MINUTES

Clean TeQ Sunrise
Community Consultative Committee



	Community Consultative Committee	Meeting Date: Commenced:	15 February 2018 1:10pm	
Independent Chairperson:	Lisa Andrews (LA)			
Member Attendees:	 Cr Mark Hall, Lachlan Shire Council (MH) Cr Alan Ward, Parkes Shire Council (AW) David Rees, Condobolin Chamber of Commerce (DR) John Lagerlow, Trundle Community Consultative Committee (JL) Des Ward, Community Representative (DW) Helen Quade – Alternate Community Representative and Alternate Trundle Community Consultative Committee delegate (HQ) Narelle Sunderland, Community Representative (NS) Vicky Swadling, Wiradjuri Condobolin Corporation (VS) [left the meeting at 3:30pm] James Fisher, Clean TeQ Syerston NSW Manager (JF) Justine Fisher, Clean TeQ GM Government, External Relations & Community (JuF) 			
Invited Guests:	 John Hanrahan Clean TeQ, Approvals Lead (JH) Stephen Grocott Clean TeQ, Chief Technical Development Officer Ronan Kellaghan Ramboll Environ, Air Quality Specialist 			
Venue:	Function Room, SRA Pavilion, Condobolin			
Minute taker: Close:	Karen Worthington, Clean TeQ Community Relations Officer (KW) 4:47pm			

1. Welcome & Introductions

Independent Chairperson, Lisa Andrews welcomed all members and guests to the first 2018 Community Consultative Committee (CCC). LA declared that she is an Independent Chairperson, appointed by the Secretary of the Department of Planning and Environment and engaged by Clean TeQ to chair this CCC meeting. For the benefit of presenting guests, each member provided a brief introduction.

2. Apologies

Apologies were received from Deputy Mayor Barbara Newton (Parkes Shire Council), Cr Steve Karaitiana (Forbes Shire Council), Geoff Rice (Parkes Chamber of Commerce), Scott Magee (Clean TeQ), Mayor Ken Keith (Parkes Shire Council), Laurie Hutchinson and Ally Coe (Wiradjuri Condobolin Corporation)

3. Business Arising from previous minutes

LA confirmed that the minutes from the November meeting were finalised and a copy emailed to members on 15 December 2017.

Actions:

Item 1: JuF confirmed that minor changes were made to the Clean TeQ Sunrise film.

Item 2: JH provided LA with correspondence detailing pest animal control measures. This was forwarded to members on 3/2/18.

Item 3: The FAQ document was forwarded to members by LA on 4/12/17. No comments were received. This document is finalised and is available on the Clean TeQ webpage.

4. Correspondence

LA provided a report on incoming and outgoing correspondence, as per the below:

- 28/11/17 Email to members informing them that MOD 4 is on exhibition until 13/12/17
- 4/12/17 Email to members with final draft of the FAQ document, requesting review and comment
- 5/12/17 Email to members with the draft minutes from 23/11/17 CCC meeting
- 8/12/17 Email from Lachlan Council advising that they have reviewed the Q&A sheet and have no comment on its content
- 8/12/17 Email from JuF attaching the document "Potential Road Transport Impacts in Trundle", which was emailed to CCC members the following morning
- 14/12/17 Email from JuF copying in the Progress Association's notice in the school newsletters
- 15/12/17 Email to members with the finalised minutes
- 20/12/17 Email to members with the MOD 6 (construction camp) briefing document
- 16/1/18 Email from Clean TeQ advising that the CCC minutes from November 2017 have been uploaded onto the project website
- 1/2/18 Email to members with the Meeting Notice & Agenda for this meeting
- 2/2/18 Email from Cr Steve Karaitiana advising that he is an apology this meeting due to the Forbes Council meeting
- 2/2/18 Email from Cr Barbara Newton from Parkes Council, advising that she is an apology for this meeting
- 3/2/18 Email to members confirming the venue for the CCC and attaching correspondence (Action Item 2 from the previous minutes), regarding kangaroo and pest animal management
- 8/2/18 Email to members with the change in venue to the SRA Pavilion
- 14/2/18 Email to members with a reminder for this meeting.

LA **moved** that the correspondence report be accepted.

Seconded: JuF

5. Reports from Clean TeQ

A range of questions were asked during the following reports and presentations. All Q&A is recorded in Item 6 - Q&A.

