Project Approval

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

I approve the project referred to in schedule 1, subject to the conditions in schedules 2 – 4.

These conditions are required to:

- prevent and/or minimise adverse environmental impacts;
- set standards and performance measures for acceptable environmental performance;
- require regular monitoring and reporting; and
- provide for the ongoing environmental management of the project.

Frank Sartor MP
Minister for Planning

Sydney 28th April 2008

SCHEDULE 1

Application Number:	07_0067
Proponent:	Shell Refining (Australia) Pty Ltd
Approval Authority:	Minister for Planning
Land:	Lot 1 DP 109739, Durham Street, Rosehill
Project:	Upgrade of the existing hydrodesulphurisation unit and associated infrastructure at the Shell Refinery in Clyde to reduce the sulphur content in diesel fuel from 50 parts per million (ppm) to 10ppm.

SCHEDULE 2

DEFINITIONS

BCA	Building Code of Australia
Council	Parramatta City Council
Day	The period from 7 am to 6pm on Monday to Saturday, and 8am to 6pm on Sundays and Public Holidays
DECC	Department of Environment and Climate Change
Department	Department of Planning
Director-General	Director-General of the Department of Planning, or delegate
EA	Environmental Assessment titled *Proposed Upgrade of Hydrodesulphurisation Unit and Clyde Refinery*, prepared by CH2M HILL Australia Pty Ltd, dated December 2007
EP&A Act	*Environmental Planning and Assessment Act 1979*
EP&A Regulation	*Environmental Planning and Assessment Regulation 2000*
EPL	Environment Protection Licence
Evening	The period from 6pm to 10pm
HDS	Hydrodesulphurisation Unit
Minister	Minister for Planning
Night	The period from 10pm to 7am on Monday to Saturday, and 10pm to 8am on Sundays and Public Holidays
Proponent	Shell Refining (Australia) Pty Ltd
Project	Upgrade of the existing HDS at the Shell Refinery in Clyde, as described in the EA
Reasonable and Feasible	Reasonable relates to the application of judgement in arriving at a decision, taking into account: mitigation benefits, cost of mitigation versus benefits provided, community views and the nature and extent of potential improvements. Feasible relates to engineering considerations and what is practical to build
Site	Land referred to in Appendix 1
Statement of Commitments	The Proponent's commitments in Appendix 3
mg/m^3	milligrams per cubic metre
ppm	parts per million

GENERAL ADMINISTRATIVE CONDITIONS

Obligation to Minimise Harm to the Environment

1. The Proponent shall implement all practicable measures to prevent and/or minimise any harm to the environment that may result from the construction, operation, or decommissioning of the project.

Terms of Approval

2. The Proponent shall carry out the project generally in accordance with the:
   a) EA;
   b) statement of commitments (see Appendix 3) ;
   c) the relevant requirements of EPL 570; and
   d) conditions of this approval.

3. If there is any inconsistency between the documents referred to in 2 a) – b), the most recent document shall prevail to the extent of the inconsistency. However, the conditions of this approval and the associated EPL shall prevail to the extent of any inconsistency.

4. The Proponent shall comply with any reasonable requirement/s of the Director-General arising from the Department's assessment of:
   a) any reports, plans or correspondence that are submitted by the Proponent in accordance with this approval; and
   b) the implementation of any actions or measures contained in those reports, plans or correspondence submitted by the Proponent.

Structural Adequacy

5. The Proponent shall ensure that all new buildings and structures, and any alterations or additions to existing buildings and structures, are constructed in accordance with the relevant requirements of the BCA.

Notes: Under Part 4A of the EP&A Act, the Proponent is required to obtain construction and occupation certificates for the proposed building works. Part 8 of the EP&A Regulation sets out the requirements for the certification of the project.

Protection of Public Infrastructure

6. The Proponent shall:
   a) repair, or pay the full costs associated with repairing, any public infrastructure that is damaged by the development; and
   b) relocate, or pay the full costs associated with relocating, any public infrastructure that needs to be relocated as a result of the development.

