orsima

Leer meer!

Respiratory Air Specialist (level-C)

Practical workbook Participant

Introduction

You use this practical workbook at the company to work on your practical experience. An important part of the training for the Respiratory Air Specialist profession. The Respiratory Air Specialist is also known as Gas Suit Worker, Respiratory Air Specialist (BA specialist) or Catalyst called handler .
The name Respiratory Air Specialist only applies to employees with C1 or C2 respiratory protection. Respiratory Air Specialists always deal with IDLH activities, i.e. activities where there is a very limited amount of oxygen or where limit values are exceeded.

The entire training consists of the following parts:

- Obtaining the mandatory certificates
- Obtaining the recommended certificates
- **Carrying out the practical assignments and gaining practical experience**
- Completing the module with a final assessment

In the overview you can see all the requirements associated with Respiratory Air Specialist. The indicated certificates have been adopted by the Orsima branch as standard. In individual cases, it is possible for companies to deviate from this in a substantiated manner.
You will also see which career opportunities there are within the Industrial Cleaning sector.

Respiratory Air Specialist
Core tasks
Perform entry and cleaning activities
Legal professional requirements
Statement 'Medically fit'
Industrial requirements (mandatory)
Basisveiligheid VCA
SIR Adembescherming AB-B
SIR Adembescherming AB-C1
SIR Adembescherming AB-C2
Industrial requirements (recommended)
SIR Hoge Druk Operator (HDO)
Cursus Begeleiden (Orsima)
Werken met kleine blusmiddelen
BHV
Werken aan flensverbindingen
Werken als buitenwacht (mangatwacht)
Vakbekwaamheid Heftruck
Gasmeten
Verplaatsen van lasten (ABvL)
Language requirements Dutch and English
3
3
3
3
Requirements other language (recommended)
3
3
3
3
Growth opportunities
High Pressure Pump Operator IC
Pressure Vacuum Pump Operator IC
Allround Operator IC
High Pressure Pump Machinist IC
Pressure Vacuum Pump Machinist IC
Allround Machinist IC
Operational Manager

** Description of the language levels:*

1. *Is able to understand and use simple messages.*
2. *Is able to understand frequently used expressions. Can communicate on everyday issues.*
3. *Is able to understand key points from clear standard texts on familiar topics. Can express himself orally in most common situations. Can describe experiences, events and opinions.*
4. *Is able to understand the main idea of a complex text. Can express himself fluently and carry on a conversation without difficulty. Can write texts, can give an opinion and can argue.*
5. *Is able to understand long and difficult texts and can express himself fluently and spontaneously. Can use the language flexibly and effectively and can produce detailed texts.*

Get started with practice

This workbook contains practical assignments with which you can practice your skills. You carry out these assignments at your workplace.

During the training you will have the support of your practical supervisor. He will help you with taking steps and if you have any questions.

You can expect the practical supervisor to:

- Support you at all times
- Help you with making a study plan
- Answer your questions and consult with you
- Provide instruction on how to carry out practical assignments
- Assess assignments and indicate points for improvement
- Indicate when you are ready to take the final test

Each assignment you have completed must be signed off by your practical supervisor.
You start with the introductory assignment.

Introductory assignment

What does the profession of Respiratory Air Specialist look like?

This chapter describes the profession of the Respiratory Air Specialist.

1. Read the text about the profession carefully.

What does the Respiratory Air Specialist do?
The Respiratory Air Specialist works for companies in the petrochemical and process industry. The Respiratory Air Specialist carries out high-risk activities under IDLH conditions (Immediately Dangerous to Life or Health).

These are, for example, catalyst activities, tank entry and cleaning. He performs these activities in a safe and efficient manner. The work is carried out in a team that, depending on the size of the project and the experience of the team, is managed by an supervisor.

Respiratory Air Specialists work in a team (BA team) in which four roles are distinguished:

- The Entry man, who enters the confined space. Several people might have this role.
- The Standby man, who goes into the confined space when the Entry man is in distress. This must not be the manhole guard.
- The Communication Man, who is responsible for communication. He monitors the surroundings.
- The Operator Life Support Unit (LSU), who provides uninterrupted air supply and the necessary records.

