

Comments on the discussion paper by Natural Resources Canada on waste disposal

By Moltex Energy

Moltex believes there are a number of permanent disposal facilities that are appropriate depending on the hazard of the waste.

All high-level waste should be evaluated against the waste hierarchy. Minimizing, reusing and recycling should be favoured before disposal. Waste disposal should only be considered once all other reasonable options have been exhausted.

It is paramount that waste disposal facilities, including those intended for high, intermediate and low-level waste, maintain open and flexible acceptance criteria. This will ensure new (and future) waste streams, which will inevitably be generated as new reactors come online, will be properly disposed of when necessary.

For example, the spent fuel from Moltex reactors will be solid chloride salts, whereas the spent fuel from CANDU reactors is oxides. Even though the volume and radiotoxicity of Moltex's spent fuel will be lower compared to CANDU spent fuel, it is unclear if future waste disposal facilities, which are designed around CANDU, will be willing and able to accept Moltex's waste.

Moltex suggests that reclassification of existing waste take place, when appropriate, to determine if it qualifies as lower-level waste. For example, there is waste in interim storage which was originally classified as intermediate-level waste, that would likely qualify as low-level waste now. This lower-level waste could then be disposed of in a simpler, less expensive way.

Moltex is satisfied with the Nuclear Waste Management Organization (NWMO) designing and implementing the Government of Canada's plan for the permanent disposal of high-level waste.

It is vital that waste owners work with those groups managing waste disposal facilities, such as the NWMO is for high-level waste, early on to ensure all waste streams can be properly disposed of. Likewise, groups managing waste disposal facilities should consult with waste owners and vendors of potential waste generating technologies when developing or revising waste acceptance criteria.

The federal government should also mandate a group to manage the permanent disposal of intermediate-level waste. Without such a group, Moltex believes the disposal of intermediate-level waste will continue to face challenges, including Indigenous and public opposition.

Moltex agrees that disposal facilities must only be constructed in willing host communities which have been fully informed of the risks and benefits associated with the construction, operation and decommissioning of the facilities.