James Fisher Clean TeQ NSW Manager

JF provided a general update on the activities that had taken place since the last CCC meeting in November 2017. This included;

- Modification 4 placed on public exhibition. This exhibition period closed on 13 December 2017.
 A response to all submissions has been provided to the Department of Planning and Environment.
- Modification 5 Determination was received and approval was granted.
- Modification 6 was placed on public exhibition. This exhibition period closed on 7 February 2018. Three public objections were received. Clean TeQ has since provided the Department of Planning and Environment with a response to all submissions received.
- Clean TeQ commissioned GTA to undertake an Independent Pedestrian Access review in Trundle. The report was presented to Trundle & District Progress Association and Parkes Shire Council on 14/2/2017. A hard copy of the report was provided to all CCC members.
- Autoclaves Successfully transported two autoclaves from New Caledonia to Port Pirie
- Accommodation facility secured accommodation facility for the construction phase
- Toronto Stock Exchange listed on the Toronto Stock Exchange. Trading commenced on 15 December 2017
- Appointed Stephen Grocott as Chief Technical Development Officer
- Commenced a short-term drilling program at Clean TeQ Sunrise

- Signed a lease for office space in Parkes
- Reached 'in-principle agreement' with all three Councils for our Voluntary Planning Agreement (VPA)
- Announced scandium partnership agreement with Chinalco and Chongqing University
- Appointed Project Operations Director, Tim Kindred (commences in April)

John Hanrahan Clean TeQ Approvals Lead

JH provided an update on the MOD4 addressing the following:

Overview of MOD4, detailing the proposed changes

JH provided information regarding the improvements being made via the MOD4, some of these improvements include;

- The addition of a water treatment plant to recycle water;
- Mine site modified layout, increased TSF size, reduced evaporation ponds and water storage dam size;
- Increased sulfuric acid plant production to extract more metal, and reduce external power requirements;
- Access to surface water on the Lachlan River
- Other mine infrastructure area components (reconfigured)
- Addition of blasting at the mine site to improve ore extraction (expected later in the mine life)
- There are no changes proposed to the following:
 - Approved surface development area
 - Life of Mine
 - Mining method and rate
 - Open cut pits
 - Waste emplacements
 - o Processing rate, and
 - Workforce
- Specialist reports within the MOD4 Environmental Assessment include:
 - o Noise and Blasting Assessment
 - o Air Quality Assessment
 - Preliminary Hazard Analysis
 - Road Transport Assessment
 - Water Management Assessment
 - o Aboriginal Cultural Heritage
 - Biodiversity Surveys
- The transport assessment included assessing possible impacts due to:
 - Increased sulfur demand;
 - External limestone supply;
 - Ammonium Sulphate product;
 - o Proposed limited heavy vehicle use of the McGrane Way, and
 - o Short-term road transport of water (during construction).
- Limestone guarry, Rail Siding and Gas Pipeline
 - No changes proposed
- MOD4 submissions received

JH informed the CCC that the majority of submissions received related to two main concerns; Project Traffic travelling through Trundle and Air Quality and Emissions.

o Project Traffic in Trundle

JH informed the CCC that to help address the communities concerns Clean TeQ commissioned an independent pedestrian access review (GTA) in Trundle. The report concluded......it is considered unlikely that a significant deterioration in the safety of that environment would result with the modified Project...As for the existing conditions, some aspects of the pedestrian and vehicular environment could however be improved to mitigate the existing issues ...

A copy of the GTA pedestrian review was provided to all CCC members for review.

In addition, Clean TeQ prepared a supplementary Road Noise Assessment (Renzo Tonin & Associates). This assessment concluded that the MOD4 would not lead to any exceedances of the relevant (NSW Road Noise Policy) road noise criteria in Trundle.

o Air Quality & Emissions

JH informed the CCC that Stephen Grocott, Clean TeQ and Ronan Kellighan, Ramboll Environ would provide a comprehensive response following his update. This would include a description of control measures to be implemented; details of emissions; dispersion mechanisms; modelling process; and predicted impacts (including context of health/odour limits).

Reduced Traffic Numbers

JH informed the CCC that Clean TeQ had undertaken a review of traffic requirements through Trundle and that by implementing shuttle buses and using heavier capacity trucks (heavy vehicle permit), the traffic numbers are predicted to reduce to a total of 146 vehicles. The table below summarising the forecast traffic numbers through Trundle has been included as part of Clean TeQ's Response to Submissions:

	Light Vehicles	Heavy Vehicles	Shuttle Buses	Total Vehicles
Modified Project – With Higher Capacity Vehicles	70	70	6	146
Employees	50	-	-	50
Employee Shuttle Buses	-	-	6	6
Limestone (with higher capacity trucks)	-	52	•	52
Lime	-	8	-	8
Other	20	10	•	30

Modification 6 Status Update

- o EA lodged in December 2017 and public exhibition closed on 7 February 2018
- o Clean TeQ is preparing a response to submissions

Justine Fisher Clean TeQ General Manager Govt. External Relations and Community

JuF provided the CCC with an update on upcoming community engagement activities, this included;

