

- TPH needs to ensure that this project is addressing a real need such as reducing health impacts through pollution prevention, preparedness and risk minimization. Does TPH research show that there are health problems not being addressed? What is the reason for this project? *(TPH: The initiative is based on the community's concerns about what chemicals are being used and/or emitted in their environment. The technical analysis is also intended to help identify potential health priorities.)*

- There are good reasons for doing this project. For example, Toronto has more emissions in total than some Provinces. We want to make Toronto a better place to live and to clean up pollution. The City is in a good position to take on more responsibility and will be a leader in this area in Canada.

- Consider the enforceability issue, in that how to make industries or operations report.

- Developing an environmental information and reporting system will be valuable for emergency preparedness.

- There is a need to clarify the goal: emergency response and community right to know goals are understandable in terms of exposure. There are other opportunities related to access to environmental information that have been identified in other jurisdictions, such as encouraging pollution prevention and increasing the awareness of businesses on ways to reduce pollution. Reporting helps identify issues and provides a feedback mechanism on the results of their actions.

Many participants agreed that the Board of Health guiding principles were a good place to start, while others had not had enough time to review them.

5.2   Comments on Methodology

- It is important to **concentrate on the most important chemicals** first, based on specific properties. Collecting an over-abundance of information can make it too confusing and result in defeating the purpose of the project. That exercise will inform how to proceed in a more certain fashion and push the science forward.

- There is a need to understand total emissions, not just those from large companies. Everyone is part of the problem. There are multiple sources – both point sources and diffuse sources. The community needs to know that.

- The documentation of data through NPRI has been poorly evaluated, since it depends on industry reporting. Small industries don't report. Emissions reporting can rely on **emission factors, which can be unreliable**. The science behind these factors is not well documented.

- It was suggested that TPH consider actual exposure in determining priorities for additional environmental reporting requirements.

5.3   Industry Perspectives

- The Canadian Chemical Producers Association (CCPA) initiative (Responsible Care) has developed a wealth of experience in this area of environmental information and reporting. At the community level, the experiences vary – for example, in one case, very few people attend a series of open houses; in another case, community advisory panels have been established that address local concerns.

- What level of interest does the public have in obtaining environmental information through reporting? *(TPH: We don't yet know what local industries and local communities are doing or what they want to know. During this project we will hear from the local community level, including both industries and communities.*

- Larger companies are reporting now, but **smaller companies are not being tracked**, and they may not be aware of the regulations or how to control emissions. The key is to include smaller businesses and lessen the burden on larger companies. Engage smaller companies such as retailers, dry cleaners, and auto body shops. *(TPH: These groups are being invited and engaged through focus groups in this project).*

- The guiding principles include use and storage of chemicals, but there are **no emissions from use and storage**. Emissions from storage and use are not known. The project needs to focus on collecting **useful** information. Consider the difference between **hazard and risk** and how well chemicals are being managed on site.

- The CCPA has a comprehensive data base for its members (NERM, or the National Emissions Reduction Masterplan). It collects information on 600 chemicals.

- The **definition of "community"** around each plant needs to be considered. Geographic boundaries may not be appropriate.

- It is important to note that there is **no correlation between risk and size of company** (i.e. number of employees).

- Toronto Industrial Network is putting together a position on CRTK and access to environmental information.

- There is a concern about the **preservation of manufacturing** in Toronto. Competitiveness is a major issue, so the results of this project need to help industry achieve this objective. There are two communities – both neighbourhoods and industry need be considered.

- There is a concern about the **burden on smaller businesses and the cost of reporting**. It must be ensured that environmental reporting does not add more bureaucracy or administration and ensures that competitiveness is maintained. Investigate using alternate ways of identifying emissions through monitoring. That technology would provide good information in a timely manner and reduce the burden on businesses/operations.

- **Ensure consistency in reporting**. Industry is currently reporting in multiple and different ways (i.e. Sewer Use By-law, NPRI). TPH could work with all levels of government to develop a common system, with one request. That will increase efficiency and diminish the burden on participants. Look at gaps in NPRI and consider how to fill gaps. There are concerns about duplication of efforts. The principles appear to be similar to the NPRI principles and OnAir127.

5.4   Community Perspectives

- The context and timeliness of information is important.   The community wants to know what pollution prevention plans are in place and what each operation is doing. Information on exposure levels affecting schools, workers, and neighbourhoods are seen to be important. In particular, the history of emissions at any given operation over time and the related health effects are seen to be useful information and has been previously requested.

- There is a need to create easy access to information that is understandable and within context. Consolidation of existing available databases (including those hard to find) would be helpful.

- The Toronto Cancer Prevention Coalition's pilot study in the Beaches discovered that smaller businesses are not reporting because the requirements are different for small companies than large companies.   It is important to include smaller companies in the reporting programs.

5.5   Labour Perspectives

- To begin, TPH should build on reporting programs that already exist.

- It is widely known that WHMIS data is difficult to keep up to date.

- There are many plants with environmental problems and this needs to be combated to protect the future of industry and operations in Toronto.

- This initiative needs to be part of the sustainable economy strategy.

- It is important not to look back but to work out a way to move forward. There is a need to build on what has been done (e.g. dry cleaners).

5.6   General Summary

In summary:

- Consider the usefulness of storage and use information;
- Make existing information easy to access, within a context, and understandable to the users;
- Include small neighbourhood companies;
- Size does not necessarily reflect risk;
- Reflect differences between risk and hazard;
- A staged approach is needed: ensure the approach to the project focuses on a few priority chemicals first; and
- Diffuse sources are a large part of the problem.

6   Discussion on Next Steps

The facilitator led participants through a discussion on opportunities for enhanced reporting in Toronto and perspectives on alternative approaches to implementing the program. The following summarizes the discussion.

6.1   Scope of Reporting

- Implement a program with other neighbouring jurisdictions.

- Work out an approach for smaller businesses (including printing shops, auto body shops, dry cleaners, etc.). If the project focuses at the start on a small number of operations, then it will be possible to develop estimates and mass balances. From there, develop models and use emission factors. The focus should be on understanding emissions and reducing the amount of hazardous chemicals used in operations.

- Look at the situation in New York City where CRTK by-laws exists. The program is based on education, incentives for transition planning, and rules/guidelines. There are penalties for not reporting.

- The information is useful for municipal planning (e.g. don't locate dry cleaning operations in apartment buildings).

- Consider a broader approach, so that businesses have one set of rules (e.g. the dental industry needs the same standards across the province, rather than limited to Toronto). Take a substance by substance approach and focus on priorities.

6.2   *Coordinate with other Reporting Programs*

- Toronto should consider working with Provincial and Federal levels of government to create a "one request" system such as the harmonization project between NPRI and OnAir Reg 127 called Owners, the One Window to National Environmental Reporting System.

- Use existing information, including Certificates of Approval information, since that protects confidentiality.

- Disclose information obtained from the sewer use by-law, NPRI, and OnAir.

- Ensure there is a common database across the Province/Country.

- Consider one portal (e.g. City of Chicago web site). Access to information could be provided through the single portal, where questions could be asked and information provided at required levels.

6.3   *Ensure reporting programs are easily accessible, comprehensive and provide useful and useable information.*

- Large companies report now, but information is difficult to interpret and hard to access.

- Learn from the experience of the Ontario Ministry of Environment in harmonizing OnAir with the NPRI.

- At the local level, one participant described how they have a community panel where efforts are made to explain related environmental information issues. It currently works on a local level, but it may be difficult to apply it City-wide. Take into account that larger companies have environmental staff, but smaller companies do not.

6.4   *For Small Businesses: Implement Program Strategically*

- Provide information on alternatives, provide support, and identify best practices. Build on existing work with Dry Cleaners and Auto body shops that has been done by the Provincial and Federal government departments and the Canadian Centre for Pollution Prevention.

- Use a staged approach.

- The program would be perceived to increase the burden on small businesses and be viewed as more red tape. Others would participate.

- Providing education and tools would be a key component of any policy.

- Small businesses need to engaged in the program. It is difficult to get small business to come to meetings.

- TPH should find out what the community wants to know.

7   Closing Remarks

Participants noted that the timeframe for this study appears to be fast, and that care must be taken not to use a rushed approach. The focus should be on specific priority chemicals, aligning existing reporting systems and databases to provide uniform procedures and requests; ensure information is accessible, within context and useable; focus on gaps (e.g. small business and priority chemicals); and there is a need to provide participants with a timeframe for determining the next steps.

Toronto Public Health staff noted that the next stakeholder meeting is January 9, 2007. The results of the technical work will be presented and discussed at that meeting, along with next steps for developing an environmental information and reporting process for Toronto.

Appendix A: List of Participating Organizations/Agencies

Organization
United Steelworkers
Canadian Institute for Environmental Law and Policy
Rohm & Haas
Brenntag Canada
Solid Waste Association of North America
TremCo
Toronto Environmental Alliance
Ontario Dental Association
Environmental Health Clinic
Infonaut Inc
Toronto Industry Network
Dominion Colour Corporation
ISP Canada, representing Leaside Business Park Association
Cement Association of Ontario
CELA
CELA/Pollution Watch
Toronto Economic Development
Toronto Economic Development
CCPA
University of Toronto

Appendix B: Guiding Principles for a Community Right to Know Strategy

Toronto Board of Health endorsed the following principles to guide the City's development of a Community Right To Know (CRTK) strategy, which strategy will:

(a)   provide consistent and timely information on toxic chemicals used, stored and released in Toronto by location and facility;

(b)   encourage and support economically and environmentally sustainable business practices through pollution prevention planning and toxic use reduction activities;

(c)   focus on toxic chemicals that contribute to one or more of the following:

(i)   occupational and environmental cancer;
(ii)   poor air quality in Toronto;
(iii)   damaging children's health; and
(iv)   prevalence of Persistent Organic Pollutants in our environment;

(d)   generate information disclosure from facilities that are highly likely to use and/or release toxic chemicals based on the above criteria and are located where people live; and

(e)   ensure an efficient, effective system for reporting and retrieving information such as a searchable web-based database.

APPENDIX E: STAKEHOLDER FOCUS GROUPS REPORT

**Stakeholder Focus Groups
Summary Report**

**Access to Environmental Information:
Environmental Reporting in Toronto**
Gaps and Opportunities

March 2007

**Prepared for
Toronto Public Health**

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1. INTRODUCTION

Toronto Public Health (TPH) is currently considering ways for the City to make environmental information more easily accessible. As a part of this work, in October 2006 Public Health retained Lura Consulting and Marshall Macklin Monaghan to assist it on a project contributing to Public Health's ongoing policy development work on environmental reporting and access to environmental information.

Specifically, the goal of this project is to aid in Public Health's understanding of the coverage, gaps and opportunities and challenges of accessible environmental reporting programs in Toronto. The project includes two key elements:

- A stakeholder consultation; and,
- A technical review.

The consultation and the technical review are designed to achieve the following objectives:

- Identify opportunities and challenges of current applicable and accessible environmental reporting programs, including a focus on success, barriers and gaps.
- Provide a gross estimate of the chemical use, storage, transfer and release by sector and chemicals in Toronto;
- Assess the completeness of coverage of existing accessible environmental reporting programs in Toronto by sector and chemicals covered;
- Identify successes and challenges of selected community right-to-know environmental reporting programs in other jurisdictions;
- Identify areas of agreement/disagreement, and paths forward around perceived barriers and opportunities for industry participating in mandatory and voluntary environmental a reporting programs; and,
- Obtain input on priority areas for enhancement of environmental reporting;

As a part of this project, four focus groups were held with stakeholder groups in order to have detailed discussions with them about the gaps, challenges and other issues associated with Environmental Reporting and Access to Environmental Information. This report describes the focus group approach and presents a summary of the results.

2. FOCUS GROUP APPROACH

Four focus groups were held with Access to Environmental Information stakeholders in the City of Toronto. The purpose of the focus groups was to:

- Assist TPH in developing an understanding of the perceptions stakeholders have on how environmental reporting could encourage pollution prevention;
- Improve TPH's understanding of stakeholder perspectives on the role of environmental reporting in current business practices and local communities;
- Identify the benefits, costs, challenges and opportunities associated with Access to Information and Environmental Reporting; and

- Identify the Implications to small and medium sized businesses, both in terms of reporting and in their environmental information being accessible.

