



2nd September 2024 – REV21

GUIDE TO REGISTRATION OF AUTHORISED REFRIGERATION PRACTITIONER.

Thank you for taking the time to register under the Pressure Equipment Regulations with SAQCC Gas.

The Department of Labour published the “Pressure Equipment Regulations” in the Government gazette in July 2009 and they came into force on 1st October 2009. These form part of the Occupational Health and Safety Act Number 85 of 1993. Revision 1 with guide notes was published in 2015 and Revision 2 was published in November 2017.

The regulations.

The Department of Labour has Mandated SAQCC Gas with the responsibility of registering and maintaining a data base of “Authorised Persons” for handling and working with gases under pressure. SARACCA is a member association of SAQCC Gas with the responsibility to review and process applications from persons in the refrigeration and air conditioning industry.

The Regulations define an Authorised Person as one who is registered with SAQCC Gas as being competent within the scope of work for refrigeration. In the refrigeration and air conditioning industry we have defined 14 categories of registration within the scope of refrigeration work

Clause 2(1) of the PER says,

Scope of Application: These Regulations shall apply to the design, manufacture, operation, repair, modification, maintenance, inspection, and testing of pressure equipment with a design pressure equal to or greater than 50kPa,.....

Clause 17; Gas reticulation equipment and systems;

1. “No person shall –

- (a) Handle, store, or distribute any gas in any manner, which includes the filling of a container, other than in accordance with the relevant health and safety standard incorporated into these regulations under section 44 of the Act;
- (b) Install or remove an appliance, pressure equipment or system for gas in any manner other than in accordance with the relevant safety standard incorporated into these regulations under section 44 of the Act;
- (c) Install or remove a gas appliance or a gas system or a gas reticulation system unless such a person is an authorised person; or
- (d) Use pressure equipment or systems for gas in any manner other than in accordance with the relevant safety standard incorporated into this regulation under section 44 of the Act.

2. After installation or re-installation, and before commissioning a gas system, the user shall ensure that an external inspection and leak test are performed by an authorised person or an approved inspection authority as applicable in terms of sub regulation 1.c.

3. an authorised person or an approved inspection authority shall issue a Certificate of Conformity after completion of a gas installation, modification, alteration or change of user or ownership in the form of annexure 1.”

Clause 18; Transportable gas containers;

1. No user shall use, require or permit a transportable gas container to be used, and no user shall fill, place in service, handle, modify repair inspect or test any transportable gas container, other than in compliance with the relevant standards incorporated into these Regulations under section 44 of the Act.

The Pressure Equipment Regulations refer to SANS 10147-2014. It is important to note in this Document that all personnel involved in the installation, operation and maintenance of refrigeration equipment and plants shall have been trained on the functioning of the installation and the handling, charging and recovery of refrigerants used in the refrigeration and air conditioning systems.

The Driven Machinery Regulations, also in the OHS Act, Clause 15 states that:

No user shall use or permit the use of a refrigeration or an air conditioning installation unless it complies with the safety standard with respect to its construction, installation, operation and inspection incorporated for this purpose into these regulations.....

All practitioners must be fully conversant with SANS 10147. There are requirements that apply to the operation and maintenance of refrigeration systems particularly section 7 regarding staff competence, operation and maintenance of refrigeration systems including plants associated with air conditioning.

A Disciplinary procedure is in place covered by SAQCC Gas Code of Conduct and is applicable to where an authorised person practicing within his scope of work shows poor or bad performance and workmanship or bad behaviour can be held to account. Doing poor work and operating without registration will be viewed in a serious light and in severe cases of misconduct legal prosecution could be followed. The Code and the Disciplinary procedure can be viewed on the SAQCC Gas web site. (www.saqccgas.co.za)

The application form for an Authorised Refrigeration Practitioner (ARP) is very straight forward. The information asked for can quickly be provided such as your name, address, phone numbers and employer details. The information regarding education and experience must be backed up by supporting certificates and documents. It would be wise to back up experience with letters from employers substantiating you experience profile.

The cost of first time registration and renewal of registration as from the 1st March 2023 is R2530.00 inclusive of VAT. Registration is valid for three years.

The cost for change of employer name or an up-grade within the 3 year cycle period is **R400.00** inclusive of VAT.

Examine the list of 14 categories of registration below to establish where your training, qualifications, competence assessment and experience qualifies you for registration.

