



Background reading re Kanagulk Landcare Group's troubles with the Iluka Douglas mine

Margaret Arthur

to:

info

07/10/2015 10:21 PM

Hide Details

From: "Margaret Arthur" <[REDACTED]>

To: <info@epa-inquiry.vic.gov.au>,

History: This message has been replied to.

2 Attachments



KLG let Minister re Mining Warden enquiry December 2014.doc



KLG concerns re Iluka mines updated September 2014.doc

Hello,

After the Horsham forum Robert Arthur was talking to Penny and Jane about the Kanagulk Landcare Group's concerns about the Iluka Douglas mine project and about Iluka's plans to turn pit23 into a 20 hectare dump for concentrated radioactive waste from the Hamilton Mineral Separation Plant for the next 20 years. The ore is being sourced from Jacinth Ambrosia mine near Ceduna in SA and the Balranald mine in NSW is due to come into production in the next 12 months or so.

The attached files will give you some background information about our concerns.

Kanagulk Landcare Group has never been opposed to mining but we believe it should be done with integrity and with care for the health and safety of the local community and the natural environment.

KLG members are also very concerned about the DHHS responses to the KLG radon monitoring of sites just outside the mine area. ARPANSA supplied the equipment and analysed the results. The results showed levels of radon gas that were MUCH higher than background. The DHHS claimed that KLG calculations and methodology were flawed, but it took them over 2 months to provide us with written comment about how it was flawed. The opening paragraph incorrectly reported the initial contact with DHHS after the results were received from ARPANSA. The last paragraph concluded that KLG was incorrect in claiming that pit 23 was the source of the radon; KLG had never even thought that the radon was from pit 23 but suspected another 2 pits! Moreover [REDACTED], author of the DHHS report, claimed his calculations showed that there was no risk to anyone living and working in the vicinity of the mine site. However he based his results on 1760 hours exposure per annum while KLG believes he should have used at least 5000 hours, probably more. Full time near the site would be $365 \times 24 = 8760$ hours per annum. People who work from home, such as farmers in the vicinity, could be exposed for at least 5000 hours. Using these figures, [REDACTED] results would have been well over the allowable dose to the public of 1 milli-sievert per annum.

Further, at the last ERC meeting in the last week of August 2015, another member of DHHS told how he had set up real time monitors to give initial results for the radon in the vicinity of the mine. KLG members asked when the tests were conducted. He said after they travelled from Melbourne. This meant that tests were being done in the hottest part of the day, when radon levels would be lowest. The diurnal effect means that the highest levels of radon gas will occur in the early hours of the morning, particularly on a frosty morning. DHHS has told Council (and presumably others) that there is no problem with radon gas at the site, BUT THEY DID NOT MENTION THE DIURNAL EFFECT AND THE HOURS THEY MONITORED. Ie DHHS has mis-led the Horsham Rural City Council.

This is why we feel strongly that EPA should be the responsible body for monitoring radiation levels in the environment and for ensuring that the environment is not harmed by a huge unlined pit filled with

concentrated radioactive waste.

If you wish to discuss these issues further or have any questions, please contact me by phone [REDACTED] or email [REDACTED]

We could write several books about all our problems with Iluka and what the regulators have allowed the company to get away with. We would like to see EPA given 'teeth' to ensure that things are done properly in the interests of the environment.

Regards,
Margaret Arthur
President Kanagulk Landcare Group and on behalf of Robert Arthur

Kanagulk Landcare Group
c/o Mrs Margaret Arthur

Phone [REDACTED]

Email [REDACTED]

10th December 2014

To: The Minister for Energy and Resources,
The Hon Lily D'Ambrosio, MP,
Level 16,
121 Exhibition St
MELBOURNE VIC 3000
Lily.d'ambrosio@parliament.vic.gov.au

Dear Ms D'Ambrosio,

Kanagulk Landcare Group (KLG) is extremely concerned about many of the practices at the Douglas mineral sands mine of Iluka Resources over the last few years. Hence KLG calls upon you to instruct the secretary of your department to ask the Mining Warden to conduct an enquiry into Iluka's mineral sands mining operation at Douglas.

Such an enquiry is urgently needed so that landowners bound by confidentiality agreements can speak out without fear of recriminations about Iluka's poor practices on the Iluka mine sites, former and current employees can speak out without penalty about deceitful and dangerous practices on the Iluka mine sites and the local community can bring forward concerns with the governance and practices of Iluka and government departments dealing with the Douglas mine.