Operation of Plant and Equipment

7. The Proponent shall ensure that all plant and equipment used at the site is:
   a) maintained in a proper and efficient condition; and
   b) operated in a proper and efficient manner.

Management Plans/Monitoring Programs

8. With the approval of the Director-General, the Applicant may submit any management plan or monitoring program required by this approval on a progressive basis.

SCHEDULE 3
SPECIFIC ENVIRONMENTAL CONDITIONS

AIR QUALITY

Air Quality Assessment Criteria

9. The Proponent shall ensure that the emissions from EPA Identification No.15 (namely the stack serving the HDS process furnace) do not exceed the air quality impact assessment criteria listed in Table 1.

Table 1: Air quality impact assessment criteria

Pollutant	***Unit of measure***	***100 percentile concentration limit***
Nitrogen oxides	mg/m^3	200
Total solid particles	mg/m^3	50
Hydrogen Sulfide	mg/m^3	5
Sulfuric acid mist (H_2SO_4) or sulphur trioxide (SO_3) (as SO_3 equivalent)	mg/m^3	100

Note: The limits reflect Group 6 of the Protection of the Environment Operations (Clean Air) Regulation 2002 for total solid particles.

10. The Proponent shall implement all reasonable and feasible measures to minimise dust generated by construction activities associated with the project.

HAZARDS

Construction

11. The Proponent shall implement all recommendations contained in the Preliminary Hazards Analysis in the Environmental Assessment.

12. The Proponent shall prepare and implement a Construction Hazard Plan for the project. This plan must be submitted and approved by the Director-General prior to the commencement of construction of the project, or as otherwise agreed by the Director-General, and must include:
    a) a **Fire Safety Study** for the project that has been prepared in accordance with the Department's *Hazardous Industry Planning Advisory Paper No. 2 – Fire Safety Study Guidelines* and the NSW Government's *Best Practice Guidelines for Contaminated Water Retention and Treatment Systems* and be approved by the Commissioner of the NSW Fire Brigades;
    b) a **Hazard and Operability Study** for the project that has been prepared in accordance with the Department's *Hazardous Industry Planning Advisory Paper No. 8 – HAZOP Guidelines* by a suitably independent and qualified expert whose appointment has been approved by the Director-General, and includes a program for the implementation of all the recommendations made in the study, including justification for the delayed implementation of any recommendations;
    c) a **Final Hazard Analysis** for the project that has been prepared in accordance with the Department's *Hazardous Industry Planning Advisory Paper No. 6 - Guidelines for Hazard Analysis;* and
    d) a **Construction Safety Study** for the project that has been prepared in accordance with the Department's *Hazardous Industry Planning Advisory Paper No. 7 – Construction Safety Study* Guidelines.

Operation

13. The Proponent shall:
    a) update and the existing Emergency Plan and Safety Management System for the whole refinery to accommodate the project in accordance with the Department's *Hazardous Industry Planning Advisory Paper No. 1 – Industry Emergency Planning and Hazardous Industry Planning Advisory Paper No. 9 - Safety Management* guidelines. The updated plans shall be submitted and approved by the Director-General prior to the commencement of commissioning of the project *;* and,

b) following approval of the updated plans by the Director-General, implement the updated Emergency Plan and Safety Management System to the satisfaction of the Director-General.

Note: The Proponent may update the Emergency Plan and the Safety Management System for the Fluidised Catalytic Cracking Unit Project and the HDS Project at the same time, provided these plans are completed and approved prior to the commencement of either project.

Compliance

14. At least 1 month prior to commencing the operation of the project, the Proponent shall submit a compliance report to the Director-General demonstrating compliance with the requirements in conditions 11 and 12 of this approval, and describing the actions that have been taken (or are proposed to be taken) to implement the various recommendations in the approved studies/plan/system.

15. Within 3 months of commencing the operation of the project, the Proponent shall provide a report to the Director-General verifying that the updated:
    a) Emergency Plan (see condition 13) is effectively in place and that at least one emergency exercise has been conducted; and
    b) Safety Management System (see condition 13) has been fully implemented, and that the records required by the system are being kept.

