Wallerawang Power Station Project
Demolition

Demolition Environmental Management Plan

Prepared by

Liberty Industrial Pty Ltd

For

Revision No.	Revision Date	Authority	Changes
A	14.02.21	JS	First Issue
B	23.02.21	JS	Addressing Greenspot comments
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GLOSSARY AND ABBREVIATIONS

ACM	Asbestos Containing Material
ALARP	Mitigate risk to “As Low As Reasonably Practical”;
ARCP	Asbestos Removal Control Plan
AWS	Automatic Weather Station
Code of Practice	A practical guide to achieve the standards of health and safety required under the model Work Health and Safety (WHS) Act and model WHS Regulations
DA	Development Approval (DA015/19) issued by Lithgow City Council on the 26th of September 2019
Environmental Aspect	means the interaction, relationship or impact of an operation or activity with the Environment including
Environmental Law	relating to the storage, handling or transportation of waste, dangerous goods or hazardous material relating to Workplace health and safety; or which has as one of its purposes or effects the protection of the Environment
Environmental Notice	means any direction, order, demand, license or other requirement from a Government Agency to take action or refrain from taking any action in respect of the Site or the Works in connection with any Environmental Law
HESQ	Health Environment Safety Quality
Liberty	Liberty Industrial
SEE	Wallerawang Power Station Demolition Statement of Environmental Effects (SSE) (Aurecon 2018
Site	means a project site or work area where the company is undertaking activities on behalf of a client
Standards	*Standards* are published documents setting out specifications and procedure
WWPS	Wallerawang Power Station
DEMP	Demolition Environmental Management Plan
DDR	Decommission, Demolition and Rehabilitation
The Project	The Wallerawang Power Station Decommission, Demolition and Rehabilitation Project
NRAR	Natural Resource Access Regulator
EPA	Environment Protection Authority
EPL 766	Environment Protection Licence number 766

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1 REQUIREMENT MATRIX

Development Approval Conditions

Table 1 – Key Demolition Environmental Development Approval Conditions

DCC No	Condition Requirement	Document Reference
B (63)	An Environmental Management Plan is to be submitted and approved by council prior to works commencing onsite. The plan is to outline management strategies/plans to mitigate and manage potential environmental impacts associated with the project.	This plan

*Further DA conditions are detailed in the appendices in their related subplans

2 BACKGROUND

2.1 PURPOSE OF THIS DEMP

This Demolition Environmental Management Plan (DEMP) has been prepared by Liberty Industrial (Liberty) for the Wallerawang Power Station (WPS) Decommission, Demolition and Rehabilitation (DDR) Project (The Project).

This DEMP and sub-plans have been prepared in accordance with the relevant project approval documentation, Liberty's Environmental Management Systems and the Guideline for the Preparation of Environmental Management Plans (DIPNR, 2004). The DEMP will provide the necessary framework to enable the project to be completed with minimal environmental impact in accordance with the environmental objectives for this project.

It is the policy of Liberty Industrial to ensure that the Project achieves a high standard of care to minimise the impact on the environment, immediate work sites, and the local community.

This DEMP addresses the applicable requirements of:

- Development Approval (DA) (DA015/19) issued by Lithgow City Council on the 26th of September 2019.
- Wallerawang Power Station Demolition Statement of Environmental Effects (SEE) (Aurecon 2018)
- Applicable New South Wales and Commonwealth Legislation;
- Environment protection licence 766

To meet these objectives, a systematic and planned approach for the management of environmental issues will be implemented on this project.

This DEMP is designed to provide the management framework with strategies to effectively manage all environmental risks during the demolition and rehabilitation process. Implementing this DEMP effectively will ensure that the Project Team meets the NSW regulatory and policy requirements in a systematic manner and continually improves its performance.

In particular, this DEMP:

- Describes the Project in detail including activities to be undertaken and relative timing;
- Describes the environmental management roles and responsibilities of personnel;
- States objectives and targets for issues important to the environmental performance of the Project;
- Identifies environmental aspects and impacts associated with each activity of the Project;
- Provides specific mitigation measures and controls that can be applied on-site to avoid or minimise negative environmental impacts;

- Provides specific mechanisms for compliance with applicable policies, approvals, licences, permits, consultation agreements and legislation;
- Outlines a monitoring regime to check the adequacy of controls as they are implemented during the works.

This DEMP is the overarching document in the environmental management system for the Project that includes a number of management documents. It is applicable to all staff and sub-contractors associated with the demolition.

2.2 DISTRIBUTION LIST

A controlled copy of this DEMP is to be distributed to the following parties for comment and review

- Liberty Industrial Directors, Senior Management, Project Manager, Project Engineer, HSEQ Manager and Site Supervisors;
- Greenspot Project Managers
- Lithgow City Council

Following review, it will be submitted to the council as required to meet relevant deffered commencement and operational consent conditions of DA015/16.

Once the DEMP has been approved, a hardcopy will be kept onsite and updated as required by the Project Manager, as well as a controlled PDF version being uploaded into the project management database. All contractors and subcontractors will be provided a copy to ensure their works are consistent with this DEMP.

2.3 REVISION

Changes to the DEMP shall only be implemented with the approval of the Project Manager.

This DEMP will be revised to address learnings identified through continual improvement and as necessary.

3 PROJECT OVERVIEW

Wallerawang Power Station (WPS) is a former coal-fired power station owned by Greenspot Wallerawang Pty Ltd (Greenspot) ATF Greenspot Wallerawang Unit Trust. WWPS is located adjacent to the township of Wallerawang, approximately 14 kilometres (km) from Lithgow and 160 km west of Sydney, in the Central Tablelands of NSW. WWPS began operation in 1957, initially consisting of four 30 megawatt (MW) units, with two 60 MW units being added in 1961 and 500 MW units being added in 1976 and 1980. The 30 MW and 60 MW units were decommissioned in the 1990's and their above ground infrastructure was salvaged or demolished at that time.

In November 2014, EnergyAustralia announced it would permanently close WWPS due to ongoing reduced energy demand, lack of access to competitively priced coal and the Powers Station's high operating costs. The WWPS has since been deregistered as an electricity generation facility with EnergyAustralia commencing some DDR activities. In September 2020, Greenspot acquired the WWPS site and

surrounding buffer lands from EnergyAustralia. Greenspot is now progressing the DDR Project with Liberty Industrial as the Principal Contractor for the demolition works.

The Project will take approximately two years to complete, commencing on site in the first half of 2021.

Under current plans, key infrastructure on site will be retained including the Turbine Hall structure, Cooling Tower, Coal Dome and Administration Building.

In parallel with completing the Project, Greenspot will progress with their development of an industrial park concept plan for the WWPS site and buffer lands, seeking approvals for a variety of uses. Greenspot's primary objective is to revitalise what would otherwise be a stranded asset, and in doing so, to generate opportunities for economic activity and employment. The desired outcome is a hub of economic activity of which the local community and the broader region is justifiably proud.

3.1 GENERAL DESCRIPTION OF THE SITE AND WORK DOMAINS

The site can be separated into a number of domains as shown in the below Figure 1, with the works subsequently described in Table 2. The infrastructure which will remain and will be incorporated into the future redevelopment of the site is shown in Figure 2.

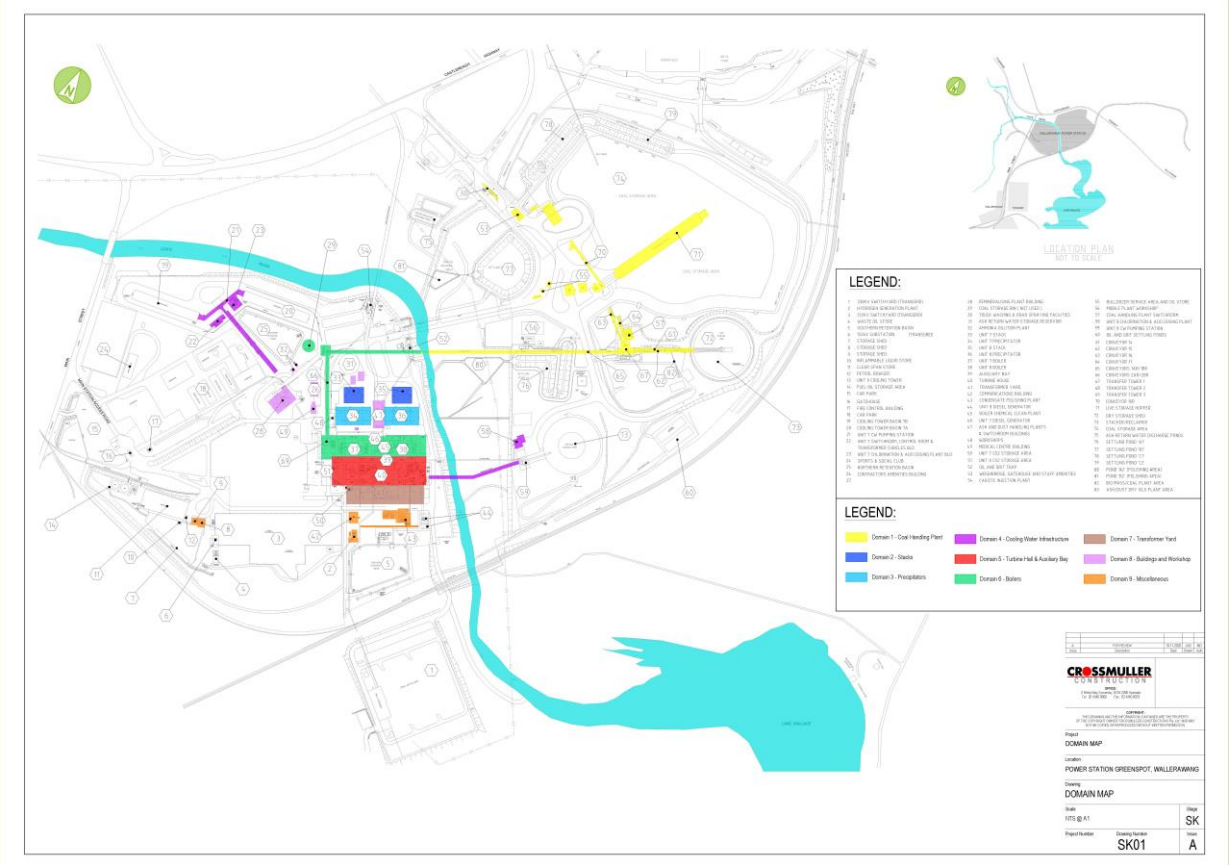

Figure 1 - Domain Map

Table 2 - Work Zone (Domains) Descriptions

Domain	Description
Domain 1 – Coal Handling Infrastructure	Removal of: ▪ Conveyors 10, 14, 15, 16, 17, 1AR/1BR, 2AR/2BR ▪ Live Storage Hopper including ▪ Transfer Tower 1 ▪ Transfer Tower 2 ▪ All below ground coal handling structures ▪ Coal Reclaiming Switch room ▪ Cliplock Roof 1 ▪ Coal Dump Building (Brick) ▪ Cliplock Roof 2 ▪ Brick Wash Building ▪ Switch Room ▪ Road and Reclaim Hopper ▪ Rill tower ▪ Coal Sampling Room ▪ Weighbridge ▪ Truck Washing and Road Spraying Facilities ▪ All above ground foundations, plinths, bunds and structures.
Domain 2 – Stacks	Removal of: ▪ Unit 7 Concrete Chimney Stack ▪ Unit 8 Concrete Chimney Stack ▪ All associated ductwork, support framing, ID fans and motors ▪ All above ground foundations, plinths, bunds and structures.
Domain 3 – Precipitators	Removal of: ▪ Unit 7 Precipitator including hoppers, vessels, collection plates, rappers, pipework and valves ▪ Unit 8 Precipitator including hoppers, vessels, collection plates, rappers, pipework and valves ▪ All associated sheds, buildings, and canopy structures ▪ All associated ductwork and supporting structures ▪ All above ground foundations, plinths, bunds and structures.