CATEGORY 'A' PRACTITIONERS

1. Refrigeration plant Operator.

“The card holder is authorised to operate a refrigeration plant and is aware of safety regulations and requirements”

The persons registering here are those who work as operators in plant rooms and in factories using process refrigeration but are not qualified by training in refrigeration.

Persons applying for registration in this category require training in the components and accessories of a refrigeration plant; Health and Safety and incident response competence related to a refrigeration, refrigerants and lubricants; maintenance of refrigeration systems.

A plant operator may not sign a Certificate of Conformity.

2. Domestic and light commercial Refrigeration Practitioner.

“The card holder is authorised to install and maintain domestic and light commercial refrigeration.”

Installers who are installing and maintaining small domestic refrigeration units using A1 and A3 (R290 & R600a) refrigerants. Persons applying for registration in this category require training in the safe handling of these refrigerants.

A Practitioner registered here is permitted to sign a Certificate of Conformity for small domestic and light/small commercial refrigeration self-contained units.

3. Refrigeration Installer/Fitter

“The card holder is authorised to install of refrigeration piping, components and equipment”

Installers who are defined as assistants or semi-skilled to NQF level 2 and 3 or who have not trade tested and are carrying out refrigeration installations under supervision fall into this category. Persons applying for registration in this category require training in the components and accessories of a refrigeration plant; Health and Safety and incident safety response.

A Practitioner registered here is not permitted to sign a Certificate of Conformity.

4. Unitary Air Conditioning unit Installer –

“The card holder is authorised to install and maintain room air conditioning units up to 18kW cooling capacity”

Installers who are installing and maintaining Room Air Conditioning units up to 18kW cooling capacity under supervision fall into this category. Persons applying for registration in this category require product training covering the components, accessories and installation of room air conditioning units and safe handling of refrigerants procedures.

The installer who is registered here is permitted to sign and issue a Certificate of Conformity (CoC) for room air conditioning units up to 18kW cooling capacity.

5. Air Conditioning & Refrigeration Apprentice/Learner-

“The card holder is an authorised air conditioning & refrigeration Apprentice/Learner”

This category is specifically for those mechanics who are in training towards a trade test. Apprentices need training in the safe handling of refrigerants. After passing a trade test the practitioner may apply to be upgraded to a Category B refrigeration practitioner within the scope of work chosen. E.g. F gases and Hydro Carbons’, Ammonia and/or Carbon Dioxide
An apprentice/learner here is not permitted to sign a Certificate of Conformity.

CATEGORY ‘B’ PRACTITIONER

6. Air Conditioning & Refrigeration Practitioner–

“The card holder is an authorised as a refrigeration Practitioner using F-gases and Hydrocarbon refrigerant gas”

Practitioners doing installation, repairs and maintenance in wide variety of refrigeration and air conditioning systems using Group A1, A2 & A3 refrigerants (except R744) can apply in this category. They must be artisans in refrigeration or electrical trades and been trained and assessed as competent in the safe handling of refrigerants.

The Practitioner is required to sign and issue a Certificate of Conformity for installation, maintenance and/or repairs.

7. Carbon Dioxide Refrigeration Practitioner-

‘The card holder is authorised as a specialist Carbon Dioxide (R744) refrigeration practitioner’

Refrigeration Mechanics working in commercial refrigeration using Carbon Dioxide can apply in this category. Persons applying for registration in this category must be refrigeration mechanics or electricians, registered as artisans and who have had training in the safe handling of refrigerants and been assessed as competent after specific Carbon Dioxide refrigeration training. Proven experience in Carbon Dioxide refrigeration is a requirement.

The Practitioner is required to sign and issue a Certificate of Conformity after installation, maintenance and/or repairs.

8. Ammonia Refrigeration Practitioner-

“The card holder is authorised as a specialist Ammonia (R717) refrigeration practitioner”

Refrigeration Mechanics working in cold storage refrigeration and process cooling using Ammonia can apply in this category. The artisan trades recognised are Refrigeration mechanics, Pipe fitters, Electricians, Millwrights, who have been assessed as competent after specific safe handling of Ammonia and safety response training.

The Practitioner is required to sign and issue a Certificate of Conformity after installation, maintenance and/or repairs.

9. Vehicular Air Conditioning Practitioner-

“The card holder is authorised as a specialist motor vehicle air conditioning practitioner”

All motor vehicle air conditioning for cars, buses, and vehicle cabs are covered by this category. Those who register here may be motor mechanics, auto electricians and diesel mechanics that have completed the vehicle air conditioning and safe handling of refrigerants training. The Practitioner is required to sign and issue a Certificate of Conformity after installation, maintenance and/or repairs.