16. The Proponent shall comply with all reasonable requirements of the Director-General in respect of the implementation of any measures arising from the reports submitted in respect of conditions 11-15, within such time as the Director-General may agree.

NOISE

Operating Hours

17. Unless the Director-General agrees otherwise, the Proponent shall comply with the hours of operation in Table 2.

Table 2: Operating Hours for the Project

Activity	***Day***	***Time***
Construction	Monday – Friday	7:00am to 6:00pm
	Saturday	8:00am to 1:00pm
	Sunday and Public Holidays	Nil
Operation	All days	Any time

Note: Construction activities may be conducted outside the hours in Table 2 provided that the activities are not audible at any residence beyond the boundary of the site.

Construction Noise Management

18. The Proponent shall prepare a construction noise management plan in consultation with the DECC, for approval of the Director-General prior to the commencement of construction. The construction noise management plan shall outline how noise impacts would be minimised and managed including, but not limited to:
    a) identification of construction activities that have the potential to generate noise impacts on surrounding land uses, particularly residential areas;
    b) a detailed description of what actions and measures would be implemented to minimise noise from these construction activities; and
    c) procedures for dealing with and responding to noise complaints and enquiries, including monitoring of construction activities.

SOIL AND WATER

Construction Soil and Water Management

19. The Proponent shall submit a construction soil and water management plan for the approval of the Director-General, prior to the commencement of construction. The plan should outline how soils, surface water and groundwater would be managed during construction and would include:
    a) processes to be implemented to identify, manage and appropriately dispose of contaminated spoil;

b) processes to be implemented to identify and manage acid sulfate soils, in accordance with the *Acid Sulfate Soil Manual* (Acid Sulfate Soil Management Advisory Committee, 1998);
c) methods to manage surface water; and
d) methods to manage and monitor groundwater, to ensure groundwater is adequately handled and protected from contaminating activities.

Contaminated Soil

20. Contaminated soil disturbed during construction is to be managed and disposed of at an appropriately licensed facility.

WASTE MANAGEMENT

21. The Proponent shall ensure that all waste generated on site during the construction and operation of the project is classified in accordance with the Environmental Guidelines: *Assessment, Classification and Management of Liquid and Non-Liquid Waste*, and disposed of at an appropriately licensed facility.

22. The Proponent shall implement all reasonable and feasible measures to minimise the waste generated by the project to the satisfaction of the Director-General.

TRAFFIC AND TRANSPORT

Access

23. The Proponent shall prepare and implement a Construction Traffic Management Plan for approval of the Director-General, prior to the commencement of construction. The plan would outline:
a) measures to minimise construction traffic impacts on streets surrounding the site; and
b) the timing and management of oversized loads travelling to and from the site.

Vehicle Parking & Queuing

24. The Proponent shall ensure that the project does not result in any vehicles queuing or parking on the public road network in the vicinity of the site.

SCHEDULE 4
ENVIRONMENTAL MANAGEMENT AND MONITORING

AUDITING

Hazard Audit

25. Within 1 year of commencing the operation of the project, and every three years thereafter, unless the Director-General directs otherwise, the Proponent shall commission suitably qualified, experienced and independent audit team, whose appointment has been endorsed by the Director-General to carry out a hazard audit of the project in accordance with the Department's *Hazardous Industry Planning Advisory Paper No. 5 – Hazard Audit Guidelines.*

26. Within 2 months of commissioning this audit, or as otherwise agreed by the Director-General, the Proponent shall submit a copy of the audit report to the Director-General, as well as a program for the implementation of any recommendations in the report or a detailed justification why these recommendations should not be implemented.

REPORTING

Incident Reporting

27. Within 24 hours of any incident or potential incident with actual or potential significant off-site impacts on the people or the biophysical environment, the Proponent shall notify the Director-General of the basic facts of the incident.

28. Within 14 days of notifying the Director-General of the incident or potential incident, the Proponent shall submit a detailed report to the Director-General that:
    a) describes the date, time and nature of the incident;
    b) identifies the cause (or potential cause) of the incident;
    c) describes what action has been taken in response to the incident to date; and
    d) describes what action will be taken in the future to prevent the recurrence of such an incident.

