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Department of Planning and Environment
Returned via Major Projects Planning Portal

Attention: Gen Lucas
Gen.Lucas@planning.nsw.gov.au

12 May 2022

Dear Ms Lucas

New Request for Advice - Secretary's Environmental Assessment Requirements Constellation Project (SSD-41579871) – Tritton Resources Pty Ltd

I refer to the email from the Department of Planning and Environment to the Environment Protection Authority (EPA) dated 2 May 2022 seeking the EPA's Secretary's Environmental Assessment Requirements (SEARs) to assist with the preparation of an Environmental Assessment for the proposed Constellation Project (SSD-41579871) located primarily within Lot 4 DP751341 (the Proposal).

The EPA has reviewed the document titled "Constellation Project Scoping Report" prepared by AARC Environment Solutions dated April 2022. The EPA understands the Proposal is seeking to develop a new open cut mining operation with underground operations. The final project design is still being determined through the pre-feasibility study, however, the Proposal in general will:-

- mine copper bearing ore through open cut and underground methods;
- transport the ore to Tritton mine for processing or leach the ore on-site depending on mineralogical characteristics and economic value;
- establish facilities on site, for administration, water management and ore management; and
- establish a waste rock emplacement on site.

The EPA has responsibilities for the regulation of scheduled activities under the *Protection of the Environment Operations Act 1997* (POEO Act). Based on the information provided to the EPA, this activity is scheduled under the POEO Act and the applicant will require an Environment Protection Licence (EPL) to carry out scheduled activities. If planning approval is granted, the applicant will need to apply to the EPA for a Licence

The EPA has considered the Proposal and provides the information it requires to properly assess the Proposal at **Attachment A**. The EPA's key information requirements for the Proposal must include an adequate description and assessment of:

1. Air quality impacts;
2. Noise and vibration impacts, including blasting;
3. Water quality and soil surface water management;
4. Waste management and disposal;

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5. Traffic and transport impacts;
6. Waste management, chemical storage and bunding; and
7. Cumulative impacts

The EPA has also provided the appropriate guidance material to be considered (but not limited too) at **Attachment B**.

It is important that all assumptions and conclusions made in the environmental assessment are supported by adequate data. The proponent should be aware that:

- any commitments made in the environmental assessment may be formalised as approval conditions and/or EPL conditions
- the EPA may require the provision of a financial assurance and/or assurances, consistent with provisions under Part 9.4 of the POEO Act. The amount and form of the assurance(s) would be determined by the EPA and required as a condition of an EPL
- the EPL will require the Proponent to prepare, test and implement a Pollution Incident Response Management Plan and/or Plans in accordance with Section 153A of the POEO Act.

If you have any questions about this matter, please contact Jenny Rushton by phone on 02 6883 5301 or by email to info@epa.nsw.gov.au

Yours sincerely,

Damien Rindfleish
Unit Head – Regulatory Operations Regional

Encl: Attachment A – EPA's Recommended Secretary's Environmental Assessment Requirements
Attachment B – Guidance Material

ATTACHMENT A – EPA's Recommended Secretary's Environmental Assessment Requirements – Constellation Project (SSD-41579871)

How to use these requirements

The EPA requirements have been structured in accordance with relevant guidelines, as follows. It is suggested that the EIS follow the same structure:

A. Executive summary

B. The proposal

C. The location

D. List of required approvals and licences

E. Identification and prioritisation of all issues

F. The environmental issues

G. The mitigation measures

H. Justification for the proposal and conclusion

The EIS should address the specific requirements outlined under each heading below and assess impacts in accordance with the relevant guidelines/standards at **Attachment B**.

A Executive summary

The document's executive summary should include a discussion of the proposed development, the key environmental risks, the identified mitigation measures, and an overall conclusion and justification for the proposal.

