CHAPTER 8

Defining Site Domains

1. Introduction

Domains are defined as a discrete operational area within a mine site, usually with a unique function and purpose and therefore similar characteristics. Given the size of the Hazelwood site and the need to assess and distinguish works that required approvals via various new and existing approval pathways, the site is divided into four key works areas or 'Closure Domains'. Closure domains for Hazelwood mine have been developed as part of the DMRP risk management process and through the review and consolidation of rehabilitation domains previously outlined in the Approved Work Plan Variation 2017 (WPV 2017) and geotechnical domains previously used in the *Appendix F - GCMP v8.1 July 2023.*

ENGIE Hazelwood has defined closure domains (and sub-domains) as areas at Hazelwood which are consistent in their condition and had similar proposed rehabilitation plans. Closure domains for Hazelwood are described individually in the following table and mapped below.

For planning and undertaking earthwork for rehabilitation within the Mine Void and Mine Surrounds, the areas are further defined based on the objective of the earthworks being undertaken, for example:

- Maintaining stable and safe access.
- Balancing resource and haul distances – borrow, cut/fill and topsoil.
- Drainage design and integration into broader mine void concept.

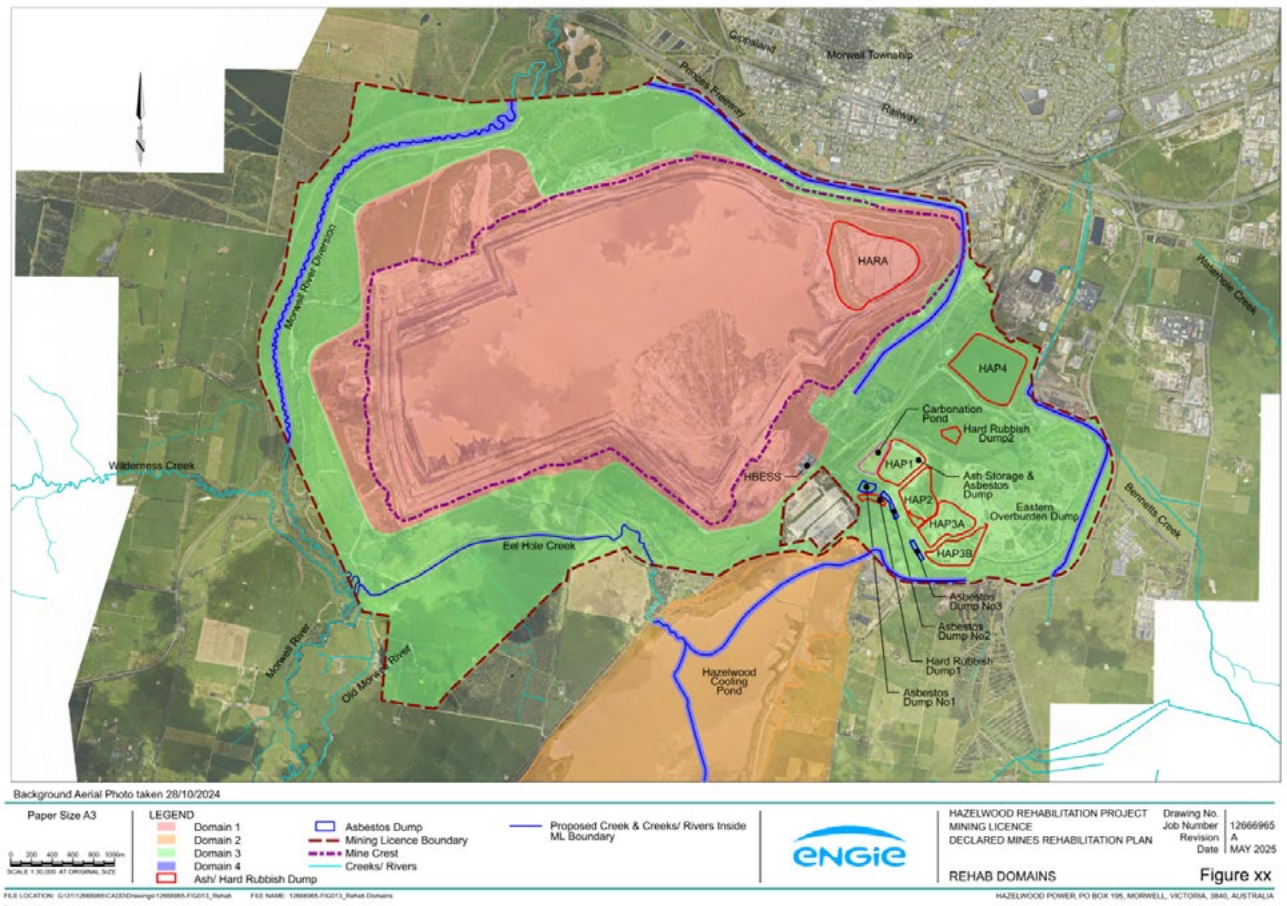


Figure 8.1: Site Domains

Table 8.1: below provides a summary of the closure domains defined for Hazelwood.

Table 8.1: Domains & Sub-Domains

EES DOMAINS			SUB-DOMAINS			PHASE RELEVANCE	
NO.	TITLE	DESCRIPTION	NO.	CLOSURE DOMAIN	DESCRIPTION	ACTIVE	PASSIVE
1	Mine void	The excavated mine area inside the mine crest and immediately outside the crest Generally enclosed by the mine perimeter road. Highly disturbed areas remaining after operations requiring significant reshaping and drainage works Includes the batters and benches of the mine walls, dumps, structures and infrastructure associated with the mining operations	1	Mine void lake	Mine void area filled with water at any particular stage of rehabilitation, progressing to a final level (currently estimated as RL +45 m AHD)	The increasing pit lake during filling. Water quality, water sourcing, erosion	The area of the pit lake at fill level Maintaining water level, shoreline protection
			2	Mine batters and floor	All mine void batters from mine floor surface to the upper edge / crest of mine void batter walls including the area immediately adjacent to the crest. Inclusive of a shoreline zone around the perimeter of the mine void where the final pit lake level (currently estimated as RL +45 m AHD) will interact with the batter surfaces	Previously prescribed rehabilitation work for slope remediation and shaping Fire risk of exposed coal (below fill level RL+45m) Stability works – surcharge and buttressing Erosion and drainage management	Only pit batters >+45RL will visible Maintain final landform and drainage Shoreline protection and safe access
			4	Landfills and disposal areas	Ash storage area (HARA)	Initial requirement for capping and licence relinquishment	Final management will be based on submerged landform
			6	Infrastructure	Infrastructure systems and / or facilities. Systems for mitigating risk and facilitating safe operations and access	Fire service system (including pipelines, supply point and pumps) maintained Roads and emergency access Electrical infrastructure Stability / groundwater and environmental monitoring	Access for slope maintenance, drainage and site monitoring Stability / groundwater and environmental monitoring
2	Hazelwood Cooling Pond	The former power station cooling water retention basin and operational infrastructure *Note: outside the scope of the ML / DMRP. Discussed to provide context for connected domains.*	5	Watercourses, storages and diversion structures	Water storage, outlet structure and associated embankments	Storage decommissioned and rehabilitated with the removal of structures (outlet etc) Re-establishment of drainage lines, construction of retention areas and riparian zones	Maintenance and management of remediation works Land transfer to future users
			6	Infrastructure	Storage and transfer pumps for firefighting reserve	Firefighting Storage decommissioned and rehabilitated with the removal of structures (pump stations, pipework etc and internal walls) Transition of firefighting pumps to mine void	
3	Mine surrounds	Balance of land within the Mining Licence area, outside the mine batter area	3	External overburden dumps	Landforms constructed from overburden material that are located external to the mine void area Most significant area is the Eastern Overburden Dump	EOD drainage and landform work completed as part of preliminary earthworks	Monitoring and transition to future use Other embedded uses may limit future use options
			4	Landfills and disposal areas	Ash storage areas, waste dumps and asbestos landfill sites, regulated by associated EPA licences	HAP4, HAP1 etc remediated (licence relinquishment) and aftercare period	Aftercare monitoring Remain as managed landforms

EES DOMAINS			SUB-DOMAINS			PHASE RELEVANCE	
3	Mine surrounds	Balance of land within the Mining Licence area, outside the mine batter area	5	Watercourses, storages and diversion structures	Water management ponds such as the WEP, NORP etc that have an interim operational function Water storages (operating dams) HCP, Recirc Pond, Clarification Pond etc (Either operational or in decommissioning phase) Water structure for diverting or channelling water such as MMD, EHC levee, MRFD, MRD levee	Water management ponds maintained Water storages progressively decommissioned and rehabilitated Drainage lines, levees and diversions remediated, formal drainage enhancements MMD decommissioned and flow diverted to mine void MRFD retained as potential flood diversion structure	Operational and management plans for retained structures
			6	Infrastructure	Infrastructure systems and / or facilities to service interim operations and rehabilitation activities Fire and water Depressurisation Electrical Buildings security and comms Roads, access, hardstands	Fire and water systems maintained. Electrical and comms systems maintained to service infrastructure and rehabilitation activities	Services decommissioned and removed to the extent not required to service future use Third party infrastructure to be maintained by owners
			7	Remaining land incl. conservation areas	Peripheral land generally outside the operational area, may have minimal disturbance or previously rehabilitated, Including leased land within MIN5004 area plus all land offsets and conservation areas under ENGIE Hazelwood's management	Site clean ups, landform and drainage works. Commence transition of low risk areas of minimal disturbance to future use (grazing and conservation areas	Relinquishment and aftercare
4	Streams and Waterways	Natural and diverted watercourses connecting to offsite streams	5	Watercourses, storages and diversion structures	Engineered diversion and associated embankments / levee structures that divert and channel water flows	Remediation and enhancement of drainage lines to remove operational requirement Passive management of site runoff	
			7	Remaining land incl. conservation areas	Land containing and adjacent to streams and water courses attributed to the maintenance of the stream (bank, flood plain and riparian zones)	Re-establishment of natural retention and riparian zones	
			8	Waterways	Natural water courses and diversions with reserves (usually formally recognised and draining a surface catchment)	Re-establishment of natural retention and riparian zones	

