Modification of Minister's Approval

Section 75W of the *Environmental Planning and Assessment Act 1979*

As delegate for the Minister for Planning, under the Instrument of Delegation executed on 11 October 2017, I approve the modification of the project approval referred to in Schedule 1, subject to the conditions outlined in Schedule 2.

Sally Munk
Acting Director
Industry Assessments

Sydney 9 May 2018 File:OBJ17/14264

SCHEDULE 1

Project Approval (07_0066), granted by the former Minister for Planning on 2 June 2008 for marine fuel storage facility, biodiesel production facility, pipeline and associated infrastructure at Lots 10, 11, 12 and 13 in DP 234887, Lot 7 in DP 262783, Lots 3 and 4 in DP 573972, Lot 361 in DP 1104196 and Lots 28 and 34 in DP 775776 and Lots 1, 2 and 3 DP 557904, Greenleaf Road, Kooragang Island, Newcastle in the Newcastle City local government area.

SCHEDULE 2

This approval is modified as follows:

1. In the definitions, insert the following definition in alphabetical order:

   MOD 5 Modification request to 07_0066, including supporting documentation prepared by Umwelt (dated 3 January 2018 and 2 March 2018)

2. Delete all references to "shall" and replace with "must" in Schedule 2 to Schedule 4.

3. Delete Condition 2 of Schedule 2 and replace with the following:

   2. The Proponent must carry out the project in accordance with:
      a) EA;
      b) site plan (see Appendix A);
      c) statement of commitments (see Appendix B);
      d) MOD 1;
      e) MOD 2;
      f) MOD 4;
      g) MOD 5; and
      f) in compliance with the conditions of this approval.

4. Delete Condition 5 of Schedule 2 and replace with the following:

   5. The Proponent must ensure that the facility does not exceed a maximum annual storage volume of 980 million litres of fuel.

5. Delete Condition 13 c) of Schedule 3 and replace with the following:

13 c) a **Final Hazard Analysis** prepared in accordance with the Department of Planning's *Hazardous Industry Planning Advisory Paper No. 6, 'Guidelines for Hazard Analysis'*. The Final Hazard Analysis should:
   a. consider relocating emergency critical services/equipment such as the electrical cubicle and foam supply away from high radiation areas;
   b. confirm implementation of the recommendations made in the Preliminary Hazard Analysis dated October 2007 and other recommendations made in the Final Hazard Analysis; and
   c. give details of the lightening protection system for the tanks and plant.

6. Delete Condition 13 d) of Schedule 3 and replace with the following:

   13 d) a Construction Safety Study prepared in accordance with the Department of Planning's Hazardous Industry Planning Advisory Paper No. 7, 'Construction Safety Study Guidelines'. Given that the site will be operational during Phase 2 of construction, the study shall include details for ensuring overall site safety.

7. Insert new Conditions 14C and 14D after Condition 14B of Schedule 3 as follows:

   14C. Prior to the use of Tank T-3, T-4, T-5 and T-6 as part of MOD 5, the Proponent must update the approved Emergency Plan to include changes associated with MOD 5 to the satisfaction of the Secretary.

   14D. Prior to the use of Tank T-3, T-4, T-5 and T-6 as part of MOD 5, the Proponent must update the approved Safety Management System to include changes associated with MOD 5 to the satisfaction of the Secretary.

8. Delete Condition 27 of Schedule 3 and replace with the following:

   27. All wastewater generated from the on-site treatment of sewage must be removed from the site to a facility that is lawfully able to reuse or dispose of it.

9. Delete Condition 43 of Schedule 3.

10. Insert new heading and new Condition 43 of Schedule 3 as follows:

   LANDSCAPING

   43. Prior to the use or occupation of the refurbished workshop and administration building included as part of MOD 4, the Proponent must prepare an updated Landscape Plan, taking into account the revised site layout. The Landscape Plan shall be designed based on the principles of the Landscape Plan submitted as part of the original application. All landscape works are to be completed in accordance with the plan within 6 months occupation of the refurbished workshop and administration buildings.