Domain 4 – Cooling Water Infrastructure	Removal of: ▪ Unit 7 – Cooling Water (CW) Pumps and Pumping Station ▪ Unit 7 Chlorination and Acid Dosing Plant Structure ▪ Unit 7 Above ground CW Conduits ▪ Unit 8 CW pump foundation block ▪ Backfill and cap all entrances to Unit 7 and Unit 8 below ground CW Conduits
Domain 5 – Turbine Hall and Auxiliary Bay	Removal of: ▪ Auxiliary Bay Structure ▪ All internal Turbine Hall plant, structures and associated equipment including Unit 7 and 8 turbine generators, rotors, condensate system, feedwater system, boiler feed pumps and condensers, tanks, pressure vessels, steam pipes, motors and valves ▪ spare turbine generator ▪ Turbine Hall internal concrete mezzanine floors, masonry and concrete walls, above ground foundations, plinths, and bunds
Domain 6 – Boilers	Remove all plant and equipment under the boilers Clear Auxiliary Bay ▪ Collapse both Boilers ready for machine destruction
Domain 6 – Boilers	Removal of: ▪ Unit 7 Boiler Structure including pressure parts, steam drums, steam mains headers, valves, furnace, water walls, economisers, superheaters, gas and air ducting, air heaters, fans, FD fans, tanks, mills, coal feeders, PF piping, burners, oil ignition system, bunkers, hoppers, conveyors, support structures, motors, pumps ▪ Unit 8 Boiler Structure including pressure parts, steam drums, steam mains headers, valves, furnace, water walls, economisers, superheaters, gas and air ducting, air heaters, fans, FD fans, tanks, mills, coal feeders, PF piping, burners, oil ignition system, bunkers, hoppers, conveyors, support structures, motors, pumps ▪ Transfer Tower 3 ▪ Former Coal Storage Bin ▪ Conveyor 3A1/3B1
Domain 7 – Transformer Yard	Removal of: ▪ Transformer unit 7-22 / 11kV

	▪ Transformer unit 7-22 / 3.3kV ▪ Transformer unit 8-22 / 3.3kV Allassociated structures, towers, enclosures and bund walls.
Domain 8 – Buildings and Workshop	Removal of: ▪ Demineralising Plant Building ▪ Medical Centre Building ▪ Contractor Amenities Building ▪ Staff Bathroom Amenities ▪ Unit 7 & 8 Ash Plant ▪ Laggers Building ▪ Ammonia Tank and Dilution Plant
Domain 9 – Miscellaneous	Removal of: ▪ Communication Building ▪ Hydrogen Generation Building ▪ Busbar Overhead Gantry ▪ Earthing Equipment Store ▪ Car Wash Area ▪ Waste Oil Loading Bay ▪ Condensate Polishing Plant Regeneration Building ▪ Maintenance Garage ▪ Open Garage

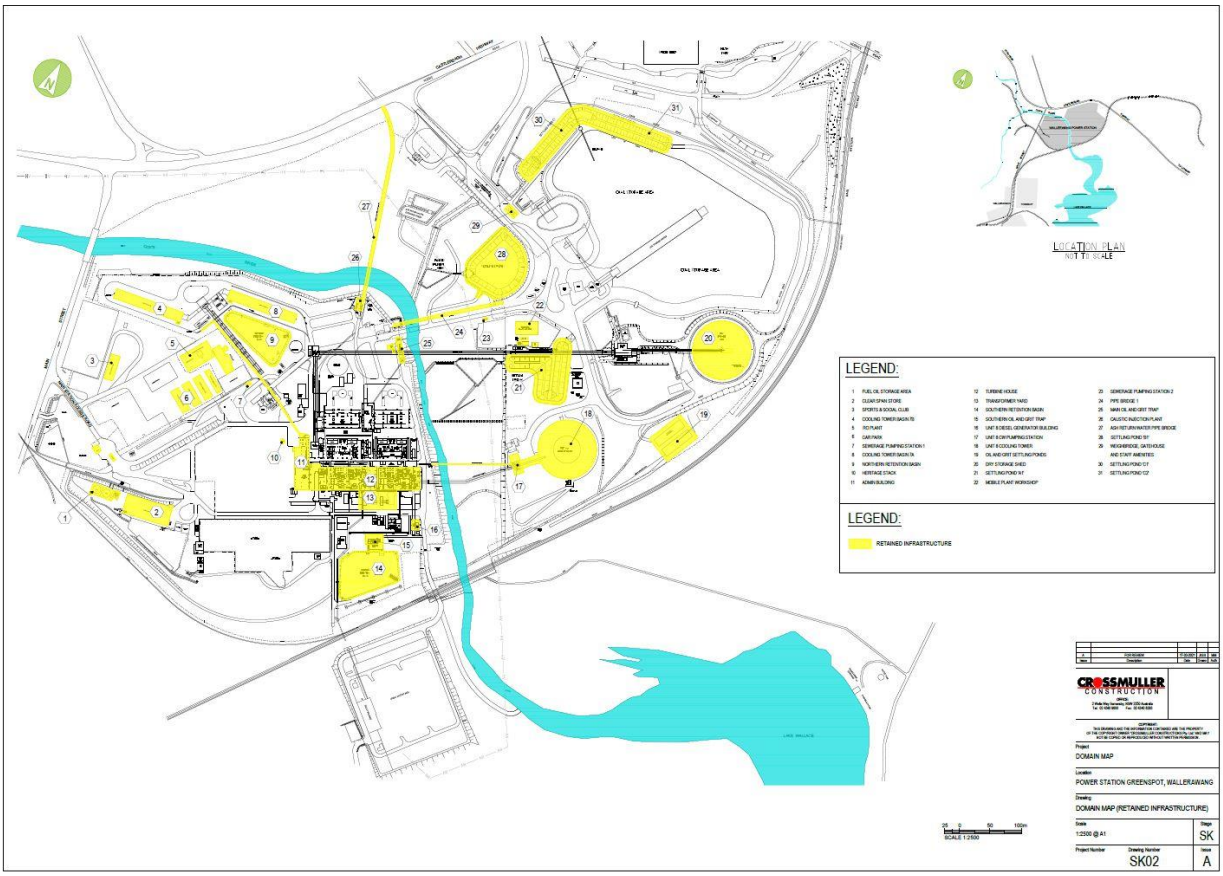

Figure 2 - Infrastructure to be retained

3.2 SCOPE OF WORK

This scope of work is to undertake demolition works, in order to enable subsequent redevelopment of the site . It includes the following;

1 Soft stripping

2 Hazardous materials removal

3 Heritage management works

4 Decommissioning/Demolition of site infrastructure

5 Waste disposal

6 Rehabilitation works to a point suitable for the redevelopment of the site

3.2.1 Plant and Personnel

At the peak of works the indicative plant and personal resourcing for the project is described in the below table.

Table 3 - Plant and Personnel Table (Indicative only and subject to change)

Plant/Personnel	Qty
260t Excavator	1
200T High Reach - Triple	1
120t Excavator	1
70t Excavator	1
48t Excavator	1
33t/36t/38t Excavator	3
25t Excavator	3
Volvo A40D Dump Truck	2
Water Truck (14,000L)	2
Fuel / Service Truck	1
30,000L Diesel Tank	1
Pad Roller	2
D6 Dozer	1
934 Materials Handler	2
Squalo Box Shear	1
Telehandler	1
Light Vehicles	8
Excavator Attachments	35
Containers	2
Scissor Lift	2
Knuckle Boom (10 – 35m)	4
50t Crane	1
100t Crane	1
250t Crane	1
25t Franna	1
Generators	6
Skilled Labourers	41
Liberty Management Staff	6
Consultants	7
Subcontractors	5

3.3 TIMING

The demolition works are planned to commence upon approval and would take about two years to complete. The Project would be implemented in two stages:

- Stage 1 comprises the dismantling and removal of existing plant and equipment from the site and the stripping of electrical systems, fire services, plastic packing etc.
- Stage 2 comprises the targeted deconstruction and demolition of the remaining buildings and infrastructure at the site

This is further detailed in section 2.4.

3.4 OVERALL PROGRAM

Month	March 2021	April	May	June	July	August	September	October	November	December	January 2022	February	March	April	May	June	July	August	September	October	November	December	January2023	February	March	
Establishment of Construction Site Facilities and Management of Site Security	X	X																								
Hazardous Material Removal	X	X	X	X	X	X	X	X																		
Demolition of Existing Infrastructure and Buildings	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X					
Rehabilitation Works	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X			
Project Completion																							X	X		

4 CONSTRUCTION ACTIVITIES

4.1 WORK HOURS

Demolition shall only be undertaken during the following standard construction hours, as defined in the DA;

- 7.00 am to 6.00 pm Mondays to Fridays
- 8.00 am to 1.00 pm Saturdays
- At no time on Sundays or Public Holidays

This includes truck movements leaving and entering site

Works undertaken outside the hours stipulated in the approval is permitted in the following circumstances:

(a) Where construction noise does not cause audible noise at any sensitive receiver;
(b) For the delivery of materials required outside these hours by the Police or other authorities for safety reasons; or
(c) Where it is required in an emergency to avoid the loss of lives, property and/or to prevent environmental harm

PLANNING AND LEGISLATIVE REQUIREMENTS

4.2 ENVIRONMENTAL OBLIGATIONS

All construction personnel working on the Project have the following general obligations:

- Comply with all Environmental Laws including authorisations, license and approvals required by any government agency for the lawful use of the site to carrying out of contracted work;
- Not contaminate or cause any pollution on or from the site due to the undertaking;
- To undertake all works in a manner that ensures the protection of the water quality objectives and environmental values for the Coxs river waters in accordance with the NSW Water Quality Objectives and the Australian and New Zealand Guidelines for Fresh and Marine Water Quality (2000) for the environmental values under the ANZECC Guidelines.
- To not pollute waters. All water discharge from the site must meet all requirements of the Protection of Environment Operations Act 1997 and ensure no contaminated or treated site waters (surface, collected groundwater or contaminated construction waters) are permitted to be discharged into the Coxs River.
- Not use, keep or handle on the site any dangerous goods or hazardous material except as may be required to carry out contracted work;
- Operate in a proper and efficient manner and maintain in good working order, all plant used in connection with the carrying out the contracted work;
- Install and maintain pollution control equipment required by an environmental law to be installed and operated in connection the site undertaking;

- Any pollution incident that causes or threatens material harm to the environment is to be reported to the EPA and other relevant authorities immediately in accordance with the POEO Act (with a subsequent written report to be provided in 7 days).
- Clean up, manage or abate any pollution occurring on and/or from the site;
- Remedy any breach of an environmental law that occurs on or affects the site as soon as it occurs (including by restoring the site to a state as close as practicable to the state it was in prior to that alleged breach);
- Comply with every environmental notice relating to the site or issued in consequence of contracted work;

4.3 LEGISLATION, STANDARDS AND CODES OF PRACTICE

Liberty Industrial commits to comply with all relevant sections of legislation, policies, guidelines and standards applicable to the project and are listed below;

- AS/NZS ISO 19011:2014 – Guidelines for Auditing Management Systems
- *Australian Standard AS 2601:2001:* The Demolition of Structures
- State Environmental Planning Policy No. 55 – Remediation of Land;
- Contaminated Land Management Act, 1997
- Protection of the Environment Operations Act 1997
- Environment Protection Manual for Authorised Officers: Bunding and Spill Management, Technical Bulletin (Environment Protection Authority, 1997).
- Waste Classification Guidelines (Department of Climate Change and Water 2009)
- AS ISO 10002-2006 Customer satisfaction – Guidelines for complaints handling in organisations (ISO 10002:2004, MOD)
- Interim Construction Noise Guideline (DECC, 2009)
- Assessing Vibration: A Technical Guide (DECC 2006)
- Guideline for the Preparation of Environmental Management Plans (Department of Infrastructure, Planning and Natural Resources, 2004).