The focus groups were conducted in December of 2006 in an informal roundtable setting, each lasting for approximately two hours. Each focus group was attended by a specific type of stakeholder. The four focus groups consisted of:
1. Small-medium sized business and business associations
2. Resident and other citizen groups
3. Non-government organizations (NGOs) such as environmental and health groups
4. Toronto Industry Network

Each focus group was attended by between 6 and 9 participants. It was not intended that the focus groups would reach consensus but rather the participants provided a variety of view points from four key types of stakeholders. Their view points will assist TPH in considering enhanced environmental reporting.

3. SUMMARY OF RESULTS

NOTE: *Unless specifically noted otherwise, the perspectives of stakeholders that are presented in this report should not be considered to be consensus opinions among stakeholders.*

This section summarizes the results of the focus group sessions. Section 3.1 provides a concise overview of the comments heard during the focus group sessions. Sections 3.2 to 3.5 summarize the viewpoints expressed at each of the four focus groups.

3.1 Overview

The main issues raised during these sessions were:

- Public security;
- Public safety;
- Protection of proprietary information;
- Accessibility of information (in terms of availability and context);
- Cost and duplication of reporting;
- Inefficiency in government use of existing data; and
- Empowerment through availability of environmental information (allowing community to seek change).

Highlights from the meetings are presented below. There were many overlaps between comments raised by the small business group and the Toronto Industry Network, and between the community groups and the NGOs. The comments below are grouped therefore by issues viewed by the business sector and by those groups representing the public.

Issues from the Business Sector

- The larger companies (who report through the National Pollutant Release Inventory [NPRI], Regulation 127, certificates of approval (Cs of A) and the sewer-use by-law) do not wish to have another system of reporting. They feel that they are currently providing enough information to government, but that different levels of government are not using and effectively sharing the existing information. It was felt very strongly that the levels of government should address their own inter-communication issues rather than requiring business to report the same information again.

- Businesses are sceptical of how well the government uses the environmental data it now collects. There is belief that the NPRI data is analyzed when submitted, but there is less confidence that other data is reviewed when submitted.

- Increasing the burden of reporting can have a serious impact on companies, as the amount of reporting currently done is expensive.

- Smaller businesses will have a very difficult time in reporting because of the cost, and the margins on operations like autobody shops and drycleaners will not support the added expense.

- Larger businesses feel that they are being targeted through NPRI and getting the blame for poor air quality when the emissions from many small businesses are not reported and emissions from outside of Toronto are not considered.

- Businesses are very concerned about the consequences of raw data being released without context, which they feel could result in undue panic or concern. There is a concern that information provided without context does not differentiate between hazards and risks.

- Business is concerned about security issues and has been instructed to be careful with what environmental information they divulge. They report that they have been told by the RCMP and CSIS not to disclose information about some material they have onsite and where it is stored.

- Release of proprietary information is a serious concern. Business representatives say that companies in other jurisdictions who do not have to publish what they have on site are at a significant advantage if they can access information on what local companies are storing and using and when, particularly if they start producing new products or make product improvements that result in a change in the chemicals used.

- Business feels that the community is not demanding this information. They state that they often have open houses and hold public meetings, but few people attend. They feel that people do not want to know about what chemical storage or emissions until an odour becomes present in the air.

Issues from Public Groups

- People want to be aware of the hazards and risks around them.

- This sector is very concerned that smaller businesses do not have to report. It was recognized that emissions reporting would be expensive for smaller businesses, and it was suggested that modeling based on equipment used, etc would provide communities with adequate information on emissions.

- Members of the public understand that business has concerns regarding security and proprietary information. The participants want a solution that both addresses those concerns and lets them have the information they need. One suggestion was that classes of chemicals and their effects be disclosed, rather than actual chemical names.

- The public is concerned that the undertaking of improving access to environmental information is very large, and that the size of the task is a barrier to it getting done. They recommend taking an incremental approach by targeting the most important sectors and chemicals first, such as by first targeting the top ten carcinogens.

- The participants want context for the environmental information, not just the raw data. They want to know what the threat is, what is being done to minimize it, and what to do if there is an emergency.

- People want to know about potential substitutes for chemicals that are being used, and how businesses are adopting these substitutes. They would like to know which businesses are using environmentally-friendly processes so they can frequent their establishments.

- Residents want to know what the baseline emissions are and what the progress is towards reducing hazards and reducing the impact on human health and the environment. They want measurements, targets, plans and evaluations.

- The public is frustrated with how the Ministry of the Environment handles Cs of A. Information contained in the Cs of A is considered to be almost inaccessible.

- The public agrees with business that governments have to address the obstacles to providing improved access to environmental information by working together and sharing existing data.

- The public believes that all of the environmental information should be made available in one place, preferably on an accessible and easy-to-navigate website.

3.2   Small & Medium Enterprises

This section provides a more detailed summary of the results from the focus group for Small and Medium Enterprises (SME). Six participants attended this meeting.

Use of Chemicals in Facilities

There is a range of chemical use in this sector. For instance, it was reported that crematoriums do not use chemicals at all, while others, like paint producers, use several types of chemicals, including hydrochloric acid and sodium hydroxide. Some smaller facilities, like autobody repair shops and gas stations, generally keep small inventories on site.

Chemical Tracking

It was said that most companies with large quantities of chemicals onsite have an inventory management system, while those with smaller amounts do not. For instance, autobody shops do not keep a large quantity of paint onsite as they are unable to predict what colours will be used, and so they order the materials as needed.

It was noted that while crematoriums do not use chemicals in their work, they did at one point store pesticides onsite for use on adjacent cemetery lawns. However, since the introduction of the pesticide by-law, this storage no longer occurs as they are no longer allowed to use Round-up™ or similar products in their lawn care.

There is a concern regarding public knowledge of what chemicals are contained on site. In some cases, competitors could figure out the formulation of products if they knew what material was stored.

There is a concern about providing raw data to the public, as many people would not be able to understand the data.

Environmental Regulations

Most SMEs do not have to report to NPRI as they do not meet the threshold requirements.

Many have to meet reporting requirements for the City's sewer-use by-law. For some, this includes filling out a form to demonstrate that the materials prohibited from entering the sewer are in fact not going there.

Public Inquiries and Reporting

Most inquiries from the public were said to be event-driven, such as when a resident smells something in the air, or if they see smoke from a stack. In general, participants report that there are very few requests for the environmental information. In some cases, like in the autobody industry, community neighbours in the area know that the business is there and what kind of work they do. It is generally only when there is a fire, a spill or a bad odour that requests are made for information on chemical storage.

Most spill events are documented and made public via the Ministry of the Environment's (MOE) Environmental Bill of Rights.

The participants expressed significant concern with the C of A process. They said that it currently takes six months or longer to get a C of A from the MOE, and that it takes a long time for an interested party to receive information from the MOE on an existing C of A.

Business is very concerned that, because of the cumbersome nature of the provincial C of A process, municipalities might be looking to collect the same information for them. This would mean duplicated effort and unnecessary cost to the businesses. SMEs would rather that the provincial government fix its C of A system and share that information

with municipalities efficiently and effectively rather than create another burden for business.

Worker Issues

The participants report that they do not receive many inquiries from workers, as most information is already available through WHMIS. In operations that include the mixing of chemicals, such as in the formulation of paints, the staff doing the work is technically trained and receives such information in their training.

Reduction of Chemical Use

All sectors were said to be required to file a pollution prevention plan with the City of Toronto. Pollution prevention training is said to be available through the sector associations, as are Codes of Practice and Best Management Practices. It was noted that following the Best Management Practices is a requirement of the C of A.

Accessing Information on Environmental Programs by Sector

The SMEs identified a number of sources from where they access information on environmental issues or programs for their sector:

1. Specifications in the Certificate of Approval;
2. Their industry associations;
3. Information programs funded by the Ministry of the Environment and Environment Canada; and
4. Work provided by retained consultants.

Benefits to Tracking Chemicals

Tracking chemical use was reported to have a number of benefits:

1. Inventory tracking can save money by ensuring efficient use of chemicals and cost-effective handling;
2. Workers are better protected by using less toxic chemicals where possible;
3. Employee morale is improved because of the decisions to substitute less toxic chemicals; and
4. Using less toxic chemicals results in fewer toxic emissions.

Barriers to Providing or Report Information on Chemicals Used

The group identified a wide range of barriers to providing information:

1. Language barriers can be a problem, including among internal staff;
2. There can be a significant impact on time and money, particularly if there are requirements for stack testing or other monitoring;
3. There is a perception that the information is submitted to government but is not looked at;
4. There is inconsistency in the process, whereby it seems that the reporting systems change just as staff get used to them;

5. Very little trust in the new government initiatives (in one case due to unsatisfactory participation in the pesticide consultation);
6. Security is an important issue, as some of the chemicals stored are dangerous and tightly controlled, and advising the wrong element in society of their location and quantity could have serious consequences;
7. Releasing proprietary information could very negatively affect businesses, where competitors in other jurisdictions who are not subject to public disclosure regulations would have a significant advantage;
8. Public apathy was said to be a problem, as the local community does not respond to invitations to open houses, public meetings, etc.;
9. The public has access to much information through NPRI, but the public may need education on how to interpret and understand the information; and
10. There should be better promotion of the availability of the environmental information that currently exists.

Other Points

The SME group was very clear that duplicative reporting must be avoided. It was felt that there is much environmental information currently available from the reporting that they now do, but the information is not being handled effectively by the different levels of government. They felt that they should not be put under extra burden because of the communication, organizational and management issues that prevent different levels of government and government departments from sharing the information already collected.

There is significant concern specifically about the C of A process. SMEs recognize that the public is frustrated with the accessibility of information through the C of A process, but they feel that the problem should be resolved by the MOE rather than having a parallel municipal reporting system.

3.3   Residential and Community Groups

This section provides a more detailed summary of the results from the focus group for residential and community groups, which included participants such as residential associations and concerned residents, among others. Nine participants attended this meeting.

Level of Awareness of Chemicals in Local Area

The participants had various levels of knowledge of what chemicals are being emitted or stored in their areas. Some had very detailed knowledge, while others were looking for information. All had concerns, and some were concerned that the NPRI data was insufficient as it only had information from larger facilities.

Sources of Information

The residents were quite knowledgeable about sources for environmental information, and identified Cs of A and NPRI as the main ones. They also look on the Internet and participate in public forums when available. They are also aware that emergency

services has information that is inaccessible. The planning department has information in their files from soil samples, but it was said to be difficult to access.

Results from Requests

Participants reported that they were able to get available information from the City when they requested it, but they were frustrated with the small amount of information collected. For instance, some residents were concerned about air quality in particular locations, but there was no available data because no monitoring stations were present, and it was too expensive to have the monitoring performed. It was felt that monitoring is done too infrequently, and that continuous monitoring is required.

Use of Information

The participants are eager to know what chemicals and emissions are present in their area, but they are also aware that it is difficult for the lay person to understand the context. They feel that they need the information, but that they also need help to interpret it.

The participants provided examples of uses for the information, which generally related to the protection of public health and the environment. Some examples include:

- Organizations could lobby for change, such as to close an airport, improve transit, or change traffic;
- People could make decisions on where to live and work;
- Residents could ask for modifications to proposed developments;
- Consumers could make decisions on which services to use (for example, to choose a drycleaner on how green their process is);
- Companies could be asked to consider alternative chemicals in their process; and
- Baselines could be established and measurements taken for the purpose of continuous improvement.

What Information Should be Available and How

Participants do not want large reports, but rather the data and assistance with the context. They would like to have easy access and prefer the internet, ideally using a clear website that is easy to navigate.

The participants feel that environmental information should be collected by the City through licensing. For instance, a dry cleaner or an autobody shop could be required to disclose what chemicals they intend to use.

Some participants felt that banks and insurance companies should ask about what chemicals businesses use and not provide loans or coverage to those companies that cause a safety concern.

Benefits of Enhanced Access to Information

The participants feel that if they have better access to environmental information, they can disseminate it within their community.

