

MINING, TAILINGS FACILITIES, WATER QUALITY PROTECTION GUIDELINES

2564. Hon Nigel Hallett to the Minister for Education and Training representing the Minister for the Environment

I refer to a document which I understand is titled 'Water Quality Protection Guidelines No. 2, Mining and Mineral Processing, Tailings Facilities 2000' which were endorsed/signed and agreed upon by the Waters and Rivers Commission, Department of Environmental Protection and the Department of Minerals and Energy -

- (1) Can the Minister explain why the Department of Environmental Protection previously insists and recommends that monitoring of seepage be undertaken with monitoring bores and sampling at least quarterly in a hypersaline environment where the beneficial use of the underlying water is only for mineral processing which imposes a large cost on any proponent given that the Department acknowledges that seepage through to floor is inevitable from the tailings dam?
- (2) If no to (1), will the Minister quote the full text from the document?
- (3) Can the Minister explain why the Department of Environmental Protection previously insists, enforces and recommends that proponents in a hypersaline environment where the beneficial use of the underlying water is only for mineral processing, have the inclusion of toe drains and underdrains to collect, treat and recycle seepage in their tailing dams obviously at a large cost when the Department clearly acknowledges that seepage from the tailings dam is inevitable?
- (4) If no to (3), why not?
- (5) Can the Minister explain why the Department of Environment previously insists, enforces and recommends that proponents in a hypersaline environment where the beneficial use of the underlying water is only for mineral processing have seepage recovery bores, perimeter drains that feed containment dams, seepage monitoring and sampling programs which all combined impose a huge financial cost on proponents given that the Department acknowledges that seepage through the bottom of the tailing dam is inevitable which most obviously causes the water table to rise, causes salinisation of the soils, potential impacts on the vegetation, adverse impacts on neighbouring tenements, or any land tenure and infrastructure as a result of unnatural elevated water levels?
- (6) If no to (5), why not?
- (7) Can the Minister explain why does the Department of Environment now waste proponents resources and money for tailings dams in a hypersaline environment where the beneficial use of the underlying water is only for mineral processing on constructing seepage recovery bores, seepage perimeter drains that feed containment dams, seepage monitoring and sampling programs which all combined impose a huge financial cost on proponents given that the Department acknowledges that seepage is inevitable through the floor of the tailing dam which obviously causes the water table to rise, causes salinisation of the soils, potential impacts on the vegetation, adverse impacts on neighbouring tenements, or any land tenure and infrastructure as a result of the unnatural elevated water levels?
- (8) If no to (7), why not?

Hon LJILJANNA RAVLICH replied:

The Minister for the Environment; Science has provided the following response:

- (1) Yes. The guidelines were developed in consultation between the Water and Rivers Commission, Department of Environmental Protection and Department of Minerals and Energy. These guidelines were developed to establish actions required by operators to meet their obligations under all of the Acts administered by those Departments and to also guide operators into areas of best practice that may be over and above legislative requirements.

It should be noted that the guidelines you mention also state: "The frequency of monitoring will vary depending on the situation of each tailings dam."

The object was to protect the environmental values surrounding the tailing facility. These values may include vegetation that could be harmed by rising hyper-saline groundwater.

- (2) Not applicable.
- (3) Yes. The guidelines were developed in consultation between the Water and Rivers Commission, Department of Environmental Protection and Department of Minerals and Energy. These guidelines were developed to establish actions required by operators to meet their obligations under all of the Acts

administered by those Departments and to also guide operators into areas of best practice that may be over and above legislative requirements.

The object was to protect the environmental values surrounding the tailing facility. These values may include vegetation that could be harmed by rising hyper-saline groundwater.

- (4) Not applicable.
- (5) Yes. The guidelines were developed in consultation between the Water and Rivers Commission, Department of Environmental Protection and Department of Minerals and Energy. These guidelines were developed to establish actions required by operators to meet their obligations under all of the Acts administered by those Departments and to also guide operators into areas of best practice that may be over and above legislative requirements.

In the Goldfields area, where low permeability clay soils underlay many mineral processing tenements, the principal seepage pathways was often considered to be lateral movement in near surface permeable top-soils. A shallow external perimeter drain allows for the capture of this seepage and its collection before leaving the area of control of the project operator, and possibly posing a risk of harm to the downstream environment. Again this needs to be judged against local conditions and the relevant environmental value for the area.

- (6) Not applicable.
- (7) Yes. The guidelines were developed in consultation between the Water and Rivers Commission, Department of Environmental Protection and Department of Minerals and Energy. These guidelines were developed to establish actions required by operators to meet their obligations under all of the Acts administered by those Departments and to also guide operators into areas of best practice that may be over and above legislative requirements.

When carrying out regulation under Part V of the Environmental Protection Act 1986, it was expected that an assessment of the local environment would form a key part of the data used to formulate a works approval or licence. The conditions set would take these environmental factors into consideration. Part V of the Environmental Protection Act 1986 requires the Department to develop practical conditions, and the wording of practical in the Act includes consideration of costs. Conversely, the licence conditions need to balance these matters.

If the proponent felt that such conditions were unreasonable, there are appeal provisions available under the Act.

- (8) Not applicable.