

# XANTHATE (PAX)

## Newcrest Mining Ltd - Cadia

### Cadia Gold Mine at a Glance

100% owned by Newcrest

FY18/19 ;

913,000 ounces of Gold

91,000 tonnes of Copper

Con 1 T3 hydrofloat project assisted in raising recovery rates from 78.9% to 83.4%.

AUGUST 2018

CADIA GOLD MINE

ORANGE, NSW

Project Manager:

Robert Fulton

### CONTACT LIME SYSTEMS

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+61 (0)8 9259 8400

Contact us for facilities to receive and handle;

- Quicklime
- Hydrated Lime
- Limestone
- Cement
- Flocculant
- Coagulant
- Acids
- Caustic
- Cyanide
- Others

See our website for a full list of our capabilities.



### Quick facts:

- Ventilation to AS/NZS 60079.10.1
- Mixing and Storage Tanks to API650 and AS1692
- Electrical equipment (motors, instruments etc) within hazardous area Ex'd IIC T6 rated
- Fan forced ventilation (Copper lined non-spark fans) for the mixing and storage tanks
- Remote dust collector and Valve control panels requiring pilot operated pneumatic systems to run effectively

### Xanthate Package

The facility supplied by Lime Systems was designed to receive and safely store dry bagged Potassium Amyl Xanthate (PAX) prior to mixing, storing and dosing the mixed solution to downstream equipment.

Safety was a priority for the facility as PAX makes the areas hazardous;

Solid PAX is considered a combustible dust and can form potentially explosive dust clouds PAX when in liquid form may decompose to produce carbon disulphide and alcohol gas as by products

PAX reaction with water is slightly exothermic which helps with decomposition, with the potential for auto ignition

Lime Systems undertook the design, supply, delivery, construction verification and commissioning assistance for this package. Hazardous area classification and final sign-off by a third party



*Control systems for the plant were required to be located over 40m from the process to maintain the integrity of the hazardous area's safety rating.*



*Spark proof copper lined fans are ducted to the sheds externals to maintain the integrity of the work areas atmosphere during operation.*

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