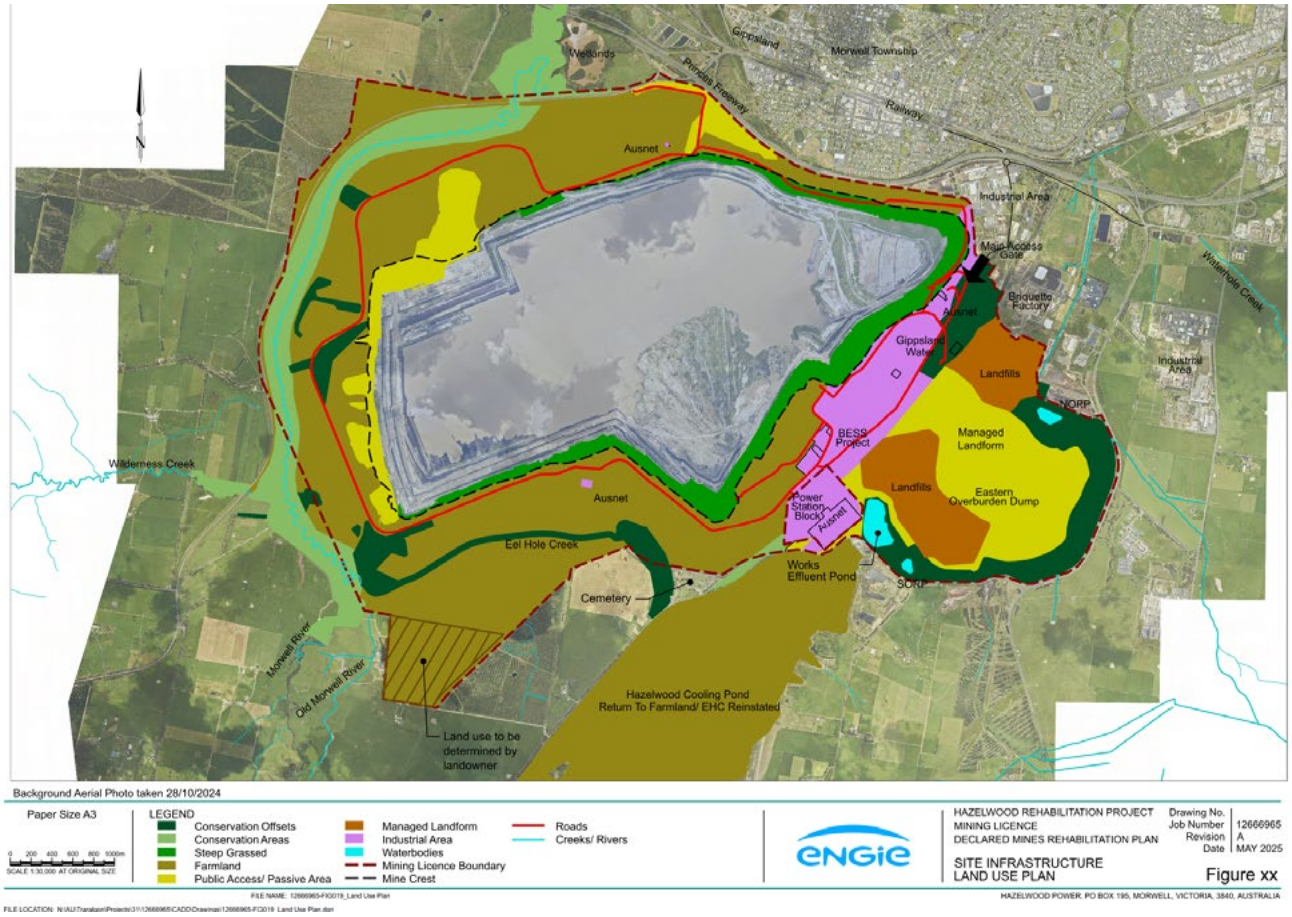


Figure 8.2: Land Use Plan

Table 8.1: Details of Domains and Sub-domains

SUB-DOMAIN	DESCRIPTION	PROPOSED KEY WORKS	OTHER RELEVANT OR BACKGROUND INFORMATION
DOMAIN 1: MINE VOID			
1 Mine Void Lake	Mine void area filled with water at any particular stage of rehabilitation, progressing to a final level (currently estimated as RL +45 m AHD) Two distinct periods of closure and rehabilitation activities would occur within this domain: • Mine lake filling • Maintenance of the final mine lake level It should be noted that operational water is presently being retained in the mine void pursuant to earlier approvals. The current volume of the water within the mine void is approximately 170GL as at 1 July 2025.	1. Filling of the lake to provide support to the overall mine batters and mine floor by providing counterweight to vertically acting aquifer uplift pressures and horizontally acting coal joint water pressures and stress relief. Also filling to cover any exposed coal remaining after mining, significantly reducing ongoing fire risk. 2. Incidental filling of pit will continue – rainwater runoff, operational (process) surface water (fire and dust suppression runoff) and groundwater extracted for mine stability (depressurisation), as a consequence of decommissioning infrastructure (including particularly electric transfer pumps, which would have previously sent the water to the HCP) on the mine floor in association with MRFD works. 3. Review / design water inlet structures and construct 4. Review groundwater requirements for filling and augment system as required, including infrastructure for discharge to mine void 5. Monitor impacts of shoreline erosion and implement controls	Infrastructure on the mine floor was decommissioned in preparation for inundation by flood flows (including electric transfer pumps that would have previously sent the water to the HCP). In late 2021 and 2022, high-volume flood flows were diverted through the MRFD from the Morwell River into the mine void. Whilst, at the time of the DMRP drafting, flood flows are no longer being diverted from the Morwell River through the MRFD in the mine void, rainwater runoff, operational (process) surface water runoff (used for fire and dust suppression) and groundwater extracted for mine stability continues to be retained in the mine void. Incidental filling of pit – diversion of flood flows from the Morwell River, through the MRFD infrastructure to support emergency works downstream in the Yallourn Mine occurred in 2021 and 2022, pursuant to emergency orders (and Condition 15A.1(b) of MIN5004) To support the requirement of the rehabilitation concepts and subsequently the outcomes of the EES, licencing and approvals pathways

