LIBERTY INDUSTRIAL

CLYDE REFINERY REMOVAL

Demolition Work Plan

Prepared by
Liberty Industrial Pty Ltd
for
The Shell Company of Australia Limited

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1 PURPOSE

This Liberty Industrial (the Company) Work Plan has been designed to provide the necessary methodologies and procedures for the demolition and removal of Shell Refinery Closure Project NSW. It should be read in conjunction with Liberty Industrial Documents:

a) Clyde Refinery Removal: Work Health & Safety Management Plan
b) Clyde Refinery Removal: Environmental Management Plan
c) Clyde Refinery Removal: Quality Management Plan
d) Clyde Refinery Removal: Traffic Management Plan
e) Clyde Refinery Removal: Industrial Relation Plan
f) Clyde Refinery Removal: Asbestos Management Plan
g) Clyde Refinery Removal: Emergency Management Plan
h) Clyde Refinery Removal: Hazardous Substances Management Plan
i) Clyde Refinery Removal: Waste Management Plan
j) Clyde Refinery Removal: Stack Demolition Management Plan

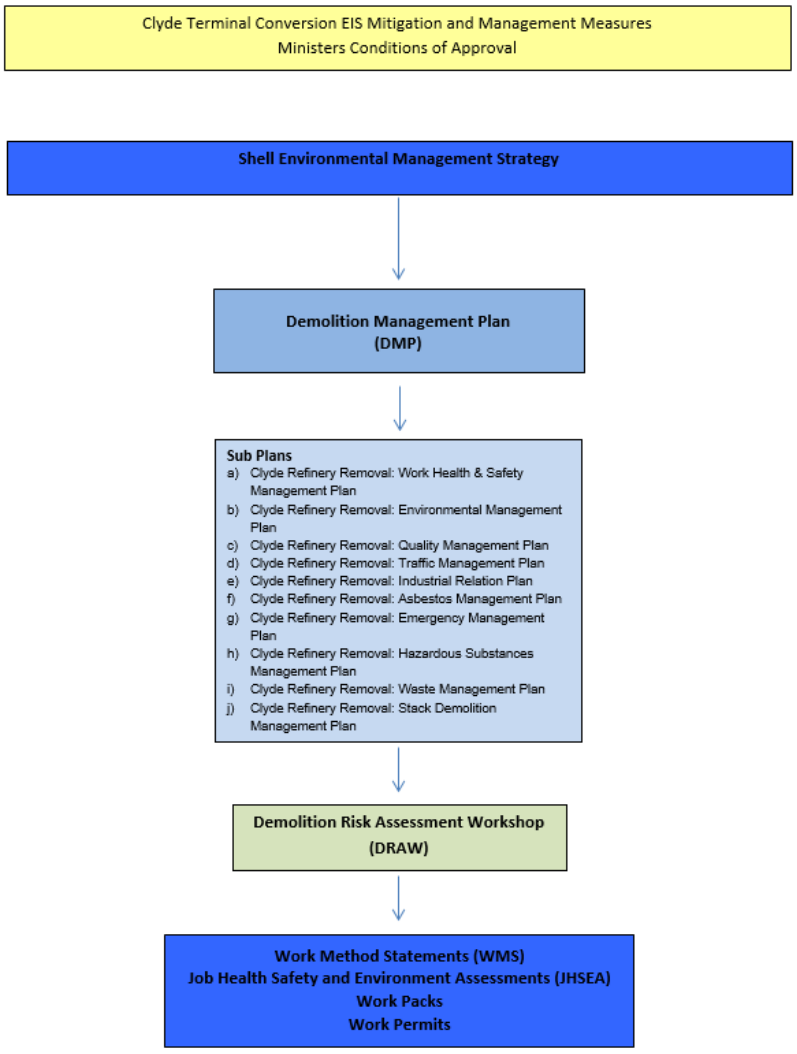

Figure 1 – Demolition Management Flow Chart

2 SCOPE

To undertake the Clyde Refinery Aboveground Equipment Sale, Recovery and Removal from the Former Process Area for the Shell Company of Australia.

3 PROJECT OBJECTIVES

All structures, process vessels, equipment and piping, instrumentation and electrical items, above grade cabling and associated cable trays shall be demolished / removed to grade and cleared from the site. All works shall be completed in a safe and efficient manner in line with HSSE controls and plans.

