

LEHDER Factsheet:

Toxics Reduction Strategy

Background

In late December 2009 the Ontario Ministry of Environment promulgated a new regulation under the Toxics Reduction Act which was finalized in July, 2009. The purpose of the Act and proposed regulation is to reduce the industrial use of toxic substances via identification and reduction planning.

Regulation Framework

The list of Toxics is based on the NPRI list and has been split into two phases in this regulation. There are 96 contaminants on the Phase 1 Toxics list and the first reporting year will be 2010 which makes the timeline associated with this proposed regulation extremely tight. Facilities will have to scramble in order to put appropriate tracking systems/processes in place to gather the required information. The Phase 2 Toxics list contains all other NPRI contaminants and will be phased in two years later, with an initial reporting year of 2012.

Key Deliverables

Under the regulation, the key deliverables for industry will be:

1. Establish baseline "usage" data starting with the 2010 operating year.

Facilities must define process(es) at the site that use/emit any one of the Phase 1 Toxics, using the same "reporting" thresholds as are used in NPRI. For each process, facilities must develop a material balance for each toxic material (i.e. quantify the amount entering the process, and amounts leaving the process via air emissions, water emissions, transformation to other products, or transfer to the next process). All of this data must be documented in an internal report that does not get submitted to the MOE, nor released to the public. A summary of this report must be submitted to the MOE by June 1, 2011.

Phase 2 Toxics will need to be tracked starting with the 2012 operating year.

2. Create Toxics Reduction Plan

Using the baseline data compiled in Item 1, the facility must prepare a Toxics Reduction plan. This plan must look at all possible reduction options for each contaminant (material substitution, process changes, emission controls etc.) and then for each of the options, assess/quantify technical feasibility, cost, and reductions that could be achieved. The plan must be completed by December 31, 2011 and must be made available to the MOE upon request, but will not be made public.

Reduction Plans for Phase 2 materials must be finalized by December 31, 2013.

Key Deliverables (continued)

3. Submit Reduction Plan Summary and Progress Reports

A summary of the Reduction Plan must be submitted to the MOE and the plan summary will be made public. Every year, the facility must provide an update on the reduction options identified in the plan to show progress to the public.

Who will be required to report?

If your facility reports releases or transfers of a contaminant under NPRI, you will need to report under this regulation.

How is this different from NPRI?

NPRI tracks releases and transfers of listed contaminants from facilities on an annual basis. This regulation has a much broader scope. It will require facilities to conduct process accounting in order to prepare a mass balance of toxic materials within internal process(es).

In addition to quantifying the amount of each contaminant that is released or transferred offsite, the facility will need to track usage from arrival onsite, and through each process in which it is used. Further, reduction plans need to address options for decreasing usage within each of those steps.

What are the steps in implementing a Toxic Substance Reduction Plan?

A number of steps will be required to establish and implement a Toxic Substance Reduction Plan.

Step 1 – Establish Operations Understanding

Step 2 – Complete Pathways Assessment

Step 3 – Define Processes

Step 4 – Identify Estimation Methods and Data Requirements

Step 5 – Establish Data Tracking Systems

Step 6 – Prepare Baseline Usage Report

Step 7 – Prepare Toxics Reduction Plan

The first several steps (1-5) should be implemented early in 2010.

Impact on Facilities

Establishing the baseline usage data will require an enormous amount of work, and is entirely dependent on how many processes are identified for a facility. It will be extremely difficult to establish useful tracking mechanisms (if needed) in such a short timeframe.

How Can LEHDER Help?

LEHDER can assist with the following:

- Development of a strategic approach to the definition of processes within the context of the regulation. This work completed in this step will form the foundation of all subsequent tracking, calculation, reporting and reduction planning
- Establishment of tracking systems to gather data to support material balance determinations for the initial Baseline Usage Assessment
- Development of material balance calculations for each process, incorporating data from facility tracking systems
- Documentation of Baseline Usage Assessment
- Assessment of technical feasibility, cost, and reduction quantification for all reduction options for each process and each contaminant
- Documentation of plans, summaries and updates

Questions?

For further information or questions regarding the regulation, please contact:

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About LEHDER

LEHDER is one of the largest Air Quality Management consulting companies in Canada. Our team of consulting professionals is built around our core strength in industrial environmental, health and safety management. LEHDER recognizes our client's need to make decisions that provide for operational flexibility while meeting regulatory, economic and social requirements.

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