	SUB-DOMAIN	DESCRIPTION	PROPOSED KEY WORKS	OTHER RELEVANT OR BACKGROUND INFORMATION
DOMAIN 1: MINE VOID				
2	Mine batters and floor	Comprised of the following features: **Mine floor,** including any exposed coal and internal overburden dumps, toe weights and surcharge dumps constructed for stability and otherwise stockpiled materials and / or water storage areas on the mine floor surface. The retention of water has inundated the mine floor infrastructure areas (sector ponds, dewatering pump stations (removed), depressurisation bore (relocated) and the majority of the exposed coal on the floor. The remaining floor is dominated by: • At the eastern end of the mine floor is an internal overburden dump. This dump covered the East Field. The dump was constructed in two levels up to approx. RL0m The HARE and HARA were constructed on top of the overburden dump. • Overburden dumping later moved adjacent to the batters of the South East Field. Internal dumping provides counterweight to the mine floor and surcharge to the lower batters. Material has been selectively used to construct further surcharges **Mine batter areas**, All mine void batters from mine floor surface to the upper edge / crest of mine void batter walls including the area immediately adjacent to the crest. Inclusive of a shoreline zone around the perimeter of the mine void where the final pit lake level (currently estimated as RL +45 m AHD) would interact with the batter surfaces and the area disturbed during operations immediately adjacent to the mine crest The area requiring earthworks, such as reshaping, capping and drainage is further segmented. These earthworks domains are referred to as follows: • East Field - Northern Batters (EFNB) • East Field Eastern Batters (EFEB) • South West Field Northern Batters (SWFNB) • North Field- North batters (NFNB) • North Field - West batters (NFWB) • West Field West Batter (WFWB) • West Field South Batter (WFSB) • South East Field West Batters (SEFWB) • South East Field South Batters (SEFSB) Rehabilitation works have been undertaken progressively on a 'non regrets' basis pending the approval of the final rehabilitation concept. Works have generally been above RL 45m, targeted capping exposed coal, meeting long term stability targets and constructing drainage. The activities to date are a combination of final and interim works.	**Mine Floor:** 1. In order to maintain geotechnical stability • Maintain aquifer de-pressurisation to mitigate floor heave. (Bores now re-established above RL 45m) • Continually monitor and assess aquifer pressures and weight balance targets • Monitor erosion impacts and control effectiveness 2. To reduce fire hazard on the exposed coal in the mine West Field floor maintain the Mine Fire Services coverage and emergency access. 3. Current infrastructure to be retained, but progressively truncated as water level increases, includes: • Surface drainage • Mine Fire Services Systems • Road access **Mine Batters:** 1. In order to maintain geotechnical stability Continued geotechnical investigations, across all domains, to determine appropriate Ground Movement criteria • Maintain monitoring, modelling and analysis of geotechnical conditions with the view to transition to passive control systems • Continue to adopt learnings into final shoreline design concept • Subsurface drainage systems (horizontal bores) will be used where this is essential to relieve hydrostatic pressures behind the batters 2. To reduce fire hazard: • Continue progressive rehabilitation to increase exposed coal coverage • Continually review and optimise the Fire Service System to maintain coverage and meet demand on all coal batters. 3. Cover all overburden batters with topsoil and sow pasture and/or native vegetation species. Cover all coal batters above +45 m RL in the East Field – Southern and East Field East Batters. Coal in other batters to remain uncovered, if below the +45 m RL final water level. 4. Infrastructure to be retained includes: • Surface drainage over all batters • Mine fire service system over all exposed coal batters • Monitoring and alert systems for stability and environmental conditions 5. Pest and Weed control • Control of invasive weed and pest animal species as per the site's Integrated Vertebrate Pest Management Plan and Weed Management Plan (WMP). • Undertake a baseline weed assessment of the area and set weed targets. • Monitor site to determine the success of the control programs and whether additional control is required.	At the end of coal mining operations the mine floor was made up of two internal Overburden Dumps, the sector ponds and the West Field operational area. The East field dump forms the base of the HARE and HARA areas which were placed on top of the overburden dump in the 1990s. **The South East Internal Dump covers most of the floor in this domain and abut the South East field Southern Batters.** This is helps mine stability as surcharge on the mine floor and buttressing against the lower batters.
4	Landfill and disposal area	Within the mine there is only a single ash landfill (HARA). The Hazelwood Ash Retention Area (HARA) is located at the base of the East Field - North Batter and East Field East Batter and is the ash waste retention area in the eastern section of the mine void. The HARA is some 10 metres deep. The area of the Hazelwood Ash Retention Area is approximately 30 hectares. The HARA is a closed ash landfill site which has recently had an interim cap installed for management of surface water ingress and dust management. This cap is being further assessed for suitability as a final capping solution for licence relinquishment. Previous operational infrastructure has been removed, although a pump and pipeline are retained to collect saline leachate and dispose to the SWOP (Saline Waste Outlet Pipeline).	Assessment of the HARA final capping requirement is currently progressing: 1. Capping Design of the HARA completed and approved, currently being progressed in consultation with EPA Victoria. EPA indicated in August 2018 that it *"consider[s] it reasonable to classify the ash material as non-prescribed industrial waste under the Environment Protection (Industrial Waste Resource) Regulations 2009 under clause 11(1)(b)"* 2. Capping of the HARA will commence post approval from the EPA, while the specific rehabilitation methodology is under technical review prior to submission to EPA 3. Inundation of the HARA, at approx. 372GL at RL+19m AHD 4. Remediation of site landfills in accordance with EPA directions and approvals, including any interim capping of HARA	**Development History:** The HARA was created in the early 2000s and has been in operation since that time. Ash placement continued up until station closure (March 2017) at which time the level of the HARA was approximately +10 m RL. Need to provide further information on the last 5 years of works. The ash has been dewatered and shaped in preparation for capping. Specifically for the HARA located within the mine void, EPA Victoria has amended the site operational licence to allow for a risk-based rehabilitation methodology to be utilised for this asset. Detailed designs for this capping system are currently subject to auditor review.

SUB-DOMAIN	DESCRIPTION	PROPOSED KEY WORKS	OTHER RELEVANT OR BACKGROUND INFORMATION
DOMAIN 1: MINE VOID			
6 Infrastructure	Infrastructure systems and / or facilities. Systems for mitigating risk and facilitating safe operations and access. Post the mining operations the infrastructure requirements have significantly reduced and changed. Infrastructure and facilities to support the remaining 'operational' activities and the rehabilitation project • Power supply systems • Haul roads and mine access roads (including traffic management system) • Security and emergency services Other systems maintained as risk control measures • Aquifer depressurisation system • Fire suppression system including reticulated water system • Mine fire service pipework • Geotechnical and environmental monitoring systems and installations • Surface drains The decommissioning of much of this infrastructure is further discussed in *Chapter 7 – Demolition and disposal*	• Power supply and roads are maintained to service the rehabilitation project; they will be progressively decommissioned. At completion the remaining power and roads will be sufficient to service the future land use and remaining monitoring requirements. • During the active fill period the aquifer depressurisation system, including groundwater bores, will be maintained to meet weight balance requirements and possibly augmented to supplement the fill process (dependant on approvals and licensing). Post fill (weight balance achieved) bores will be decommissioned and rehabilitated (sealed). • Monitoring bores, geotechnical equipment and installations will be progressively decommissioned. There may be optimisation and augmentation to suit introduction of passive controls. • The reticulated pipework will be maintained and operated to provide fire protection and dust suppression. The network will be progressively truncated as the water level rises. • The peak demand for the mine fire service system will reduce as the water level increases. This creates the opportunity for a re-engineered MFSS, which would perform at the equivalent level to the presently operating mine water pump system. This modified MFSS would include the use of relocatable floating diesel pumps on the surface of the mine lake (once the lake is of sufficient depth and volume to support this infrastructure). These would remain in place until all of the exposed coal has been covered by water. • The modified MFSS would make use of the connection of the Gippsland Water supply (which is not dependent upon external power supply) to the C and D tanks. • The MFSS would be progressively decommissioned as the mine is filled. In particular: • Below RL +45m, pipelines, fittings and concrete footings that are redundant would be at a minimum, removed to 5m below the final water level. • Above RL +45m, redundant and disused pipework, fittings and concrete footings would be removed.	Aquifer depressurisation system: The aquifer depressurisation system comprises a series of groundwater bores, pumping infrastructure, and discharge pipelines directing water to the mine void. The aquifer depressurisation system is supported by groundwater and geotechnical monitoring bores. Reducing groundwater pressures in the major aquifers below the mine floor is required to maintain stable geotechnical conditions as a risk management strategy. The current aquifer depressurisation bore network around the mine void is shown in **Figure 8.6**. In respect of the M1 aquifer, the following bores are in operation for dewatering purposes: • H5118, H5119, H4674, H5120, H5040, H4676, H4675, H5042, H5121, H5122 In respect of the M2 aquifer, the following bores are in operation for dewatering purposes: • Bores H4037, H4039, H4512, H4040, H4539, H5269, H5255 and H5284 Depressurisation activities also include the monitoring and maintenance of pumping and observation bores and monthly weight and water balance assessments. Target aquifer pressures are derived regularly to account for weight balance changes arising from the ongoing mining operations. Groundwater Licence 2007412 (GSRWA 1996) allows ENGIE Hazelwood to undertake groundwater extraction for the operation and management of the depressurisation systems. As part of the establishment of the mine lake described in Section 4.3.4 above, aquifer depressurisation pumping would continue as a source of mine filling until the mine lake reaches a depth of RL +45m AHD. Following this point, aquifer depressurisation pumping would cease given that there would be sufficient weight on the floor of the mine to counter the vertical-acting uplift pressures from the underlying aquifers. Aquifer depressurisation would continue throughout the filling of the mine to contribute to geotechnical stability and mitigate mine floor heave. Subsurface drainage systems (horizontal bores) would also continue to be used where this is essential to relieve hydrostatic pressures behind the batters. **Fire suppression system including reticulated water system:** The infrastructure for the proposed filling of the mine void intersects with the MFSS. Fire prevention, mitigation and suppression for the operation of the mine is governed by the FRMP (approved by ERR) and managed through the Mine Fire Service Policy (MFSP), as well as other associated internal policies and procedures. These policies and procedures relate to the exposed coal areas of the Hazelwood Mine. A key element of fire risk management at the mine is the reticulated water system, which consists of a network of water pipelines, hydrants, sprays and tanker filling points for use in fire prevention, mitigation and dust suppression activities. Fire protection of exposed coal in the operating areas are primarily provided by sprays (large scale sprinklers) and hydrants attached to the mine fire service system with water supply from the mine fire service pump station (FSPS). Water is supplied to the reticulation system through the relocatable fire services pump station which draws water from the mine retention area. An additional water source is provided via two pump stations (PH50 and PH53), which can also draw water from the HCP into the MFSS via C and D Tank. The Low Quality Water (LQW) pipeline can also be activated to draw water from the Yallourn – Loy Yang Low Quality Water Supply Pipeline and via the Gippsland Water connection into C and D tanks. The mine reticulated water system is pressurised through a gravity feed via C and D tanks, with the pressure levels of the lower systems maintained using pressure reduction valves. Booster pump systems are used to increase the pressure in pipes at grass level and above. There are multiple booster pumps to allow redundancy at each booster location. As is set out in the MFSP, the electrical distribution system providing power to electric pumps is designed to provide power through multiple feeders. To minimise the risk of losing multiple pumps from a single power failure, where practicable, electrical supplies to critical pumps supplying the mine fire service system are provided from separate power distribution centres including the Morwell West (MWW), Morwell North (MWN) and Morwell East (MWE) substations. To minimise the risk of losing multiple pumps from a single power failure, where practicable, electrical supplies to critical pumps supplying the mine fire service system are provided from separate power distribution centres including the Morwell West (MWW), Morwell North (MWN) and Morwell East (MWE) substations. Ongoing management of fire risk during the filling of the mine would be conducted in accordance with the FRMP, in through the maintenance of the reticulated fire service system and the grazing and slashing of vegetated areas to limit fuel loads. **Power supply system/s** **Arterial mine road and secondary mines roads on the berms** **Mine fire service pipework** **Surface drains** **Surface water storage** Decommissioning of the following surface water storages and their associated infrastructure has already occurred under existing approvals, in particular the 2017 WPV and MRFD emergency approvals: • Recirculation pond • Transfer Point 5 and Transfer Point 8 • Carbonation pond • Overburden runoff treatment pond • "Dirty water" sector ponds.

