

## MAY 2014

## **Urunga Antimony Contaminated Site Remediation Works**

About 33 people attended a meeting at Urunga Golf Club on Thursday May 29 to discuss the recommended option to remedy toxic waste from an antimony processing plant at Hillside Drive, Urunga.

The meeting was facilitated by Bellingen Shire Council and presented by Clayton Colmer from the Soil Conservation Service, Coffs Harbour.

The processing plant was set up to treat mineral mined from Wild Cattle Creek mine set up in 1973 and shut down in the 1980's. Bellingen council carried out a clean-up operation in 2009.

The plant is on the edge of the wetland to take advantage of available water, however tailings and waste was dumped on the site, leading to mercury, lead, arsenic and antimony pollution throughout the wetlands to the sea. In wet weather there is heightened levels of antimony in the system and in dry weather arsenic. All of this has had no good effect on aquatic life.

Several remedies were researched on a cost/benefit basis, including removing the waste to other areas. The recommended rehabilitation involves on-site disposal in a treated monocell, which works as follows:

By digging out 84,000 tonnes of material from the tailings/mill area it is ex-

pected to remove 96.6% of the contamination. The spoil would be mixed on site with 'binders', including clays and cement, then moved up the hill into a prepared monocell with a  $\cdot 7$  hectare footprint.

The cell is an inclined earth structure with rubble drainage under and around it and lined with non-permeable clay which will also be used on top of the material to make a capsule containment with water monitoring pipes at the deep end to enable the site containment to be monitored.

The cap will be covered with earth to a depth to enable growth of trees without roots breaking through the cap. Water runoff from rain events will be directed around the installation to minimise effects of water on the structure.

It is expected to take three to four months to complete the job, preferably starting August-September when it is usually dry. There will be short periods of intense activity when moving material and equipment. Rehabilitation of the wetland should be rapid with good regrowth.

Cost of the entire project is expected to be about \$2-million largely funded by taxpayers, as the mining company has made its profits and long departed.

Unfortunately this seems all too common, although one wonders how this mill and tailings dump could be allowed

to operate on that site in the 1970's, as it is almost as bad as the Halls Peak copper mine in the Chandler Gorge, which has left the Macleay River with a very long sentence of pollution.

We have been assured that with 'modern' mining methods, pollution would either not exist or be reduced to the absolute minimum and, indeed, current policies at Hillgrove mine are very promising.

However, with all levels of government interested in making a fast buck, the long-term results from 'historic' mining seem to make the long-term pain far more costly than the short-term gain. Past experience should make us all very cautious and ever vigilant.

Urunga is a tourist destination and representatives of SOMR attended this meeting in case the recommended remediation involved moving the contaminated material to our back yard. It does not, and seems to be an excellent solution to the problem. While no-one can say with 100% certainty just how long it will last, if the containment does fail far into the future, damage from the stabilised material would be far less serious than leaving it as it is.



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