

# **Ministry of the Environment Emergency Management Program**

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# PURPOSE OF PRESENTATION

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- To summarize Ontario's Emergency Management Program requirements
- Describe how the Ministry of the Environment has designed its Emergency Management Program to address:
  - Spill and drinking water emergencies and
  - Continuity of Operations
- Propose a complimentary approach by industry

# INTRODUCTION

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- Ontario has densely populated areas in close proximity to the United States – 7 million people in the Greater Toronto Area alone
- Ontario has 21 nuclear reactors, major rail lines, major airports and 50% of Canada's chemical industry
- Each year Ontario experiences tornadoes, floods, forest fires, spills and other hazardous events
- On average, communities across the Province declare 12 emergencies annually
- Ontario has extensive and aging infrastructure

# INTRODUCTION

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- The Province is implementing reforms to emergency and disaster management
- We are moving towards comprehensive emergency management programs that include the following core components of emergency management:
  - Prevention, mitigation, preparedness, response and recovery
- Our aim is to ensure a proactive, coordinated and comprehensive approach to managing emergencies
- While this presentation focuses on one Ministry's efforts to develop an emergency management program, it is important to recognize that similar programs are being developed in other ministries and communities all across the Province
- Industries can benefit by having complimentary programs for addressing spill contingencies and other areas of risk

# BACKGROUND

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- Emergency Management Act revised April 15, 2003
- Emergency Management Ontario, within the Ministry of Community Safety and Correctional Services, issued provincial “essential level” emergency management program guidelines in March of 2004
- Order in Council 2291/2004, assigning responsibilities to ministers, was signed on December 8, 2004
  - Since replaced by OIC 1492/2005
- Regulation 380/04, prescribing standards for emergency management programs, came into force December 31, 2004

# EMERGENCY MANAGEMENT ACT

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- Requires ministries and municipalities to develop and implement Emergency Management Programs
- Emergency Management Programs to consist of :
  - Emergency plan
  - Training and exercises
  - Public education
  - Other elements prescribed by regulation
- Hazard Identification and Risk Assessment (HIRA):
  - Ministries and municipalities to identify and assess hazards and risks to public safety that could give rise to emergencies, and identify infrastructure at risk of being affected by emergencies

# By ORDER IN COUNCIL

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- All ministers are required to formulate emergency plans for continuity of operations
- Specified ministers must formulate emergency plans for types of emergencies assigned to them
- **Minister of the Environment** responsible for:
  - Spills of pollutants to the natural environment including fixed site and transportation spills
  - Drinking water emergencies

# REGULATION 380/04

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- Specifies emergency management standards for provincial ministries, municipalities and designated entities
- The regulation is divided into three parts:
  - Part I - Ministry standards
  - Part II - Municipal standards
  - Part III - Standards for designated entities

# MINISTRY STANDARDS (Reg. 380/04)

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- Sect. 1 – Emergency Management Program (**EMP**) Coordinator
- Sect. 2 – Emergency Management Program (**EMP**) Committee
- Sect. 3 – Ministry Action Group
- Sect. 4 – Emergency Operations Centre
- Sect. 5 – Emergency Information Officer
- Sect. 6 – Ministry Coordination
- Sect. 7 – Emergency Plan - to consist of 2 components:
- Sect. 8 – Continuity of Operations Plan
- Sect. 9 – Emergency Response Plan

# EMP COORDINATOR

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- Minister designates an EMP Coordinator and alternate
- EMP Coordinator and alternate complete training
- The EMP Coordinator coordinates the development and implementation of the Ministry's emergency management program within the Ministry (and where possible with others - other ministries / municipalities)
- The EMP Coordinator reports to the Ministry's EMP Committee on his or her work under

# EMP COMMITTEE

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## **Prescribed composition** (Reg. 380/04):

- EMP Coordinator
- Senior ministry official appointed by Minister to serve as chair
- Ministry employees responsible for EM functions as appointed by the Minister

