

DATE

7 JULY 2023

CLIENT

GRAPHITE ENERGY

PROJECT

**LAKE SUSTAINABLE ENERGY PRECINCT
212 LAKE CARGELLIGO ROAD, LAKE CARGELLIGO**

DOCUMENT TITLE

DA2022/50 - RESPONSE TO ADDITIONAL INFORMATION REQUEST





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7 July 2023

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**DA2022/50 PROPOSED LAKE SUSTAINABLE ENERGY PRECINCT - LOT 3 DP 858374 AND LOT 102 DP 1253582
LAKE CARGELLIGO**

Thank you for forwarding the Additional Matters Requiring Attention, prepared by the Western Regional Planning Panel (WRPP) dated 4 July 2023 and inviting Graphite Energy to provide information to assist with the clarification of certain matters relating to the Lake Sustainable Energy Precinct.

To assist Council in its completion of the assessment report, each of the issues raised by the WRPP has been repeated below, followed by a Currajong response:

- + **WRPP Issue 1** - The assessment report is required to address the RFS Guideline Planning for Bushfire Protection 2019.

Currajong Response to Issue 1 - At the time of submission of the Development Application for the Lake Sustainable Energy Precinct, the site was not shown as bushfire hazard on the Lachlan Shire Bush Fire Prone Land Map (BFPLM). It is understood the Lachlan Shire BFPLM has been updated to include Category 3 Grasslands, with the Graphite Energy Lake Sustainable Energy Precinct shown to be affected by the new grassland category.

Having regard to the RFS Planning for Bushfire Protection Guideline 2019, the Lake Sustainable Energy Precinct is located on predominantly cleared grassland with minimal slope and adequate asset protection zones already existing between bush fire hazard areas and existing / proposed buildings. No residential accommodation aspects are proposed at the Lake Sustainable Energy Precinct and the proposal is assessed as 'Other Development' as per Chapter 8 of the guideline.

The Lake Sustainable Energy Precinct is not a Hazardous Industry as identified in Section 8.3.9 of the Planning for Bushfire Protection Guideline 2019 and all existing / proposed buildings are to be provided with safe access for emergency evacuation. A minimum of 250,000 litres of water is to be reserved at the premises for firefighting purposes. The primary access from the Lake Sustainable Energy Precinct to the public road network comply with Section 3.4 of the guideline and there are perimeter roads and property access roads existing / proposed that provide access for emergency vehicles.

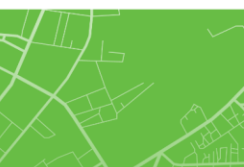
Graphite Energy has developed bushfire management procedures in various corporate documents in order to achieve compliance with IPART and Essential Energy's requirements for high voltage electricity installations. A review of these bushfire management procedures has been undertaken by CNF and Associates dated 13 September 2021 and is attached.

- + **WRPP Issue 2** - The assessment report is required to address the DPE Hydrogen Guidelines and provide more details on the production, storage and use of hydrogen in electricity generating works and confirm whether the TESS storage is proposed for the hydrogen.

Currajong Response to Issue 2 - Section 1.1 of the Currajong Statement of Environmental Effects (SEE) for the Lake Sustainable Energy Precinct, dated 4 November 2022 states:

'The Development Application seeks consent for alterations and additions to the existing electricity generating works approved under DA2008/0063 to include a solar photovoltaic farm couple with energy storage systems (battery energy storage, thermal energy storage and hydrogen energy storage), as well as tank-based aquaculture and greenhouse horticulture.'

Section 1.2.4 of the Currajong SEE advises hydrogen energy storage is for power generation and diesel replacement. In Section 2.3 of the Currajong SEE dealing with ancillary aspects of the Lake Sustainable Energy Precinct, the SEE notes hydrogen energy production and storage is for refuelling of farming plant machinery and equipment as well as plant





operated by Graphite Energy and other industry partners. In explaining the electricity generated from the integrated storage systems (including hydrogen) Section 1.2.4 of the SEE advises:

'Hydrogen energy storage is integral to the electricity generating works at the Lake Sustainable Energy Precinct, enabling the use of renewable energy 24/7 with the end product of hydrogen being used as a power source to generate electricity. Hydrogen will be used to generate steam to power the existing steam turbine to supply electricity for onsite use as well as exporting surplus power to the grid. It will also be used as an alternate fuel to diesel to power larger vehicles such as tractors operated at the farm and trucks transporting agricultural products to market.'

