Figure 1 **Origin-Destination map used to calculate options of travel distance from Gentilly, QC to near Dryden, ON**

These emergency preparedness and response plans must be incorporated on the potential transportation corridors as shown in the map in Figure 1 just one of the almost 30 nuclear waste storage facilities in Canada, ranging from Low-level to Intermediate-level to High-level radioactive waste. This map indicates the options of just one of the transportation corridors for Gentilly-1 to the DGR site. This exercise can be repeated for each of the other nuclear waste storage facilities in Canada.

These three options indicate the possible routes by highway roads, transportation corridors, transferring nuclear waste from Gentilly-1 Waste Management Facility to the Deep Geological Repository.

These must be incorporated on the potential transportation corridors as shown in Figure 1 which maps out just one of the almost 30 nuclear waste storage facilities in Canada, ranging from Low-level to Intermediate-level to High-level radioactive waste.

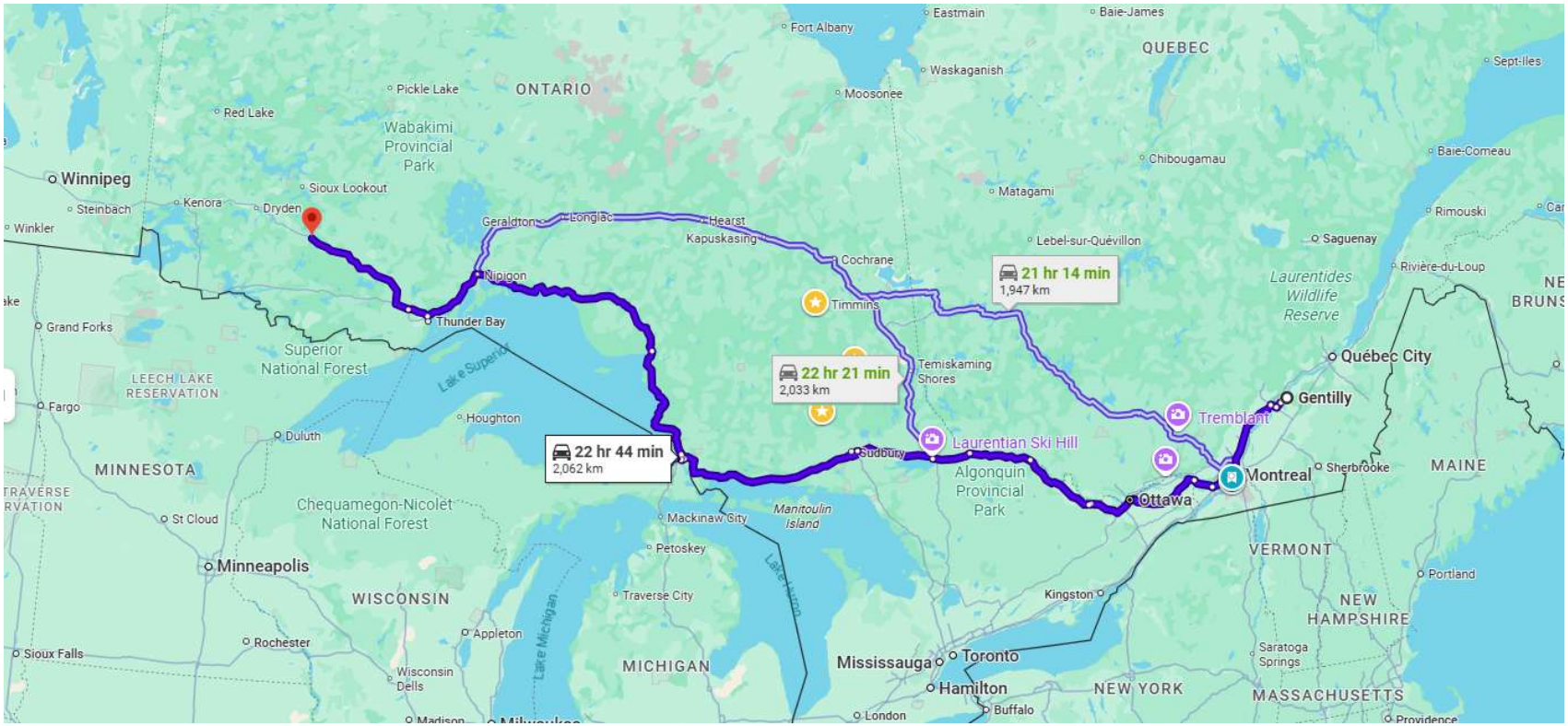


Figure 2 **Origin-Destination map used to calculate direct travel distance from each nuclear waste facility to DGR**

The Origin-Destination map (see Figure 2 below) has calculated the travel distance from each of the 12 of 29 nuclear waste storage facilities in Canada to the DGR. These distances are direct or as the 'crow flies' and the distances would be longer when calculated to the real road path. This map provides an approximation of distance between each nuclear waste storage facility and the DGR. Actual road, rail or marine shipping conditions would need to be applied to obtain real world conditions.

