

View from kitchen window



This photograph shows the north view from my kitchen window and is similar to that from our dining room that extends further east (right). The WRE (south bund) will cover all this view from the top of the trees just above the fence rail to 45 metres above the skyline. All will be broken waste rock covered.

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MCPHILLAMYS GOLD PROJEC  
SSD-9505

## **I OBJECT to the PROPOSAL**

We spent two years searching for a rural property with reasonable acreage and a presentable dwelling. This property fully satisfied our expectations. Through the 18 years we have lived here many clients and visitors have commented on the beautiful vista across the Mid Western Highway to the landscape where the mine site is proposed.

### **Visual Amenity**

The residence at 232 Walkom Road, at an elevation level of 975 metres and a distance of 750 metre from the mine boundary. Our location on the eastern edge of Kings Plains suggests we are a 'sensitive receptor' although there is no indication of which individual residences fall within this category in the EIS. The house and garden, situated on a ridge and positioned to the NE has a view of the entire mine site along the Mid-Western Highway from Pounds Lane to Dungeon Road. The house is a long rectangular building with the dining room, kitchen, living room, family room, main bathroom, a guest bedroom, the main bedroom and double garage all facing the mine site. The house has been planned and built to take the maximum advantage of the sun during the winter months. The large landscape kitchen window faces the proposed waste rock emplacement and the mine vehicle entrance. I will be able to watch the construction of the mine entrance; the preparation of the site for the disposal of the waste rock; the continuous disposal of the waste rock; the construction of the bund that will take four years; and the daily movement of all the vehicles (690 employees) entering the mine site winding their way up a steep hill to the Regis administration building and the processing plant

When we access vehicles from the garage the mine site is in full view as it is when we drive down the steep ridge to leave the property.

We often relax outdoors for breakfast or on a warm evening we overlook this view. If we have guests over for a BBQ this is where we arrange outdoor furniture. Although the visual consultants took photos from this property these have been omitted from the EIS. Is this because there is such an expansive view overlooking the entire southern mine site? There will be a high level of visual impact for 4 years as a result of mine development. This will remain high throughout the 15 years of the mine's proposed life and beyond with the final view of an artificial landscape with possibly little growth of vegetation covering the toxic reclaimed waste.

### **Biodiversity:**

The proposed mining operations will significantly disturb the nearby wildlife. Mining affects the environment through the removal of vegetation and topsoil, the displacement of flora and fauna, the release of pollutants and the generation of noise and vibrations. The loss of habitat will have long term effects on the threatened koalas and squirrel gliders and the many threatened species of birds. The impact of noise, dust and night lighting, lack of clean water may affect the environment surrounding the mine site and lead to a complete loss of local habitat for these animals. As we are located on the perimeter of the mine boundary I expect we will experience a reduction in wildlife. During the very hot summer of 2018-19 for the first time during 18 years on this property there was a drastic reduction in birdlife in our garden. The changes in climate must be affecting the local Koala population as we recently rescued an injured male searching for food.

The native vegetation enhances our rural view and it has a detrimental affect on the environment to destroy mature trees that are over hundred years old. Any trees that are planted to replace them will not be fully grown in the lifetime of many of the residents in Kings Plains.

### **Environmental Impacts on Health:**

This is a statement from the WHO: 'Health is a state of complete physical, mental and social wellbeing and not merely the absence of disease'.

Although there has been extensive modelling in the EIS - noise, vibration, light emissions, dust pollution, toxic chemical emissions, air pollutants - there is no guarantee that acceptable levels will always be maintained. Cadia Valley Operations 20 kms from Kings Plains has ongoing issues with toxic dust emissions from their tailings dam, noise from the processing plant, and the positioning of lights at night. CVO's nearest rural resident is 3kms from the mine boundary. Complaints come from residents living 15kms away in Errowanbang, Spring Hill and Panuara. The Lake Cowal gold mine at West Wyalong has a 12 km buffer zone and residents have complained about vibrations from blasting and noise. For properties Regis has wanted to purchase on the western mine boundary the residents have been threatened with being seriously affected by noise and dust. The company representatives have been so convincing that these long time (generations) residents have been convinced it has been in their best interest to sell out. Our residence is much closer but on the wrong side of the highway!!

### **Noise**

Because this rural environment is relatively quiet I can hear semitrailer compression breaking on the Mid-Western Highway from within the house. When the Blayney Shire Council operates machinery during roadworks on Kings Plains Road, vehicle noise becomes a nuisance factor.

The mine noise will be intrusive 24 hours a day, 365 days of the year for 10 -15 years at 232 Walkom Road, Kings Plains.