Key legislation, objectives, application and relevance for the project are further listed and discussed in Table 2.

Table 4 - Outline of Relevant Legislation

Legislation	Objectives & Application	Relevance
Protection of the Environment Operations Act 1997	Objectives of the Act are: • To protect, restore and enhance the quality of the environment in New South Wales, having regard to the need to maintain ecologically sustainable development, • To provide increased opportunities for public involvement and participation in environment protection, • To ensure that the community has access to relevant and meaningful information about pollution, • To reduce risks to human health and prevent the degradation of the environment by the use of mechanisms that promote the following: • Pollution prevention and cleaner production, • The reduction to harmless levels of the discharge of substances likely to cause harm to the environment, • The elimination of harmful wastes, • The reduction in the use of materials and the re-use, recovery or recycling of materials, • The making of progressive environmental improvements, including the reduction of pollution at source, • The monitoring and reporting of environmental quality on a regular basis, • To rationalise, simplify and strengthen the regulatory framework for environment protection, • To improve the efficiency of administration of the environment protection legislation, • To assist in the achievement of the objectives of the Waste Avoidance and Resource Recovery Act 2001.	There is a duty to report pollution incidents under Section 148 of the Protection of the Environment Operations Act 1997 (POEO Act). Schedule 1 of the POEO defines scheduled activities that require an Environment Protection Licence. The POEO Act classifies Environmental Offences and Penalties.

Legislation	Objectives & Application	Relevance
Protection of the Environment Operations (Clean Air) Regulation 2010	This Act: • Provides for the certification of domestic solid fuel heaters; • Controls burning generally by imposing an obligation to prevent or minimise emissions, by prohibiting the burning of certain articles and requiring approval for certain fires/incinerators; • Requires the fitting of anti-pollution devices to certain motor vehicles and prescribes an offence of emitting excessive air impurities; • Imposes certain requirements and standards on the supply of petrol; • Prescribes standards for certain groups of plant and premises to regulate industry's air impurity emissions; and • Imposes requirements on the control, storage and transport of volatile organic liquids.	Regulates atmospheric pollutants including dust and odour onsite

Legislation	Objectives & Application	Relevance
Protection of the Environment Operations (Waste) Regulation 2005	This Act: • Provides for the contributions to be paid by the occupiers of scheduled waste facilities for each tonne of waste received at the facility or generated in a particular area; • Exempts certain occupiers or types of waste from these contributions; • Allows rebates to be claimed in relation to certain types of waste; • Provides for certain reporting and record-keeping requirements in relation to scheduled waste facilities and scheduled landfill sites; • Exempts certain waste streams from the full waste tracking and recordkeeping requirements; • Makes requirements relating to the transport of waste to interstate destinations; • Makes special requirements including reporting requirements relating to asbestos waste as well as prohibiting the re-use and recycling of asbestos waste; • Imposes requirements on brand owners and retailers to recover, re-use and recycle packaging; • Allows the EPA to issue exemptions from certain provisions of the Act and Regulations; • Allows the EPA to approve the immobilisation of contaminants in waste; and • Makes it an offence to apply, or to cause or permit the application of, residue waste to land that is used for the purpose of growing vegetation, subject to any exemptions.	Regulates management and disposal of wastes onsite
Protection of the Environment Operations (Noise Control) Regulation 2008 (NSW)	This Act • Provides for the sale and use of various motor vehicle and motor vehicle accessories devices such as horns and alarms; • Regulates noise emitted as a result of the use of marine vessels; • Prohibits the selling of certain articles that emit noise above prescribed levels, such as lawn mowers, edge-cutters, string trimmers and brush cutters; • Requires labelling of certain other noise emitting articles such as chainsaws, air conditioners, air compressors, pavement breakers, garbage compactors; and • Provides for the inspection and testing of certain articles.	Relates to noise generating activities during the works.

Legislation	Objectives & Application	Relevance
Fire Brigades Act 1989	This Act applies to; • Land-based hazardous material incidents (and to any fires that may result from them) that occur anywhere in the State except on State waters, as defined in the Marine Pollution Act 2012. • A hazardous material incident that occurs in or on a building, bridge or other structure or on any body of water (not being part of State waters) is taken to be land-based.	Applies to emergency incidents and accidents involving hazardous materials
Biodiversity Conservation Act 2016	The objects of this Act are as follows: • To conserve biological diversity and promote ecologically sustainable development, and • To prevent the extinction and promote the recovery of threatened species, populations and ecological communities, and • To protect the critical habitat of those threatened species, populations and ecological communities that are endangered, and • To eliminate or manage certain processes that threaten the survival or evolutionary development of threatened species, populations and ecological communities, and • To ensure that the impact of any action affecting threatened species, populations and ecological communities is properly assessed, and • To encourage the conservation of threatened species, populations and ecological communities by the adoption of measures involving co-operative management. •	Biodiversity Conservation Act 2016, requires any threatened plant or animal species, populations or ecological communities associated with a proposed development to be identified and hat acceptable recovery and management strategies are implemented if a likely significant impact would occur. The project will be managed to avoid impacts on threatened species and endangered ecological communities, as necessary.

Legislation	Objectives & Application	Relevance
Waste Avoidance and Resource Recovery Act 2001	The objects of this Act are as follows: • To encourage the most efficient use of resources and to reduce environmental harm in accordance with the principles of ecologically sustainable development, • To ensure that resource management options are considered against a hierarchy of the following order: (i) Avoidance of unnecessary resource consumption, (ii) Resource recovery (including reuse, reprocessing, recycling and energy recovery), (iii) Disposal, • To provide for the continual reduction in waste generation, • To minimise the consumption of natural resources and the final disposal of waste by encouraging the avoidance of waste and the reuse and recycling of waste, • To ensure that industry shares with the community the responsibility for reducing and dealing with waste, • To ensure the efficient funding of waste and resource management planning, programs and service delivery, • To achieve integrated waste and resource management planning, programs and service delivery on a State-wide basis, • To assist in the achievement of the objectives of the *Protection of the Environment Operations Act 1997*.	Waste Avoidance and Resource Recovery Act 2001 Establishes the waste hierarchy. Promotes waste avoidance and resource recovery by developing waste avoidance and resource recovery strategies. Provides requirements for waste avoidance and resource recovery

Legislation	Objectives & Application	Relevance
Heritage Act 1977	The objects of this Act are as follows: • To promote an understanding of the State's heritage, • To encourage the conservation of the State's heritage, • To provide for the identification and registration of items of State heritage significance, • To provide for the interim protection of items of State heritage significance, • To encourage the adaptive reuse of items of State heritage significance, • To constitute the Heritage Council of New South Wales and confer on it functions relating to the State's heritage, To assist owners with the conservation of items of State heritage significance.	Heritage Act 1977 approval must be gained from the Heritage Council when making changes to a heritage place listed on the State Heritage Register, or when excavating any land in NSW where an archaeological relic might be disturbed. The Construction Heritage Management Plan identifies controls and mitigation measures.

Legislation	Objectives & Application	Relevance
National Parks and Wildlife Act 1974	The objects of this Act are as follows: • The conservation of nature, including, but not limited to, the conservation of: (i) Habitat, ecosystems and ecosystem processes, and (ii) Biological diversity at the community, species and genetic levels, and (iii) Landforms of significance, including geological features and processes, and (iv) Landscapes and natural features of significance including wilderness and wild rivers, • The conservation of objects, places or features (including biological diversity) of cultural value within the landscape, including, but not limited to: (i) Places, objects and features of significance to Aboriginal people, and (ii) Places of social value to the people of New South Wales, and (iii) Places of historic, architectural or scientific significance, • Fostering public appreciation, understanding and enjoyment of nature and cultural heritage and their conservation, • Providing for the management of land reserved under this Act in accordance with the management principles applicable for each type of reservation. • The objects of this Act are to be achieved by applying the principles of ecologically sustainable development. In carrying out functions under this Act, the Minister, the Chief Executive and the Service are to give effect to the following: The objects of this Act, The public interest in the protection of the values for which land is reserved under this Act and the appropriate management of those lands	National Parks and Wildlife Act 1974 Aboriginal Heritage sites are managed under this Act by the NSW Environment, Energy and Science. Unexpected finds of heritage require stop work proceedings and approval sought from OEH to disturb site. The Construction Heritage Management Plan identifies controls and mitigation measures.

Legislation	Objectives & Application	Relevance
Water Management Act 2000	The objects of this Act are to provide for the sustainable and integrated management of the water sources of the State for the benefit of both present and future generations and, in particular: • To apply the principles of ecologically sustainable development, and • To protect, enhance and restore water sources, their associated ecosystems, ecological processes and biological diversity and their water quality, and • To recognise and foster the significant social and economic benefits to the State that result from the sustainable and efficient use of water, including: (i) Benefits to the environment, and (ii) Benefits to urban communities, agriculture, fisheries, industry and recreation, and (iii) Benefits to culture and heritage, and (iv) Benefits to the Aboriginal people in relation to their spiritual, social, customary and economic use of land and water, • To recognise the role of the community, as a partner with government, in resolving issues relating to the management of water sources, • To provide for the orderly, efficient and equitable sharing of water from water sources, • To integrate the management of water sources with the management of other aspects of the environment, including the land, its soil, its native vegetation and its native fauna, • To encourage the sharing of responsibility for the sustainable and efficient use of water between the Government and water users, • To encourage best practice in the management and use of water.	Controlled activities will take place as defined in the Water Management Act 2000. As such an approval form the Natural Resources Access Regulator (NRAR) will be sought for the project.

Legislation	Objectives & Application	Relevance
Biodiversity Conservation Act 2016	The purpose of this Act is to maintain a healthy, productive and resilient environment • to conserve biodiversity at bioregional and State scales, and • to maintain the diversity and quality of ecosystems and enhance their capacity to adapt to change and provide for the needs of future generations, and • to improve, share and use knowledge, including local and traditional Aboriginal ecological knowledge, about biodiversity conservation, and • to support collating and sharing data, and monitoring and reporting on the status of biodiversity and the effectiveness of conservation actions, and • to regulate human interactions with wildlife by applying a risk-based approach, and • to support conservation and threat abatement action to slow the rate of biodiversity loss and conserve threatened species and ecological communities in nature, and • to establish a framework to avoid, minimise and offset the impacts of proposed development and land use change on biodiversity, and • to establish a scientific method for assessing the likely impacts on biodiversity values of proposed development and land use change, for calculating measures to offset those impacts and for assessing improvements in biodiversity values, and • to support public consultation and participation in biodiversity conservation and decision-making about biodiversity conservation.	Requirement for the project minimise impacts on biodiversity, threatened species and the associated habitats.

4.4 PROJECT SPECIFIC APPROVAL

4.4.1 Development Approval (DA) (DA015/19).

Development Approval (DA) (DA015/19) issued by Lithgow City Council on the 26th of September 2019.

4.4.2 Controlled Activities on Waterfront Land Water Management Act 2000

Controlled activities carried out in, on, or under waterfront land are regulated by the Water Management Act 2000 (WM Act). The Natural Resources Access Regulator (NRAR) administers the WM Act and is required to assess the impact of any proposed controlled activity to ensure that no more than minimal harm will be done to waterfront land as a consequence of carrying out the controlled activity. Approval from NRAR will be obtained prior to commencing works on waterfront lands

4.4.3 Asbestos

The Hazardous Materials Survey anticipates the presence of asbestos located within buildings.

