REX CHRISTOPHER PLUMMER 99 LOUEE STREET, RYLSTONE, NSW 2849

The Director, Resource Assessments, Planning and Assessment, DPIE, Locked Bag 5022, Parramatta, NSW 2124

Dear Sir,

APPLICATION NAME: BOWDENS SILVER MINE AMENDMENT APPLICATION NUMBER: SSD5765 PRACTICAL REHABILITATION IMPROVEMENTS

I object to this proposal (SSD 5765).

I declare that I have not made any Donations or Gifts to any political party or personnel in the last two years.

Bowdens have claimed "rehabilitation' will take place and it will take 7 years. They have convinced themselves by using a box of coloured pencils to show shades of green and brown hoping DPIE will be convinced. There is to be almost no rehabilitation other than some tree planting.

These observations are made with some degree of experience in the field. For a number of years I was a member of the South Australian Extractive Industries Committee. My *opinion* on such matters was also admissible and accepted as an Expert Witness by the South Australian Planning Appeals Board (the SA equivalent of NSW's Land and Environment Court)

I can see at least three elephants in the room, the WRE, the Main Pit and TSF

WRE

One of the dominant and visually offensive remnants will stay as it is if Bowdens get their way. If Bowdens had thought of relocating (safely encapsulated) the PAF pile in the southern toe of the WRE it could work two ways.

At the end of mining the southern 200 metres or so of the WRE could be removed to partly fill the main pit and raise the floor to help with any other shaping. That would eliminate the offensive part of the WRE and its engineered conical shape and prominent nose. It would also allow flexibility to sculpt the remaining volume of the WRE into some more natural form with a slow taper towards Battens Road.

Bowdens seem to believe their own mantra that they will conform with the existing native landscape. Most of the time this fatuous. Something like this strategy might get them closer to that goal.

Main Pit

It is proposed by Bowdens not to be filled. Bowdens doesn't offer a cogent reason for not placing part of the WRE into it. Nor do they provide a case for not manipulating the walls (benching) to make it safer and for some level of access.

It remains on their maps untouched by their coloured pencils. Why?

TSF

This has some major issues

- Bowdens has relied wrapping the sludge in impermeable materials. Like a plastic bag of noodles at an Asian street stall. Eventually the bag will break.
- Bowdens main containment is the Bituminous Geotextile on the floor and sides and wall. This has a life and will eventually fail. It won't fail uniformly. It will degrade and break down at different points at different times. In geotechnical terms this will create 'piping' It is caused by the reserve of evenly graded particles being supported and surrounded by fluid (water) under pressure also known as solifluction. Water pressure at the bottom of the TSF is about 80psi, enough to blow the taps off my bathroom wall.
- Why haven't Bowdens proposed a dewatering programme for the TSF? Essentially a
 network of bores where fluid could be gathered and removed for off-site treatment.
 There may be a long term issue with access for heavy machinery such drilling rigs.
- Ultimately the Geotxtile will totally go and the toxic sludge will have to integrate with the containing landscape and water table; Bowdens have not addressed this.

Until Bowdens either cogently refutes some of these thoughts (with engineering support) or adjusts their plan so that there is a reduced impact of the proposed mine on the long term landscape, then DPIE needs to reject the proposal in full.

Yours sincerely,

Chi 12/8

R C Plummer