17 LNG FACILITY REHABILITATION AND DECOMMISSIONING

This chapter describes the general methodology for decommissioning and rehabilitation of the LNG Facility Component

Each LNG train has a design life of at least 20 years, with potential operation well beyond this. Given this timeframe, a range of factors will impinge on decommissioning methodology, including:

- available technology
- the prevailing legal and regulatory regime
- social and political conditions affecting the subsequent land use of the LNG Facility site
- economic conditions that may impact on the extent to which plant and equipment will be reused or recycled.

Taking these factors into account, decommissioning of the LNG Facility is described below in conceptual terms. Concepts outlined may vary subject to negotiation and consultation with regulators and other appropriate stakeholders as detailed planning for decommissioning is undertaken closer to the end of the Project's life.

17.1 CONSTRUCTION DECOMMISSIONING

Some decommissioning will be required at the completion of the construction phase. This will include:

- return of the Auckland Point staging area to Gladstone Ports Corporation (GPC) control at completion of lease. Decommissioning and remediation of infrastructure in this area is subject to negotiation and commercial agreements with GPC
- removal of buildings and associated infrastructure not required for ongoing operations at the LNG Facility site. Construction camp footings and foundations will be removed and the area ripped and landscaped for erosion control. While landscaping will involve some revegetation, in general much of this area will be retained as open space and/or hardstand area to continue to provide bushfire buffer between the northern side of the site and the process trains, and to allow ongoing laydown areas for major site maintenance works.

17.2 OPERATIONS DECOMMISSIONING

17.2.1 Removal of Plant and Equipment

Detailed planning for decommissioning will be refined during the life of the QCLNG Project, and will commence no later than five years prior to the scheduled end of the LNG Facility life. Negotiations with relevant

stakeholders, and in particular the Department of Infrastructure and Planning (DIP) (or applicable subsequent regulator) as the regulator of the Gladstone State Development Area (GDSA), will be undertaken to determine whether any items of infrastructure are to remain for subsequent users of the site. Items which may usefully be retained on site could include:

- fences, roadways and hardstand areas
- the Materials Off-Loading Facility (MOF)
- stormwater management features, such as sediment control ponds
- selected buildings, power distribution infrastructure, sewage and drainage control infrastructure.

Unless directed otherwise by regulators, it is intended that all plant and equipment on the LNG Facility site, including LNG trains, tanks, jetty, and supporting infrastructure will be removed. In general:

- Following the cessation of operations, the processing facility and utility equipment where applicable will be de-inventoried. LNG and propane storage tanks will be emptied of product. Process chemicals, desiccant, oils and refrigeration liquids will be drained or recycled into site storage or appropriate containers for eventual safe removal from site and disposal, as required by the designated regulatory acts and authorities. Isolated gas streams will be minimised where possible and will be sent to the LNG Facility flare systems prior to inert purging.
- LNG Facility equipment and piping will be purged of hydrocarbons and either sold for reuse or scrap, or disposed of in accordance with regulatory requirements applicable at the time. Removal of plant and equipment will be undertaken in accordance with any relevant provisions of the *Dangerous Goods Safety Management Act 2001* (Qld) (or equivalent legislation as applicable at the time).
- Tanks will be demolished and removed as scrap unless there is some commercial value in their retention or resale.
- Buildings will be removed and sold for reuse, recycling, or disposed of in accordance with regulatory requirements applicable at the time. Footings and foundations may be removed, although deep footings (including piles) may remain in situ.
- Where hardstand areas are not to be retained, those including internal roads will be ripped and revegetated.
- Where sediment ponds are not to remain, ponds will be drained, backfilled and revegetated.

17.2.2 Contaminated Land

Normal operations of the LNG Facility are not anticipated to result in significant soil or groundwater contamination, although potential spills or leaks of hydrocarbons, process chemicals or other wastes may impact the site. In any event, the LNG Facility will be listed on the Queensland Environmental Management Register (EMR) as having been used for notifiable activities

under Schedule 2 of the *Environmental Protection Act 1994* (Queensland).

In the event that removal from the EMR and/or Contaminated Land Register (CLR) is required (subject to negotiation with regulators and dependant upon proposed subsequent land use), appropriate site investigation will be undertaken in accordance with the requirements of the *Draft Guidelines for the Assessment and Management of Contaminated Land in Queensland* (May 1998) (as amended or updated, or as per equivalent guidelines or legislation at the time or as directed by the appropriate regulator).

The need for specific-site investigations, including the nature and extent of investigations and any remediation and validation works required, will be subject to details of site history over the Project life and to applicable regulations and guidelines at the time of decommissioning.

17.3 REHABILITATION

Rehabilitation will be subject to the proposed use of the site subsequent to decommissioning of the LNG Facility. Given that the site is currently within the GDSA and consequently under the jurisdiction of the DIP, the nature and extent of rehabilitation will be agreed with the DIP (or applicable subsequent regulator) during detailed planning for decommissioning.