B The proposal

The proposed development must be adequately described and should clearly state and refer to:

1. the type, the nature and size of the proposed development, including proposed average and maximum annual production rates that are expected to occur;
2. the type, the nature and amount of the processes and the products to be used, including the plant and equipment proposed for use, fuel and chemicals required and proposed methods for their transportation, storage, use and their emergency management provisions, including relevant process flow diagrams;
3. the by-products produced and/or wastes produced, including the fate of such products;
4. the staging and timing of the proposal, including any construction works and any plans for potential future expansion plans and the proposed construction and operational hours, including and heavy vehicle movements;
5. the anticipated benefits to relevant industry, community, etc;
6. the anticipated level of performance in meeting required environmental standards and cleaner production principles; and
7. the proposal's relationship to any other facility or industry.

C The location

Provide an overview of the setting in which the proposed development is to take place in its local and regional environmental context including:

1. the location of the proposed facility, its layout, including plant and equipment, and details of the surrounding environment, including land use zoning with appropriate maps/diagrams;
2. the topography;
3. meteorological data (e.g. temperature, wind (prevailing wind direction and strength), rainfall, evaporation, etc);
4. surrounding land uses, including ownership details of any residence and/or land likely to be affected by the proposed facility with appropriate maps/diagrams;
5. ecological information (vegetation, fauna, waters) with appropriate maps/diagrams; and
6. availability of services and the accessibility of the site for passenger and freight transport.

D List of approvals and licences

Identify all approvals, licences or permits required to undertake the proposed development as well as those already obtained and those to be obtained.

Based on the information provided and should the proposed development be approved; the proponent will need to make a separate application to EPA for an environment protection licence for the Constellation Project (SSD-41579871). Additional information is available through EPA's

Guide to Licensing document. General information on license requirements can also be obtained from EPA's Environment Line on 131 555 during office hours or can be found on the EPA web site (click here).

E Identification and prioritisation of issues / scoping of impact assessment

Identify a scoping risk assessment methodology, undertake a risk assessment, and identify and prioritise key issues.

F The environmental issues

1. Environmental impacts of the project

1.1. The EIS must address the requirements of Section 45 of the *Protection of the Environment Operations Act 1997* (POEO Act) by determining the extent of each impact and providing sufficient information to enable the EPA to determine appropriate conditions, limits and monitoring requirements for an Environment Protection Licence (EPL).

1.2. Impacts related to the following environmental issues need to be assessed, quantified and reported on:

- **Air quality impacts**: air quality including dust and particulates from all sources. Measures to prevent or control the emission of dust from vehicle movements and particulates from mining activities.
- **Noise and vibration impacts** associated with blasting, and operational noise particularly machinery, plant and truck movements.
- **Waste** including details of solid and liquid waste management at the mine. Consideration needs to be given to transportation, assessment and handling of waste; waste processing, including reuse, recycling, reprocessing or treatment both on and offsite; disposal options for all wastes or recovered materials at the premises; bunding and storage; as well chemical storage and hazardous materials and radiation, where relevant.
- **Water and Soils** including site water balance and sediment and erosion controls during construction and operation phases.

The Environmental Impact Statement (EIS) should address the specific requirements outlined under each heading below and assess the impacts and proposed controls for managing the environmental impacts of these activities in accordance with the relevant guidelines mentioned.

2. Licensing requirements

2.1. The development is a scheduled activity under the *Protection of the Environment Operations Act 1997* (POEO Act) and will therefore require an Environment Protection Licence (EPL) if approval is granted.

2.2. Should project approval be granted, the proponent will need to make an application to the EPA for its EPL for the proposed facility prior to undertaking any on site works. Additional information is available through the *EPA Guide to Licensing* document.

SPECIFIC ISSUES

3. Air issues

3.1. The EIS must demonstrate the proposal's ability to comply with the relevant regulatory framework, specifically the *Protection of the Environment Operations (POEO) Act 1997* and the *POEO (Clean Air) Regulation 2021*. Particular consideration should be given to ensuring sensitive receptors are protected from any adverse impacts from dust and airborne particulates from all activities associated with the proposal.

3.2. The EIS must include an air quality impact assessment (AQIA). The AQIA must be carried out in accordance with the document, *Approved Methods for the Modelling and Assessment of Air Pollutants in NSW* (2022). The assessment must identify all sensitive receptors in proximity to the proposed development and present the potential impacts on those receptors, including worst case scenarios.

