

Source and Emission Inventories

Introduction

LEHDER suggests that the development of the air source and emission inventory should be part of a strategic approach to understanding not only the emissions but also the significance of the emissions from a regulatory and social point of view.

The key step in understanding the compliance status of a facility with respect to emissions to the atmosphere is the development of a robust source and emission inventory. These inventories are used for:

- Applications for Certificates of Approval, Licenses and Permits
 - Dispersion model studies
 - Preparation of submissions for regulatory requirements such as NPRI, TRI, Reg.127, GHG, NERM etc.
 - Emission reduction or pollution prevention programs
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LEHDER Approach to Source and Emission Inventories

The LEHDER approach to preparing source and emission inventory involves identifying all possible sources and then preparing emission estimates based on a relationship between key process parameters such as production rates, fuel consumption, formulation etc. LEHDER emission inventories are designed to provide optimum flexibility in assessing emissions from new or changed operations in order to maintain currency.

LEHDER Capabilities for Source and Emission Inventories

LEHDER can prepare source and emission inventories that meet the guidelines and requirements of regulatory bodies. Source inventories are prepared using innovative techniques that allow integration of data into any format required by the client or regulatory body or for direct input into dispersion modeling programs such as ISCST3. Data that can be provided includes:

- Source location (UTM co-ordinates or other applicable system)
- Source dimensions
- Height above roof and grade
- Description of source process
- Building and Property line dimensions and co-ordinates
- Exhaust flow rate and temperature
- Approval number and date

Emissions inventories are prepared by estimating emissions for each source. Techniques used include:

- Actual emission data
 - Published emission factors (AP42)
 - Mass balance calculations
 - Manufacturers data sheets and guarantees
 - Engineering calculations
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**LEHDER
ESH
Information
Management
Service
(LEIMS)**

The LEHDER ESH Information Management Service (LEIMS) is well suited to the development and maintenance of source and emission inventories. LEIMS is provided by LEHDER to manage our client's ESH data in a consolidated custom data management system integrated with a graphical interface.

LEIMS turns filing cabinets full of consultant's reports into information available at the desktop.

**Related
Air Quality
Management
Services**

The Air Quality Management Services provided by LEHDER include:

- Regulatory Negotiations and Strategic Planning
 - Applications for Permits, Licenses and Certificate of Approval
 - Source Testing (Air)
 - Compliance
 - Engineering/Process Evaluations
 - Odor Evaluations
 - Compliance Odor Testing and modeling
 - Dispersion Modeling
 - Ontario Reg. 346
 - AERMOD, ISCPrime
 - Screen 3
 - Preparing Source and Emission Inventories
 - Annual Emission Inventories
 - NPRI
 - GHG Reporting
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**For further
information**

For further information please contact:

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**About
LEHDER**

LEHDER recognizes our client's need to make decisions that provide for operational flexibility while meeting regulatory, economic and social requirements.

LEHDER Environmental Services Limited provides totally integrated solutions to industrial clients throughout North America. Our team of consulting professionals is built around our core strength in industrial environmental, health and safety management.

Visit our web pages at www.lehder.com
