Emergency Preparedness & Response to a Diesel Fuel Release
Challenges to Providing Integrated Solutions

Greater Sudbury Emergency Management Advisory Panel

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OBJECTIVE

To share the expertise & knowledge of AECOM's Emergency Response Consulting (ERC) Group on how to successfully contain, mitigate and remediate damage to the environment arising from a sudden and accidental release.

TAKE AWAYS

PERSPECTIVE

RIM Industry “Private Interests among others”

Integrated Solutions – “To a point”

Challenges - “The nature of the beast”
- Recovery
- Long-term solutions

AECOM

- More than 45,000 employees
- Offices in more than 140 countries
- ENR – AECOM Largest Design Firm
- Publically traded NYSE
- Ethisphere – AECOM one of the most ethical firms for the last 3 years

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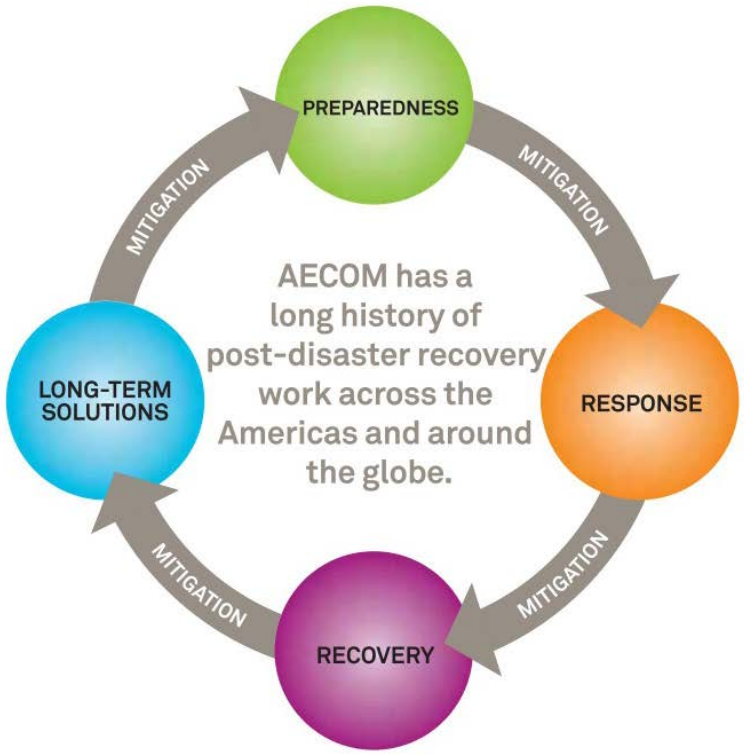
- Spills
- Pipeline Breaks
- Flooding
- Wind damage



Mock Scenario

- Sunny, cold & clear November morning at about 7:15am.
- Transport bulk carrier hauling 30,000 l of diesel fuel, westbound on the Trans-Canada Hwy 17.
- Crashes into the bridge that crosses the Wahnapitae River.
- Releases most of its load onto the roadway and into the river.
- Reports indicate that the driver of the bulk carrier slammed on the brakes to avoid a salt truck that was leaving a stop sign to enter Hwy 17 from the intersection just east of the bridge.
- The drivers of both vehicles were injured & taken from the scene.
- Emergency Response crews responded to contain the diesel fuel released into the Wahnapitae River, source of drinking water for the Greater City of Sudbury.
- The bridge remains closed and traffic on the Trans Canada is being re-routed.

Mock Scenario

AECOM

Mock Scenario

INITIATION/DRIVER

ASSIGNMENT

- Called by the insurer on the 24/7 Hotline
- Mobilize to the scene – “Go & Know” – report back