I spend time outdoors on the farm and in the garden. There will be intense noise from the traffic ascending and descending the road on the hill that provides access to the administration building, processing plant and other amenities. The traffic noise that will be generated from heavy vehicles, service vehicles, and employees vehicles entering the mine site adjacent to our property will be distracting. The heavy vehicles in low gear will generated excessive noise as they climb the long hill leading up to the mine processing plant. Noise will be generated from blasting, drilling day and night, the loading and unloading of waste material, constructing the bund and the mine entrance, vehicle warm-up procedures, vehicle movement, extracting material from the pit, and the crushing and grinding at the processing plant, No matter how much 'potential' mitigation is offered by Regis in the way of double glazing, air conditioning and screening they will provide insufficient protection from the exposure to prolonged environmental noise. For Regis to make this offer indicates there is a noise impact that will permeate outside the mine development and affect 'near neighbours'. Quote from EIS 'Noise modelling for construction and operation for outcomes for 'sensitive receptors'- design changes have been made where reasonable and to manage noise emissions feasible to minimise noise as much as possible.' Noise will be a major concern at our residence.

‘Exposure to prolonged or excessive noise has been shown to cause a range of health problems.....continual noise sets off the body’s acute stress response’

‘....it may be sounds we aren’t even aware we’re hearing that are affecting us the most, in particular those we hear when we are asleep’.

### **Health effects of the environment noise pollution: Australian Science Academy**

‘Noise monitoring appears to focus on assessing noise from the perspective of contributing to industrial deafness rather than from the perspective of noise nuisance which causes loss of amenity’

Heavy vehicles and machinery emit very low frequency noise which is not being monitored. This low frequency noise is an important source of disturbance because its wavelength is of the type that resonates in cavities such as rooms of houses, the skull and chest cavities’.

### **EDO Discussion paper 2011**

#### **Vibrations:**

There will be ground borne sound from drilling and blasting during the mine’s construction and operation phases; blasting will be the major source. Due to the closeness of the residence to the mining operations vibrations could possibly affect the stability of the brick residence at 232 Walkom Road.

#### **Air Quality**

##### **Dust:**

As the residence is situated on a hill 975 metres above sea level it often receives strong gusts of wind. The toxic dust from the waste rock dump and blasting spreading coarse particles and particles larger than PM10 will affect our impacts from dust. ‘The vast majority of dust from mining activities consists of coarse particles (40%) and particles larger than PM10, generated from....mechanical disturbance of rock and soil material by shovel, bulldozing, blasting, and vehicles on dirt roads. Particles are also generated when wind blows over bare ground and stockpiles

**.....fine particles below 2.5um in diameter may be of a greater health concern than larger particles as they can reach the air sac in the lungs....coarse parcels (2.5-10) could also be associated with adverse health effect’.**

**[www.nsw.health.nsw.gov.au/environment](http://www.nsw.health.nsw.gov.au/environment)**

The installation of air-conditioning units to mitigate the impact of dust would restrict our availability of good quality fresh air as doors and windows would need to remain closed. If Regis is offering first flush filters on rainwater tanks and air conditioning that in itself is admitting dust will be an issue. This will restrict our enjoyment of the our rural environment.

The potential amenity impacts of dust from the mine operations are: depositing dust onto clothes on the washing line; the house roof solar panels and on to the house roof and shed that transfers dust into the tanks when it rains.

The proposed tailings dam will be only approximately 20 kms from the tailings dams at CVO which has uncontrollable dust emissions despite attempting to control the dust with suppressants. Several months ago I observed a cloud of ‘white dust’ pass over the Regis mine site. I presume this was a dust cloud from the COV tailings dam.

## **Waste Rock Disposal**

The large volume of waste rock generated will be dumped on the disposal site opposite our residence which will make a huge visual impact. Regis intends to use dust suppressants on this high volume of waste rock but there is a reluctance when questioned to provide the name of the product they will use. The dust suppressant used by CVO on the failed tailings dam at Cadia is not suppressing the toxic dust as expected. There will be a significant level of toxic substances from the metallic waste. I am concerned about the 42% of acid forming rock which when exposed to oxygen and water will become acidic and form a solution high in sulphate and elevate the levels of cadmium, copper, lead, zinc arsenic and mercury in the soil. Then there is the problem with the layers of salt that will dry out on the waste dump from the brine water pumped from Lithgow that will be used to suppress the dust. There is the potential for this acid mine drainage to leak into the water table.

'To permit an acid generating mine means future generations will take responsibility for a mine that must be managed for hundreds of years.'

## **Guidebook for Evaluating Mining Project EIAs**

### **Toxic chemical emissions.**

'Doctors are calling for stronger national air pollution standards to limit dangerous pollutants including nitrogen dioxide, sulphur dioxide and ozone ambient air. Air pollution currently causes over 3000 premature and preventable deaths per year in Australia, as well as contributing to asthma, heart disease, lung disease and cancer. Medical group Doctors for the Environment Australia is urging environment ministers to tighten air pollution standards to protect health, and to bring standards in line with international best practice.'

