SECTION **19**

Waste Rehabilitation and Long Term Responsibility

THIS IS **ONE** SECTION OF **TWENTY TWO,**

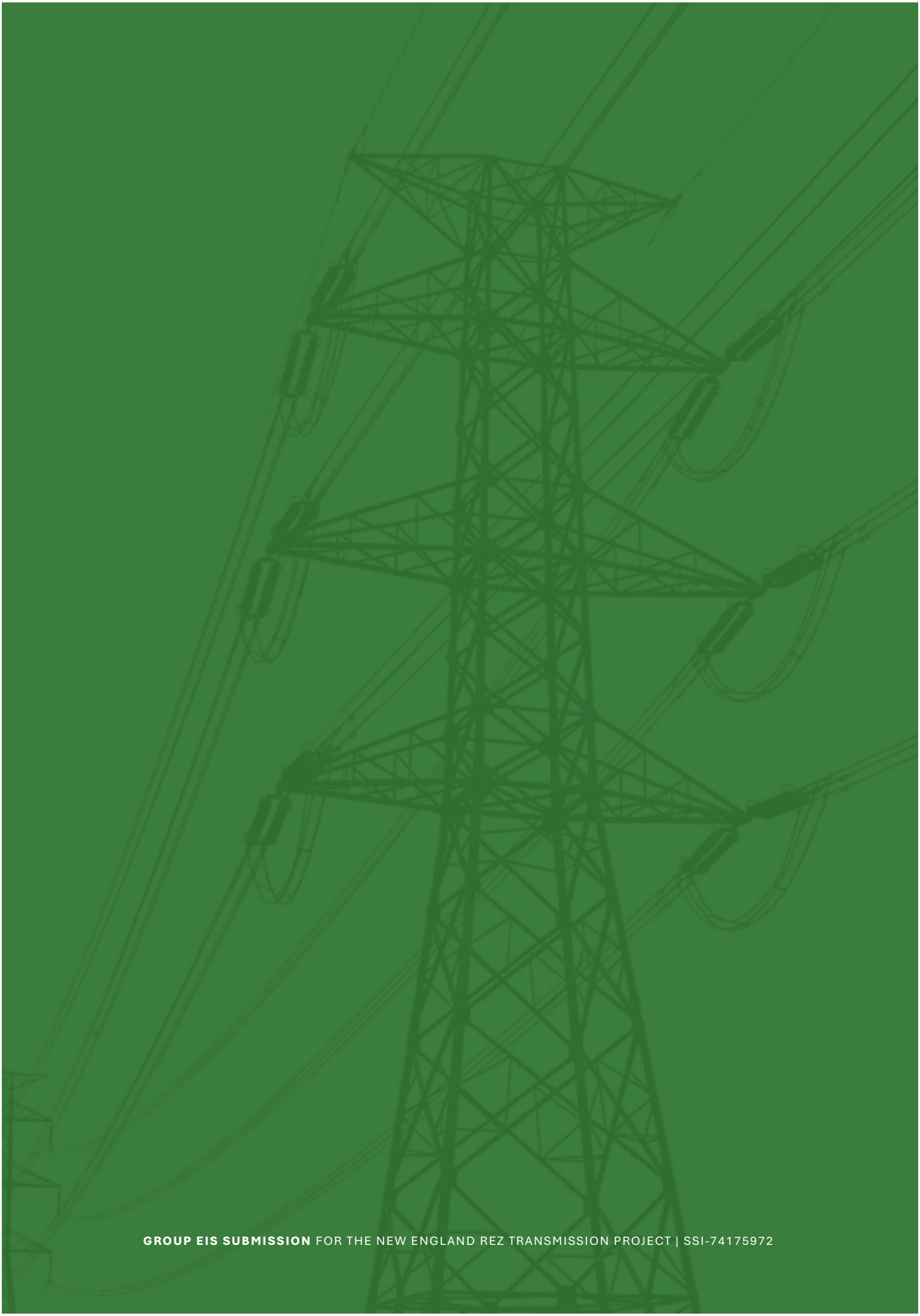
THAT FORMS PART OF A LARGER GROUP SUBMISSION

TO THE NEW ENGLAND REZ TRANSMISSION PROJECT

SSI-74175972



Walcha High Country Guardians | Rouchel Brook Action Group | Protect the Valley Upper Hunter Responsible Infrastructure Group | Voice for Walcha



GROUP EIS SUBMISSION FOR THE NEW ENGLAND REZ TRANSMISSION PROJECT | SSI-74175972

SECTION 19

Waste Rehabilitation and Long Term Responsibility

Key issues we have found ...

Receiving facilities lack confirmed capacity	Existing facilities face capacity restrictions while disposal destinations and acceptance remain unconfirmed, risking competition with essential community waste disposal services.
Local waste burdens remain unclear	Construction totals lack annual, peak and council allocations, preventing communities from comparing additional waste with existing loads and available services.
Wastewater planning leaves major gaps	Camp sewage, concrete washout, contaminated runoff and treatment sludge need separate quantities, treatment pathways, receiving capacity and contingencies before approval.
Spoil reuse cannot be assumed	Unresolved contamination and asbestos risks leave disposal classifications uncertain, while proposed spoil and vegetation reuse lacks quantified destinations and contingencies.
Rehabilitation must restore productive land	Rehabilitation must restore soil, drainage, pasture and farm infrastructure against recorded baselines, with measurable standards, independent verification and funded corrections.
Closure costs need guaranteed funding	Removal obligations require a complete inventory, independently assessed costs, financial security and continuing responsibility through ownership changes and final closure.

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SECTION **19**

Waste, Rehabilitation and Long Term Responsibilities

EXECUTIVE SUMMARY

The EIS does not demonstrate that the project's waste can be managed within the capacity of the facilities expected to receive it. It also leaves essential rehabilitation, removal and financial obligations to future planning. Approval should be withheld until these matters are resolved.

Again, if the scale of this project was of a managable size, these deferred design features would not pose a problem. The risk with this project is that the assumed capability is simply not there in many cases. This needs full assessment prior to determination to prevent cost blowout, timeline blowout, and the unmanageable escalation of impacts to community, economy and landscape.

