



# Careers in manufacturing: chemical, hydrocarbons and refining

## Plant operators

**Chemical, gas, petroleum and power generation plant operators control the operation of chemical production equipment, pump gas and oil from wellheads, refine and process petroleum products, and operate boilers, turbogenerators and associated plant to generate electrical power.**

Tasks include:

- controlling equipment performing continuous and batch processes to process chemicals and natural gas, manufacture refined petroleum products, and blend petroleum base stocks to produce commercial fuels, lubricating oils and asphalt
- controlling the preparation, measuring and feeding of raw material and processing agents such as catalysts and filtering media into plant
- patrolling and inspecting equipment to ensure proper operation and setting operating controls on equipment
- analysing samples and readings and recording test data
- controlling records of production, quantities transferred and details of blending and pumping operations
- checking equipment for malfunctions and arranging maintenance
- operating power generation plant controls to produce required load
- monitoring operation of power generation plant and interpreting instrument readings
- authorising procedures to isolate high-voltage and low-voltage electrical apparatus and plant

- writing reports and maintaining records on equipment performance, instrument readings and switching operations
- carrying out routine operating tests.

Occupations within the chemical, hydrocarbons and refining sector include:

- Chemical plant operator
- Gas or petroleum operator
- Power generation plant operator.

### Chemical plant operator

Chemical plant operators control the operation of chemical production plant.

#### **Specialisations:**

- Chemicals distiller
- Chemicals fermentation operator
- Industrial gas production operator
- Paint maker
- Pharmaceutical plant operator
- Pilot plant operator

#### **Relevant qualification:**

- Certificate III in Process Plant Operations

## Gas or petroleum operator

Gas or petroleum operators operate equipment to pump oil and gas from wellheads, and refine and process petroleum products.

### **Specialisations:**

- Gas compressor turbine operator
- Petroleum blending plant operator
- Petroleum terminal plant operator
- Refinery pipeline operator

### **Relevant qualifications:**

- Certificate III in Process Plant Operations

## Power generation plant operator

Power generation plant operators operate boilers, turbogenerators and associated plant to generate electrical power.

### **Specialisations:**

- Hydro-electric station operator
- Power generation turbine room operator

### **Relevant qualification:**

- Certificate III in Process Plant Operations

*This information sheet has been produced with assistance from the Australian Government.*