Kanagulk Landcare Group has been concerned about Iluka's practices since the 2009 Work Plan variation was signed off by the then Minister. With a change of management, Iluka quietly pushed through Work Plan Variation 2009, without ERC or community consultation. That led to KLG concerns about many of Iluka's practices.

- 1) Pit 23 has been used to receive radioactive waste from the Hamilton Mineral Separation Plant (MSP) and the work plan was changed to exempt Iluka from complying with the original EES by which the waste was to be co-disposal and buried at depth. Hence a massive radioactive dump has been established, without any risk assessment as per geo-technical and hydrological studies in accordance with ARPANSA and ICPR guidelines, on the risk of leachate from pit 23 to ground water streams and hence to the Glenelg River and the Douglas chain of significant wetlands. Pit 23 is on a sand base but is un-bunded. How did Iluka get approvals to use pit 23 like this without a thorough independent risk assessment? What Iluka is doing in pit 23 is not consistent with what the Minister signed off in the 2009 Work Plan variation.

- 2) The waste that is currently being returned to pit 23 from Hamilton MSP is from ore that was sourced from other mines sites in Victoria and interstate. World's best practice states that waste should be returned to its source. On what basis did Iluka get approval to bring waste from the Ouyen mines to Douglas?
- 3) The Minister only gave approval for waste to go in the bottom of pit23 (ie in one layer). Why is the department allowing multiple layers and no co-disposal in pit 23 as required by the 2009 Work Plan variation?
- 4) Iluka is currently proposing to use pit 23 as a 'landfill' site, distinct from the rest of the Douglas mine site for the disposal of wastes from the Hamilton Mineral Separation Plant until 2030. This would result in a massive radioactive dump, sited in a prime agricultural district, and threatening community health and the natural environment, including the Glenelg River and the Douglas chain of salt lakes. The fact that this waste could be derived from any material sourced from anywhere in the world, so long as it passes through the Hamilton Mineral Separation Plant, is a major concern. How did the Department of Health come to the conclusion that the contents of this landfill would be category c waste and therefore not involve the EPA?
- 5) In December 2014 Iluka presented to Horsham Rural City Council a document to support its case for pit 23 to become a 'land-fill'. The document contains flawed data, has no cross references and KLG believes it was designed to mislead the Council. The sources and calculations used for this document need to be thoroughly investigated.
- 6) Very poor work practices resulted in the over-filling of pit 19. Although Iluka has done some works to improve the drainage and stop further spills into the Glenelg River, KLG still has concerns about pit 19 and the long term effects on the environment arising from the overfill. What the Minister signed off on re pit 19 is not consistent with what has occurred in pit 19.
- 7) KLG believes that the 2009 Work Plan approval was obtained based on erroneous information. It stated that Iluka measured more than 30 bores and that all local bores had a reading of 18,000ec units ie were too saline for stock and domestic purposes. In fact only one bore had this reading and most other bores are suitable for stock and domestic purposes. In a consultation phase, this would have been learned. Current decisions by government departments are still being made on the erroneous data.
- 8) KLG believes that Iluka breached the work plan re co-disposal in the slimes dam.
- 9) The Strathlyn Bore Field was set up during the drought to provide water to the mine site. The operating rules showed a lack of understanding of groundwater flows and hence damage was done to the Glenelg River.
- 10) There has been biased governance by the relevant government departments: Earth Resources (first part of DPI and later DSDBI) and Department of Health. Eg As a result of KLG concerns, a review of the Douglas mine by [REDACTED] of DSDBI

was conducted in 2013-4. However no stakeholder, no-one from KLG and no community member from the ERC was consulted.

- 11) KLG believes that Iluka has hidden behind stakeholder and worker “confidentiality agreements”. KLG also believes that Iluka has condoned or encouraged dishonest work practices.

In the early years of Iluka’s Douglas mine, the Kanagulk Landcare Group and the ERC had a good working relationship with Iluka. If there were concerns, they were discussed and, where necessary, Iluka changed its practices. eg When it was pointed out that Iluka had 5m wide tree lines, while the EES stated they should be 20m, Iluka planted more trees. Since the Work Plan Variation 2009, that relationship has deteriorated, because of poor practices by Iluka and the regulators. KLG is not against mining. It is concerned for the long-term health of the local community and the natural environment.