Chapter 23 identifies substantial construction waste. Its separately quantified entries expressed in tonnes total 22,975 tonnes. Additional streams include 270,000 cubic metres of cleared vegetation, 10,000 cubic metres of spoil unsuitable for project use, 4,200 cubic metres of concrete waste, 120 megalitres of amenities wastewater, 170 kilolitres of oils and 4,400 conductor drums. These figures describe different streams and units; they do not establish a total landfill requirement. The missing information is the quantity allocated to each reuse, recovery, treatment and disposal pathway. [1, Table 23.2, pp. 765–766]

The assessment has six major deficiencies:

1. **Receiving capacity has not been demonstrated.** EnergyCo's regional study identifies constrained or unavailable facilities, while the EIS leaves final destinations and capacity confirmation to later work. Armidale Council has expressly restricted the project wastes its landfill can accept. [1, WM2, p. 773; 2, s. 4 and Appendix D; 9, pp. 6–7]

2. **The local increase over existing waste loads cannot be reliably assessed.** Chapter 23 provides construction totals without annual, peak-period, LGA or receiving-facility allocations. The regional baseline covers a different geographic area and an older project pipeline. [1, ss. 23.1–23.3; 2, foreword and s. 7.1]

3. **Important waste quantities remain uncertain.** Unresolved spoil classifications, naturally occurring asbestos risks and incomplete site investigations affect the amount of material requiring specialist management. [4, ss. 4.6 and 6.3–6.4]

4. **The liquid-waste assessment is incomplete.** The 120 ML estimate is described as amenities and ablutions wastewater. Construction-process liquids, treatment residuals, peak treatment demands and off-site acceptance require a reconciled assessment. [1, Tables 23.2–23.3; 3, WWC2, pp. 149–150]

5. **Regional solutions are not demonstrated delivery commitments.** The evidence must identify necessary upgrades, funding, responsible parties, operating dates and alternatives if facilities or reuse pathways are unavailable. [2, foreword and Chapter 14]
6. **Restoration and closure obligations remain insufficiently defined.** The EIS's general rehabilitation commitments do not establish the complete removal inventory, measurable restoration outcomes, financial protection and continuing responsibility needed to protect affected landholders. [5, s. 3.5 and s. 12.3.3; 8, s. 4.1]

The SEARs require waste to be identified, quantified and classified across all stages. Council advice specifically requests waste destinations, assessment of landfill capacity, decommissioning planning and financial security. These requirements must be answered with evidence and enforceable commitments. [6, pp. 1, 5; 8, ss. 4.1–4.2; 9, p. 6; 10, p. 2]

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2 | What the SEARs and agency advice require

The Planning Secretary's Environmental Assessment Requirements (SEARs) and agency advice identify the information needed to assess the project. The table below connects those requirements to the evidence still needed.

Requirement and source	Information still required
Waste throughout all project stages. The SEARs require identification, quantification and classification of waste and management measures developed in consultation with facilities and councils. Their project-description requirements expressly include decommissioning and rehabilitation. [6, pp. 1, 5]	A complete waste inventory covering construction, temporary-site removal, operation, major asset replacement and eventual closure, with management pathways and quantified residual disposal.
Excavation and off-site waste. EPA advice requires quantities and classifications for excavation, demolition and construction waste, including material removed off site and a lawful receiving-facility commitment. [7, s. 3.1, pp. 3–4]	A reconciled material balance, adequate classification evidence and viable destinations for the forecast quantities.
Storage contingencies. EPA advice requires plans for excessive stockpiling and dirty-water volumes exceeding available storage. [7, s. 6.3, p. 5]	Quantified storage limits, interruption scenarios, alternative destinations and controls when treatment, reuse or collection cannot operate.
Landfill capacity over the project life. Tamworth Council requests assessment of pressure on landfill licence capacity during construction, operation and decommissioning, including volumes, timing and disposal locations. [8, s. 4.2, p. 6]	Annual and peak allocations to facilities, existing intake, competing demand and available licensed and practical capacity.
Decommissioning and financial protection. Tamworth Council requests a rehabilitation and decommissioning plan, rehabilitation criteria and proposed financial security before construction. [8, s. 4.1, p. 6]	Defined removal and restoration obligations, an assessed cost and a binding funding mechanism.
A waste and decommissioning plan within the EIS. Armidale Council requests quantified lifecycle waste, material lifespans and recovery pathways, including recycling limitations. [9, p. 6]	A project-specific plan that demonstrates feasible recovery and disposal throughout the asset life.
Waste volumes and destinations. Uralla Council requests solid and hazardous waste quantities and destinations, management of regional capacity constraints, and wastewater treatment and disposal for camps and compounds. [10, p. 2]	Location-specific waste and wastewater arrangements supported by receiving-capacity evidence.

The EIS identifies procedures but does not complete the assessment of the quantities, destinations and capacity on which those procedures depend. Chapter 23 commits to classification, segregation, authorised contractors and lawful disposal. WM1 leaves the construction Waste Management Plan to detailed design, and WM2 leaves selection and confirmation of receiving facilities to subsequent work. [1, Tables 23.3, 23.5 and 23.6]

The central deficiency is the absence of a demonstrated, available waste-management solution for the assessed project. A later management plan can organise work within an assessed solution. It must not become the point at which the basic disposal burden, receiving infrastructure and associated impacts are first established.

PART A

Waste generation, regional capacity and unfinished planning

3 | Waste expected from the project

Construction quantities

Table 1 sets out the indicative construction quantities in Chapter 23. The estimates derive from the reference design and are to be confirmed during detailed design. [1, s. 23.3.1]

Waste stream	Construction estimate	Assessment issue
Cleared vegetation	270,000 m^3	No quantified allocation between timber recovery, mulch, other reuse and disposal.
Excavated spoil unsuitable for project use	10,000 m^3	This is not total excavation or a complete balance of material moved off site. Classification remains subject to investigation.
Concrete waste	4,200 m^3	Includes excess concrete, overpour, washdown and batching waste. Recovery and disposal quantities are not allocated.
Offcuts, excess materials and packaging	20,000 tonnes	Broad combined category without a material-by-material recovery and disposal breakdown.
Workforce general domestic waste	1,500 tonnes	Annual and location-specific quantities and destinations are not given.
Workforce organic waste	775 tonnes	Receiving processing capacity is not established.
Workforce recyclables	650 tonnes	Processing destinations and acceptance capacity are not confirmed.
Oils	170 kL	Treatment or recovery destinations and available capacity are not specified.
Grease	50 tonnes	Separately identified stream requiring a suitable management pathway.
Treated timber conductor drums	4,400 drums	No weight, return-to-supplier allocation or quantified residual disposal requirement.
Amenities and camp wastewater	120 ML	The estimate describes liquid/slurry from amenities and ablutions. Other liquid streams require reconciliation.
Miscellaneous chemicals and associated wastes	Minimal quantity	No numerical estimate for the listed chemical wastes.

> Table 1 - **Waste quantities identified in the EIS**
Source: [1, Table 23.2, pp. 765–766]. All quantities in this table are construction totals, not annual loads.

The separately quantified tonne-based rows sum to **22,975 tonnes**. This subtotal excludes the streams reported in cubic metres, liquid volumes and drum numbers. It must not be presented as total project waste or total landfill demand. A revised material balance must also prevent overlap between broad packaging estimates and separately listed items such as conductor drums.

