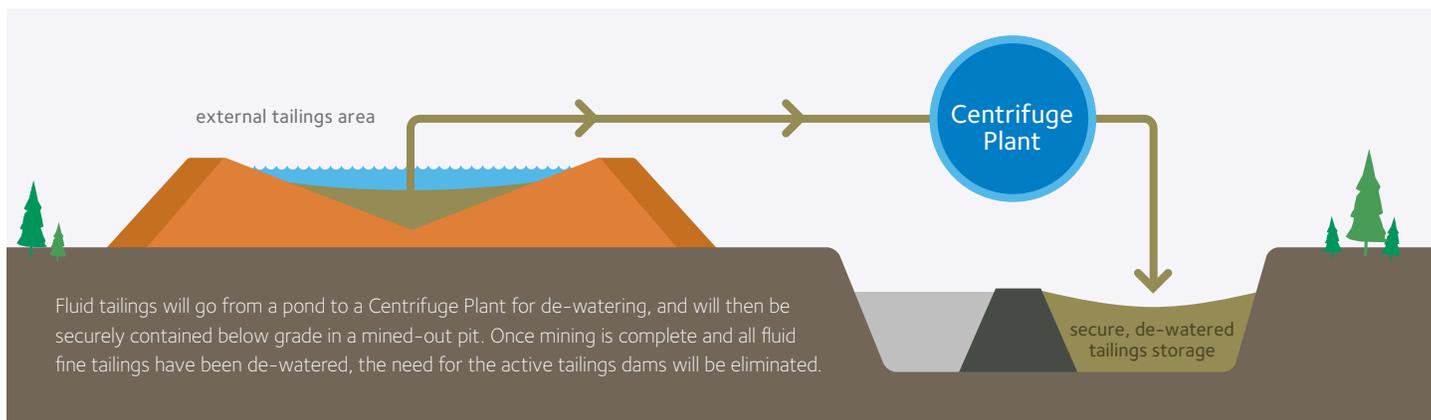




# Environmental Responsibility: Tailings Management



Frontier's Tailings Management Plan uses leading-edge engineering and technology to ensure the highest degree of safety and security, and to allow for faster reclamation.

## Tailings de-watering

Centrifuges will extract water from fluid fine tailings held in ponds in the external tailings area area. The de-watered tailings will then be placed below grade, in a mined-out pit serving as a dedicated disposal area. This will significantly reduce the volume of tailings in ponds during mine operations.

## Secure long-term containment

Post-closure, all remaining fluid tailings will be de-watered and contained below grade in the dedicated disposal area. At this point, the need for active tailings dams will be eliminated, providing an additional level of long-term security.

## Progressive reclamation during operations

The de-watering and in-pit storage of fluid tailings will also allow the progressive reclamation of the surface of the external tailings area to begin during active mining operations, rather than waiting until post-closure.

*Tailings are a by-product of the process used to extract bitumen from mined oil sands. Tailings consist of water, silt, sand, clay and residual bitumen.*