11. Delete re-numbered Condition 44 of Schedule 3 as inserted in MOD 4.

12. Delete heading '**PROCUREMENT OF FEEDSTOCK**' of Schedule 3.

13. Delete Condition 49 of Schedule 3.

14. Insert new heading and insert new Condition 49 of Schedule 3 as follows:

   VAPOUR PRESSURE

   49. The Proponent must ensure that only combustible liquids with a true vapour pressure of less than or equal to 25.8 mm Hg (0.5 psia) are stored in Tanks T-1, T-2, T-3, T-4, T-5, T-6 and T-7.

15. Delete Condition 50 of Schedule 3.

16. Delete re-numbered Condition 51 of Schedule 3 as inserted in MOD 2.

17. Delete Condition 55 in Schedule 4 and replace with the following:

   55. The Department must be notified in writing to compliance@planning.nsw.gov.au immediately after the Applicant becomes aware of an incident. The notification must identify the development (including the

development application number and the name of the development if it has one), and set out the location and nature of the incident.

Subsequent notification must be given and reports submitted in accordance with the requirements set out in Appendix C.

18. Replace the Statement of Commitments in Appendix B with the Statement of Commitments in Attachment A of this modifying instrument.

19. Insert new Appendix C after Appendix B as follows:

APPENDIX C: WRITTEN INCIDENT NOTIFICATION AND REPORTING REQUIREMENTS

A written incident notification addressing the requirements set out below must be emailed to the Department at the following address: compliance@planning.nsw.gov.au within seven days after the Proponent becomes aware of an incident. Notification is required to be given under this condition even if the Proponent fails to give the notification required under condition 55 or, having given such notification, subsequently forms the view that an incident has not occurred.

WRITTEN INCIDENT NOTIFICATION REQUIREMENTS

Written notification of an incident must:

(a) identify the development and application number
(a) provide details of the incident (date, time, location, a brief description of what occurred and why it is classified as an incident)
(b) identify how the incident was detected
(c) identify when the applicant became aware of the incident
(d) identify any actual or potential non-compliance with conditions of consent
(e) describe what immediate steps were taken in relation to the incident
(f) identify further action that will be taken in relation to the incident
(g) identify a project contact for further communication regarding the incident.

INCIDENT REPORT REQUIREMENTS

Within 30 days of the date on which the incident occurred or as otherwise agreed to by the Secretary, the Proponent must provide the Secretary and any relevant public authorities (as determined by the Secretary) with a detailed report on the incident addressing all requirements below, and such further reports as may be requested.

The Incident Report must include:

(a) a summary of the incident
(b) outcomes of an incident investigation, including identification of the cause of the incident
(c) details of the corrective and preventative actions that have been, or will be, implemented to address the incident and prevent recurrence
(d) details of any communication with other stakeholders regarding the incident.

ATTACHMENT A
STATEMENT OF COMMITMENTS

7.0 Statement of Commitments

The Statement of Commitments included in the 2008 EA has been revised to consider the issues raised in the response to submissions, as well as including commitments made in subsequent modifications. The Statement of Commitments detail the measures proposed by Park for environmental mitigation, management and monitoring.

If approval is granted under the *Environmental Planning and Assessment Act 1979* for the Project, Park will commit to the following controls.

7.1 Operational Controls

7.1.1 All activities will be undertaken generally in accordance with the 2008 EA, as modified.

7.1.2 The Project will operate up to 24 hour per day 7 days per week.

7.2 Noise

7.2.1 Construction activities which are audible at any residential or other sensitive receiver will be limited to between 7.00 am and 6.00 pm Monday to Friday and 8.00 am and 1.00 pm Saturdays.

Works proposed to be undertaken outside of these hours includes:

- any works that do not cause construction noise emissions to be audible at any nearby sensitive noise receiver;
- the delivery of materials as requested by the Police or other authorities for safety reasons;
- emergency work to avoid the loss of life, property and/or prevent environmental harm; and
- any other work as agreed through negotiation between Park and potentially affected noise receivers or as otherwise agreed by the EPA.

Noise Mitigation Measures

7.2.2 During the detailed design and procurement process Park will ensure noise emissions from the facility meet the EPA goals.

7.3 Traffic

Pipeline Construction

7.3.1 Park will provide appropriate traffic management controls during the construction of the transfer pipeline during Phase 1 of the Project. Traffic management controls will include a one lane 'stop-go' control along Heron Road and/or the temporary closure of both Heron and Greenleaf Roads.