The participants would like to see improved information sharing between the City and the Provincial and Federal Governments. It was felt that change is needed at the City and at the Province to do this.

With environmental information, the City could establish an emissions baseline and reduction targets and then measure progress. It was suggested that ten priority chemicals could be targeted to start, and an incremental approach could be taken by adding substances later.

With information on emissions and stored chemicals, the City could establish Environmental Health Inspectors, who could check sites and determine if fences provided significant buffers and the effectiveness of other protection and prevention measures. They could also assist communities by providing context on local situations.

Barriers and Challenges

The participants felt that there are significant barriers to getting useful information:

1. There are too many places one must visit to access information. There should be one repository of information, with support for people trying to access it.
2. It is difficult for the lay person to understand chemical names, technical information, and the context. There should be education and support available to help interpret the environmental information.
3. There are many information gaps because smaller facilities do not report but should.
4. There should be more education in schools about the effects of chemicals on people.
5. There is no standard for non-pollution; rather, the standards are for thresholds of acceptable pollution. A target for no pollution should be established and approached through continuous improvement and monitoring. The burden of proof should be on businesses to demonstrate that they are not polluting.
6. To improve access to environmental information, the support of business is needed. To obtain their support, their concerns of security, confidentiality and burden of reporting must be addressed. There should be incentives and award programs to encourage them.
7. This is a big task and a significant challenge. Do not try to do it all at once, but instead approach it incrementally, as has been done with smoking.

3.4   Non-Governmental Organizations

This section provides a more detailed summary of the results from the focus group for NGOs, such as environmental groups and health groups. Eight participants attended this meeting.

Use of Information

NGOs use environmental information in a variety of ways to protect public health and the environment, including:

1. Researching links between chemicals, emissions and the impacts on human health;
2. Determining amounts of materials in communities, particularly hazardous materials;
3. Trying to get pharmaceuticals out of the waste stream and out of wastewater;
4. Using community education to support people who are trying to find out more about what is going on in their area; and
5. Disseminating information.

Experience Accessing Information

There was significant frustration expressed with respect to accessing environmental information, including:

1. One participant reported that companies were telling them that the NPRI data was wrong, because in larger businesses it is not the responsibility of the plant manager to report but instead someone at a head office not familiar with the local situation;
2. It was felt that there is inadequate information available on smaller companies because the Cs of A are difficult to access and the cost can be prohibitive. It was noted that it is often the poor and the disadvantaged who live in areas of greater risk, but they do not have the resources to pay for accessing information;
3. The City's website was strongly criticized and characterized as impossible to navigate;
4. One participant noted that, during a fire at a nearby business, residents were told to close the windows and to stay indoors, but were provided with no information on what they were being exposed to;
5. The general public does not know where to go to access information, and so they call NGOs;
6. People are not concerned until there is a problem such as a release or a disaster. It was suggested that there should be a system used to provide information in these cases, which could include use of radio or auto-diallers; and
7. People with environmental sensitivities who live in apartments often have many problems with cleaning solutions and other products used in building maintenance, but they have a difficult time accessing information on the chemicals being used and convincing management to change products.

The group wanted to point out at least one success story, which was the Toronto Environmental Alliance's mapping of the NPRI data. It was reported that there was a strong response from neighbourhoods and national coverage. The data had been available for 12 years, but this format made it more relevant to people.

Is Assistance in Accessing and Interpreting the Information Needed?

NGOs reported that they often provide information to other groups or residents on request. Sometimes they assist by directing the requester to the proper source, or they provide brochures and guidebooks.

Occupational groups and labour groups were identified as being very good sources of contextual information on locally-present chemicals and emissions, reportedly because the labour groups were providing information in support of their members and customers.

Disappointment was expressed in the availability of environmental information from the professional medical community.

The NGOs find that they are called upon to provide local environmental information and to provide the necessary context, education and awareness, because a gap exists in providing this service. They feel that government should fill that gap, and point to Toronto's pesticide by-law as a good example of how it should be done.

What Information Does the Public Want?

It was said that the public wants contextual information, such as the impacts chemicals and emissions may have on them. That information is particularly desired when there is some sort of trigger, such as an odour in the community or a materials spill. They also want information when a specific issue is in the media. For example, when the media reports that there are ten carcinogens in Toronto's air, the public is said to want to know where they are coming from.

It was felt that people living near factories and manufacturing plants want to know what chemicals are involved, but they also want to know about pollution remedies, how conditions could be improved, and what action they should be taking to protect their health.

Participants say that residents also want to know that situations are being monitored, remedies to pollution issues are being pursued, and that emergency services has the necessary information.

The participants said that the public want environmental information as it relates to re-zoning applications. For instance, they want to know about adjacent industrial uses when someone is trying to re-zone for residential development. Many of the NGOs said they would support business in keeping industrial buffer zones protected from residential encroachment. They say that they want information before decisions are made and not after an application has been approved.

How Should Information Be Available?

The NGOs feel that information should be widely available, possibly at kiosks, libraries, schools and at the facilities themselves. They feel that internet access to the information would be ideal because those without computers at home can access the information at a library or school. Further, there must be strong promotion that the resource exists.

They would like to be able to search the website by postal code in order to access local environmental information.

It was felt that the environmental information should be available in one place through one portal, so the desired information can be found without having to search many different databases, files and reports. The participants felt that they should not have to search through Cs of A, planning documents, the Spills Branch of MOE, libraries and other places – instead, the information should be available in one place.

A geographical information system (GIS) was suggested as a good tool for presenting environmental information. One of the participants reported that the Ministry of Natural Resources was building such a system, and that staff there felt Toronto had unique challenges that would make incorporating their information difficult, arising from amalgamation and different data systems in use.

The participants said they would like to know what kinds of pollution prevention plans companies have in place and are being pursued, and what the measurement trends reveal.

They say that the public is interested in knowing how secure they are, and materials the companies around them have onsite.

It was felt that there has to be access to environmental information, but at the same time there must be security considerations in place when the information could lead to someone getting dangerous material for bad intentions. There must be a solution to these conflicting interests.

The participants felt that there must be public support for change and alternatives, and attention must be paid to smaller businesses and their concerns. The requirements to provide environmental information should be supported by training and transitional funding.

It was suggested that facilities themselves should be labelled. If a factory has hazardous chemicals onsite, then a disclosure should be posted on the building or on a visible sign on the edge of the property so the public knows that there is a risk.

Concerns Regarding Information Availability

NGOs recognized there are issues with respect to the dissemination of environmental information, particularly:

1. Security concerns, such as providing the whereabouts of chemicals to terrorists, vandals and criminals;
2. The sharing of proprietary information and the potential negative impact on businesses; and
3. The potentially significant burden on small businesses.

The group offered some remedies, such as:

1. Reporting on classes of chemicals, rather than the exact chemical name;

2. Discussing with businesses and the City how to arrive at the right level of detail about what is stored and where in the facility it is stored; and
3. Asking small businesses to provide an estimate calculated from their size and a typical scenario in their industry.

Challenges to Developing Accessible Information System

The NGOs identified a number of challenges and remedies to developing enhanced access to environmental information:

1. The undertaking is large and difficult. In order to address this problem, a subset of chemicals and/or sectors could be addressed first, with others to follow. This would allow the most important to be tackled at the beginning, while ironing out system issues before addressing the broader range of chemicals and sectors;
2. Program cost was felt to be an issue. It was felt that in order to make the system sustainable, it should be self-financing through fees;
3. There are jurisdictional problems between governments and within governments that negatively affects access to environmental information, and that these issues must be addressed. In particular, it was stated that within the City, there is little cooperation between TPH and Planning. It is felt that TPH should be the lead agency and others should be told to cooperate;
4. There are concerns that management and labour issues may create barriers;
5. It was felt that there currently exists among the general public a general lack of trust with government; however, it was noted that the general public does seem to trust TPH;
6. Communicating the existence of an environmental information system could be a challenge. Significant resources and effort should be put into this. Partnerships with Business Improvement Associations were suggested. Providing audits and recommendations to businesses would assist them in getting more information on how to reduce their emissions and use of toxic chemicals. It was suggested that if open houses are not well-attended, then businesses could present at residents' association meetings. Information could be provided through door-to-door visits and flyers.
7. The participants felt that Industry should not have to duplicate their reporting because of government failure to integrate and share environmental information, and that Government should resolve this issue.

Legal Liability in Providing Information

While the NGOs recognized that there can be a legal liability associated with providing environmental information, it was felt that not providing the information could also make businesses and the government liable, as someone could suffer harm because he or she was not informed of a known potential health risk. It was suggested that Best Practices on collecting, analyzing and reporting accurate information would help to minimize the risk of liability.

Role of NGOs in Making Environmental Information Useful

NGOs felt that it was important for government to promote the availability of environmental information. However, they did see potential role for themselves:

1. Raising awareness of an environmental information program through their existing communication channels (newsletters, flyers, etc.);
2. Assisting with community animation, such as discussing with residents and other interested parties on how to use the information; and
3. Helping with analyzing the data and assisting with advocacy initiatives.

It was noted that if TPH wanted to promote the information through NGOs as a primary vehicle, then they would require a commitment of funding.

3.5 Toronto Industry Network

This section provides a more detailed summary of the results from the focus group for the Toronto Industry Network. Seven participants attended this meeting.

Systems for Tracking Chemicals Used in Workplace

Larger businesses were said to have tracking systems. If they are ISO certified, then they will have a management system that tracks inventories. Their information can feed into environmental reporting requirements, but it is not automatic. There still must be a significant amount of effort in identifying smaller constituents not identified on MSDS sheets and to calculate emissions.

Environmental Reporting Systems

The larger businesses have to report to a range of systems, including:

1. NPRI;
2. Ontario Regulation 127/01: Airborne Contaminant Discharge Monitoring and Reporting;
3. United Nations Precursors Act;
4. Chemical Weapons Convention;
5. Emergency Response Regulations; and
6. City of Toronto Sewer-Use Bylaw.

Most systems have a threshold that triggers the need to report.

It was noted that CSIS has expressed some concern about information that is publicly available. It was reported that CSIS had removed information from a library in Sarnia because of security concerns.

Local Community Awareness of Business Operations

The businesses expressed frustration in trying to disseminate information to the public about their operations, what is stored there, and what emissions they have. Many have tried open-houses and community meetings, but attendance has been poor. Their experience is that the public wants information quickly when there is an indication of a problem, such as an odour, but they are not interested until such a trigger occurs.

Requests for Environmental Information From Community

Most businesses report few to no requests for environmental information from the local community. Occasionally, someone will request clarification if they look at the NPRI site, but it was said that this does not happen often. Companies who report being aggressive in their outreach to the community say that they get slightly more requests for information, but still there are few. Most requests are a result of an incident or odour.

Emergency Response

Most businesses report that they have an ongoing relationship with the local fire department, who visit them once or twice a year to see what material is stored there. Some businesses will proactively call the fire department and report new chemicals that they begin to use.

Insurance Companies

Business finds that insurance companies have "the biggest stick around." The insurance companies will at times demand more requirements for safe storage and handling than the regulations.

Hazard Versus Risk

Businesses are concerned that many people are focused on hazards and not the risk that they face. For example, if the same chemical is stored in two different places, where one is very secure and controlled while the other is not, then the hazard is the same but the risk is very different. Business is concerned that availability of raw data raises concerns about hazards but does not provide information on levels of risk. They feel that it is important to provide contextual information so that the focus can be rightly placed on risk.

Also, quantities can be difficult for the public to understand if it is presented as raw data. For example, if a company cannot account for 3 lbs of material, they report it as an emission. But if it is 3 lbs over a year when they use 5 tonnes of the material, it is very little, and could even be explained by minor calibration issues with meters. But the public may perceive that 3 lbs of the material was emitted in one incident, which is entirely different and is more alarming.

Business is concerned about the public's ability to understand the complex nature of the data that will be made public. They use the example of a large and complex document from the Ministry of the Environment on toluene that took a long time to develop. People without training who have access to raw data would likely not understand the context of the data and therefore not understand their exposure to risk.

City By-law

The business community is very concerned that the City has already decided to create an environmental reporting and emissions bylaw, or will decide to do so as a result of the current consultations.