All asbestos works will be carried out under and consistent with Liberty Industrial Class A licence. This involved the submission of a *Notification of Removal of Asbestos to WorkSafe NSW.*

4.5 ENVIRONMENTAL POLICY

Liberty Industrial's Environmental Policy is detailed in Appendix A1.

4.6 OBJECTIVES AND TARGETS

Environmental objectives and targets have been established as a means of assessing environmental performance during the WWPS. These objectives and targets have been developed with consideration of the key issues identified through the environmental assessment and risk assessment process.

Management review process shall occur via weekly operations meetings which will include Senior Management Staff, Site Management Staff, Engineers and Health, Safety, Environment and Quality (HSEQ) Advisors with minutes provided to the General Manager (GM) and Directors for review.

Measurable targets shall be consistent with this plan

Table 5 - Environmental Performance Targets

Objectives	Targets	Measurement tools
Comply with all relevant environmental standards and approvals during the life of the Project	Full compliance with statutory approvals	Audits, compliance reporting, management review, inspection reports
Comply with statutory requirements, regulatory approvals and regulatory reporting (Commonwealth and NSW).	No regulatory infringements No formal regulatory warning	Audits, compliance reporting, management review, inspection reports
Protect people, the environment and property	Comply with the DEMP and all relevant legislation, standards and codes of practices	Compliance report, management review and audits, inspection reports
Continuously improve environmental performance	Develop and maintain a program of ongoing environmental training. Capture lessons learnt from environmental incidents to minimise repeat issues. Encourage and reward innovation and effort throughout the workforce	Compliance report, management review and audits, inspection reports

4.7 ASPECTS AND IMPACTS

A risk management approach has been used to determine the severity and likelihood of an activity's impact on the environment and to prioritise its significance. This process considers potential regulatory and legal risks as well as taking into consideration the concerns of the community and other key stakeholders. The objectives of the risk assessment are to:

- Identify activities, events or outcomes that have the potential to adversely affect the local environment and/or human health/property;

- Qualitatively evaluate and categorise each risk item;
- Assess whether risk issues can be managed by environmental protection measures; and
- Qualitatively evaluate residual risk with implementation of measures.
- Appendix A2 contains an Environmental Risk Assessment Aspects and Impacts associated with the Project. Measures to mitigate the identified environmental risks are also provided. The key environmental aspects for this project include:
- Erosion and sediment control
- Air quality management
- Noise and vibration management
- Hazardous material management
- Waste management
- Biodiversity Management
- Traffic Management

5 IMPLEMENTATION AND OPERATION

This DEMP is the overarching management plan for a suite of environmental management documents for the Project. It provides a structured and systematic approach to environmental management. The primary purpose of the system of documentation is to:

- Ensure compliance with all applicable environmental laws, specifications, obligations and approvals.
- To minimise environmental impacts.

5.1 DOCUMENTATION

5.1.1 DEMP

This DEMP provides the system to manage and control the environmental aspects of the Project. It identifies all requirements applicable to activities described in Section 2. It also provides the overall framework for the system and procedures to ensure environmental impacts are minimised and legislative and other requirements are fulfilled. The strategies defined in this DEMP have been developed with consideration of project approval requirements, safeguards and mitigation measures outlined in approval documents and reports. This DEMP establishes the system for implementation, monitoring and continuous improvement to minimise impacts from the Project on the environment. This DEMP is consistent with:

- Guideline for the preparation of Environmental Management Plans (DIPNR, 2004);
- AS/NZS ISO14001: 2004, 'Environmental Management Systems - requirements with guidance for use;

This DEMP and associated sub-plans will be provided to the certifier for approval prior to physical commencement of the Project.

5.1.2 DEMP Sub-Plans

A number of sub-plans support the DEMP. These documents are prepared to identify requirements and processes applicable to specific impacts or aspects of the activities described in Section 3 and address the requirements of the Deffered Commencement Conditions (Schedule A) and Operational Consent Condition (Schedule B) of DA015/19. They are used to define the operational controls required to ensure that each potential aspect and impact identified is eliminated, reduced or mitigated. The sub-plans are communicated to all employees, including sub-contractors. The project engineers and subcontractors are responsible for incorporating the requirements into the site-specific risk assessments, staff training and briefings. Copies of the sub-plans are provided in Appendix B1 to Appendix B5.

The following sub-plans have been developed for this project:

Table 6 - CEMP Sub Plan Table

Sub Plans
Blast Management Plan
Traffic Management Plan
Noise and Vibration Management Plan
Air Quality Management Plan
Soil and Water Management Plan
Waste Management Plan
Rehabilitation Management Plan
Heritage Management Strategy
Biodiversity Management Plan
Contaminated Land Management Plan

5.2 ROLES AND RESPONSIBILITIES

5.2.1 Roles and Responsibilities Matrix

Table 7 - Roles and Responsibility Matrix

Responsibility	Project Directors	Project Manager	Site HSEQ Advisor	Heritage Consultant	Project/Site Engineer	Site Supervisor	National HSEQ Manager
Develop environmental policy; objectives, targets and programs;	X	X					
Review and approve environmental documents		X	X				
Conduct and keep record of inductions & attendance.			X				
Implementation & recording of toolbox talks			X			X	
Recording of toolbox talks			X		X	X	
Daily prestart/conduct risk assessments in Job Hazard Analysis (JHA)						X	
Monitor works to ensure they are compliant with JHAs and environmental KPIs					X	X	
Identify & coordinate training			X				X
Conduct environmental Inspections			X				
Conduct internal audits			X		X		

Responsibility	Project Directors	Project Manager	Site HSEQ Advisor	Heritage Consultant	Project/Site Engineer	Site Supervisor	National HSEQ Manager
Tracking of non-conformances			X		X		
Review environmental reports and inspections and initiate actions to rectify		X	X		X		
Reporting of Incidents		X	X		X		
Notification of incidents		X				X	
Manage complaints		X					
Involvement in the investigation of environmental incidents		X	X		X	X	
Compile Monthly Reports		X			X		
Compliance tracking and monitoring					X		
Implementation of mitigation measures in the DEMP and Sub Plans		X	X		X		
Ensure that all demolition work is carried out in accordance with *Australian Standard AS 2601:2001*		X	X		X	X	
Follow instructions as indicated in mitigation and management measures of DEMP Sub Plans	X	X	X	X	X	X	X
Ensure heritage works are undertaken				X			

Responsibility	Project Directors	Project Manager	Site HSEQ Advisor	Heritage Consultant	Project/Site Engineer	Site Supervisor	National HSEQ Manager
Ensure dangerous goods and chemicals are stored correctly			X			X	
Ensure dust management is in accordance with AQMP.					X	X	
Ensure waste management is in accordance with WMP.					X	X	
Ensure traffic and transport measures are adhered to in accordance with TMP			X		X	X	
Ensure construction hours and protocols are adhered to.		X				X	
Implement and adhere to noise and vibration mitigation measures (NVMP)			X		X	X	
Assure compliance with applicable legal requirements and other requirements to which the organization subscribes		X	X				X
Maintain and implement a Demolition Environmental Management Plan	X	X	X	X	X	X	X
Undertake environmental monitoring					X	X	
Manage environmental audits			X		X		

Responsibility	Project Directors	Project Manager	Site HSEQ Advisor	Heritage Consultant	Project/Site Engineer	Site Supervisor	National HSEQ Manager
Updating DEMP through review of the environmental impacts of construction activities		X			X		
Attend site, inspect and asses any heritage unexpected finds				X			
Attend site, inspect and asses any contamination unexpected finds		X			X		
Measure and monitor and manage dust emissions					X	X	
Measure, monitor and manage waste generated during construction including: general procedures for waste classification, handling reuse, disposal; use of secondary waste material in construction wherever feasible and reasonable; procedures or dealings with green waste including timber and mulch from clearing activities; and measures for reducing demand on water resources					X	X	
Measure, monitor and manage hazards and risks			X		X	X	

5.3 PROJECT CONTACTS

Table 8 - Project Contacts

Name	Title	Phone Number
Matt Smith	Senior Project Manager	0488 567 005
Alwin De Leon (LI)	Project Manager	0437 807 039
John Harris (LI)	Safety Manager	0488 662 253
Wayne Walker (LI)	Senior Site Supervisor	0488 657 279
Owen Mike (LI)	Site Supervisor	0418 915 049
John Stevanoni (LI)	Environmental Advisor	0477 773 829
TBA (LI)	Project Engineer	TBA
Edward Webber (LI)	HSEQ Advisor	TBA

6 COMPETENCE TRAINING AND AWARENESS

Onsite environment training will be coordinated and recorded by the Project Engineer and Site Supervisor. Records including details of topics, attendees, and duration will be stored in a training register, signed attendance sheets will be filed.

Internal and on-the-job training is provided on a regular basis for all staff including subcontractors.

Environmental Awareness training will be delivered to staff and subcontractors through the site induction, toolbox talks, and pre-start briefings. General awareness for site operatives and office-based staff will also be provided via notice boards, posters and environment bulletins.

6.1 SITE INDUCTIONS

All workers and visitors shall undergo the following inductions/trainings prior to commencing work

- Liberty Industrial Project Specific Induction;
- Greenspot General Site Induction

All visitors will undergo a Visitors Induction prior to entering the site and will remain with a fully inducted person at all times.

6.2 TOOLBOX TALKS

Toolbox talks will be undertaken on a regular basis and will include, where required information on environmental impacts of the demolition and remediation works. Where required, specific training will be provided to the relevant personnel on hazards associated within specific activities and the controls to be implemented to minimise environmental harm. This will include measures identified in the DEMP.

Toolbox talks will be tailored to specific environmental issues including:

- Erosion and sedimentation control;
- Hours of work;
- Emergency and spill response;
- Noise
- Housekeeping and waste
- Project and clearing limits
- Dust control

Toolbox Talk attendance is mandatory and attendees of Toolbox Talks are required to sign an attendance form. Records of Toolbox Talk attendance will be maintained.

6.3 PRESTART MEETINGS

The pre-start meeting is a tool for informing the workforce of the day's/ shift's activities, safe work practices, environmental protection practices, work area restrictions, activities that may affect the works, hazards and other information that may be relevant to the day's work.

The Site Supervisor, or other appropriate site staff member, will conduct a daily pre-start meeting for the site workforce before the commencement of work each day (or shift) or where changes occur during a shift. Pre-start meetings may be project-wide and/or held for specific work areas.

The environmental component of pre-starts will include any environmental issues that could potentially be impacted by, or impact on, the day's activities. All attendees will be required to sign on to the pre-start and acknowledge their understanding of the issues explained. Pre-start topics, dates delivered and a register of attendees will be recorded and the records maintained.

6.4 ADDITIONAL AND REVISED TRAINING

Additional or revised training as a result of monitoring outputs and/or DEMP review will occur via Prestart Meetings and Toolbox Talks. If required, changes to the site induction will occur. The need for additional training will be determined by the processes.

7 COMMUNICATION AND RECORDS

7.1 COMMUNICATION

Liberty Industrial commits to reporting through the Project Manager, communicating and reporting all environmental concerns categorized as high risk as per the risk assessment in this DEMP. Communication typically occurs during daily pre start meetings, weekly site meetings and monthly project meetings.

7.2 COMMUNITY REATIONS AND COMPLAINTS MANAGEMENT

Prior to the commencement of the project, Greenspot will establish and maintain a website for the provision of electronic information associated with the project. Greenspot will, subject to

confidentiality, publish and maintain up-to-date information on the website or dedicated pages, including;

(a) The documents referred to under Schedule A Condition 1 of DA015/19

(b) A copy of DA015/19, EPL 766 and any other relevant environmental approval, licence, permit, required and obtained in relation to the project

(c) All strategies, plans and programs required under DA015/19, or details of where this information can be viewed;

(d) Information on demolition and operational progress

7.3 COMPLAINTS AND ENQUIRIES PROCEDURE

Prior to the commencement of the project, Greenspot will ensure that the following are available for community complaints and enquires during construction and operation;

a) a 24-hour contact number(s) on which complaints and enquires about demolition and operational activities may be registered

b) a postal address to which complaints and enquires may be sent; and

c) an email address to which electronic complaints and enquires may be transmitted

The telephone number, postal address and email address shall be published in a newspaper circulating in the local area prior to the commencement of the project. The above details shall also be provided on the website.