Safety and compliance with regulations and procedures are an important part of carrying out the work. In view of the risky working conditions, teamwork and trust in each other are important. Each team member is responsible for carrying out his own work and for the work of the entire team.

The Respiratory Air Specialist uses various respiratory protection equipment and personal protective equipment in the performance of his work. He is versatile and can preferably take on any of the roles in the BA team. He has the ability to deal with changes while performing work under IDLH conditions.

The Respiratory Air Specialist is aware of the possible consequences of his actions. He is very vigilant and, according to the IDLH procedure, immediately calls for help in case of (life-threatening) disturbances or problems that he cannot solve himself.

The Level C-2 Respiratory Air Specialist acts as a mentor to (new) colleagues where appropriate. He supervises new colleagues during the performance of the work.

What do you need to do the job well?
In order to perform well, you have to meet the following preconditions:

- You are able to understand and speak Dutch and/or English.
- You obtained the ‘Basisveiligheid VCA’ certificate
- You obtained the SIR Adembescherming AB-B certificate
- You obtained the SIR Adembescherming AB-C1 certificate
- You obtained the SIR Adembescherming AB-C2 certificate
- You are at least 18 years old.
- You can read and understand a work permit.
- You can act as a work permit holder.

The industry also advises you to complete the following training:

- SIR ‘Hoge Druk Operator (HDO)’ certificate
- Course ‘Begeleiden’ (Orsima)
- ‘Werken met kleine blusmiddelen’ certificate
- ‘BHV’ certificate
- ‘Werken aan flensverbindingen’ certificate
- Course ‘Werken als buitenwacht (mangatwacht)’
- ‘Vakbekwaamheid Heftruck’ certifcate
- ‘Gasmeten’ certifcate
- ‘Verplaatsen van Lasten (ABvL)’ certifacte

In the profession of Respiratory Air Specialist you have to deal with:

- Carrying out reactor work
- Carrying out cleaning activities such as HD activities under IDLH conditions

When performing the work:

- You are constantly aware that acting during work can have immediate life-threatening consequences.
- You always check whether all employees can work safely.
- You always take into account the guidelines, procedures and safety regulations.
- You are continuously vigilant for unexpected disruptions or defects and call for help if you cannot solve it yourself.

Collect contact information*

2. Fill in the contact details.

Personal information
First name:
Last name:
Date of birth:

Company data
Company name:
Name of practical supervisor:
Phone number / Email address:

* *This information is only used to support the execution of the module and to be able to issue a certificate as proof of passing this module.*

Create a step-by-step plan

To become an experienced Respiratory Air Specialist you have to perform the work a number of times. This way you gain more and more work experience, and you know increasingly well what to do at what time.

Before you start work you will receive an instruction from the practical supervisor. When you have performed the work, the practical supervisor will give you feedback. This way, you will learn step by step to perform the work independently and well.

The step-by-step plan helps to consciously take learning steps. The mentor or company draws up the step-by-step plan. The practical supervisor will help you with the implementation of the step-by-step plan. You perform each practical assignment at least three times. The practical supervisor will indicate when it is sufficient.

There are a total of 12 different assignments.

1. Preparing to enter an (inert) confined space.
2. Reading and understanding the work plan.
3. Acting as holder of work permits (including TRA).
4. Checking and connecting breathing apparatus.
5. Placing and using aids.
6. Placing and using rescue equipment.
7. Alignment of suction hoses and a vapor return line.
8. Entering an (inert) confined space.
9. Emptying the room.
10. Cleaning the room.
11. Filling the reactor under inert conditions (Catalyst).
12. Alignment and maintenance of materials and tools.