They raise the following concerns about a City By-law:

1. Where would the City get the expertise to evaluate the information and make decisions, such as reductions to limits of emissions;
2. Why would the City establish a parallel bureaucracy to those already existing at the provincial and federal levels;
3. Why should business have to report to another government, when the information is already in government hands and the actual problem is the ability of the bureaucracies to communicate and share the information;
4. Another reporting structure could introduce problems such as differences in units, calculations and reporting periods, which would result in inconsistencies of figures and confusion. It has taken five years to harmonize the Regulation 127 and NPRI reporting requirements so that the compounds and measurement units are the same - bringing in another system would throw everything into disarray again;
5. If the City is going to introduce such a system, there should be a cost-benefit analysis conducted;
6. The cost implications to business of another reporting structure are very significant and could contribute to companies shutting down or moving their operations outside of Metro. The businesses site the example of New Jersey, which has regulated chemical businesses so much that most have left for other jurisdictions.
7. The airshed in Toronto is significantly influenced by activities outside of Toronto; therefore, it makes more sense for the Province and Federal Government to address the issue, as they can influence contributors outside of the City;
8. Reporting is one thing, and community dialogue is another, and the focus should be on the dialogue;
9. The City has to consider its jurisdiction in this matter, and environmental protection is a federal issue.

Benefits to Businesses of Collecting Information

It was noted that there are benefits to environmental reporting for companies. For example, when a company has environmental information on its operations, it can deal with the community rationally when there is an incident, thereby avoiding public hysteria. It was also noted that having that information and sharing it with the community builds bridges between the community where people live and the community where people work.

Another benefit noted was that opportunities become available for substituting less harmful chemicals. However, it was noted that business would in general be looking for those opportunities to reduce costs and ensure worker safety anyway. Also, a factor limiting this benefit was said to be that many chemical companies are unable to change product formulas because they produce the chemicals under a license to manufacture from another company.

Cost of Collecting and Reporting Information

The participants stated that the costs of collecting and reporting environmental information are very significant. Larger businesses have full-time technical staff

committed to reporting, and it is viewed as a cost of doing business. Smaller businesses have to rely on consultants, and report spending as much as $20,000 per year for reporting alone. The implication for businesses such as auto paint shops is very significant if they have to incur such costs. It is possible that they will simply refuse to do so or will fill out the forms without actually measuring.

If there is a requirement for stack testing or continuous monitoring, the equipment and the operation will both be very expensive.

Challenges to Reporting Environmental Information

Challenges identified by business include the following:

1. Cost is a very big issue, and although it is a cost of doing business for large companies, it can be crippling for smaller companies;
2. Different requirements by different systems create duplication, making business report the same information but in different formats, units and frequencies.

Addressing the Challenges

The harmonization of NPRI and Regulation 127, which was described as being a cooperative effort between industry and government, has minimized duplication. It was thought that adding a bylaw would recreate problems that have taken five years to fix.

Concerns Regarding Public Knowledge of What Is On Site

Business is concerned about the public availability of information about inventories for the following reasons:

1. Without context, it can raise unnecessary anxiety. Business is much more comfortable with disclosure if context is provided. The Community Awareness and Emergency Response (CAER) model was said to be effective but not perfect, and should be expanded upon;
2. There are security issues, as access to some chemicals must be restricted from terrorists and criminals. In fact, some companies have to keep records of who is buying certain material, and check to see if they are permitted to have it. Announcing that such information is present can make it easier for people with bad intentions to obtain the materials illegally. It may be better to disclose this information to emergency services, but not the general public. Also, if there was more trust between community, business and government, then the community may be satisfied that they are being protected.
3. Proprietary information could be disclosed. Although it is possible to get exemptions for disclosure of proprietary information, the process is rigourous and expensive, and companies said they tend not to pursue it. Businesses say they do not mind disclosing to emergency services or to a government program, but if the information is put on a publicly accessible website, then there could be serious implications for competitiveness. It was felt that this issue must be considered further.

Why Are Some CAER Sites Better Than Others?

The local CAER sites are successful because they are persistent and proactive with businesses. In areas where the public has been engaged, mail-outs have been conducted and outreach campaigns have been attempted. These efforts are said to have resulted in more people coming to an open house.

It was suggested that people will respond if they see a benefit in attending an open house or information meeting. One benefit could be to have a better understanding of risk and why residential development should not encroach on industrial lands.

Suggestions for Dissemination of Environmental Information

The businesses recommended a clear and easily-navigated website that is dedicated to providing access to environmental information and not a subset of any other website. The site would have to be maintained to ensure that all of the links work and that the integrity of the data is sound. The City of Toronto website was cited as a way not to do it, as it is difficult to navigate.

4. CONCLUSIONS

The focus group sessions have provided detailed insight into the perceptions of stakeholders on the issues relating to enhancing access to environmental information. Some common ground was observed, which can help lead the way to a path forward. These common elements included:

- An awareness that public security concerns with respect to access to environmental information exist that require addressing;
- The need to protect small businesses from excessive reporting burdens;
- The need to provide information on emissions and storage in a context that is meaningful;
- That user-friendly websites are the best way to report and to access environmental information; and
- That different levels of government should work together to improve access to the environmental information currently collected.

It was commonly noted among the focus groups sessions that access to environmental information must be improved and made more efficient, and that there are benefits to both business and the public for there to be some sharing of information. Some industry groups are working with community-based committees to explain their pollution prevention and environmental protection activities, while NGOs are working to help the public better understand the information that is currently available.

While the focus groups helped to identify the challenges of improving access to environmental information, the participants also provided suggestions for overcoming them, such as:

- Enhancing community dialogue among business and the community;
- Using models to generate emission estimates for small businesses;
- Limiting the amount of detailed information on storage but instead focusing on classes of chemicals; and
- Focusing on a short-list priority of chemicals and sectors in a phased-in approach.

The feedback provided through these focus group sessions will build on the other consultative efforts in this process. Together, the feedback will help TPH develop a path forward on enhancing access to environmental information that best meets the needs of its stakeholders.

APPENDIX F: RESULTS AND STEPS FORWARD WORKSHOP REPORT

**Results and Steps Forward
Stakeholder Workshop - January 9th, 2007**

**Access to Environmental Information:
Environmental Reporting in Toronto**
Gaps and Opportunities

March 2007

**Prepared for
Toronto Public Health**

Table of Contents

1   Introduction

Toronto Public Health (TPH) is currently considering ways for the City to make environmental information more easily accessible. As a part of this work, in October 2006 Public Health retained Lura Consulting and Marshall Macklin Monaghan to assist it on a project contributing to Public Health's ongoing policy development work on environmental reporting and access to environmental information.

Specifically, the goal of this project is to aid in Public Health's understanding of the coverage, gaps and opportunities and challenges of accessible environmental reporting programs in Toronto. The project includes two key elements:

- A stakeholder consultation; and,
- A technical review.

The consultation and the technical review are designed to achieve the following objectives:

- Identify opportunities and challenges of current applicable and accessible environmental reporting programs, including a focus on success, barriers and gaps.
- Provide a gross estimate of the chemical use, storage, transfer and release by sector and chemicals in Toronto;
- Assess the completeness of coverage of existing accessible environmental reporting programs in Toronto by sector and chemicals covered;
- Identify successes and challenges of selected community right-to-know environmental reporting programs in other jurisdictions;
- Identify areas of agreement/disagreement, and paths forward around perceived barriers and opportunities for industry participating in mandatory and voluntary environmental reporting programs; and,
- Obtain input on priority areas for enhancement of environmental reporting.

On January 9, 2007, a stakeholder workshop was convened to present the results of the stakeholder consultation process to date, to present the results of the technical review, and to obtain feedback from participants on potential steps forward. The workshop format consisted of a presentation of the results, followed by a series of roundtable discussions. The results of the roundtable discussions were presented in plenary sessions at the workshop's midpoint and at the closing.

Fifty-two participants attended the workshop. A list of participating organizations and agencies is provided in Appendix A. An overview of the presentations is provided in Section 2, and the results of the workshop are presented in the Section 3.

2   Presentations

The workshop was opened by session facilitator Sally Leppard of Lura Consulting. She then introduced Dr. David McKeown, Medical Officer of Health for the City of Toronto, to deliver the session's opening remarks.

Dr. McKeown welcomed the participants to the workshop and thanked them for coming. He acknowledged that many of those attending the day's workshop had previously contributed their

perspectives in earlier components of the stakeholder consultation process, and that TPH appreciated their contributions of time and expertise.

In his presentation, Dr. McKeown described why Access to Environmental Information (AEI) has become an important issue in Toronto. He noted that AEI fits with the City's values of transparency, accountability and public accessibility.

He described some of the benefits associated with improving AEI, such as helping to understand the impacts of pollution on public health, encouraging pollution prevention, supporting emergency planning and preparedness, and improving the understanding of health and environmental risks.

Dr. McKeown reviewed some of the work that TPH has completed recently in trying to better understand AEI, and noted that the current AEI project will help to provide a better understand of the reporting gaps and opportunities that currently exist in Toronto. The findings of this project will be used to inform his report to the Board of Health in May 2007 on options for moving forward.

Following Dr. McKeown's presentation, Ms. Leppard described the purpose of the stakeholder meeting, which was as follows:

> *The stakeholder consultations to date have identified important considerations and possible opportunities to enhance access to environmental information in Toronto. This session will review discussions to date as well as the results of the technical review on key chemicals and sectors and explore potential steps forward.*

Ms. Leppard led a round of introductions from the project team the meeting participants.

Following the introductions, Ms. Carolyn Adams of Marshall Macklin Monaghan and Dr. Harvey Shear from the University of Toronto presented the preliminary findings of the technical review. Their presentation included, the methodology of the technical review, the review's scope and limitations, and the preliminary results and conclusions. For the most current information and results of the technical review refer to the technical report (Substances of Concern Release and Transfer Reporting in Toronto: Analysis of Gaps)

After the presentation, the floor was opened for questions and comments (See Appendix B).

Following the question and answer period, Jean-Louis Gaudet of Lura Consulting presented the key findings to date of the stakeholder consultation. His presentation included an overview of the consultation methodology, the key messages received, and a summary of the feedback received on the benefits of AEI, its problems and challenges, and possible solutions.

The main issues raised by the focus groups included: public security, public safety, protection of proprietary information, accessibility of information, cost and duplication of reporting, inefficiency of government use of existing data and empowerment through availability of environmental information.

The jurisdictional review identified six key lessons:

1. Provide necessary technical expertise on staff.
2. Develop an electronic program.

3. Manage program resources wisely.
4. Work closely with stakeholders, particularly Industry and the small business sector.
5. Provide a variety of support mechanisms to Industry and businesses.
6. Establish clear program goals and objectives.

Following his presentation, questions and comments were invited from the floor. These are provided in Appendix B.

3 Summary of Stakeholder Feedback

NOTE: *Unless specifically noted otherwise, the perspectives of stakeholders that are presented in this report should not be considered to be consensus opinions among stakeholders*

Goals of an AEI Program

The workshop participants were asked to consider what goals the City of Toronto should strive to achieve with an AEI program.

To help stimulate discussion, participants were reminded of the three major goals the Board of Health identified for developing an AEI program and asked if the goals were specific enough and what was missing. The identified goals were:

- Encouraging pollution prevention in businesses and operations;

- Facilitating emergency preparedness; and,

- Improving the understanding of health and environmental risks.

The participants provided suggestions for modifying the goals and for adding new ones. Suggestions for how to modify the stated goals included:

- Use a **stronger term instead of "encouraging"**, such as reinvigorate, reinforce, or enhance (the word "encourage" is too weak a word);

- **Include the public's right to know** on what companies are releasing (the public's right to access environmental information should be clarified in the goals);

- The goals should more closely **reflect the guiding principles** endorsed by the Board of Health for developing a Community-Right-To-Know strategy; and

- **Examine the goals of similar programs** in other jurisdictions (the goals of other jurisdictions could provide insight into what goals are most suitable for Toronto).

It was also suggested that there should be an **over-arching statement of purpose** for a Toronto AEI program, such as protecting public health and reducing toxic chemical exposure to people and the environment.