29. The Proponent shall maintain a register of incidents and potential incidents on site, and make this register available for inspection at any time by an independent hazard auditor and the Director-General.

APPENDIX 1
LOCATION OF PROPOSAL

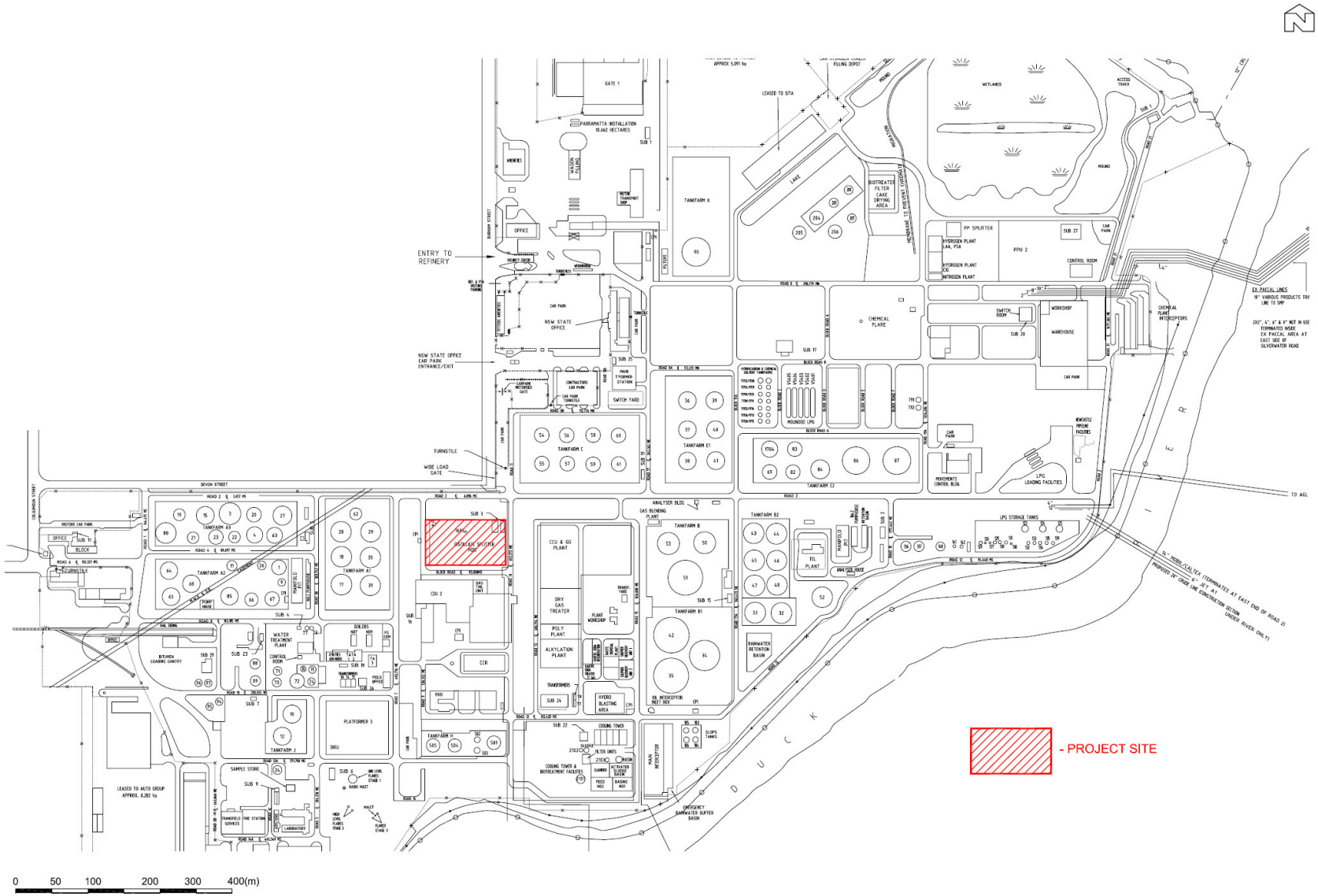
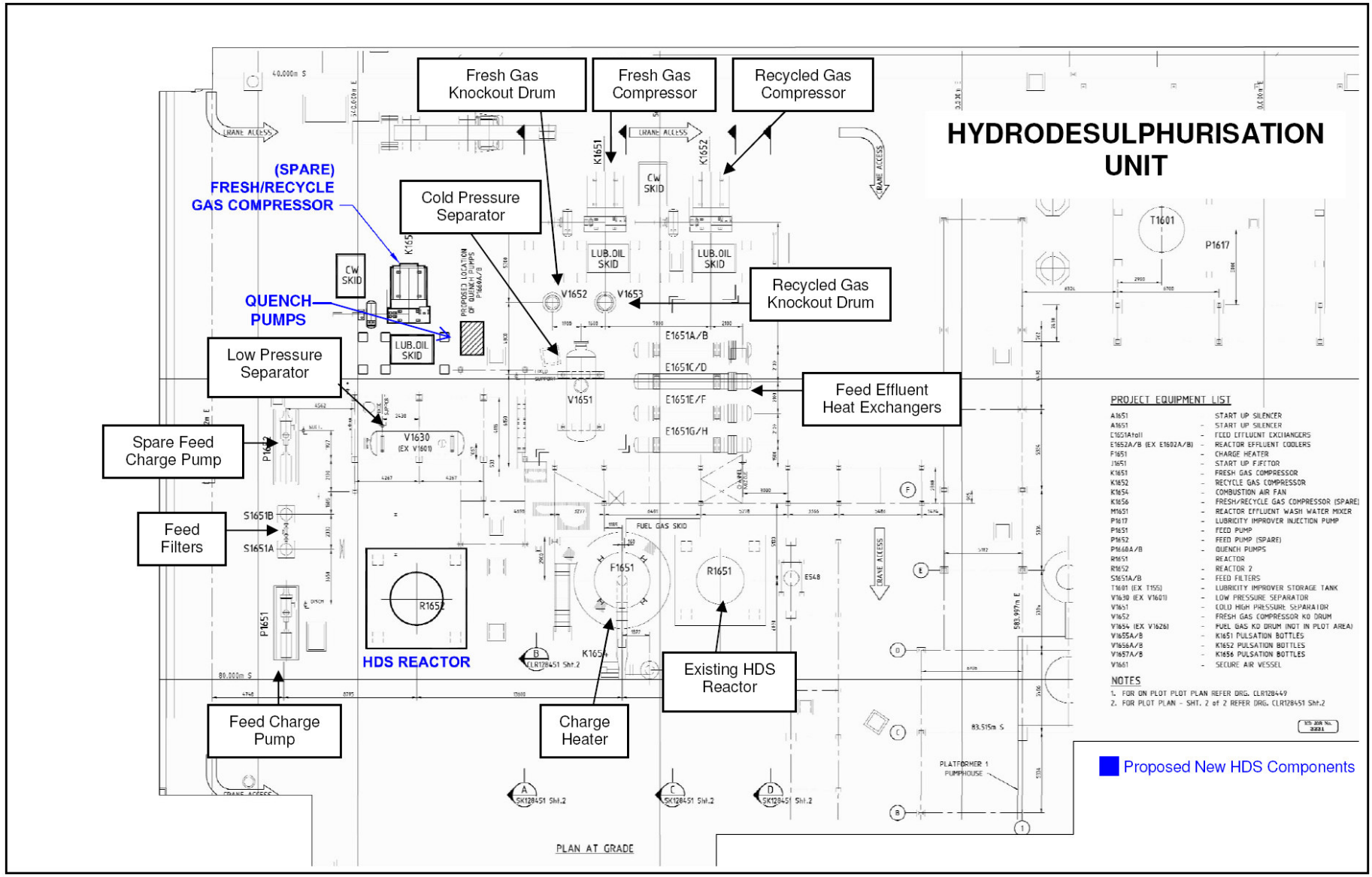