7.3.2 Park will consult with the RLMC (or its successor), traffic management operators, Newcastle City Council and the RMS to determine the most effective traffic management measures to be implemented during the construction of the pipeline during Phase 1 of construction.

Operational Traffic Controls

Operational traffic management measures to be implemented include:

7.3.3 Provision of a minimum of 18 parking spaces on-site, where possible.

7.3.4 Overnight heavy vehicle parking will be accommodated for on-site.

7.3.5 The design of the access driveway, and internal access roads, will conform to *Australian Standard AS 2890.2:2002 - Off Street Commercial Vehicle Facilities*.

7.3.6 Provision of appropriate access driveways and circulation roadways, as well as loading areas, which will ensure that all manoeuvring occurs on site.

7.3.7 The design of on-site service areas including the refuelling, service or maintenance bays, will be in accordance with *AS 2890.2*, where appropriate. Through bays may be utilised where the vehicles do not need to manoeuvre on either approach or departure to the service area.

7.3.8 As a principle, heavy vehicles will use the route via Greenleaf Road and the Teal Street on and off ramps for access to and from the west to minimise any potential traffic flow issues.

7.3.9 A maximum of 12 fuel distribution trucks per hour will be loaded and depart the Facility, when averaged over a 24 hour period.

7.3.10 The Facility will generate a maximum of 96 fuel distribution truck movements per day, when averaged over a rolling 30 day period.

Shipping

7.3.11 Park will liaise with the harbour master to manage the safe navigation of ship movements within the Port of Newcastle.

7.4 Hydrocarbon Management

Park will manage the risk of hydrocarbon spills through the implementation of a range of physical controls and mitigation measures in the handling of hydrocarbons in the storage, transfer pipeline, refuelling barge and the road tanker loading/unloading bay. The specific physical controls and mitigation measures to be implemented include:

Storage

7.4.1 The following physical controls and mitigation measures have been incorporated into the design and operation of the terminal:

- the storage tanks and connecting pipeline infrastructure has been designed in accordance with *AS 1940:2004 - The storage and handling of flammable and combustible liquids*;
- a leak detection system has been incorporated within the base of each tank;
- the tanks are contained within a bunded area which has been designed in accordance with *AS 1940*. The bunded area has a storage capacity of approximately 110 per cent of

the storage capacity of the largest tank. This capacity has also taken into account firewater and rainfall events;

- the bunded area will be lined with high density polyethylene (plastic), ensuring that any spills can not disperse into the soil and/or groundwater;

- prior to commencement of construction of the tank farm bund, or parts of it, Park will submit a **Tank Farm Bunding Detailed Design and Construction Report**. ("the Report"). The Report will include, but need not be limited to the following:

    - the bund technical specifications including details such as final footprint, size, containment volumes and permeability details;

    - design of the bund lining system to achieve an impermeable barrier with appropriate early warning leak detection and leak prevention systems that are reviewed by a site auditor accredited under the *Contaminated Land Management Act 1997*, prior to the commencement of construction of these facilities;

    - bund construction methodology, including construction quality assurance procedures and timeframes;

    - measures to ensure that any liquids contained within the bund are securely contained and that there is no migration of contaminants from the bund that could cause pollution of ground waters or other risk of harm to human health or the environment; and

    - details of assessment and monitoring programs to ensure that the performance objectives of the bund are achieved and that the bund continues to provide an effective barrier for the prevention of pollution of land and waters;

- as-constructed drawings will be prepared from field surveys which depict the basal elevation of the bund, the upper surface of the liner(s), any geotextiles, engineered liners and sealed layers of the bund;

- prior to the bulk storage of fuel commencing on site, Park will provide a report which confirms that the bunds infrastructure has been installed in accordance with the **Tank Farm Bunding Detailed Design and Construction Report**. The report will include the 'as constructed drawings', the construction quality control results and written advice from the person(s) overseeing the works to advise whether or not they were installed in accordance with the approved design and construction specifications;

- an automated monitoring system will be installed in all tanks (radar gauge and Programmable Logic Control system-fuel level detector), which will automatically stop fuel pumping if the storage level in the tank exceeds its designed limits during a fuel transfer, i.e. high level alarms;

- standby emergency spill kits are available. Additional resources are available from the Port of Newcastle and from Australian Marine Oil Spill Centre (AMOSC) members located in the area, such as Shell etc;

- isolation valves are physically locked when not in use; and

- valves located within secure/fenced area.