4 REFERENCES

- WorkCover NSW Demolition Licensing;
- WorkCover NSW Friable Asbestos Licensing;
- Work, Health and Safety Act 2011;
- Work, Health and Safety Regulation 2011;
- Protection of the Environment Operation Act 1997
- Protection of the Environment Operation Regulations (various)
- Demolition Work Code of Practice;
- AS 2601 The Demolition of Structures;
- AS 4361.2 Guide to Lead Paint Management;
- AS 3000 SAA Wiring Rules;
- AS ISO 14004 - 2004-11-15: Environmental management systems - General guidelines on principles, systems and support techniques;
- AS/NZS ISO 14001:2004: Environmental management systems - Requirements with guidance for use;
- AS/NZS ISO 19011:2003 Australian/New Zealand Standard Guidelines for quality and/or environmental management systems auditing
- Environmental Protection Authority publication Environmental Guidelines for Major Construction Sites (1996)
- AS 1885.1 – 1990: Workplace injury and disease recording standard;
- AS/NZS 4801 - 2001: Occupational Health and Safety Management Systems - Specification with Guidance for use;
- How to Safely Remove Asbestos Code of Practice;
- AS/NZS ISO 9001:1994: Quality systems - Model for quality assurance in production, installation and servicing;
- AS/NZS 4581 - 1999: Management System Integration – Guidance to Business, Government and Community Organisations;

- AS/NZS 4804 - 2001: Occupational Health and Safety Management Systems - General guidelines on principles, systems and supporting techniques;
- National Code of Practice for Excavation Work;
- Asbestos Blueprint for NSW;
- Fire Brigades Act 1989;
- Local Government Act 1993;
- AS 2865 – 2009 Confined Spaces;
- AS 1319 Safety Signs for the Occupational Environment;

5 SITE LOCATION

The Clyde Refinery is located in Clyde, New South Wales, Australia, approximately 16km west of the Sydney Central Business District.

Figure 1 - Location of Clyde Refinery

5.1 GENERAL DESCRIPTION OF THE SITE

Clyde Refinery operations ceased in October 2012 however the terminal facility continues operations. The site principally consists of both current and redundant storage tanks and redundant crude oil processing facilities utilising catalytic crackers and high temperature steam generation. Refer to Appendix A for Site Map.

6 GENERAL SCOPE OF WORK

The initial Scope of Work includes the removal of above ground facilities within the zoned area of drawing CLR_0007264_DDDD.

Mobilisation and demobilisation of necessary demolition plant, personnel and consumables to and from the Site:

- Removal of:

– Process Units;

– Buildings;

– Above ground Structures;

– Storage Tanks;

– Piping;

– Pipe racks/culverts (careful dismantling of pipework);

– Plant;

– Instrumentation controls;

- Removal and disposal of all asbestos containing materials and hazardous materials identified for removal by demolition contractor in the Decommissioning, Decontaminating, Demolition and Disposal (DDDD) Waste Register Summary.

6.1 REMOVAL OF HAZARDOUS MATERIALS

6.1.1 Transformers

The Company will engage an environmental contractor (Hydrodec), to drain and clean the transformers of all oil prior to the removal from site.

Contaminated oils (Polychlorinated biphenyls (PCB's)) will be disposed of by the contractor. Any electrical apparatus with PPM with Non-scheduled (>2mg/kg but <50mg/kg), Scheduled (>50kg but <100,000mg/kg) or Concentrated (>100,000mg/kg) classification will be flushed through until such time as the oil concentration has decreased to less than 2 mg/kg, thus rendering the transformer fit for recycling.

Containment and control of waste will be of paramount importance and a policy on zero spillage will be adopted.

All oil hoses are affixed to taps or valves. The flow of oil will take place through pipes, hoses and a pump, into an IBC or ISO tank for storage and subsequent transport off site. A proprietary surfactant is pumped into the unit and recirculated a number of times to flush the unit.

Flushing consists of loading the unit numerous times, once loaded the product will be removed, and the unit refilled again. Upon the final drain, the oil will be sampled and sent to a NATA accredited lab to ascertain the PCB levels, and suitability for recycling.

Some transformer inspection plates are removed for greater access and effective dispersion. A mobile bund will be supplied for the duration of the job; all pumping equipment will be held within the mobile bund while pumping. The overall setup will form part of the environmental risk assessment prior to commencement of the task.

EPA licenses are held for transport and facilities.

Ref: Work Method Statement (WMS) Transport, Storage and Disposal of PCBs
WMS Oil Removal and Processing

6.1.2 Residual Liquids and Solids

An environmental inspection will be carried out by the Company worker(s) in conjunction with Viva Energy worker(s) to identify the extent of hydrocarbon contamination within the redundant pipelines and process plant.