Note: Committee steers the development, implementation and review of the Ministry's Emergency Management Program and advises the Minister

# MOE's EMP COMMITTEE

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- **Co-Chairs** **ADMs – Operations and Corporate Management Divisions**
- **Alternate Co-Chairs** **Directors – SAC and HRB**
- **EMP Coordinator**
- **Continuity of Operations Manager**
- **Information Technology Director**
- **Laboratory Services Branch Director**
- **Environmental Monitoring & Reporting Branch Manager**
- **Waste Management Policy Branch Director**
- **Drinking Water Program Branch Director**
- **Communications Branch Manager**
- **Environmental Assessment and Approvals Branch Director**
- **Legal Services Branch Representative**
- **Ontario Clean Water Agency Manager**

# Ministry Action Group

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## **Prescribed composition** (Reg. 380/04):

- Deputy Minister or designate
- Senior ministry official appointed to the EMPC
- Ministry Emergency Management Program Coordinator
- Such other ministry employees as may be appointed by the Minister

Note: MAG directs the ministry's response in an emergency, including the implementation of emergency response plan

# MOE MINISTRY ACTION GROUP

For wide-spread / multiple issue emergencies:

Executive Lead – Deputy Minister

- Appointed Members:
  - ADM, Operations Division
  - ADM, Drinking Water Management Division
  - ADM, Corporate Management Division
  - Emergency Management Director (Director Ops Integration/SAC)
  - Director, Safe Drinking Water Branch
  - Continuity of Operations Director (Director HRB)
  - Director, Communications Branch
  - Ministry Emergency Management Program Coordinator
  - Manager, Continuity of Operations and Safety
- Additional members as required such as: Regional Director(s), EMRB, LSB, WMPB, SDB, Legal Services, OCWA as well as a duty officer, operations officer and support staff

Note: The above MAG composition is reflected in MOE's Emergency Response Plan

# SCENERIO SPECIFIC LEADS

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The designated MAG Executive Leads for scenario-specific emergencies are as follows:

- Spills ADM, OD
- Drinking Water ADM, DWMD
- Continuity of Operations ADM, CMD

# EMERGENCY OPERATIONS CENTRE

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- Minister to establish an emergency operation centre (EOC) to be used by the MAG in an emergency
- The EOC must have appropriate technological and telecommunications systems to ensure effective communication in an emergency



MOE's Emergency Operations Centre is co-located with the expanded Spills Action Centre (SAC)



SAC expanded in 2004 to accommodate increased reporting and emergency management needs

# EMERGENCY PLAN

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The emergency plan formulated under the EM Act to be composed of:

- A continuity of operations plan and
- An emergency response plan for specific types of emergencies assigned by Order in Council

# CONTINUITY OF OPERATIONS PLAN

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## Continuity of operations plan:

- Assigns continuity responsibilities to employees
- Identifies critical functions and services (CFS)
- Assesses importance of systems, infrastructure, assets and resources used in providing CFS
- Establishes priorities for resumption of services
- Contains a communications strategy
- Contains an information technology plan
- Contains a strategy for resumption of services

# EMERGENCY RESPONSE PLAN

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For types of emergencies assigned by OIC:

- Assigns, by position, responsibilities for implementing the ER Plan
- Sets out procedures for notifying MAG members
- Sets out procedures for alerting the public of the emergency and keeping the public informed throughout the emergency, and
- Is coordinated as much as possible with other emergency response plans

# MOE'S EMERGENCY RESPONSE PLAN

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## Objective:

- To provide a systematic, coordinated and effective Ministry response to spill and drinking water emergencies as well as other emergencies where MOE support is required