Routine operational waste

The operational table identifies 15 tonnes a year of general waste, less than 500 kL a year of amenities wastewater and fewer than 10 conductor drums a year. Vegetation, transformer oils and several chemical or electrical wastes are described without a numerical quantity. These estimates do not establish major replacement-cycle or end-of-life waste volumes. [1, Table 23.4, pp. 769–770]

What the inventory must establish

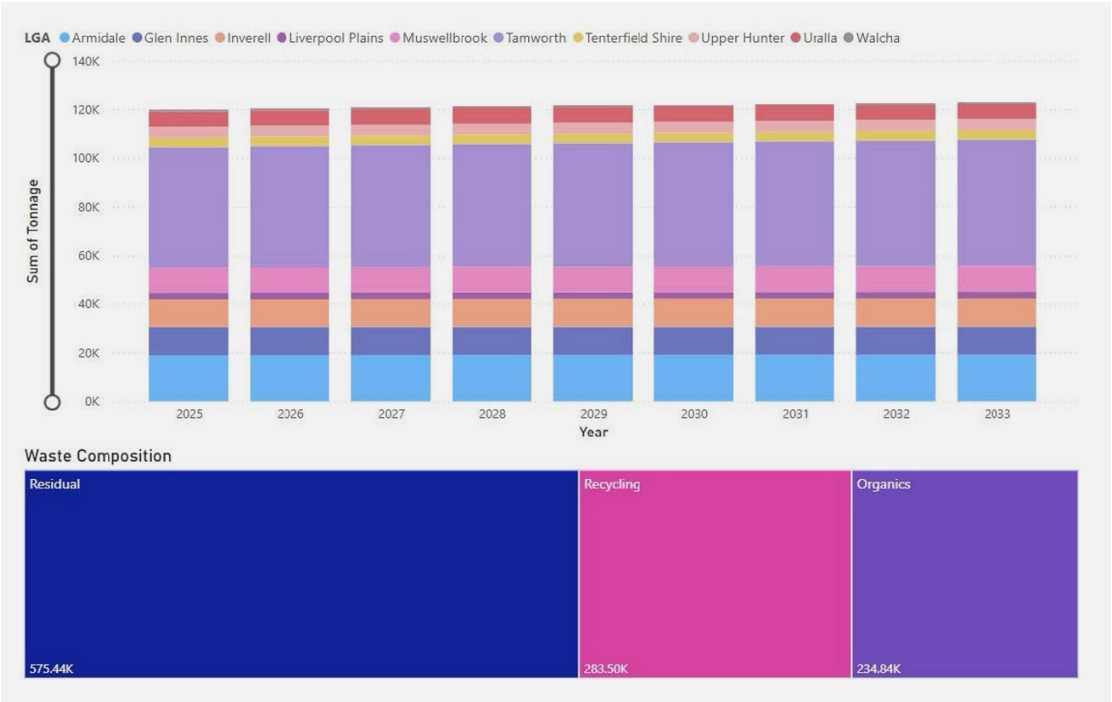
The EIS does not show how the construction totals translate into loads on individual councils, processors and landfills. It needs annual and peak-period quantities, locations of generation, classifications, and allocations between on-site reuse, off-site reuse, recycling, treatment and disposal. Each estimate must state its assumptions and reasonable uncertainty range.

The inventory must expressly cover enabling works, access-track and ancillary-site construction, removal of temporary facilities and treatment residuals. Where these are already included in a broader estimate, EnergyCo must identify the allowance and avoid double counting. Without that reconciliation, the community cannot assess the waste burden of the complete project.

4 | Existing waste loads and regional capacity

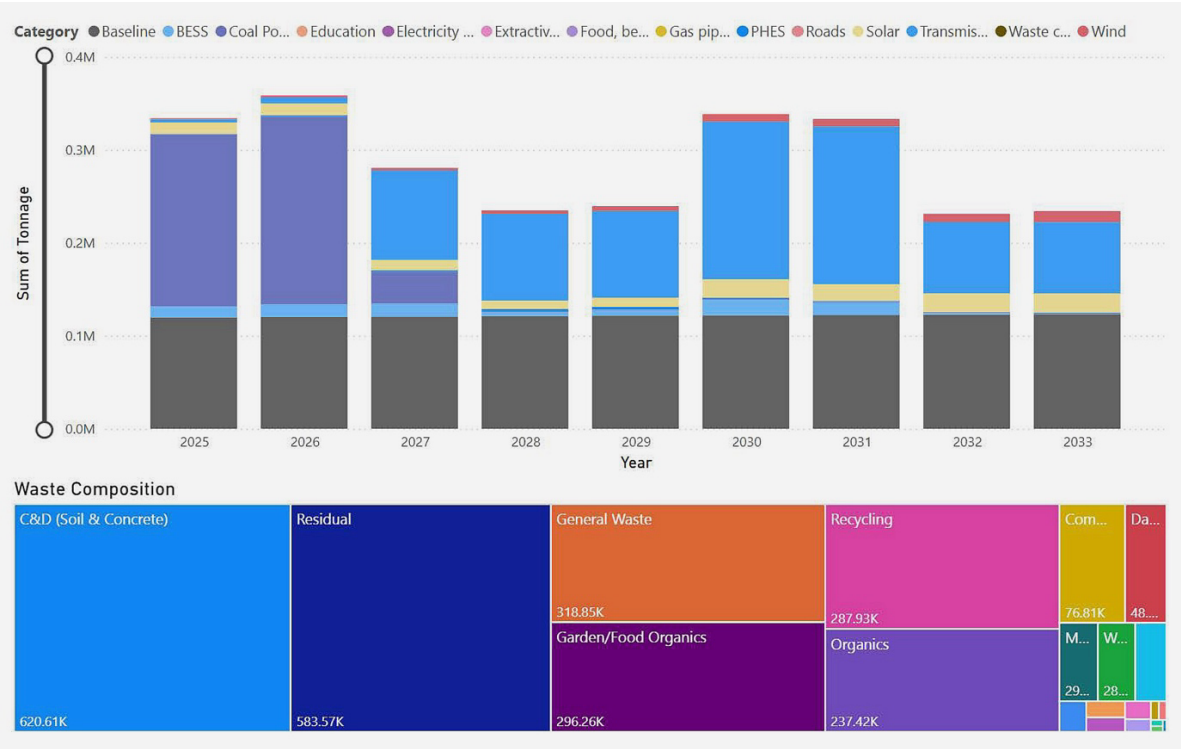
The regional baseline

The regional waste study estimates existing resident and ordinary commercial waste at approximately **120,000 tonnes a year**. Its baseline includes residual waste, recycling and organics and excludes sewage. [2, s. 7.1, pp. 69–70]



> Figure 1 - **Baseline Waste - Waste Resource Study p75**

Figure 35 shows an upper-scenario peak of approximately 360,000 tonnes a year, about three times that baseline.