Once the level of contamination has been established as per Viva Energy documentation, a sequence and methodology will be derived so as to contain and remove residual materials.

Dependent upon the form of contamination found, the vessel/pipework will either be mechanically cleaned at source or taken to a specific quarantine area where they will be contained and a secondary cleaning operation will be undertaken.

The waste will be analysed to demine its correct waste stream and only then will it be transported off site by an Environmental Protection Authority (EPA) licenced contractor and disposed or recycled at a lawful facility.

The Company will use a “cradle to grave” waste tracking system to ensure that the waste has been transported to the lawful facility for recycling or disposal.

For further details refer to the Environmental Management Plan and Waste Management Plan under separate cover.

6.1.3 Asbestos

The Company has engaged a Licensed Class "A" removal company to undertake the work. Any Class "B" asbestos will be removed by licensed workers of the Company.

In relation to demolition zones 5 and 6 (Appendix B), a comprehensive scaffolding system will be erected to the distillation columns and structural steelwork which is known to have asbestos insulation present. This scaffolding will have a full temporary design for access and wind loading.

Each enclosure will then be inspected and signed off by an independent hygienist upon completion. Please see under separate cover Asbestos Control Plan.

Asbestos enclosures will be constructed utilising the scaffold structures. The licensed company will remove the asbestos pursuant to the "How to Safely Remove Asbestos CoP"[1]. The waste material will be disposed of by a licensed contractor to a lawful facility.

6.1.4 Tanks Cleaning

Transpacific (Industrial Cleaning Specialist) has been engaged to systematically clean the few remaining tanks and associated pipework as identified by any remaining residues and contamination within. Transpacific maintain a licensed waste disposal and approved laboratory facility.

Disposal of material will take place after an analysis has been undertaken to determine the waste stream for this material and its correct passage to landfill or lawful recycling facility.

Ref: ***Waste Management Plan***

6.2 DECONTAMINATION OF PROCESSING PLANT

Areas that have been assessed as potential "hot spots" will be inspected for contamination by the Company Project Manager and Site Supervisor. They will develop WMS and JHAs to address same.

These materials will then be removed for landfill or lawful recycling facility in accordance with all legislative requirements.

[1] How to safety remove asbestos: Code of Practice NSW – January 2012

6.3 GENERAL DEMOLITION TECHNIQUES

In the petrochemical environment of the Refinery, the majority of demolition techniques will be of “cold cut” nature. Only where specific Work Permits and assessments have been carried out in accordance with WMS and JHA’s, will any hot works be considered. The process of generating WMS and JHA’s is covered in the WHS Management Plan.

Prior to any induced collapse techniques, structural calculations will be undertaken and a cut by cut methodology produced and signed off by the structural engineer.

The majority of demolition will be carried out by excavators using shears and grapple attachments ranging from 36 to 120 tonnes.

Ref: ***Work Health and Safety Management Plan***

6.4 COLD CUT DISMANTLING OF PIPEWORK ADJACENT TO LIVE SERVICES

The main pipe culvert running east west along the boundary of ‘Road 2’ houses a significant concentration of live service pipelines. Adjacent to these are a numerous redundant pipelines which are to be removed in their entirety.

A Work Permit system will be implemented for the removal of redundant pipelines in these specific areas. A reciprocal cold cutting saw will be used to sever and liberate the redundant pipelines.

The pipes will be cut into manageable lengths dependant on diameter, either manually removed or by crane after a cranage study is undertaken to sling and lift.

6.5 DEMOLITION OF REFINERY STACKS

There are a total of five (5) stacks being:

- CDU;
- CCU;
- HVU;
- P3;
- B7/B9;

The Company WorkCover High Risk Licensed shotfirer will prepare a blast plan for the five stacks including a series of test blasts. The stacks will be prepared for implosion pursuant to GHD structural engineering design and professional advice.

See blast plan under separate cover for details.

7 PLANNING

An investigation of the structure has been undertaken by the company and itemised in the following paragraphs.

