

Dubbo Project

Community Consultative Committee Meeting

Minutes

| Title: | Community Consultative Committee | Meeting Date: Time: | 17 May 2021 5.30 pm | | | |
|-----------------------|---|------------------------|------------------------|--|--|--|
| Chairperson: | Michael Silver OAM | | | | | |
| Meeting Attendees: | Janice Hosking, Community Member | | | | | |
| | Megan Brennan, Community Member Manny Portelli, Community Member | | | | | |
| | Royce Munro, Community Member | | | | | |
| | David Woodall, Managing Director ASM | | | | | |
| | Michael Sutherland, General Manager NSW | | | | | |
| | Esther Williamson, Secretariat | | | | | |
| Apologies: | Clr Kevin Parker, Dubbo Regional Counci | l | | | | |
| Venue: | 220 Obley Road, Toongi NSW 2830 | | | | | |

Agenda Item 1 Welcome

The meeting was declared open at 5.30pm.

Agenda Item 2 Acknowledgement of Country

Acknowledge the traditional owners of the land, and their Elders past, present and emerging.

Agenda Item 3 Apologies

The chairperson noted the apology from Clr Kevin Parker.

Agenda Item 4 Declaration of Pecuniary or other interests

Michael Silver declared his expenses as Independent Chair are borne by the Proponent. Pecuniary submissions received from new members, Megan Brennan, and Royce Munro.

Michael Sutherland noted, likely need to revisit Declaration of Pecuniary forms, since the demerger of Australian Strategic Materials Ltd from Alkane Resources Ltd and the likelihood of some committee members now holding ASM shares.

Chairperson, Michael Silver will reissue Declaration of Pecuniary forms to all members.



Agenda Item 5 Chair's Minute (Committee Resignations & Membership)

Issue raised by Michael Silver in sourcing an Aboriginal Community Representative.

Positions were advertised and closed on Friday 13th November. Nominations were invited for new community positions, to representative local Aboriginal community.

Post the two new CCC appointments, Chairperson had highlighted the opportunity for an indigenous representative on the CCC and forwarded an invite to Dubbo Local Aboriginal Land Council.

Several contact attempts have been made, for nominating interest in CCC, via post, email, and calls to the ALCC's main number. No response has been forthcoming to date.

It is hoped after now appointing a new CEO & Chairman to Dubbo Local Aboriginal Land Council, and David Woodall's meeting with the Elders on 18 May, some interest might be generated.

Agenda Item 6 Endorsement of Minutes of previous meeting

The minutes of the previous meeting of 16 November 2020 were approved and uploaded on the Proponents website.

Action item from previous minutes: "Dubbo Project process modification, due to the refined process" discussion from Mike Sutherland - has no change to process currently. Item held for discussion at next meeting.

Agenda Item 7 Business Arising from previous minutes

Nil business.

Agenda Item 8 Correspondence

 NSW Department of Planning, Industry and Environment: Advising appointment of Megan Brennan & Royce Munro as community members of the Dubbo Project Community Consultative Committee

Agenda Item 9 Proponent's Report

David Woodall provided the committee with an update:

ASM overview:

Historically, Dubbo Project was looking to develop lower value products and metal oxides. With 90% of rare earths metals being produced in China, and 6% in Japan, getting the Dubbo Project up and running would prove challenging by only producing an oxide, and could not obtain full value.



- In 2016, Alkane invested in a new innovative process with an investor to develop "group 4 elements" (titanium (Ti), zirconium (Zr), hafnium (Hf), rutherfordium (Rf)), into metals. This process was initially successful in producing titanium metal, and the process was adapted to our rare earth material's. All products have now been metallised on a proprietary scale.
- Mid last year a commercial pilot plant, was established in South Korea. This involved testing the commercial & larger scale production metals, which was successful.
- ASM is currently in the process of developing a metal plant in South Korea, where it expects a 5,200t p/a metal output.
- Plan is to use construction of the Korean metal plant as a template to replicate in Europe,
 Australia and potentially North America. This will allow the Dubbo Project to sell oxides to
 itself or transfer the material to its metal plants to produce metal so now ASM can now talk
 to end users i.e., manufacturers. ASM has been able to simplify its metallurgical process, and
 this is part of the work that is now being progressed.
- As production of metal is now achievable, South Korea is particularly interested, as they are a major manufacturing hub, and struggle to source metals which are not produced in China. As such, a relationship with Australia and South Korea can now be formed based on Australia building a plant in Korea and providing a reliable metal source.
- Dubbo will produce in its first phase, approx. 50% of South Korea's rare earth metal requirements. Having a deposit which can supply 75+ years and a second deposit nearby provides confidence in supply to the Koreans.
- A lot of momentum in Korea has been achieved, through talks with four five of the largest companies, and looking for a strategic partner in South Korea, to fund the significant part of Dubbo Project development. We are looking to synergise with the Korean government on both the commercial & government side to assist with financing. Letter of support from Australian Government is also an important factor.