Community Engagement

- o Community drop-in sessions in Trundle and Fifield on 26 & 27 February respectively
- Meet with near neighbours in Fifield in the coming weeks
- Publish and distribute our second edition of the community newsletter (print and electronic)
- Launch online forms for people to register their interest in future employment and procurement opportunities
- Investing in our community Voluntary Planning Agreement
 - 'In-principle' agreement for Voluntary Planning Agreement with Forbes, Lachlan and Parkes Shire Councils
 - \$400,000 per annum community contribution (50% Lachlan Shire Council, 25% Forbes Shire Council and 25% Parkes Shire Council)
 - o Additional \$340,000 in road maintenance contributions per annum
 - o Total spend of \$740,00 per year
- Community Investment Program
 - o To be launched later this year

Stephen Grocott Clean TeQ Chief Technical Development Officer

SG was invited to present at the CCC to help address concerns raised around Air Emissions from CCC and community members. SG provided the CCC with a presentation on Air Emissions. Prior to commencing the presentation SG provided background information on his experience working in the

technology and processing fields for the past 35 years. SG provided information that covered the below topics, a copy of the presentation, titled *15 February 2018, CCC*, is available on the Clean TeQ website:

- Air Emissions Sulfur Dioxide
 - Sulfur is a by-product of natural gas production and oil refining
 - o Imported sulfur will be burnt in an acid plant to make sulfur dioxide (SO₂)
 - o Acid will be stored in tanks and used to dissolve the nickel, cobalt and scandium
- Processing Plant

SG provided a flowchart detailing the various steps associated with the processing plant and metals recovery. This chart is shown on page 21 of the 15 February 2018, CCC presentation. [Available on the Clean TeQ webpage.]

- Sulfur Dioxide Health
 - o High concentrations, for long periods of time, can affect health
 - Maximum acceptable air concentrations are often determined after applying a safety factor to the maximum concentration that doesn't affect an "exercising asthmatic"
 - World-wide health authorities say maximum 1 hr per year at 0.2 ppmv^{*} (same as Australia's NEPM**)
 - o Working backwards, the NSW EPA limits our stack emissions to 1,000 ppmv.
 - SO₂ doesn't bio-accumulate.

In closing SG informed the CCC that:

- Clean TeQ are selecting from amongst the world's best acid plant manufacturers and designs
- Clean TeQ are aiming for less than the EPA limit of ~350 ppm
- Clean TeQ monitor stack emissions and publish online
- The stack is designed to achieve efficient SO₂ dispersion
- Clean TeQ has used state-of-the-art, validated dispersion modelling (Ramboll)
- Ground level concentrations are below concentrations that might affect the most sensitive of people (e.g. exercising asthmatic)
- SO₂ doesn't bio-accumulate
- SO₂ only affects rain water quality or causes acid rain in air sheds if there is massive, untreated SO₂ emissions from hundreds of untreated sources (e.g. power plants burning high sulfur coal and metal smelters)
- How Clean TeQ will manage and monitor emissions

Ronan Kellighan Ramboll Environ, Air Quality Specialist

RK provided a presentation to the CCC on the Air Quality Assessment completed for MOD4. The presentation provided information for members that covered;

- NSW EPA approved methods for air quality assessment in NSW which specifies:
 - How input data is collected and used:
 - Meteorological data
 - Emissions data
 - Terrain data; and
 - Building, receptors etc.
 - How dispersion modelling should be performed.
 - How results should be presented and interpreted.
 - What should be included in the air quality assessment report.
- Explanation of what a dispersion model is and a simplified example of a dispersion equation
- Selecting the right dispersion model and approved models for use in NSW
- Specific inputs used in the Sunrise (MOD4) dispersion modelling
- NO_x and SO_x Emissions Also known as 'Acid Rain'
 - Acid Rain is a process where SOx and NOx emissions react with water in the atmosphere and fall to the ground as wet or dry deposition.
 - No evidence of 'Acid Rain' occurring in NSW even in concentrated heavy industrial areas (i.e. Hunter Valley and Wollongong).

 Predicted SOx and NOx ground level concentrations are well below air quality objectives for ecosystem health, biodiversity and agriculture.

6. Q&A

During the various presentations CCC members asked a range of questions. These questions and answers provided are details below:

Q: DW asked what McGrane Way will be used for?

A: JH informed the CCC that McGrane Way is expected to be used for transport of minor reagents and consumables with possibly 2 deliveries (heavy vehicles) per day. JH informed the CCC that McGrane Way is currently excluded for use by project heavy vehicles due to a development consent condition. Seeking approval for use through MOD4 will provide flexibility for transport routes.

JF added that future use of a rail terminal in Dubbo wouldn't be ruled out however, approval to do so would be required.

Q: HQ asked if the revised traffic numbers will form part of the Development Consent.

