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Regulator

Régie de l'énergie
du Canada

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To: All Companies under Canada Energy Regulator Jurisdiction who construct and operate liquid storage tank facilities

**Information Advisory CER IA 2024-001
CER Expectations for Emergency Preparedness and Response for a Potential Fire Incident at Liquid Storage Tank Facilities**

Please find attached the Information Advisory CER IA 2024-001.

The Canada Energy Regulator (**CER**) has issued the attached information advisory to provide clarity regarding the CER's expectations of companies, including persons (operators) holding a licence or authorization pursuant to the *Canada Oil and Gas Drilling and Production Regulations*, regarding Emergency Preparedness and Response for a potential fire event at low vapor pressure (liquids) storage tank facilities.

The advisory applies specifically to the processes for hazard identification and analysis, and for the evaluation of risks required by the *Canadian Energy Regulator Onshore Pipeline Regulations* and the *Canada Oil and Gas Drilling and Production Regulations*. These processes are essential to the development and implementation of controls, including pre-fire planning, and determining resource requirements for responding to fire incidents that could occur at liquid storage tank facilities.

We encourage you to review these expectations and ensure they are implemented within your own management systems. The CER will incorporate these expectations into its compliance verification and oversight activities.

If you have any questions regarding this Information Advisory, please contact the CER at 1-800-899-1265 or email buops.ems-gmus@cer-rec.gc.ca.

All advisories are published on the CER Safety and Environment website located [here](#).

Best regards,

Signed by

Tracy Sletto,
Chief Executive Officer

Attachment

cc: Canadian Association of Petroleum Producers, Email media@capp.ca
Energy Connections Canada, Email ebahry@energyconnectionsCanada.com

Canada



CER Expectations for Emergency Preparedness and Response for a Potential Fire Incident at Liquid Storage Tank Facilities

Basis for Issuance

CER Inspectors have identified, through compliance verification activities, an opportunity to clarify the regulatory requirements and standards regarding fire protection measures at low vapor pressure storage tank facilities (**liquid storage tank facilities**). Specific risks and hazards posed by liquid storage tank facilities operations are to be identified and used to design controls, assess response resource requirements and/or develop pre-planned response actions across industry and in coordination with first responders or external contractors.

Background

The [Canadian Energy Regulator Onshore Pipeline Regulations \(OPR\)](#), require companies to develop and maintain emergency management programs that anticipate, prevent, manage and mitigate conditions that could adversely affect the safety and security of the company's pipelines, employees, the public, as well as property and environment.

Pursuant to section 6, paragraphs 6.5(1)(c), (e), (f), and (t), subsections 32(1), (1.1), (2), and sections 33-35 of the OPR, Emergency Management Programs must include all processes and procedures that are to be developed, established, and implemented based on controls and contingencies required to address potential hazards and companies must communicate this information to those who may require it.

The [Canada Oil and Gas Operations Drilling and Production Regulations \(DPR\)](#) require authorized and licensed persons (operators) to develop and maintain effective management systems and contingency plans to mitigate the effects of any reasonably foreseeable event that might compromise safety or environmental protection.

Pursuant to sections 6, 18, and 19 of the DPR, risks and hazards associated with operations and activities must be identified and evaluated, and contingency plans and emergency response procedures put in place to deal with potential hazards.

CER Expectations

Respecting liquid storage tank facilities, companies are expected to:

- Have completed meaningful and realistic hazard identification and analysis, and risk evaluations for all liquid storage tank facilities. The CER expects companies to analyse and evaluate the likelihood and consequences of the different potential fire scenarios that could occur at their liquid storage tanks and their secondary containment systems, including credible worst case fire scenarios such as a full surface tank fire, a multiple tank fire, a spill fire and potential escalation onto boil over as applicable. The CER also expects companies to have taken into consideration in their analysis, the time it would take them to initiate and extinguish the different possible fire scenarios. As such time could influence the likelihood of escalation of a fire into a more consequential event. The depth and details of the hazard analysis and risks evaluations needs to be sufficient to justify the fire fighting measures in

place and the response times (pursuant to paragraphs 6.5(1)(c) and (e) and section 32 of the OPR, and paragraphs 6(j) and 19(h), and section 18 of the DPR).

- Include preparedness, coordination, and initial response activities for liquid storage tank facilities in emergency management programs, emergency response plans and contingency plans (pursuant to paragraph 6.5(1)(t), sections 32 and 33 of the OPR, and pursuant to paragraphs 6(j) and 19(h), and section 18 of the DPR).
- Use identified hazards and risks to design and implement controls and comprehensive procedures and training requirements (pursuant to paragraphs 6.5(1)(e), (f), and (t), and section 32 of the OPR, and pursuant to paragraphs 8(d), 9(d), 19(e), and (h), and section 18 of the DPR).
- Use identified hazards and risks to identify realistic and appropriate response resource requirements such as water, firefighters and firefighting equipment, and substances (e.g., firefighting foam), target response times, first responders, contractor requirements, and area or mutual aid agreements (pursuant to paragraphs 6.5(1)(e), (f), and (t), and sections 32 and 33 of the OPR and pursuant to paragraphs 8(d), 9(d), and (g) of the DPR).
- Collect and record the above information in plans or procedures which shall address potential fire scenarios including credible worst-case scenarios such as a full surface tank fire, a multiple tank fire, a spill fire and potential escalation onto boil over as applicable. The CER expects these procedures or plans to be reviewed and field tested on a regular basis to ensure their adequacy and readiness. Such plans or procedures must be incorporated into the company's Emergency Management Program (pursuant to paragraphs 6.5(1)(f) and (t) and section 32 of the OPR, and pursuant to paragraphs 6(j) and 19(h), and section 18 of the DPR).
- Clearly describe public protection mitigation measures in company documents for staff and contractors who may use them and engage with local first responders and anyone else who may require such information in an emergency (pursuant to paragraphs 6.5(1)(f), (l), and (m), and sections 33-35 of the OPR, and pursuant to paragraphs 6(j), 8(d), 19(e), and (h) of the DPR).
- Where applicable, meet the requirement for storage tanks to comply with the relevant clauses of the National Fire Code of Canada.

CSA Z246.2 includes similar emergency preparedness and response requirements.

For more information

For further information, please refer to the [CER's Emergency Management](#) webpage. If you have any questions regarding this Information Advisory, please contact the CER at 1-800-899-1265 or email buops.ems-gmus@cer-rec.gc.ca.