The participants' suggestions for additional goals focused on **emergency preparedness and risk management** and on **pollution prevention and environmental protection**. Their suggestions are provided below:

Emergency Preparedness and Risk Management

- Providing **community involvement** in emergency preparedness (this will keep citizens better informed of what to do in case of emergency);

- Evaluating **local risks** (communities face different risks that may be unique to their area, such as risks from local industries or geographic conditions);

Pollution Prevention and Environmental Protection

- Developing a better understanding of **pollutant pathways** (understanding what and where pollutants are or are not released in Toronto can help to understand their pathways);

- Increasing **awareness** among the public, industry and business to help encourage changes toward sustainable business and industry (more community knowledge on threats and risks will lead to incentives for change);

- Improving understanding to improve **compliance** (organizations that track their chemicals more closely and are more aware of their regulatory obligations will be more likely to comply);

- Reducing **legacy issues and liabilities** for both government and business (being aware of potential threats will allow for proper disclosure and allow organizations to address threats before they become serious);

- Protecting **ecological health** (ecological health should be considered, not just human health); and

- Addressing **planning and development** issues (for example, better access to environmental information can help avoid incompatible land-use planning, such as building homes near industrial sites).

The participants also provided some general suggestions to consider when designing goals for an AEI program. These included:

- Increase the involvement of the **Ministry of Labour** (because the labour component is a very important aspect of AEI, the Ministry should be more involved);

- Link with other **existing reporting programs**;

- Make sure **industry understands its roles** (industry needs to know what its obligations are with respect to regulations and as a stakeholder);

- As work is made toward the goals and the additional data makes the picture more clear, the **goals can be refined**;

- Include the emergency preparedness community and address their **security concerns** (the emergency preparedness community has expressed a number of security concerns regarding AEI that should be addressed, such as the potential misuse of GIS information by terrorists); and

- Include chemicals in **transport and those being stored** outside.

Priority Groupings of Chemicals and Sectors

To obtain feedback on reporting priorities, participants were asked what they felt the priority chemicals groupings and sectors were, based on the review of key sectors and chemicals in Toronto.

Priority Chemical Groupings

The main chemical or chemical groupings suggested by the participants included:

- Household products (it was suggested that TPH should do more consumer intervention in this area);

- Chromium, Cadmium, and Nickel;

- Volatile Organic Compounds;

- Dry cleaning chemicals;

- Priority carcinogens; and

- Pesticides (for use both inside and outside of homes and other buildings).

It was also suggested that the priority chemical groupings should be based on the risk-exposure potential to human health and on environmental health hazards.

Priority Sectors

The participants identified a number of priority sectors, which included:

- Mobile sectors;

- The fuel distribution sector;

- Sectors currently exempt from NPRI;

- On-site dry cleaners;

- The construction sector;

- The City of Toronto and its operations;

- Small to medium sized businesses; and

- The plating industry (it was suggested that a similar approach be used as was used with the autobody sector).

The participants also noted some considerations that TPH should include when deciding on target sectors. These considerations included:

- The sectors should be kept broad-based;

- Look at the big picture to be able to examine the information within a proper context, while at the same time consider the unique circumstances at local situations;

- All emitters should be included in order to help better understand pollutant pathways;

- Emphasize all business sectors and target geographical hotspots, such as the waterfront, etc.

- Expand reporting thresholds, and include categories such as chemical limits, number of employees, etc;

- Focus on the Workplace Hazardous Materials Information System (WHMIS) and how it is used by small to medium sized businesses; and

- The knowledge gap on storage must be addressed.

- This environmental information is needed to help the City with its municipal and emergency planning.

Changes to Existing Programs

The participants were asked what changes could be made to existing reporting systems to close current gaps in environmental reporting in Toronto. As a general way of improving reporting in Toronto in general, it was suggested that reporting systems should be somehow **linked together**, or able to be accessed through **one portal**. It was suggested that a **"one-window" pilot program** be created in an effort to better integrate environmental data and information. Suggestions for possible program linkages included the Pest Management Regulatory Agency, dry cleaning regulations and CEPA. It was also suggested that there could be lessons learned from reporting programs in Fort Saskatchewan and in Manitoba.

Suggested changes for specific programs are described below.

National Pollutant Release Inventory (NPRI)

- **Lower the reporting thresholds** in order to capture more emitters and more chemicals that are currently unreported;

- **Include small to medium sized businesses**;

- Provide the information in a **context** that makes it more easier to understand;

- Review the process for **granting exemptions**; and

- **Shorten the lag time** between when the data is submitted and when it is posted on the NPRI website.

Responsible Care

- Consider **expanding** the Responsible Care program, particularly to include small to medium sized businesses;

- **Share the lessons learned** from the program with the rest of Industry;

- Use the program to form effective **partnerships**; and

- Include a **training** component.

Sewer-Use By-law

- Provide the Sewer-Use By-law team with **greater resources**;

- Make the reports **publicly accessible**;

- **Report** on illegal activity; and
- Improve **enforcement** of the by-law.

Certificates of Approval (Cs of A)

- Make the information contained in Cs of A **more accessible**;
- **Eliminate the fees** for accessing the information;
- **Reduce** the amount of time required to have the Cs of A approved; and
- Add **expiry dates** to Cs of A.

CEPA Environmental Registry and Environmental Emergency Planning

- Increase the amount of **tracked substances**; and
- Provide more information on and incentives for **safe alternatives**.

Hazardous Waste Regulations

- Make reports **publicly available**; and
- Apply the regulations to **more businesses**.

Spill Reporting

- Have **better information** on spills available to the public;
- Have **stronger fines**; and
- Provide **better follow-up** on spill sites to ensure that corrective action and mitigation has taken place.

It was observed that it is the responsible companies who report when they have spills.

WHMIS

- **Increase public access** to WHMIS information.

Fuel Storage Tank Registration

- Encourage businesses to keep fuel tanks in a **safe condition**.

Audience Needs and Levels of Information

Participants were asked to provide feedback on who the different audiences are for environmental information, and what level of access the audiences need. For the discussion, potential audiences were grouped into five categories:

- Government agencies;
- Emergency preparedness;

- Community;

- Business/operations; and

- Others.

The feedback presented by the participants is presented below, organized by the five categories. It was noted that there should be a distinction made between information on storage and use, and on releases and transfers.

Government Agencies

It was felt that **the City of Toronto is a major audience** for environmental information, and that it and its departments should have complete access to the information. In particular, City of Toronto departments highlighted as audiences included were **Parks and Forestry and Recreation, the Planning Department, the Toronto Transit Corporation, and Public Health**. Suggested uses by the City for the information included:

- The City should use the information to look just not at emissions but at the **human health impact** of exposures to pollutants;

- Parks and Forestry and Recreation could **assess ecological impacts and monitor trends** in the information;

- The City could use the information to **inform its policy development** and help with **compliance enforcement**; and

- Public Health could **act as an intermediary** between businesses, the community and emergency response and help to **provide context and relevancy** to the environmental information.

It was noted that there is a **concern over the City's liability issues**. It was asked what the City's liability would be if environmental information provided by the City showed, for example, that a property was directly adjacent to an historical dump site. Would the City be liable for the possible negative impact caused by the availability of that environmental on the property value, or would the City be liable for health impacts that were not avoided by making the public aware of the potential hazard?

It was also suggested that **all levels of government** need access to environmental information, particularly those agencies that create or enforce regulations. The **Ministry of Health** was an example of a government department requiring access, as they would need the environmental information to help inform policy.

Emergency Preparedness

In general, it was felt that **those involved with Emergency Preparedness** should have access to environmental information, in particular the Fire Marshal, emergency providers, and those involved in emergency planning. While it was commented that Emergency Providers are best able to identify how they should use and access the information, suggestions for types of information they might need included:

- Up-to-date information on what **materials are present** on a site, so that they can be aware of any hazards that are present; and

- Up-to-date information on the **risk exposures** of the on-site materials, so that it can be communicated to the general public during spill or release incidents, such as fires.

In addition, it was noted that **biohazards** are becoming an emerging issue, as a new centre for treating Biohazard materials is coming to Toronto. It was suggested that those who will work in the centre and those will live near it are an audience.

It was also noted that there needs to be a **standard way for spills to be reported** because of the difficulty in finding who spill incidents should be reported to.

Community

Communities in general were viewed as a key audience for environmental information, and it was stressed that the information provided to the community members in a useful **context**. The NPRI pollutant map produced by the Toronto Environmental Alliance was cited as a good way to provide the information in a contextualized way, in that it showed a geographic distribution of where chemicals were emitted and their quantities.

In general, the participants identified a number of **information needs**, including:

- **What pollutants** are being released;
- Where and **from whom** they are being released; and
- What the **potential health impacts** are.

It was suggested that this information should include all **"over-the-fence" emissions** that enter into the public airshed, even those that are below current thresholds. This information would be used in the following ways:

- To determine **what hazards exist in the community** and how to **limit involuntary exposure** to them;
- To look at **trends in pollutant loads**;
- In **speaking with companies** to discuss the their issues, to **take action as needed**, and to **encourage businesses** to adopt more environmentally friendly practices; and
- To help **protect businesses** from issues of liability.

It was also thought that this information would help both the City of Toronto and its citizens to **better understand the results of policy changes**.

In terms of accessing the information, one avenue suggested was to **incorporate 311 with a right-to-know information clearinghouse centre**. Also, it was recognized that not everybody's information needs could be satisfied through one website, as the information needs are too great to have all in one place. To address the terrorism risk, it was suggested that the appropriate measures be conducted, such as a **security check**, when granting access to environmental information on companies to ensure that the person or group requesting information are not a public threat.

A diagram, presented as Figure 1, was prepared by one of the table groups to illustrate how access to the information might be organized. The raw environmental data that is collected is

represented by the base of the triangle. As you move up through the triangle, the information increasingly undergoes contextualization or processing and is turned into knowledge. The middle of the triangle represents information that is not generally accessible except on request or to specific groups. The top of the triangle represents information that has been contextualized for release to the general public.

Figure 1: How different audiences use environmental information

Business and Operations

It was generally felt that businesses and operations need information that will help them **improve the environmental performance** of their organizations. In particular, this information includes:

- Information on **pollution prevention best practices** (it was suggested that this information should be shared among businesses, but acknowledged that competitiveness concerns may make a company hesitant to share their best practices);

- Additional **information from suppliers on material substitutes**;

- **WHMIS materials safety data sheets (MSDS) should be improved** to provide additional information (it was also noted that companies purchasing materials through a retailer rather than a supplier would not receive MSDS sheet those products); and

- **Educational information and training** on pollution prevention planning and transition planning (e.g., helping companies make the transition to a more environmentally responsible production process).

In addition, it was suggested that **incentives** be provided to encourage businesses to engage in pollution prevention planning.
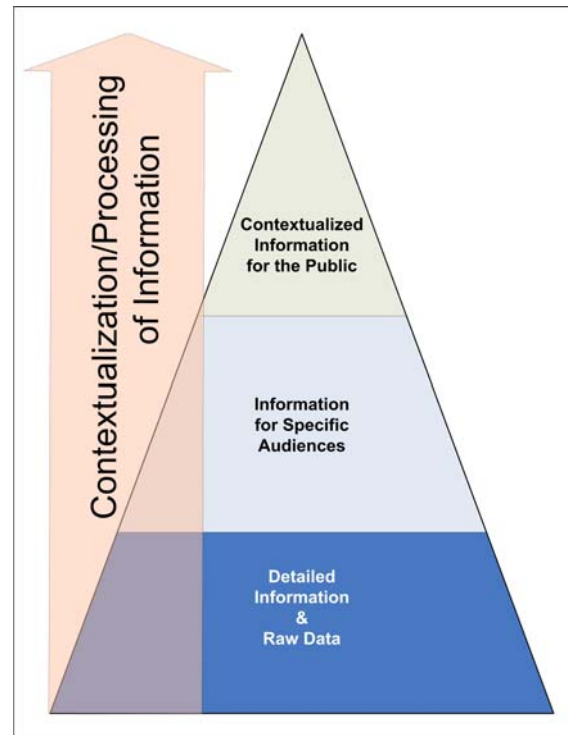
With respect to the MSDS sheets, it was noted that any improvements or added information made to them must be done at a provincial and federal level to ensure that they are used uniformly across Canada and not just in Toronto.