7.1 PROJECT SUPERVISION

At all times during the demolition works, the demolition will be supervised by a competent supervisor attached to and approved by WorkCover Authority NSW demolition licence in addition to a Project Manager:

Name	Position	Contact Details
David Wall	Senior Project Manager	0488 055 845
Ryan Kinney	WorkCover Approved Demolition Supervisor (Unrestricted)	0487 811 481
Lewis Bridle	WorkCover Approved Demolition Supervisor (Unrestricted)	0424 505 576

7.1.1 Project Manager

The Project Manager is the key person responsible for the success of the project and has overall responsibility for the implementation and administration of the Management System. The Project Manager's responsibilities include, but are not limited to:

- Track project progress, report issues and manage project resources;
- Deliver business outcomes through the effective and efficient management of projects;
- Provide quality assurance for project documentation as appropriate;
- Facilitate or participate in project-related workshops, meetings and discussions;
- Document and maintain an up to date risk register for all projects;
- Maintain project management templates and tools;
- Provide or coordinate project management and related training;
- Ensure safety, environment and other risk assessments are undertaken for all works maintenance activities undertaken on the site generally;
- Ensure action is initiated to reduce or eliminate risks or hazards;
- Interact with unions, and clients and communicate at all levels;
- Manage multi-functional and multi-discipline teams in order to achieve program objectives;
- Analyse complex problems, identify critical issues and develop strategies for delivering solutions;
- Supervision of project staff, consultants and contractors;
- Management any HSEQC matters that may arise from time to time;

7.1.2 Site Supervisors

Site supervisors are responsible for seeing that the works undertaken on-site are conducted in a safe and efficient manner. They report directly to the Project Manager and are assisted by the Site Safety Manager. The Site Supervisor's responsibilities include but are not limited to:

- Conduct pre start meetings, assign tasks, discuss project needs, potential problems, project progress, current performance and future plans, consult with workers on safety matters, and reinforce drug, alcohol, and change management procedure;
- Conduct behavioural observations on workers during the course of the project;
- Ensure reporting procedures concerning significant hazards, incidents, effluent and emission are followed accurately and in the prescribed time frame for same;
- Ensure that tool box talks are undertaken and recorded as determined in the site management plan;
- Identify safety training requirements and consult with Project Manager and HSEQ Advisor for appropriate training programs;
- Conduct information and induction sessions;
- Assist in the identification of hazards in the workplace;
- Recommend preventative measures, including control systems to detect deviation from agreed safety policy;
- Liaise with the site management team on the safety aspects plant/process modification, including equipment specifications, waste disposal and industrial hygiene, protective clothing and the storage of dangerous chemicals and other substances;
- Initiate and manage site emergency procedures;
- Ensure that company plant is serviced and maintained to manufactures specifications;
- Actively supervise the site by walking around communicating with the workforce a minimum of 50% of the work day.
- Address any "grievance" that may arise on site pursuant to the registered instrument grievance procedure in a timely manner, those matters that can't be resolved are to be brought to the immediate attention of the Project Manager;
- Chair weekly tool box talks;
- Ensure that workers are supplied with protective clothing and equipment along with training in the use PPE where necessary;
- Investigate and document all recordable incidents in line with company procedures, and ensure corrective action and notification is actioned;
- Participate in, and contribute to, the effectiveness of health and safety meetings;

- Facilitate and support daily toolbox talks, and communicate safety feedback and information;
- Ensure that subcontractors adhere to their submitted WHS plan and to all WMS, JHA and Work Permits;
- Undertake daily work area inspections.

Note: Should at any time, any of the above mentioned responsibilities not be able to be fulfilled, the Project Manager is to be informed immediately.

7.1.3 Site Safety Manager

The site safety manager is responsible for the implementation of the WHS Management Plan. Specific duties of the site Safety Manager include, but are not limited to:

- Ensure safety programs in force at the time and safety procedures are implemented;
- Review new procedures and manage their implementation;
- Ensure reporting procedures concerning significant hazards, incidents, effluent and emission are followed accurately reported in the prescribed manner;
- Maintain records on safety programs and ensure licenses and permits are current;
- Identify safety training requirements and consult with the Project Manager for appropriate programs;
- Conduct information and induction sessions;
- Assist in the identification of hazards in the workplace;
- Recommend preventative measures, including control systems to detect deviation from agreed safety policy;
- Liaise with the management team on the safety aspects plant/process modification, including equipment specifications, waste disposal and industrial hygiene, protective clothing and the storage of dangerous chemicals and other substances;
- Initiate and manage site emergency procedures;
- Obtain and coordinate the services and cooperation of external emergency authorities as necessary;
- Ensure that subcontractors adhere to their submitted WHS plan and all WMS, JHAs and Work Permits.

7.2 SITE INVESTIGATION

The facility is primarily constructed of catalytic converters, tanks and piping. There are small buildings throughout the site used for amenities and workshops.