# PLAN CONTENTS

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- **Introduction**
- **Scope and Application**
  - Authority
  - Purpose and Limitations
  - Plan Objectives
  - Activation and Termination
- **MOE Resources**
  - Spill Response
  - Drinking Water Response
  - Other MOE Resources
- **MOE's Emergency Response Structure**
  - Emergency Operations Centre
  - Ministry Action Group
  - Regional Action Group
  - Response Structure Overview
- **Annexes**

# EXISTING MINISTRY RESOURCES

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MOE's Existing Resources for Spills and Emergencies include:

- Spills Action Centre
- Level 1 - District Office
- Level 2 - Regional and Drinking Water
- Level 3 - Head Office

# SPILLS ACTION CENTRE

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- Province-wide, 24-hour reporting and response coordination by environmental officers
  - **1-800-268-6060**
- Receive and assess a wide range of reports for MOE as well as other agencies and coordinate response actions
  - 4000 spill reports each year including 150 to 200 from the chemical sector
- Provide information on the properties of spilled materials and run a spill model for St. Clair River
- Activate a Ministry field response and other MOE resources
- Serve as MOE's Emergency Operations Centre
  - Including MOE continuity of operations



SAC is staffed by **Environmental Officers** who assess all incoming calls, on a 24-hour rotating shift basis, to determine appropriate response action

# LEVEL 1 – DISTRICT RESPONSE

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- Service delivered by district environmental officers during business hours and Environmental Response Persons (ERPs) during after-hour
- ERP call-out criteria established for SAC
- Provide the Ministry's initial field response
- Assess and ensure appropriate response actions
- Request Level 2 support when needed



## Spill to Land

## LEVEL 2 – REGIONAL / DRINKING WATER

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- Support by management, technical resources or communications
- Additional staff and equipment
- Some air or water modelling/monitoring
  - Varies from region to region
- Drinking Water Management Division resources



## Spill to Water

# LEVEL 3 – HEAD OFFICE

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- Expertise and resources from other divisions/branches (e.g. Environmental Monitoring and Reporting Branch, Standards Development Branch, Laboratory Services Branch, Communications Branch)
- The mobile Trace Analytical Gas Analyzer (TAGA) units represent the most significant Level 3 resource used for air related emergencies



**The Ministry has two mobile TAGA units which employ state-of-the-art technology to take real-time air measurements during air-related emergencies.**

