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Pipeline Act

SOUR PIPELINE REGULATION

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Interpretation

1 In this regulation:

"C.S.A.—Z731" means CSA Standard CAN/CSA—Z731—M91 Emergency Planning for Industry as published by the Canadian Standards Association;

"emergency" means an emergency for which an emergency response plan establishes a mode of response;

"emergency planning zone (EPZ)" means an area surrounding a sour pipeline for which an emergency response plan must be developed to protect the public and workers in that zone from the hazards of any release of H₂S;

"emergency response plan" means an emergency response plan described by section 5;

"level 1" means, in respect of a pipeline, a release volume of less than 300 cubic metres of H₂S or a release rate of less than 0.3 cubic metres per second of H₂S;

"level 2" means, in respect of a pipeline, a release volume of between 300 and 2 000 cubic metres of H₂S or release rate of between 0.3 and 2.0 cubic metres per second of H₂S;

"level 3" means, in respect of a pipeline, a release volume of between 2 000 and 6 000 cubic metres of H₂S or a release rate of between 2.0 and 6.0 cubic metres per second of H₂S;

"level 4" means, in respect of a pipeline, a release volume of more than 6 000 cubic metres of H₂S or a release rate of more than 6.0 cubic metres per second;

"public facility" means a public building such as a hospital, school, recreational facility or any other development the minister may designate;

"setback" means the distance in metres from the centre line of a sour pipeline to an inhabited building or public facility;

"sour pipeline" means a pipeline containing hydrogen sulphide (H₂S) in concentrations of 1 mole % or more;

"unrestricted rural development" means dwellings located outside an urban centre that has more than 8 dwellings per quarter section;

"urban centre" means a city, town, village or incorporated district with not less than 50 dwellings.

Applicability

2 A company having a sour pipeline must conform to this regulation and to the Pipeline Regulation.

Setbacks

3 The minimum setback for a sour pipeline built on or after this regulation comes into force must be, based on the level that corresponds to the release volume or release rate of H₂S from the pipeline,

(a) for level 1, 100 metres,

(b) for level 2, 100 metres for individual buildings and 500 metres for urban centres or public facilities,

(c) for level 3, 100 metres for individual buildings, 500 metres for unrestricted rural development and 1 500 metres for urban centres or public facilities, and

(d) for level 4, distances specified by the chief inspecting engineer that are not less than in corresponding level 3 circumstances.

Emergency planning zones

4 (1) An emergency planning zone must be maintained for each sour pipeline.

(2) The emergency planning zone of a sour pipeline is the area within a parameter formed by using the hydrogen sulphide release rate in metres per second or volume in cubic metres for the sour pipeline and finding the corresponding distance in kilometres using the graphs set out in the Schedule to this regulation.

(3) The parameter is calculated by measuring the distance out from the outside edges of the sour pipeline.

Emergency response plan

5 (1) Each company that has a sour pipeline must, before the sour pipeline is open for service, prepare and implement for the sour pipeline an emergency response plan that has the approval of the chief inspecting engineer.

(2) An emergency response plan must be prepared in conformity with the guidelines for the preparation and content of a sour gas emergency response plan as published by

(a) the Canadian Petroleum Association,

(b) the Alberta Energy Resources Conservation Board, or

(c) the commission.

(3) An emergency response plan must specify the following:

(a) the rate of flow, the maximum size of a leak, the maximum rate of flow of the release and the maximum volume of the release which constitute an emergency and the time required to shut the sour pipeline down in response to that emergency;

(b) the level, as defined by this regulation, of the sour pipeline and of any facility associated with that sour pipeline;

(c) the names, titles and duties under the emergency response plan of members of the response team;

(d) the names and addresses of persons living within the emergency planning zone for the sour pipeline and the evacuation plan for these persons;

(e) maps showing the location of dwellings, public buildings, roads and railway and trap lines within the emergency planning zone;

(f) plans for prevention of entry of unauthorized persons into the emergency planning zone during an emergency;

(g) plans for the protection of workers including the equipment, procedures and training they require for the purposes of the emergency response plan;

(h) a communications plan to ensure that the response team, appropriate Provincial and local authorities and agencies and members of the public are advised in case of an emergency;

(i) procedures established to respond to each significant increase of release of H₂S during an emergency;

(j) procedures to monitor and control release of H₂S during an emergency;

(k) ignition procedures to be employed during an emergency including the names of persons authorized to ignite and the criteria they will employ to determine whether ignition is appropriate;

(l) the leak detection system and procedures.

(4) Before giving an approval under subsection (1), the chief inspecting engineer may require the company seeking the approval to

(a) obtain approval for the emergency response plan for the sour pipeline from any ministry of the government the chief inspecting engineer specifies, and

(b) satisfy the chief inspecting engineer that the emergency response plan for the sour pipeline

(i) is sufficiently integrated with plans for emergency response developed or being developed for wells, lines or other land or facilities the chief inspecting engineer specifies and approves for this purpose, or

(ii) covers further land or facilities the chief inspecting engineer specifies for the purpose.

Additional design requirements

6 (1) A sour pipeline must have check and block valves so located that the release of H₂S will remain within acceptable limits in the event of a leak.

(2) A sour pipeline must include emergency shut down devices that close on the failure of any control or operating component.

(3) Signs must be posted at all sour pipeline facilities warning of the possible presence of H₂S and advising about protective gear requirements.

Additional submission requirements

7 (1) An application to construct a sour pipeline must include

(a) a chemical analysis of the gas or fluid to be transported,

(b) a description of the leak detection system,

(c) the maximum and minimum temperature of the gas or fluid to be transported, and

(d) the release volume or release rate, at standard atmospheric conditions, of H₂S from the sour pipeline calculated using the maximum pressure possible.

(2) Before permission to open a sour pipeline for service will be granted, the following must be submitted to the commission:

(a) evidence that all emergency shutdown devices will fail closed;

(b) details of the internal corrosion protection plan for the sour pipeline.

Lead agency

8 (1) The commission is the lead agency for the purposes of an emergency response plan and it must be notified and reported to as lead agency.

(2) Compliance with notification and reporting requirements under an emergency response plan are in addition to, and not in place of, notification and reporting requirements under the Pipeline Act.

Schedule - Grid 1

(Section 4 (2))

Schedule - Grid 2

Schedule - Grid 3

Schedule - Grid 4

Note: this regulation supersedes B.C. Reg. 448/92

[Provisions of the Pipeline Act, R.S.B.C. 1996, c. 364, relevant to the enactment of this regulation: sections 35, 37]

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