Hence KLG is calling for an enquiry by the Mining Warden, so that all concerns of landowners, the community, and past and present employees of Iluka can be brought into the open and directions given for the safe future of the Douglas mine site.

If you have any questions or want further examples of Kanagulk Landcare Group’s concerns, please contact me.

Yours faithfully,

Margaret Arthur
President, Kanagulk Landcare Group

cc Ms Emma Kealy, Member for Lowan
Mr Greg Barber, Leader of the Greens in the Legislative Council

**CONCERNS of KLG about ILUKA RESOURCES' DOUGLAS MINE
to OCTOBER 2012 (updated October 2013, September 2014, October 2014, January 2015)**

CONCERN	RATING	NOTES AND ACTIONS
1. Failure to consult with local community re dumping of concentrated tailings from Ouyen mine in pit 23. Variation to Ouyen mine plan without consulting stakeholders at Douglas / Kanagulk.	Very high	KLG believes this is a breach of Mineral Resources Act – DPI (DSDBI under Napthine government) has not wanted to act.
2. Failure to consult with local community about the dumping of tailings from the Hamilton Separation Plant in pit 23 after active mining had ceased at Douglas. .	Very high	Refer to concern number 32 below. Failure to consult over bringing waste from Jacinth Ambrosia mine near Ceduna to pit 23 at Douglas.
3. No risk assessment done on pit 23.	Very high	Iluka appointed consultant to assess pit 23 in about October 2012 after months of complaints from KLG. February 2013 KLG told it would not be able to see the report, but DPI or Manager MAY be able to summarise findings. This has not occurred as at October 2013 and [REDACTED] stated in terse responses that it would not be done.
4. Landscape vandalism – failure to restore pit 19 to original drainage lines and landform.	Very high	Feb 2013 KLG told that 1 metre has been removed from Pit 19 and drainage lines AROUND the pit will be put in place. The Work plan is being changed retrospectively. NOTE: The subsoil and topsoil has not yet been returned to Pit 19. 2014 - subsoil and topsoil returned to pit 19.
5. KLG suspects that pit 19 was overfilled with slimes which would be in contravention of the EES and this added about 4 metres to height of the landscape.	Very high	[REDACTED] thinks (August 2014) that the overfill may be as much as 7 metres or more.
6. If slimes were illegally dumped in pit 19, then there should have been a risk assessment and an engineering response as occurs with Tailings Storage facilities.	Very high	Changes above have been made on recommendation of a consultant – KLG not party to this. The plan as explained at Feb 2012 ERC did not allow for return to pre-mining drainage lines.
7. Failure to comply with June 2009 mine plan variation and raise the walls of Tailings Storage Facility by 2 metres.	High	No action from DPI (now DSDBI)
8. Failure to explain to DPI or ERC that the TSF wall was not being raised.	High	This indicates the high level of deceit practised by Iluka.

<p>9. Failure to comply with the intention of the Mine Plan Variation 2009 which allowed tailings from Echo and Ouyen mines to be stored at Douglas instead of being returned to place of origin, on the assumption that the TSF wall be raised 2 metres.</p>	<p>Very high</p>	<p>This indicates the high level of deceit practised by Iluka. No action by DPI (Now DSDBI)</p>
<p>10. Iluka failed to follow the EES process of rehabilitation; only a 3 km footprint to be open at one time, but Iluka had much more than this (I was told 14km open at one time.) Echo mine finished January 2012 and now rehabilitation almost finished.</p>	<p>Very high</p>	<p>As at September 2014 Echo closure plan is being finalised. ERC members having input into this. October 2014: ERC members given NINE days only to reply to Echo Mine Closure plan details. Eventually given an extra week. This was not adequate to consult with Echo landowners. EXPECTATION: There must be at LEAST a month, preferably two months, to respond to the Douglas Closure Plan when the time comes.</p>
<p>11. Mis-leading community about time-frames from ceasing active mining to total restoration. KLG unaware until about 12 months ago that mine-site could be open until 2030.</p>	<p>High. As of September 2014 critical concern</p>	<p>At the May 2014 ERC meeting Iluka announced that they intend applying for a change of planning for pit 23 and surrounds, so they can continue dumping waste from Jacinth Ambrosia near Ceduna and dump from Balranald in NSW in pit 23.</p>
<p>12. Concern about capping of pits with only 5 metres of overburden /topsoil, in an area where very deep cracks have been known in the clay soils.</p>	<p>Very high</p>	<p>██████████ to research the deep cracking of soils on ██████████ farm a few years ago. March 2013 - Still to be done.</p>
<p>13. Destruction of native grasslands. Pre-mining study by ██████████ identified native grassland ecosystem which is worthy of protection.</p>	<p>High</p>	<p>Refer to ██████████. These areas should not be returned to cropping land, but put under covenant. We think that ██████████ has not been consulted by Iluka since his pre-mining study.</p>
<p>14. Strathlyn borefield - operating guidelines ineffectual in protecting the Glenelg River, 2006-2008. Damage to riverine redgum forest floodplain ecosystem and growling grass-frog (frogs not heard for 5years).</p>	<p>Very high</p>	<p>Refer to ██████████ phone ██████████ for further information.</p>
<p>15. Mine site bores not monitored on an appropriate and regular basis, especially with potential risk from pit 23.</p>	<p>Very high</p>	<p>KLG believes that regular monitoring should occur quarterly for at least 20 years. At the ERC meeting Feb 2013, ██████████ stated more bores would be placed in strategic places but this had not been done by the August 2013 ERC meeting. August 2014 - more bores have been placed but the pattern of them does not allow for detailed monitoring of flows from pit23. Should be in a transect line from pit 23.</p>

