

# Notice

ENVIRONMENT PROTECTION ACT 1970

## SECTION 22(1)

### NOTICE TO SUPPLY FURTHER INFORMATION

**TO: MORNING STAR GOLD N.L.**

**OF: LEVEL 6, 15 ASTOR TERRACE, SPRING HILL QLD 4000**

**WHEREAS** an application by you for a long route licence in respect of the premises situated at 1 Mine Road, Woods Point, VIC 3672 was received by the Environment Protection Authority ("the Authority") on 25 March 2019.

**AND WHEREAS** the Authority considers the information specified herein is necessary and relevant to the consideration of the application.

**NOW TAKE NOTICE** that pursuant to section 22(1)(a) of the Environment Protection Act ("the Act") you are **HEREBY REQUIRED** to supply to the Authority by 5 pm Friday 2<sup>nd</sup> August 2019 the information specified in the Attachment to this Notice.

**DATED: 23 July 2019**

.....  
Belville Leshoele  
DELEGATE OF THE  
ENVIRONMENT PROTECTION AUTHORITY



**Environment  
Protection  
Authority Victoria**

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# ATTACHMENT

Please note, all information must be prepared by a suitably qualified person and accompanied by sufficient details, reports, calculations and justifications that would allow the Authority to test and verify your findings.

## **Purpose**

To assist the Authority in assessing the application for a long route licence, it is considered that further design, analysis and/or information needs to be provided to the Authority to support the application. To support the application, Morning Star Gold N.L are required to provide the following additional information.

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### **1. Flow Data**

The application is lacking in suitable flow information to assess the likely dilution available in Morning Star Creek for the discharge from the Morning Star Mine. Flow data needs to cover all seasons as well as the actual flow data over the approval monitoring period so as we can understand better what is occurring downstream of the discharge. If actual flow data is not available, then synthetic or modelled flow data, or flow estimates may be used.

### **2. The proposed arsenic limits in the discharge**

The Authority considers that the proposed As limit of 0.4 mg/l is too high, and notes that the As concentrations measured in the discharge after the change to the treatment plant peaked at about 0.25 mg/l and the Authority considers that this would be a more appropriate limit for Arsenic in the discharge. Please provide justification for your proposed limit of 0.4 mg/l and show how SEPP limits for arsenic will be achieved considering the available dilution. If SEPP limits cannot be achieved then please provide a discussion about proposals for a mixing zone, its extent and how it will be assessed.

### **3. Other metals in the discharge**

Aluminium is variable and was too high on occasions please provide some explanation of the high Aluminium results and measures that can be taken to control the discharge of aluminium.

As a check provide an analysis for potential other metals in the raw mine water and discharge water. The metals screen should analyse at least for the following metals: cadmium, copper, lead and zinc.

### **4. Information on Suspended Solids and Turbidity**

There is no information on Suspended Solids and turbidity in the discharge please provide some information on these parameters.

### **5. Technical information on the plant**

Please provide the following:

- Technical drawings drawn to scale of the proposed aeration / oxidation system showing the dimensions, inlets, outlets location and types;
- Design calculations.
- An explanation as to why the system is only achieving 70% removal when 95% removal is reported as being a minimum for this type of treatment system.
- Provide evidence of SS removal by the treatment system.
- Daily pumping of sludge from Pachuca 1 and Pachuca 2 as is proposed is not best practice and could interfere with the settling process, please justify the current practice.

## **6. Public Health concerns**

Our Environmental Public Health Unit were concerned that the concentrations of arsenic downstream were above drinking water and recreational use guidelines. Please provide information on the beneficial uses made of Morningstar Creek and the Goulburn River downstream of the discharge and on potential and likely pathways of human exposure so as the risk to public health can be assessed. There needs to be some discussion of a potential mixing zone to address public health concerns which may require some signposting to warn the public of the presence of the mixing zone and limitations on use of the water. Complete and submit to the Authority a risk assessment in accordance with EPA Publication 1287 *Guidelines for Risk Assessment of Wastewater Discharges to Waterways*.