

# Processed Kimberlite Mine Workings Project

## Advantages

- Eliminates the need to construct another on-land PKC dam raise
- Smaller on-land PKC Facility
- Best option for Lac de Gras water quality
- Less chance of caribou directly contacting PK material
- On-land PKC Facility closure can start 3 years earlier
- Enables additional PKC Facility closure options
- Uses less water from Lac de Gras to fill pit lakes

## Disadvantages

- Requires construction of a new pipeline
- More operating experience with deposition in PKC Facility
- Requires an Environmental Assessment and Water Licence Amendment
- Change from what was originally proposed in 1999

## **NEW SLIDE – Pros and Cons**

- This is a new slide that was prepared to address a request last night from Blake Rasmussen of YKDFN. He asked if we could summarize the pros and cons – or advantages/disadvantages of the Project.
- I would like to start with the advantages:
- The Project eliminates the need to construct another PKC dam raise
  - 6km of a 4m dam raise is a significant construction activity
- With the Project there would be a smaller surface PKC Facility
  - It would be 4m lower and contain about 5Mm<sup>3</sup> less PK material
- The Project provides the safest long-term PK containment
  - Below ground storage is more secure than above ground
- The Project provides the best option for Lac de Gras water quality
  - Long-term pore water release deep below a chemocline will result in a lower loading rate to the Lac de Gras than if the porewater was released to Lac de Gras from the surface of the PKC.
- There is less chance of caribou directly contacting PK material if it is stored more than 100m below water.
  - Contact with surface PK in the PKC is also reduced as PKC closure can begin 3 years sooner with the Project.
- PKC surface facility closure can begin 3 years earlier
  - With the Project FPK deposition to the surface PKC will end and closure construction can begin 3 years earlier than if we had to wait until the end of commercial production
- The Project enables additional PKC closure options as there would be a place to dispose of EFPK if that is found to be a feasible benefit for PKC closure.

- With the Project there would be less Lac de Gras water used to fill the A418 pit/underground at closure
  - This could amount to more than 5Mm<sup>3</sup> less Lac de Gras water use at closure.

These are what we believe to be the key advantages of the Project.

Disadvantages we identified are:

- Requires construction of a new pipeline
  - This would be a pipeline directly from the Process Plant to the A418 pit/underground.
- Diavik has more experience with PK deposition to the surface PKC rather than to mine workings
- The Project requires an Environmental Assessment and Water License Amendment
- The Project is a change from what was originally proposed in 1999.