Ibrahim Farag 1072 Blue Springs Road Cope Lot 72 DP 750742

# **Objection to Ulan Coalmine Mod 6 Application**

Ulan Coalmine is a very large coal extractor operating within the Mid-Western Regional Council LGA, in close proximity to the Goulburn River, it is one of three large coalmining operations operating in the immediate area.

UCMPL currently has consent to extract in excess of 22 million tones of thermal coal per annually until 2033. With three large longwall underground operations mines and previously an open cut mine, it covers an area of almost 150 km², much of which is environmentally sensitive pristine wooded forest with many indigenous cultural heritage areas. As landholders we have no idea of the total volume of coal been extracted by the three companies, the cumulative impacts on surface and Ground water or impacts of subsidence on the region. I believe it is incumbent on the department to make those facts known to the property owners.

The original Mod 6 application proposed an extension of the MOD 3 approval over my property Lot 72 DP 750742. In the absence of the mandatory environmental assessments prior to the MOD 3 application I strenuously objected till those studies were performed and completed. UCMPL elected to amend the MOD 6 application by deleting the proposed extensions over my property.

It is my contention and strong submission that it is totally remiss and negligent of the Department to continue to consider applications by UCMPL until the mandatory environmental studies associated with MOD 3 are performed.

Those studies were not performed due to the submission of FALSE & MISLEADING Information in the EA's prepared by UMWELT on behalf of UCMPL, the Department is very conversant with the entire matter and has to date failed to ensure those studies are performed.

#### **SURFACE AND GROUND WATER:**

It is disturbing that comprehensive studies have not been performed on the cumulative impacts of all the current approvals on our surface and ground water, {our water resources are the life line of the entire area}.

As a consequence the immeasurable loss of our priceless Surface & groundwater "an essential NATURAL resource", has never been quantified, I am in doubt this is because to do so would be detrimental to the future operations of UCMPL and the other two mine companies in our district.

### **SUBSIDENCE:**

In addition, it is of great concern that the subsidence modeling submitted and accepted by the Department has proven to be totally inaccurate and flawed.

The sad reality that the subsidence and surface cracking resultant from extraction beneath the property known as "Woodbury" has proven that the modeling is totally erroneous and flawed. That property has suffered from at least one SINK HOLE and the subsidence cracking to the surface has by far exceeded the modeling. While the predicted surface cracking was less than 200mm wide, it has in fact exceeded 1.4m in width.

Any reasonable person would anticipate that the consent authority would halt all operations and have the subsidence and water modeling peer reviewed by a SUITABLY qualified experts in addition to an internal review / investigation.

The disparity between the predicated surface cracking and the resultant surface cracking is not what could be regarded or viewed as "within the margin of error". The disparity in the surface cracking can only be described as dire if not catastrophic, and reinforces the dangers of relying on modeling.

It would be beyond alarming if the Department has been made aware of the disparity and not commissioned independent consultants to conduct site visits so and to prepare an impartial report on the failures of the modeling.

As landholders we are at the mercy of the Department in the hope they will always do the right thing and as the consent authority will act to protect of the interests of the landowners impacted by mining activities.

Finally the flawed modeling will undoubtedly have an impact on the veracity of the other EA studies. In simple words, had the modeling predicted there could be surface cracks well in excess of a meter in width:

- 1. Would the Department have approved the applications?
- 2. What impact would this have had on the reports by other consultants preparing studies on threatened species, natural habitats, creeks, indigenous cultural artifacts and heritage?
- 3. Sandstone outcrops, caves and cliffs?
- 4. The draw down levels ground water, aquifers and spring fed dams?
- 5. Water bores?
- 6. The loss of natural surface water into the catchments
- 7. Creeks, dams, billabongs, natural springs and swamps?

## IMPACTS OF SUBSIDENCE ON SURFACE AND GROUND WATER:

Given the matters raised above, there is no doubt that the flawed subsidence modeling will directly impacted the water modeling which included impacts on aquifers and surface runoff. Given that "Woodbury" is the first privately owned property that UCMPL is extracting coal from beneath, the Department must revisit all the modeling prior to permitting extraction from beneath other privately owned land holdings.

To that end it I ask the Department and assessing officers the following questions:

- 1. Are they able to inform the land owners with any degree of certainty if the surface cracking and subsidence will be consistent with the modeling they relied upon prior to granting the UCMPL consents for underground wall mining?
- 2. That their properties will not suffer surface cracking mirroring that of Woodbury?
- 3. If the Surface cracking and subsidence will exceed the modeling what impact will that have on their surface water, runoff to catchment, aquifers and bores?
- 4. What are the current daily / weekly / monthly water pump outs rates from all the longwalls currently been mined?
- 5. Will the Department revisit and have the subsidence and water modeling they relied upon peer reviewed by totally independent experts in the respective fields?
- 6. What will the impacts on the ground be as a direct consequence of the loss of surface and ground water?
- 7. Does the Department accept that loss of surface and ground waters will have a permanent, irreversible and dire impact on threatened species, their natural habitat, and indigenous cultural artifacts and sandstone and cliff collapses.

# OTHER MATTERS OF SERIOUS CONCERN:

- 1. Why has the Department accepted a Modification application that is silent on the cumulative impacts of subsidence, Ground and surface water as they do not acknowledge that the subsidence modeling has proven fundamentally flawed and erroneous?
- 2. It is my very strong submission that the Department can not approve any further extension to the Ulan operation beyond what has been approved no 2033.
- 3. The Department has a duty to acknowledge and ensure that their consideration of any coal application includes global decarbonisation targets for the management of climate extremes are met.

#### **Annexures:**

In support of the matters I raise I have attached a number of scientific papers and other relevant material:

- 1. A plan of the areas ALREADY declared within a Mine Subsidence District for Mudgee.
- 2. Scientific paper on "IMPACT OF LONGWALL MINING ON SURFACE WATER-GROUND WATER INTERACTION AND CHANGES IN CHEMICAL COMPOSITION OF CREEK WATER"
- 3. Scientific paper on "SURFACE WATER-GROUNDWATER INTERACTION IN THE FRACTURED SANDSTONE AQUIFER IMPACTED BY MINING-INDUCED SUBSIDENCE: 1. HYDROLOGY AND HYDROGEOLOGY"
- 4. Scientific paper on "SURFACE WATER-GROUNDWATER INTERACTIONS IN A CATCHMENT IMPACTED BY LONGWALL MINING"
- 5. Scientific paper on "THE INVESTIGATION OF GROUNDWATER-SURFACE WATER LINKAGES USING ENVIRONMENTAL AND APPLIED TRACERS: A CASE STUDY FROM A MINING-IMPACTED CATCHMENT"
- 6. Scientific Paper on "SURFACE WATER-GROUNDWATER CONNECTIVITY IN A LONGWALL MINING IMPACTED CATCHMENT IN THE SOUTHERN COALFIELD, NSW, AUSTRALIA"
- 7. Scientific Paper on "CHANGES OF WATER QUALITY IN A STREAM IMPACTED BY LONGWALL MINING SUBSIDENCE"
- 8. UCML Plan showing extent of "Catchment Boundaries and Remnant Ponding Impacts"
- 9. I have also attached my Social Impact survey response as UCML have NOT attached it in full as originally discussed and agreed. I object profoundly to their attempts to bury my responses.