3.3. The EIS must detail emission control techniques/practices that will be employed at the site and identify how the proposed control techniques/practices will meet the requirements of the POEO Act, *POEO (Clean Air) Regulation* and associated air quality limits or guideline criteria.

4. Noise and Vibration

The EIS must assess the following noise and vibration aspects of the proposed development

4.1. Construction noise associated with the proposed development should be assessed using the *Interim Construction Noise Guideline (*DECC, 2009).

4.2. Vibration from all activities (including construction and operation) to be undertaken on the premises should be assessed using the guidelines contained in the *Assessing Vibration: a technical guideline* (DEC, 2006).

4.3. If blasting is required for any reasons during the construction or operational stage of the proposed development, blast impacts should be demonstrated to be capable of complying with the guidelines contained in *Australian and New Zealand Environment Council – Technical basis for guidelines to minimise annoyance due to blasting overpressure and ground vibration* (ANZEC, 1990).

4.4. Operational noise from all industrial activities (including private haul roads and private railway lines) to be undertaken on the premises should be assessed using the guidelines contained in the *NSW Noise Policy for Industry* (EPA, 2017).

4.5. Noise on public roads from increased road traffic generated by land use developments should be assessed using the guidelines contained in the *NSW Road Noise Policy* and associated application notes (EPA, 2011).

5. Waste, chemicals and hazardous materials and radiation

5.1. The EIS must assess all aspects of waste generation, management and disposal associated with the proposed development.

5.2. The EIS must demonstrate compliance with all regulatory requirements outlined in the POEO Act and associated waste regulations.

5.3. The EIS must identify, characterise and classify the following in accordance with the EPA's *Waste Classification Guidelines (2014)* and associated addendums:

i. all waste that will be generated onsite through excavation, demolition or construction activities, including proposed quantities of the waste;

ii. all waste that is proposed to be disposed of to an offsite location, including proposed quantities of the waste and the disposal locations for the waste. This includes waste that is intended for re-use or recycling.

5.4. The EIS must outline contingency plans for any event that may result in environmental harm, such as excessive stockpiling of material, or dirty water volumes exceeding the storage capacity available on-site.

5.5. The EIS must demonstrate that appropriate spill containment will be provided for storage, filling and loading of all fuels and other chemicals to be used on site, in accordance with the relevant Australian Standard.

5.6. The EIS must provide details of all solid and liquid waste management at the proposed development, including:

i. The transportation, assessment and handling of waste arriving or generated at the site;

ii. Any stockpiling of wastes or recovered materials at the site;

iii. Any waste processing related to the proposal, including reuse, recycling, reprocessing or treatment both on and off-site;

iv. The method for disposing of all wastes or recovered materials at the premises;

v. The air or water emissions arising from the handling, storage, processing and reprocessing of waste at the facility; and

vi. The proposed controls for managing the environmental impacts of these activities.

5.7. For any wastes classified as industrial or hazardous under the EPA's Waste Classification Guidelines, the EIS must describe the nature of the waste; and describe the proposed management techniques to be taken to minimise potential impacts associated with transporting, storing, handling or disposing of the waste whilst having regard to the *Protection of the Environment Operations Act 1997*, *Radiation Control Act 1990* and the Code of Practice and Safety Guide for Radiation Protection and Radioactive Waste Management in Mining and Mineral Processing 2005

6. Water

6.1. The EIS must demonstrate how the proposed development will meet the requirements of section 120 of the POEO Act.

6.2. The EIS must include a water balance for the development including water requirements (quantity, quality and source(s)) and proposed storm and wastewater disposal, including type, volumes, proposed treatment and management methods and re-use options.

6.3. If the proposed development intends to discharge waters to the environment, the EIS must demonstrate how the discharge(s) will be managed in terms of water quantity, quality and frequency of discharge and include an impact assessment of the discharge on the receiving environment. This should include:

- Description of the proposal including position of any intakes and discharges, volumes, water quality and frequency of all water discharges.

- Description of the receiving waters including upstream and downstream water quality as well as any other water users.

- Demonstration that all practical options to avoid discharge have been implemented and environmental impact minimised where discharge is necessary.