It is important to note three things from the above chart;

1. Base case waste load is even in its quantity from year to year. LGA's can manage for this annual load.
2. The additional waste is of an overwhelming scale, compared to base case, in addition to being erratic in its quantity.
3. No information is given to allocate waste to each LGA. This study needs to be completed.

This base case covers the larger region including centres such as Muswellbrook, Tamworth, Inverell and Glen Innes. However, it is likely to be the smaller centres, such as Uralla and Walcha, that do not have the capacity, that will carry the burden of the waste.

The regional baseline also covers ten LGAs rather than Chapter 23's eight-LGA study area. It includes Glen Innes, Inverell and Tenterfield, but excludes Singleton. Its project pipeline is based on November 2024 information. These differences must be reconciled before the forecasts are used to claim that this project's local waste impacts are acceptable. [2, foreword and Table 1, p. 16; 1, s. 23.1, p. 761]

A reliable percentage increase for each affected council is unable to be calculated from Chapter 23. Its whole-construction totals have not been matched to annual local baseline loads or facility allocations.

EnergyCo must provide that comparison in consistent units, areas and time periods.

Existing facility constraints

The regional study identifies substantial constraints at facilities listed in or near the project area. Table 2 records the study's findings, which require current operator confirmation.

Facility	Annual limit reported by the study	Constraint reported by the study
Walcha	1,500 tonnes	No capacity for additional waste; significant REZ commercial and construction waste cannot be accommodated.
Uralla	3,000 tonnes	At its annual licensed limit and fewer than three years of remaining operating life at the study date.
Armidale	15,000 tonnes of general solid waste	At its annual limit. Proposed additional capacity requires planning and licensing changes.
Scone	7,000 tonnes	At its annual limit and no capacity for additional waste.
Aberdeen	5,000 tonnes	No capacity to receive and process additional waste.
Murrurundi and Merriwa	Historical licence figures do not establish available landfill capacity	Both landfills are reported closed and operating as transfer stations.

> Table 2 - **Existing constraints reported in EnergyCo's regional waste study**

Sources: [2, ss. 4.1–4.2, especially pp. 25, 29 and 39; Appendix D, pp. 147–148 and 156–158]. Annual limits are not measures of spare capacity or current waste production.

Walcha's estimated 40-year landfill life relates to existing domestic filling rates. The same study says it cannot receive significant REZ commercial, industrial or construction waste. The long domestic operating life does not demonstrate a capacity to absorb this project. [2, s. 4.1.10, p. 29; Appendix D, p. 158]

Armidale's amended advice makes the restriction explicit: its landfill cannot accept project or REZ waste, apart from certified virgin excavated natural material, paper and cardboard, and commingled recycling. A facility appearing in an EIS list is therefore not evidence that it will accept the proposed loads. [9, pp. 6–7]

Facility information must be reconciled

Chapter 23 lists landfilling at Murrurundi and Merriwa, while the regional study says their landfills are closed. Chapter 23 lists asbestos acceptance at Scone, while the study's main text says Upper Hunter asbestos is accepted only at Aberdeen. These differences require confirmation of present operating status and acceptance arrangements. [1, Table 23.1, pp. 764–765; 2, s. 4.1.8, p. 29]

The study identifies 60 facilities, including 41 transfer stations primarily serving domestic waste and generally unsuitable for REZ commercial volumes or types. The EIS must establish the suitability and spare capacity of actual destinations, including any downstream landfill or processor reached through a transfer station. [2, s. 4.2, p. 30]

5 | Solid waste recovery, reuse and disposal

Receiving facilities and available capacity

The EIS has not completed the connection between the waste generated and the facilities expected to manage it. WM2 commits to later selection of facilities and consultation about capacity. It does not provide annual allocations, confirmed acceptance or a quantified contingency destination for each material stream. [1, WM2, p. 773]

The receiving-facility assessment must state existing intake, licensed and consented limits, actual processing capability, remaining landfill space, other committed demand and the capacity available during the project's peak periods. Required upgrades must have identified approvals, funding, delivery dates and responsible parties.

Without this assessment, households and existing businesses face the risk of reduced access to disposal services, earlier exhaustion of landfill space and additional transport or infrastructure costs. Those consequences must be assessed before the waste solution is accepted.

Excavated material and vegetation

The 10,000 m^3 unsuitable-spoil entry must be reconciled with the project's full excavation and reuse balance. Chapter 23 describes potential natural-material reuse and testing of suspect spoil, but does not quantify all excavated material, its location, the timing of reuse or the residual off-site requirement. [1, Tables 23.2–23.3, pp. 766, 768]

For the 270,000 m^3 of vegetation, the EIS describes possible timber reuse, firewood, mulch and licensed disposal of weed-contaminated material. State Forest timber recovery is subject to further discussion. These options require quantified allocations and demonstrated users or processing capacity. [1, Table 23.3, p. 767; WM3, p. 773]

The assessment must identify where material will be stored, processed and applied, the quantities each use can absorb, and what happens when reuse is unavailable. Landholder agreement and the suitability of receiving land must be established. Material must not accumulate on properties because an assumed market or use fails to materialise.

Construction materials and recovery targets

The 20,000-tonne combined estimate for offcuts, excess materials and packaging needs to be separated into practical streams such as metals, timber, plastics, cardboard and mixed residual waste. The assessment must then identify processors, acceptance conditions and realistic recovery rates. [1, Table 23.2, p. 766]

The EIS states that EnergyCo has set waste-reduction and recycling targets for the network operator. It does not disclose their numerical values in that passage or in Chapter 23. The targets, calculation methods, relevant waste streams, exclusions and compliance arrangements must be published. [5, Table 2.3, p. 32; 1, s. 23.5]

A recovery target requires a deliverable pathway. Procurement, supplier take-back, segregation and processing arrangements must support the claimed outcome. The residual disposal assessment must allow for contamination, rejected loads and recovery rates below the target.

6 | Contaminated spoil and special wastes

Investigations affect the disposal burden

Technical Report 19 contains a conceptual site model, sampling, classification procedures and commitments to further investigation. The outstanding issue is the quantity and classification of material that those investigations will require the project to manage.