3. Complete the step-by-step plan part 1.

- Determine a week in which you will start.
- Think about how many assignments you will do in one week.
- Agree with the practice supervisor when he assesses and gives feedback

Step-by-step plan part 1 – Name:				
Schedule Date/week	**Assignment**	**Done yes/no**	**Assessed yes/no**	**Sufficient yes/no**
	First time 1. Prepare to enter an (inert) confined space.			
	First time 2. Reading and understanding the work plan.			
	First time 3. Acting as holder of work permits (including TRA).			
	First time 4. Checking and connecting breathing apparatus.			
	First time 5. Placing and Using Resources.			
	First time 6. Placing and using rescue equipment.			
	First time 7. Align suction hoses and vapor return line.			
	First time 8. Entering an (inert) confined space.			
	First time 9. Emptying the room.			
	First time 10. Cleaning the room.			
	First time 11. Filling the reactor under inert conditions.			
	First time 12. Align and maintain materials and tools.			
	Feedback/assessment moment			

Schedule Date/week	Assignment	Done yes/no	Assessed yes/no	Sufficient yes/no
	Second time 1. Prepare to enter an (inert) confined space.			
	Second time 2. Reading and understanding the work plan.			
	Second time 3. Acting as holder of work permits (including TRA).			
	Second time 4. Checking and connecting breathing apparatus.			
	Second time 5. Placing and using aids.			
	Second time 6. Placing and using rescue equipment.			
	Second time 7. Align suction hoses and vapor return line.			
	Second time 8. Entering an (inert) confined space.			
	Second time 9. Empty the room.			
	Second time 10. Cleaning the room.			
	Second time 11. Filling the reactor under inert conditions.			
	Second time 12. Alignment and maintenance of materials and tools.			
	Feedback/assessment moment			
Schedule Date/week	**Assignment**	**Done yes/no**	**Assessed yes/no**	**Sufficient yes/no**
	Third time 1. Prepare to enter an (inert) confined space.			
	Third time 2. Reading and understanding the work plan.			

	Third time 3. Acting as holder of work permits (including TRA).			
	Third time 4. Checking and connecting breathing apparatus.			
	Third time 5. Placing and Using Resources.			
	Third time 6. Placing and using rescue equipment.			
	Third time 7. Align suction hoses and vapor return line.			
	Third time 8. Entering an (inert) confined space.			
	Third time 9. Emptying the room.			
	Third time 10. Cleaning the room.			
	Third time 11. Filling the reactor under inert conditions.			
	Third time 12. Align and maintain materials and tools.			
	Feedback/assessment moment			

Also make a step-by-step plan for the mandatory certificates.

- How long does the training take?
- When can you start the training?
- How much time do you need to prepare for the exam?
- When can you take the exam?

4. Complete the step-by-step plan part 2.

Step-by-step plan part 2 – Name:			
Schedule Date/week	**Basisveiligheid VCA**	**Done yes/no**	**Sufficient yes/no**
	Training started		
	Education completed		
	Exam done		

Schedule Date/week	SIR Adembescherming AB-B	Done yes/no	Sufficient yes/no
	Training started		
	Education completed		
	Exam done		
Schedule Date/week	**Adembescherming AB-C1**	**Done yes/no**	**Sufficient yes/no**
	Training started		
	Education completed		
	Exam done		
Schedule Date/week	**Adembescherming AB-C2**	**Done yes/no**	**Sufficient yes/no**
	Training started		
	Education completed		
	Exam done		

And of course you can also include one or more recommended certificates in the step-by-step plan.

- How long does the training take?
- When can you start the training?
- How much time do you need to prepare for the exam?
- When can you take the exam?

5. Complete the step-by-step plan part 3.

Step-by-step plan part 3 – Name:			
Schedule Date/week	**SIR 'Hoge Druk Operator (HDO)'**	**Done yes/no**	**Sufficient yes/no**
	Training started		
	Education completed		
	Exam done		
Schedule Date/week	**'Begeleiden' (Orsima)**	**Done yes/no**	**Sufficient yes/no**
	Training started		
	Education completed		
	Exam done		
Schedule Date/week	**'Werken met kleine blusmiddelen'**	**Done yes/no**	**Sufficient yes/no**
	Training started		
	Education completed		
	Exam done		
Schedule Date/week	**'BHV'**	**Done yes/no**	**Sufficient yes/no**
	Training started		