Greenspot shall record the details of all complaints received in an up-to date Complaints Register. The Register shall record, but not necessarily be limited to;

a) the date and time of the complaint;

b) the means by which the complaint was made (e.g. telephone, email, mail, in person)

c) any personal details of the complainant that were provided, or if no details were provided note that effect

d) the nature of the complaint;

e) the time taken to respond to the complaint

f) any investigations and actions taken by the Proponent in relation to the complaint;

g) any follow-up contacts with, and feedback from, the complainant; and

h) if no action was taken by the Proponent in relation to the complaint, the reasons(s) why no action was taken

The complaints Register shall be made available for inspection by Lithgow City Council.

8 INSPECTIONS, MONITORING AND AUDITING

8.1 METHODS OF EVALUATION

Progress and compliance against environmental requirements will be evaluated through:

- Audits, both internal and external;

- Review of documents and/or records;
- Employee and Client feedback;
- Project or work reviews and reporting;
- Direct observation;
- Environmental inspections.

8.2 INSPECTIONS AND MONITORING

Liberty Industrial will undertake the following inspections and monitoring as outlined below.

Table 9 - Environmental Monitoring and Inspection Table

Activity	Frequency	Location	Responsibility	KPI	Record
Dust	Daily, during works and weekly	All	Project Environment Advisor (Weekly) Site Supervisor (During works)	No visible dust leaving the boundaries	Weekly Environmental Audit Work permit
Odour	Daily, during works and weekly	All	Project Environment Advisor (weekly) Site Supervisor (During works)	All non-detectable odour at boundary	Weekly Environmental Audit Work Permit
Discharge Water Quality	Prior to discharge or reuse	Sediment Basins	Project Environment Advisor Environmental Consultant	No visible oil and grease	Water Discharge (permitted only with clean water) and Reuse Permit Laboratory Reports
				pH between 6.5-8.5	
				Specific contaminants below ANZECC Guidelines	
				TSS Below 50mg/L	
Weather	Daily	On Site Weather Station	Project Environment Advisor	Review of work activities when adverse weather is forecast	Daily Prestart Meeting
Chemical Spillage	Daily	Chemical Storage Area	Project Environment Advisor	No spills to ground All chemicals correctly stored and bunded	Weekly Environmental Audit Work Permit

Plant	Daily	On all plant and equipment	Site Supervisor Plant Operators	No excessive smoke No leaks on plant	Plant Pre-Start Checks
Sediment Control Devices	Weekly Prior to and following rainfall	All current work areas	Project Environment Advisor Site Supervisor	All sediment control devices in good condition allowing adequate operation	Weekly Environmental Audit Work Permit
Asbestos	Daily	Asbestos removal areas	Asbestos Supervisor Project Environment Advisor	All monitoring results for the project below a fibre count of 0.01 f/ml	Asbestos Air Monitoring Register

8.3 RECORDS OF MONITORING

All monitoring records as detailed in Table 9 are kept on the Liberty Industrial Database with these forms detailed in Appendix A3.

Monitoring of the works, worksite and its associated environmental controls as outlined in Job Hazard Analysis (JHA FRM-058) is documented daily in the Work Permit (FRM-014). This is documented by the Site Supervisors signing off the works at least a daily interval to ensure they are compliant with the JHAs and the Environmental KPIs. Non-compliance will be noted in the Work Permit and works are ceased until environmental controls can be re-established. It is also noted that any time throughout the day compliance or non-compliance can be recorded on the Work Permit.

On a weekly basis Liberty Industrial will carry out a Weekly Environmental Audit as detailed in Appendix A3 (FRM-007).

8.4 REPORTING

As a minimum on every project, the Project Environment Advisor or Project Manager will:

- Establish and maintain necessary records for the recording and reporting of environmental incidents at the workplace;
- Encourage worker's participation in reporting environmental incidents;
- Ensure all environmental incidents are investigated and reported in accordance with company and client procedures;
- Notify the relevant authority of non-compliances and environmental incidents, as required

Reporting for the project will include the following

Table 10 - Reporting and Typical Content

Report	Typical Content
Environmental Incident Reports	Time; Date; Location; What happened; Influencing factors; Witness Names; Interim Actions and Comments; Photo Evidence
Weekly Environmental Audit (Liberty Industrial)	Time Date; Work Location, KPIs, Comments, Photo Evidence, Compliance details

8.5 MECHANISMS FOR FEEDBACK INTO ENVIRONMENT MANAGEMENT DOCUMENTATION

The DEMP is an overarching management plan for a suite of environmental management documents used for the Project. Figure 5 below is a diagram of how auditing and the compliance tracking program feed back into Liberty Industrial's System of Work Method Statements (WMS) and Job Hazard Analysis (JHA) to improve these and ensure compliance with the DA and Relevant Legislation

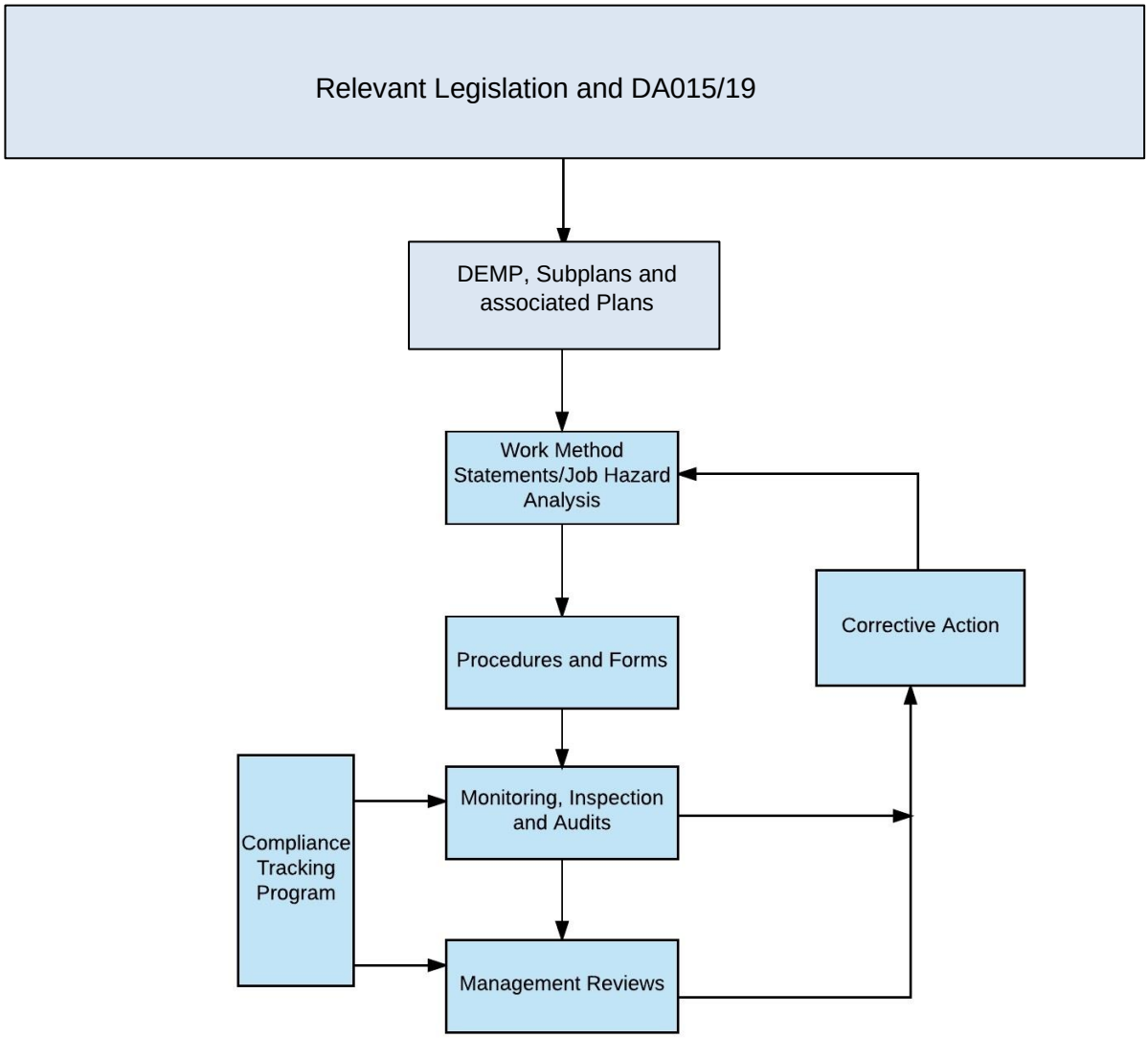

Figure 3 - Environmental Document Management Structure and Feedback Flowchart

9 INCIDENTS AND EMERGENCIES

9.1 DUTY TO NOTIFY ENVIRONMENTAL INCIDENTS

Material harm to the environment, includes any direct or indirect alteration of the environment that has the effect of degrading the environment.

There is a duty to notify 'relevant authorities' as specified in section 148(8) of the POEO Act (the EPA, Local Authority, Ministry of Health, WorkCover Authority and Fire and Rescue NSW) of pollution incidents where material harm to the environment is caused or threatened. Material harm includes actual or potential harm to the health or safety of human beings or to ecosystems that is not trivial or that results in actual or potential loss or property damage of an amount over $10,000. Failure to do so is an offence.

However, any notification is not admissible in evidence against the person for an offence or for the imposition of a penalty. The duty to notify applies to the person carrying on the activity, an employee carrying on the activity and the occupier of premises where the incident occurs.

Liberty industrial will call 000 if the incident presents an immediate threat to human health or property. Fire and Rescue NSW, the NSW Police and the NSW Ambulance Service are the first responders, as they are responsible for controlling and containing incidents beyond the capabilities of site personnel.

If the incident does not require an initial combat agency, or once the 000 call has been made, Liberty Industrial will phone the EPA Environmental Hotline on 131 555.

All incidents regardless of magnitude will be reported to the Greenspot Representative and investigated during the works. A copy of the Greenspot Pollution Incident Response Management Plan (PIRMP) will be kept in the Liberty site office at all times.

9.2 INCIDENT AND EMERGENCY RESPONSE

In the event of an Incident or Emergency, the Person-in-Charge (Project Manager, Site Safety Manager or delegated person) will classify the situation under the category of Minor (Level 1), Serious (Level 2) or Major (Level 3).

Emergency Spills are to be managed as per *Appendix A3*– Emergency Spill Repose Procedure.

The Emergency response procedure shall address these three (3) levels of response in a site Incident & Emergency operation:

- Containment;
- Notification;
- Mobilisation;

9.2.1 Minor Incident & Emergency (Level 1)

Minor (level 1) a Minor Incident / Emergency is one that can be satisfactorily handled by site worker(s) and does not affect or threaten parties beyond the scope of the project operations.

Minor (level 1) is the initial step to control the Site Incident / Emergency. At this level, on-site worker(s) must be prepared to follow the concise Incident & Emergency response procedure immediately.

The minor level exists from the moment a problem is discovered until Incident & Emergency response worker(s) are notified. Generally, emergencies are contained by site worker(s) and do not go beyond this level. Specifically, the minor level consists of the following actions:

- Discovery and reporting of the problem;
- Monitoring the situation;
- Early and immediate action;

At the minor level, frontline supervisors must obtain precise information about the Incident & Emergency. They need to evaluate the situation before they can initiate Emergency Response Plans. This information comes from the discoverer and other individuals who report on conditions in the affected area. Supervisory worker(s) then evaluate the information and initiate an appropriate and immediate response to control the problem.

