Australian Government

Department of Education, Employment and Workplace Relations

PRMPFES48A Receive and dispatch ozone depleting substance and synthetic greenhouse gas containers

Release: 1

PRMPFES48A Receive and dispatch ozone depleting substance and synthetic greenhouse gas containers

Modification History

Not Applicable

Unit Descriptor

Unit descriptor
This unit of competency specifies the outcomes required to receive containers of ozone depleting substances (ODS) and synthetic greenhouse gases (SGG) in accordance with regulatory and workplace requirements, including identification of workplace procedures and documentation requirements for receiving and dispatching ODS and SGG containers. Activities covered in this unit include checking, inspecting, loading and unloading, classifying, making safe, moving, storing, dispatching and completing workplace documentation.

Application of the Unit

Application of the unit
This unit of competency supports one or more extinguishing agent handling licences prescribed under the *Ozone Protection and Synthetic Greenhouse Gas Management Act 1989*.

Licensing/Regulatory Information

Not Applicable

Pre-Requisites

Prerequisite units
The following units of competency must be assessed prior to this unit:

- PRMPFES03C *Safely move materials and loads in the workplace*
- PRMPFES43A *Prevent ozone depleting substance and synthetic greenhouse gas emissions*.
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Employability Skills Information

Not Applicable

Elements and Performance Criteria Pre-Content

Elements describe the essential outcomes of a unit of competency.	Performance criteria describe the required performance needed to demonstrate achievement of the element. Where ***bold italicised*** text is used, further information is detailed in the range statement. Assessment of performance is to be consistent with the evidence guide.

Elements and Performance Criteria

ELEMENT	PERFORMANCE CRITERIA
1 Interpret and comply with legal and industry requirements related to receiving and dispatching ODS and SGG containers.	1.1 Apply knowledge and understanding of ***legislative requirements*** to ***work procedures*** and clarify where necessary with ***relevant persons***. 1.2 Apply knowledge and understanding of ***ODS and SGG*** emission legislative and industry requirements to receive, store and dispatch containers. 1.3 Identify ***potential and actual breaches*** of legislative and industry requirements and take action according to ***organisational requirements*** and ODS, SGG and occupational health and safety (***OHS***) ***policies and procedures***.
2 Inspect and receive ODS and SGG containers.	2.1 Identify and follow work procedures for receiving ***ODS and SGG containers***. 2.2 Identify potential risks and ***hazards***. 2.3 Follow OHS ***risk control measures*** and procedures. 2.4 Use ***personal protective equipment*** (PPE) correctly to check, receive and store containers. 2.5 ***Check containers*** against consignment documentation and identify ***discrepancies***. 2.6 Weigh and record mass of containers. 2.7 Receive containers and complete ***documentation*** according to ***work procedures***.
3 Classify received ODS and SGG containers.	3.1 Identify types of ***ODS and SGG containers*** and ***ODS and SGG*** contents. 3.2 Check for ***container defects***. 3.3 Identify and condemn containers according to ***work procedures***. 3.4 Label and isolate ***condemned containers***. 3.5 ***Make safe*** condemned containers according to ***work procedures***.
4 Move and store ODS and SGG containers.	4.1 Identify appropriate ***manual handling techniques and aids***. 4.2 Use safe ***work procedures*** to unload, unpack, move and correctly ***store containers*** in the workplace. 4.3 Seek assistance from others to maintain a safe and effective workplace.

ELEMENT	PERFORMANCE CRITERIA
	4.4 Complete ***documentation*** according to ***work procedures***.
5 Dispatch ODS and SGG containers.	5.1 Confirm containers comply with regulatory requirements for transport and storage. 5.2 Securely store containers ready for dispatch. 5.3 Perform leak detection test on stored containers and identify leakages. 5.4 ***Make safe*** containers according to ***work procedures***. 5.5 Load and secure containers on transport vehicles. 5.6 Complete ***documentation*** according to ***work procedures***.

Required Skills and Knowledge

REQUIRED SKILLS AND KNOWLEDGE

This section describes the essential skills and knowledge and their level, required for this unit.