Transfer Pipeline

7.4.2 The following physical controls and mitigation measures have been incorporated into the design and operation of the transfer pipeline:

- the design, construction, operation and maintenance of the pipeline will be undertaken in accordance with *AS 2885 Pipelines – Gas and liquid petroleum*;

- the pipeline will be cathodically protected for enhanced anti-corrosion properties;

- any underground or inaccessible sections will be sheathed in polymer coating or wrapped in anti-corrosion impregnated tape;

- flexible hoses will be blown out and cleared of fuel with compressed air at end of every use, prior to disconnecting the flexible hose;

- fuel will be removed from the transfer pipeline at the conclusion of each transfer operation i.e. the pipeline will be pigged. The transfer pipeline is empty when connecting flexible hose/or not in use;

- drip trays of a size to Australian Standards will be located underneath the point of connection between the steel pipeline and flexible hose on wharf and barge. Drip trays to be removed by hand and cleaned at terminal;

- the pig points will be bunded. The capacity of the bund will exceed the capacity of the pig hatch;

- the terminal tank(s) will be dip gauged before filling the pipeline and after pigging pipeline to ensure zero fuel remains in pipeline, i.e. confirm the total volume of fuel dispatched/received;

- the volume of fuel dispatched/received will be cross checked at both ends;

- regular (every half hour) cross checks of volume dispatched from terminal to that received at the berth and visa versa;

- regular (continuous at start of pumping then every half hour) cross checks of the pressure within the pipeline at the terminal to that at the berth will be undertaken. Pressure is logged on the Product Transfer Form;

- automatic shut off of the terminal pumps will occur if the maximum operating pressure of the pipeline is exceeded;

- visual inspection of the pipeline will be undertaken prior to and during loading. Half hourly checks will be undertaken during loading;

- emergency stop buttons will be located at staffing points i.e. at terminal, berth, and refuelling barge. Staff walking the pipeline will be in contact with staff at these locations via a radio;

- multiple isolation valves are located along the pipeline, i.e. damaged sections of the pipeline to be isolated to minimise spills;

- isolation valves are physically locked when not in use;

- non-return valves used on pipeline;

- flexible hoses used for fuel tanker vessel discharge will be pressure tested prior to every discharge operation;

- pressure testing of the transfer pipeline will be undertaken at the following intervals:

- on installation, the pipeline will be pressure tested to 1.5 times its maximum allowable operating pressure;
- yearly hydrostatic leak and strength testing of pipeline in accordance with the existing operating procedure at Port Kembla; and
- monthly air pressure test of pipeline in accordance with the existing operating procedure at Port Kembla;

- flexible hoses for barge and ship refuelling are pressure and continuity tested every six months in accordance with the existing operating procedure at Port Kembla;
- valves located within secure/fenced area;
- collision aspects have been considered in the design of pipeline. Physical protection methods e.g. bollards, armco guard rail etc and high visibility colours and signage on pipeline including emergency contact phone numbers will be included where required;
- fuel transfer operations will be undertaken in accordance with Park's existing operating procedure at Port Kembla;
- minor spills will be cleaned up using spill kit materials;
- large volume of spilt oil to be removed by a licensed waste oil contractor (e.g. Nation Wide Oil), as required;
- appropriately trained and competent operators in accordance with the existing operating procedure at Port Kembla; and
- multiple staff are located a critical locations during barge refuelling operations allowing for greater awareness and quick response to any issues.