Section 1.2.4 of the SEE states:

'It is important to note the integrated energy storage facilities are a form of electrical generating works, particularly at night when the PV is not generating electricity.'

It is maintained throughout the Currajong SEE that hydrogen gas production and storage at the Lake Sustainable Energy Precinct is not of a type that triggers criteria for Designated Development or State Significant Development.

Section 3.3 of the Currajong SEE and Drawing SK0003 prepared by the Nettletontribe provides a description of the hydrogen facility at the Lake Sustainable Energy Precinct. It is important to note the hydrogen facility is relatively small-scale, commensurate with its Research and Development (R&D) purpose. The hydrogen facility is being designed to produce a maximum of one (1) tonne of hydrogen gas per day with typical production more likely to be 250kg / day. Based on the continual consumption of hydrogen gas at the Lake Sustainable Energy Precinct it is estimated that total hydrogen gas present at the site would be a maximum of 10 tonnes present on the site at any one time.

Shed 7 Hydrogen Facility has a gross floor area of 650m² and is proposed to be serviced by a compressed hydrogen gas storage tank of 10 tonne capacity to the north of Shed 7.

At the time of submission of the Development Application for the Lake Sustainable Energy Precinct, the DPE Hydrogen Guideline dated March 2023 was not published. Having regard to the DPE Hydrogen Guideline 2023, the hydrogen components of the Lake Sustainable Energy Precinct are small-scale and do not present a risk to worker or public safety or any significant environmental risks for the following reasons:

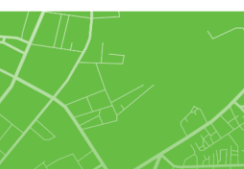
- Hydrogen gas storage will not exceed the 50 tonnes present threshold quantity in Schedule 15 of the Work Health and Safety Regulation 2017 that would quantify the premises as a major hazard facility under State Environmental Planning Policy (Planning Systems) 2021.
- The proposal is not a heavy industry and hydrogen production is ancillary to electricity generating works, extensive agriculture and aquaculture which are all permitted in the RU1 Primary Production zone.
- The proposal does not involve heavy industry storage and hydrogen storage is ancillary to electricity generating works, extensive agriculture and aquaculture which are all permitted in the RU1 Primary Production zone.
- The proposal does not involve the operation of a service station, highway service centre, freight transport or port facility.

- + **WRPP Issue 3** - Clarification is required on whether TESS units to be assembled and tested on site are to be distributed across NSW / Australia for similar ventures.

Currajong Response to Issue 3 - Section 1.2.4 of the Currajong SEE provides a description of the Thermal Energy Storage (TES) system proposed at the Lake Sustainable Energy Precinct and Section 1.2.2 provides an overview of the ongoing Graphite Energy R&D program at the site.

TES assembly will be of a scale to support the needs of the Lake Sustainable Energy Precinct. It will also be used as part of Graphite Energy ongoing R&D program. There may be assembly of TES for off-site R&D, such as the delivery of several TES units to a mine seeking alternate distributed energy. Generally, the Lake Sustainable Energy Precinct will not be used for large scale nationwide manufacturing and distribution of TES.

Should there be high demand for TES units requiring mass production and distribution, an alternate industrial scale manufacturing facility would be sourced.





To be clear, TES assembly is to be regarded as an ancillary component of the electricity generating works being carried out at the Lake Sustainable Energy Precinct as well as the ongoing R&D components being trialled in relation to sustainable powering of farming systems, all of which are permitted on land zoned RU! Primary Production.

- + **WRPP Issue 4** - A condition is required for a waste management strategy as draft condition 8 only relates to construction not operational phase.

Currajong Response to Issue 4 - Graphite Energy advises it would be comfortable with a condition requiring the preparation of a waste management strategy for the operational aspects of the greenhouse and fish farm for submission with the Construction Certificate for Stage 3 Works.

- + **WRPP Issue 5** - There needs to be a condition requiring the applicant to submit a notice of modification under the EP&A Regs modifying the existing consent (DA2008/0063) to address any potential changes arising from the current DA.

Currajong Response to Issue 5 - Development Consent No. DA2008/0063 was granted by Lachlan Shire Council on 19 November 2008 for electrical generating works. It is Graphite Energy's intention to voluntarily surrender Development Consent No. DA2008/0063 upon receipt of the approval for the Lake Sustainable Energy Precinct by way of providing written notice to Council as per Clause 67 of the Environmental Planning and Assessment Regulation 2021. Graphite Energy advises it would be comfortable with a condition requiring the surrender of Development Consent No. DA2008/0063 as per Section 4.17(5) of the Environmental Planning and Assessment Act 1979.

