

Charles Horrell

From: Deborah Mills
Sent: Monday, 12 September 2016 8:43 a.m.
To: Charles Horrell
Subject: RE: Full assessment - Oceana Gold

Follow Up Flag: Follow up
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Hi Charles,

As requested, I have reviewed the relevant sections of Oceana Gold's Coronation North application for discharges-to-air. The relevant features of the project consist of constructing a new Coronation North Pit, adding a 2km road extension, performing a road re-alignment and building a new waste rock stack. The proposed activities are the same as existing activities at the mine.

The applicant has provided a detailed Assessment of Environmental Effects (AEE) for review. The main contaminant of concern is dust and the main sources are:

- Earthworks
- Vehicle movements
- Loading and unloading of materials
- Wind-generated entrainment of dust, and
- Blasting

Due to its relatively large size, dust generally does not travel farther than a couple of hundred metres from its place of origin. Factors which may affect the amount of dust generated at the Macraes site include:

- Frequency and speed of wind
- Percentage of small particulates
- Moisture content
- The area exposed
- Disturbances to the land

Quantifying dust emissions from the mine's proposed expansion is extremely difficult due to the changing nature of conditions. Any estimates of emissions will have a large degree of uncertainty. Because of this, the methodology used in the AEE was to compare the effects of the proposed activities to the effects of the existing activities, paying particular attention to the change in rate of activity and location of activity in relation to sensitive receptors. This methodology is reasonable and acceptable.

As the proposed activities are quite similar to existing activities, complaints received by the mine and by ORC were analysed, as was the monitoring data gathered for the existing consents. The AEE indicates that the mine is compliant with current consent dust limit conditions and has received relatively few complaints; no complaints have been received during 2014 and 2015.

Several nearby residences were deemed to be sensitive receptors. Wind patterns and separation distances were examined in the AEE to determine the likelihood of any significant effects. Separation distances are within recommended guidelines for mining activities, but due to the nature of the winds (frequently high-speed winds from the western quarter) and the fact that dust sources are often vast and elevated, there is potential for significant amounts of dust to be generated, if the site is not managed properly. Most of the nearby residences are upwind of the mining activity, but there are a couple that are located downwind of the activities. Therefore, it is important for the applicant to exercise effective dust mitigation measures.

Oceana Gold currently has a Dust Management Plan which has proven effective in dust management, particularly during adverse weather conditions. The plan calls for multiple mitigation measures to limit dust. These include keeping exposed areas to a minimum (by re-planting), applying water when needed, keeping speed limits low, planning dust-generating activities during times of lower wind speeds, minimising hauling distances and drop heights, along with other effective measures.

I am satisfied that by continuing to perform dust mitigation measures into new areas of activity the effects of the proposed activity will be no more than minor. The applicant will continue to monitor for dust and TSP and proposes moving one dust pot to a new location. I agree with that recommendation as the new location is closer to one of the residences and will provide important information for dust management purposes.

If you have any questions, please let me know.

Regards
Deborah

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From: Charles Horrell
Sent: Monday, 29 August 2016 11:19 a.m.
To: Deborah Mills
Subject: Full assessment - Oceana Gold

Hi Deborah

As discussed we will now require the full assessment for air quality for the Oceana Gold applications. I have attached a link to the application containing the report that refers to discharges to air: "Coronation North - Assessment of Effects of Discharges to Air". Could you please provide your assessment by the 16th of September?

Let me know if require anything further or have any questions.

Kind regards,

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