The Refuelling Barge

7.4.3 The following physical controls and mitigation measures have been incorporated into the design and operation of the refuelling barge:

- the barge will be double hulled/double skinned;
  - if the hull of the barge is damaged the contents will be emptied to a ship or the terminal; and
  - additional water based spill control equipment and resources can be called on from the Port of Newcastle and Australian Marine Oil Spill Centre (AMOSC) members e.g. Shell etc;
- Park will have an emergency response vehicle and punt based on land and the barge will also carry oil spill response equipment (e.g. floating booms) Park's Oil Spill Response system and capability exceeds IMO & AMSA 'Marine Oil Spill & Pollution Guidelines';
- all loading operations are computer controlled using Programmable Logic Control system at terminal;
- flow meters provide readings of volumes transferred with automatic presets to stop pumps at set volumes;
- radar gauge is used to provide constant readout of barge tank capacity with alarms activated when tanks are nearing capacity;
- manual dippings and ullages (the volume remaining in the tank) at terminal tanks and barge tanks, are undertaken to confirm flow meter and radar gauge readings;

- fuel is to be loaded evenly between the barges tanks to minimise the listing of the refuelling barge;
- the barge includes a dedicated overflow/slops tank;
- radio contact between barge, terminal and staff walking the pipeline is available at all times;
- maintenance of barge is undertaken as part of overall maintenance program;
- the operation and calibration of measuring equipment is undertaken as per existing operating procedure at Port Kembla;
- minor spills to be cleaned up using spill kit materials;
- large volumes of spilt oil to be removed by licensed waste oil contractor (e.g. Nation Wide Oil), as required;
- multiple staff at critical locations during barge refuelling operations allowing for greater awareness and quick response to any issues;
- emergency stop buttons located at staffing points;
- additional equipment and resources can be called for from the Port of Newcastle and Australian Marine Oil Spill Centre (AMOSC) members e.g. Shell etc;
- all Park staff are trained and accredited by the AMOSC;
- procedures adhere to International Safety Guideline for Oil Tankers and Terminals (ISGOTT) Manual; and
- competent and trained operators e.g. Barge Master.

Road Tanker Loading Unloading Bay

7.4.4 The following physical controls and mitigation measures have been incorporated into the design and operation of the road tanker loading/unloading bay:

- truck loading occurs within a bunded concrete area;
- all spills/stormwater within the loading bay are directed to a 20 KL Spill Pit meeting *AS 1940* requirements, which includes an impervious lining layer, such as bentonite (clay) or high density polyethylene (plastic) and provides capacity for spillage from one 8 KL road tanker compartment;
- trucks connect to a PLC system during loading, which controls the loading process via:
    - correlating volume to be loaded with truck ID Tag; and
    - the Scully system i.e. sensor which detects fuel level in tank and activates automatic shut off if triggered;
- flow meters provide readings of volumes transferred with automatic presets to stop pumps at set volumes;
- radar gauge is used to provide constant readout of tank capacity with alarms activated when nearing tank capacity;
- emergency stop buttons are located at filling bays;
- trucks fitted with brake interlocks, which prevents the truck from driving off while connected to the loading bay hoses;

- hoses are fitted with dry break couplings which prevents spills/leaks during connection/disconnection operations; and
- mobile spill kits will be available at the loading site (e.g. wheelie bins with quick response resources).

General

7.4.5 Park will prepare and implement a **Containment Bund, Tank and Pipeline Integrity Assessment Program**. The Program will detail measure(s) to assess the integrity of the tank farm containment bund, other containment structures, tanks and transfer pipelines during the life of the facility. The Program will include but need not be limited to measures to monitor the effectiveness/integrity of the bunds, tanks other containment structures and pipelines.

Asset Security and Training

7.4.6 A site security plan will be developed prior to the commissioning. This plan will detail how access to fuel storages, master flow and drain values, pumps loading/unloading connections and pipelines will be secured and controlled.

7.4.7 Staff will receive inductions and regular operational training reflective of their roles and responsibilities.

7.5 Hydrology and Water Quality

Construction

7.5.1 A Soil Water Management Plan will be developed in accordance with the requirements of the *Managing Urban Stormwater: Soils and Construction (NSW Landcom 2004) (the Blue Book)* to outline the sediment and erosion control measures implemented during the construction phase.

Operation

7.5.2 Water controls will be designed and constructed to divert clean water around the Project site.

7.5.3 Water collected from dirty areas on site will be stored within spill pits and/or bunded areas (fitted with a high density polyethylene (plastic) impervious liner) and treated. Prior to discharge off site water will be sampled and analysed to ensure it meets the relevant criteria outlined in **Table 7.1**.