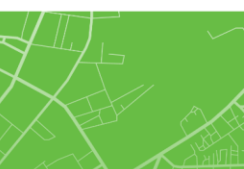
- + **WRPP Issue 6** - The assessment report should include discussion regarding designated development.

Currajong Response to Issue 6 - Section 1.5 of the Currajong SEE states the proposal is not Designated Development pursuant to Part 1 Schedule 3 of the Environmental Planning and Assessment Regulation 2021 and an Environmental Impact Statement (EIS) is not required.

In a bid to satisfy the WRPP that the proposed Lake Sustainable Energy Precinct is not Designated Development an evaluation of all potential criteria under Part 2 of Schedule 3 of the Environmental Planning and Assessment Regulation 2021 is listed in the table below:

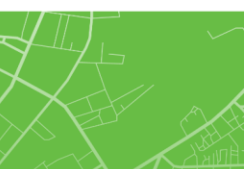
Table 1 - Designated Development

Development Type	Main Threshold Criteria	Applicability	Comment
Agricultural produce processing facilities	Processing over 30,000 tonnes per year / release of sludge to a natural waterbody, wetland or vulnerable groundwater	No	Stage 2 of the proposal involves Agri-voltaics and Stage 3 involves horticulture, with no produce processing at the site at a scale detailed in the threshold criteria
Aircraft facilities	Significant impacts form aircraft, helicopters or to the receiving environment in relation to noise, biodiversity, waterbodies or environmentally sensitive area	No	No aircraft facilities are proposed at the site
Aquaculture	Large scale supplemental feeding in tanks, artificial ponds or natural waterbody or fish farming of non-indigenous species within close proximity of a natural waterbody or wetland	No	Stage 3 of the proposal involves small-scale fish farming of native species within tanks inside buildings



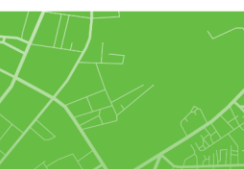


Artificial waterbodies	Large scale artificial waterbody within close proximity to a natural waterbody, wetland or vulnerable groundwater	No	The proposal does not involve the construction of large-scale waterbodies at the site. All water stored at the site will generally be in tanks
Battery storage facilities	Large scale battery storage capable or supplying more than 30 megawatts of electrical power	No	The proposal does not involve battery storage with more than 30 megawatts of storage capacity
Bitumen pre-mix and hot-mix facilities	Large scale bitumen production capacity within close proximity to a natural waterbody, residential zone or dwelling	No	The proposal does not involve manufacturing of bitumen material
Breweries and distilleries	Large scale alcohol production capacity within close proximity to a residential zone, natural waterbody or vulnerable groundwater	No	The proposal does not involve the processing of alcohol on the site at a scale detailed in the threshold criteria
Cement works	Large scale processing of cement or lime within close proximity to a residential zone, dwelling, natural waterbody or wetland	No	The proposal does not involve the processing of cement / lime products on the site at a scale detailed in the threshold criteria
Ceramic and glass manufacturing	Large scale processing of ceramic / glass products within close proximity to a residential zone, dwelling, natural waterbody or wetland	No	The proposal does not involve the firing of bricks, tiles, pipes, pottery, ceramics, refractories or glass at the site
Chemical industrial facilities and works	Premises involved in manufacturing of fertiliser, batteries, carbon black, paints, inks, polishes, adhesives sealants, petrochemicals, pesticides, toxic substances, rubber, soap, plastics or the like	No	The proposal does not involve the manufacturing of any toxic substances
Chemical storage facilities	Premises involved in the chemical storage (including large scale gas storage) within close proximity of a natural waterbody, wetland, vulnerable groundwater, drinking water catchment or floodplain	No	The proposal does not involve storage of chemicals / gas at a scale detailed in the threshold criteria
Coal mines	Large scale coal mines with additional criteria for mines within close proximity to a natural waterbody, drinking water catchment, coastline or wetland or that involve blasting close to a residential zone or dwelling	No	No coal mines are proposed at the site
Coal works	Large scale coal processing with additional criteria for coalery within close proximity to a natural waterbody, drinking water, wetland, environmentally sensitive or State significant area	No	No coal processing facilities are proposed at the site