6.4. The EIS must refer to Water Quality Objectives for the receiving waters and indicators and associated trigger values or criteria for the identified environmental values of the receiving environment. This information should be sourced from the ANZECC (2018) Guidelines for Fresh and Marine Water Quality.

6.5. The EIS must describe how stormwater will be managed in all phases of the project, including details of how stormwater and runoff will be managed to minimise pollution. Information should include measures to be implemented to minimise erosion, leachate and sediment mobilisation at the site. The EIS should consider the guidelines *Managing urban stormwater: soils and construction,* vol. 1 (Landcom 2004) and vol. 2 (A. Installation of services; C. Unsealed roads; D. Main Roads; E. Mines and quarries) (DECC, 2008).

6.6. The EIS must describe any water quality monitoring programs to be carried out at the project site. Water quality monitoring should be undertaken in accordance with the *Approved Methods for the Sampling and Analysis of Water Pollutant in NSW* (2022).

7. Incident Management

The EIS must identify adequate incident management procedures to be established including notification requirements to the Appropriate Regulatory Authority and other relevant authorities for incidents that cause or have the potential to cause material harm to the environment (Part 5.7 of the POEO Act).

8. Cumulative impacts

The EIS must identify the extent that the receiving environment is already stressed by existing development and background levels of emissions to which this proposal will contribute; and identify the cumulative impacts of the proposed development in a local context.

9. Monitoring Programs

The EIS must include a detailed proposal of any noise, air, water, land, waste, meteorological monitoring during construction and operation to ensure and assumptions, predictions, goals, and criteria are achieved. The proposal should include a detailed description of the monitoring locations, sample analysis methods and the level of reporting proposed.

G. Compilation of mitigation measures

Outline how the proposal and its environmental protection measures would be implemented and managed in an integrated manner so as to demonstrate that the proposal is capable of complying with statutory obligations under EPA licences or approvals (e.g. outline of an environmental management plan).

Include any Statement of Commitments to be made by the Proponent.

H. Justification for proposed development and conclusion

Reasons should be included which justify undertaking the proposal in the manner proposed, having regard to the potential environmental impacts.

ATTACHMENT B – EPA's Guidance Material (not exhaustive)

Legislation	
Environmental Planning and Assessment Act 1979	http://www.legislation.nsw.gov.au/maintop/view/inforce/act+203+1979+cd+0+N
Protection of the Environment Operations Act 1997	http://www.legislation.nsw.gov.au/maintop/view/inforce/act+156+1997+cd+0+N
Protection of the Environment Operations (Noise Control) Regulation 2017	https://legislation.nsw.gov.au/#/view/regulation/2017/449
Protection of the Environment Operations (Clean Air) Regulation 2010	https://legislation.nsw.gov.au/#/view/regulation/2010/428
Protection of the Environment Operations (Waste) Regulation 2014	https://legislation.nsw.gov.au/#/view/regulation/2014/666
Waste Avoidance and Resource Recovery Act 2001	https://legislation.nsw.gov.au/#/view/act/2001/58
Contaminated Land Management Act 1997	http://www.legislation.nsw.gov.au/#/view/act/1997/140
Licensing	
Licensing Requirements	https://www.epa.nsw.gov.au/licensing-and-regulation/licensing
Noise/Vibration	
Interim Construction Noise Guideline (DECC, 2009)	https://www.epa.nsw.gov.au/your-environment/noise/industrial-noise/interim-construction-noise-guideline
Assessing Vibration: a technical guideline (DEC, 2006)	https://www.epa.nsw.gov.au/your-environment/noise/industrial-noise/assessing-vibration
Noise Policy for Industry (2017) and Implementation and Transitional arrangements for the Noise Policy for Industry (2017)	https://www.epa.nsw.gov.au/publications/noise/17p0524-noise-policy-for-industry https://www.epa.nsw.gov.au/publications/noise/17p0293-implement-transition-arrange-noise-pol-industry
NSW Road Noise Policy (DECCW, 2011)	http://www.epa.nsw.gov.au/resources/noise/2011236nswroadnoisepolicy.pdf
Air/Odour	
Approved methods for the Modelling and Assessment of Air Pollutants in NSW (2016)	http://www.epa.nsw.gov.au/resources/epa/approved-methods-for-modelling-and-assessment-of-air-pollutants-in-NSW-160666.pdf
Approved methods for the Sampling and Analysis of Air Pollutants in NSW (2007)	http://www.epa.nsw.gov.au/resources/air/07001amsaap.pdf
National Environment Protection (Ambient Air Quality) Measure	http://www.nepc.gov.au/nepms/ambient-air-quality
No EPA specific guidance material exists for the control of dust from construction sites. Consideration should be given to the POEO Act and the Local Government Air Quality Toolkit (DECC, 2007)	http://www.epa.nsw.gov.au/air/lgaqt.htm
Technical Framework - Assessment and Management of Odour from Stationary Sources in NSW (DEC, 2006) and	http://www.epa.nsw.gov.au/air/odour.htm http://www.epa.nsw.gov.au/air/odour.htm