A: JH informed the CCC that the Development Consent is unlikely to contain detailed information specific to the number of vehicle movements. It was explained that while the Development Consent isn't likely to state specific traffic numbers, if the modification is granted, Clean TeQ would be required to comply with the revised numbers. The development consent states that Clean TeQ must carry out the development generally in accordance with the EIS which includes environmental assessments prepared for the modification. This also includes Clean TeQ's Response to Submissions which describes the revised traffic numbers.

Q: DW asked what would happen if the Westella Limestone quarry doesn't go ahead.

A: JF informed the CCC that initially all limestone would be sourced from a 3rd party. The limestone coming from this supplier is a higher grade than that available at Westella meaning less is required. Westella may be used in the future depending on plant requirements.

Q: JL asked if the public would see the Response to Submissions (MOD4).

A: JH informed the CCC that the Response to Submissions was a public document and available on the DPE website.

Q: JL asked what the proportion / schedule of truck movements through Trundle would be?

A: JF informed the CCC that truck movements associated with limestone would be consistent over a 24-hour period.

Q: DW asked if Clean TeQ could confirm if the Rail Siding would be built.

A: JF informed the CCC that the project team is working through construction and planning around the rail siding.

JH stated that the rail siding is part of the approved project and that any change to sulfur transport would require a modification to the Development Consent.

Q: DW asked how the stack will be monitored?

A: SG informed the committee that the Stack will likely be monitored 24/7 via a monitoring device that is placed across the top of the stack. Real-time data is monitored from the Control Room.

Q: HQ asked if real-time data would be available to neighbours.

A: SG informed the CCC that it was unlikely that neighbours would have access to real-time data, but that weekly / monthly reports could be provided.

Recommendation: A recommendation was made that all monitoring data be provided to the CCC once operational, including any non-compliances.

Q: DW asked if local Met data was used in the Air Quality Assessment modelling.

A: RK informed the CCC that the onsite met station was no longer is use and that no onsite data was available. Data from the Condobolin Met station was used as it displays similarities.

Q: JL asked what happens when sulfur de-rails.

A: SG informed the CCC that sulfur is not classified as a dangerous good and that it is similar to what is commonly used in domestic gardens.

JF added that the sulfur will arrive via ship and be transported on rail in containers. The sulfur would then be transported from the rail siding to site via truck where it will be rear tipped.

Q: HQ asked what reagents associated with the project are classified as Dangerous Goods.

A: JF informed the CCC that some of the reagents classified as Dangerous Goods included; Ammonia, Hydrochloric Acid and Sulfuric Acid.

JH added that all Dangerous Goods will be transported and managed as per relevant regulations.

7. General Business

DW asked if Clean TeQ would apply for water harvesting rights on company owned land. JH informed the CCC that all landholders have harvestable rights and that there isn't an approval process associated with this right.

DW asked where will water required for construction come from. JF informed the CCC that the base case was as per MOD4 and would come from the approved borefield. JF also noted that discussions have been held with Parkes Shire Council to investigate options and viability of obtaining water from Trundle.

HQ asked whether Clean TeQ holds a Water Access Licence (WAL). JH informed the CCC that Clean TeQ does hold a WAL.

DW asked why the company had purchased a WAL from Borrowa Irrigations for 243ML. JH informed the CCC that Clean TeQ is required to hold sufficient entitlement to account for any dewatering of the open cut pits prior to this take occurring. The license needed to be in the Lachlan Fold Belt groundwater source. Groundwater modelling completed to date indicates any water ingress into the pits will be negligible and therefore the 243ML license should be sufficient. JH also informed the CCC that he would check the licence with regards to it being an irrigation licence.

DW asked if all roads would be upgraded prior to construction. JF informed the CCC that the project team are working with LSC to prioritise roads and that Wilmatha Road will be the first upgraded.

HQ raised concerns with regards to engagement and communication methods being used by Clean TeQ when negotiating noise and powerline easement agreements. JuF thanked HQ for her feedback and stated that she would talk to the teams responsible internally.

NS asked how much waste would be generated from the Construction Camp, where would it go and what impact would it have on landfill. JH informed the CCC that waste would be addressed through MOD6 in consultation with Lachlan Shire Council (LSC).

LA reminded the CCC that the purpose of minutes is to provide a summary of the meeting. To ensure all questions from the community are addressed, LA recommended that a new agenda item be included for all future meetings, "Community Concerns" and requested that members provide a list of questions two weeks prior to the meeting. Responses will be provided at the meeting and recorded in the minutes.

8. Next meeting

Next meeting to be confirmed.

ACTION ITEMS

ITEM	ISSUE	RESPONSBILITY
1	Confirm details of Borrowa Irrigation WAL	JH