Dubbo Project Optimisation & Opportunities:

- The optimisation study is nearing completion end, but ASM have delayed publication due to other opportunities we would like to include, such as a 40-Megawatt renewable power plant. Reasons around including a renewable power plant are the aim to operate net carbon neutral and have some certainty in power operating costs.
- Another opportunity is to develop a chlor-alkali plant onsite, which would produce our own hydrochloric acid and caustic soda. These are the two largest reagents required for processing and could offer an opportunity to on-sell these products.
- Three parties in Korea, signed interest in the opportunities of the Dubbo Project. Hoping to
 obtain a definitive proposal to include in the optimisation study, which will allow us to see
 the true benefits.
- A metal plant is likely to be established at the Dubbo Project, as a number of these materials
 are highly reactive and oxidise quickly. One metal of interest is titanium which is a highly
 sort after material used in 3D printing. The Dubbo Project titanium contains less oxygen,
 which withstands more heat, and has less risk of burning. With 3D printing gaining great
 momentum, high quality titanium powder will be in great demand, and the Dubbo Project is



well placed to provide supply to the market if we act quickly. Dubbo is also likely to be the largest hafnium producer in the world, which is a remarkably interesting dense material used in turbine manufacture due to it thermal properties (extremely high melting point).

- There are a lot of opportunities within the Dubbo Project, however we will extract and process the most high-value products.
- For the Dubbo Project to be successful, appropriate high-quality recruitment will be required to develop an organisation with the right culture, right behaviour, and attitudes. Australian Strategic Materials has started this process and is now in the final stages of recruiting the Executive Team.

Michael Sutherland provided the committee with an update:

Logistics:

- Road approved to have 75 B-double trucks per day, however, the actual requirement by road would now be 95 B-double trucks per day. Approved for 600,000 tonnes of reagents, and now required to transport 818,000 tonnes of reagents.
 - 600,000 tonnes of reagents could be transported via rail, and the remaining 218,000 tonnes could be transported by 22 B-doubles on road.
 - Obley Road will need to be upgraded to meet B-Double standards, with widening, straightening & shoulder works to occur. Two bridges, and major culverts included. Will be designed for 110km travel, as per Dubbo Regional Council, with 100km speed limit.
- Rail Approval has given to re-open the rail line from Newcastle to Molong.
 - Re-instate the existing four rail crossings in town, and the two rail crossings along Obley Road. No new crossings will be built. The alternative is to install a flyover in Dubbo.
 - Bulk reagents to travel by rail from Newcastle to Toongi.
 - Plan to build a 500m long siding (100m wide) at existing Toongi Siding location, with a reach stacker to off load containers.
 - o Man-proof fence to be erected to secure goods, and potentially fence whole line.
 - ASM has made application to NSW government for assistance with re-establishing the crossings which the Government removed.

Basalt Quarry:

- Approval is in place for a basalt quarry onsite, which is located below the ore body (in the footprint of the waste rock emplacement).
- Looking to modify consent to take basalt offsite, for use to upgrade the road & rail line. Greenhouse gas (from diesel road transport) savings would be achieved to source and process on site, rather than transport from Dubbo.

Agenda Item 10 Other Agenda Items (members questions)

- Q. Apart from main rare earth ASM plans to metallise, are there other opportunities to explore?
- A. Dubbo Project has significant amounts of various rare earths, but to build a plant to process all potential materials significantly increases the cost as each individual element is added.