CHALLENGES

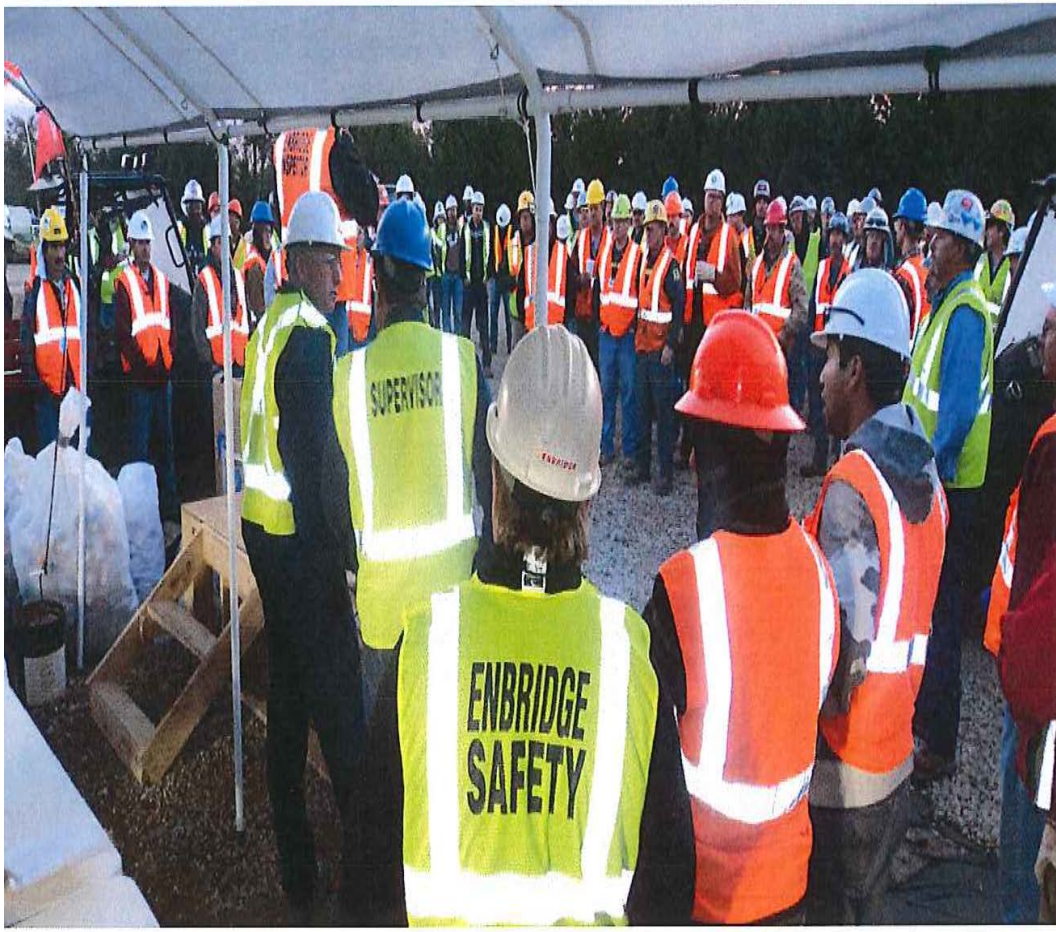
- Instructions
- Coverage
- Limits
- Data collection/access
- Order of operations

RESPONSE - Responsibility: Roles/Mandate

1st responders on-call emergency services **911**
- Police
- Ambulance
- Fire services
- Towing/recovery

Priorities
- **Human health and safety**
- Environment
- Infrastructure and disruption

- Other stakeholders
- Public versus private interests
- Different levels of government
- Local residents
- Media



Mock Scenario

AECOM

Spill occurs

- Must report to SAC
- Must clean up the spill so that we prevent, decrease or eliminate any adverse effect that may results - (return the natural environment to pre-existing where practicable).
- Who has the responsibility to clean up?
- Owner of the pollutant
- Person occupying, owner, having charge of, management or control of the property.

Part X

Duty to mitigate and restore

93. (1) The owner of a pollutant and the person having control of a pollutant that is spilled and that causes or is likely to cause an adverse effect shall forthwith do everything practicable to prevent, eliminate and ameliorate the adverse effect and to restore the natural environment.

"restore the natural environment", when used with reference to a spill of a pollutant, means restore all forms of life, physical conditions, the natural environment and things existing immediately before the spill of the pollutant that are affected or that may reasonably be expected to be affected by the pollutant, and "restoration of the natural environment", when used with reference to a spill of a pollutant, has a corresponding meaning;

Return to pre-existing conditions when practicable

STABILIZATION

QUASI-EQUILIBRIUM

- Free product
- Dissolved phase
- Shoreline
- Sediments
- Surface run-off

CHALLENGES

- Equipment (tools & technology)
- Access
- Qualified specialized personnel
- Natural conditions
- Scale

STABILIZATION

ASSESSMENT

- Optimize the stabilization
- Determine extent
- Evaluate receptors and potential receptors
- Supply data to evaluate preliminary options/costs/schedule/feasibility
- Report
- Await instructions
- Iterative activities as required for refinement

COSTS

PROJECT MANAGEMENT

- Timely
- Cost-effective
- Justifiable/defensible
- Limits
- Coverages
- What is practicable? (Who's perspective?)
- Evaluate options/costs/schedule/feasibility
- Provide recommendations
- Manage subsequent activities

REPORTING & DOCUMENTATION

- Client driven
- Also regulatory requirements
- May be “privileged”
- Detailed data collection
- Scientific
- Details of activities – support expenditures/recoveries

LONG-TERM LIABILITY AND FILE CLOSURE (Recovery)

- Achieving the end-point
- Scientific reporting to support
- Maybe peer review and “negotiations”
- Compensation
- Releases

QUESTIONS

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