

LEGISLATIVE COUNCIL
Question on notice

19 NOV 2013

Tuesday, 15 October 2013

359. Hon Robin Chapple to the Minister for Agriculture and Food representing the Minister for Mines and Petroleum.

I refer to the photos of dust at <http://www.robinchapple.com/sites/default/files/2013-10-09%20ThunderBox%20Dust.pdf> emanating from the Thunderbox Gold Mine on 9 October 2013, and I ask:

- (a) why did this fugitive dust emission eventuate;
- (b) what was the source of the fugitive dust emission;
- (c) was this fugitive dust emission incident reported to the Department of Mines and Petroleum;
- (d) if no to (c), why not;
- (e) is there a condition contained within the licence condition for the Thunderbox mine that seeks to prevent such a fugitive dust emission;
- (f) if no to (e), why not;
- (g) if yes to (e), will the Minister table the licence; and
- (h) if yes to (e), what actions are available to the Minister to prosecute or cause the Thunderbox Mine to cease such fugitive dust emissions?

Answer

The Department of Mines and Petroleum advises:

- (a) Officers from the Department of Mines and Petroleum (DMP) have reviewed the photographs. While DMP's investigation into this matter is continuing, the officers consider that the dust emissions were likely to be the result of high winds passing over exposed tailings which have low moisture content at the mine site.
- (b) The investigating officers of DMP consider that the dust was generated from a tailings storage facility on the mine site.
- (c) Yes
- (d) Not applicable
- (e) Yes. Condition 26 of Mining Lease 36/512.

- (f) Not applicable
- (g) An extract of the applicable conditions of the tenement is attached [see tabled document no]
- (h) The investigation of the incident is continuing and DMP will consider the appropriate enforcement or prosecution action following the completion of the investigation. The *Mining Act 1978* provides powers to issue administrative directions where there is a risk of environment harm, and provides for fines, or forfeiture to be considered for breaches of tenement conditions.