DOMAIN 2: HAZELWOOD COOLING POND

Description:
The Hazelwood Cooling Pond (HCP) is a constructed waterbody with earthen embankments. It was constructed from 1961 to 1963 as part of the Hazelwood Power Station. The HCP is located to the south-west of the power station block, approximately 8 kilometres south of the Morwell township and the pond is not within MIN5004, so therefore not within the scope of the DMRP. Two subdomains, however that sit within the HCP domain are within MIN5004 and are considered within scope of the DMRP.

SUB-DOMAIN		DESCRIPTION	PROPOSED KEY WORKS	OTHER RELEVANT OR BACKGROUND INFORMATION
5	Watercourses, storages and diversion structures	The HCP storage impoundment is created by 2 large embankments and is ~500Ha in area and up to 15m deep. The main (Eel Hole Creek) embankment parallel to Yinnar Rd provides a regulated closure across Eel Hole Creek, the smaller (Southern) embankment north of Switchback Rd increases the storage depth. Once the recirculation pond for the power station cooling system it also received excess water from the mine and was the main point of discharge to the receiving environment. It is now managed as a flow through system. (Outflows matched to catchment inflows) The balance of the retained volume is used to supplement to firefighting reserve retained in the 'hot water channel' and will be transfer to the mine when decommissioned. The HCP rehabilitation is proposed to be done in parallel to the mine earthworks and filling. There is key timing linked to peak fire demand (amount of exposed coal) and mine void water level (operational conditions for supply and booster pumps)	While linked to mine rehabilitation milestones the major constrains relate to the impacts downstream and working in an operating impoundment and simultaneously managing stream flows. The works need to coordinate: Progressively rehabilitate the pond floor and reinstate the former Eel Hole Creek waterway Decommission and reshape walls Remove outlet structure Establish riparian zone with flood retention to protect downstream Engage with future users (GLaWAC, WGCMA)	Prior to power station closure the HCP was primarily a recirculation basin for cooling water. The secondary use was storage for mine firefighting and dust suppression, and regulation of excess mine 'process' water. Without the cooling make up water and excess mine water the historic discharges have stopped, and the HCP is now managed to represent natural flow through. Revised Dam Safety Assessments (ANCOLD Stability Review) identified increased risk from seismic loading necessitating an operational review. The operating level was significantly lowered and public access removed.
6	Infrastructure	The HCP also contains structures and infrastructure to provide a pumped reserve of water for firefighting (particularly mine scale events). The embankment and weir previously used to regulate the 'hot water channel' forms an impoundment separate from the main body of the HCP. The water level is managed to ensure volume and pump operational requirements. Transfer pumps can also top up from the HCP	The transfer pumps will be lowered to support the draining of the HCP and to maintain the firefighting volume.	

DOMAIN 3: MINE SURROUNDS

This domain is the area outside the mining zone, generally outside the mine perimeter road. It contains several sub-domains including landforms, such as external overburden dumps, constructed from overburden material that are located external to the mine void area, watercourse diversion structures and a range of infrastructure. Of significance is the Eastern Overburden Dump which includes ash storage areas and asbestos landfill sites, regulated by Environmental Action Notices issued by EPA Victoria and ENGIE Hazelwood's Operational Licence OL000046436 and associated processes. The domain also includes all leased land within MIN5004 area plus all land offsets and conservation areas under ENGIE Hazelwood's management.

ENGIE Hazelwood has already significantly progressed decommissioning, demolition and rehabilitation works within the 'mine surrounds' domain. These works are previously approved or necessary operational works in relation to the areas surrounding the mine void and that are/were not the subject of the EES. Works in this domain consist of decommissioning of infrastructure systems and facilities, including ponds, car parks and buildings, and the Southern Outlet Ponds, which will be drained, and the sediment covered and made a free draining landform. At completion of earthworks the works effluent pond (WEP) will remain as a sediment pond acting as a conduit from the power block, EOD and surrounding area via the remediated HCP into the reestablished Eel Hole Creek.

Works conducted pursuant to previous approvals includes

- Finalisation of the demolition of the Hazelwood Power Station and associated infrastructure, pursuant to existing permits under the Building Act 1958 (Vic)
- Development of a portion of land near the Hazelwood Power Block for the Battery Energy Storage System and associated infrastructure
- Implementation of environmental investigations and clean up works under Clean Up Notices issued by EPA Victoria in relation to the mine void and broader Hazelwood site, which have now been transitioned to constitute Environmental Action Notices under the Environment Protection Act 2017 (Vic)
- Management of landfills and related audits and reporting to EPA Victoria under ENGIE Hazelwood's Operational Licence OL0046436 and approved Landfill Environment Management Plan
- Capping of ash landfills (subject to oversight and approvals from EPA Victoria)
- Overburden dump earthworks to create a final landform and ensure adequate drainage, as authorised by the 2017 WPV and correspondence with ERR and EPA Victoria
- Decommissioning and demolition of remaining redundant infrastructure

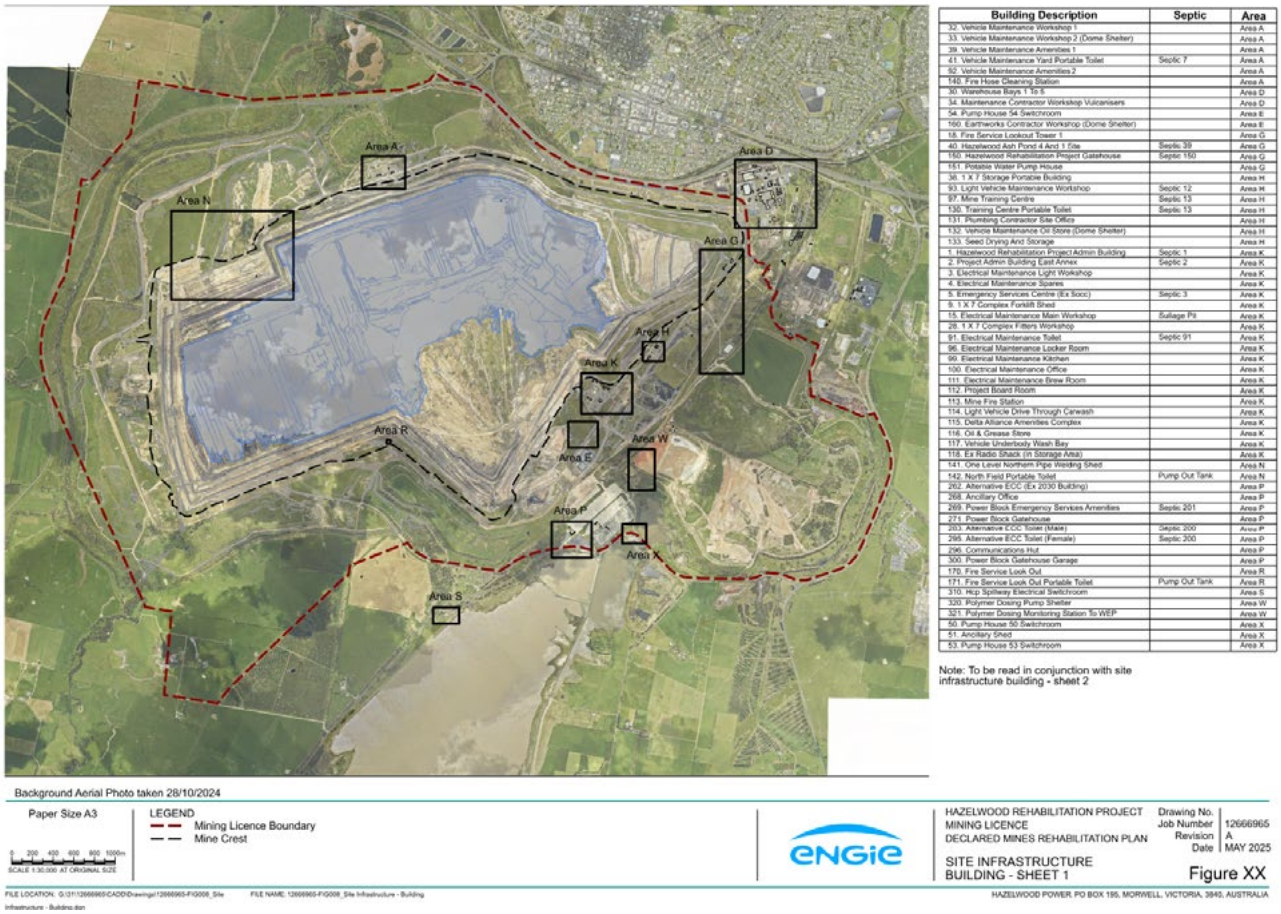
SUB-DOMAIN		DESCRIPTION	PROPOSED KEY WORKS	OTHER RELEVANT OR BACKGROUND INFORMATION
3	External overburden dumps	Landforms constructed from overburden material that are located external to the mine void area. These dumps generally contain overburden with some low-quality coal. Other material is also managed in specified locations, including ash and asbestos in licenced landfills, and hard rubbish (non-putrescible waste) dumps. **The Eastern Overburden Dump (EOD)** in the eastern portion of the project area. The EOD is approximately 50 metres high and has an area of approximately 285 hectares. Much of the surface has been shaped for stability and vegetated. Rehabilitation works for improved landform and drainage are being undertaken, as well as targeted remediation on areas, such as Hazelwood Ash Pond (HAP) 2a, HAP1/AL4 and HAP 4. These landfill portions of the EOD are the subject of ENGIE Hazelwood's EPA Operational Licence OL0046436 and EPA Victoria's separate regulatory oversight and will require long-term management under EPA Victoria's landfill aftercare requirements. The Clean Up Plan identifies the proposed end land use for the EOD as a "managed landfill", given that the licensed landfills within the EOD will be managed in accordance with their respective EPA licences, any future EPA instruments and ENGIE Hazelwood's environmental management procedures until the land is relinquished. **The Western Overburden Dump (WOD)**, located to the north of the North Field, has been rehabilitated with grass and mature trees. The WOD is approximately 22-28 metres high and has an area of approximately 28 hectares. **The South East Field Screening Dump (SEFSD)**, located on the south-western side of the SEFWB, has been rehabilitated. The SEFSD is approximately 20 metres high and has an area of approximately 59 hectares.	The ex-pit overburden dumps have mostly been progressively rehabilitated, with coverings of vegetation. Due to the requirement for areas on the EOD to be completed under the current EPA Victoria statutory process, complementary rehabilitation works are continuing on the broader EOD. The WOD and SEFSD have been completed as part of previous project works. Monitoring and maintenance activities are continuing in accordance with current use. **Proposed works:** 1. Overburden dump earthworks to create a final landform and ensure adequate drainage, as authorised by the 2017 WPV and correspondence with ERR and EPA Victoria. All remaining rehabilitation works on the EOD will be progressed under the separate regulatory oversight of EPA Victoria. These rehabilitation works will progress in parallel with the filling of the mine to create a final landform in this portion of the project area and ensure adequate drainage. 2. Vegetation management (e.g., for the management of fire risks and weeds) across the project area 3. Operational activities to mitigate fire risk, such as supporting infrastructure for the reticulated fire service system 4. Evaluation of EOD stability, including ongoing hydrogeological and geotechnical monitoring and reporting	