	Education completed		
	Exam done		
Schedule Date/week	**'Werken aan flensverbindingen'**	**Done yes/no**	**Sufficient yes/no**
	Training started		
	Education completed		
	Exam done		
Schedule Date/week	**'Werken als buitenwacht (mangatwacht)'**	**Done yes/no**	**Sufficient yes/no**
	Training started		
	Education completed		
	Exam done		
Schedule Date/week	**'Vakbekwaamheid heftruck'**	**Done yes/no**	**Sufficient yes/no**
	Training started		
	Education completed		
	Exam done		
Schedule Date/week	**'Gasmeten'**	**Done yes/no**	**Sufficient yes/no**
	Training started		
	Education completed		
	Exam done		
Schedule Date/week	**'Verplaatsen van lasten (ABvL)'**	**Done yes/no**	**Sufficient yes/no**
	Training started		
	Education completed		
	Exam done		

Assignment 1. Prepare for entering an (inert) confined space.

Description

You prepare to safely enter an (inert) confined space. You participate in the toolbox meeting. You make a choice for the safest working method and choose which respiratory protection equipment you need. You base your choice on the information from the toolbox meeting and the work plan. You determine which personal protective equipment you need. You also look at the work permit and/or TRA. You ensure that the work can be carried out in accordance with all set preconditions.

Preparation

You consider which materials and tools you need for the job. You base your choices on the start instruction and work plan and work permit.

1. You choose the safest working method and collect the materials and tools.
Check:

- √ Working method chosen with decision diagram
- √ Respiratory protection equipment chosen
- √ Special risks stated in TRA via toolbox or on work permit
- √ Personal protective equipment
- √ Safety precautions fitted

2. You check whether the location where you are going to work is safe.
Check:

- √ Checklist IDLH completed by Contractor
- √ Own safety
- √ Other people's safety
- √ Hazardous goods safety

Performance

You prepare the necessary materials and equipment needed for the project. Both on the ground and at the manhole.

1. You drop off the location.
Check:

- √ Markings applied
- √ Workplace cordoned off
- √ Equipment safely placed

2. You follow the instructions and regulations.
Check:

- √ You work meticulously
- √ You work at a good pace
- √ The space can be entered safely

Completion

You check whether the work has been done properly.

1. You check the regulations and preconditions.
Check:

- √ Work can start safely
- √ The BA team has the right equipment

2. You report the work performed to your supervisor.
Check:

- √ Reporting choices made
- √ Listing found details

Assignment 2. Read and understand work plan

Description

You participate in the toolbox meeting. This includes all necessary instructions and safety plans. You read the work plan in preparation for the toolbox meeting. You consider which materials and equipment you need. You also check which preconditions apply. You mark things that are not clear and you decide which questions you will ask to remove any ambiguities.
With all the information collected and studied, you can participate in the toolbox meeting well prepared .

Preparation

You request the work plan and the work permit from the supervisor.

1. You request the correct work plan and work permit.
   - √ The project is designated
   - √ Correct work plan requested
   - √ Correct work permit requested
   - √ Checklist requested

Performance

You read the work plan and determine which materials and equipment you need, to carry out the project. You formulate questions about things that are not clear.

1. You read the information and formulate questions.
Check:
   - √ Work plan is clear
   - √ Work permit is clear
   - √ Questions formulated

2. You determine which materials and equipment are needed to carry out the project.
Check:
   - √ You choose the safest working method
   - √ Required materials known
   - √ Required equipment known
   - √ Preconditions and requirements known

Completion

You participate in the toolbox meeting and ask the questions.

1. You participate in the toolbox meeting.
Check:
   - √ Work plan and work permit understood correctly
   - √ Questions asked and a clear answer received
   - √ Work permit signed

2. You check whether the chosen working method matches the information from the toolbox meeting.
Check:

- √ Correct working method chosen
- √ Additional points of attention known

Assignment 3. Acting as holder of work permits (including TRA)

Description

The purpose of the work permit is to prevent unsafe situations and actions. The work permit also guarantees good communication between all parties involved in the implementation of the project. As a work permit holder, you ensure a safe workplace and instruct colleagues about the safety measures to be taken. You carry out the TRA and at the end of the work you hand in the work permit to the issuer.

Preparation

You request the work permit from the supervisor and determine which safety risks there are.