Table 7.1 - Water Quality Discharge Criteria

Water Quality Parameter	Unit of Measure	Criteria 100 % Concentration Limit
pH	pH	6.5 – 8.5
Total Suspended Solids	mg/L	50
Oil and Grease	visible	none
Chemical Oxygen Demand	mg/L	40
Volume	KL	none
BOD	mg/L	No limit specified

7.5.5 A comprehensive groundwater monitoring program will be developed in consultation with the EPA and establish trigger levels which represent limits to indicate the detection of groundwater pollution. The groundwater monitoring parameters includes:

- electrical conductivity;
- pH;
- total suspended solids;
- total petroleum hydrocarbons; and
- total oil and grease.

7.5.5 An oil response and prevention plan will be developed.

7.5.6 Effluent from the enviro system will be trucked off site for disposal at an approved facility.

7.5.7 Groundwater samples will be collected and analysed for a period of at least 24 months from the commencement of construction. From this monitoring data Park will establish for each parameter the range of concentrations/units indicative of uncontaminated groundwater at the premises.

7.5.8 Within 27 months from the commencement of construction date Park will submit in writing to the EPA the data obtained under the groundwater monitoring program. The data will be submitted in both graphical and tabular form.

7.5.9 Within 27 months from the commencement of construction date Park will submit in writing to the EPA and seek written approval for the following:

- a list of parameters and sampling frequencies to be used as the basis of groundwater testing for an on-going groundwater monitoring program; and
- a list of concentrations/units for the parameters to be used as limits to indicate the detection of groundwater pollution when compared to the groundwater test results obtained from the on-going groundwater monitoring program.

7.6 Air Quality

Air Quality Management and Mitigation

Park have committed to the following air quality management and mitigation measures for the Project:

Construction

7.6.1 Maintenance of appropriate dust management controls during the construction phase of the Project including minimisation of disturbed areas, watering of exposed surfaces during construction and the stabilisation of exposed areas post construction;

Operation

7.6.2 Fitting diesel and marine fuel storage tanks with floating roofs and pressure release valves to assist in minimising vapour emissions from the tanks;

Air Quality Monitoring

7.7 Visual

7.7.1 The site will be landscaped to improve the visual amenity of the site. Native tree and grass species will be selected for landscaping. The species used would be endemic to the area and would complement the objectives of the Kooragang Wetland Rehabilitation Project.

7.7.2 All lighting associated with the proposed development will be designed, installed and operated in accordance with *AS 4282:1997 - Control of the Obtrusive Effects of Outdoor Lighting*.

7.7.3 A weed management plan will also be incorporated into the landscape management plan.

7.8 Hazard and Operability

The preliminary hazard analysis (refer to **Appendix 8**) identified a range of technical control measures and non-technical safeguards and procedures that will be put in place to reduce the level of risk associated with the operation of the facility.

7.8.1 The technical control measures to be implemented include:

- design of tanks, plant, bunding and piping in accordance relevant standards and codes;
- design of surface drainage systems to prevent contamination of surrounding waterways;
- equipment selected for respective hazardous area classification to control ignition sources;
- provision of emergency isolation valves, shut down system and backflow prevention devices;
- reversion of valves, process equipment and control systems to fail safe positions;
- auto shutdown of plant on high temperatures or pressures;
- install tank level device(s) as appropriate and provision of high level alarms;
- physical barriers including bunding and bollards;
- control of ignition sources;
- storage of dangerous goods in dangerous goods compliant stores;
- inlet and outlet flow monitoring during ship transfers;
- implementation of leak detection system;
- provision of pump deadhead instrumented protection and recycle lines;
- provision of flame arrestors on vent systems;
- installation of oil/water separators to remove contamination prior to discharge; and
- provision of fire detection system and fire suppression fire water ring main and if required by Australian standards cooling water system and foam deluge fire fighting system.