Other Audiences

Other audiences mentioned by the participants included:

- **The Federal Government and the Province of Ontario** (it was felt that they both need to upgrade their reporting systems);

- **The Ministries of Environment and Labour** (these ministries in particular could make use of Environmental Information in their role of protecting the environment and workers);

- **Schools and Hospitals** (these groups should have some degree of access); and

- **Other groups**, such as faith groups and municipal riding associations.

Broad Policy Options

Participants were asked what type of programs would work for a made-in-Toronto approach. They were asked to consider preferred policy options and considerations for achieving the City's AEI goals. The suggested policy options are described below, grouped according to the goals.

Encouraging Pollution Prevention

The following options were suggested as policy options to encourage pollution prevention:

- **Use a collaborative approach among City departments and other stakeholders** (The City cannot do this alone and will need partners, such as external stakeholders and those within the City, like Economic Development. Efforts between departments must be well coordinated. Linkages with other programs, such as Climate Change programs, should also be pursued);

- **Demonstrate leadership** (The City should get its "own house in order" and report on the chemicals it uses, stores, and emits);

- **Provide assistance and incentives for businesses** (Incentives can be used to encourage businesses and other operations to participate in pollution prevention planning. Incentives could include youth grants, implementation of a municipal procurement policy that rewards innovative companies, and the clarification of environmental requirements. It was noted that avoiding penalties can also be an incentive);

- **Conduct pilot research** (Information reporting and access systems could be pilot-tested before being rolled out);

- **Use a by-law to encourage participation** (The sewer-use by-law requires some companies to prepare pollution prevention plans. This scope could be broadened to require more companies to prepare them); and

- **Track and report on trends and benefits** (It was suggested that pollution prevention plans be monitored to identify pollution reductions and the benefits for businesses).

Some general considerations were also noted. These included:

- Most large companies understand the need for pollution prevention and do it willingly. Small companies, however, face **financial constraints** that are barriers to implementing improved pollution prevention practices or achieving ISO 14000 status.

- In global economies, the ability to substitute materials for more environmentally benign products is limited.

- The level of reporting, how the information will be used, and the resulting **legislative and bureaucratic costs** most be considered.

- Care must be taken to not drive businesses away from Toronto by increasing their **administrative burden**. Small and medium-sized businesses currently not reporting may need **help from the City** if they are required to do so.

Emergency Planning and Preparedness

The participants came up with the following policy options for meeting the AEI goal of emergency planning and preparedness:

- **Expand the scope of mandatory pollution prevention reporting currently in place** (because mandatory pollution prevention reporting currently exists, they should be expanded to collect additional information need by emergency planners and responders. This could include regulated databases and additional training for responders);

- **Provide additional training on chemical hazards both by and for emergency responders** (Additional training could be provided for emergency responders on the environmental and health risks of industrial chemicals. The responders could also speak with children in schools on these risks, who in turn would share this information with their parents);

- **Engage business and industry with pollution prevention inspectors** (Businesses and pollution prevention inspectors could work together to help businesses meet industry benchmarks); and

- **Establish an emergency response committee or regulatory body for companies that have pollution prevention programs** (Emergency response committees can help to ensure that emergency situations do not occur in the first place).

It was also noted that access to environmental information and knowing where materials are stored would help emergency planners with their **long-term strategic planning**. It would also help municipal planners **avoid uncomplimentary land uses**, such as placing schools near factories.

Improving Public Awareness of Risks

Options for improving the public's awareness of risks included:

- **Use common communication tools** (Common communication tools such as fact sheets and websites can be used to raise awareness around the risks of chemicals to public health. It was suggested that the information be made as clear as possible, using language that's comprehensible at a grade 8 level. The development of an index as a means of contextualizing the information was also suggested);

- **Label organizations on environmental performance and risks** (Labels rating the risks to the community of chemicals stored or used on-site could be posted at business locations {akin to the labelling program currently used in Toronto for

restaurants}. This could be used in conjunction with enhanced enforcement activities); and

- **Engage communities and businesses** (The City could engage communities and businesses to help them make better choices, such as the adoption of pollution prevention activities {for businesses} or where to live and work {for residents}. It was noted that involving the public is part of the process for both determining levels of risk and raising public confidence).

Increasing Efficiency for Industry and Operations

Options for increasing efficiency for industry and operations included:

- **Make requirements and protocols for reporting environmental information more clear for business** (To help businesses comply with environmental requirements and to alleviate the associated burdens, improve how they receive and submit information. For instance, improve the forms businesses and operations need to complete, and clarify what they need to do to be compliant by identifying their deficiencies. The City could act as a mediator to help industry meet their pollution prevention goals);

- **Expand the scope and enforcement of the Sewer-Use by-law** (The Sewer-Use By-law could be expanded to include additional mediums and chemicals);

- **Encourage improved efficiency through the tax and fee structure** (Tax structures and compliance-based fees could be implemented to encourage desired behaviours among businesses.);

- **Adopt mechanisms for encouraging green-based industries** (Incentives can be used to attract green-based industries to Toronto (it was suggested that the Ministry of Environment's efforts in this area be examined for lessons learned, as they were not very successful). Labelling similar to the Environmental Choice could be implemented to provide consumers with information on more environmentally-friendly product options.);

- **Consider the insurance industry for sources of information or as a regulating body** (Insurance companies require information on chemicals from companies, and so they could be a source of environmental information or could act as a regulating body. If the insurance industry is to be considered as a regulating body for environmental information, then the aspect of due diligence would need to be examined.); and

- **Promote pollution prevention best practices** (Develop and promote best practices for Industry based on the size of the business, the toxicity of the chemicals used, and the level of contamination released.)

Ways Forward

Participants were asked to consider what policy elements would form the ingredients of an effective Made-in-Toronto approach for AEI. Their suggestions are described below.

- **Quality control and data validation** (It would be important that the data provided is reliable and accurate. The City would need to assist reporting companies and would

have a role in driving dialogue with businesses. Compliance spot-checks could contribute to this.);

- **Broader capture of emissions and the filling of reporting gaps** (Reporting gaps currently exist among small operations and unreported toxics. These gaps could be filled using NPRI as a basis but by lowering the thresholds. The same reporting mechanism could be used but customized for Toronto. The City's licence office could be given more authority to collect and dispense additional information.);

- **Addition of storage, use and transportation of chemicals** (Information on storage and use could be considered in the second stage of a Toronto AEI program. The value of having this information would have to be assessed. Collection/reporting of the information would have to be mandatory to ensure the data is reliable.);

- **Sharing of Information, both within and outside of the City** (The City's IT staff could help to develop a common interface between departments and share environmental information. The Ministries of Labour and Environment should become more involved and could help to fill reporting gaps and to build a knowledge base on the use of chemicals. Links could also be provided with existing databases.);

- **Stakeholder engagement** (Stakeholders should be more involved and legitimacy given to the research work they do. They should be encouraged to work together proactively and in partnerships. A tri-party government-industry-community committee could be established.);

- **Streamlined reporting with existing systems** (To avoid duplication, a Toronto AEI reporting program should be streamlined with existing reporting programs. Target just five priority chemicals to start to make it easier to streamline and to avoid alienating or scaring businesses required to report.); and

- **Encouragement of sustainable business practices** (Businesses can be provided with guidance on how to include pollution prevention and toxics removal into their business plan. Encouraging sustainable business should be included in Toronto's economic plan.)

4   Closing Remarks

At the end of the workshop session, Ms. Leppard thanked the participants for their time and feedback. She noted that the results of the workshop and of the project overall will be posted on the Toronto Public Health website at http://www.toronto.ca/health/hphe/toxic_chemicals/toxicchemicals.htm as they become available. Public comments on the reports can be directed to Toronto Public Health, which will in turn inform their report to the Board of Health which is planned for May 2007.

Appendix A: List of Participant Agencies/Organizations

Organization
Ontario Centre for Environmental Technology Advancement (OCETA)
CLATA (Canadian Allied Trades Association)
Provincial Cancer Prevention and Screening Council and TCPC
Toronto Public Health - South Region
Canadian Chemical Producers' Association
Cement Association of Ontario
Solid Waste Management
Environmental Health Clinic
Toronto Public Health, Planning and Policy-Environmental Protection Office
Dow Chemical Canada, Inc.
Resident/citizen
Univar Canada Ltd.
Ministry of the Environment, Information Management & Access Branch
Transportation Services
The Dow Chemical Company (TDCC)
The Fairlawn Neighbourhood Centre
Toronto Water
Dominion Colour Corporation
Leaside Property Owners' Association Inc.
The Clean Air Partnership
Rohm and Haas Canada LP
Toronto Cancer Prevention Coalition
Etobicoke/York Local Health Committee
Canadian Centre for Pollution Prevention
ISP Canada Inc.
ETCAG (East Toronto Climate Action Group)
Structural Pest Management Association of Ontario
Hamilton District Autobody Repair Association (HARA)
Toronto Environment Office, City of Toronto
United Steelworkers - Canadian National Office
DEL Equipment Limited
Toronto Environmental Alliance
Corporate Policy Group LLP
Occupational Health Clinic for Ontario Workers, Inc.

Organization
Toronto Industry Network
Canadian Environmental Law Association
Sierra Legal Defence Fund
Tremco Canada Division, RPM Canada
Brenntag Canada Inc.
Bombardier Aerospace
Citizens for a Safe Environment
Canadian Institute for Environmental Law and Policy
Toronto Police
Canadian Manufacturers and Exporters
Air Pollution Coalition
City of Toronto, Works and Emergency Services
City of Toronto, Fire Services
Toronto Public Health
Lura Consulting
Marshall Macklin Monaghan
University of Toronto

Appendix B: Questions and Answers on the Presentations

These are the questions and answers that followed the presentation on the **technical review**:

C[1]:   Normally, large buildings do not report to NPRI.
A: That is why there was a large jump in emissions from that sector. Ms. Adams expanded on how the emissions were calculated.

Q: Can the presentation be sent in an e-mail?
A: Yes, it will be.

Q: The estimate of the dry cleaning and laundry services sector is less than 1%. Is that for reported or total estimated?
A: Total estimated.

Q: If most of the chemical sectors report to NPRI, what about wastewater operations?
A: About 20-25% report to the NPRI.

Q: When looking at the NPRI for the estimates, were the data from Regulation 127 looked at for more coverage?
A: No.

Q: Were the BOH priority chemicals considered in the study?
A: Yes.

C: Information provided in Certificates of Approval (Cs of A) was not used. When businesses apply for new technologies, they fill out a form on storage, etc. for the C of A.
A: That information is not completely publicly available or accessible. The technical reports in Cs of A are not available.

Q: Fire departments know what chemicals are stored and where.
A: Larger companies report to the Fire Department and the Environment Canada. That information is not publicly available.

These are the questions and answers that followed the presentation on the **stakeholder consultation**:

C: Under key messages, the message that this information is wanted to protect public health is not there. It should be, as it is a fundamental reason why access to this information is important.

C: It should also be noted that environmental information can play an important role in better understanding how pollutants in the environment affects public health.

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[1] C, Q and A stands for Comments, Questions and Answers, respectively.

Q: Will more information on the jurisdiction review be provided?
A: A report on the jurisdiction review will be included in the final consultation report.

APPENDIX G: JURISDICTIONAL REVIEW REPORT

**An Analysis of Environmental
Reporting Programs**

**Access to Environmental Information:
Environmental Reporting in Toronto**
Gaps and Opportunities

March 2007

**Prepared for
Toronto Public Health**

Access to Environmental Information: Environmental Reporting in Toronto
An Analysis of Environmental Reporting Programs

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1. INTRODUCTION

Toronto Public Health (TPH) is currently considering ways for the City to make environmental information more easily accessible. As a part of this work, in October 2006 TPH retained Lura Consulting, Marshall Macklin Monaghan and Dr. Harvey Shear to assist it on a project contributing to TPH's ongoing policy development work on environmental reporting and access to environmental information.

Specifically, the goal of this project is to aid in TPH's understanding of the coverage, gaps and opportunities and challenges of accessible environmental reporting programs in Toronto. The project includes two key elements:

- A stakeholder consultation; and,
- A technical review.

