



*The Bendigo & District Environment Council Inc*  
*P.O. Box 557 Bendigo 3552*

Registration No A0017439S, (Incorporated 30/11/1988)

BDEC is a community based not for profit organization with a broad experience and depth of knowledge of environmental issues and the social problems surrounding these issues. BDEC's membership boasts a diverse background that has formulated many community based submissions for proposals that have significant community impact. Our membership includes tertiary qualifications and post tertiary qualifications in:

Environmental science  
Zoology  
Ecology  
Land development  
Biology  
Botany (particularly with regional focus)  
Physics  
Engineering  
Mathematics  
Medicine

Most of our members have lectured at a tertiary level on the above specialities. We have members who are currently employed or have been employed in environmental projects by:

- \* Local Councils (including City of Greater Bendigo)
- \* State governments
- \* Environment Victoria
- \* The former Land Conservation Council
- \* UNESCO
- \* many private environmental reports and also
- \* 3 Local Field Naturalists / Ecologists with 30+ years experience



*Bendigo - Heart of the Box - Ironbark Forest.*

Submission to Victorian Parliamentary enquiry into the EPA  
On behalf of the Bendigo & District Environment Council Inc. 30/10/15

Bendigo & District Environment Council Inc. would like to begin by briefly describing a series of events in Bendigo relating to one particular mining project extending over a period of 30 years. It highlights potential problems that have prevented the EPA achieving its stated aims.

For that mining project Bendigo Gold Project to proceed, dewatering of old mine workings was required. The mine water contains Arsenic between 1 to 5 mg/L or 1-5 Tonnes / Gigalitre.

In July 1980 the World Health Organization body, International Agency for Research on Cancer (IARC), published its findings of the 1979 consensus conference which declared Arsenic a human carcinogen (lung and skin).

In 1985 the EPA licensed pumping of mine water (allowing a maximum of 0.7 megalitres/day) containing Arsenic (maximum allowed 2mg per Litre) from that Bendigo mine to an evaporation Pond at Woodvale 16 kilometres away. In total without license breach, 0.5 metric tonnes of Arsenic could be placed into those Ponds, adjacent to a “small acreage” farming community, each year.

In that Licence (EX219) no mention was made of Arsenic being a Carcinogen. In 1987 a further IARC report implicated Arsenic in additional human cancers (Urinary tract and Liver).

In 1988 the first Environmental Effects Statement into the Bendigo Gold Mine was conducted. There was no mention by the mining company or the EPA at that EES that Arsenic was Carcinogen.

At subsequent EES's over that mining project 1989, 1997, 1998, 2004 where the EPA submitted, the word Carcinogen still did not appear in any submission.

In October 1999, the EPA licenced an increase in the volume of water that could be sent to Woodvale by a factor of 4., increasing the annual Arsenic deposition to 2.5 metric tonnes per annum. This occurred without Community Consultation, Planning Panel, EES, or other form of Hearing. Interestingly, this occurred during a prolonged caretaker government period.

With evaporation at the Woodvale Ponds the concentration of Arsenic in the water increased to 6mg/Litre.

However, a problem developed at Woodvale in the late 1990's: too much water was being delivered. A decision was made to spray the Arsenic at 6mg/L into the air to assist evaporation. The EPA were at multiple meetings where this was discussed, with clear evidence of the resulting spray drift going offsite onto nearby farms AND water tanks. No urgent action was initiated.

On Jan 23rd, 2000 (20 years after Arsenic was declared a Carcinogen) the Minutes of a Bendigo Gold Environmental Review Committee (ERC) meeting reveal the following conversation;

Question from ERC Community Representative :

"The condition on the EPA Licence for Woodvale includes a limit of 2ppm (2mg/L) for Arsenic in the water delivered to Ponds, however in December the reported concentration was almost 4ppm"?

Reply by EPA (2 EPA were persons in attendance, one was EPA Manager North West Region), dutifully transcribed verbatim in the ERC minutes;

“The limit placed on the quantity of water delivered to Woodvale is primarily for the purpose of setting fees, NOT (my emphasis) for environmental protection.”

The EPA respondent goes on: “Since there is no discharge to the environment the water quality does not effect the impact on the environment”

One community representative responds "you won't know if any environmental effects have occurred for 10-15 years".

This highlights several issues, still evident today in the EPA’s dealings involving multiple mining contamination events across the state of Victoria;  
i) The EPA was presumably not aware Arsenic was a Carcinogen or of the toxic effects of other minerals and compounds eg. Arsenic, Antimony, Vanadium etc.

The EPA’s Regional Officers do not appear to have the Science / Technical / Medical background to interpret immediate significance of an environmental contaminant. The skill set and emphasis of these officers appears more administrative.

ii) The EPA was concerned about fees not the environment

iii) The EPA clearly did not intervene even when prima faciae evidence of offsite discharge of a Carcinogen was offered. One can only hypothesize why such a failure to respond occurred. Reasons could extend from ignorance to political discouragement.

Fast forward 15 years,

BDEC believes the present EPA continues to exhibit the past features of past failures even today.

A recent Water tank and Soil Study by DWELP (June 2015) revealed 80% of water tanks tested at Woodvale contained Arsenic! Surface soil Arsenic concentration was on average 7mg/kilogram higher than background levels.

This equates to 8 metric tonnes of Arsenic (a carcinogen) being added to soil within a kilometer radius of the Woodvale Ponds.

Combine that with prima facie evidence of recent dust, containing 1,000! mg/kg Arsenic, leaving those Ponds in a recent (April 2015) ERC presentation.

NO active intervention from the EPA is in evidence as of the date of this Submission.

To help overcome the above fallibility in the EPA performing its function, BDEC Inc. would make the following recommendations:

- a) The EPA needs ability to initiate and pursue prosecutions “in house” and to be statutorily independent of Government.
- b) Field Officers educated in basic toxicology or biology.
- c) The EPA needs the power to veto corporate projects or actions, if (the EPA) perceives an environmental risk to human health.
- d) This power should override other Departments eg planning decisions where a contamination event poses serious risk to human health. The EPA should not take precedence over actions taken under the provisions of the Emergency Management Act .
- e) The EPA should have the independent ability to assess and set human safety standards from environmental contamination/pollution. It is currently hamstrung by "Guidelines" published by other Departments. It should have the power to review evidence such as within USEPA Standards and make its own determination. USEPA standards tend to be 5 to 10 years ahead of Australian Standards.
- f) Once the EPA has mastered its primary role above consideration may be

given to extending its role to cover anthropogenic threats to biodiversity.

Yours Sincerely,

Dr. Simon Perrin MBBS, FANZCA, Dip RACOG

Mining Spokesperson

Bendigo & District Environment Council Inc.