An investigation of the identified demolition areas has been completed with the following key points noted:

- The location and extent of items to be demolished have been clearly identified;
- The demolition area contains an underground live fuel line;
- The demolition area does not contain any live electrical services, UST's, basements or cellars;
- Surrounding buildings to be retained have been identified;
- PCB oils still remain on site and will be lawfully disposed of;
- The location of adjacent roadways and operational areas has been clearly defined;
- The general conditions of pavements that may be impacted by the deconstruction works have been recorded;

7.3 MANAGEMENT PLANS

- Work Health Safety Management Plan;
- Environmental Management Plan;
- Quality Management Plan;
- Traffic Management Plan;
- Industrial Relations Management Plan;
- Asbestos Control Plan;
- Emergency Management Plan;
- Hazardous Substances Management Plan;
- Waste Management Plan;
- Stakeholder Communication Plan;
- Detailed Demolition Program (Gantt chart);
- Demolition Risk Assessment Workshop (DRAW);
- Site Induction.

7.4 WEATHER

Daily monitoring of the weather will be undertaken by accessing the online weather bureau website. This information will be conveyed to the worker(s) at the morning pre start and may have a bearing on the daily undertakings. More regular monitoring and communications will be undertaken where weather conditions and the specific work scopes dictate.

Precautions will be taken to ensure that the stability of the structure and the safety of worker(s) on site will be maintained in the event of a sudden and severe change in weather.

In the event the wind reaches levels where the work is deemed to be unsafe (either crane lifts or asbestos removal works), or when the debris cannot be effectively

contained or captured, all work stops and the work area made safe until conditions abate.

Works shall be undertaken in compliance with AS/NZ 1418.3-1997 Cranes, hoists and winches and AS/NZ 2550.1

7.5 SITE ACCESS

Access to the demolition area will be by through gate 6 at the corner of Colquhoun and Unwin Street as detailed in Appendix B.

7.6 STRUCTURAL DETAILS

7.6.1 Height of the structure

The mean height of the facility is 15m. In addition there are five (5) stacks, being up to 100 metres in height and consisting of a concrete exterior with brick lining.

One of the highest structures is a reinforced concrete stack within Area 11 (Appendix B). This is in close proximity to the east-west pipeline culvert in which there are live services. Additional protection measures will be designed and implemented to ensure that no service lines are disrupted or affected.

7.6.2 Distance from the structures to the site boundary

The highest parts of the structure are the stacks, being 100m in height. There is no foreseen demolition hazard associated with the induce collapse of the five stacks, which shall be imploded to fall in an area deemed safe and appropriate as per AS2601, The Demolition of Structures.

This will be outlined in a detail work method statement and Job Hazard Analysis prior to stack demolition works being approved and supported by independent engineering calculations.

7.6.3 Services

On each of the demolition zones, all services will be rendered isolated and severed at the demolition area boundary with the operational terminal. Sign off will be issued by a competent Viva Energy representative prior to handover of the assets.

The Project Manager will undertake separate verification to ensure the services identified are effectively isolated.

8 UNDERSTANDING OF SPECIFIC PROBLEMS

The following table details specific problems which may arise during the course of the works and proposed solutions:

#	Identified Problem	Proposed Solution
1	Public concerns	▪ Refer public contact to Viva Energy Stakeholder Plan and Complaints procedures ▪ All complaints received to be referred to Viva Energy ▪ Induct worker(s) into protocol
2	Traffic Interaction	▪ Project Planning ▪ Site Specific Traffic Management Plan ▪ Induct worker(s) into protocol ▪ Ensure Traffic Control Plan is in place
3	Dilapidated structure not appropriate for induced collapse	▪ Project Planning ▪ Thorough investigation by structural engineers and recording of same ▪ Thorough investigation by the company Supervisor and recording of same ▪ Development and approval of alternate methodology required.
4	Working at heights	▪ Project Planning ▪ Induct worker(s)into WAH procedure ▪ Working at height permits required prior to works commencing
5	Working near water	▪ Project Planning ▪ Induct worker(s) into protocol ▪ Induct worker(s) into rescue procedure
6	Working in a constricted area	▪ Project Planning ▪ Housekeeping ▪ Progressive waste removal
7	Media attention	▪ Refer media inquiries to Viva Energy

		▪ Induct worker(s) into protocol
8	Public and client concern over air/noise contamination~~,~~	▪ Undertake air monitoring in accordance with Environmental Management Plan. ▪ Undertake noise monitoring in accordance with Environmental Management Plan
9	Release of hazardous contaminate	▪ SWMS must be completed, approved by Viva Energy~~.~~ prior to implementation.
10	Rupture or disturbance of active pipeline	▪ Separation and mechanical protection of any live service line. ▪ Viva Energy Emergency Response Plan ▪ Viva Energy environmental controls

9 SITE ORGANISATION

9.1 PERIMETER FENCING

The site will be fully secured by temporary fencing and the site entrance will be through Gate 6 at the corner of Colquhoun and Unwin Street. The fencing will be signposted with demolition and asbestos work in progress when applicable.