At BH123, nickel exceeds a threshold which the report says would result in hazardous-waste classification if no further analysis occurred. Further leachability testing may support classification as general solid waste. Until that testing is completed, the final classification and affected volume remain unresolved. [4, s. 6.3.2, p. 57]

The report also identifies a naturally occurring asbestos risk band between Hanging Rock and Glenrock intersecting approximately 3 km of alignment, including towers and access roads. Targeted investigation and a management plan are required where relevant disturbance cannot be avoided. The mapped risk must be reflected in waste estimates and disposal contingencies. [4, s. 4.6, p. 37; Table 11-1, p. 92]

Intrusive investigation had not been undertaken at Camps 1 and 4, including the Central South Hub camp, and investigation at Camps 2 and 5 was limited. Several potential contamination sources, including livestock dips, fill, stockpiles and dumping areas, were not comprehensively located or mapped. [4, ss. 1.2.2, 6.3.1 and 6.4, pp. 11, 57–58]

The disposal assessment must account for these known uncertainties. It must provide expected and credible upper-bound quantities by classification, appropriate receiving pathways and the effect of specialist disposal on storage, transport and cost. An assumption that excess soil can be reused cannot resolve an untested contamination risk.

Classification before disturbance and reuse

The report requires further assessment of unavoidable disturbance in areas with moderate or greater potential contamination impacts and targeted asbestos investigation. These commitments need clear completion points before relevant disturbance. [4, Table 11-1, pp. 90–93]

The findings must update the waste inventory and receiving-capacity assessment. Contaminated material must be segregated from clean fill and rehabilitation material. Reuse must be suitable for its receiving land and lawful under the applicable classification or recovery arrangements. Unexpected-find procedures must supplement, rather than delay, the investigation of already identified risks.

Contaminated water and dam sediments also require attention where works affect dams or groundwater. Their expected quantities and management pathways must be identified separately from the amenities wastewater estimate. [4, ss. 8.3.2–8.3.3, pp. 72–73]

7 | Wastewater generation, treatment and disposal

The liquid-waste balance is incomplete

Table 23.2 describes 120 ML of liquid waste and slurry from amenities and ablutions. Table 23.3 refers to sewage and concrete washouts and proposes camp treatment plants, possible reuse and off-site transport of remaining wastewater. These descriptions do not provide a complete quantified balance of sewage, construction-process liquids, reuse and residual disposal. [1, pp. 766, 769]

The regional wastewater study identifies construction-process wastewater as an outstanding information requirement. Examples include contaminated runoff and wheel washes. Some streams may disrupt sewage-treatment processes and require alternative treatment. [3, WWC2, pp. 149–150]

EnergyCo must demonstrate the treatment requirement for each liquid stream. This includes total and peak daily volumes, pollutant loads, treatment standards, reuse demand, storage and residual disposal. Concrete washout and other process water cannot simply be assumed suitable for the same pathway as camp sewage.

Capacity must be demonstrated for the project

Table 3 shows selected results from the regional study. These are modelled utilisation rates for broader REZ development, using average dry-weather flows. They are not measured current spare capacity or the transmission project's individual contribution.

LGA	Modelled baseline utilisation	Modelled utilisation with REZ development
Walcha	24%	26%
Uralla	52%	105%
Tamworth	98%	99%
Upper Hunter	97%	98%
Armidale	89%	91%

Table 3 - **Selected regional wastewater treatment capacity comparisons**

Source: [3, Table 7-2, p. 124]. The displayed REZ percentages are the same in the study's Stage 1 and Stage 2 columns for these LGAs.

The model shows Uralla exceeding assumed capacity and several systems operating close to it. It does not show Walcha exceeding its adopted treatment capacity. However, the study excludes wastewater-network constraints and peak wet-weather flows, lacks plant-efficiency information and assumes no on-site treatment at project sites. The EIS now proposes camp treatment plants. The model must therefore be reconciled with the current design and verified operating capacity. [3, pp. 121–124 and Appendix G, p. 171]

Camp plants, residuals and outstanding investigations

The assessment must specify each camp plant's throughput, treatment performance, storage, reuse area or demand, and response when weather or water quality prevents reuse. It must quantify screenings, sludge and other treatment residuals and identify lawful receiving facilities. The EIS describes treatment and residual removal, but Chapter 23 does not provide those quantities and receiving allocations. [5, pp. 66, 727; 1, Table 23.3, p. 769]

The regional study identifies seven further actions, WWC1–WWC7. They address camp siting and networks, process-wastewater quantities, practical plant capacity, treatment solutions, tankering, verification of Liverpool Plains capacity and extreme wet-weather flows. EnergyCo must publish the status and findings of each action and show how they have been incorporated into the project. [3, Table 8-6, pp. 149–151]

8 | Waste transport, storage and contingency arrangements

Transport follows the disposal decision

The EIS's proximity list does not establish haulage routes from individual work fronts or camps. Until destinations and quantities are allocated, the waste assessment cannot demonstrate the corresponding route-specific traffic burden. [1, Table 23.1 and WM2]

The transport schedule must include residual construction waste, vegetation, specialist spoil, wastewater, treatment residues and material sent for recycling. It must show vehicle capacities, loaded and empty movements, peak days, intermediate transfers and alternative destinations. The totals must reconcile with the traffic assessment and identify any additional road, safety, noise or dust measures.

Storage must have limits and a practical alternative

Chapter 23 provides ordinary controls for segregation, labelled storage, bunding and authorised collection. The assessment still needs maximum storage quantities, holding periods and interruption scenarios for the volumes generated by this project. [1, Tables 23.3 and 23.6]

EPA advice expressly requires contingencies for excessive stockpiles and dirty water exceeding available storage. The project must show how it will manage rejected loads, transport interruptions, unavailable processors, failed treatment and periods when treated wastewater cannot be reused. [7, s. 6.3, p. 5]

Temporary storage must not become the default response to an unavailable disposal pathway. Site limits, inspection requirements, removal triggers and assessed alternative destinations are needed before the relevant facilities operate. The costs and responsibility for those alternatives must remain with the project. Emergency plans should also identify how waste from foreseeable spills, fires or equipment failures will be contained, classified and removed, including contaminated firewater and damaged materials.

9 | Cumulative waste pressures, infrastructure and funding

The regional study establishes the need for coordinated waste planning, but its forecasts use an older project pipeline and generic transmission waste assumptions. The EIS must reconcile that work with the current design, construction program, project list and verified facility capacities. [2, foreword, ss. 6.1 and 6.3.2.9, pp. 59–60; 5, Table 2.3, p. 32]

The assessment must prevent several projects from each relying on the same apparent spare capacity. Annual and peak-period allocations should account for existing community demand and other committed or reasonably foreseeable developments. Where infrastructure is insufficient, the solution must identify the facility, operator, approvals, funding and commissioning date.

