

Nickel Odour

- The Port has always experienced problems with odour from the nickel when loading ships. With the Port becoming more efficient in recent years and the ships being loaded faster, the odour problem has been exacerbated.
- Odour is caused by the combination of the xanthate added during the processing of the nickel ore and the sulphur present in the ore. The odour occurs when the stockpiled concentrate is disturbed during ship loading, which releases small amounts of strong smelling fumes.
- The Port had an odour study carried out in the summer of 2001-02 in cooperation with the mining companies that ship their product through the port to determine if there were any operational practices that could eliminate the problem.
- The Port occasionally experienced problems with odour when unloading the trains. A carbon scrubber has been fitted to the train-unloading hopper, which has helped reduce the odour from this source.
- Employees working with the nickel concentrate are monitored regularly to ensure that the Port workers are not exposed to levels of dust that pose a health risks.
- The sensitivity of the human nose is such that it can detect many odours at levels many time less that the levels that can cause health effects. The human nose can detect very low levels of fumes produced by nickel concentrate.
- The Port is implementing a number of procedures to further reduce the odour. These include upgrading the dust collection system in the nickel storage sheds, and maintaining nickel sheds, which includes the sheds being reclad and re-roofed to ensure nickel dust does not escape.
- The Port also has a procedure to stop loading nickel ships if the odour is particularly bad and the prevailing winds are from a direction that will blow the smell into residential areas. (Loading of the nickel ship in Port last week was stopped because of the strong odour and the direction of the wind.)
- The Port is working with contractors who deliver the nickel concentrate to the Port to further reduce the effect of the odour during unloading operations.
- There is no reason to believe that the odour is a health risk. Nickel concentrates have been handled at mines, plants and ports around the world for many years, and there have been no recorded health problems reported from these activities and the emission of odours from the concentrate.
- The Port continues to liaise with the nickel producers to determine if something can be done to reduce the impact of the odour during ship loading operations: One important contact is Cosmos whose Mine Manager is a metallurgist and is interested in this problem.

His details are:

Cosmos

Barrie Hancock

Mine Manager

Email: barrieh@jubileemines.com.au

Ph 9031 4100