9.2 DEMOLITION CONTROL ZONE

The perimeter of the defined deconstruction zone will be fenced and sign posted to prevent unauthorised access. Access points will be established and only worker(s) who have been inducted with the authority of the Project Manager may enter these zones.

9.3 BARRICADE AND SIGNS

Work areas will be barricaded and signposted to define the area and prevent access. Any hazards identified will also be barricaded and signposted.

9.4 MATERIALS PROCESSING AREA

A materials processing areas as identified in the Appendix B and will be located in the fenced perimeter. The exact location will vary dependant on the location of the particular item of infrastructure being demolition at any given time. This will be identified in the demolition work plan and the work specific Work Method Statements (WMSs).

9.5 SKIP BIN FOR STORAGE OF ASBSTOS MATERIAL

A designated area will be identified prior to asbestos removal works being undertaken. This will be addressed in the Asbestos Control Plan and work specific WMS. The skip

bin will covered with a tarpaulin when not in use. All asbestos materials will be contained within the bin by approved methods to prevent migration.

9.6 FIRST AID

A certified First Aid worker(s) shall be on site full time during the works to administer First Aid in the event of an incident and to participate in any emergency evacuation drill.

9.7 SITE AMENITIES

The site amenities and office will be powered by local electrical source.

The amenities will be maintained in a clean and hygienic manner during the course of the project.

10 DEMOLITION METHODOLOGY

Following is the general information surrounding the development of the site specific WMSs which are prepared under separate covers and detail the steps required to safely undertake the task.

Note: A Job Hazard Analysis (JHA) shall be undertaken by the work crew for each activity within each WMS prior to commencement of that activity.

10.1 DEMOLITION SEQUENCING

The general staging and sequencing of the works is outlined below:

1. Site Establishment (Setup work zone, Mobilise plant, Establish amenities);
2. Environmental Cleaning and flushing of plant (where required);
3. Clearance certification;
4. Preparation of site for asbestos removal works and undertake removal;
5. Once asbestos removal works are cleared demolition works will commence;
6. Prepare buildings and redundant plant for induced collapses, including the development of work specific Work Method Statements and Job Hazard Analysis's and undertake induced collapse;
7. Scrap metals processing;
8. Demolition area (non-soil & groundwater) remediation, tidy and level site;
9. Demobilise Plant and Equipment;
10. Site handover.

Exclusion Zones will be placed around sections of the buildings which are being prepared for induced collapse, pursuant to AS2601. The Demolition of Structures, 1.5 times the height of the structure being induced where possible.

10.2 STRUCTURAL ENGINEERING REQUIREMENTS

The demolition of the plant is a complex and specialist task and requires significant engineering input to ensure structural integrity is maintained throughout the demolition process and ensure no delays to the critical path. Engineer(s) will be utilised when required to develop structural demolition methodologies which will be reviewed and approved by the company.

10.3 MAJOR PLANT & EQUIPMENT

The following outlines a list of the proposed plant and equipment to be used for the works:

- 2 x 120t Hitachi Excavators with grabs and rotating shear attachment;
- 1 x 70t Volvo Excavator with grab and rotating shear attachments;
- 2 x 46t Volvo Excavator with grab and rotating shear and bucket attachments;
- 4 x 36t Volvo excavators with bucket shear and grab attachments;
- 1 x 5t telehandler;
- 1 x 3t telehandler;
- 1 x Moxy;
- 1 x Semi tippers;
- LPG/Oxy Cutting Sets;
- 1 x Fuel/Service tank;
- 2 x 20ft Containers;
- 120ft Elevated Work Platform;
- 86ft Elevated Work Platform;

Note: Viva Energy's EIS predicted conservative sound power levels of equipment to be used for demolition works. The sourced equipment is significantly quieter than the levels proposed in the EIS.