hi



Tenement Endorsement and Conditions Extract

Tenement: M 36/512

Show History: No

Working versions only: No

#	ENDORSEMENTS	Status	Start Date	End Date
1	The lessee's attention is drawn to the provisions of the Aboriginal Heritage Act, 1972.	Active	03/01/2001	
#	CONDITIONS	Status	Start Date	End Date
1	Survey.	Active	03/01/2001	
2	All surface holes drilled for the purpose of exploration are to be capped, filled or otherwise made safe after completion.	Active	03/01/2001	
3	All disturbances to the surface of the land made as a result of exploration, including costeans, drill pads, grid lines and access tracks, being backfilled and rehabilitated to the satisfaction of the Environmental Officer, Department of Mines and Petroleum (DMP). Backfilling and rehabilitation being required no later than 6 months after excavation unless otherwise approved in writing by the Environmental Officer, DMP.	Active	12/09/2012	
4	All waste materials, rubbish, plastic sample bags, abandoned equipment and temporary buildings being removed from the mining tenement prior to or at the termination of exploration program.	Active	03/01/2001	
5	Unless the written approval of the Environmental Officer, DMP is first obtained, the use of drilling rigs, scrapers, graders, bulldozers, backhoes or other mechanised equipment for surface disturbance or the excavation of costeans is prohibited. Following approval, all topsoil being removed ahead of mining operations and separately stockpiled for replacement after backfilling and/or completion of operations.	Active	12/09/2012	
6	The lessee notifying the holder of any underlying pastoral lease by telephone or in person, or by registered post if contact cannot be made, prior to undertaking airborne geophysical surveys or any ground disturbing activities utilising equipment such as scrapers, graders, bulldozers, backhoes, drilling rigs; water carting equipment or other mechanised equipment.	Active	03/01/2001	
7	The lessee or transferee, as the case may be, shall within thirty (30) days of receiving written notification of: <ul style="list-style-type: none"> • the grant of the lease; or • registration of a transfer introducing a new lessee; advise, by registered post, the holder of any underlying pastoral lease details of the grant or transfer.	Active	03/01/2001	
8	The lessee submitting a plan of proposed operations and measures to safeguard the environment to the Director, Environment Division, DMP for his assessment and written approval prior to commencing any developmental or productive mining or construction activity.	Active	12/09/2012	
9	No interference with Geodetic Survey Stations LEN77 and LEN142 and mining within 15 metres thereof being confined to below a depth of 15 metres from the natural surface.	Active	03/01/2001	
10	No interference with the optic fibre cable or the installations in connection therewith, and the rights of ingress to and egress from the facility being at all times preserved to the owners thereof.	Active	03/01/2001	
11	No excavation, excepting shafts, approaching closer to the Goldfields Highway, Highway verge or the road reserve than a distance equal to twice the depth of the excavation on the Goldfields Highway or Highway verge being confined to below a depth of 30 metres from the natural surface.	Active	03/01/2001	
12	The construction and operation of the project and measures to protect the environment being carried out generally in accordance with the document titled: <ul style="list-style-type: none"> • "Notice of Intent Wildara Project Thunderbox Gold Deposit" dated September 2001 (NOI 3840); • "Notice of Intent Thunderbox Gold Project Tailings Management" dated November 2001 (NOI 3842); and retained on Department of Mineral and Petroleum Resources File No. 4358/01 and 4394//01. • "Thunderbox Gold Project Tailings Storage Stage 2 Embankments Addendum to the NOI dated May 2003 and retained on Department of Industry and Resources File No. 4394/01. Where a difference exists between the above document(s) and the following conditions, then the following conditions shall prevail.	Active	14/07/2003	
13	The development and operation of the project being carried out in such a manner so as to create the minimum practicable disturbance to the existing vegetation and natural landform.	Active	28/02/2002	
14	All topsoil being removed ahead of all mining operations from sites such as pit areas, waste disposal areas, ore stockpile areas, pipeline, haul roads and new access roads and being stockpiled for later respreading or immediately respread as rehabilitation progresses.	Active	28/02/2002	
15	At the completion of operations, all buildings and structures being removed from site or demolished and buried to the satisfaction of the Executive Director, Environment Division, DMP.	Active	12/09/2012	
16	All rubbish and scrap is to be progressively disposed of in a suitable manner.	Active	28/02/2002	
17	On the completion of operations or progressively when possible, all waste dumps, tailings storage facilities, stockpiles or other mining related landforms must be rehabilitated to form safe, stable, non-polluting structures which are integrated with the	Active	12/09/2012	