The regional study proposes waste frameworks, updated facility information, service agreements, reverse logistics and monitoring. Its foreword expressly states that opportunities are not commitments or guaranteed actions. The EIS's cumulative-waste section acknowledges potential capacity exceedance and ongoing consultation about facilities and destinations. [2, foreword and Chapter 14; 5, s. 24.2.2.19, p. 812]

The assessment needs a funded delivery program for the capacity on which the project relies. Where an upgrade or new service cannot be delivered in time, EnergyCo must demonstrate an alternative and assess its impacts. Councils and existing businesses must not lose essential capacity because a project has assumed that regional coordination will produce a solution later.

Armidale Council specifically rejected reliance on broad coordination statements or future strategies without explaining who would act and with what authority. That concern should be answered through named responsibilities, enforceable arrangements, reporting and intervention triggers. [9, p. 5]

PART **B**

Rehabilitation, end of life waste and long term responsibility

10 | Rehabilitation and end of life obligations

The EIS commits to rehabilitating temporary construction areas, undertaking pre-condition assessments and preparing property management plans. It also anticipates an operating life of around 50 years, potentially longer with maintenance and upgrades, and says a detailed decommissioning and rehabilitation plan would be prepared before final closure. These commitments establish an intention to rehabilitate. They do not settle the restoration standards, removal obligations, funding and long-term responsibilities that affected landholders need to understand before approval. [5, s. 3.5, p. 143]

10.1 Rehabilitation after construction and closure of temporary facilities

Closure of temporary facilities is part of the construction program. Camps, compounds, laydown areas, batching facilities and temporary services will require dismantling, waste removal and rehabilitation as construction finishes. Section 3.5 provides for temporary-site decommissioning before construction is completed and for unused access tracks to be rehabilitated or retained in consultation with landholders. [5, s. 3.5, p. 143]

The assessment needs to show what this work involves at each site. It should identify the buildings, concrete, hardstand, underground services, wastewater infrastructure and contaminated materials to be removed; the associated waste quantities and destinations; and the timing of reinstatement. The construction waste inventory must make clear whether these removal and clean-up activities are included.

Section 12.3.3 says temporary facilities would be restored to their former use, subject to approval conditions and property plans, unless otherwise requested by the landholder or located on freehold land acquired by EnergyCo. Acquisition does not establish an acceptable final condition for that land. The intended future use and rehabilitation obligations for acquired camp and ancillary sites must also be specified. [5, s. 12.3.3, pp. 496–497]

10.2 Restoration of agricultural land and environmental values

Returning land to a broad use is not the same as restoring its agricultural productivity. A paddock can return to grazing while supporting lower stock numbers because of compaction, poor drainage, damaged soil structure, weeds or reduced pasture establishment. Rehabilitation must be assessed against the condition and productive function of the land before disturbance.

The EIS identifies approximately 2,233 hectares of agricultural land affected during construction. It proposes pre-condition assessments and property-specific rehabilitation arrangements. That baseline must record the characteristics needed to demonstrate recovery, including soil condition, drainage, pasture or cropping performance, fencing, water infrastructure and existing biosecurity conditions. [5, s. 12.3.3, pp. 496–497; Table 12.7, LP2, p. 507]

The EIS commits to property-infrastructure adjustments at no cost to landholders and to repairing construction damage. Those commitments should expressly cover the functional restoration of affected dams, bores, pumps, pipelines and stock-watering systems, with agreed performance standards and a process for addressing defects that emerge after construction. [5, s. 12.3.2, p. 496; Table 13.5, AG4, p. 543]

Organic properties require specific protection. The EIS excludes genetically modified plants from rehabilitation and provides for consultation with organic producers about property-specific risks. The resulting plans must also address imported soil, residues, weed-control products and any testing or corrective work needed to protect certification. [5, s. 13.3.5.5, p. 535; Table 13.5, AG5, p. 544]

Contaminant screening must reflect the receiving land use. Technical Report 19 considers some soils suitable for reuse under industrial or public-open-space scenarios. That finding does not establish agricultural productivity or suitability for every rehabilitation site. Vegetation restoration must likewise specify the required species, establishment standards and erosion-control outcomes, beyond the future procedures identified in the EIS. [4, s. 8.3.1, p. 71; 5, Table 7.10, B2, p. 279]

10.3 Waste from asset replacement and eventual decommissioning

The waste assessment must cover the infrastructure that will be replaced during operation and removed when it is no longer required. The project description anticipates replacement or upgrading of energy-hub components and an operating life that may extend beyond 50 years. Chapter 23 lists routine maintenance waste, but its operational table does not provide an inventory of major replacement cycles or an end-of-life waste estimate. [5, ss. 3.4.2–3.5, pp. 142–143; 1, Table 23.4, pp. 769–770]

The assessment should quantify the principal materials in towers, conductors, substations, transformers, batteries, cables, foundations and associated infrastructure. It should then distinguish material expected to be replaced during operation, material removed at final closure and material proposed to remain in the ground. Waste classifications, recovery opportunities and residual disposal requirements must accompany those estimates.

Future waste technology and asset life will change. That does not prevent EnergyCo from providing a present-day inventory, realistic recovery assumptions and an obligation to review the assessment as the assets change. It is the starting point for estimating closure costs and avoiding an unfunded waste liability.

This is supported by the SEARs requirement to quantify waste throughout all project stages and by Tamworth Regional Council's request for landfill-capacity assessment across construction, operation and decommissioning, including waste volumes, timing and disposal locations. [6, pp. 1, 5; 8, s. 4.2, p. 6]

10.4 What will be removed and what will remain

Section 3.5 estimates that final decommissioning, if required, would take around two years. It leaves the detailed plan until that stage. The generic commitment does not explain the extent of tower, substation and foundation removal, the treatment of buried infrastructure or the final landform and drainage arrangements. [5, s. 3.5, p. 143]

The EIS should establish a component-by-component removal schedule and a defined final condition for affected land. Any proposal to leave foundations, cables, drainage structures or other infrastructure in place must identify its extent, constraints on future land use and continuing inspection or maintenance obligations. Retention must be justified and agreed through a clear process; it must not become the default because removal costs have not been funded.

The social assessment records concern about complete infrastructure removal, productive land use and residual environmental impacts. It reduces the assessed decommissioning uncertainty from High to Negligible using community engagement and continuing maintenance, upgrading or replacement as management measures. Those measures do not establish enforceable removal or restoration obligations. [5, Table 10.8, p. 405]

Landholder agreement to retain a useful access track must be specific. It must not transfer responsibility for unrelated infrastructure, concealed contamination or failed rehabilitation.

10.5 Responsibility, funding and financial security

The approval must identify who remains responsible for rehabilitation, waste removal and remediation throughout construction, operation, transfer of ownership and final closure. Landholders and councils need an enforceable point of responsibility if contractors leave, ownership changes or restoration fails.