**Media Release:Doctors for the Environment Australia: 6 Aug 2019**

### **Cyanide:**

The cyanidation method of extracting gold gives rise to emissions of hydrogen cyanide. The production of huge amounts of tailings during the life of the mine is a potential source of heavy metal due to the extraction of low grade ore. Regis is planning to use stronger levels of cyanide during the processing operation than at Lake Cowal. This could have a deadly effect on wildlife that enters the mining area.

### **Sulphur Dioxide (SO<sub>2</sub>):**

42% of mine waste is described in the EIS as 'potentially' acid forming. There may not be enough non-acid forming rock during the life of the mine to prevent it from coming in contact with rain water or an elevated water table beneath the waste rock.

'People living near hazardous sites containing sulphuric acid are at risk of breathing contaminated air - spending time outdoors and exercising increases the risk of exposure to sulphuric acid'

## **Acid Drainage Fact Sheet-First national Environmental Health Innovation health Network**

'Exposure to sulphur dioxide can damage the lungs. People with impaired heart or lung function including asthma are at increased risk. Sulphur dioxide is involved in the creation of acid rain and secondary fine particle air pollution which causes cardiovascular and respiratory diseases, including cancer.'

**Expert Position Statement on health-based standards for Australian.....:Lung Health Research centre, Doctors for the Environment, Lung Foundation Australia, Thoracic Society Australia and NZ.**

**Mine Blasting Fumes (NO2):**

Gases a component in blasting plumes can persist in the atmosphere under certain conditions and affect residents nearby or those downwind of the blast site. High levels of NO2 can cause serious lung inflammation and short term exposure can cause irritation to the eyes, nose and throat, headaches, and breathing. Our property is situated downwind from the mine site.

**[www.health.nsw.gov.au/environment](http://www.health.nsw.gov.au/environment)**

**Diesel Fumes (NO2):**

One of the negative ways gold mining affects the environment is the release of large amounts of exhaust fumes from heavy equipment and heavy vehicles. One of the 'hot spots' will be at the mine entrance adjacent to our residence. Vehicle emissions will release a high percentage of nitrogen dioxide into the Kings Plains environment. 'Diesel engine exhaust .....contains a mixture of airborne chemicals - CO2,CO Nitric oxide NO2 - that can be harmful to people. When inhaled these chemicals increase the risk of developing long-term problems -lung and bladder cancer'

**[www.cancer.org.au](http://www.cancer.org.au) and [epa.nsw.gov.au](http://epa.nsw.gov.au)**

'High exposure to NO2 'causes illness and disease impacting on a wide range of organs including lungs, heart, and circulatory system. There is strong evidence for adverse effects in vulnerable groups including people with chronic disease, the elderly and children.'

**Expert Position Statement on health-based standards for Australian.....:Lung Health Research centre, Doctors for the Environment, Lung Foundation Australia, Thoracic Society Australia and NZ.**

**Arsenic:**

Inorganic arsenic found in rocks and mine tailings is harmful. Arsenic is in the ore extracted from the pit. After the gold is extracted from the ore the waste material will go into the tailings dam or be deposited in the waste rock emplacement.

The dust from the tailings dam and waste rock emplacement will be deposited on our roof and implement shed poisoning our rain water; it will settle on the home grown vegetables and fruit; on fences, gates and pasture; and we will breath in the fine dust. Regis has intentions to transport arsenic rich ore body from a local lease 'Discovery Ridge' near Mandurama once the McPhillamys project is approved. This will greatly increase the amount of arsenic in the tailings dam.

'Arsenic can enter the body if we swallow dust or soil that comes from mine tailings. Arsenic enters the body if a person breathes in fine dust that contains arsenic.....studies reported long term affects in people living in areas with arsenic in mine tailings. ....large amounts of arsenic can irritate the stomach, intestines and may damage the heart, kidneys, nerves and blood and cause cancers of the skin, lungs, bladder, liver, kidney and prostate.'

**[www.health.vic.gov.au/hazards](http://www.health.vic.gov.au/hazards)**

**Light emissions:**

The EIS states there will be no night time disturbance from lights. The mine lighting will be intrusive at 232 Walkom Road at night. During the research stage of the Regis project drilling was carried out throughout the night, lighting up the night sky. The lights from the movement of vehicles on the mine site and those entering and leaving the mine adjacent to 232 Walkom Road will impact significantly to the skyglow in an already existing dark sky. Departing vehicles<sup>7</sup> will direct lights towards our residence. We will no longer be able to relax outdoors in the evening to gaze at the stars nor teach the grandchildren about the stars and their constellations.