Required skills:

- apply correct manual handling techniques
- assess safe working loads
- solve problems in practical and safe ways
- assess movement paths for transporting ODS and SGG containers in the workplace
- move dangerous goods and ODS and SGG containers safely in the workplace
- identify hazards in the work area in relation to receiving, classifying, moving, storing and dispatching ODS and SGG containers
- check ODS and SGG containers for defects
- condemn defective ODS and SGG containers
- identify contents of ODS and SGG containers
- interpret temperature and pressure graphs for different agents to determine pressure at a given temperature
- label and isolate condemned ODS and SGG containers
- make safe ODS and SGG containers according to work procedures
- select and use relevant PPE
- select and safely use tools, equipment and materials appropriate to a specific task
- select and use relevant communications records when receiving, classifying, moving, storing and dispatching ODS and SGG containers
- use appropriate workplace housekeeping procedures
- plan and organise work in order to estimate time to complete activities and prioritise tasks
- report and record information neatly and legibly when completing documentation
- use effective customer service skills and relate to people from a range of social, cultural and ethnic backgrounds and with a range of physical and mental abilities
- apply language, literacy and numeracy skills to:

- communicate with others in a clear and concise manner in verbal, non-verbal and written modes
- read, understand and comply with work instructions and specifications
- read, understand and record measurements.

Required knowledge:

- principles and procedures related to receiving, classifying, moving, storing and dispatching stock
- implications of incorrect manual lifting techniques
- implications of ignoring safety precautions used with mechanical and manual handling aids
- site layout
- reasons for preventing ODS and SGG emissions in the workplace
- methods used to prevent ODS and SGG emissions in the workplace
- types of ODS and SGG containers
- methods used to make safe containers
- types of materials stored in ODS and SGG containers
- methods used to label condemned containers
- methods used to isolate condemned containers
- manual handling techniques and aids applied to receiving and moving ODS and SGG containers
- documentation used to receive, classify, move, store and dispatch ODS and SGG containers
- relevant federal, state or territory legislation that affects organisational operations, including:
  - anti-discrimination and diversity
  - equal employment opportunity
  - industrial relations.

KEY COMPETENCIES

The seven key competencies represent generic skills considered necessary for effective participation by an individual in the workplace.

Performance level 1 - at this level the candidate is required to undertake tasks effectively.

Performance level 2 - at this level the candidate is required to manage tasks.

Performance level 3 - at this level the candidate is required to use concepts for evaluating and reshaping tasks.

Key competency	**Example of application**	**Performance level**
How are ideas and information communicated?	Collect information regarding the work environment and analyse against relevant policies and procedures.	1
How can information be collected, analysed and organised?	Use information to resolve ODS and SGG container receiving issues with relevant persons.	2

Key competency	Example of application	Performance level
How are activities planned and organised?	Organise work tasks according to safe work practices while mindful of regulatory framework.	2
How is teamwork used?	Contribute to a safe work environment.	1
How are mathematical ideas and techniques used?	Weigh ODS and SGG containers and record weight using correct units of measurement.	1
How are problem-solving skills applied?	Identify and report hazards and display initiative to identify problems.	2
How is the use of technology applied?	Use manual handling aids and apply correct techniques.	2

Evidence Guide

EVIDENCE GUIDE

The evidence guide provides advice on assessment and must be read in conjunction with the performance criteria, required skills and knowledge, the range statement and the Assessment Guidelines for this Training Package.

Overview of assessment

- Competency in this unit will underpin competency in other aspects of the candidate's role in managing their work tasks.
- This unit could be assessed on its own or in combination with other units of competency relevant to the job function.