Figure 1: Shell Refinery Layout – location of the HDS

APPENDIX 2
PROPOSED LAYOUT


HYDRODESULPHURISATION UNIT
Fresh Gas Knockout Drum
Fresh Gas Compressor
Recycled Gas Compressor
(SPARE) FRESH/RECYCLE GAS COMPRESSOR
Cold Pressure Separator
QUENCH PUMPS
Recycled Gas Knockout Drum
Low Pressure Separator
Feed Effluent Heat Exchangers
Spare Feed Charge Pump
Feed Filters
HDS REACTOR
Existing HDS Reactor
Feed Charge Pump
Charge Heater
PLAN AT GRADE
PROJECT EQUIPMENT LIST
NOTES
Proposed New HDS Components

APPENDIX 3
STATEMENT OF COMMITMENTS

12 Draft Statement of Commitments

12.1 General

Following the requirements of Part 3A of the EP&A Act, this section describes Shell's commitment to environmental mitigation, management and monitoring for the proposed upgrade to the HDS Unit.

12.2 Overview

The environmental assessment of the proposed HDS Unit upgrade has identified a range of environmental outcomes and management measures that would be required to avoid or reduce the environmental impacts of the project. Environmental mitigation, management and monitoring options have been proposed by Shell to reduce the environmental risk of the project. Where possible, the measures have been based on achieving a defined performance standard or implementing a proposed process.

Specific actions which aim to deliver the desired outcomes where practicable are based on:

- Developing project designs which are capable of achieving the outcomes
- Developing environment management and mitigation measures during the planning and design phase and
- Implementing, monitoring and review of these measures during the construction and operational phases.

Following approval of the Project, the finalised Commitments will guide the subsequent phases of the project development process to reduce impacts on the environment. Unless otherwise directed by the DoP or other relevant authority, Shell shall endeavor to comply with the following environmental commitments.

12.3 Statutory Commitments

Shell shall ensure that all licenses, permits and approvals are obtained and maintained as required throughout the life of the Project. Copies of all relevant licenses, permits and environmental approvals will be available on site at all times during the project.

12.4 Project Compliance

12.4.1 Responsibility

Shell shall be responsible for the project and the environmental impacts that may result.

12.4.2 Communications and Training

Reasonable steps will be taken to ensure that employees, contractors and sub-contractors are trained and are made aware of, and comply with, the conditions of the DoP's approval relevant to their respective activities. In addition, all employees, contractors and sub-contractors would be made aware of HSE responsibilities and potential consequences of departure from procedure.

12.4.3 Certification of Compliance

Prior to each of the events listed below, Shell shall certify in writing to the satisfaction of the Director-General that it has complied with all conditions of the DoP's approval applicable prior to that event:

- The commencement of any physical works associated with the project and
- Commissioning of the upgraded HDS Unit.

12.4.4 Report Updates

Any update reports with regard to compliance with all, or any part of, the conditions of approval shall be supplied upon request. Any such update shall meet the requirements of the Director-General and be submitted within such period as the Director-General may agree.

12.5 Management of Key Issues

Table 12-1 outlines the mitigative measures and safeguards that would be required to prevent or minimise environmental impacts from the upgraded HDS Unit.

Table 12-1 Summary of Environmental Commitments

Issue	Environmental Safeguard	Implementation stage	Responsibility
Construction Noise	All construction and operational noise to remain within regulatory limits, and noisy activities would be limited to day time hours	Construction	Shell
Land Use Safety	Submit for the approval of the Director-General, a Construction Safety Study for the development, prepared in accordance with the Department's Hazardous Industry Planning Advisory Paper No. 7 - Construction Safety Study Guidelines. The Study shall specifically identify and address potential hazards associated with the construction of the development and its interaction with other parts of the Refinery while the works permitted under this approval are undertaken. Key issues to be considered are; • leak point minimisation for all equipment handling H_2S; • Review of the location and quantity of the fixed H_2S monitors. The emphasis for	Pre-construction	Shell

