



## **Anne Tremblay's Biography**

Anne Tremblay is the Secretary General of the International Manganese Institute (IMnI), the Paris-based Mn industry association representing Mn producers & traders worldwide.

A former journalist, Anne Tremblay has broad experience in Marketing & Communications.

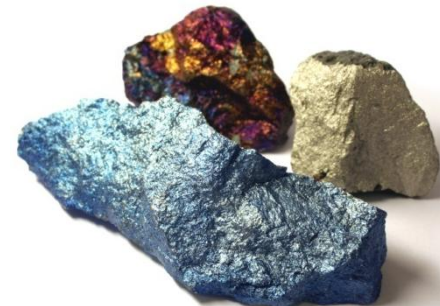
A Canadian, she holds graduate degrees from McGill University (Montreal) and the Sorbonne (University of Paris IV).



# Towards Ensuring A Sustainable Mn Industry

## IMnI's OHES 5-Year Plan

Anne Tremblay  
IMnI Secretary General





## Background:

- Regulatory demands growing & spreading worldwide;
- Health and environmental effects of Manganese are not fully understood;
- Unknown socio-economic profile of the Mn industry.



## OHES Mission Statement

To develop IMnI as the platform for providing the industry with **guidance, tools and information** that will allow it to **anticipate the growing demands of global regulation** on health, safety and environmental responsibility/accountability, whilst improving worker **safety**, guaranteeing **sustainability** and protecting industry **profitability**.

Key words **highlighted**



## OHES Goals

1. Anticipate, track & attempt to favourably influence the increasingly stringent regulations spreading worldwide
2. Develop a Mn OEL\* that appropriately protects workers and is acceptable to both global regulators and the Mn industry
3. Build a fundamental understanding of Mn health issues and methods to eradicate their incidence
4. Establish & Reduce the industry's environmental emissions footprint

\* OEL: occupational exposure limit



## 1. Anticipate, Track & Influence Growing Worldwide Regulations

### Objectives:

Set up an IMnI Regulatory Committee to:

- Monitor & report on upcoming regulations
- Participate in “embryonic” regulations
- Support members’ compliance with current & future regulatory needs
- Build defence case: Socio-Economic Analysis (SEA)
- Monitor legal cases, litigation (welding fumes, air monitoring, etc.)
- Network with regulators & other ind. associations



## 2. Develop a Globally Acceptable Mn OEL

### Objectives:

- Develop Research Program
  - i. Identify a reliable biomarker for Mn exposure
  - ii. Perform a full human health risk assessment
  - iii. Establish ties with the academic community to advance research on Mn-related issues
- Convince regulators to adopt the OEL & help members to meet it

## 3. Understand & Eradicate Mn Health Issues

### Objectives:

- Develop a Study Program
- Lobby for funding annually (USA, EU, China, India, etc.)
- The Study Program will be implemented when funding is received

## 4. Establish & Reduce Emissions Footprint

### Objectives:

- Perform full Life Cycle ISO 14043 Assessment (LCA) for Mn, including carbon footprint
- Develop full Environmental Risk Assessment

## Continuous Improvement

- Education on Health & Safety (eg workshops, presentations during site visits, posters or stands at relevant conferences)
- Continue to feed our electronic library of all scientific studies on Mn-based substances
- Disseminate results of industry SEA



## OHES 5-Y Program - Budget Summary over 5 Years

### GOALS:

1. Anticipate, track & attempt to favourably influence increasingly stringent worldwide regulations
2. Develop a Mn OEL
3. Understand Mn health issues
4. Establish & Reduce environmental emissions footprint
5. Continuous Improvement

### COST

817K €

1.198K €

1.015K €

1.122K €

113K €

**Total Estimated Cost (2011-2015)**

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**4.265K€**



## Reasons for the 5-Year Program:

- Need to better understand any adverse health effects
- Regulations are getting tougher (precautionary principle) and harmonising globally (e.g. GHS)
- The burden of proof is being pushed to industry
- The cost of complying to regulator-imposed exposure limits



## Benefits:

- Understand the effects on human health and the environment
- Robust, defensible data including a reliable biomarker
- Better worker safety monitoring to eliminate the incidence of exposure-related illness
- Build a strong, evidence-based defence against unrealistic regulatory demands.

## Is Doing Nothing an Option?

The risk of inactivity:


- In the hands of regulators, using out-of-date information, precautionary principle and high uncertainty factors
- Unrealistic OELs could cripple industry, pushing up costs and closing some plants
- Uses of Mn may be restricted on the market
- Ultimately, new products/processes will be developed using less, or no, Mn.



## History tells us...

- Seveso disaster, Italy - 1976
- Bhopal disaster, India – 1984
- Buncefield fire, UK - 2005
- Deepwater Horizon disaster, Gulf of Mexico – 2010
- Magyar Aluminium disaster, Hungary – 2010
  
- and many, many more.

## Current Headline News...

- Manganese in Children's Drinking Water Lowers IQ
- Neurotoxicity of inhaled manganese: public health danger in the shower?
- 'Toxic Trespass' - National Film Board of Canada
- Possible Link Between Environmental Manganese and Cancer – Medical News USA
- Illegal mining rings cancer alarm –  **THE TIMES OF INDIA**  
Powered by Indiatimes

Long-term costs to industry: image, shareholder confidence, compensation claims, credit rating, business loss, substitution...



## What Will the OHES 5-Year Program Offer?

We will become:

a recognised responsible industry, taking the lead in understanding and reducing any health and environmental issues by using high quality data.

We will be able to:

better defend our industry against unreasonable and unscientific regulatory demands.



Thank you.

Any Questions?