

State Mining Engineer,
Mines Department,
PERTH.

KALGOORLIE 19th August 1953.

Ventilation - Australian Blue Asbestos Mine - Wittenoom.

I visited the asbestos mine operated by the Australian Blue Asbestos Ltd. at Wittenoom from July 28th to August 1st and inspected the underground working places and treatment plant. I also made an air survey of underground workings.

The volume of air flowing through the mine was measured using the vane anemometer and resulted.

Intake

New Portal	11,000 c.f.m.
Upper Seam	9,200 c.f.m.
Lower Seam	12,590 c.f.m.

Total 32,790 c.f.m.

Discharge

Main Entry (Upper Seam) 40,590 c.f.m. (Measured past fan)

The fan in use is still the Richardson 60" Axial Flow fan powered by a 25 H.P. electric motor.

The quantity of air circulating through the mine is satisfactory for the number of working places. The intake through the New Portal ventilates the new stopes and development ends in this new section of the mine, and the intake on the Upper Seam, ventilates those stopes in the old section of the mine which are still working. The air through the Lower Seam is split and ventilates the stopes still operating in this seam. This air then upcasts through jump - ups to the Upper Seam and joins the return air, through the old stoped - out workings, to the exhaust fan.

Underground

Conditions underground generally were satisfactory. I deplore the lack of the use of water on broken dirt underground. Water is used but not to the extent sufficient to minimise the dust hazard. Especially where scraping was in operation the dust counts were high. The installation of a fibre drying plant in their mill is an urgent necessity in order to dry the fibre product, and then the use of water underground can be rigidly enforced. The attached sheets show temperatures and dust counts recorded underground.

In some stopes the working places were advanced more than 10 feet off an airway and the ventilation was not satisfactory. I requested that secondary ventilating appliances be used in such stopes.

Treatment Plant.

Extensive additions and alterations are being made to this plant. Included in the additions is the installation of a cyclone dust collector and three field dust collectors. These to connect the five small cyclones which exhaust through the roof of the building. This should prevent much of the dust which is at present exhausted to atmosphere and drifts down and back into the mill. (This installation should now be in operation).

Inside the mill hessian (and wool bale) walls have been erected. These enclose certain sections of the plant and act as ducts to the 48" diameter Richardson Propellor fans installed in the roof. These fans also need exhaust ducts to carry the dust into the air and away from the vicinity of the mill.

The mill has been enclosed on two sides and according to reports this has had a good effect on the amount of dust in the plant.

I consider the worst feature of the mill is the cloud of dust which arises from the mill and then either drifts down to the ground or blows down the gorge. It seems to have a demoralising effect. By requesting that extensions be added to the exhaust ducts it is hoped that the dust will be taken away from the vicinity of the mill.

The attached sheet shows the dust counts recorded in the mill. These counts are high but possibly the improved dust collection set - up will improve conditions in the mill.

General.

I was advised by the management of the proposed building alterations. Among the alterations is the conversion of the present office building, situated near the New Portal entrance, in the Underground changeroom. Provision is being made for the administration of Aluminium Therapy and the management propose making this treatment available when the changeroom is completed.

DISTRICT INSPECTOR OF MINES.