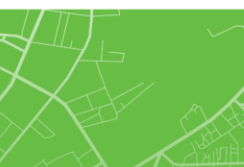


Composting facilities or works	Large scale composting facilities within close proximity to a natural waterbody, wetland, vulnerable groundwater, environmentally sensitive or State significant area, residential zone or dwelling	No	The proposal does not involve composting at a scale detailed in the threshold criteria
Concrete works	Large scale concrete works with addition criteria for works within close proximity to a natural waterbody, residential zone or dwelling	No	The proposal does not involve concrete works at a scale detailed in the threshold criteria
Container reconditioning works	Handling of containers used for transport of toxic substances	No	The proposal does not involve container reconditioning at the site
Contaminated groundwater treatment works	Premises treating more than 100 megalitres of contaminated groundwater per year	No	The proposal does not involve groundwater treatment or use
Contaminated soil treatment works	Premises treating contaminated soil from other sites or works within close proximity to a natural waterbody, vulnerable groundwater, drinking water catchment, steep sloping land, floodplain or dwelling	No	The proposal does not involve contaminated soil treatment
Crushing, grinding or separating works	Large scale crushing, grinding or separating of sand, gravel, rock or the like within close proximity of a natural waterbody, wetland, residential zone or dwelling	No	The proposal does not involve crushing, grinding or separating works at a scale detailed in the threshold criteria
Dairies	More than 800 head of milking cows	No	The proposal does not involve the operation of a dairy
Desalination plants	Plants with capacity of more than 2,500 persons equivalent capacity or 750 kilolitres per day or plants works within a floodplain, coastal dune field, drinking water catchment or within close proximity to a natural waterbody, wetland or dwelling	No	The proposal does not involve the operation of a desalination plant
Electricity generating stations	Large scale electrical power stations involving water storage facilities that inundate wilderness land or located on a floodplain	No	The electrical generating capacity is substantially below the electricity generating capabilities from PV solar (3 megawatts) and steam generator (2 megawatts)
Energy recovery facilities	Large scale energy recovery facilities that process more than 200 tonnes of waste per year or 200 kilograms of hazardous waste and the like	No	The proposal does not involve the operation of an energy (waste) recovery facility
Extractive industries	Extracting more than 30,000m3 or disturbance of more than 2ha or within close proximity of a natural waterbody,	No	The proposal does not involve the operation of an extractive industry



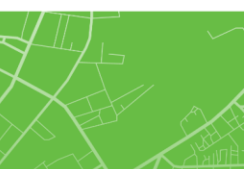


	wetland, coastline or contaminated area, steep slopes or residential zone / dwelling where blasting is proposed		
Feedlots	Confinement of 1,000 head of cattle, 4,000 sheep or 5,000 for other animals other than poultry	No	The proposal does not involve the operation of a feedlot
Geosequestration facilities	Works involving the injection and geological storage of greenhouse gases into the ground surface	No	The proposal does not involve the drilling or operating of a greenhouse gas geological well or the like
Horse facilities	Equestrian facility with over 400 horses	No	The proposal does not involve the management of horses
Limestone mines and works	Works that disturb more than 2 hectares of land or within close proximity to a natural waterbody, drinking water catchment, environmentally sensitive or State significant area or residential zone / dwelling where blasting is proposed	No	The proposal does not involve limestone works
Livestock processing industry	Processing capacity of more than 750 tonnes per year of live weight or within close proximity to a natural waterbody, vulnerable groundwater, steep slopes, drinking water catchment or floodplain	No	The proposal does not involve the operation of a livestock processing industry
Marinas and related land and water shoreline facilities	Large capacity marinas or boat repair and maintenance facilities	No	The proposal does not involve a marina or related facility
Mineral processing or metallurgical works	Large scale processing and smelting facilities or within close proximity to a natural waterbody, wetland, vulnerable groundwater or residential zone	No	The proposal does not involve processing of ore, minerals or the like
Mines	Large scale mines that disturb more than 4 hectares of land or within close proximity to a natural waterbody, drinking water catchment, environmentally sensitive or State significant area, wetland, coastline or residential zone / dwelling where blasting is proposed	No	The proposal does not involve processing of mining
Oil and petroleum waste storage works	Oil and petroleum waste storage activities requiring a licence under the Protection of the Environment Operations Act 1997	No	The proposal does not involve storage of wastes at a level that triggers the EPA requirement for an Environment Protection Licence
Paper pulp industrial facilities	Large scale paper pulp industrial facilities within close proximity of a natural water body, vulnerable groundwater or drinking water catchment	No	The proposal does not involve paper pulping or the like