‘A key factor in how humans sleep is regulated is exposure to light or to darkness....’  
Melatonin is a natural hormone made by your body at night. Bright light inhibits the release of melatonin...’

**[www.sleepfoundation.org](http://www.sleepfoundation.org)**

‘Melatonin is a natural hormone that regulates sleep-wake cycles. Light decreases melatonin production and signals to the body to stay awake

Lack of sleep can affect your immune system. Long term sleep increases your risk of obesity, diabetes and cardiovascular disease’

**[www.mayoclinic.org](http://www.mayoclinic.org)**

**Water Pollution:**

The toxic dust from the 11 sources of dust, the main source being the tailings dam, will enter the atmosphere and pollute the 3 rainwater tanks, the dams and the grazing land. In the 18 years we have lived here there have been three droughts, the present one the worst. There has been a drastic reduction in dam water levels and a limited supply of feed for the few remaining cattle. I want the Belubula river, the local springs and ground water to remain a clean source of water and undisturbed by an industry renowned for using high volumes of water. A water greedy mine makes no sense at a time when there are local water shortages due to drought conditions.

**Mental Health:**

Regis has taken an inordinate time, in fact years to collect material for the EIS. Regis has a reputation for not keeping to their time schedule. They have not had adequate answers for many of our questions. We are adversely affected from the impact of this mine proposal. The company is fully aware of the impact it will have on our lives, yet Regis representatives fail to acknowledge this. As explained in the visual amenity section 232 Walkom Road has a panoramic view of the entire southern boundary of the mine site and to the north across the waste dump. I have spoken to the consultants who have informed me that in their opinion there is little visual impact from our residence of the mine operations when I look out the kitchen window. I spend much time in the garden and paddocks where I will have a constant reminder of the mining operations. I have made 3 requests to Regis to have our noise levels monitored at the residence but I have not had a response. The consultant placed the noise monitor that measured our noise levels (R18) over a hill near R15 yet our residence is behind R17 which is going to be greatly impacted by the noise from the construction of the mine entrance and the vehicles entering the site and climbing a steep hill. We will be impacted by traffic noise but not to the same degree as R17.

When it comes to negotiating to sell our 300 acre property we are left stranded. Either it is sold at a reduced price or it will not sell at all. At present any property for sale at Kings Plains is not attracting buyers. Regis does not intent to enter into a voluntary purchase agreement, in fact the EIS states ‘the financial burden of any decline in property values

rests with the existing property owners.’ Because of the harsh winters, the eternal drought conditions and the ageing occupiers who have become too old to manage the farm it makes sense to down-size. The capital investment in the property is now frozen and a portion of it happens to be my superannuation. The future looks bleak if we are compelled to stay due to the proposed mine. In the EIS Vol 8 the mitigation in the action plan suggests residents be allowed to leave the district but whenever someone who feels greatly impacted by the project tries to negotiate with Regis they a ‘hit a brick wall.’ This just leaves us in limbo which just exacerbates our stress level which could become worse as time passes. The evident stress and anxiety of Kings Plains residents from time delays and misinformation from Regis prompted me to organise a health counsellor from the Central West to conduct a mental health workshop for Kings Plains residents in December 2018. This was well attended and much appreciated.

## **Conclusion**

Regis has been asked by residents to provide a buffer zone, as other local gold mines have done for their local population, but Regis ignores this request.

All of the issues that have been mentioned- noise, pollution, light emissions, dust pollution and toxic chemical pollution - have a combined detrimental effect on the health of the population living nearby. Why offer to provide close residents with air-conditioning, double glazing and first flush filters on rainwater tanks if there are no negative impacts from dust and noise and chemical pollution as Regis keeps stating? If Regis is given permission to operate the mine the health of all residents living close by with long term exposure to the mine pollutants will be at risk of developing low immunity and disease. Those most at risk will be residents who already have health problems as well as the young and the elderly. For this elderly couple an industrial development on our doorstep will impact on our health and longevity according to health science and the medical profession.

I am not prepared to live in a polluted atmosphere that could eventuate in a third diagnosis of cancer. ‘Health will no longer be the state of complete well-being but merely the presence of disease’. (WHO rewritten).

Regis is imposing on our lifestyle and should take responsibility for this intrusion and take the first step to negotiate a settlement rather than force the landholder to do so. 232 Walkom Road (R18) will not be a suitable place for a family but far more suited to accommodation for itinerant mine workers. I do not wish to live adjacent to a nuisance neighbour.

It appears when mining companies in Australia spend millions setting up a proposed mining site, no matter what the consequences for the environment and those settled close by, there are expectations that the government will give permission for the mine to go ahead.

Gold is in oversupply. The Reserve Bank Governor would like to give it away!!!