9.2.2 Serious Incident & Emergency (Level 2)

A serious Incident & Emergency (level 2) is one that has implications beyond the control of local site worker(s). It would generally involve parties outside the direct scope of the site operations.

In an Incident or Emergency, the Project Manager or Site Safety / HSEQ Manager may decide that they need outside assistance to handle a situation or that additional communication is necessary. Action is taken immediately to minimise hazards to all persons and to get assistance as quickly and easily as possible.

If an Incident & Emergency occurs, all worker(s) are to be notified of the hazards and, if required, mobilise them to safety. Notify other key worker(s) in order to mobilise the Incident & Emergency response team if required.

All supervisors and persons as named in a level 2 process must be trained in the appropriate response protocols.

9.2.3 Major Incident & Emergency (Level 3)

A major Incident or Emergency is an incident having major safety, environmental or public welfare implications.

The major Incident or Emergency level 3 takes affect when Incident or Emergency operations have been established and the Project Manager or the site Safety / HSEQ Manager has taken over directing Incident / Emergency operations until external Emergency services providers are available on location.

All Incident & Emergency response worker(s) shall report to the Project Manager in the first instance.

9.3 NON-CONFORMANCE, CORRECTIVE AND PREVENTATIVE ACTIONS

A non-conformance is the failure or refusal to comply with the requirements of this DEMP and supporting documentation. Any member of the Project Team may raise a non-conformance or improvement opportunity through the use of Liberty Industrial's Quality System Database and all non-conformances shall be reported to the Project Manager. Where a non-conformance is identified, the following procedure will be followed. For each non-conformance identified, a corrective/preventative action (or actions) must be implemented. In addition, any environmental management improvement opportunities can be initiated as a result of incidents or emergencies, monitoring and measurement, audit findings or other reviews. Improvement opportunities may also result in the implementation of corrective/preventative actions.

Corrective/preventative actions and improvement opportunities will be entered into the Liberty Industrial Quality System Database and include detail of the issue, action required, timing and responsibilities. The record will be updated with date of close out and any necessary notes. The database will be reviewed regularly to ensure actions are closed out as required. Non-conforming activities may be stopped, if necessary, by the Site Supervisor, Project / Site Engineer and Project Manager. The works will not commence until a corrective / preventative action has been closed out.

Procedures for rectifying any non-compliance identified during environmental auditing, review of compliance or incident management are also documented in the Compliance Tracking Program.

9.4 EMERGENCY CONTACTS

Table 11 - Emergency Contacts

Organisation	Phone Number	Address
Fire	000	
Ambulance	000	
Police	000	
EPA Environment Line	131 555	
NSW Health – Penrith Public Health Unit	(02) 4734 2022	
State Emergency Service	132 500	
SafeWork NSW	131 050	
Local Authority – Lithgow City Council	(02) 6354 9999	
Fire and Rescue	(02) 6355 1005 When HAZMAT is required call 000	
Secretary of the Department of Planning &Environment (DOP – Senior Planning Officer Industry Assessments)	(02) 9274 6386	
Transport Management Centre (when incident impacts roadways)	131 700	
Natural Resource Access Regulator	1800 633 362	

9.5 RISK ASSESSMENT

Risk Assessment involves the identification of hazards (potential to cause harm), the assessment of the risks posed by those hazards, the development of controls to eliminate and minimise risks and the ongoing management of the risk controls.

Risk Assessment and Risk Management strategies will be used consistently throughout the project. Job Hazards Analysis (JHA) will be conducted prior to the commencement of each activity as detailed in Appendix A7- Forms. The JHA is used to identify both Work Health and Safety and Environmental hazards and if a task changes significantly or a change occurs in the environment, or other hazards are identified, the JHA will be reviewed.

A copy of the JHA will be available at the workface and the original filed in the Project Office.

The Project HSEQ Manager is responsible for ensuring risk controls are implemented and monitored for effectiveness. The Project Manager is responsible for providing sufficient resources to ensure risk controls are implemented.

A project risk assessment has been included in Appendix A3.

9.5.1 Hazard Identification and Reporting

Any worker(s) identifying a hazard shall:

- Report the hazard immediately to the supervisor;
- Stand guard until the supervisor arrives to assess the hazard;
- The responsible supervisor shall ensure identified hazards are promptly reported and recorded on the hazard register;

All hazards shall be actioned and signed off as completed in a timely manner.

Hazards will be reported to the supervisor as soon as possible. If the hazard can be corrected or controlled by the worker(s) that identifies it, they must do so immediately. If the hazard cannot be corrected or controlled the hazard must be isolated and other worker(s) protected from the hazard.

9.5.2 Take 5

Worker(s) are encouraged to be accountable for their own and others actions, and to immediately address issues that are unsafe or have unacceptable risk.

To facilitate this behaviour, the company will use the Take 5 System where all employees carry a formatted note book to help identify a hazard or potential hazard, which requires the individual to take action and document the action taken. All employees and subcontractors will be operating under this system and will be instructed in its use during the site induction.

All tasks will have a Take 5 carried out immediately before that task is under taken.

Take 5 is a simple hazard identification and risk assessment, undertaken immediately prior to starting the task. It is designed to ensure that personnel assess each task for risk by completing the checklist as follows:

- Think through the task – break into steps;
- Spot the hazard – “What if”;
- Assess the risk;
- Make the changes;
- Do the job safely.

9.5.3 Hazard Investigation

All environmental hazards and issues are to be reported as soon as practicable to the relevant supervisor and then passed onto the Project Manager.

The supervisor will investigate hazards reported immediately; the investigation findings will be detailed and reported back to the workgroup at the next opportunity (normally pre shift meeting).

The intent of Take 5 Hazard Identification is to be pro-active in identifying, evaluating and controlling hazards that may result in incidents involving injury, environmental issues or equipment damage.

Should the matter remain unresolved, it will then be addressed between the employee, their supervisor, and the Project Manager.

The company will ensure that all worker(s) on the project will have the necessary knowledge, awareness and skills to fulfil their environmental responsibilities. This will be done through the company inductions, and any required specific awareness training, either prior to commencement of the project, or during daily team pre start consultation meeting.

10 APPENDIX A1 ENVIRONMENTAL POLICY

Environmental Policy

The Company's aim is to achieve a high standard of care and minimise our impact on the natural environment in all undertakings.

Liberty Industrial will:

- Conduct operations in compliance with all relevant environmental regulations, licences and legislation as a minimum condition;
- Identify, monitor and manage environmental aspects and impacts and prevent pollution arising from the undertakings;
- Seek continuous improvement of the Integrated Management System and in environmental performance, operational processes, waste management and use of resources by:
    - Monitoring and improving demolition, site remediation and civil construction methods to minimise environmental impact;
    - Analysing and continuously improving recycling rates;
- Provide training and awareness for all workers on environmental matters;
- Communicate and consult regularly with the workers about our policy and individual responsibilities;
- Communicate with customers, suppliers, contractors and sub-contractors, community and external agencies about our environmental performance;
- Establish and review environmental objectives and targets;
- Develop, implement and maintain a Management System based on the requirements of ISO 14001: Environmental Management System.

Regards

Clinton Dick
Director
15 January 2021

11 APPENDIX A2 ENVIRONMENTAL RISK ASSESSMENT, ASPECTS AND IMPACTS

11.1.1 Risk Assessment Matrix

The following risk assessment matrix has been used to determine the risk of each individual environmental aspect relevant to the WWPS DDR Project. The level of risk determined from the matrix identifies the level of control measures required for that environmental aspect.

Table 12 - Risk Matrix

Likelihood	Consequence				
	1 - Low	2 - Minor	3 - Moderate	4 - Major	5 - Critical
A - Almost certain	High (11)	High (16)	Extreme (20)	Extreme (23)	Extreme (25)
B - Likely	Moderate (7)	High (12)	High (17)	Extreme (21)	Extreme (24)
C - Possible	Low (4)	Moderate (8)	High (13)	Extreme (18)	Extreme (22)
D - Unlikely	Low (2)	Low (5)	Moderate (9)	High (14)	Extreme (19)
E - Rare	Low (1)	Low (3)	Moderate (6)	High (10)	High (15)

Tolerable	ALARP	ALARP	INTOLERABLE

11.1.2 Risk Matrix Explanation

Table 13 - Risk Matrix Explanation

Probability			**Consequences**		
A	Almost Certain	Expected to occur, quite common.	25	Critical	• Major environmental harm. E.g. critical pollution incident causing significant damage or potential to health or the environment. • Fines and prosecution likely.
B	Likely	Will probably occur, has happened.	21	Major	• Long term or serious environmental damage. • Numerous complaints received. • Potential for prosecution. • Loss of reputation
C	Possible	Might occur at some time.	13	Moderate	• Moderate environmental impact. • Will cause complaints. • Possible fine.
D	Unlikely	Could occur at some time although unlikely.	5	Minor	• Minimal environmental harm. • Potential for complaints. • Fine unlikely.
E	Rare	Might occur at some time in exceptional circumstances.	1	Low	• Little or no environmental harm. • Little potential for fines or complaints.

An environmental project risk analysis has been conducted for the Project and is detailed in Table 14.

11.1.3 Project Risk Analysis

An environmental project risk analysis was conducted by the Project Team. This shall be reviewed at regular intervals.

Table 14 - Project Risk Analysis

#	Sequence of Work Activities How will the work be done?	Potential Hazards What harm can occur?	Initial Risk	Safeguards/Controls How can the risk be minimised?	Frequency	Timing	Residual Risk	Responsibility Who will ensure that controls are in place?
Prior to Works Commencing								
1	Planning of works	Works commencing without approval	17	In order to undertake works satisfaction of DA015/19 Dffered Commencement Conditions will need to occur	Once	Prior to commencement of works	5	Site Supervisor Project Manager
2	Provide training to all personnel and subcontractors	Non-compliance with agreed work methods and procedures	13	All personnel to be inducted on to site; induction to include site-specific environmental requirements. All personnel to be tool boxed on the requirements of this DEMP including erosion and sediment control plans, locations of heritage items and protection requirements, noise mitigation measures.	As required	Prior to commencement (Induction)Throughout the Duration of Project (Toolboxes and Prestart)	5	Site Supervisor

#	Sequence of Work Activities How will the work be done?	Potential Hazards What harm can occur?	Initial Risk	Safeguards/Controls How can the risk be minimised?	Frequency	Timing	Residual Risk	Responsibility Who will ensure that controls are in place?
3	Works Footprint	Disturbance of land outside of Works Footprint.	17	No personnel permitted to access the areas outside of the Works Footprint including but not limited to pedestrian access, parking vehicles, stockpiling of materials. To be included in site specific induction. Personnel to be made familiar Works Footprint zone. To be included in site specific induction.	Ongoing	Throughout the Duration of the Project	5	Site Supervisor
Mobilisation to site								
4	Driving to site, around site and offsite	Disturbance to heavy machine movement footprint	17	Ensure site speed limits are maintained i.e. 20 km/h Park on hard stand areas where possible.	Ongoing	Prior to works commencing and throughout the Duration of the Project	9	Site Supervisor
5		Generation of dust leading to complaint	12	Ensure site speed limits are maintained i.e. 20 km/h. Use of water where necessary to suppress dust on exposed and trafficable areas. Truck loads to be covered.	Ongoing	Throughout the Duration of the Project	8	Site Supervisor Project Manager