1. You request the work permit and determine the risks.

- √ Work permit available
- √ Risks mapped
- √ Measures to prevent risks known

Performance

You instruct colleagues on the safety measures to be taken and you carry out the TRA.

1. You instruct the team that will carry out the project about the safety measures.
Check:

- √ TRA performed
- √ Instruction given and understood by team

2. The safety measures have been taken before the start of the project.
Check:

- √ Location safe
- √ Correct equipment available
- √ Safety employees
- √ Points of attention are known

Completion

You check whether the work has been carried out in accordance with the work permit and submit the work permit to the issuer.

1. You control the work.
Check:
- √ Work plan and work permit correctly understood
- √ Asked questions and received a clear answer

2. You inform the supervisor about the work performed.
Check:
- √ Work carried out according to work permit
- √ Work permit submitted
- √ Closing work permit after completion of work

Assignment 4. Checking and connecting breathing apparatus

Description
Before the work can start, you want to make sure everything is safe. This means that you check all the breathing air equipment and also make sure that it is properly connected.
The Life Support Unit (LSU) must be operated by an instructed person (does not need to be certified).

Preparation
You check the breathing apparatus.

1. You have the correct breathing equipment available and it functions properly.
- √ Correct breathing apparatus
- √ Sufficient respiratory protection equipment for all involved
- √ Protective equipment works well

Performance
You connect the breathing apparatus.

1. You connect the respiratory protective equipment.
Check:
- √ Own respiratory protective equipment properly connected
- √ Respiratory protection of the whole team well connected

2. You connect the LSU and the operator is instructed.
Check:
- √ Operator has been instructed
- √ LSU is connected correctly
- √ Backup system is connected correctly

Completion
You check whether you can start the work safely.

1. You control the work.
Check:
- √ Own safety in order
- √ Other people's safety in order
- √ Security location in order

Assignment 5. Place and use tools

Description
You make a choice for the safest working method and choose which tools you use. You base your choices on the work permit and/or TRA.
You assess whether the cordone and markings have been applied correctly. You make sure that there are as few disruptions as possible on through routes. You do not compromise on safety.

Preparation
You consider which materials and tools you need for the job. You get your information from the work permit and/or the TRA.

1. You request the work permit and choose the right tools.
- √ Work permit available
- √ Tools known
- √ Known security risks

Performance
You place the tools and check whether the location is safe to perform the work. During work, you check whether the aids are safe to use.

1. Location is safe, resources are placed correctly.
Check:
- √ Resources safely placed
- √ Location safe
- √ Own safety
- √ Safety of others

2. Tools are safe when performing the work.
Check:
- √ Check use of tools
- √ No incorrect use
- √ No damage to tools

Completion
You reflect on the work performed and pay particular attention to the observed safety.

1. The work has been carried out safely.
Check:
- √ Worked according to work permit
- √ Any specifics resolved safely

Assignment 6. Placing and using rescue equipment

Description
You will ensure that the workplace is safe to carry out cleaning work. You do this by setting up the rescue equipment or safety equipment. You choose the right rescue equipment that may be needed. You give instruction and discuss the safety plans with the team. With the team you set up the Life-Support-Unit (LSU) and other rescue equipment. You attach the fall protection in preparation for entering a confined space.
After carrying out the cleaning work, you put away the rescue equipment. You clean and align the resources and materials used. You report any defects in the LSU log. You clear the barrier and store the fall protection and always take responsibility for quality and safety.

Preparation
You have the materials and rescue equipment you may need for cleaning work. You get your information from the work permit and/or the TRA. You discuss the safety plans with the team.

1. You request the work permit and choose the right rescue equipment.
- √ Tripod complete with accessories
- √ Correct type of stretcher
- √ Lighting

2. You discuss the safety plans with the team.
- √ Work permit and TRA reviewed
- √ Checklist IDLH
- √ Tests performed
- √ LMRA performed
- √ Materials OK
- √ Any deviations reported

Performance
You place the rescue equipment and check whether the location is safe to carry out the work. During work, you check whether the rescue equipment is within direct reach.

1. You set up the rescue equipment with the team.
Check:
- √ Life Support Unit (LSU) established
- √ Communication tools tested
- √ Rescue equipment set up that is indicated in the work order (tripod, slide, tank clamp, etc.)

