



Tellus provides safe and cost effective disposal and permanent isolation of contaminated power pole wood waste

CLIENT'S SECTOR

Electricity – Transmission and Distribution

CLIENT'S WASTE TYPE

Chrome copper arsenic, pigment emulsified creosote, dieldrin and aldrin treated wood

THE CLIENT CHALLENGE

Disposal of hazardous power pole wood wastes

Wood is widely used as the material for power poles throughout Australia. To increase longevity, power pole timbers are treated with a range of hazardous chemicals to reduce rotting and insect infestation.

Historically, a range of hazardous chemicals have been and continue to be used. Types of chemicals used to treat wood for use as power poles included:

- Chrome copper arsenic (CCA)
- Pigment emulsified creosote (PEC)
- Persistent organic pollutants (POPs) e.g. dieldrin and aldrin

The challenge lies in how these hazardous, chemically treated wood wastes are managed once power poles are replaced or removed from service.

Unfortunately due to the hazardous nature of the chemicals used, significant quantities of these wastes are deemed too difficult or too expensive to treat and so require disposal.

Power pole wood treated with creosote, CCA and POPs is generally too hazardous for disposal via landfills, due to the risk of leachate formation and groundwater contamination, posing considerable risk to public health as well as potentially causing damage to the environment.

TELLUS SOLUTION

Safe and cost effective storage and permanent isolation at the Sandy Ridge near-surface geological repository

Tellus has provided a permanent solution to dispose of hazardous chemical impacted power poles using world's best practice solutions at the Sandy Ridge facility. This solution provides disposal in accordance with the Basel Convention Technical Guideline: general technical guidelines on the environmentally sound management of wastes consisting of, containing or contaminated with persistent pollutants.

These guidelines outline the environmentally sound methods of managing POPs, including the use of a Specifically Engineered Landfill (SEL) for disposal. As a geological repository, the Sandy Ridge Facility exceeds the capability of an SEL. Power pole wood waste can be placed and encapsulated within the Sandy Ridge near surface geological repository. This waste disposal solution at Sandy Ridge provides a long-term safe and environmentally sound way of isolating hazardous power pole wood waste, preventing discharge of hazardous chemicals to the environment.

“Utilising Tellus' Sandy Ridge facility has allowed us to safely and economically dispose of our stockpile of legacy hazardous material.”
Waste Manager, WA based utility company