#	Sequence of Work Activities How will the work be done?	Potential Hazards What harm can occur?	Initial Risk	Safeguards/Controls How can the risk be minimised?	Frequency	Timing	Residual Risk	Responsibility Who will ensure that controls are in place?
6	Mobilise plant/equipment/labour to site	Excessive noise and congestion leading to noise complaint	12	Mobilise plant only within normal working hours. Parking areas to be nominated for plant, equipment and vehicles. No parking, queuing or idling of engines on public roads. All site staff vehicles must enter the construction site and park within designated parking areas. Obtain Road Occupancy Licenses as necessary.	Ongoing	Throughout the Duration of the Project	7	Site Supervisor Project Manager Project Engineer
7		Inability of emergency services to access site	18	Ensure access tracks are designed to allow emergency services to access site if required; do not block site accesses. Water supply available at all times.	Ongoing	Throughout the Duration of the Project	8	Site Supervisor Project Manager
Heritage Management								
8	Heritage Management		12	The salvage of heritage items and structures is to be managed in accordance with the Heritage Management Strategy.	Once	Prior to site establishment	7	Heritage Specialist Site Supervisor
Demolition and Rehabilitation								
9	Involved in the removal of structures and pavements	Noise	12	All machinery is to be appropriately silenced with mufflers. Ensure plant is regularly maintained. Conform to working hours	Ongoing, during plant prestart and during services	Throughout the Duration of Works	7	Site Supervisor

#	Sequence of Work Activities How will the work be done?	Potential Hazards What harm can occur?	Initial Risk	Safeguards/Controls How can the risk be minimised?	Frequency	Timing	Residual Risk	Responsibility Who will ensure that controls are in place?
10	and filling of voids	Transport of Demolition Waste transferring waste Offsite	17	Ensure all vehicles use covers when transporting waste Ensure waste facility is a licenced transfer station or landfill	Ongoing	Throughout the Duration of Works	9	Site Supervisor Project Engineer
11		Waste Generation	12	No waste to be disposed of onsite, unless expressly identified in relevant approvals and licences Use waste management hierarchy principals and recycle and reuse whenever possible	Ongoing	Throughout the Duration of Works	8	Project Manager Site Supervisor Project Engineer
12		Surface Water Discharge	17	Ensure erosion controls are in place and maintained during the works	Ongoing	Throughout the Duration of Works	5	Site Supervisor Project Engineer
General								

#	Sequence of Work Activities How will the work be done?	Potential Hazards What harm can occur?	Initial Risk	Safeguards/Controls How can the risk be minimised?	Frequency	Timing	Residual Risk	Responsibility Who will ensure that controls are in place?
13	Waste management including litter, tracking of waste quantities and locations of disposal, soft strip of buildings	Incorrect disposal leading to contaminated waste streams / illegal dumping.	13	No waste to be disposed of onsite. Sewage waste to be disposed of by a licensed waste contractor offsite. Waste arising from soft strip of buildings is to be segregated wherever possible, e.g. timber, metal, light tubes, cabling etc. and sent to a waste facility able to recycle the material and provide recycling reporting. Specific recycling areas have been nominated	Ongoing, Daily and during weekly environmental audit	Throughout the Duration of Works	8	Site Supervisor Site Engineer
14	General use of plant and equipment and storage of hazardous materials	Pollution of ground / waterways due to failed hydraulic / fuel hoses on machinery/refuelling, spillages of hazardous materials.	12	Any refuelling to be undertaken either offsite or in areas located at least 20 metres from drainage lines or waterways with spill kits readily available. Refuelling not to be left unattended at any time. Plant and equipment to be well maintained and to be checked daily as part of morning pre-start including hydraulic hoses and connections. Chemicals to be placed in a drip tray when being used on site and removed to a bunded chemical storage container at the end of each day. Spill kits to be readily available at each work zone.	Ongoing	Throughout the Duration of Works	5	Site Supervisor

#	Sequence of Work Activities How will the work be done?	Potential Hazards What harm can occur?	Initial Risk	Safeguards/Controls How can the risk be minimised?	Frequency	Timing	Residual Risk	Responsibility Who will ensure that controls are in place?
15		Noise causing annoyance to local residents.	16	Works are only to occur 7:00am to 5:30pm Monday to Friday, and 7:30am to 3:30pm Saturdays, unless otherwise approved. All noise complaints to be reported to the site supervisor/project engineer immediately, recorded and the issue resolved. Equipment that is not in use to be switched off.	Ongoing	Throughout the Duration of Works	7	Site Supervisor Project Manager
16	Removal of hazardous materials from buildings	Asbestos sampling and removal	17	Refer to Asbestos Removal Control Plan. No asbestos works to be undertaken unless Asbestos Removal Control Plan has been approved and signed on to. Asbestos waste must be stored in a closed skip/bin with limited access. Asbestos waste will be transported to an approved asbestos disposal facility.	Ongoing	Throughout the Duration of Asbestos Removal Works	8	Site Supervisor

12 APPENDIX A3 FORMS

JOB HAZARD ANALYSIS

JOB HAZARD ANALYSIS (JHA)							
Project		Company					
JHA Name			JHA Number		Date		

Supervisor Review and Approval (to be completed daily prior to commencement of work and when amendments are made):

JHA Rev No.	Supervisor Name	Signed	Date	JHA Rev No.	Supervisor Name	Signed	Date
0				7			

1				8			
2				9			

Sub-Permits			
Working at Height ☐	Hot Work ☐	Hazardous Work ☐	☐
Crane Work Box ☐	Excavation ☐	Confined Space ☐	☐

Plant			
Compressor ☐	☐	☐	☐
Excavator ☐	☐	☐	☐
Forklift ☐	☐	☐	☐
Hand tools ☐	☐	☐	☐
Oxy Cutting Equipment ☐	☐	☐	☐
EWP ☐	☐	☐	☐
Welder ☐	☐	☐	☐
Crane Work Box ☐	☐	☐	☐

Materials					
Product Name	SDS Available	Product Name	SDS Available	Product Name	SDS Available
	☐		☐		☐
	☐		☐		☐
	☐		☐		☐
	☐		☐		☐

Relevant legislation, Codes of Practice, and Standards relating to the work			
Work Health & Safety Act	☐	Cranes Code of Practice (Model Draft)	☐
Work Health & Safety Regulation	☐	Scaffold and Scaffolding Work Code of Practice (Model Draft)	☐
Demolition Work Code of Practice	☐	Hazardous Manual Tasks Code of Practice (Model Code)	☐
AS 2601 – The Demolition of Structures	☐	How to Safely Remove Asbestos Code of Practice	☐
Managing the Risk of Falls at Workplaces Code of Practice (Model Code)	☐		☐
AS 4361.2 Guide To Lead Paint Management	☐		☐

Qualifications / Competencies / Courses required to perform the work							
SB – Scaffolding Basic	☐	RI – Rigging Intermediate	☐	CV – Vehicle Loading Crane	☐	Bonded Asbestos Removal	☐
SI – Intermediate Scaffolding	☐	RA – Rigging Advanced	☐	WP – Boom type elevated platform	☐		☐
SA – Advanced Scaffolding	☐	LF - Forklift	☐	VOC - Excavator	☐		☐
DG – Dogging	☐	CT – Tower Crane	☐	Slewing Crane	☐		☐
RB – Basic Rigging	☐	CN – Non-Slewing Mobile Crane	☐	Friable Asbestos Removal	☐		☐

PPE Requirements							
Hard Hat	☑	Tyvek Suits	☐		☐		☐
Safety Glasses	☑	Respirator	☐		☐		☐
High Visibility Clothing	☑	Cutting Jacket	☐		☐		☐
Long Sleeve Shirts	☑	Face Shield	☐		☐		☐
Long Pants	☑	Full Face Respirator	☐		☐		☐
Safety Boots (lace up)	☑	Cutting Gloves	☐		☐		☐

Gloves ☑	☐	☐	☐

Risk Assessment Matrix

CONSEQUENCE TABLE

Consequence	Health & Safety	Environment	Community / Media / Government	Loss / Damage
LOW	First aid treatment	Limited damage to area or low significance	Public concern restricted to local complaints	$0-$5K
MINOR	Medical Treatment	Minor short-term damage to environment / heritage	Minor, adverse local public or media attention and complaints	$15K-$150K
MODERATE	Classified Injury (LTI or restricted work case)	Moderate effects on environment / heritage	Attention from media and / or heightened concern from community	$150K-$1.5M
MAJOR	Fatality or severe permanent disability	Significant environmental / heritage damage	Significant adverse national media/public attention	$1.5M-$15M
CRITICAL	Multiple fatalities / health effects to	Severe damage to environment / heritage with	Serious public or media outcry	$15M-$150M

LIKELIHOOD TABLE

Likelihood	Description	Frequency at Location
ALMOST CERTAIN	Expected to happen	Occurs once a week
LIKELY	May easily happen	Occurs once a month
POSSIBLE	May happen	Occurs once every year
UNLIKELY	May happen sometime	Occurrence once every 10 years
RARE	May happen in extreme circumstances	Occurs once every 100 years

	> 50 persons	long-term effects		

Likelihood	Consequence				
	1 - Low	2 - Minor	3 - Moderate	4 - Major	5 - Critical
A - Almost certain	High (11)	High (16)	Extreme (20)	Extreme (23)	Extreme (25)
B - Likely	Moderate (7)	High (12)	High (17)	Extreme (21)	Extreme (24)
C - Possible	Low (4)	Moderate (8)	High (13)	Extreme (18)	Extreme (22)
D - Unlikely	Low (2)	Low (5)	Moderate (9)	High (14)	Extreme (19)
E - Rare	Low (1)	Low (3)	Moderate (6)	High (10)	High (15)

Tolerable	ALARP	ALARP	INTOLERABLE

JOB HAZARD ANALYSIS

L = Likelihood **C** = Consequence **RR** = Risk Rank

Job Step No.	Description of Job Step	Hazards	Pre Control Risk Rank			Controls	Post Control Risk Rank		
			L	C	RR		L	C	RR
•									
•									

Personnel Sign On and Acknowledgement			
By signing below you acknowledge that you have been consulted and inducted into this JHA and given instruction and training on how to undertake the work.			
Name	Signature	Date	Company

WORK PERMIT

Work Permit Name		Date	
Project			
Permit Valid From		To	

Work Pack Contents		
Work Method Statement (WMS) – Only 1 x WMS per Work Permit		
No.	Name	Rev No
Job Hazard Analysis (JHA) – Only 1 x JHA per Work Permit		
Name		Rev No
Safety Data Sheets (SDS) – list all materials being used		
A copy of the SDS for Hazardous Substances and Dangerous Goods MUST be in Work Pack. Others to be available.		
OTHER (e.g. Engineering drawings, Toolbox meetings, etc.)		

Permits: Tick box and attach Permits to the Work Pack as they are issued					
Excavation		Confined Space		Hazardous Work	
Excavation required	☐ Yes ☐ No	Confined space Entry required	☐Yes ☐ No	Hazardous Work Required	☐ Yes ☐ No
Crane Work Box		Working at Heights		Hot Work	
Crane Work Box required	☐ Yes ☐ No	WAH required	☐Yes ☐ No	Hot Work required	☐ Yes ☐ No

Issue of Work Permit (Supervisor)	
Permit Issuer:	I confirm that the Work Pack contains the above documentation

Name:		Signature:		Date:	

Acceptance of Work Permit (Work Group Representative)					
Group Rep:	I confirm that the Work Pack contains the above documentation				
Name:		Signature:		Date:	
Company:		Contact No			

Work Permit Transfer: As the new Group Rep, I confirm the Work Pack contains the stated documentation					
Name:		Signature:		Date:	
Company:		Contact No			
Name:		Signature:		Date:	
Company:		Contact No			

Supervisor Daily Check: Should the work being undertaken not meet the requirements of this permit, then ALL work must stop until the issues are resolved.

This Work Permit must be signed off daily, If there is no work on a given day, it must be recorded as "no work".