Other possible routes can be calculated, including railway routes, a hybrid of highway-marine shipping or a hybrid of highway-rail-maritime shipping.

Each transfer from these hybrid routes increases the risk of exposure and malfunction causing release of nuclear material. In other words, the simplest transportation corridor with the lowest relative risk would be entirely a highway scenario.

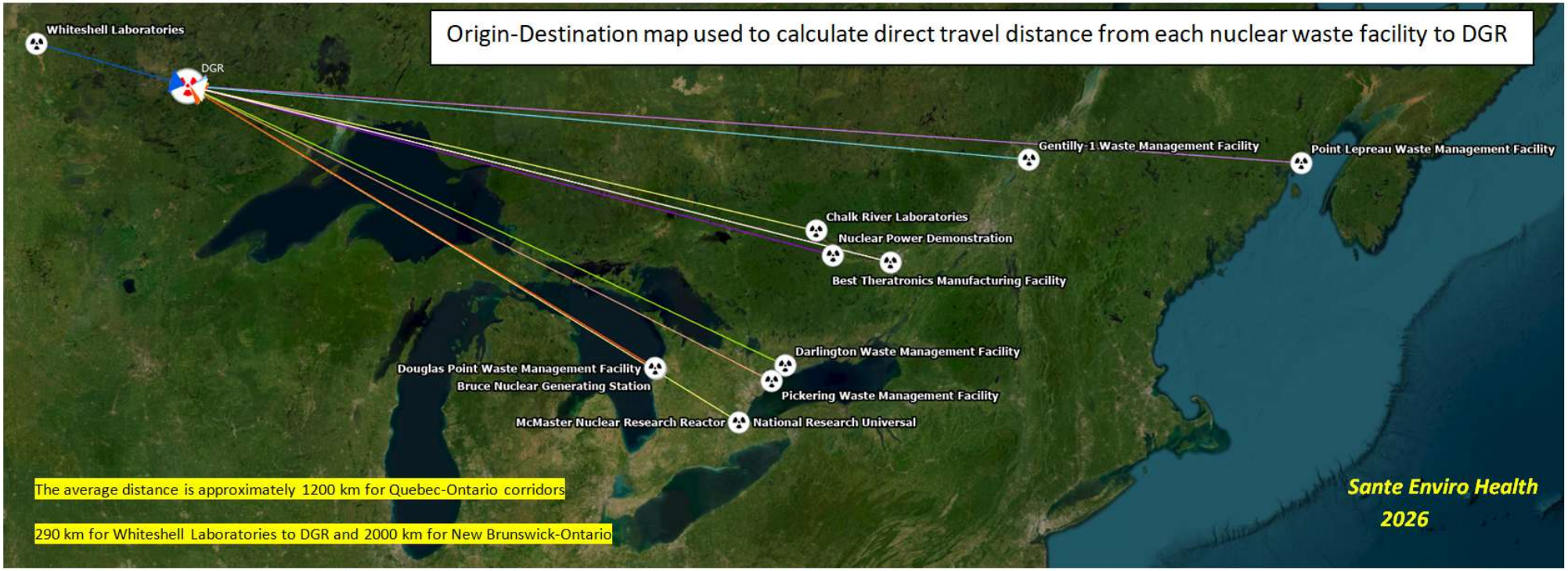
Next would be railway-highway which would have on both ends a transfer of nuclear material from truck to rail and then back to truck.

Finally, the most risk would arise from multiple transferring needed for a highway-rail-maritime shipping scenario. This would involve transfer of nuclear material as in scenario 2 with the addition of added risk from an on and off of a maritime vessel.

The stated risk can be calculated using the premise that the longer the transportation corridor the higher the risk involved. As well, the transfers at each stage of the journey as noted above will only add to the overall risk.

These routes must be primed to provide an emergency response, particularly at populated points along the way.

SEH will review the emergency preparedness and response plans in relation to the transportation corridor distances calculated as exemplified in Figure 1 and Figure 2.



Sante Enviro Health (SEH) – Montreal, February 4, 2026

Comments on the draft Tailored Impact Statement Guidelines and the draft Public Participation Plan for the Deep Geological Repository for Canada's Used Nuclear Fuel Project (DGR)