10. Refrigerated Transport Practitioner–

“The card holder is authorised as a specialist refrigerated transport practitioner”

Those who register for refrigerated transport vehicles and containers here may be refrigeration mechanics, motor mechanics, auto electricians and diesel mechanics that have completed the vehicle refrigeration and safe handling of refrigerants training. The Practitioner is required to sign and issue a Certificate of Conformity after installation, maintenance and/or repairs.

11. Marine Refrigeration Practitioner –

“The card holder is authorised as a specialist marine refrigeration practitioner on all types of refrigerant gases”

The refrigeration on fishing boats and ships and refrigerated container carriers is covered in this category. Those who register here must be refrigeration mechanics electricians and millwrights who have trained in the marine environment. Knowledge in all types systems and refrigerants used on fishing boats and ships. Practitioners must have completed the requisite refrigeration training and the safe handling of refrigerants training.

CATEGORY ‘C’ PRACTITIONER

12. Inspector – Refrigeration installations –

“The card holder is an authorised Inspector of refrigeration installations”

This registration is for those who by experience and training are well versed in all applications of industrial and commercial refrigeration who can work within their training, experience and competence. Previous registration as a refrigeration mechanic is a requirement plus an assessment in the inspection of refrigeration plant as per Unit Standard 262159 and knowledge of SANS10147, SANS347 and the OHS Act and Regulations

13. Inspector – Refrigeration associated with Air Conditioning –

“The card holder is an authorised Inspector of refrigeration associated with air conditioning installations”

This registration is for those who by experience and training are well versed in all aspects of refrigeration associated with air conditioning. Previous registration as a refrigeration mechanic is a requirement plus an assessment in the inspection of refrigeration plant as per Unit Standard 262159 plus knowledge of SANS10147, SANS347 and the OHS Act and Regulations.

14. Designer – Refrigeration and Air Conditioning –

“The card holder is an authorised Designer of refrigeration and air conditioning installations”

This category is aimed at those who design refrigeration systems and refrigeration related to air conditioning at different levels. A technical / engineering diploma or degree is a requirement.

It is a requirement that the designer define where the design expertise gained. Design qualifications in refrigeration and air conditioning theory plus knowledge of SANS10147, SANS347 and the Pressure Equipment Regulations incorporated into the OH&S Act. Recognition of prior learning and experience in the field will be applied.

All applicants must have been assessed as competent in the safe handling of refrigerants by a SARACCA recognised training provider. The following is required in the Safe Handling of Refrigerants;

- The identification and handling of refrigerants and lubricants
- Health and Safety and requirements related to a Refrigeration Mechanic;
- Incident safety response and Personal Protection Equipment;
- Maintenance of refrigeration systems
- The theoretical and practical aspects of refrigerant recovery, pressure testing, evacuating and charging of refrigeration systems;

A list of accredited training providers is available from SARACCA.

The realigning the refrigeration and air conditioning trades by Department of Higher Education, SAQA and QCTO with industry participation has been achieved could be introduced by 2020

You are required to sign a Code of Good Refrigeration Practice as part of your registration.

Do not forget it is most important to attach all the relevant documentation, copies of certificates, photographs and proof of payment. Failure to do so will delay and stall your application.

It is better to provide more information than too little.

Registration as an “authorised refrigeration gas practitioner” is a legal requirement and any false declaration or working outside of the scope of your registration and competence will result in disciplinary procedures in terms of the SAQCC Gas Disciplinary Code and/or possible or possible legal action and prosecution in terms of the OHS Act.

An Authorised Refrigeration Gas Practitioner in category B with up to date registration is required as detailed in the PER Regulation 17 to sign a Certificate of Conformity (CoC) after completion of an installation, maintenance procedure, repair, relocation or decommissioning of a unit or plant.

Room air conditioning unit installers in Category A4 may only sign a CoC for room air conditioning unit installation and maintenance up to 18kW cooling capacity.

Category 6 to 13 practitioners may sign a CoC for work in their area of competence and experience for any size plant provided they have done the work or witnessed the installation and commissioning of the plant.

Upon successful registration, you are required to download the SAQCC Gas COC App on your mobile phone or tablet and complete the registration process to gain access to your digital card and the COC platform.