Petroleum works	Petroleum works requiring a licence under the Protection of the Environment Operations Act 1997	No	The proposal does not involve petroleum works at a level that triggers the EPA requirement for an Environment Protection Licence
Pig farms	Pig farms that accommodate more than 2,000 pigs or 200 breeding sows or within close proximity to a natural waterbody, wetland or within a vulnerable groundwater area, drinking water catchment or floodplain	No	The proposal does not involve the operation of a pig farm
Poultry farms	Poultry farms with more than 250,000 birds, or within 500 metres of another poultry farm	No	The proposal does not involve the operation of a poultry farm
Railway freight terminals	Large scale railway freight terminals or within close proximity to a natural waterbody, wetland, environmentally sensitive or State significant area, residential zone / dwelling	No	There are no railways or railway terminals forming part of the proposal
Saleyards for cattle and other animals	Large scale premises with annual throughput more than 50,000 head of cattle or 200,000 other animals	No	The proposal does not involve the operation of a saleyards
Sewerage systems and sewer mining systems	Facilities with capacity of more than 2,500 persons or 750 kilolitres per day or within a floodplain, coastal dune field, drinking water catchment, natural waterbody, wetland, residential zone or dwelling	No	The proposal does not involve the operation of a large-scale sewerage treatment plant
Shipping facilities	Large scale wharf-side cargo loaded facilities	No	The proposal does not involve the operation of a large-scale boat loading facilities
Turf farms	Turf farms within close proximity of a natural waterbody, wetland or another turf farm or in vulnerable groundwater area, drinking water catchment	No	The proposal does not involve turf farming
Waste management facilities or works	Large scale waste facilities or within close proximity to a natural waterbody, wetland, coastal dune field or environmentally sensitive or State significant area or in a vulnerable groundwater area, residential zone / dwelling, floodplain, coastal dune field, drinking water catchment or floodplain	No	The proposal does not involve the operation of a waste management facility
Wood or timber milling or processing works	Large scale timber processing within close proximity to a dwelling, natural waterbody or wetland	No	The proposal does not involve the operation of a timber mill or the like
Wood preservation works	Large-scale wood preservation works located in or within close proximity of a	No	The proposal does not involve the preservation of wood





	natural waterbody, wetland or environmentally sensitive area of State significance, vulnerable groundwater, steep slopes, drinking water catchment or dwelling		
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In addition to Table 1, the volume of hydrogen gas present at the site will not exceed the 50 tonnes threshold quantity in Schedule 15 of the Work Health and Safety Regulation 2017 that would quantify the premises as a major hazard facility, which in turn would trigger the development being categorised as State Significant Development under State Environmental Planning Policy (Planning Systems) 2021, which in turn would trigger the requirement for an Environmental Impact Statement (EIS) to be prepared.

- + **WRPP Issue 7** - The assessment report is to address whether noise mitigation controls during the operation of the facility is required.

Currajong Response to Issue 7 - Section 5.9 of the Currajong SEE provides an assessment of noise and vibration. Noise assessment criteria was based on the site and surrounds comprising rural land (35L_A90) being the assumed minimum environmental noise level under the NSW Noise Policy for Industry 2017.

The noise assessment findings advised that noise emissions and vibration associated with the proposed Lake Sustainable Energy Precinct are unlikely to have a significant noise impact due to the separation from nearest dwelling to the north-west (>1km) and the proposed limited construction works being undertaken in daylight hours. Exceedances of the noise level criteria under the NSW Noise Policy for Industry 2017 were not assessed to be triggered and a site-specific noise assessment involving calibrated noise loggers on and around the site was not warranted given the separation distances between the Lake Sustainable Energy Precinct and sensitive receivers and the mitigation measures proposed by Graphite Energy, as follows:

- o Enclose fixed engines, pumps and compressors where practicable.
- o Use of electrical motors in mechanical systems where practical.
- o Maintain equipment in accordance with the original equipment manufacturer's specifications.
- o Work in daylight hours only.
- o Shut down equipment when not in use.

It is noted that no objections or issues were raised by adjoining landowners about noise or vibration impacts as a result of the public engagement phase of the proposal.