Tamworth Regional Council specifically requested a Decommissioning and Rehabilitation Plan, rehabilitation criteria and proposed financial security or a decommissioning bond before construction. The EPA's amended advice also states that it may require financial assurance as a licence condition. The EIS's general commitment to a future closure plan does not resolve the amount, form, timing or availability of that protection. [8, s. 4.1, p. 6; 7, p. 2; 5, s. 3.5, p. 143]

Financial protection should be based on an independently assessed cost of completing the outstanding work, including waste transport and disposal, infrastructure removal, soil and water remediation, rehabilitation, monitoring and corrective action. It should allow for uncertainty in contamination and recovery costs and be reviewed as the project, costs and liabilities change. Speculative future scrap values should not be relied upon to fund essential obligations.

Responsibility and security must continue through ownership or operator changes. Release of security should depend on verified completion, with sufficient protection retained for defects or contamination that become apparent during monitoring.

10.6 Rehabilitation standards, verification and long term monitoring

Property Specific Management Plans can record local requirements, but they need a consistent minimum restoration standard across the project. LP2 and the agricultural mitigation measures provide for pre-condition assessments, rehabilitation processes and property-specific plans. They do not set the measurable agricultural and environmental completion standards sought in this submission. [5, Table 12.7, LP2, p. 507; Table 13.5, AG3, pp. 541–543]

Before relevant disturbance, each site should have an agreed baseline, rehabilitation objective and completion criteria covering, as applicable:

- soil condition, drainage and recovery of agricultural productive capacity;
- stable landforms, erosion control and established vegetation;
- restored property and water infrastructure, and effective weed and biosecurity controls;
- removal or lawful retention of infrastructure and waste, with contamination validation where required.

Each obligation needs a completion date, an inspection and reporting process, and a defined response if the standard is not achieved. Verification should include appropriate independent expertise and affected landholder participation. Monitoring must continue long enough to test recovery through relevant growing seasons and rainfall conditions. Failed revegetation, renewed erosion, drainage defects or contamination must trigger funded corrective work and further verification.

The EIS describes rehabilitation as an outcome but leaves central questions about delivery unresolved. Approval must secure what will be removed, the condition in which land will be left, the standards by which recovery will be judged, and the funding and responsibility for achieving those standards. Those protections must be established before disturbance and remain enforceable until the obligations are fulfilled.

11 | Summary of deficiencies and risks to the community

The EIS identifies waste streams and standard management procedures, but leaves the practical capacity solution and significant restoration obligations unresolved. The resulting risks extend from the construction period to final closure.

Deficiency	Community or landholder consequence	Required response
No annual and local allocation of project waste	Additional pressure on local services cannot be assessed against existing demand.	Consistent baseline comparisons, annual quantities and peak receiving loads.
Unconfirmed destinations and constrained facilities	Loss of community capacity, longer haulage and unfunded infrastructure demands.	Demonstrated acceptance capacity, funded upgrades and viable alternatives.
Incomplete spoil classification and liquid-waste balances	Unexpected specialist disposal, storage and transport requirements.	Investigation, quantified allowances, appropriate treatment and disposal capacity.
Unproven recovery assumptions and storage contingencies	Accumulation of material when a proposed use, processor or treatment route fails.	Quantified recovery pathways, storage limits and assessed contingencies.
Undefined replacement and closure waste	Future disposal requirements and removal costs remain uncertain.	Lifecycle inventory, removal commitments and regularly updated closure estimates.
Incomplete restoration criteria and financial protection	Reduced land productivity, persistent defects and costs transferred to landholders or councils.	Measurable outcomes, continuing liability, independent verification and adequate security.

> Table 4 - **Deficiencies, consequences and required protection**

These findings are supported by the evidence in Sections 3–10. They require resolution during assessment and enforceable obligations before the relevant activities commence. A future plan must implement an assessed solution and defined outcomes, rather than postpone the decisions that determine the project's impacts.

12 | Questions and demands

EnergyCo must provide enough information before determination to establish a feasible waste strategy and assess its impacts. Any approval must then require final arrangements, operating plans and necessary infrastructure to be in place before the relevant work starts.

12.1 Complete inventory and baseline comparison

Question: What waste will be generated, where and when?

Demand: Before determination, provide a single inventory covering enabling works, construction, camp and compound removal, operation and asset replacement. Separate each stream by quantity, classification, year and LGA, identify peak months, and state assumptions and uncertainty ranges. Compare annual project additions with existing annual waste loads in the same area and units. Keep transmission-project quantities separate from forecasts for the wider REZ.

12.2 Confirmed receiving capacity

Question: Which facilities can receive the forecast waste?

Demand: Before determination, identify proposed receiving facilities and demonstrate their ability to accept each classification and forecast peak load, allowing for existing customers and other projects. Distinguish licensed throughput, actual processing capacity and remaining landfill space. Before the relevant work starts, secure written acceptance arrangements and a viable alternative if a nominated facility becomes unavailable. A list of nearby facilities is insufficient.

12.3 Excavated material and vegetation reuse

Question: How much excavated material and vegetation can actually be reused?

Demand: Provide a reconciled material balance showing quantities generated, reused on the project, transferred for beneficial use, stockpiled and disposed of. Identify the location, timing and capacity of proposed uses, including any processing needed. Reconcile surplus earthworks with the waste inventory. Before determination, assess a credible disposal alternative for material whose reuse has not been demonstrated, including its transport and environmental impacts.

12.4 Contamination investigation and classification

Question: What investigations are needed to classify and manage contaminated material?

Demand: Before determination, identify unresolved contamination and naturally occurring asbestos risks, the likely waste streams and credible quantity ranges, and demonstrate that suitable treatment or disposal pathways exist. Complete the necessary site investigations, classification, remediation design and validation requirements before affected ground is disturbed. Explain how contaminated material will be segregated and prevented from entering clean fill, rehabilitation material or offsite reuse streams.

12.5 Wastewater treatment and residuals

Question: How will sewage and construction-process wastewater be treated?

Demand: Reconcile the 120 ML amenities and ablutions estimate in EIS Table 23.2 with camp occupancy and construction duration. Separately quantify washdowns, concrete washout and contaminated runoff. Before determination, demonstrate treatment feasibility using peak daily flows and pollutant loads, onsite plant capacity, reuse demand, residual effluent and sludge quantities. Assess wet-weather storage and plant-failure contingencies. Confirm receiving-plant acceptance, any required upgrades and operating arrangements before wastewater is generated.

12.6 Waste transport and road impacts

Question: What traffic will waste management add to local roads?