SUB-DOMAIN		DESCRIPTION	PROPOSED KEY WORKS	OTHER RELEVANT OR BACKGROUND INFORMATION
DOMAIN 3: MINE SURROUNDS				
4	Landfill and disposal areas	The project area includes various ash storage areas, hard rubbish and asbestos landfill sites, which were established for the purposes of waste management to support the former Hazelwood Mine and Power Station operations. These are regulated by associated EPA licences. **Hard rubbish dumps** were used to dispose of non-hazardous materials generated from power and mine operations that were generally too big for the municipal waste management systems. **Asbestos landfills** are for hazard Category C prescribed industrial wastes (Asbestos (all forms) and ceramic-based fibres similar to asbestos) as described under the Industrial Waste Management Policy (Prescribed Industrial waste) (EPA 2008). **Ash landfills** were used as storage sites as part of the ash disposal system, for ash produced from the burning of coal for electricity generation in the power station. Prior to 2006, ash was collected, mixed with water and sent to the ash storage areas. Ash material that was collected on the hearth was raked into a sluice trench where it was washed into the ash pits, from where the ash waste slurry was pumped into the ash ponds. Post 2006, an ash thickener was constructed and the coal ash (in thickened slurry form) was pumped to the HARA. • **HAP 4:** Closed and rehabilitated. HAP 4 is fully capped and vegetation and is presently being management and monitored. It is located in the northern part of the EOD. The BPEM capping completion is currently subject to EPA auditor review. • **HAP 1 Asbestos Landfill No. 4:** Located in the western part of the EOD. Closed landfill. Historically received Category C Waste – asbestos (including asbestos in fill material soil) and ceramic-based fibres with physico-chemical characteristics similar to those of asbestos. A minimum 500 mm interim cap was installed at the end of landfill operations. The landfill has since had stockpiled ash (from creating the asbestos landfill) placed over the top and shaped to its final under cap landform and is presently awaiting final capping, (to commence 2025 and construction completion expected 2026). • **HAP2A** has been fully capped and vegetated and presently being managed and monitored. Located in the southern part of the EOD. • **Asbestos Landfill No. 3 (ASL3)** - Located in the southern part of the EOD. It is fully capped and vegetated and presently being managed and monitored.	All landfill and disposal areas are currently decommissioned and undergoing various stages of rehabilitation, licence relinquishment or aftercare 1. Capping of ash landfills (subject to oversight and approvals from EPA Victoria) 2. Monitoring and maintaining geotechnical stability 3. Monitoring and review of rehabilitation, including hydrological assessments 4. Maintain the ponds subsurface leachate collection systems 5. Monitor seepage quality to determine if additional management is required. 6. Long term land use is limited by aftercare risk.	Over the years, Hazelwood Mine has utilised several storage sites as part of its ash disposal system. The ash storages structures are similar to tailings storage facilities (TSFs) and are managed in-line with the Australian National Committee on Large Dams (ANCOLD) (https://www.ancold.org.au/) guidelines where required. All ash storage areas are EPA licenced facilities, managed and closed in accordance with EPA Guidelines and Audit processes. Previous technical studies assessing the composition of the ash storage areas determined the coal ash generation process to be uniform over the history of the Hazelwood Power Station operation and therefore concluded that the ash was likely chemically homogeneous across the landfills and throughout the history of the use of the ash ponds. The final landform for each waste disposal site has been designed to be compliant with the requirements of the EPA Victoria Best Practice Environmental Management for Siting, Design, Operation and Management of Landfills (EPA Victoria, 2015) or other agreed risk based approach to capping, ensuring that the caps will readily shed stormwater, therefore reducing water infiltration into the waste mass. The nature of the waste, preparation of the ash and cap foundation, and the cap design itself, seek to limit differential settlement and therefore reduce the risk of water ponding. Waste settlement analyses and slope stability assessments will be undertaken for the proposed landforms and the existing embankments as part of the detailed design of the caps. *It should be noted that the HAP1 also accepted ash slurry when the thickener was on bypass mode from the HARA, (for breakdown or planned maintenance). The Carbonation Pond, which was part of HAP1, also served as the storge dam for recirculated ash water, used in the ash collection process in the power station. The original nearby recirculating pond was repurposed as a buffer storage for excess saline water that was then treated to manage the pH at the adjacent carbonation plant and disposed via the SWOP system. Note in 2015 an upgrade to the thickener plant made it possible to progressively recover some saturated ash from HAP1 using a contracted cutter suction dredge, for reprocessing the ash via the thickener plant and subsequently be pumped to the HARA. This practice was terminated in late 2016 when the closure announcement was made. It should also be noted the pH treatment no longer occurs due to significantly reduced volumes of saline water now disposed of from site.

	SUB-DOMAIN	DESCRIPTION	PROPOSED KEY WORKS	OTHER RELEVANT OR BACKGROUND INFORMATION
DOMAIN 3: MINE SURROUNDS				
5	Watercourses, storages and diversion structures	The area external to the mine void contains numerous ex-operational ponds and water retaining structures, both mining and power station related. The majority of these are no longer required for their original use and are progressively being decommissioned and rehabilitated in accordance with relative licencing and guidance. Classification of Water Structures have been broken up into their different operational and Management processes based on the attributes and the intended purpose. **Water Storage Dams** – Primary Use for Storage of water • Treated Effluent Pond (Salt Water Pond) • Hazelwood Cooling Pond • Hazelwood Recirculation Pond • Northern Overburden Run off Treatment Ponds • Firmin's Lane Pump Station **Water Management Ponds** – Primary use to control water through retention from either natural or manmade depressions • TP8 – Decommissioned • WEP • SOP • SORP • TP5 • Various Wetlands • Various Farm Dams **Other Significant water structures** – These are significant structures which divert water and are man made • Eel Hole Creek Diversion • Morwell River Diversion • Morwell River Flood Diversion (MRFD) • Morwell Main Drain • Wilderness Creek Diversion	**Water Storage Dams** due to their attributes, they will be progressively decommissioned as the operational needs for water storage change e.g. Fire service water from the HCP to the Mine void. Decommissioning will be part or full removal of walls to reduce the holding capacity and or wall height to reduce the hazard of the potential of failure, e.g. removal or lowering of the dam walls. **Water Management Ponds** Water Management Ponds will be decommissioned or retained pending the need for the water management through final surface water design Hydrology assessment of the area. **Other Significant water structures** – the structures are Diversion Levees, embankments or river alignments for the purpose of diverting the water to facilitate mining operations. These will remain in perpetuity with the exception of the Morwell Main Drain which is planned to be decommissioned. **Morwell Main Drain** Decommissioning the MMD (particularly the low flow pipe) and diverting flows directly to mine void will address any long term risk of water ingress and potential for further sinkholes . The diversion could potentially source water for mine filling and top-up water for the mine lake and assist management of urban runoff. The construction of drop structures would comprise entry points for water to flow into the mine. This concept can be further enhanced by re-invigoration of the 'old' MMD concrete drop structure to divert flows from the Morwell township safely to the floor of the mine and removal of the current steel aqueduct structure beyond the proposed entry points into the mine. **Inlet / Outlet structure** The proposed Inlet structure will utilise the current MRFD to be modify the structure to take water from the River, the MRFD is subject to ongoing monitoring and readiness to operate in case of a flood emergency. An Outlet structure is proposed to be facilitate the water level in the Mine void with a levee structure to maintain the required level, this will be subjected to the operations conditions of the inlet and outlet structures **River and Creek Diversion** Diversion Structures will be subjected to minimal works, with the exception of Eel Hole Creek further Hydrological monitoring will be needed prior to the decommissioning of the HCP to ensure the diversion can handle increase flood flows due to the loss of retention in the Hazelwood Cooling Pond.	The dams are currently under the dam surveillance program and are subject to monitoring and reporting. The decommissioning of these dams will utilise the Guidelines from ANCOLD to ensure they do not pose significant Hazards Water Management Ponds have not been historically defined as they do not pose significant hazards. The development of a sink hole in the MMD provided a pathway for surface water ingress into the coal structure increasing hydrostatic pressure and ultimately ground movement, which manifested as significant surface cracks in the Princes Freeway and the southern edge of Morwell township While remediation, and repair and lining of the MMD was undertaken, the recommendation to decommission the drain has remained The MRFD is subjected to an operational manual to maintain it is ready for a flood emergency to prevent flooding downstream and impacts on Power supply to the state. The HCP is a large flood retention basin on Eel hole Creek, adding to the reduction of flooding downstream since built. The removal of this structure will allow for minimal retention and increase flood volumes downstream in times of flooding