- + **WRPP Issue 8** - Details of the food processing to occur on site and the need for any conditions relating to this.

Currajong Response to Issue 8 - At this stage it is not proposed to process any food on site. Fish would be transported live from the Lake Sustainable Energy Precinct and horticultural products would be transported in bulk to various markets / customers. Should there be a need for such on-site processing, a separate Development Application would be lodged.

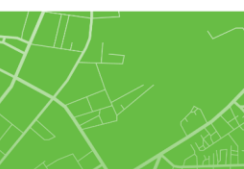
- + **WRPP Issue 9** - Details of the volume of hydrogen and food to leave the site by truck.

Currajong Response to Issue 9 - As set out in the estimates of traffic movement included in the Traffic Impact Assessment prepared by PTC dated 12 October 2022, at full capacity across all aspects of operations the site is expected to have a maximum of:

- o 3 semi-trailer movements a week; and
- o 8 rigid truck movements a week.

The actual truck movements are anticipated to be less than this allowance.

The maximum volume of hydrogen in a semi-trailer / tanker truck is approximately 1 tonne. Total annual produce output from the greenhouse and fish farm is estimated at 350 tonnes (greens and fish) which would be transported by rigid truck.





+ **WRPP Issue 10** - Clarification on the reference to BESS in the Currajong SEE (page 31).

Currajong Response to Issue 10 - Details of the battery energy storage system or BESS are set out on page 11 of the SEE. A 650kW/650kWh battery system will be installed as part of the electricity generating works. It will be contained in an enclosed 6m transportable shipping container, and it is proposed to locate this with Shed 7, which would also contain the hydrogen production system.

+ **WRPP Issue 11** - As there are multiple land uses proposed hours of operation need to be identified.

Currajong Response to Issue 11 - The proposed hours of operation have been kept generic in response to multiple land-uses and the extreme weather conditions that can be experienced at the site, particularly during the hot summer season.

There are some aspects of the Lake Sustainable Energy Precinct that will operate 24 x 7, such hydrogen production and the running of pumps within the fish farm. However, activities requiring staffing and / or potentially noisy operations are proposed to be limited to daylight hours.

Section 3.4.4 of the Currajong SEE advises construction works would generally be undertaken during standard working hours, Monday to Saturday. No night works or work on Sundays or public holidays are proposed, other than for emergency maintenance and repairs. Section 3.4.5 details the daily operations and maintenance by staff would be undertaken during standard working hours of 7am to 6pm Monday to Friday and 8am to 1pm on Saturday. The SEE also notes that during summer months, the solar farm may continue to produce electricity after 6pm and prior to 7am while the sunlight hours are longer and there is potential for summer working hours of 6am to 8pm Monday to Friday and 6am to 1pm on Saturday.

+ **WRPP Issue 12** - Details on water balance and supply.

Currajong Response to Issue 12 - The proposed water usage and water availability balance is set out in the Water Services Strategy prepared by Graphite Energy dated 22 September 2022 and also discussed at Section 5.6 of the Currajong SEE.

It is anticipated that at full production the Lake Sustainable Energy Precinct would use 2,600kL a year. This demand will be serviced by onsite collection and storage. In all scenarios (Average, Above Average and Below Average Rainfall Periods) there is sufficient onsite collection and storage for the intended operations.

In response to issues raised about water supply for emergency response to bushfire and / or fires within buildings, the Graphite Energy Water Services Strategy report has been updated to reserve a minimum of 250,000 litres of water for fire fighting purposes, with an allocation of 40,000 litres per year for the top up of reserve tanks (if required).

Should more than the annual allowance of 40kL be required to maintain dedicated firefighting supply of 250KL, any shortfall will be provided from (in order of priority):

1. The 3,300kL surplus available in both average and above average rainfall years.
2. The 4,150kL stormwater overflow catch dam.
3. Trucked in from town water supply (standpipe).
4. From the high security water supply licence of the landowners.

The updated Water Services Strategy report concludes there will be sufficient supply of water for all firefighting requirements under any rainfall scenario. A copy of the Graphite Energy Water Services Strategy dated 7 July 2023 is attached.

Table 2 summarises the water balance reporting undertaken by Graphite Energy.