The consultation and the technical review are designed to achieve the following objectives:

- Identify opportunities and challenges of current applicable and accessible environmental reporting programs, including a focus on success, barriers and gaps.
- Provide a gross estimate of the chemical use, storage, transfer and release by sector and chemicals in Toronto;
- Assess the completeness of coverage of existing accessible environmental reporting programs in Toronto by sector and chemicals covered;
- Identify successes and challenges of selected community right-to-know environmental reporting programs in other jurisdictions;
- Identify areas of agreement/disagreement, and paths forward around perceived barriers and opportunities for industry participating in mandatory and voluntary environmental a reporting programs; and,
- Obtain input on priority areas for enhancement of environmental reporting;

This report summarizes the findings of a review of the successes and challenges of environmental reporting programs in other jurisdictions. The three jurisdictions that were selected for analysis are:

- New York City's *Community Right-to-Know Program*
- Massachusetts' *Toxic Use Reduction Program*
- Oregon's' *Toxic Use & Waste Reduction Assistance Program*

To undertake the review information has been gathered from a diverse range of sources. In December 2006, telephone interviews were conducted with the co-ordinators of each program. The interviewees were provided with a brief description of the TPH project and asked to share their experiences in regards to their programs' challenges, opportunities and gaps. In addition, the review has examined all available annual reports and/or program reviews, as well as all accessible program documentation (involving legislation, program guides, forms and electronic information).

This report begins with a brief overview of the three selected jurisdictions, followed by the analysis of the programs. A Summary of Co-ordinator Interviews is attached in Appendix A.

2. PROGRAM OVERVIEWS

2.1 New York City's Community Right-to-Know Program

The Department of Environmental Protection for New York City administers a Community Right-to-Know Program. This program came into effect in 1998 with the passing of the New York City Community Right-to-Know Laws and Regulations (no.26). The Laws and Regulations detail all aspects of the program, including the hazardous substances covered, facility requirements and annual reporting.

The program has a specific list of hazardous substances for which reporting is required. This list was originally based upon existing federal lists, although it has since been modified as a result of surveys of various industries. For each substance a Threshold Reporting Quantity (TRQ) has been established, at which businesses which use the substance at or above the threshold level must participate in the program. The guidelines indicating which businesses are subject to the regulations are quite broad. All businesses, regardless of size, are subject to the regulations. There are also no exemptions based upon the type of business. The only exemptions are certain fossil fuels and petroleum products which are already regulated by the New York City Fire Department.

All businesses at or above the TRQ must submit a Facility Inventory Form by March 1st, for the preceding calendar year. This form includes such information as the amount and location of hazardous substances, and their corresponding Material Safety Data Sheets (MSDS). Substances present at quantities greater than or equal to federally established levels must also complete a Risk Management Plan, involving a Risk Assessment, a Risk Reduction Program and an Emergency Response Program. Support is provided through presentations to associations and individual businesses, a program manual and on-line program information. Inspection can occur without notice, and failure to report/filing false reports can lead to a fine and/or jail time.

Access to the collected program information is limited. The data is available to Emergency Response personnel. Members of the public are able to access the data through two methods: in person, or through written request. An annual report regarding the program is produced, and is available to the public upon written request.

2.2 Massachusetts' Toxic Use Reduction Program

The Department of Environmental Protection for the State of Massachusetts administers a Toxic Use Reduction Program. This program came into effect in 1989 with the passing of the Toxic Use Reduction Act. The Act outlines the administrative means by which cleaner production techniques will be encouraged, and establishes a state-wide goal of a 50% reduction in toxic waste generation (achieved in 1998). The act aims to change and

modernize production practices, produce products to include non-toxic ingredients (though chemical substitution and/or product reformulation) and recycle raw materials throughout the production process.

The substances regulated under the program come from existing federal lists. There are three criteria to determine which businesses are regulated under the program. First, they must use and/or manufacture chemicals above a variety of threshold levels: 25,000 pounds for a manufactured/processed chemical, 10,000 pounds for a chemical that was otherwise used, and a variety of levels for Persistent Bio-accumulative Toxics (PBTs). Second, businesses must employ the equivalent of ten or more full-time employees. Third, they must fall within a set list of Standard Industrial Classification (SIC) codes.

Regulated businesses must comply with a variety of requirements. A Toxic Use Report must be submitted yearly, listing chemicals used and any changes from previous years. During the second year of filing a Toxic Use Reduction Plan must be developed. This plan includes an assessment of current chemicals used, an evaluation of feasible reduction options and an implementation schedule for any options that were chosen. As such the planning process is mandatory, but implementation is optional. The plan must be updated every even numbered year. After the initial plan, and two plan updates, an Environmental Management System (EMS) may take the place of the Toxic Use Reduction Plan. Support is provided through several mechanisms, such as a research institute, free confidential technical assistance, a multi-agency council to advise on the program as well as training guides and on-line information. Inspection occurs for companies failing to comply with the program regulations, and can result in financial penalties.

Access to the collected program information is readily available. While members of the public are not able to access specific company information, a program report is produced annually. This report, available on-line, outlines data on chemical usage, industry sectors regulated and the changes in toxic chemical use over the life of the program.

2.3 Oregon's' Toxic Use & Waste Reduction Assistance Program

The Department of Environmental Quality for the State of Oregon administers a Toxic Use & Waste Reduction Assistance Program. This program was created in 1989 with the passing of the Toxic Use and Hazardous Waste Reduction Act. The goal of the Act is to protect public health, safety and the environment, provide technical assistance to toxic users and generators, require toxic users to engage in planning and monitor the use of toxic substances and the production of hazardous waste.

The specific list of chemicals regulated by the program derives from federal EPA guidelines. The list of industries which must report their chemical use is broken into 3 categories: Large Toxic Users are defined federally, Large Quantity Generators produce 2,200 lbs/month of toxic waste and/or 2.2 lbs/month of acute hazardous waste and Small Quantity Generators produce 200-2,200 lbs/month of toxic waste. The only exemptions to the regulations are toxic chemicals which are naturally occurring in the raw materials used.

Regulated businesses have various regulatory requirements. All must develop a reduction plan or EMS which: assesses toxic chemical usage, evaluates various methods of reduction, provides employee training and awareness and incorporates reduction activities into facility management practices and procedures. The status of the reduction plan or EMS must be reported through an Implementation Summary Form. The main mechanism for program support is a free confidential Technical Assistance Program, although program guides and on-line program information is also available. Failure to properly participate in the program can lead to a fine.

Access to the information collected is not yet public. Businesses required to participate in the program may keep their reduction plan or EMS private and on-site. However, implementation summaries will shortly be available through a searchable on-line database, which is currently under construction. This database will enable success stories to be shared with the public and other businesses. The information shared in the summaries is at the discretion of each business.

3. PROGRAM ANALYSIS

3.1 Increasing Access to Environmental Information

The three programs have varied success in increasing access to environmental information. For many programs there are legal obstacles to making company information available to the public. It has also been suggested that for competitive reasons companies are more comfortable participating in programs which keep their information private. There has also been little public interest in the data gathered, although it is difficult to determine whether that is a genuine disinterest or a function of the programs not being public-friendly. It seems logical that reports which can only be accessed through written/telephone request would inherently receive less public interest than on-line reports.

Due to this situation all information is increasingly being accessed electronically. While public access though the internet is not tracked, a rough estimate of industry use can be determined. All jurisdictions reported increasing use from industries of on-line reporting. New York City estimates that up to 80% of all regulated businesses will report on-line by the year 2011. The move on-line may also expose such industries to additional electronic resources, such as chemical lists, user guides and annual reports.

Due to the difficulty in assessing information use, programs have generally moved towards using information on a goal-specific basis. The goal of the New York City program is risk reduction, and thus information is made available to emergency response personnel such as the fire department. It is also made available to the staff of regulated companies, acting in a similar fashion to a WHIMIS program. On the other hand the goal of the two state programs is to reduce toxic use, and as such progress is tracked through an annual report, and success stories are shared between industries.

3.2 Stimulating Pollution Prevention

The two state programs have been successful in preventing pollution (the New York City program does not have pollution prevention as a goal).

Massachusetts
Industries involved in the program from 2000-2004 have reduced:

- Toxic chemical use by 9%,
- Toxic byproducts by 9%,
- Toxics shipped in product by 14%,
- On-site releases of toxics to the environment by 23%, and
- Transfers of toxics off-site for further waste management by 20%.

Industries involved in the program for a greater time period, 1990-2004, have reduced:

- Toxic chemical use by 41%,
- Toxic byproducts by 65%,
- Toxics shipped in product by 58%,
- On-site releases of toxics to the environment by 91%, and
- Transfers of toxics off-site for further waste management by 56%.

Oregon
From 2001 to the second quarter of 2003, industries achieved the following results:

- Reduced or eliminated 82,341 lbs. of toxic chemicals and hazardous wastes;
- Diverted to more environmentally protective treatment/disposal methods 38,443 lbs. of hazardous waste;
- Safely managed 46,241 lbs. of hazardous waste;
- Reduced 54,000 gallons of wastewater; and
- Diverted to more environmentally protective disposal methods 2,000,000 gallons of wastewater.

3.3 Challenges to Implementation

All programs analysed have been operating for a minimum of 5 years, and have been meeting their mandates. As such, while the following challenges are important, they have not been insurmountable in terms of program implementation.

Bringing industry on-side during the initial program launch was a challenge. Certain industries saw the program as simply another level of reporting, were sceptical about the purpose of the program and were sceptical about the chemical expertise of program staff.

Determining the chemical list was also a challenge for New York City, as they found the list too broad. As such, program staff worked with industry to refine the criteria.

Financial resources were also an area of concern. It was noted that the creation of an electronic program requires resources and is not without its obstacles, and that it would have been easier if the program was on-line from its very beginning. It was also noted that staffing levels could be higher, and that it is difficult to administer a program though cycles of fluctuating budgets.

It was also suggested that program goals can be a challenge. At a certain point companies reach the limit of feasible reductions i.e. they have reduced/managed their toxic chemical use as much as is feasible. Toxic reduction programs then need to begin examining their goals and objectives.

3.4 Key Factors for Success

An analysis of the three jurisdictions suggests various factors which are keys for program success. These are described below.

• Program Administration

   A variety of administrative measures contribute to program success:

   - **Proper staffing** is a program requirement. While this includes adequate staffing levels it also includes employing staff that have technical expertise and can persuasively explain the goals of the program.
   - Having an **electronically savvy program** is a key to program success. Every program has moved towards on-line reporting and information. Such a system not only simplifies program compliance, it exposes industry to a variety of assistance mechanisms (such as guides, technical programs, etc…).
   - The two state programs also contained a variety of **support structures** beyond a simple reporting mechanism. These included panels to make recommendations on the program, technical assistance, technical research and program compliance support.

• Program Goals and Objectives

   The other main key to success is structuring the program to achieve the stated program goals and objectives.

   - All programs mentioned the vital importance of creating a **partnership between a variety of stakeholders,** most specifically government and industry. Involving industry greatly assists in developing the list of chemicals to monitor and industries to regulate. It also aids in making industry more comfortable with the purpose and goals of the program, and more willing to accept the expertise of program staff.
   - A partnership also alters the manner in which the program is administered. It has been suggested that a focus on a partnership should go hand-in-hand with a **focus on assistance**. While all programs contained monitoring and enforcement components, in practice those tools were only used if absolutely necessary. Instead, the availability of assistance through a variety of

mechanisms was seen as the key factor in gaining reductions in toxic use and generation (through training, education, program guides, technical assistance, etc…). Related to this is the suggestion that industry requirements are flexible, so that industries which meet their minimum requirements through an EMS not be required to duplicate their work, yet they still remain a component of the program and maintain their ability to access program assistance.

- Finally, it should be noted that **success can be defined differently for each jurisdiction**. The program for New York City did not focus on pollution prevention; rather it was based upon the need for risk reduction. On the other hand, the programs for Massachusetts and Oregon both contained the goal of pollution prevention. As such, program structure and requirements flow out of the goals and objectives of the programs.