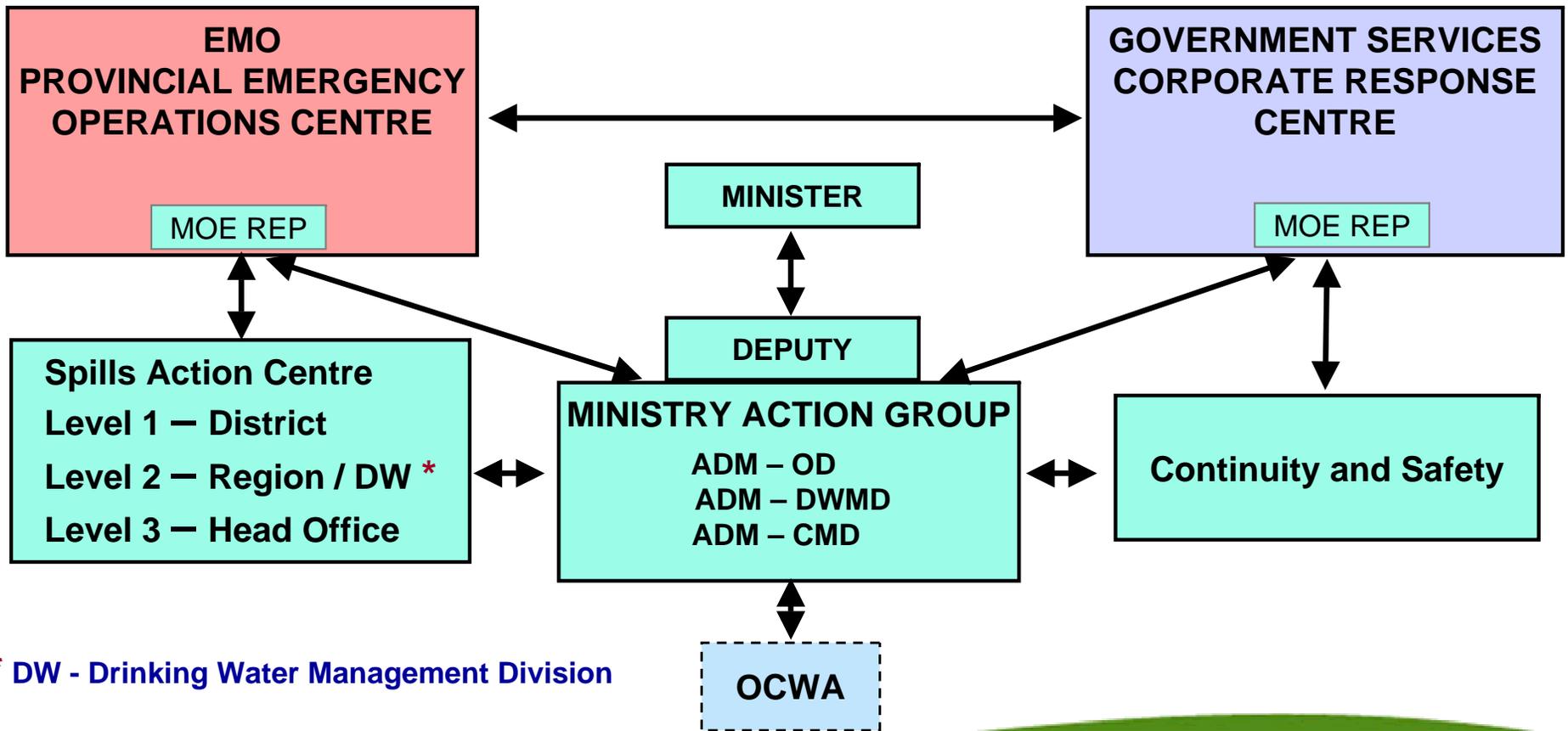


TAGA responding to a large industrial fire

# How the Province / MOE is organized to deal with external Emergency response and internal continuity of operations

## EMERGENCY RESPONSE

## CONTINUITY OF OPERATIONS



\* DW - Drinking Water Management Division

# EMERGENCY MANAGEMENT SUMMARY

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- Ontario's Emergency Management Program (EMP) requirements are established under the Emergency Management Act, Order in Council 2291/2004 and Regulation 380/04
- The Minister of the Environment has an EMP in place for addressing spill and drinking water emergencies
- In addition to the 24/7 operations of the Spills Action Centre the Ministry has three levels of field response capabilities
- The Ministry's senior level EMP Committee steers emergency preparedness within MOE
- The Ministry has an updated Emergency Response Plan and a Continuity of Operations Plan
- The Ministry Action Group operating out of the Emergency Operations Centre is responsible for leading MOE's response during emergencies.

# LESSONS FOR INDUSTRY

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- Those industries that have significant spill risks can extract some important lessons from Ontario's Emergency Management Program requirements and are encouraged to develop a complimentary approach for addressing spills and emergencies
- Industries at risk should consider:
  - Prevention – including the need for improved process safety management to reduce or eliminate the significance and frequency of harmful releases to the natural environment
  - Preparedness – including the need to appoint a coordinator, develop a response plan, train staff and conduct exercises
  - Response – including the ability to activate resources in a timely manner and to retain the services of cleanup contractors
  - Recovery – including any measures taken to recover from an emergency, restore the natural environment and return to a state of normalcy

# CLOSING REMARKS

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- Emergency / spill response is a shared responsibility
- All three levels of government have a role to play and so does industry
- Collectively, we need to:
  - Prevent, prepare, respond and recover

# QUESTIONS?