- √ Safety guaranteed (BHV / rescue team available according to rescue plan)

2. You set up the breathing apparatus and perform a function test.
Check:

- √ Line up breathing apparatus
  - Explain breathing air hoses (with communication)
  - Perform visual inspection
  - Blowing Air Hoses (Blowing Out Old Air)
- √ Functional test breathing apparatus performed
  - Testing communication and respiratory equipment (helmet/mask, etc.)
- √ No damage to rescue equipment

2. You set up the means to perform a rescue upon entry.
Check:

- √ Additional airlines available
- √ Extra breathing apparatus for rescue team
- √ Additional means of communication available

Completion

After carrying out the cleaning work, put away and clean the rescue equipment. Please report details in the LSU logbook.

1. You clean up the rescue equipment.
Check:

- √ The cleaning work is signed off by the client
- √ Resources and materials are aligned
- √ Resources and materials have been cleaned
- √ Waste and residual material is disposed of in accordance with regulations

2. You clear the barrier and fall protection and ensure that everything is stored safely and in the right place.
Check:

- √ Materials and resources have been cleaned
- √ Resources and materials are safely stored
- √ Defects have been reported in the LSU log

Assignment 7. Line up suction hoses and a vapor return line

Description

You prepare the cleaning work by aligning the equipment. You choose the right suction hose and vapor return line. You base your choices on the work plan and the TRA. You check the checklist after alignment.
You pay attention to your own safety and that of the environment and you wear full safety equipment.

Preparation

You prepare the lining up of the equipment.

1. You choose the right suction hose.
Check:
- √ Choose resources according to decision tree and TRA
- √ Prepare resources according to decision tree and TRA
- √ Correct suction hose
- √ Personal protective equipment according to work permit and TRA

2. You choose the right vapor return line and install cooling if necessary.
Check:
- √ Choose resources according to decision tree and TRA
- √ Proper vapor return line selected
- √ Cooling installed
- √ Personal protective equipment according to work permit and TRA

Performance

You check security.

1. You check whether the location where you will be working is safe.
Check:
- √ Work environment cordoned off according to regulations
- √ Checklist completed
- √ Own safety
- √ Other people's safety

Completion

You check the work done.

1. You check the regulations and preconditions.
Check:
- √ Work can start safely
- √ Checklist has been signed off

2. You report the work performed to your supervisor.
Check:
- √ Reporting choices made
- √ Listing found details

Assignment 8. Entering an (inert) confined space

Description

You will carry out cleaning work in a confined space. You ensure that an A frame / Trussing frame is set up when the tank is entered from the top. You attach the fall protection to the

frame. The team positions itself in which two members of the team work on top of the installation and one team member enters the installation (the entry man).
If you enter the confined space from the side, through the regular manhole, make sure that the entry man is on a leash. The entry man wears the necessary PPE and breathing apparatus. The standby man continuously monitors the entry man and the gas detection equipment. The standby man is ready to enter the reactor immediately with an emergency procedure and to provide assistance to the entry man if there are problems. The communications man is at a safe distance from the manhole and monitors the low-pressure box and the entire platform. The entire team is in constant contact with each other, so that an emergency can be dealt with quickly and in a targeted manner.

Preparation

You prepare to enter an (inert) confined space.

1. You choose the right auxiliary and rescue equipment and set it up.
Check:
- √ Life Support Unit (LSU) deployed
- √ Safety equipment set up as indicated in the work order
- √ Personal protective equipment according to work permit and TRA

2. You discuss the safety plans with the team.
- √ Work permit and TRA reviewed
- √ Checklist IDLH
- √ LMRA performed

Performance

You enter the confined space as an entry man. The other members of the BA team are lined up.

1. You enter the confined space.
Check:
- √ You are on a leash
- √ Breathing equipment set up
- √ Communication with BA team tested

2. You ensure safety in the event of an emergency.
Check:
- √ Standby man present in the right place
- √ Communication man present in the right place
- √ LSU operator present in correct position

Completion

You complete the work after the cleaning work has been carried out.