SUB-DOMAIN	DESCRIPTION	PROPOSED KEY WORKS	OTHER RELEVANT OR BACKGROUND INFORMATION
DOMAIN 3: MINE SURROUNDS			
6 Infrastructure	Infrastructure systems and / or facilities. Systems for mitigating risk and facilitating safe operations and access. Post the mining operations the infrastructure requirements have significantly reduced and changed. Infrastructure and facilities to support the remaining 'operational' activities and the rehabilitation project Buildings, workshops and storage areas Power supply systems Services (Comms, water, septic etc) Haul roads and mine access roads (including traffic management system) Security and emergency services Other systems maintained as risk control measures Aquifer depressurisation system Fire suppression system including reticulated water system Mine fire service pipework Geotechnical and environmental monitoring systems and installations Surface drains The decommissioning of much of this infrastructure is further discussed in *Chapter 7 – Demolition and disposal.* This domain comprises the infrastructure systems and facilities that were maintained during the operational mine period and includes infrastructure systems and / or facilities, including infrastructure used to store water within MIN5004 area. The infrastructure encompasses several different systems or facilities, many which has been partly or wholly decommissioned including: 1. **Water Infrastructure** (associated with transfer of water within the MIN5004 area): • pumping bores, • monitoring and artesian depressurisation bores, • fire suppression system and • pumps / pipelines. 2. **Roads and carparks** 3. **Power** (above and below ground) including MWW, MWN and MWE substations - The project area contains various power infrastructure such as above and below ground power lines and services, as well as three substations (MWW, MWN and MWE). 4. **Sewage (above and below ground)** 5. **Telecommunications (above and below ground) including the communications tower** 6. **Buildings** 7. **Hardstand areas** 8. **Fuel and chemical storages**	**Water Infrastructure:** Water pipelines, fittings and concrete footings that have been made redundant and are no longer required for either reuse or recycling below RL+45m AHD (or maximum alternative final lake level) would be left in situ and progressively decommissioned as the mine lake fills, and as exposed coal is progressively covered by water. Roads and carparks Redundant roads above the crest of the mine that have no specific post-relinquishment use would be ripped, topsoiled and revegetated. Redundant car parks would also be decommissioned. **Power** Overhead power lines and electricity distribution lines are expected to be maintained during filling as power is required for infrastructure such as aquifer pumps and mine water pumps. ENGIE Hazelwood would also continue to comply with its 'Mine Electricity Safety – Bushfire Mitigation Plan' in respect of measures implemented to reduce the risk of bushfires affecting overhead electrical supply lines. **Sewage** All septic systems with absorption lines, servicing remaining buildings around the site. Will be progressively decommissioned, to the EPA guidelines, as part of individual building decommissioning and demolition. Buildings to be retained at relinquishment (nominally the gatehouse and the proposed visitor hub on the Northern Batters) will have their respective septic systems retained. **Buildings** Some mine buildings, facilities and depots remain to be decommissioned, demolished and the underlying land remediated (when they become redundant). This is expected to be within 3-5 years from mine fill commencement. A list of the existing buildings that are scheduled for demolition follows and is shown in **Figure 8.3** and **Figure 8.4** • Rehabilitation Project Gatehouse – Hazelwood Drive • Mine Training Centre Complex – Eastern Perimeter Road • Delta Contractors Yard – Eastern Perimeter Road • Mine Administration Office – Eastern Perimeter Road • Southern Outlet Control Centre (SOCC) – Eastern Perimeter Road • Mine Workshop – Eastern Perimeter Road • Mine Store / Mine Electricians Workshop – Eastern Perimeter Road • Mine Drive Through Car Wash – Eastern Perimeter Road • Mine Oil & Grease Store & Manual Vehicle Station – Eastern Perimeter Road • Fire Service Lookout – Southern Perimeter Road • Fire Service Depot –Hose Wash Station – Northern Perimeter Road • Northern Batters Plant Maintenance Workshop (aka. Former Chess Idler (L&L Engineering)) – Northern Perimeter Road. **Hardstand areas** Hardstands beyond the mine crest, will be progressively removed, either as part of the earthworks phase completion, or as part of final building demolition after mine fill. **Onsite fuel storage** On site fuel and other hydrocarbons, including oil and grease storage, will be removed at the completion of the earthworks phase. Refuelling for any vehicles remaining on site to support the mine fill, will be via local service stations. Vehicles and remaining portable equipment will be serviced off site under commercial arrangements at appropriate workshops. Any remaining stored chemicals will also be removed from site at the completion of the earthworks phase, with the possible exception of cleaner's supplies to service any buildings remaining during the mine filling phase.	**Water Infrastructure:** The following water infrastructure has already been decommissioned: • Clean Water Pump Station and pipelines • Dirty Water Pump Station and pipelines • Redundant aquifer bores and pipework (including the removal of pumping infrastructure and sealing of bores on the floor of the mine in connection with the construction and operation of the MRFD infrastructure). **Roads and carparks** The road network within the project area includes sealed and unsealed roads. Some access roads may be retained post-relinquishment to enable access and for use in fire and other land management and emergency activities. **Power** Due to much of this infrastructure being part of the state transmission and distribution networks, any decision about its future is the responsibility of AusNet. A 6.6 kV electrical distribution network also extends around the perimeter of the mine. Duplicate electricity supplies are provided to key infrastructure for improved reliability. The Hazelwood switchyard is outside of the project area. However, the ownership of the switchyard has been transferred to AusNet Services so that it can continue to support the regional distribution of electricity. The long-term future of certain AusNet infrastructure on the Hazelwood site, such as the MWW and MWN are to be discussed and determined with AusNet Services (given that they are third-party infrastructure). Buildings Various buildings have already been decommissioned within the project area. It should be noted that: *Rehabilitation Project Gatehouse – Hazelwood Drive* - Opportunities are being considered to retain this building and hand over at relinquishment for other potential uses, for example a visitor information centre. *Mine Training Centre Comple and Delta Contractors Yard* - These two buildings are to be demolished by the end of mine fill. It is most likely these will be demolished much earlier to facilitate rehabilitation of the nearby southern outlet ponds and landform rehabilitation package. **Mining and power generation infrastructure** This was demolished in 2020/2021 **Hardstand areas** Hardstand areas within the mine void and below the water level of the lake have been included in the Inert Assets Register. Onsite fuel storage