Construction Plant	L_{eq} Sound Power Level dB(A)	Plant Usage
		Demolition
Excavator equipped with mechanical shears	107	2
Excavator equipped with hydraulic shears	107	2
Trucks	108	4
Crane	105	2
Air compressors	94	
Pneumatic wrenches	107	
Cutting torches	110	3

10.4 TRANSPORTATION

All recyclable materials will be transported to an approved and lawful site for recycling. In the case of steel, all ferrous and non-ferrous materials will be shipped overseas for recycling. These materials will be transported by semi-tipper trucks which will be organised by the company's preferred metals recycling contractor.

10.5 ONSITE PROCESSING

A "materials landing and processing area" as identified in Appendix B will be established. This process entails the use of cold cutting by use of a hydraulic shear attachment on the excavator and oxy acetylene cutting techniques of the steel members. This is to keep the involvement of manual handing to a minimum and to maintain the critical path.

When sections require oxy-cutting, they are removed from the scrap pile onto the concrete landing adjacent, and section cut. When the stockpile is full and approved for transport offsite by a Shell representative, the material is transported offsite to be shipped. Please see under separate cover, Waste Management Plan

10.6 RECYCLING AND WASTE MANAGEMENT

All steel and materials, other than the salvage items, will be transported to a licenced recycling facility.

All waste will be transported offsite by licensed contractor to a lawful disposal landfill. All waste will be tracked and audits undertaken to verify its destination.

Ref: Waste Management Plan

10.7 REGULATORY AUTHORITY NOTIFICATION

WorkCover NSW will be notified on the prescribed form and in the prescribed manner the intention of the company to undertake the following works:

- Demolition Works;
- Asbestos Removal Works;

The regulator will be provided with a notification 5 days prior to work commencing as prescribed.

Ref: Form 65 Notification of licensed asbestos removal work

Form 67 Notification of demolition work

10.8 SAFETY AND ENVIRONMENTAL RISK CONTROL

10.8.1 Demolition Risk Assessment Workshop

A Demolition Risk Assessment Workshop (DRAW) will be undertaken prior to work commencing to identify the high level Safety and Environmental risks that are likely to be encountered during the works.

The site team undertaking the DRAW will include, but not be limited to, the following:

- Senior Project Manager
- Site Supervisor
- Site Safety Manager
- Workers
- Client Representatives

The DRAW will then be used by the site team as the foundation for the development of a Job Hazard Analysis (JHA) for each specific task identified within the Work Method Statement.

As circumstances change, the DRAW will be review.

10.8.2 Protective Measures

Fencing
The perimeter of the defined demolition zone will be fenced and sign posted to prevent unauthorised access. Only persons with the authority of the Project Manager may enter the demolition zones.

Spotters
During heavy lifts, spotters will be stationed as required by the JHA to prevent unauthorised access.

Environmental Controls
See Environmental Management Plan under separate cover

10.8.3 Risk to adjacent office building

Where a risk assessment identifies a building under induce collapse may impact on the adjacent building, specific control measures will be designed with engineering review and undertaken to protect the adjacent structures as identified in the work specific Work Method Statement and associated JHA.

10.8.4 Emergency Response

An emergency response plan has been developed. An emergency muster point has been identified where the helicopter landing pad is located. Please refer to Appendix A – Site Map as well as the Emergency Management Plan.

10.9 DAILY CHECK ITEMS

10.9.1 Before Commencing

- All openings and elevated free edges are properly guarded;
- Any temporary bracing or propping and the like are stable and secure;

- All fire and safety services are operational where required and other services not required have been safely disconnected;
- Any hazardous substances have been removed and correctly disposed of;
- Lines of communication to the supervisor are clear and operational;
- All emergency access routes are clear of debris and clearly marked;
- Gas check to drainage interceptors;
- Drain silt covers are in place;
- Fencing and signage;
- Equipment subjected to pre-start checks including checks for Green Golden Bell Frog presence when required;
- Personnel fit for work;
- Hazards and risks involved with the day's activities are understood and controls in place.

10.9.2 Before Leaving Site

- All partly demolished plant and or structures are secure and stable.
- All demolished materials have been removed or secured against high winds.
- All heat sources have been properly extinguished.
- All emergency access routes are clear of debris and clearly marked.
- All boundaries have been secured against unlawful entry.
- All areas outside of the deconstruction zone are clear of demolished materials and any hazard is properly lit, guarded and clearly marked.
- A daily close out meeting will be held to confirm all of the above.