Critical aspects for assessment and evidence required to demonstrate competency in this unit

- A person who demonstrates competency in this unit must be able to provide evidence of:
  - locating, interpreting and applying relevant information, standards and specifications
  - complying with OHS regulations, ODS and SGG regulations (where required) and state and territory legislation applicable to workplace operations
  - complying with organisational policies and procedures, including quality requirements
  - communicating and working effectively and safely with others
  - on a minimum of two different occasions:

- identifying, selecting and using appropriate documentation to receive ODS and SGG containers into a work site
- using tools, equipment and materials effectively to receive and move containers in a work site
- using tools, equipment and materials effectively to dispatch containers from a work site
- checking, inspecting, classifying and receiving containers and complete workplace documentation
- labelling, isolating and storing condemned containers
- making safe containers according to work procedures
- creating and modifying workplace records and documentation
- identifying risks and hazards at work site
- using appropriate PPE

- using appropriate manual handling techniques and aids to transport and store containers
- selecting and using appropriate workplace colloquial and technical language and communication technologies in the workplace.

Specific resources for assessment

- Resource implications for assessment include access to:
  - actual or simulated work environment
  - a range of ODS and SGG containers with different contents, including damaged and faulty containers
  - assessment documentation, including training and assessment record books
  - all necessary tools, equipment and materials
  - relevant procedure manuals and receiving documentation
  - all necessary safety equipment and PPE.
- Where applicable, physical resources should include equipment modified for people with disabilities.
- Access must be provided to appropriate learning and/or assessment support when required.
- Assessment processes and techniques must be culturally appropriate, and appropriate to the oracy, language and literacy capacity of the candidate and the work being performed.

Context of assessment

- For valid and reliable assessment of this unit, competency should be demonstrated over a period of time and be observed by the assessor (or assessment team working together to conduct the assessment).
- Competency is to be demonstrated in a range of situations, reflecting the practical requirements of the workplace which may include customer and workplace interruptions and involvement in related activities normally experienced in the workplace.
- Assessment of competency over the full range of performance criteria may be made through practical demonstrations in the workshop environment. Consideration should be given to assessing consistency of outcome over an appropriate period of time.
- Candidates should also be given the opportunity to practice and undertake self-assessment of performance before requesting formal assessment.
- All safety requirements must be adhered to during all practical activities.

- Oral questioning or a written assessment may be used to assess underpinning knowledge. (In assessment situations, where the candidate is offered a preference between oral questioning and written assessment, questions are to be identical.)
- Assessment of evidence should establish the candidate's ability to perform the job to the standard required in the workplace.
- Supplementary evidence may be obtained from relevant authenticated correspondence or reports from supervisors or team leaders that demonstrate an understanding of the requirements for receiving and dispatching ODS and SGG containers in a workplace.
- Candidate should be encouraged to compile a portfolio of examples of completed documentation relevant to the candidate's organisation. One accurate example of each completed document is suggested as sufficient to infer competency and ability to transfer appropriate skills to each document type when required in the workplace. (Oral questioning may contribute as evidence of this ability.)
- Information derived from enterprise policies and practices must be treated as commercial-in-confidence.
- In all cases where practical assessment is used it will be combined with targeted questioning to assess the underpinning knowledge.
- Questioning will be undertaken in such a manner as is appropriate to the oracy, language and literacy levels of the candidate and any cultural issues that may affect responses to the questions. It will reflect requirements of the unit of competency and the work being performed.
- Where assessment is for the purpose of recognition (RCC or RPL), the evidence provided will need to be authenticated and show that it represents current competency demonstrated over a period of time.
- Performance and assessment of this unit must be carried out within the relevant requirements of the following legislative and industry framework:
  - Acts, regulations and codes
  - Australian and international standards identified as relevant to the receipt and dispatch of ODS and SGG containers
  - regulations and codes of practice for the handling and transport of dangerous goods and hazardous

substances
- relevant codes and regulations for the receiving of goods
- licensing arrangements
- environmental regulations, including ODS and SGG legislation, codes and regulations
- organisational requirements, including policies and procedures relating to ODS, SGG and OHS
- OHS legislation, codes and regulations
- manufacturer specifications.

Range Statement

RANGE STATEMENT

The range statement relates to the unit of competency as a whole. It allows for different work environments and situations that may affect performance. ***Bold italicised*** wording in the performance criteria is detailed below. Add any essential operating conditions that may be present with training and assessment depending on the work situation, needs of the candidate, accessibility of the item, and local industry and regional contexts.