16. Misleading presentation of the radioactivity levels of the bores. The data was presented as Radium 227 and 228 and not expressed as total radioactivity, which should include all the daughter radio nuclei.	Very high	<p>██████ told by former Iluka employee that many bores exceeded allowable levels.</p> <p>September 2014: More readings have been supplied to ERC in 2014. Some exceedances have been noted.</p>
17. Dust pollution on Good Friday (6 th April 2012). EES stated that a binding agent would be used to stabilise the mine site. KLG heard that some staff of Iluka were concerned about the pit 23 tails blowing over their work site	Very high	<p>Failure of Iluka to keep promises made in EES process.</p> <p>Once active mining ceased, no binding agent used and dust monitoring reduced to once a week.</p> <p>September 2014 – binding agent was used last autumn after KLG complaints.</p>
18. Dust pollution on Wednesday 23 rd May 2012. EES stated that a binding agent would be used to stabilise the mine site.	High	Failure of Iluka to keep promises made in EES process.
19. Issue of monazite dust on ██████ house not addressed until he threatened legal action.	Very high	<p>Compensation needed for ██████'s legal bill????</p> <p>Was this listed as a formal complaint to Iluka? (not mentioned as an ERC incident report.)</p>
20. Failure in public consultation	Moderate Very high	<p>Iluka has made positive steps to address this: more regular meetings with KLG and ERC members, also initiation of risk assessment in pit 23.</p> <p>September 2014 – at last ERC meeting on Wed August 27th ERC members were given copy of Iluka's closing plan for the Echo mine and asked to respond by Friday 5th September. Totally inadequate time frame, as ERC members needed time to consult each other and farmers in Echo region – and ERC members have their own businesses to run.</p> <p>January 2015 – This closure plan should have been examined in detail by Horsham Rural City Council.</p>
21. Poor governance at ERC process. Stakeholders or those with pecuniary interest hesitant (afraid?) to raise issues. ERC members should declare conflicts of interest.	Very high	<p>*DPI to action (now DSDBI)</p> <p>September 2014 – No real progress.</p>
22. Poor governance in way election of ERC members conducted August 2012.	High	Raised with ██████ of DPI.- nothing to be done about this.
23. Poor governance in that Iluka did not distribute technical reports prior to ERC meeting.	High	<p>Iluka agreed at meeting with KLG on Wed 3rd October 2012 to raise this at ERC meeting in November. February 2013 information sent to ERC members a week before ERC.</p> <p>September 2014 – most ERC material is</p>