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4. LESSONS LEARNED FROM OTHER JURISDICTIONS

An analysis of Community Right-to-Know/Toxic Use Reduction programs in other jurisdictions suggests six key lessons for Toronto. While these lessons can be considered individually, a large degree of interconnection exists between them.

1. **Provide necessary technical expertise on staff.**

    Employing staff suitable to the project is a major component of program success. Acting as the main point of contact, employees have two major functions to play. The first is to champion the program. Some of the jurisdictions noted that industry was sceptical of the program purpose, seeing it as an opportunity to take money from them through program fees, and/or as a political action without solid foresight. Staff has the on-going role of describing the benefits of the program for the companies themselves (such as reduced liabilities, reduced waste) and for the community at large.

    Employees also need to have a background in chemistry, even staff acting as general program administration or customer service. It was highlighted that industry members are quickly able to realize when a program staff member does not have the necessary chemical expertise. In such situations respect is lost not only for the employee, but for the program as a whole.

2. **Develop an electronic program.**

    Each of the three programs reviewed for this report has developed, or are developing, a program that relies heavily upon on-line resources. Such a system would involve the list of regulated chemicals, the Act which created the program, a program guide for industry, all of the forms necessary for compliance, and program reports/reviews. None of the programs as of yet feature on-line fee payments, although all state they are moving towards that goal.

    There are several benefits of having an electronic system. The operation of the program is much more efficient. One jurisdiction described having to manually enter into the program database the forms submitted by industry, whereas with the electronic system, staff time can be used more productively. An electronic program is also much more user-friendly for companies, as highlighted by the accelerating pace at which the electronic compliance option is being utilized. An on-line system also allows the program to keep in touch with companies, and to expose users to the available assistance programs and/or mechanisms available.

    Creating an electronic program with on-line reporting was a key priority, and all coordinators wished that such a system had been created from the beginning of their programs.

3. **Manage program resources wisely.**

All programs noted that staffing is below optimal levels, and that their program funding fluctuates over time. Due to these budgetary realities, there is a universal theme amongst the programs to focus on priorities. Priorities include:

- Targeting specific chemicals and industries;
- Scoping program goals
- Using staff as effectively as possible; and
- Examining mechanisms for supporting industry

4. **Work closely with stakeholders, particularly industry and the small business sector.**

Partnering with industry means:
- **Involving industry early and often in the program construction** to increase industry support and the feasibility of reaching program goals. To achieve such involvement, Massachusetts, for example, established an on-going multi-stakeholder advisory committee for their program.
- **Focusing on providing assistance to industry**. While all programs contained monitoring and enforcement components, in practice the main interaction with companies occurred through more co-operative means.
- **Creating a flexible program**. The two state programs provided flexibility in their compliance requirements, enabling companies to use Environmental Management Systems when desired, rather than rigidly requiring a pre-determined compliance structure.

5. **Provide a variety of support mechanisms to industry and businesses.**

Programs provide two realms of support to industry:
- **Assistance** is offered to achieve program compliance, through provision of program guides, telephone-based customer service, presentations to industry associations, and examples of best-practices from other companies.
- **Technical assistance** is also offered in Massachusetts and Oregon. This involves free, confidential technical assistance to achieve reductions and/or substitutions in chemical use. Also, research institutes study methods to achieve reductions and/or substitutions.

6. **Establish clear program goals and objectives.**

Each program was successful in fulfilling its program mandate, whether that be **risk reduction or toxic use reduction,** however the programs did not achieve goals outside of their program boundaries. **None of the programs were designed to increase access to information regarding toxic use and storage**. As such, there were no simple mechanisms by which to access the information compiled, and there has been little public interest in accessing the data. The mandate of reducing toxic chemical use was never a goal of the New York City program, and therefore toxic use is not tracked. On the other

hand, the Massachusetts and Oregon programs were never designed to reduce risk, and therefore risk reduction plans are not a required component of compliance.

A final observation regarding goals involves the need for **flexibility,** to re-focus program mandates once certain goals have been achieved. For example, the two state programs are beginning to reach the limits for feasible toxic use reduction, and thus decisions will need to be made about whether the program should continue, and if so in what capacity.

APPENDIX A: SUMMARY OF CO-ORDINATOR INTERVIEWS

Question/Response	Program
1. What/who initiated the need for the program, and what was the process?	
• A non government organization (NGO) attempted to get a referendum on the vote ballot to ban certain chemicals. Therefore the program was a compromise between environmental NGOs and industry.	Massachusetts
• Chemical regulation first started at the federal level with the Environmental Protection Agency. • There were a few 'instances' within New York City involving hazardous substances, which spurred city officials to start the program.	City of New York
• The Bhopal incident in India increased awareness of the need to manage toxins. • There was political support at the State level (from the governor), the federal level was also doing something at the same time, and there was a push from a local NGO. Therefore there was momentum.	Oregon
2. How were the chemicals selected for the program?	
• Followed existing federal regulations	Massachusetts, City of New York, Oregon
• The chemical list was modified according to surveys with different industries.	City of New York
3. How was it decided which industries would be included?	
• Followed existing federal regulations	Massachusetts, City of New York
• If industries exceed the standards they include them, regardless of size e.g. drycleaners.	Oregon
4. Are there any gaps in the chemicals/industries which report?	
• No	Massachusetts, City of New York
• The list is not comprehensive, but looks at the major flow of chemicals. While other chemicals can be very dangerous/lethal, they are already highly regulated and/or narrowly used.	Oregon
5. How frequent is reporting required, and why was the frequency selected?	
• Yearly.	Massachusetts, Oregon
• By March 1st, for the previous year (similar to taxes). • With the move to an electronic process reporting can now occur as early as Jan 1st.	City of New York

Question/Response	Program
6. How active is monitoring/enforcement?	
• There is only 1 inspector. He also inspects facilities for things such as air quality, etc… and therefore TURA is only one area on his inspection checklist • Inspection really only occurs once a year if a company does not file their paperwork	Massachusetts,
• Inspectors typically do not notify business ahead of time. • The only exemptions are large facilities, such as hospitals, where it may be difficult to locate the one person in charge of program compliance. • Inspectors are active every day, as there are more than 10,000 facilities. However, there are only a few inspectors, and therefore the main goal is to have outreach to educate.	City of New York
• The program is shifting to partnerships, rather than command and control. Inspector resources have shrunk (now only seven dedicated to the program). • More resources are now heading towards monitoring.	Oregon
7. How is industry supported? (Training? Guides? Electronic Access? Etc…)	
• They have been on-line, including submitting, for a few years (fee payments are not yet on-line) – and at least half are now participating in this manner • There are also training guides, free technical advice and a research institute	Massachusetts,
• They main support is through presentations. They originally began presenting to associations, but now have begun meeting with individual facilities. • This past year they started adding more information on-line (they are cautious about giving out the program information, and thus moved carefully with on-line services). • All forms are on-line. They can submit the forms on-line and electronically add MSDS sheets. Payment is not yet on-line, although it is a goal. The on-line reporting has allowed earlier reporting, as of Jan 1st. • No targets were set for on-line use, but it's likely that between 60-80% of industries will be on-line within 5 years, as the numbers increase daily. In their presentations they encourage the paperless option.	City of New York

Question/Response	Program
• Technical Assistance Program, electronic/on-line	Oregon
8. Were there any previous reporting requirements for industries, and if so has the program altered these requirements?	
• There is reporting for hazardous waste and air quality, so this is an additional reporting requirement	Massachusetts,
• Not aware of any others	City of New York
• No	Oregon
9. How was it decided to make the program mandatory? Were other methods tried/investigated?	
• Reporting is mandatory, but the planning component is voluntary. They must go through the process, but there is no requirement to adopt the regulations.	Massachusetts,
• No other methods were tried.	City of New York
• Penalties are available if needed but there is a preference for working with industries	Oregon
10. How was the program implemented? (Training? Consultation? Communication? Etc…)	
• Initially did a major survey of every business in the state, to identify relevant companies. These companies were then provided with a letter and program package, and training sessions are held yearly in the spring.	Massachusetts,
• A manual regarding the program was created, and mailed to all businesses listed in the yellow pages. This package included the new law, the list of substances, and information on how to comply. • No media was used, only direct mailings. • They used to re-mail the manual, along with a reminder, every year. They no longer do this since they are on-line. • They only have one employee to answer inquiries, unless one of the inspectors is in the office. If mistakes are noted a notification, and new forms, are mailed. All employees have a background in chemistry.	City of New York
• Needed staff to implement the program. One person is co-ordinator, but the work takes a team. And need a guiding group as your councillors. • Had a cross-section of stakeholders working on the program • The program was solidly based on information and data i.e. – chemicals, process, etc…otherwise you can quickly lose industries respect.	Oregon

Question/Response	Program
11. Has the program stimulated pollution prevention?	
• 2004 Annual Report – Companies participating since 1990 have reduced toxic chemical use by 41%, toxic by-product creation by 65% and toxic releases to the environment by 91%	Massachusetts,
• Other areas of the Department of Environmental Protection, such as air, waste, sewers, look after pollution prevention. They do not use data from the Right-to-Know program.	City of New York
• Yes – this is evident in the annual reports.	Oregon
12. How is the data made accessible, and is there a demand for the information?	
• The information is available on-line. They have no records of receiving telephone calls of inquiry from the public	Massachusetts,
• They receive phone calls, although they cannot provide any specific data on how often etc... Citizens must fill out an access request form – to legally be able to release information.	City of New York
• Very little request for information – maybe 3 in the past 10 years. Therefore the gain was not proportional. As a solution a working group suggested an on-line clearing house, where businesses can learn from other businesses.	Oregon
13. How is the data used? (Is the collected data interpreted, and if so how?)	
• An annual report is created, tracking progress	Massachusetts,
• There is an annual report, which can be requested, giving full details of the program. • The only way data is used is that if levels are above a certain threshold the business must complete a risk management plan, and they need a consulting engineer to submit the plan.	City of New York

Question/Response	Program
• Have done annual reports, but eventually dropped this due to a lack of resources.	Oregon
14. What areas of the program could be improved, and is there a mechanism to review the program?	
• There are no set reviews. A program review was undertaken in 1997. This found that of the 81% of companies that had implemented at least one TURA recommendation, 67% had reduced their toxic chemical use, and 61% had decreased their toxic by-product creation. On the other hand, of the companies that had not implemented a recommendation, 66% had maintained/increased their toxic chemical use, and 61% had maintained/increased their toxic by-product creation.	Massachusetts,
• No formal reviews are required although there are internal and informal reviews periodically	Oregon
15. What are the challenges the program faces?	
• The biggest challenge is the electronic reporting: it has taken a long time to be implemented (previously, all reports were entered manually), and there are continued problems with the electronic reporting. There is a lack of financial resources dedicated to the project	Massachusetts
• Staffing levels. They need more staff for Emergency Response, and they don't have many inspectors.	City of New York
• Resources are a continuing issue • How to deal with persistent toxins, or when companies have done as much as they can. Therefore, need to look at a federal level for the production of material.	Oregon
16. What areas of the program have been successful?	
• The planning component, as certain companies have done quite a bit to reduce their toxic use • The Office of Technical Assistance has also been very successful, providing free, confidential assistance from chemical engineers.	Massachusetts
• The on-line services. • The program is successful when staff can explain the purpose of the program.	City of New York
• What businesses have done is so impressive. This program has helped stimulate change, but there's been a societal shift.	Oregon
17. What lessons can Toronto learn?	
• Go electronic from the start • Heavily involve trade associations, stakeholders and interested parties • Combine requirements with various EMS options, which are more flexible and of a broader environmental scope	Massachusetts

Question/Response	Program
• Start with a survey of which businesses are out there, • Educate businesses from the very beginning, and teach them that the program will help the companies in the long-run (i.e. deliver the message).	City of New York
• Integration –achieve your objective by bringing together as many resources (training, education, research, federal programs, etc…) as possible. • Partnership, partnership, partnership and more partnership.	Oregon

PROGRAMS:

Massachusetts   Massachusetts Department of Environmental Protection, Toxic Use Reduction Program
City of New York   City of New York Department of Environmental Protection, Community Right-to-Know Program
Oregon   State of Oregon Department of Environmental Quality, Toxic Use and Hazardous Waste Reduction Program