No	Supervisor Name	Date	Time	Is the work being undertaken pursuant to this permit		Company Undertaking the Work
1.				☐ Yes	☐ No	
2.				☐ Yes	☐ No	
3.				☐ Yes	☐ No	
4.				☐ Yes	☐ No	
5.				☐ Yes	☐ No	
6.				☐ Yes	☐ No	
7.				☐ Yes	☐ No	
8.				☐ Yes	☐ No	
9.				☐ Yes	☐ No	
10.				☐ Yes	☐ No	
11.				☐ Yes	☐ No	
12.				☐ Yes	☐ No	

13.				☐ Yes	☐ No	
14.				☐ Yes	☐ No	
15.				☐ Yes	☐ No	
16.				☐ Yes	☐ No	
17.				☐ Yes	☐ No	
18.				☐ Yes	☐ No	
19.				☐ Yes	☐ No	
20.				☐ Yes	☐ No	
21.				☐ Yes	☐ No	
22.				☐ Yes	☐ No	
23.				☐ Yes	☐ No	
24.				☐ Yes	☐ No	
25.				☐ Yes	☐ No	
26.				☐ Yes	☐ No	
27.				☐ Yes	☐ No	
28.				☐ Yes	☐ No	
29.				☐ Yes	☐ No	
30.				☐ Yes	☐ No	
31.				☐ Yes	☐ No	

FORM 007 - WEEKLY ENVIRONMENTAL INSPECTION

Project:

Inspection Carried Out by: Signed:

Date: Area/Location:

Weather Conditions (Tick appropriate boxes)**:**

Fine ☐ Light rain ☐ Heavy rain ☐ Light wind ☐ Strong wind ☐

ITEM	Y / N	COMMENTS
1. General Site		
Is the site in a generally tidy condition?		
Is all equipment, materials, etc contained within work area boundary?		
Are there any obvious signs of demolition/ remediation related disturbance outside of the demolition/ remediation area?		
Is the DEMP readily accessible?		
Is an environmental incident response plan displayed in a prominent position?		
Is there an accessible complaints register?		
Is there documentation of any training undertaken since the last inspection?		
Is there minimal dirt on adjacent public roads?		
Have all required traffic control measures been implemented in accordance with the TMP (eg: warning signs, temporary road closures etc)?		
Is all demolition/ remediation plant parked on site?		
Are any private vehicles of demolition/ remediation personnel obstructing the passage of local traffic?		

ITEM	Y / N	COMMENTS
Have local residence been notified 5 days prior to the commencement of works, for works outside of the normal working hours?		
Have local residents been notified 5 days prior to demolition/ remediation of activities that are likely to cause dust, offensive noise or access?		
Are complaints being reported to the Principals Representative?		
Is the Complaints Register complete and have actions detailed been implemented?		
Is the access to any private properties being obstructed?		
Are pedestrian routes adjacent to site being obstructed (are appropriate alternative routes in place)?		
Has Environmental training been conducted over the last 3 months?		
2. Air Emissions		
Is dust suppression equipment readily accessible?		
Are there any obvious signs of dust deposition outside of demolition/ remediation area(s)?		
Is spoil being prevented from being tracked onto public roads?		
Are the haul roads being kept damp (if required)?		
Is the air quality monitoring equipment (if installed) operating correctly?		
Is there adequate procedures implemented for dust control?		
Is there stabilisation of stockpiles or erection of dust screens?		
Do any vehicles or machinery have visible exhaust for more than 10 seconds?		

ITEM	Y / N	COMMENTS
3. Water Management		
Have required erosion control measure been correctly installed and are they functional? Check that there are/is; ○ no gaps in silt fences/barriers ○ no material lying across filter material or build up of silt no obvious signs of significant seepage through fences.		-
Are there any obvious signs of overflow from sediment detention basins?		
Are there obvious signs of uncontrolled drainage leaving the site?		
Are any materials, temporary structures/works in drainage lines?		
Where required, are drainage outlets provided with energy dissipaters to minimise erosion?		
Does water quality in down slope areas appear to be unaffected by demolition/ remediation works?		
Are diversion banks and drains located appropriately?		
Are there any apparent illegal discharges to sewers (cleaning of paint brushes, plaster, concrete)?		
Is the washdown of demolition/ remediation plant/vehicles restricted to a designated area (eg: truck wash out area)?		
Does the sediment basin require discharge? (5 days from last rain event?		
4. Waste Management		
Is there appropriate documentation of any waste material disposed of offsite?		
Are waste receptacles accessible and clearly marked with regard to waste type?		

ITEM	Y / N	COMMENTS
Is all recyclable material separated as per the Waste Management Plan (are records available)?		
Are records of the type, amounts, date, transport, and disposal site of waste kept in a Waste Register?		
Do trucks removing material from the site have their loads covered?		
5. Hazardous Materials and Storage		
Are all hazardous materials (eg: fuels, chemicals etc) stored in an impervious bund which can contain 110% of the volume of the largest container stored in that bund?		
Are all hazardous materials stored in a covered area more than 20m away from waterways and drainage inlets?		
Are all site spill kits readily accessible and adequately stocked?		
Is the on-site refuelling of demolition/ remediation plant restricted to a designated area more than 20m away from waterways and stormwater inlets?		
Are there any obvious signs of fuel spills, oil leakage, etc from demolition/ remediation plant? check both plant and ground		
Are the relevant Safety Data sheets (SDS) available on site?		
Are containers labelled and stored correctly when not in use (i.e. in chemical storage areas or portable bunds)?		
6. Noise Control		
Is there documentary evidence that all required noise suppression measures have been installed and operating in accordance with manufacturer's instruction and/or relevant environmental protection licence conditions?		

ITEM	Y / N	COMMENTS
Is all noise monitoring equipment (if installed) operating correctly?		
Are all plant/machinery switched off when not in use?		
Have the residents that are likely to be affected by offensive noise and/or vibration been notified?		
Have residents been notified of works to be undertaken outside of normal working hours?		
Have the siting of work areas, vehicle and plant parking areas, material stockpiles and equipment storage been arranged to minimise noise?		
Are there appropriate noise and vibration controls for activities adjacent to residents and other sensitive receivers?		
Are there any controls imposed on the Project by regulatory authorities? Are they being met?		
7. Resource Consumption		
Does the Project monitor water consumption?		
Does the Project monitor energy consumption?		
Are there any objectives and targets directed at resource consumption?		
Are there any recycling/reuse/redesign initiatives for products, materials and processes?		
8. Processing Areas		
Do stockpiles appear adequately maintained and managed (measures in place to prevent dust and soil run off)?		
Are there separate stockpiles for different material eg: ferrous/ non ferrous/ hand cut etc?		

ITEM	Y / N	COMMENTS
Are any stockpiles located within the tree drip line (3m from tree base)?		
Are there dust control measures in place for the stockpile?		
9. Demolition/ Remediation Areas		
Are areas where demolition/ remediation activities have ceased being stabilised and rehabilitated?		
Are any demolition/ remediation materials stored inside vegetation protection zones?		
Are there any obvious signs of demolition/ remediation activity within protected vegetation areas?		
Is contaminated land fenced off?		
Are disturbed areas stabilised and revegetated?		
Are all required protection measures in place and functional?		
10. Heritage Management		
Are demolition/ remediation materials stored inside heritage protection zones?		
Are there any obvious signs of demolition/ remediation activity within protected areas?		
Biodiversity Management		
Are the biodiversity management areas clearly delineated		
Is weed monitoring being undertaken		

ACTION ITEM NO.	**1.** CORRECTIVE ACTION DETAILS	ACTION REQ'D BY	ACTION CLOSE-OUT DATE
1.			

2.			

LIBERTY INDUSTRIAL

MOBILE PLANT PRE START CHECK SHEET

NO.

HIRED ☐ **Week Ending: / /**

ASSET NUMBER: _____ ASSET TYPE: _____ ASSET LOCATION: _____

WEEK ENDING HOURS READING: _____ WEEK ENDING KM'S: _____

ATTACHMENT: _____ ATTACHMENT ASSET NO. LI _____

CHECKLIST (INCLUDING LITRES ADDED)	Mon		Tues		Wed		Thurs		Fri		Sat		Sun	
	✓	LTRS ADDED	✓	LTRS ADDED	✓	LTRS ADDED	✓	LTRS ADDED	✓	LTRS ADDED	✓	LTRS ADDED	✓	LTRS ADDED
ENGINE OIL														
TRANSMISSION OIL														
HYDRAULIC OIL														
COOLANT														
BRAKE FLUID														
AIR CLEANERS / PRE CLEANER														
GREASED														
WALK AROUND INSPECTION														
MILEAGE / HOURS														

SAFETY CHECKLIST	Mon	Tues	Wed	Thurs	Fri	Sat	Sun
	✓ or ✗	✓ or ✗	✓ or ✗	✓ or ✗	✓ or ✗	✓ or ✗	✓ or ✗
SERVICE BRAKES / PARK BRAKES WORKING CORRECTLY							
SEAT / SEATBELT - CONDITION / ADJUSTMENT							
LIGHTS / FLASHING LIGHT							
HORN / FIRE EXTINGUISHER (IF APPLICABLE)							
STEERING - FUNCTIONING CORRECTLY							
TYRES - DAMAGE / WEAR							
VISIBILITY - WINDOWS / WIPERS MIRRORS CLEAN							
MACHINERY CLEAN - IN & AROUND MOVING PARTS, IN CABIN, ETC							

MECHANICAL CHECKLIST	Mon	Tues	Wed	Thurs	Fri	Sat	Sun
	✓ or ✗	✓ or ✗	✓ or ✗	✓ or ✗	✓ or ✗	✓ or ✗	✓ or ✗
TRACKS / IDLERS, WEAR, CRACKS / SPROCKETS							
GROUSERS, WEAR / ADJUSTMENT							
TRANSMISSION FUNCTIONING CORRECTLY							
ELECTRICAL / GAUGES							
LOOSE OR MISSING BOLTS / PINS / GUARDS							
HYDRAULICS / RAMS / HOSES - LEAKS / WEAR							
OIL LEAKS - ENGINE / TRANSMISSION / DIFF / FINAL DRIVE							
RADIATOR - VISIBLE LEAKS / WATER LOSS / IS CORE CLEAN							
OPERATOR'S INITIAL:							

PLANT FAULT / DEFECT REPORT

(PLEASE REPORT ANY FAULT DURING SAFETY CHECK OR MECHANICAL OPERATION DIRECTLY TO MECHANICS / SUPERVISOR)

.....

.....

.....

OPERATOR'S NAME: ..... OPERATOR'S SIGNATURE: .....

SUPERVISOR'S NAME: ..... SUPERVISOR'S SIGNATURE: .....

SAFE TO OPERATE ☐

MECHANIC'S REPORT

.....

.....

MECHANIC'S NAME: ..... MECHANIC'S SIGNATURE: .....

IF A MAJOR FAULT IS DISCOVERED DURING THE DAILY INSPECTION OR AT ANY OTHER TIME WHICH EFFECTS THE SAFE OPERATION OR THE POTENTIAL FOR SERIOUS MECHANICAL BREAKDOWN THEN THE FOLLOWING SHOULD BE DONE:

1. THE MACHINE MUST BE PARKED IN A SAFE LOCATION AWAY FROM OTHER OPERATING PLANT
2. MAJOR FAULTS MUST BE REPORTED IMMEDIATELY TO YOUR SUPERVISOR AND PLANT NOT USED UNTIL AUTHORISED
3. ALL THE ABOVE INFORMATION MUST BE FILLED OUT

No employee is expected to put themselves, the machine or others at risk by the operation of machinery that is not in a safe mechanical condition. Responsible reporting of faults will not put your employment at risk. Non reporting of faults or not completing plant check sheets may cause disciplinary action.

FORM 400 (REV 06 16-03-16) **LEGEND: (WHITE - 'ADMINISTRATION COPY', YELLOW - 'REMAINS IN BOOK')**