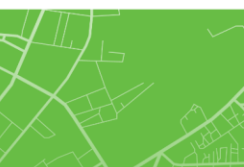




Table 2 - Usage Scenario Summary Water Services Strategy

	Average 'Figure 10'	Above Avg 'Figure 11'	Below Avg 'Figure 12'
Total Rainfall (kL)	7,300	10,800	2,450
Total Caught in Tanks (kL)	3,050	3,050	2,000
Total Caught in Catch Dam (kL)	2,850	3,500	0
Sub-Total Rainfall Caught (kL)	5,900	6,550	2,000
Annual Usage (kL) ex firefighting supply	2,555	2,555	2,555
Annual Firefighting Top Up (kL)	40	40	40
Contribution from Storage (kL)	Nil	Nil	595
Spare / Deficit (kL)	3,305	3,955	0
	127% Surplus	153% Surplus	
Firefighting Reserve (kL)	250		
Comments	More than sufficient rainfall in both scenarios, remainder to flow into stormwater catch dam. Minimum storage of 250,000 litres is to be held in reserved for emergency fire-fighting purposes. Surplus rainfall distributed to ongoing storage.		595kL used from dam stored reserve.

Source: Graphite Energy Water Services Report

+ WRPP Issue 13 - Clarification on plan and document referencing.

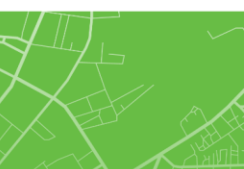
Currajong Response to Issue 13 - No comments on final formatting of conditions, other than Graphite Energy requests the opportunity to review draft conditions prior to determination by WRPP.

+ WRPP Issue 14 - Clarification on listing of agency conditions.

Currajong Response to Issue 14 - No comments on final formatting of conditions, other than Graphite Energy requests the opportunity to review draft conditions prior to determination by WRPP.

+ WRPP Issue 15 - Clarification on draft Condition 7(c)(iii).

Currajong Response to Issue 15 - As per the Currajong letter to Lachlan Shire Council dated 23 June 2023, Graphite Energy requested that Development Contributions be paid progressively to Council proportionately to the value of each of the 4 stages of the project, prior to the issue of the respective Construction Certificate for each stage of the project.





- + **WRPP Issue 16** - Outline of the purpose of condition 10.

Currajong Response to Issue 16 - Graphite Energy has extensive soil sampling taken across two separate geotechnical reports for the site, which are attached.

- + **WRPP Issue 17** - Lighting assessment to be documented in assessment report.

Currajong Response to Issue 17 - Lighting will be installed inside all existing / proposed new buildings, including emergency lighting and security lighting at building entrances, car parks and hardstands. Where practical, motion activated lighting will be installed for outdoor lighting. The nearest dwelling is located more than 1km from the facility and will not be adversely affected by light overspill. Graphite Energy has commissioned Marline Building Services to complete an Electrical Service Review to ensure compliance with BCA and other specific lighting standards. The Electrical Services Review will be supplied to Lachlan Shire Council prior to the issue of the Construction Certificate for Stage 1 Works.

- + **WRPP Issue 18** - Clarification on whether a Phase 1 assessment should have been undertaken.

Currajong Response to Issue 18 - That part of the Burnlea property that accommodates the Lake Sustainable Energy Precinct was historically used for broadacre cropping. Prior to the occupation of the site by Graphite Energy there were no farm buildings on the site, including sheep shearing sheds, dips or other activities that could have caused contamination at the site.

From around 2009 the site was improved by Graphite Energy with new buildings and modern facilities. No buildings or structures comprise asbestos or other toxic materials. The existing towers comprise concrete footings and galvanised mild steel frames, with the contents of the energy storage boxes on top of the towers being graphite, which is inert and non-toxic. The diesel fuel area is the only area that has potential to have caused contamination of soils. Inspection of this area shows a concrete bunded surfaced refuelling area with no evidence of contamination from spills.

Graphite Energy has undertaken extensive soil sampling taken across two separate geotechnical reports for the site which are attached. In addition to the results of previous soil testing, 50 excavation pits associated with ACHAR investigations and site inspections were undertaken over the site which did not reveal any evidence of site contamination.

I trust the information submitted with this letter is sufficient to address the relevant matters for consideration under Section 4.15 of the Environmental Planning and Assessment Act 1979 in relation to DA2022/50.

Please feel free to table this letter with the WRPP, along with the Currajong letter dated 23 June 2023.

Should you have any further questions or queries, please do not hesitate to contact me on 0428254299.

Yours faithfully,

Michael Carter
Director

