

## Skills Programme Details

### Skills Programme in Handling of chemicals

**MQA ID: MQA/SP/0011/09**

**NQF Level: 2**

**Minimum Credits: 11**

#### **Purpose of Skills Programme**

This skills programme is aimed at persons who work or intend to work within the chemical handling section of a processing plant and who seek recognition for essential skills in this area.

#### **Rationale**

The majority of the candidates for this skills programme are likely to be working in the mining and minerals sector. The skills program will give them the opportunity to balance their practical skills with the essential knowledge needed to earn a formal skills program in chemical handling operations.

There is also a critical need in the industry to identify people who are able to conduct the essential operations associated with efficient and safe handling of chemicals in at least one of the operations.

#### **Articulation**

This skills programme may be the initial platform for obtaining credits towards the National Certificate in Mineral Processing (NQF level 2 to 4) and other production related sub fields.

#### **Learning assumed to be in place**

It is assumed that candidates embarking on learning towards this skills program are educated to NQF Level 1.

#### **Access to the skills programme**

This skills programme is open to anyone with access to learning opportunities and work experience in the areas reflected in the exit level outcomes and unit standards. It is advisable that candidates should already have addressed the areas reflected under "learning assumptions" before embarking towards this skills programme, although the exact starting point depends on the available resources for learning.

#### **Learning programme**

Training (notional) Period based on total credit value core only

11 X 10 = 110 Hours

= 110/6 hours = 19 Days

## Composition of the Skills Programme

### 1. Generic Core Unit standards

NLRD Number	Standard title	NQF Level	Credits
	<b>Materials transport and handling</b>		
252295	Transfer fluids by means of a pump	2	3
	<b>TOTAL CREDITS</b>		<b>3</b>

### 2. Site specific core unit standards (at least one must be achieved to complete the skills programme)

NLRD Number	Standard title	NQF Level	Credits
252322	Off-load acid from a tanker into a storage facility	2	6
252289	Off-load liquified gas into a storage facility	2	6
252319	Off-load cyanide from a tanker into a bulk storage facility	2	7
252311	Off-load carbon from a tanker into a storage facility	2	6
252317	Off-load organic reagents into a storage facility	2	6
252353	Load carbon from a storage facility into a road tanker	2	6
252316	Off-load an alkali into a storage facility	2	6

### 3. Elective unit standards

NLRD Number	Standard title	NQF Level	Credits
252337	Handle liquid cyanide safely in a metallurgical plant	2	4
252321	Handle cyanide solids safely in a metallurgical plant	2	4
252302	Handle inorganic reagents safely in a metallurgical plant	2	6
252335	Handle acids safely in a metallurgical plant	2	6
252286	Handle organic reagents safely in a metallurgical plant	2	4
256716	Make up a cyanide solution in a metallurgical plant	3	6
256716	Make up an inorganic reagents in a metallurgical plant	2	6
15298	Make up a hydrochloric acid solution in a metallurgical plant	2	4
252287	Make up an ammonia solution in a metallurgical plant	2	6
243650	Handle waste material in a metallurgical plant	2	4
252350	Determine relative density by means of a density scale	2	3
252332	Slake Lime	2	4
252312	Make up organic reagents in a metallurgical plant	2	6
256596	Take representative samples of slurries and liquids in a metallurgical process	2	4
254335	Perform a basic titration	2	2
10740	Lift and move a load	3	7