1. You clear away the resources and clean them.
Check:
- √ The cleaning work has been signed off by the client
- √ Means and materials are delineated
- √ Means and materials have been cleaned
- √ Waste and residual material is disposed of in accordance with regulations

Assignment 9. Emptying the room

Description

You are going to empty the tank with pressure vacuum. You assist the Pressure Vacuum Pump Machinist in preparing the pressure vacuum truck for use.
You pay attention to safety and choose the right aids and safety equipment according to the work plan and the TRA. You choose a hose with the right diameter, depending on the substance that needs to be vacuumed. You also choose the right suction technique. You let the pressure vacuum truck recirculate, with which the nitrogen that is sucked out of the tank or reactor is blown back into the tank via a return hose.

Preparation

You assist the Pressure Vacuum Pump Machinist in preparing the pressure vacuum truck for use. You collect tools and materials and you coordinate the execution of the work with your supervisor.

1. You assist in preparing for use and collect the material you need to carry out the work.
Check:
- √ Vacuum truck checked
- √ Vacuum truck set up and hoses connected
- √ Personal protective equipment

2. You check whether the location where you are going to work is safe.
Check:
- √ Own safety
- √ Other people's safety
- √ Hazardous goods safety

Performance

You carry out the cleaning work.

1. You remove the substances with the vacuum truck.
Check:
- √ Surface is clean
- √ Vacuum truck has been used efficiently
- √ Nitrogen via return hose back into tank/reactor
- √ For solids, vacuum layer by layer

2. You follow the instructions and regulations.
Check:

- √ You work meticulously
- √ You work at a good pace

Completion

You clean up the workplace and dispose of the waste safely.

1. You clean up the dirt.
Check:

- √ Sort residual waste by type.
- √ Dispose of residual waste in an environmentally conscious and safe manner.

2. You clean the materials and tools.
Check:

- √ Cleaning tools and equipment
- √ Cleaning PPE
- √ Storing tools and resources

Assignment 10. Cleaning the room

Description

You clean the confined space. Based on the work plan and the TRA, you choose the right cleaning method and the right means and materials. You pay attention to your safety and that of the team and you pay attention to environmental aspects. You ensure that the correct safety measures are taken before the cleaning work starts. You use the right cleaning agents and personal protective equipment. You work at a good pace towards a good result.

Preparation

You prepare the work by collecting the necessary materials and resources. You ensure that the BA team is available and that the necessary safety measures are taken.

1. You collect the materials and resources.
Check:

- √ Tools and Materials
- √ PPE tailored to product information sheets or SDS Sheets
- √ Security measures taken

2. You check whether the location where you are going to work is safe.
Check:

- √ Own safety
- √ Other people's safety
- √ Checklist IDLH

Performance

You carry out the cleaning work.

1. You clean the tank/reactor according to the work plan.
Check:
- √ BA team set up and communication tested
- √ Tank/reactor clean
- √ Own safety guaranteed during cleaning

2. You follow the instructions and regulations.
Check:
- √ You work meticulously
- √ You work at a good pace

Completion

You clean up the workplace and deliver the work to the client.

1. You clean the materials and tools.
Check:
- √ Close and clean materials and tools
- √ Cleaning PPE
- √ Storing materials and tools

2. You transfer the installation to the client.
Check:
- √ Overall inspection performed
- √ Installation transferred

Assignment 11. Filling the reactor under inert conditions (Catalyst)

Description

According to the loading diagram supplied by the client, you will reload the reactor with the required catalyst. The catalyst beds are filled with the loading equipment using a method that is appropriate for the catalyst. You use video recordings that are viewed by the client. The loading can be carried out under nitrogen conditions. This is made known by the client and the supplier in the work order/scope.
Depending on the health risks with regard to the catalyst, you determine by means of the MSDS with which respiratory protection you have to work.
NB In case of reactor work, supplement with gas farm work and/or carry out work under IDLH conditions.

Preparation

You prepare the work.

1. You collect the materials and resources.
Check:
- √ Tools and Materials
- √ PPE tailored to product information sheets or SDS Sheets
- √ Security measures taken

2. You check whether the location where you are going to work is safe.
Check:
- √ Own safety
- √ Other people's safety
- √ Checklist IDLH

Performance
You load the reactor according to the correct method.