Legislative requirements may include:
- relevant current Australian standards, such as AS 4077
- relevant federal, state and territory building Acts, regulations and codes
- fire protection industry codes of practice
- OHS legislation, codes and regulations
- regulations and codes of practice for the handling and transport of dangerous goods and hazardous substances
- relevant codes and regulations for receiving and dispatching goods
- licensing arrangements
- environmental regulations, including ODS and SGG legislation, codes and regulations, such as *Ozone Protection and Synthetic Greenhouse Gas Management Act 1989*
- other relevant legislation relating to ODS and SGG containers, including international, shipping and marine codes
- Australian petroleum industry requirements.

Work procedures may include:
- instructions from colleagues, supervisors and managers
- specific customer requirements

- assignment instructions
- equipment manufacturer requirements
- reporting and documentation requirements
- ODS, SGG and OHS requirements
- manual handling techniques
- PPE requirements.

Relevant persons may include:

- team leaders
- supervisors
- managers
- colleagues
- customers.

ODS and SGG materials are listed using the format: Product name (other names); use. Check the latest amendments to the *Ozone Protection and Synthetic Greenhouse Gas Management Act* for the current list of ODS and SGG extinguishing agents which may include:

- **Blitz III** (HCFC Blend D); used in flooding systems
- **CFC 11** (trichlorofluoromethane, CCl_3F); may be found as a propellant in some powder fire extinguishers (this product is banned in Australia)
- **FC-2-1-8** (CEA-308, $CF_3CF_2CF_3$); used in flooding systems
- **FC-3-1-10** (CEA-410, C_4F_{10}); used in flooding systems
- **FC-5-1-14** (CEA-614, C_6F_{14}); used as a streaming agent
- **FE-227** (heptafluoropropane, HFC-227ea); used as a total flooding extinguishing agent - is a replacement for Halon 1301
- **FE-25** (pentafluoroethane, HFC-125); used in inerting and explosion suppression applications and retro-fit to existing Halon 1301 systems
- **FE-36** (hexafluoropropane, HFC-236fa); used in portable fire extinguishers - is a replacement for Halon 1211 and Halon 1301
- **FE-13** (trifluoromethane, HFC-23); used as a total flooding agent
- **FE-241** (chlorotetrafluoroethane, HCFC-124); used as a total flooding agent for non-occupied spaces and as a streaming agent
- **FM100**® (HBFC-22B1); used in portable fire extinguishers
- **FM200**® (heptafluoropropane, HFC-227ea); used in chemical storage areas, clean rooms, communications facilities, laboratories, museums, robotics and emergency power facilities
- **Halotron** (HCFC Blend B); used as a total flooding agent and streaming agent
- **Halon 1211** (BCF); used as a streaming agent - requires a special permit in Australia
- **Halon 1301** (BTM); used as a total flooding agent - requires a special permit in Australia
- **Halon 2402** (**dibromotetrafluoroethane**, $\mathbf{C_2Br_2F_4}$); limited use in military systems - requires a special permit in Australia
- **HCFC 22** (**chlorodifluoromethane**, $\mathbf{CHClF_2}$); used as a propellant in some powder fire extinguishers (this product is banned in Australia)
- **HFC 134a** (unsymmetric tetrafluoroethane, CH_2FCF_3); used as a propellant in some powder

fire extinguishers

- **NAF-S-III** (HCFC Blend A); used as a total flooding agent - is a replacement for Halon 1301
- **NAF-P-III** (HCFC Blend C); used as a streaming agent - is a replacement for Halon 1211
- **NAF-P-IV** (HCFC Blend E); used as a streaming agent
- **SF6** (sulfurhexofluoride, SF_6); used as an inerting agent for sealed high voltage switchgear.

Potential and actual breaches could be identified by:

- direct observation
- workplace quality assurance teams.

Organisational requirements may include:

- legal and organisational policies and guidelines
- personnel practices and guidelines outlining work roles, responsibilities and delegations
- legislation relevant to receipt and dispatch operations
- OHS policies, procedures and programs
- procedures and work instructions to prevent emission of ODS and SGG in the workplace
- documentation and information systems and processes
- use of electronic job scheduling and communication devices.