11 ASBESTOS AIR MONITORING

Asbestos emissions shall be monitored for all aspects of the works whilst being undertaken. Work shall cease in the event that emissions are detected which have the potential to harm the environment. Air monitoring will be undertaken in accordance with the Asbestos Control Management Plan and CoP.

12 NOISE CONTROL

Following is a list of the proposed noise producing activities to be undertaken:

- Oxy cutting;
- Shearing with excavators;
- Loading trucks;
- Plant Movement;
- Minimal Crane work;

Noise from the above activities is expected to be minimal and expected to fall within the required parameters of LA10 (15 minute) noise emission criterion of 75 dB(A) (6am to 6pm), or background plus 20 dB(A) as determined in the Viva Energy submitted EIS;

13 CLIENT INSTRUCTIONS

Instructions are to be accepted from Viva Energy or relevant regulators only.

14 COMPLAINTS

Any complaints received throughout the duration of the demolition project shall notify the Project Manager immediately. The Project Manager will then direct the complaint to a Viva Energy representative so that the existing Viva Energy Complaint Procedure can be initiated.

15 PROGRAMME

See Demolition Schedule for the works under separate cover.

16 SITE INDUCTIONS

All worker(s) and visitors shall undergo the following inductions prior to commencing work:

- Liberty Industrial Project Specific Induction;
- Viva Energy Induction (where required).

17 WORKING ADJACENT TO TERMINAL AREAS

The company will be responsible for ensuring that active product lines and utilities adjacent to and within the ongoing Terminal Area are not damaged.

18 PERMITS

The company will implement a Work Permit (WP) system. No work will be undertaken on the project for which a WP.

Permits that will be issued will be but not limited to the following:

- Hot work (drilling, grinding, cutting);
- Working at height (above 2 m);
- Electrical power will be isolated prior to demolition commencing;
- Welding;
- Oxy cutting;
- Excavation and Penetrations;
- Hazardous Work Permit;

19 TRAINING

Only trained worker(s) will be engaged on the project along with their qualifications. Verification Competencies (VOC's) will also be undertaken, and filed.

20 WORK AREA INSPECTIONS

Work area inspections shall be undertaken on a weekly basis as a minimum.

Ref: ***FRM-013 Work Area Inspection***

PRO-057 Work Area Inspection

21 HEALTH AND SAFETY SYSTEM

Consideration of health and safety risks and control measures has been included in the site specific Work Health and Safety Management Plan under a separate cover. In addition, a Demolition Risk Assessment Workshop (DRAW) will be undertaken prior to commencing work along with specific Work Method Statements and Job Hazard Analysis.

22 ECOLOGICAL SUSTAINABLE DEVELOPMENT

The company commits to an ecological and sustainable site. These commitments will include the Viva Energy site environmental requirements and will include the following:

22.1 GREEN PROCUREMENT AND ENERGY & WATER EFFICIENCY

The following measures shall be adopted:

- Use of the latest in fuel efficient plant;
- Lighting will only be used for site offices and amenities where natural light is insufficient (no lighting required outside to facilitate the works);
- When plant is not in use it is to be switched off minimising idling time of the plant;
- The company's own transport shall be utilised to minimise travelling distances and time, reducing emissions and impact on the environment;
- Transport loads will be maximised to reduce number of loads and hence emissions and impact on the environment;
- Recycled paper will be used for all documentation produced and printing on both sides of each page. Soft copies of documents are to be used in preference to printing;
- Plant is maintained to manufacturers specifications;

22.2 WASTE AND RECYCLING

- All demolition material will be sorted into waste streams to maximise recycling;

- 95% recycling of all ferrous and non-ferrous products from the project;

22.3 EFFICIENCY IN RESOURCE AND MATERIAL USE

Due to the nature of the undertaking, the use of materials will predominately be fuel, Oxy/LPG gas, geo-fabric for environmental controls. The use of these materials will be monitored to ensure maximum efficiency is achieved.

22.4 MONITORING AND REPORTING

The following items shall be monitored by all worker(s) and reported to the Project Manager for action:

- Water leaks;
- Flickering lights;
- Dripping taps;
- Idling plant;
- Inefficient use of materials;
- Inefficient use of plant;

23 COMMUNICATION PROTOCOL

All external communication including media, key community representatives, community groups, neighbours approached to Liberty Industrial personnel shall notify the Project Manager immediately. All external communications shall be directed to the Viva Energy representative.

APPENDIX A – SITE MAP

LIBERTY INDUSTRIAL

Site Map

APPENDIX B – INDICATIVE SCRAP LAYDOWN & PROCESSING AREAS