Demand: Before determination, quantify waste and wastewater haulage by route, construction stage and peak day, stating vehicle capacities and counting loaded and empty movements consistently. Include transport to distant specialist facilities and transfers between stockpiles, processing sites and final destinations. Assess cumulative road, safety, noise and dust impacts. Show how these movements reconcile with the traffic assessment and identify who funds any necessary road measures.

12.7 Storage limits and contingencies

Question: Where will waste be stored while awaiting reuse, treatment or removal?

Demand: Identify proposed storage locations, maximum quantities and holding periods before determination where their impacts affect the assessment. Address drainage, sediment and leachate control, dust, fire, odour, weeds and separation of incompatible materials. Before use, establish operating limits, inspection requirements and removal triggers. Provide contingencies for rejected loads, interrupted transport and unavailable receiving facilities so temporary storage does not become an uncontrolled disposal solution.

12.8 Cumulative capacity and funded upgrades

Question: How will cumulative demand and necessary upgrades be addressed?

Demand: Update the regional assessment for the current project design, construction programme, other committed or reasonably foreseeable projects, and verified facility capacities. Explain what has been completed under the regional waste study and wastewater recommendations WWC1–WWC7. Identify required upgrades, responsible parties, funding and delivery dates. Before determination, demonstrate a deliverable capacity solution; before the relevant waste is generated, have that capacity commissioned and available without displacing essential community services.

12.9 The closure inventory

Question: What material will remain at the end of the project's operating life?

Demand: Before determination, provide an indicative inventory of towers, conductors, foundations, electrical equipment, oils, buildings and ancillary infrastructure, with quantities and likely recovery or disposal pathways. Identify material proposed to remain in the ground and assess the consequences. Establish a process for updating the inventory and closure costs as the design and assets change. Future refinement must not replace an initial assessment of the expected closure obligations.

12.10 Removal and restoration standards

Question: What removal and restoration outcomes will be guaranteed?

Demand: Before determination, establish minimum standards for temporary-site rehabilitation and eventual closure, including infrastructure removal, clean-up, stable landforms, drainage and restoration of affected agricultural land. Set measurable criteria for contamination, erosion, compaction, soil condition and pasture establishment, with comparison against recorded pre-construction conditions. Resolve property-specific methods before disturbance. Any retained infrastructure must have an identified purpose, assessed consequences and the landholder's informed agreement; retention must not transfer an unwanted liability.

12.11 Responsibility and financial security

Question: Who will pay if rehabilitation fails or the operator cannot meet its obligations?

Demand: Before determination, identify the parties responsible for construction waste, contamination, temporary-site restoration, decommissioning and post-closure defects. Provide an independently reviewed cost estimate and propose enforceable financial security covering those obligations. Establish security before construction and maintain it until the secured obligations are verified as complete. Specify how it will be reviewed and adjusted, and who can access it if obligations are not met. Ownership changes must preserve responsibility, funding and the ability to require corrective work.

12.12 Verification, monitoring and reporting

Question: How will compliance and rehabilitation success be demonstrated?

Demand: Before determination, specify measurable recovery and disposal commitments, rehabilitation completion criteria, independent verification and corrective-action obligations. Require records of quantities, classifications, destinations and acceptance, with regular public reporting. Establish monitoring periods suited to the risks, landholder reporting arrangements and clear triggers for further work. Final operating plans must be approved before the relevant activity begins, and material changes to assessed waste volumes, destinations or impacts must receive further assessment and public scrutiny.

> POSITION SOUGHT

Approval should be withheld until EnergyCo demonstrates that the project's waste can be lawfully and practically managed, that receiving and treatment capacity is sufficient, and that the resulting environmental and community impacts have been assessed. A future Waste Management Plan cannot substitute for this evidence.

The assessment must cover all material waste streams, including surplus spoil, contaminated material, process wastewater, temporary-facility removal, asset replacement and eventual decommissioning. Material new information about quantities, destinations, treatment infrastructure or impacts should be publicly exhibited before determination so affected councils, landholders and communities can respond.

Any approval must require final acceptance arrangements, operating plans and funded infrastructure upgrades to be completed before the corresponding work generates waste. It must also establish enforceable minimum removal and rehabilitation standards, clear responsibility, independent verification and adequate financial security.

Detailed closure methods can be updated as the infrastructure ages. The obligations, minimum outcomes and funding mechanism must be established upfront and maintained throughout the project's life. Landholders and councils must not inherit the cost of failed rehabilitation, abandoned infrastructure or unresolved waste.

Source references

Page references are the printed page numbers in each source. References to the regional studies identify their modelling and assessment findings; those figures are not a substitute for updated operator-confirmed capacity.

[1] EnergyCo. New England REZ Network Infrastructure Project Environmental Impact Statement, 2026. Chapter 23 Waste management, printed pp. 760–774. Tables 23.1–23.6 and measures WM1–WM5. Official source

[2] MRA Consulting Group for EnergyCo. New England REZ Waste Management and Circular Economy Study. Public version released December 2025. Foreword, Chapters 4, 6–8 and 14, and Appendix D. Official source

[3] Jacobs for EnergyCo. New England REZ Water and Wastewater Security Study. Public version released December 2025. Chapter 7, Table 7-2, Table 8-6 and Appendix G. Official source

[4] Aurecon. Technical Report 19 Contamination Impact Assessment, final revision 4 September 2026. Sections 4.6, 6.3–6.4, 8.3 and Table 11-1. Official source

[5] EnergyCo. New England REZ Network Infrastructure Project Environmental Impact Statement, 2026. Full EIS: Table 2.3; sections 3.4–3.5, 12.3 and 13.3; Tables 7.10, 10.8, 12.7 and 13.5; and section 24.2.2.19. Source 1 is an extract from this EIS. Official source

[6] NSW Department of Planning, Housing and Infrastructure. Amended Planning Secretary's Environmental Assessment Requirements, SSI-74175972. Issued 7 April 2026, pp. 1 and 5. Official source

[7] NSW Environment Protection Authority. Amended advice on the New England REZ Transmission Project, 22 January 2026. Financial assurance at p. 2; construction waste at pp. 3–4; waste and contingency requirements at p. 5. Official source

[8] Tamworth Regional Council. Amended advice, 12 March 2026. Sections 3.3, 4.1 and 4.2, particularly p. 6 of 9 on decommissioning, rehabilitation, financial security and landfill capacity. Official source

[9] Armidale Regional Council. Amended advice, 11 February 2026. Cumulative coordination and monitoring at pp. 4–5; waste and decommissioning plan and landfill restrictions at pp. 6–7. Official source

[10] Uralla Shire Council. Amended advice, 4 February 2026. Local capacity and place-based impacts at p. 1; wastewater, waste quantities, destinations and regional disposal constraints at p. 2. Official source

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