



ONTARIO ENERGY BOARD

IN THE MATTER OF the Ontario Energy Board Act, 1998, S.O.1998, c.15, Schedule B;

AND IN THE MATTER OF an application by Pembina Infrastructure and Logistics LP for a permit to drill hydrocarbon injection and withdrawal wells within the vicinity of the Moore 3-21-XII Designated Storage Area and to expand the storage capacity at the Corunna Storage Terminal;

AND IN THE MATTER OF Ontario Energy Board File Number EB-2015-0032

**Responses of Pembina Infrastructure and Logistics LP
to Interrogatories of Ministry of Natural Resources and Forestry**

Interrogatory #1

Reference: Pre-filed Evidence: Application at pp. 4-7, ss. 1.0, 4.1 and 4.2

Preamble: On pp. 4-5 of the Application, toward the end of s. 1.0, the Applicant appears to seek approvals for the conversion of Cavern 45 and ten other solution-mined caverns into hydrocarbon storage caverns. However, at pp. 6-7, ss. 4.1 and 4.2, only the conversion of Cavern 45 is discussed in detail.

**Question/
Request:** a) Is the Application seeking approval for the ten other conversions at this time, and if so, what is the detailed description of those ten conversion processes?

Response: a) In this Storage Cavern Expansion Scheme Application ("Application"), Pembina is requesting the required permit(s) and licenses under the *Oil, Gas and Salt Resources Act* R.S.O. 1990, c P.12 ("OGSRA") to convert Cavern 45 to hydrocarbon storage in 2015 by abandoning the current entry well and drilling two new entry wells.

Pembina plans to convert ten other currently unused caverns to hydrocarbon storage in the next 15 years (the "Storage Cavern Expansion Scheme").

As stated on p. 6 of the Application, Pembina has not confirmed a conversion schedule for the ten other conversions because each Proposed Cavern¹ will be brought into service as required to meet business needs. As part of the Storage Cavern Expansion Scheme, over the next 15 years, as business needs arise, Pembina will submit an Application for Conversion to Storage for each Proposed Cavern to the Ministry of Natural Resources and Forestry ("MNR"). At the time of the Application for Conversion to Storage for each Proposed Cavern, Pembina will provide the MNR with the requisite information relating to how it proposes to convert each Proposed Cavern.

As stated in the Application, the MNR must refer Pembina's Application for conversion of Cavern 45 to the Ontario Energy Board ("OEB") since the point of injection being

¹ After performing an assessment of all 14 Suspended Caverns at the Corunna facility, Pembina identified 11 Suspended Caverns (the "Proposed Caverns") as having good potential for conversion to storage (as further defined on p. 3 of Pembina's Application).



proposed for Cavern 45 is within 1.6 kilometers of an area designated under the *Ontario Energy Board Act 1998, SO 1998, c. 15, Sch B* (a "Designated Area").

Pembina understands that the MNR referral process would be the same for the other ten Proposed Caverns because the points of injection for each cavern would also be within 1.6 kilometers of a Designated Area. However, in light of this referral process and in order to minimize the administrative burden and streamline the future regulatory permitting process for the remaining ten Proposed Caverns under the Storage Cavern Expansion Scheme, Pembina seeks to receive approval of the OEB of the Storage Cavern Expansion Scheme such that although the requisite Application for Conversion to Storage for each Proposed Caverns will be made to the MNR for each of the ten remaining Proposed Caverns, the MNR could issue the requisite permits and licenses without referring the applications to the OEB. Historically, the OEB has granted these blanket approvals, as shown in Provident's OEB's original approval for the Corunna Facility.

If the OEB were to approve the Storage Cavern Expansion Scheme as outlined above, Pembina would notify the OEB when an Application for Conversion to Storage for each Proposed Cavern made under the scheme was submitted to the MNR. Pembina intends to notify the OEB to ensure the OEB is continually informed of the work in relation to the approved Scheme Approval Application and Pembina's Corunna Facility.

