Australian Government

PMAOPS262 Operate digestion equipment

Release: 1

PMAOPS262 Operate digestion equipment

Modification History

Release 1. Supersedes and is equivalent to PMAOPS262A Operate digestion equipment

Application

This unit of competency covers the skills and knowledge needed to operate digestion equipment as used in a metalliferous minerals processing plant.

This unit of competency applies to any type of digestion equipment. Examples include:

- autoclave digesters
- tube digesters.

This unit of competency applies to an operator who is required to start up and shut down digestion equipment to procedures, make adjustments to flow rate, pressure and temperature, as appropriate to the type of digestion equipment, and identify problems and take appropriate action.

This unit of competency applies to an individual who may work alone although under routine direction and supervision. They may work as part of a team or group and will work in liaison with other shift team members and the control room operator, as appropriate.

No licensing, legislative or certification requirements apply to this unit at the time of publication.

Pre-requisite Unit

Nil

Competency Field

Operations

Unit Sector

Elements and Performance Criteria

Elements describe the essential outcomes.		Performance criteria describe the performance needed to demonstrate achievement of the element.	
1	**Prepare for work**	1.1	Receive and give shift handover
		1.2	Identify work requirements

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		1.3	Identify and control hazards
		1.4	Coordinate with appropriate personnel
		1.5	Check for recent work undertaken on digestion equipment
		1.6	Note any outstanding/incomplete work
		1.7	Check operational status of digestion equipment
2	**Operate digestion equipment in accordance with procedures**	2.1	Identify the type of digestion equipment and duty
		2.2	Adjust flow, temperature and pressure as appropriate to type of digestion equipment and duty
		2.3	Complete routine checks, logs and paperwork, taking action on unexpected readings and trends
3	**Recognise and take action on abnormal situations in accordance with procedures**	3.1	Monitor digestion equipment frequently and critically throughout shift using measured/indicated data and senses
		3.2	Identify impacts of any changes upstream and downstream
		3.3	Recognise situations which may require action
		3.4	Resolve routine problems
		3.5	Take actions on other abnormal situations to make safe and have the situation resolved
4	**Isolate and de-isolate digestion equipment**	4.1	Complete any required pre-start checks
		4.2	Start up/shut down/changeover digestion equipment according to the plant type and duty in liaison with other personnel
		4.3	Isolate digestion equipment
		4.4	Make safe for required work
		4.5	Check digestion equipment is ready to be returned to

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service

4.6 De-isolate and prepare digestion equipment for return to service

Foundation Skills

This section describes those language, literacy, numeracy and employment skills that are essential to performance.

Foundation skills essential to performance are explicit in the performance criteria of this unit of competency.

Range of Conditions

This field allows for different work environments and conditions that may affect performance. Essential operating conditions that may be present (depending on the work situation, needs of the candidate, accessibility of the item, and local industry and regional contexts) are included.

Regulatory framework

The latest version of all legislation, regulations, industry codes of practice and Australian/international standards, or the version specified by the local regulatory authority, must be used, and include one or more of the following:

- legislative requirements, including work health and safety (WHS)
- industry codes of practice and guidelines
- environmental regulations and guidelines
- Australian and other standards
- licence and certification requirements

All operations to which this unit applies are subject to stringent health, safety and environment (HSE) requirements, which may be imposed through state/territory or federal legislation, and these must not be compromised at any time. Where there is an apparent conflict between performance criteria and HSE requirements, the HSE requirements take precedence.

Procedures

All operations must be performed in accordance with relevant procedures.

Procedures are written, verbal, visual, computer-based or in some other form, include one or more of the following:

- emergency procedures

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- work instructions
- standard operating procedures (SOPs)
- safe work method statements (SWMS)
- formulas/recipes
- batch sheets
- temporary instructions
- any similar instructions provided for the smooth running of the plant

Hazards

Hazards include one or more of the following:

- electricity
- gas
- gases and liquids under pressure
- structural hazards
- structural collapse
- equipment failures
- industrial (machinery, equipment and product)
- equipment or product mass
- noise, rotational equipment or vibration
- plant services (steam, condensate and cooling water)
- working at heights, in restricted or confined spaces, or in environments subjected to heat, noise, dusts or vapours
- flammability and explosivity
- hazardous products and materials
- unauthorised personnel
- sharp edges, protrusions or obstructions
- slippery surfaces, spills or leaks
- extreme weather
- other hazards that might arise

Routine problems

Routine problems must be resolved by applying known solutions.

Routine problems are predictable and include one or more of the following:

- seal/gasket leaks
- pressure loss/low flow
- high pressure
- blockages/build-up/fouling
- erosion/wear
- driver problems
- temperature excursions (high or low)

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Known solutions are drawn from one or more of the following:

- procedures
- training
- remembered experience

Non-routine problems must be reported according to according to relevant procedures.

Logs and reports

Logs and reports include one or more of the following:

- paper or electronic-based logs and reports
- verbal/radio reports
- reporting items found which require action

Action

Action in accordance with procedures includes the following:

- determining problems needing action
- accessing and applying relevant technical and plant data
- applying appropriate problem solving techniques to determine possible fault causes
- rectifying problem using appropriate solution within area of responsibility
- following through items initiated until final resolution has occurred
- reporting problems outside area of responsibility/ability to designated person

Resolve routine problems

Resolving routine problems includes one or more of the following:

- making adjustments to the equipment (e.g. flow and pressure)
- carrying out minor maintenance within operator's skill level
- identifying and reporting problems outside operator's scope of ability
- identifying and controlling hazards related to digestion equipment and surrounding areas

Start up/shut down as required

Start up/shut down as required includes the following:

- start up and shut down to/from normal operating conditions
- start up and shut down to/from isolated, cold or empty
- start up and shut down to/from other conditions/situations experienced on the plant

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Work requirements

Work requirements come from briefings, handovers and work orders, and include one or more of the following:

- compliance documentation
- product specifications
- nature and scope of tasks
- achievement targets
- operational conditions
- lighting conditions
- plant or equipment defects
- hazards and potential hazards
- coordination requirements or issues

Unit Mapping Information

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Links

Companion Volume implementation guides are found in VETNet - https://vetnet.gov.au/Pages/TrainingDocs.aspx?q=9fc2cf53-e570-4e9f-ad6a-b228ffdb6875

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