1. You load the reactor.
Check:
- √ BA team set up and communication tested
- √ Tank/reactor clean
- √ Own safety guaranteed during cleaning

2. You follow the instructions and regulations.
Check:
- √ You work meticulously
- √ You work at a good pace

Completion
You clean up the workplace and deliver the work to the client.

1. You clean the materials and tools.
Check:
- √ Closing and cleaning materials and tools
- √ Cleaning PPE
- √ Storing materials and tools

2. You transfer the installation to the client.
Check:
- √ Complete inspection performed
- √ Installation transferred

Assignment 12. Align and maintain materials and tools

Description
After the work is done, you align the tools. Then you check the materials and tools. If there are defects, report them so that materials can be repaired or replaced. The check consists of

a visual inspection. Clean the outside of the mask and hoses with cleaning products to prevent danger to others.

Preparation

You line up the resources and collect them.

1. You align the resources.
Check:
- √ Align respiratory protection equipment
- √ Align fall protection

2. You assess which materials and aids need to be checked.
Check:
- √ Tools and Materials
- √ Respiratory protection equipment

Performance

You check the materials and tools.

1. Materials inspection and cleaning.
Check:
- √ Visual inspection
- √ Mask and hoses are clean
- √ Report to which pollution materials have been exposed

2. You follow the instructions and regulations.
Check:
- √ You work meticulously
- √ You work at a good pace

Completion

You complete the work.

1. You report found deviations
Check:
- √ Deviations reported to supervisor
- √ Defective materials and tools offered for repair/destruction

2. You store the equipment
Check:
- √ Equipment neatly stored
- √ Equipment stored in the right place

Final assessment Respiratory Air Specialist

The last step to complete the practical skills is taking the final test.
In this test you show that you are capable of working in practice as a Respiratory Air Specialist.

You will discuss with your practical supervisor when you can take the final test.
On the day of the final test you will receive an assignment from the practical supervisor that you will carry out.
The practice supervisor and sometimes another assessor look at how you do this. They will assess your work on the following points:

Core task 1: Performs entry and cleaning work			
1.1 Prepare the entrances	I	G	N
Provides instruction and discusses safety plans. • Actively participates in work discussions • Determines the resources and people required for implementation • Sets goals and priorities			
Prepares the necessary materials and equipment with the team. • Prepares materials, tools and equipment for use • Organizes the work of colleagues • Sets up the equipment responsibly			
Goes through work permit and TRA and checklist IDLH and performs tests. • Performs the LMRA before the work is started • Signals deviations and reports them • Always shows the awareness that acting on work activities can have immediate life-threatening consequences			
1.2 Entering the installation	I	G	N
Attaches fall protection. • Works according to safety procedures regulations and work instructions • Uses the prescribed PPE • Does not make improper use of materials and resources			
Cooperates when entering the confined space. • Always checks team members for proper use of respiratory protection and life-saving equipment • Communicates professionally and correctly with the communication equipment • Adapts to changing circumstances			
Vacuums the contamination from the confined space. • Identifies and reports an unsafe situation • Uses the right tools • Performs all work in accordance with the applicable regulations for safety, working conditions and the environment			

1.3 Loads the reactor (specific to Catalyst)	I	G	N
Loads the reactor according to the loading diagram. • Checks the work of others during and after the performance • Checks own work during and after the performance • Provides colleagues with necessary information			
Uses the right choice method. • Chooses the right materials and resources to carry out the work • Handles life-saving resources and equipment responsibly • Discusses with the team who will take on which role			
1.4 Completes the work	I	G	N
Disposes of the waste according to regulations. • Disposes of waste/residual material in accordance with regulations • Addresses others about unsafe and/or non-environmentally conscious behaviour • Performs all work in accordance with the applicable regulations for safety, working conditions and the environment			
Clears the barrier and stores fall protection. • Stores materials and resources in a clean and safe place • Reports defects and defects in the LSU log • Takes responsibility for quality and safety			
I: Insufficient G: Good N: Not observed Total assessment final test: Pass / Fail*			