Technical Notes - Assessment and Management of Odour from Stationary Sources in NSW (DEC, 2006)	
Water/Soils	
ANZECC Guidelines for Fresh and Marine Water Quality (2018)	https://www.waterquality.gov.au/guidelines/anz-fresh-marine
NSW Water Quality and River Flow Objectives	http://www.environment.nsw.gov.au/ieo/index.htm
Applying Goals for Ambient Water Quality Guidance for Operations Officers – Mixing Zones	http://deccnet/water/resources/AWQGuidance7.pdf
Approved Methods for the Sampling and Analysis of Water Pollutant in NSW (2004)	https://www.epa.nsw.gov.au/-/media/epa/corporate-site/resources/water/approvedmethods-water.pdf
Soil and Landscape Issues in Environmental Impact Assessment (DLWC 2000)	https://www.shop.nsw.gov.au/publication/soil-and-landscape-issues-in-environmental-impact-assessment-technical-report-no-34-1324-6860-839
Managing urban stormwater: soils and construction, vol. 1 (Landcom, 2004) and Addendum Publications (Various)	http://www.environment.nsw.gov.au/stormwater/publications.htm
Landslide Risk Management (2007)	http://www.australiangeomechanics.org/resources/downloads/
Site Investigations for Urban Salinity (DLWC, 2002)	http://www.environment.nsw.gov.au/resources/salinity/booklet3siteinvestigationsforurbansalinity.pdf
Dryland Salinity Resources (Various)	http://www.environment.nsw.gov.au/salinity/solutions/urban.htm
Contaminated Sites Assessment and Remediation	
Contaminated Land – EPA website	https://www.epa.nsw.gov.au/your-environment/contaminated-land
Managing land contamination: Planning Guidelines – SEPP 55 Remediation of Land	http://www.epa.nsw.gov.au/clm/planning.htm
Guidelines for the NSW Site Auditor Scheme – 3rd Edition (EPA, 2017)	https://www.epa.nsw.gov.au/publications/contaminatedland/17p0269-guidelines-for-the-nsw-site-auditor-scheme-third-edition
Guidelines for Consultants Reporting on Contaminated Sites (EPA, 2000)	http://www.epa.nsw.gov.au/resources/clm/20110650consultantsglines.pdf
Sampling Design Guidelines (EPA, 1995)	http://www.epa.nsw.gov.au/resources/clm/95059sampgdlne.pdf
National Environment Protection (Assessment of Site Contamination) Measure	http://www.nepc.gov.au/nepms/assessment-site-contamination
Waste	
NSW Waste Avoidance and Resource Recovery Strategy 2014-2021	http://www.epa.nsw.gov.au/wastestrategy/warr.htm
Waste Classification Guidelines – 4 Parts (EPA, 2014)	http://www.epa.nsw.gov.au/wasteregulation/classify-waste.htm
Chemical and Fuel Storage	
Storage and Handling of Dangerous Goods – Code of Practice (WorkCover, 2005)	http://www.safework.nsw.gov.au/__data/assets/pdf_file/0005/50729/storage-handling-dangerous-goods-1354.pdf