Railroad Emergency Response
What OSCs Need To Know
Instructors

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Railroad Emergency Response
What OSCs Need to Know

Welcome!
Welcome!

- Your host & Instructor(s)
- Safety briefing
- Course Materials
- Student manuals
- Student Introductions
Course Agenda

- Railroad Awareness and Emergency Response
  - RR Organization
  - System Protection
  - Emergency Response

- Railroad Incident Site Assessment
  - Assessment
  - Tactical Priority

- Spy Hill
  - An Overview

- OSHA 1910.120 and NFPA 472
  - History and Evolution
Site Assessment
Transportation Organization

- Responsibility
  - Region
  - Division
  - Zone
  - Terminal / Subdivision

- Leadership Position
  - Sr. Vice President
  - General Manager
  - Superintendent
  - Trainmaster
Chain of Command

- **Fire Service**
  - Fire Chief
  - Assist. / Bat. Chief
  - Captain
  - Lieutenant

- **Railroad**
  - Vice President
  - General Manager
  - Superintendent
  - Trainmaster
System Protection

DG System Protection Map

Legend:
- Dangerous Goods Officer (DGO) Territory
- DGO Home Terminal
- Dangerous Goods Responder (DGR)
- Strategic Locations
- Emergency Response Contractors (ERC)

Regions:
- Western
- Eastern
- Southern

Dangerous Goods Team

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Emergency Response Contractors (ERC)
Incident Notification Process

Legend

- Required Notification
- As Conditions Warrant
- § Required for Dangerous Goods Incidents

Network Operations Centre (NOC - Edmonton)

- eBusiness and Transaction Centre
- Transport Canada (CANUTEC)/TSB
- - HRSDC
- - Canadian Nuclear Safety Commission
- - RAC/AAR
- - Canadian Forces (DND)

Rail Traffic Center

- Senior Region Officers
- § DGO (Dangerous Goods Officer)
- § DGR (Dangerous Goods Responder)
- § Shipper ER 24 hr number on shipping document

Risk Management / Risk Mitigation

National Response Center (NRC) (U.S.)

Public Affairs

People Department (HR)

CN Legal

Incident Discovery (First Witness)

Road or Yard Incident?

Road

Yard

Transportation Supervisor

CN Police

Municipal Responders (Police, Fire, Ambulance, etc.)

- Environmental Officer

- Environment Canada
- Provincial Ministry of the Environment
- State & Local Environmental Protection Agencies

- State and Local Emergency Management Agencies
- U.S. Fish and Wildlife Service
- Department of Defence
- Department of Energy
Call the railroad and report your location and situation.
Notification Visor Card

PRECAUTIONS TO TAKE AT THE SITE OF A DERAILMENT &
CN EMERGENCY RESPONSE PROCESS

DO NOT APPROACH THE TRAIN UNLESS YOU ARE SURE IT IS SAFE TO DO SO.
Tank cars, loaded or residue, present the most obvious threat during an incident. However,
dangerous goods are also transported in other rail cars, trailers, and containers.
If you are first at the scene, make every effort to keep the public and any potential source of
ignition away from the cars involved in the incident.
Determine the contents involved by checking the documentation held by the train conductor,
member of the train crew or the on-scene-coordinator.
For shipments of dangerous goods, this documentation will include, at a minimum, a shipping
document describing the commodity being transported and will include emergency telephone
numbers. A copy of the Emergency Response Guidebook will also be available.
Documentation will normally be available from the train conductor at the scene. Should the
train conductor and crew be disabled, documentation can be found on the lead locomotive.
Should the train's crew be unable to provide assistance, a copy of the train consist and
Dangerous Goods shipping documents can be generated by calling the 24 hour emergency
telephone number.

CN 24 HOUR EMERGENCY TELEPHONE NUMBER:
800-465-9239

(CN - 2005)
Emergency Response

- **Network Operations**
  - Mechanical Dept.
  - Engineering Dept.
  - Transportation Dept.

- **E.R. Support Team**
  - Safety & Regulatory Affairs
  - Police
  - Dangerous Goods Group
  - Environmental Group
  - Risk Mitigation Group
  - Public Affairs Group

- **External Support**
  - Industry Response Teams
  - ER Contractors
  - Municipal Response Teams
Contracted Response - Expectations

- Experience
- Locations
- Limitations
- Ability
- Duties
- Equipment
- Regulatory Compliance
  - Training
  - Respiratory
  - Med. Surveillance
- Contract Compliance
  - Audit
  - Drills
  - Experience
CTEH

- Centers for Toxicology and Environmental Health

- [www.cteh.com](http://www.cteh.com)

- Advanced Air Monitoring

- Plume Modeling

- Continuous air monitoring and data logging

- Assist in determining necessary evacuation distances to protect responders and the public

- Can help determine PPE requirements
Plume Dispersion Modelling
Emergency Response Resources

- Municipal
- State/Provincial
- Federal
- Railroad
- Shipper
- Contractor
ICS Integration

Who's In Charge?
Railroad ICS Model

- Senior Transportation Officer
  - PIO
  - Safety
    - Transportation
    - Engineering
    - Mechanical
    - ER Support
Incident Methodology

- Activate ERP and Logbook
- Establish a perimeter
- Establish Incident Command System
- Begin site assessment
- Establish control zones
- Apply tactics
- Terminate the incident
Emergency Response Process

**Discovery**
- Emergency Recognition
- Initial Notification
- Preliminary Assessment
- Source Control

**Initial Response**
- Incident Command
- Objectives & Priorities
- Tactical Plan/Mobilize Resources

**Sustained Actions**
- Transfer of Command
- Shift Rotations
- Logistical Support

**Termination/Follow-up**
- Demobilize Resources
- Demobilize Organization
- Incident Termination
- Accident Investigation
- Response Critique