OHS policies and procedures may include:

- employer and employee rights and responsibilities
- the OHS hierarchy of control
- assessing the work site for hazards and risks prior to preparing it for the work procedure
- displaying signs and using barriers in work area
- hazard and risk identification and reporting
- risk assessment and control measures
- incident and accident investigation
- OHS audits and safety inspections
- safe operating procedures and instructions, including:
  - working safely around electrical wiring, cables and overhead powerlines
  - working safely around tools and equipment
  - working safely on ladders and raised platforms
  - risk and hazard recognition
  - emergency procedures
  - awareness of electrical hazards
  - following confined spaces procedures
  - using PPE, including:
  - safety glasses or goggles
  - safety boots or shoes
  - hard hats
  - earmuffs or plugs
  - appropriate gloves and overalls

- sunhats
- dust masks
- two-way radios
- high visibility clothing

- equipment maintenance and use
- use and storage of hazardous substances
- first aid.

ODS and SGG containers may be identified by:	• type of container:
	  • hand-held fire extinguishers
	  • system cylinders
	  • pressure vessels, such as half-tonne storage vessels
	• colour and markings of container
	• container label:
	  • country of origin
	  • chemical name
	  • product name
	• size and shape of container.

Hazards may include:	• ergonomic, such as incorrect manual handling methods • environmental, such as improper use of ODS and SGG or hazardous materials • obstructive, such as blocked access to emergency entry or exit points • hazards associated with electrical or mechanical faults • any source of potential harm • any situation with a potential to cause loss • equipment in a work site • people in a work site • work methods, plans, procedures and work instructions.

Risk control measures may include:	• the hierarchy of control preferred order of control measures for risks:
	  • 1: elimination of hazard; controlling the hazard at source
	  • 2: substitution of hazard; e.g. replacing one substance or activity with a less hazardous one
	  • 3: engineering solution to hazard; e.g. installing safety guards on machinery
	  • 4: administration solution to hazard; policies and procedures directed at safe work practices
	  • 5: PPE solution to hazard; e.g. gloves or safety boots.

Check received ODS and SGG ***containers***:	• are correct type • are the correct quantity of containers received • are in good condition • are labelled correctly

- have appropriate dangerous goods declarations and markings, where applicable
- have appropriate material safety data sheets (MSDS), where applicable.

Discrepancies may include:	• damaged ODS and SGG containers • wrong containers received • errors in paperwork • incorrect quantity of containers received.
Documentation may include:	• receiving and dispatching documentation • goods identification numbers and codes • codes of practice and regulations relevant to the receiving of goods • Australian and international regulations and codes of practice for the handling and transport of dangerous goods and hazardous substances • dangerous goods declarations • MSDS • quality assurance procedures • emergency procedures • equipment manufacturer specifications • workplace procedures and policies • job cards • customer or supplier instructions • service agreements • corrective action reports • ODS and SGG container classification reports • condemned ODS and SGG container reports • receiving record system.
Container defects may include:	• leaking seals and gaskets • leaking seams • faulty gauges • rust or corrosion • physical damage • incorrectly capped or pinned container heads.
Condemned containers may include:	• leaking containers • physically damaged containers • containers with faulty gauges • damaged or faulty container heads • incorrectly capped or pinned container heads.
Make safe unplugged or uncapped ODS and SGG containers may include:	• replace pins • tape or cut away hose • use relevant sealant to seal leaking containers.

Manual handling techniques and aids may include:	• techniques:
	  • lifting
	  • pushing

- pulling
- carrying

- aids:
  - lifting magnets
  - suction grips
  - lifting straps
  - hooks
  - wheelbarrows
  - hand trucks
  - trolleys
  - mechanical handling aids, including:
  - cranes
  - hoists
  - forklifts
  - pallet trucks.

Store containers may include:

- secure storage
- protection from harm
- stable location
- upright position
- caged storage facility.

Unit Sector(s)

Sector
Fire Protection Equipment

Competency field

Competency field
Asset Maintenance