#	CONDITIONS	Status	Start Date	End Date
	surrounding landscape and support self sustaining, functional ecosystems comprising suitable, local provenance species or alternative agreed outcome to the satisfaction of the Executive Director, Environment Division, DMP.			
18	Any alteration or expansion of operations within the lease boundaries beyond that outlined in the above document(s) not commencing until a plan of operations and a programme to safeguard the environment are submitted to the Executive Director, Environment Division, DMP for his assessment and until his written approval to proceed has been obtained.	Active	12/09/2012	
20	The lessee submitting to the Executive Director, Environment Division, DMP, a brief annual report outlining the project operations, minesite environmental management and rehabilitation work undertaken in the previous 12 months and the proposed operations, environmental management plans and rehabilitation programs for the next 12 months. This report to be submitted each year in: <ul style="list-style-type: none"> • October 	Active	12/07/2012	
21	The tailings storage facility shall include an adequately designed and sized underdrainage system located at the upstream toe of the embankment. The construction of any tailings impoundment embankment shall be supervised by an engineering or geotechnical specialist.	Active	28/02/2002	
22	The construction of any tailings storage embankment shall be documented by an engineering or geotechnical specialist and confirm that the construction satisfies the design intent. The construction document shall include the records of construction quality control testing, the basis of any method specification adopted, and any significant modifications to the original design together with reasons why the modifications were necessary. The construction document shall also present as-built drawings for the embankment earthworks and pipework. A copy of the construction document shall be submitted to the Department of Mineral and Petroleum Resources for its records.	Active	28/02/2002	
23	The tailings storage facility shall be checked on a routine daily basis by site personnel during periods of deposition to ensure that the facility is functioning as per the design intent.	Active	28/02/2002	
24	An engineering or geotechnical specialist shall audit and review the active tailings storage facility on a biennial basis. The specialist shall review the past performance, validate the design, examine tailings management, and review the results of monitoring. Any deficiencies noted in the audit and review report shall be suitably addressed and improved. The audit and review report shall be submitted to the Department of Minerals and Petroleum Resources with the annual environmental review, and should be accompanied by a recent survey pick-up of the facility and an updated tailings storage data sheet.	Active	28/02/2002	
25	At the time of decommissioning of the tailings storage facility and prior to rehabilitation, a further review report by a geotechnical or engineering specialist will be required by the Director, Environment Division, DMP. This report should review the status of the structure and its contained tailings, examine and address the implications of the physical and chemical characteristics of the materials, and present and review the results of all environmental monitoring. The rehabilitation stabilisation works proposed and any on-going remedial requirements should also be addressed.	Active	12/09/2012	
26	The lessee taking all reasonable and practicable measures to prevent or minimise the generation of dust from all materials handling operations, stockpiles, open areas and transport activities.	Active	28/02/2002	
27	The lessee ensuring that all matter containing saline, alkaline, cyanide or other process chemical constituents being retained within holding facilities, such that there is no impairment of surface or underground waters.	Active	28/02/2002	
28	Waste retention facilities not being constructed upstream or within catchments of surface impoundments used for human, stock or irrigation water supply purposes.	Active	28/02/2002	
29	The lessee diverting stormwater runoff away from areas adjacent to waste management facilities to maintain the threat of accidental loss of stored matter due to flooding or erosion.	Active	28/02/2002	
30	The lessee installing and maintaining, where practicable, a perimeter drain immediately downstream of the external toe of the waste storage dam, which shall be used to collect and recover any liquid matter resulting from seepage or breach of the embankments.	Active	28/02/2002	
31	The lessee installing and maintaining monitoring facilities in such locations and to the specification approved by the Director, Environment, DMP, if there is concern that waters utilised by the project may be lost other than by evaporative processes.	Active	12/09/2012	
32	Wastes from ancillary facilities such as maintenance workshops and laboratories being managed in a manner which minimises their detrimental effect on the surrounding environment. Practical measures such as protective bunding, skimmers, silt traps, neutralisation pits and petrol/oil traps being provided and maintained as appropriate.	Active	28/02/2002	
33	Any failure of components of waste management systems resulting in a loss of potentially polluting matter to the environment being immediately reported to the Inspectorate Environmental and Rehabilitation Officer of the Department of Minerals and Energy. This report being accompanied by a program for corrective action.	Active	28/02/2002	
34	Pipelines carrying dewatering effluent, saline groundwater from borefields, or process waters to and from tailings impoundments being fitted with automatic shutoff devices to prevent flow of effluent and waters to the environment in the event of a system failure.	Active	28/02/2002	
35	The lessee visually inspecting for evidence of pipeline failure to the ground surrounding the dewatering effluent and saline groundwater supply pipelines at a minimum frequency of once per week.	Active	28/02/2002	
36	Should a failure in an inspected pipeline be discovered, the discharge being ceased immediately and not resuming until the pipeline has been repaired. The Environmental Officer, DMP being notified within one week of the failure and provided with an estimate of total effluent volume lost due to the failure.	Active	12/09/2012	
37	All pipeline access roads being engineered to prevent erosion and exposure of the pipeline caused by stormwater runoff.	Active	28/02/2002	
38	Placement of waste material must be such that the final footprint after rehabilitation will not be impacted upon by pit wall subsidence and zone of instability.	Active	28/02/2002	
39	Any faunal deaths associated with the operation of the tailings dam being immediately reported in writing to the Regional Environmental Officer.	Active	28/02/2002	

CONDITIONS

		Status	Start Date	End Date
40	"A Mine Closure Plan is to be submitted in the Annual Environmental Reporting month specified in tenement conditions in the year specified below, unless otherwise directed by an Environmental Officer, DMP. The Mine Closure Plan is to be prepared in accordance with the "Guidelines for Preparing Mine Closure Plans, June 2011" available on DMP's website" <ul style="list-style-type: none">• 2013	Active	12/09/2012	
41	Where saline water is used for dust suppression, all reasonable measures being taken to avoid any detrimental effects to surrounding vegetation and topsoil stockpiles.	Active	12/09/2012	

-- End of Report --