SUB-DOMAIN	DESCRIPTION	PROPOSED KEY WORKS	OTHER RELEVANT OR BACKGROUND INFORMATION
DOMAIN 3: MINE SURROUNDS			
7 Remaining land including conservation areas	**Description:** This domain comprises all leased land within the MIN5004 area including all offsets and conservation areas. Isolated areas of the site have been leased to third parties for infrastructure purposes (e.g., with Gippsland Water, AusNet Services) and for grazing and agricultural activities (including as a bushfire fuel reduction measure). **CONSERVATION AREAS** 'old' Strzelecki Highway Segregated into three protection areas and containing scatterings of mature Eucalyptus Strzelecki (Strzelecki Gum) individuals — ENGIE Hazelwood owned land to the north and south of the existing 'old' Strzelecki Highway, on the outside south-western corner of the MIN5004 area. Eel Hole Creek Net Gain Offset and Cemetery Conservation Area. A section of remnant vegetation along Eel Hole Creek which has been protected by fencing, this area contains remnant Swamp Scrub (along the reek), with Plains Grassy Woodland away from the creek line Revegetated wetland / riparian vegetation corridor Known as Morwell River Wetlands (north and south), a large, rehabilitated wetland and riparian vegetation corridor, downstream of existing diversion area which has been subject to revegetation and habitat augmentation works — Located on the southern boundary of the MIN5004 area, along Eel Hole Creek, two sections adjacent to each other, one situated within the MIN5004 area, one situated on the outside of the MIN5004 area. Directly north of the MIN5004 area, within the area bounded by the Princes Highway, the Morwell River and the Strzelecki Highway. Brodribb wetlands Wetland established to restore ecological functionality to the floodplains adjacent to Brodribb Road — Located adjacent to Brodribb Road, along the outside of the southern boundary of the MIN5004 area.	In addition to ongoing maintenance of the current conservation sites for pest flora & fauna control and fence repair, a conservation strategy has been developed. This strategy aims to enhance conservation outcomes on the Hazelwood site (including the conservation areas) by identifying opportunities to create physical linkages between areas of remnant native vegetation that will assist in providing ongoing passage for the flora and fauna in the area. As is shown in **Figure 8.2** and **Figure 8.5**, the End Land Use Plan within the Clean Up Plan identifies that: • A significant portion of land surrounding the mine void is proposed to be used for agricultural purposes • A large portion of land to the south-east of the mine void is proposed to be used as industrial land • Small portions of land to the north and south-east of the mine void are proposed to be retained as modified ecosystems. It is expected that the footprint of the rehabilitation works will largely be confined to disturbed areas, outside of established conservation areas. Potential opportunities for the use of, or linkages with, these remaining land areas may be the subject of future discussions closer to the time of relinquishment. Additionally, alongside the conduct of the project works, and as part of the aftercare plan, a Land Management Plan (LMP) would be implemented to manage weeds and pests at the site. Any noxious weeds identified would be prioritised for treatment. Where significant weed outbreaks are identified, a suitable plan of management would be developed and implemented.	ENGIE Hazelwood also manages conservation areas within the project area to meet its legal obligations for biodiversity offsets and general enhancement of conservation values beyond those requirements, including planting and protecting threatened species such as Strzelecki Gum (*Eucalyptus strzeleckii*). Several wetlands have been established to restore ecological functionality to the floodplains of the Morwell River and an area adjacent to Brodribb Road.



Building Description	Septic	Area
32. Vehicle Maintenance Workshop 1		Area A
33. Vehicle Maintenance Workshop 2 (Dome Shelter)		Area A
39. Vehicle Maintenance Amenities 1		Area A
41. Vehicle Maintenance Yard Portable Toilet	Septic 7	Area A
92. Vehicle Maintenance Amenities 2		Area A
140. Fire Hose Cleaning Station		Area A
30. Warehouse Bays 1 To 5		Area D
34. Maintenance Contractor Workshop Vulcanisers		Area D
54. Pump House 54 Switchroom		Area E
160. Earthworks Contractor Workshop (Dome Shelter)		Area E
18. Fire Service Lookout Tower 1		Area G
40. Hazelwood Ash Pond 4 And 1 Site	Septic 39	Area G
150. Hazelwood Rehabilitation Project Gatehouse	Septic 150	Area G
151. Potable Water Pump House		Area G
36. 1 X 7 Storage Portable Building		Area H
93. Light Vehicle Maintenance Workshop	Septic 12	Area H
97. Mine Training Centre	Septic 13	Area H
130. Training Centre Portable Toilet	Septic 13	Area H
131. Plumbing Contractor Site Office		Area H
132. Vehicle Maintenance Oil Store (Dome Shelter)		Area H
133. Seed Drying And Storage		Area H
1. Hazelwood Rehabilitation Project Admin Building	Septic 1	Area K
2. Project Admin Building East Annex	Septic 2	Area K
3. Electrical Maintenance Light Workshop		Area K
4. Electrical Maintenance Spares		Area K
5. Emergency Services Centre (Ex Socc)	Septic 3	Area K
9. 1 X 7 Complex Forklift Shed		Area K
15. Electrical Maintenance Main Workshop	Sullage Pit	Area K
28. 1 X 7 Complex Fitters Workshop		Area K
91. Electrical Maintenance Toilet	Septic 91	Area K
96. Electrical Maintenance Locker Room		Area K
99. Electrical Maintenance Kitchen		Area K
100. Electrical Maintenance Office		Area K
111. Electrical Maintenance Brew Room		Area K
112. Project Board Room		Area K
113. Mine Fire Station		Area K
114. Light Vehicle Drive Through Carwash		Area K
115. Delta Alliance Amenities Complex		Area K
116. Oil & Grease Store		Area K
117. Vehicle Underbody Wash Bay		Area K
118. Ex Radio Shack (In Storage Area)		Area K
141. Ore Level Northern Pipe Welding Shed		Area N
142. North Field Portable Toilet	Pump Out Tank	Area N
262. Alternative ECC (Ex 2030 Building)		Area P
268. Ancillary Office		Area P
269. Power Block Emergency Services Amenities	Septic 201	Area P
271. Power Block Gatehouse		Area P
283. Alternative CCC Toilet (Male)	Septic 200	Area P
295. Alternative ECC Toilet (Female)	Septic 200	Area P
296. Communications Hut		Area P
300. Power Block Gatehouse Garage		Area P
170. Fire Service Look Out		Area R
171. Fire Service Look Out Portable Toilet	Pump Out Tank	Area R
310. Rkp Spillway Electrical Switchroom		Area S
320. Polymer Dosing Pump Shelter		Area W
321. Polymer Dosing Monitoring Station To WEP		Area W
50. Pump House 50 Switchroom		Area X
51. Ancillary Shed		Area X
53. Pump House 53 Switchroom		Area X