Interrogatory #2

- Reference:** Pre-filed Evidence: Application at p. 16, s. 12.0
- Preamble:** The Application at p. 16, s. 12.0, indicates that a risk assessment is yet to be completed. Nowhere in the Application does the Applicant set out the nature and substance of any risk assessment as contemplated.
- Question/
Request:**
- a) Please confirm our understanding as set out above.
 - b) Is the Applicant proposing to complete a risk assessment?
 - c) Will the risk assessment be conducted in accordance with CSA Z341 s. 7.1: *Risk Assessment and s. 7.2 Assessment of Neighboring Activities*?
 - d) When will the risk assessment be conducted?
 - e) Please provide the details as to the nature and substance of the yet to be conducted risk assessment.
- Response:**
- a) The final risk assessment data is currently being assembled by the consultant for Cavern 45. This data will then be used by Pembina to create the risk assessment report for Cavern 45.

As stated in the Application at p. 16, s. 12.0, Pembina will complete this risk assessment for each Proposed Cavern, prior to the introduction of any hydrocarbons into the cavern. As business demands will determine the product and flow rate required in each



cavern, a risk assessment cannot be performed until this information is confirmed. Pembina will provide the MNR with a copy of the completed risk assessment for all of the Proposed Caverns, prior to each cavern being placed into operation.

- b) Please see the response to (a) above.
- c) The risk assessments that will be conducted for each of the Proposed Caverns will be in accordance with CSA Z341 s. 7.1: *Risk Assessment* and s. 7.2 *Assessment of Neighboring Activities*. The specifics of the risk assessment can be found on p. 16, s. 12.0 of Pembina's Application.
- d) Please see the response to (a) above.
- e) Please see the response to (a) above.

Interrogatory #3

Reference: Pre-filed Evidence: Application at pp. 16-17 s. 13.0

Preamble: The Application at 16-17 s. 13.0 discusses a geomechanical assessment.

- Question/
Request:**
- a) Please confirm whether and how these works meet the requirements of CSA Z341 s. 7.3: *Geological Studies*.
 - b) Has the applicant updated the studies from 1995 described at s. 13.0 of its Application? If yes, provide us a copy.

Response: Pembina has not updated the geomechanical assessment since the studies conducted in 1995, however, as stated in Pembina's Application as pp. 16-17. Pembina's previous geomechanical assessments were completed in accordance with CSA Z341 s. 7.3: *Geological Studies*. Pembina is currently exploring options to update the geomechanical assessment of the existing and operational Corunna Facility.

Once Pembina has explored its options in this respect, Pembina will consider all relevant and material factors in its assessment and decision regarding whether or not a new geomechanical assessment is warranted under the circumstances. Pembina will undertake to update the MNR and OEB at that time.

Interrogatory #4

1. **Reference:** Pre-filed Evidence: Application at pp. 15-16 s. 11.0

Preamble: The Application at pp. 15-16, s. 11.0, describes the applicant's current Emergency Response Plan in place at the Corunna Facility and its proposed expansion to include all proposed new hydrocarbon storage caverns, including updating notification provisions.

- Question/
Request:**
- a) Please confirm that the emergency response shall be in accordance with the requirements of CSA Z341.2-14, s. 10.1.2 Emergency Response Plan.
 - b) Please advise how the neighbors to the subject property and the Ministry of Natural



Resources and Forestry would be notified in the event of an emergency.

- Response:**
- a) Confirmed. Pembina's existing Emergency Response Plan ("ERP") is compliant with the requirements of CSA Z341.2-14 (the "ERP Standard"). It contains information on emergency control systems, to ensure safe control and shutdown of the facility; and it includes facility evacuation procedures. On an annual basis, Pembina provides an ERP review and conducts an ERP exercise. Pembina currently has ERP exercise records for the past 3 years since its acquisition of the facility, and not the 5 years stated in the ERP Standard.
 - b) Pembina is a member of the Chemical Valley Emergency Coordinating Organization ("CVECO") and will use the CVECO notification system to provide emergency information to area stakeholders. Additionally, contact information for stakeholders within the Pembina Emergency Planning Zones ("EPZs") will be gathered and included in the Emergency Response Plan so that those stakeholders within the EPZs can be notified by telephone and/or personal visit if appropriate.

The notification to CVECO would also ensure that the Sarnia Fire and Policy Department, the St. Clair Township Fire Department, the London OPP, and the CACC Wallaceburg are notified. Additionally, Pembina would contact the Ministry of Natural Resources ("MNR") through their TIPS-MNR Reporting Line: the Ministry of Environment and Environment Canada through their Spills/Emergency Line, and if deemed necessary, Emergency Management Ontario. Additional government agency contacts may be made based on the type of the incident.