

Explanatory Notes for Completing Tailings Storage Data Sheet

The following notes are provided to assist the proponent to complete the tailings storage data sheet.

1. Paddock (ring-dyke), cross-valley, side-hill, in-pit, depression, waste fill etc.
2. Number of cells operated using the same decant arrangement.
3. Internal for paddock (ring-dyke) type, internal plus external catchment for other facilities.
4. End of pipe (fixed), end of pipe (movable) single spigot, multi-spigots, cyclone, CTD (central thickened discharge) etc.
5. Gravity feed decant, pumped central decant, floating pump, wall/side mounted pump etc.
6. Clay, synthetic etc.
7. See list below for ore process method.
8. Tonnes of solids per year.
9. Maximum wall height above the ground level (AGL), not AHD or RL.
10. TDS means total dissolved solids.
11. WAD CN means weak acid dissociable cyanide.
12. All constituents occurring at concentrations of 1% or greater of the tailings by mass should be reported. In addition, licensees should report those constituents occurring at lower concentrations but where the nature of the compound or its concentration results in potential for environmental or health impacts.

The main components of the tailings can be assessed through assays of either the waste tailings material or of the original ore body itself and analysis of the liquid fraction. Licensees are asked to focus upon those components of the tailings with the most potential to impact upon the environment. Elements that may be significant include:

- | | | | |
|-------------|------------|-------------|------------|
| • Antimony | • cadmium | • lead | • silver |
| • arsenic | • chromium | • manganese | • sulphur |
| • barium | • cobalt | • mercury | • thallium |
| • beryllium | • copper | • nickel | • tin |
| • boron | • iron | • selenium | • zinc |

Explanatory Notes for Completing Tailings Storage Data Sheet

13. Specify the units of measurement for each compound.

Operations producing sulphidic mine wastes should assess the potential for sulphide oxidation resulting in acid generation. An outline of current methods including the net acid producing potential (NAPP) test and net acid generation (NAG) test, is provided in Environment Australia (1997).

ORE PROCESS METHODS

The ore process methods may be recorded as follows:

- Acid leaching (atmospheric)
- Acid leaching (pressure)
- Alkali leaching (atmospheric)
- Alkali leaching (pressure)
- Bayerprocess
- Becher process
- BIOX
- Crushing and screening
- CIL/CIP
- Washing and screening
- Flotation
- Gravity separation
- Heap Leaching
- Magnetic separation
- Ore sorters
- Pyromet
- SX/EW (Solvent Extraction / Electrowinning)
- Vat Leaching

Disclaimer

This publication may be of assistance to you but the State of Victoria and its employees do not guarantee that the publication is without flaw of any kind or is wholly appropriate for your particular purposes and therefore disclaims all liability for any error, loss or other consequence which may arise from you relying on any information in this publication.