7.8.2 The non technical safeguards and procedures to be implemented include:

- conducting HAZOPs of process designs, site layout and design changes;
- equipment and plant inspection and maintenance procedures;

- operating procedures, including manual tank transfers, and training;
- cessation of operations in adverse weather conditions;
- operator monitoring of control conditions such as inlet and outlet flow monitoring during ship transfers, leak detection systems;
- Hot Work/Safe Work Procedure;
- implementation of site speed limit and driver training;
- provision of security measures include 'person proof' fencing, CCTV, intruder beams, security patrols, operator/driver vigilance, security access pass for after hours access;
- isolation of the tank farm from the truck loading area when the facility is not manned via fencing i.e. access to tank farm prohibited. Trucks and drivers can only access the truck loading area via a swipe card arrangement;
- development of spill response procedures and management plan;
- provision of PPE and safety shower/eye wash;
- appropriate training and supervision of operations;
- provision of on-water pollution response equipment and plan;
- ensure no flammable class 3 liquids are stored in the same bund area as the combustible C1 substances;
- preparation of a Fire Safety Study;
- procedures are in place for the storage and handling of dangerous goods;
- management procedure for contaminated soil in accordance with Orica Management Plan; and
- preparation of an Emergency Response Plan in accordance with HIPAP 1 that coordinates onsite activities and defers authority to the Local Emergency Operations Controller once external support is sort is response to the emergency. The Local Emergency Operations Controller is the position as defined in the *Newcastle Disaster Plan Newcastle City Council 2005*.

7.9 Soil and Groundwater Contamination

Pipeline Construction

7.9.1 Prior to disturbance of soils within the identified Orica contamination zone, for pipeline construction Park will follow the processes outlined in the Orica EMP.

7.9.2 A physical barrier such as a clay plug will be constructed at the northern and southern extents of the contamination zone

Construction and Operation

7.9.3 In the event of any potential or actual ASS/contaminated material being encountered, the following management measures will be implemented:

Materials Handling:

- separate stockpiles for different materials;
- stockpiles to be located within a bunded area;
- liming of the stockpile ground prior to the stockpiling of ASS material; and
- the stockpile will be treated with lime as required.

Testing:

- testing of ASS and treatment with lime as required; and
- classification of material prior to disposal.

7.9.4 Where possible, ASS material will be treated and re-used for the backfilling of pipeline trenches, or other construction activities on site. Contaminated material may also be encapsulated within the on site earthen bunds or used as backfill material in the trench. In the event that the material cannot be successfully treated and or reused it will be removed from site. If additional material is required for the construction of the bund, only Virgin Excavated Natural Material (VENM) will be imported and used unless otherwise approved in writing by the EPA.

7.9.5 A remediation action plan will be prepared for the handling of lead contaminated material that occurs in surface layer around the base of the existing tanks.

7.10 Greenhouse Management

7.10.1 Assess the viability of implementing energy management systems;

7.10.2 Seek continuous improvement in energy efficiency in the onsite processes; and

7.10.3 Assess and implement energy and greenhouse management initiatives during the design and operation of the Project.

7.11 Waste Management

7.11.1 The management of waste materials generated by the construction and operation of the Project will be managed through the design; procurement of construction materials and purchasing; identification and segregation of reusable and recyclable materials; processing materials for recycling; and considering environmental impacts for waste removal processes.

7.12 Environmental Management, Monitoring, Auditing and Reporting

Environment Management System

7.12.1 Park will develop and implement an Environment Management System to outline the environmental management practices to be implemented during the construction and operation of the Project.

Environmental Protection Licence

7.12.2 Park will obtain an Environmental Protection Licence for the Project.

Independent Environmental Audit

7.12.3 Three years after the commencement of the Project, and every four years thereafter, Park will commission and pay the full cost of an Independent Environmental Audit of the Project.

Incident Reporting

7.12.4 Within seven days of detecting an exceedance of the limits/performance criteria in this approval or an incident causing (or threatening to cause) material harm to the environment, Park will report the exceedance/incident to the Department, and any relevant agency. The report will:

- describe the date, time, and nature of the exceedance/incident;
- identify the cause (or likely cause) of the exceedance/incident;
- describe what action has been taken to date; and
- describe the proposed measures to address the exceedance/incident.

Community Enquiry Phone Number

7.12.5 Prior to the commencement of construction, Park will implement, publicise and list with a telephone company a contact phone number, which would enable the general public to reach a person who can arrange appropriate response action to the enquiry. Park will maintain a register to record details of all enquiries received and actions undertaken in response. Park will supply the EPA with a copy of the enquiries register on an annual basis.