## Yancoal Southey Project



How will sewage be managed? During construction, sewage will be collected in lift stations and transported to a wastewater management facility that will meet or exceed wastewater management criteria set by Saskatchewan's Ministry of Environment and the Water Security Agency. In the environmental assessment, a standard two-cell lagoon is constructed onsite. However, benefits to local communities could arise if a nearby municipal facility is available which meets, or could be upgraded to meet project needs. Yancoal is interested in this type of shared infrastructure arrangement, where local communities could realize longer term benefits.

How will brine (i.e., mining wastewater and process water) be disposed of? Mine and mill wastewater will be in the form of a brine containing dissolved salts. This brine will not come into contact with surface or well water. The brine will be injected more than 1 kilometre (km) underground, providing safe and permanent storage in geological formations which are naturally high in dissolved salt content.



## WasteWater Management

## Effects will be Limited

## Yancoal Canada Resources

Robin Kusch Unit 300, 211 4th Avenue South Saskatoon, SK S7K 1N1

Phone: 1-306-668-5558 ext. 6015 Mobile: 1-306-227-1073 Fax: 1-306-668-5559 Email: r.kusch@yancoal.ca www.yancoal.ca Sewage will be managed under the environmental regulations that apply to newly-constructed municipal wastewater facilities. Two-cell settlement and evaporation systems are typical of approved facilities. Systems that involve the discharge of treated effluent into the environment, require a sufficient treatment period prior to release (e.g., 1 year). Also, discharge frequencies can be significantly reduced with the construction of large evaporation cells and the occurrence of dry weather. The system employed for the Southey Project, whether onsite or through a sharing arrangement with a local community/municipality, will be in accordance with provincial regulations.

An evaluation was completed to determine where wastewater could be safely disposed of. This assessment identified that the Winnipeg and Deadwood geological formations would have the capacity to contain the brine. In addition to the distance from the geological formations (over 1 km), the overlying freshwater aquifers are separated from the disposal zone by a number of low permeability layers, thus water movement is highly restricted.



Together we can build something to be proud of.