Note: To be read in conjunction with site infrastructure building - sheet 2

Figure 8.3: Buildings to be demolished

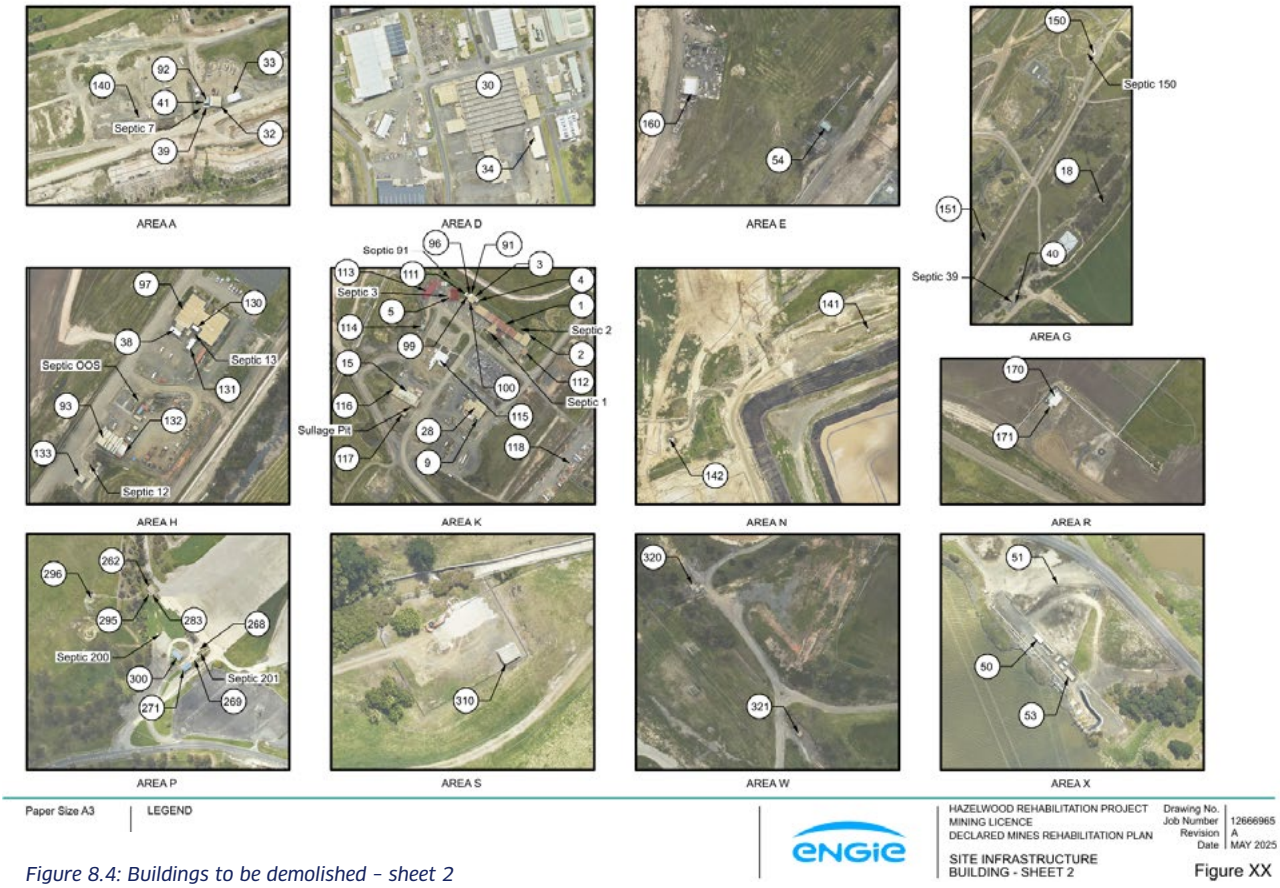


Figure 8.4: Buildings to be demolished – sheet 2

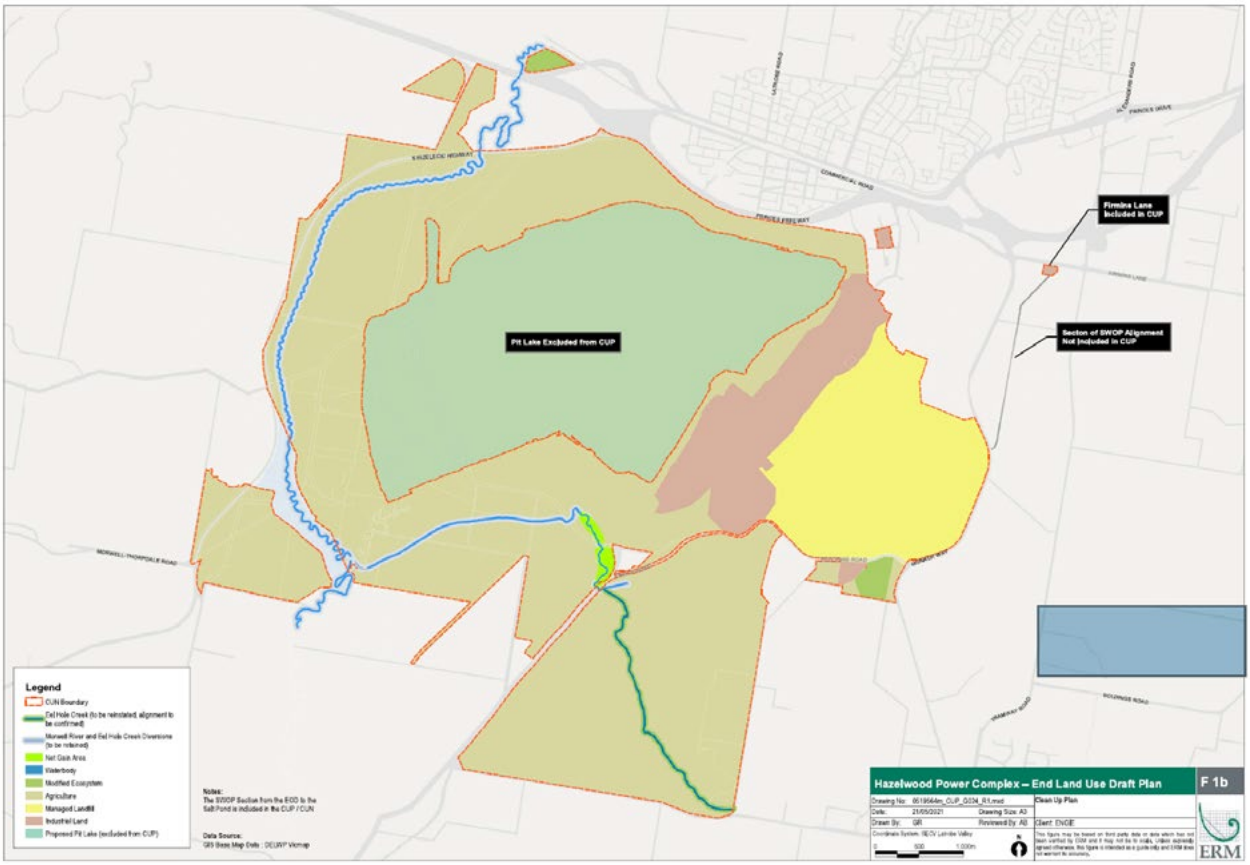


Figure 85: Clean Up Plan

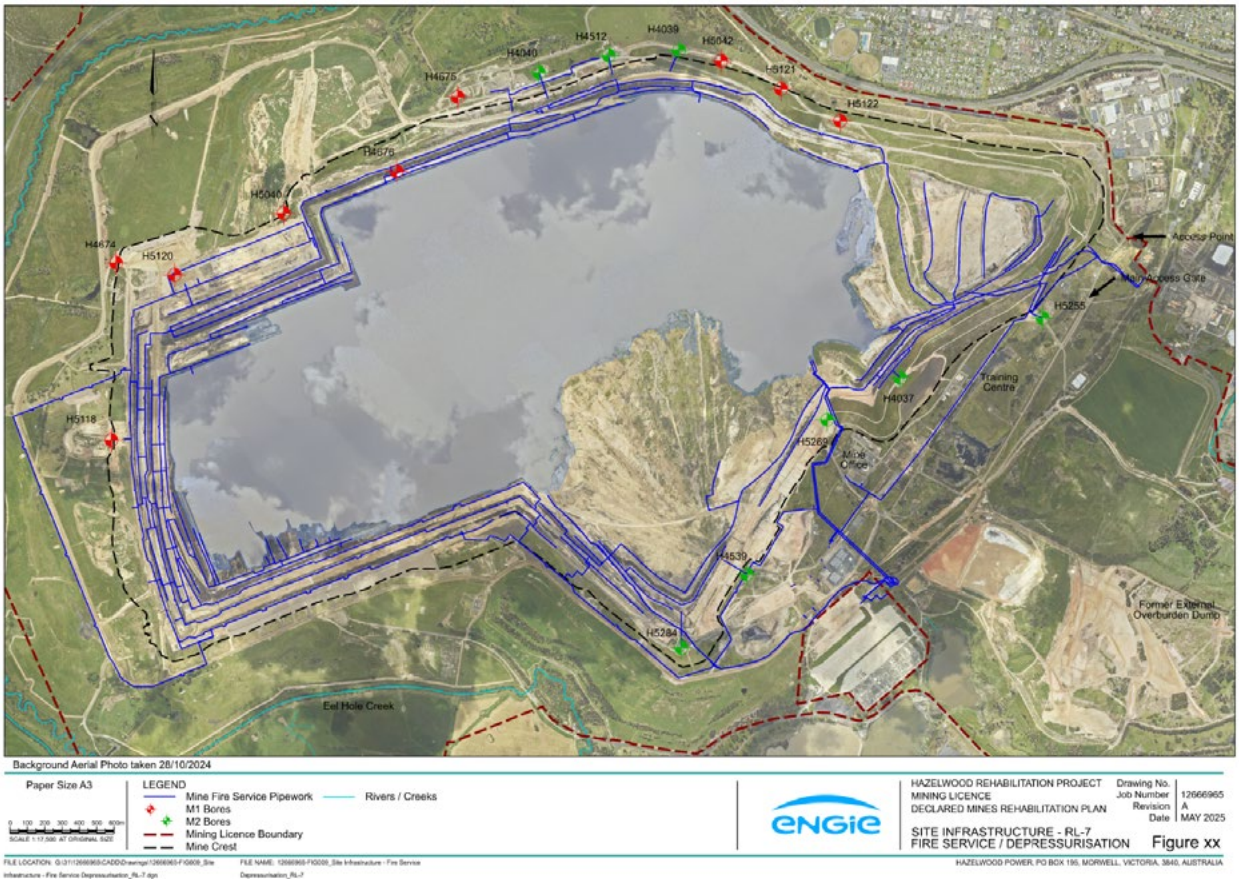


Figure 86: Current aquifer depressurisation bore network

DOMAIN 4: STREAMS AND WATERWAYS

Description: Natural and diverted watercourses connecting to offsite streams. This includes any associated embankments / levee structures that divert and channel water flows, land associated with the function of the stream (banks, flood plain and riparian zones) and natural or diverted courses of formally recognised streams. This does not include surface drainage systems or diversions reporting to the mine void

This domain consists of the waterways and includes the following main structures and watercourses:
- The Hazelwood Morwell River Diversion (MRD)
- The Eel Hole Creek Diversion
- The Wilderness Creek Diversion
- Bennetts Creek

The following works are required for the project:
- Management of the existing Hazelwood Morwell River Diversion (MRD) as per WGCMA Diversion Licence.
- Eel Hole Creek re-establishment (to its former path using the natural contours and connection to the WEP).
- Eel Hole Creek (below HCP) upgrades / enhancements

SUB-DOMAIN		DESCRIPTION	PROPOSED KEY WORKS	OTHER RELEVANT OR BACKGROUND INFORMATION
5	Watercourse diversion structures	Engineered diversion and associated embankments / levee structures that divert water flows around waterways so access to the resource was maintained during the operational mine period.	Eel Hole Creek (below HCP)– Investigate / implement the potential Yinnar Rd Culverts upgrade, design and upgrade the lower Eel Hole Creek for flows post HCP decommissioning Design and construct the connection of EHC through the area of the existing HCP embankment. The design needs to consider: • grade control structures for bed stability • Rock ramps and rock lined channels • Replacement of existing culverts at Yinnar Road with new rise box culverts to tie in with the new channel • Decommissioning of redundant infrastructure in this portion of the project area Maintain MRD and EHC flood levees	
6	Remaining land incl. conservation areas	Waterways on all leased land within MIN5004 area plus all land offsets and conservation areas under ENGIE Hazelwood's management.	Site maintenance including weed control and pest animal control. Some conservation areas may require addition fencing for security and potential supplementary planting around old large tree remnants.	Conservation areas are broken up into difference priorities for each area. These include highly regulated conservation offsets, remanent stands of rare and / or threated species, remnant vegetation and buffer trees.
7	Waterways	Non-engineered water courses - parts of Eel Hole Creek	**Eel Hole Creek restoration through existing Hazelwood Cooling Pond** Following the draining of the HCP approximately three to five years after the commencement of mine lake filling, the alignment of Eel Hole Creek is proposed to be restored through the rehabilitation of the underlying land. A concept design has identified two potential options for the restoration of Eel Hole Creek. Each option would involve the re-establishment of the creek, wetland / retention areas and riparian corridors accompanying the creek. The options differ in respect of the percentage of the land underlying the HCP that would be set aside for the purposes of commercial or other terrestrial land uses.	