		forwarded a week prior to meeting EXCEPT the closure plan for Echo mine which is being rushed through- only a week given for ERC members to analyse and respond..
24. Failure to acknowledge complaints as formal complaints, as indicated in the KPI (Key Performance Indicator). ***	High	September 2014 – Iluka has established an 1800 number for phone complaints to be made.
25. Questions to ERC not always answered at ERC even though submitted prior to the ERC meeting.	High	Mine management has made some effort to see that this is done in later meetings in 2012. Replies at Feb 2013 ERC meeting were read fast and sounded as if they had been put past a company solicitor or superior. Margaret Arthur asked for the written version be forwarded to KLG asap – not received as at 14 th March. January 2015 – this answer never received. Questions submitted to May 2013 ERC not answered as 5 days not enough time (██████████) finally received answers about 10 weeks later but no detailed information given. September 2014 – Iluka ██████████ ██████████ sent answers to KLG questions by email within 3 weeks after the ERC meeting. HENCE THE QUESTIONS AND ANSWERS ARE NOT RECORDED IN THE MINUTES. These questions were submitted 10 days before the meeting.
26. Formal requests for data made at ERC meetings has not always been forwarded. (eg ██████████ requested radiological data from Monitoring bores.)	Very high	██████████ had requested raw data; graphs presented to ERC meeting August 29 th 2012 are of analysed data. See also no 25 above May ERC 2013.
27. In early 2012 requested proof of delegation of authority for the signing of June 2009 mine plan variation. Only the delegations for 2012 supplied.	High Low	2009 proof of delegation required from DPI. – to be sighted by ██████████ or ██████████. Correct document eventually received from ██████████ during 2013.
28. Ecological offsets are only 5 m wide; GHCMA requires off-sets to be 20m wide	Low	██████████ raised at ERC that EES called for 10 or 20m corridors of trees.... Iluka then planted a lot more trees than required to make up for shortfall. * Check that corridor completed.
29. Failure to manage ecological off-sets before KLG complained	Low	September 2014 – ██████████ has raised several times the fact that offsets are infested with phalaris. Iluka said at August 2014 ERC that they will ask Trust for Nature to spray phalaris again.
30. Strategic policy flawed.- failure to mention ‘natural environment’ in “Iluka’s Game Plan”	High	Needs to be rectified by the Iluka Board.

<p>31. Concerns over pits 19 and 21 and the way they were constructed.</p>	<p>Very high</p>	<p>Refer to [REDACTED]</p>
<p>32. Concerns that Iluka wants to have the planning for pit 23 changed so it can be used as a “landfill” (Iluka’s words) for waste from Jacinth Ambrosia mine near Ceduna SA and the Balranald mine in Western NSW when it starts. Iluka may also have unannounced plans for waste from other sites. (eg Balranald in NSW)</p>	<p>Critical</p>	<p>September 2014. Pit 23 is an unbunded (un-lined) pit with surface area 18.8 hectares. The waste from Hamilton MSP is about 8-10% monazite, so pit 23 will be a massive monazite dump if Iluka gets its way. Already there are about 20,000 tonnes of monazite in the pit, where originally there was about 1300 tonnes of monazite in the mineral sands at the base of the pit. The concern of KLG is that, as the monazite breaks down, there will be increased radium, radon gas and radioactive particles leached into the groundwater (used by local farmers as stock water) and ultimately to the Glenelg River. October 2014 Also concern that radon gas could be escaping into the air through uncompressed cover over pit 23.</p>
<p>33. In attachment to minutes of August 2014 ERC meeting, was detail about monazite break down to inert lead. Lead -210 is formed before inert lead; this is radioactive and attaches to dust particles. Refer ARPANSA document #143, pages 17 and 18.</p>	<p>Critical</p>	<p>October 2014 KLG now has concern that lead -210 attached to dust particles could have been blown over surrounding farm land since the mining waste from Hamilton was first returned to pits.</p>
<p>34. Poor rehabilitation practices on - [REDACTED] land. - [REDACTED]’ land. This is contrary to the information in Iluka’s newspaper advertisements during 2014.</p>	<p>Very high</p>	<p>When KLG raised issues of poor rehabilitation over the years, the [REDACTED] [REDACTED] [REDACTED] stated that issues were between the landowner and Iluka. During Mine tour by ERC members before the ERC meeting on November 26th 2014, members of KLG on the tour were concerned at the poor engineering of a drain on [REDACTED] land which was next to a void – engineered for a 1 in 10 year rain event. Concern that a breach would occur in a 1 in 20 or greater rain event, the water would go into the void. Also concern that the wall of the void had cracks and it could collapse. Also concern that pit 10 on [REDACTED] land was not filled in according to the original layers but overburden just pushed into pit. Large very hard lumps formed. [REDACTED] has lost 2 years production on several hectares.</p>