## **BLM – Safe and Secure: Nuclear Waste Storage**

| Name:                            | _ Date: | Class: |  |
|----------------------------------|---------|--------|--|
| Deep Geological Repository Assig | gnment  |        |  |
| Assignment due date:             |         |        |  |

The purpose of this research project is to determine a potential location for a Deep Geological Repository for spent nuclear fuel.

You will be required to use **The Atlas of Canada** (online from Natural Resources Canada) to find **one** suitable location which meets the criteria below.

The location:

- must be in the Canadian Shield region;
- must be in an area with intrusive rock (rock category);
- must not be at a high risk for earthquakes or seismic hazards;
- must have low mineral value (i.e. no mining nearby); and
- must be accessible by at least one current road.

You must include (printed from the Atlas of Canada or copied into a PowerPoint):

- a geological map of Canada with your location identified;
- a regional geographic map with your location identified;
- a regional major rock categories map with your location identified;
- a regional significant earthquakes and seismic hazards map with your location identified;
- a regional mining map with your location identified; and
- a regional road transportation Infrastructure.

As well as the maps, you will need to include explanations as to how your location meets the criteria. The explanations can be:

- included on the maps;
- included on a separate piece of paper; or
- included with the maps in a PowerPoint presentation.

The explanation will be a maximum of 250 words in length and must be typed (12 pt, 1.5 line spacing).

When all of the locations have been chosen, each group will present their location and provide the rationale for their choice to the class.