Q. Is there radiation activity in the rare earths?

A. There is radiation in some types of deposits. Dubbo's trachyte type deposit is weakly radioactive with traces of uranium (100ppm) and thorium (350ppm). These radiation levels are extremely low and the expected dose over a whole year at the closest residences to the mine will be 0.03mSv which is less than one chest x-ray or a flight from Sydney to London.

To put it into perspective, radiation like asbestosis is all around us.

When we mine materials at Dubbo, it will be treated with limestone and reverts it back to a similar form, neutralising the acid waste rock.

The trace amounts of uranium and thorium (along with other waste minerals) will be diluted with salts and/or neutralised with limestone, making it even lower in concentration than the original ore and no longer classified as radioactive. it will be stored on-site in double-lined waste facilities. Uranium will not be recovered or stored.

Any product leaving Dubbo will have zero radioactivity.

- Q. Does radiation concentrate with processing of materials?
- A. No. Through the 17 various steps of solvent extraction, a stabilised material will form. Waste is then transferred to a covered, double lined RSF, and will be less radioactive than original product.

Environmental, Social, and (Corporate) Governance, are the key issues to have as little impact as possible.

- Q. Is there a timeline/roadmap?
- A. Optimisation of Dubbo Project expected to be finalised in July 2021. It is expected that the front-end engineering and design work will take approximately 9 to 12 months to complete EOI will occur during this time, both internationally & domestically. Once David Woodall is back in South Korea (July 2021), the progressing of finance opportunities will follow. ASM are hopeful in 2022 that it might be breaking ground at Dubbo.
- Q. What processes will occur in the next 18 + months?
- A. The course of events over this time will involve having the South Korean metal plant up and running and likely to have one or two plants nearing the end of their construction.

With the successful capital raising of \$86 million AUD, it will finance us to build the metal plant in South Korea and allow ASM to complete the front-end engineering and design work required.

The South Korean government gave ASM a grant of US\$4.5 million and completed an audit on this work in November 2020.



- Q. Will ASM build an Australian Metal plant here (Dubbo) first?
- A. This will be a question for the Australian politicians.
- Q. What does ASM need from our politicians?
- A. ASM has asked the Australian Federal Government for a letter of support outlining what number (dollars) the government finance institutions are willing to assist with. ASM have had assurances that the Government will seriously look at support. This will be crucial to instil confidence and have South Koreans also invest in ASM.
- Q. What will happen with Obley Road?
- A. The road will be upgraded to B-Double standard, with widening, straightening & shoulder works to occur. Two bridges, and major culverts included. It will be designed for 110km travel, as per Dubbo Regional Council standards, with 100km speed limit.

Talks are underway with Council regarding re-opening the rail line, as approved to do so. With the increase in reagents required for processing, re-establishing the rail is now viable. It would greatly reduce road transport risk and deliver considerable GHG savings.

- O. Will a communications tower be erected?
- A. The project will require good communications, particularly for solvent extraction. ASM will consider communications systems to enable the logistics task and processing plant to run smoothly.
- Q. What processes would be worked on first?
- A. Works on road and rail would need to commence early in the project development, to get materials to site.
- Q. When will community meetings commence?
- A. Makes sense to start EIS & community meetings when ASM kicks off the project modification. Once some direction re financing is in place, ASM will have more certainty in the steps forward.

Agenda Item 11 General Business

Nil



Agenda Item 12 Next Meeting

Meetings are to be held on the 1st Monday of every 4th Month. Next proposed meeting will be held on Monday, 16 August 2021.

The meeting closed at 6.38pm.

Approved:

Michael J Silver OAM Independent Chair

11 June 2021



Dubbo Project

Community Consultative Committee Meeting Action List

Action Sheet - Meeting 17/05/2021

| Ref # | Meeting Date | Agenda Item | Action | Responsibility | Completion date |
|-------|-----------------|----------------|---|----------------|-----------------|
| 1 | 16/11/20 | | For discussion - Dubbo Project process modification, due to the refined process | M Sutherland | On hold |
| 2 | 17/05/21 | 4 | Declarations of pecuniary interest to be re-issued due to demerger of ASM | M Silver OAM | 11/6?21 |
| 3 | 17/05/21 | 4 | Discussion with Wiradjuri Elders group about positions on CCC | | 18/5/21 |
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