Issue	Environmental Safeguard	Implementation stage	Responsibility
	these should be placed on the monitors capacity to rapidly detect H_2S releases and activate emergency responses;		
Land Use Safety	Submit for the approval of the Director-General, a Hazard and Operability Study (HAZOP) of the development (and related systems). The Study shall be chaired by an independent, qualified person or team, approved by the Director-General, and shall be carried out in accordance with the Department's publication Hazardous Industry Planning Advisory Paper No. 8 - HAZOP Guidelines.	Pre-construction	Shell
Land Use Safety	Submit for DoP and NSW Fire Brigade a Fire Safety Study	Pre-construction	Shell
Land Use Safety	Review of existing emergency response plan and pre-incident plans for the HDS Unit and update where necessary	Pre-operation	Shell
Land Use Safety	Undertake a review of the Refinery's health, safety, security and environment management system to include the changes associated with the Project. The Project and subsequent works should be fully integrated into the system including regular auditing	Pre-operation	Shell
Land Use Safety	Include the HDS Unit upgrade in any activities undertaken in response to the pending NSW Major Hazard Facility (MHF) legislation	Upon gazettal of legislation	Shell
Waste Management	Spent catalyst would be handled in accordance with Shell's EPL and EPA guidelines.	Operation	Shell
Community Consultation	An information leaflet outlining the project and the potential impacts on surrounding residents would be distributed.	Pre-construction	Shell
CEMP	A construction environmental management plan would be prepared outlining environmental management measures to be adopted.	Pre-construction	Shell
Air Quality	Monitoring of HDS Unit stack would continue in accordance with Shell's EPL 570.	Operation	Shell

12.5.1 Community Information, Consultation and Involvement

Prior to the commencement of works, Shell shall ensure that the following are available for community complaints:

- A telephone number on which complaints about the Project may be registered
- A postal address to which written complaints may be sent and

- An email address to which electronic complaints may be transmitted.

The telephone number, the postal address and the email address shall be provided in a letterbox drop prior to the commencement of construction.

Details of all complaints received via those methods listed above as well as complaints received in person either at the refinery or elsewhere will be recorded in an up-to-date Complaints Register. The Register shall record, but not necessarily be limited to:

- The date and time, where relevant, of the complaint
- The means by which the complaint was made (telephone, mail, email or in person)
- Any personal details of the complainant that were provided, or if no details were provided, a note to that effect
- The nature of the complaint
- Any action(s) taken in relation to the complaint, including any follow-up contact with the complainant and
- If no action was taken in relation to the complaint, the reason(s) why no action was taken.

The Complaints Register shall be made available for inspection by the Director-General upon request. Summaries of the Register, without details of the complainants, will be made available to the public for inspection upon request.

All monitoring, including recording and reporting of monitoring results, as required by the DoP's approval and as may be specified in an EPL applicable to the Project will be undertaken. Such records will be retained on site in a legible format and will be made available to authorised persons upon request.

12.6 Environmental Management and Reporting

12.6.1 Construction Environmental Management Plan

A Construction and Environmental Management Plan (CEMP) will be prepared and implemented to outline environmental management practices and procedures to be followed during the construction phase of the Project. The CEMP would address the requirements of the DECC and a copy shall be submitted to the Director-General, DOP, prior to the commencement of any construction works.

12.6.2 Operational Environmental Management

Prior to the re-commissioning of the HDS Unit, Shell shall demonstrate to the Director-General that it has updated environmental and safety management systems for the refinery to reflect any necessary modifications.

Incident Reporting

The site has an incident reporting and investigation system that would be utilised if an incident occurred. This is a detailed and comprehensive system to ensure not only monitoring of incidents but also of the remedial response.

12.7 Validation of Commitment

Such commitments as identified above remain current for the life of the Project to the extent that they do not become subject to change as a result of some other form of subsequent agreement with recognised authorities or where they may contradict a legal or other requirement currently or subsequently imposed on the project or Shell that was not known at the time of making this commitment.

This commitment is made under authority of the following person, who is legally empowered to make this undertaking on behalf of Shell Refining (Australia) Pty Ltd:

Name	David Johnston
Position	Refinery Manager
Signature	David Johnston
Date	24/12/07