

ATTACHMENT 30 – ENBRIDGE SUPPLEMENTAL RELEASE VOLUME CALCULATION

MP 608 – Marshall, Michigan Incident
NTSB/PHMSA Information Request No. 5.4 Supplemental

5.4 Reference: NTSB/ PHMSA email of July 31, 2010

Preamble:

Request: **Please provide volume possible released. Provide information relating to:**

- a) the original volume of commodity in the pipeline prior to the time of the leak;**
- b) the volume that was added to this original amount with each start up;**
- c) the volume delivered to any location during this same time frame and up until the isolation event;**
- d) the volume of product still in the pipeline at the time of the isolation event upstream of the isolation valves;**
- e) the volume of product still in the pipeline at the time of the isolation event downstream of the isolation valves.**

Response: A – Supplemental: The Line 6B line fill prior to the leak was approximately 206,787.0 m³ (temperature corrected to 15 degrees Celsius).

D. The volume of product still in the pipeline at the time of the isolation event upstream of the isolation valve at mp 607.66 was 100,278.3 m³ (temperature corrected to 15 degrees Celsius).

E. The volume of product still in the pipeline at the time of the isolation event downstream of the isolation valve at mp 610.61 was 104,134.2 m³ (temperature corrected to 15 degrees Celsius).

Based on the above information, the final volume of product still in the pipeline following the repair between the isolation valves at mp 607.66 and mp 610.61 was approximately 1,513.4 m³ (temperature corrected to 15 degrees Celsius).

Therefore, the approximate void volume can be back calculated as follows:

Volume Out = A – D – E – C – 1513.4 m³ + B = 3170.1 m³ at standard conditions (which equates to 3192.8 m³ at leak conditions / leak temperature).