



Respiratory Protection Standard

LMS0052A

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Scope and Purpose

This standard applies to all Suncor Energy Inc. employees, contractors, vendors, and visitors and is part of Suncor's EH&S management system.

This standard applies to all personnel working at Suncor Oil Sands, Fort Hills and East Tank Farm including vendors and contractors.

The purpose of this standard is to outline the minimum acceptable requirements for the use of respiratory protection by Suncor personnel. The standard defines responsibilities, establishes respirator selection criteria, and defines fit testing and training requirements. The goal of this standard is to provide appropriate respiratory protection to Suncor personnel in a manner consistent with regulatory requirements and accepted professional practice. This program was developed in accordance with Alberta Occupational Health and Safety Code, Sections 244 to 255. This program applies to all employees who are required to wear respirators during normal work operations and during non-routine or emergency operations.

Hazard Assessment

A hazard assessment of the work area shall be conducted to determine the respiratory hazards present. The results of the hazard assessment for each Business Area are documented in specific Industrial Hygiene reports.

The following factors shall be considered during the hazard assessment, before selecting the type of respiratory protection:

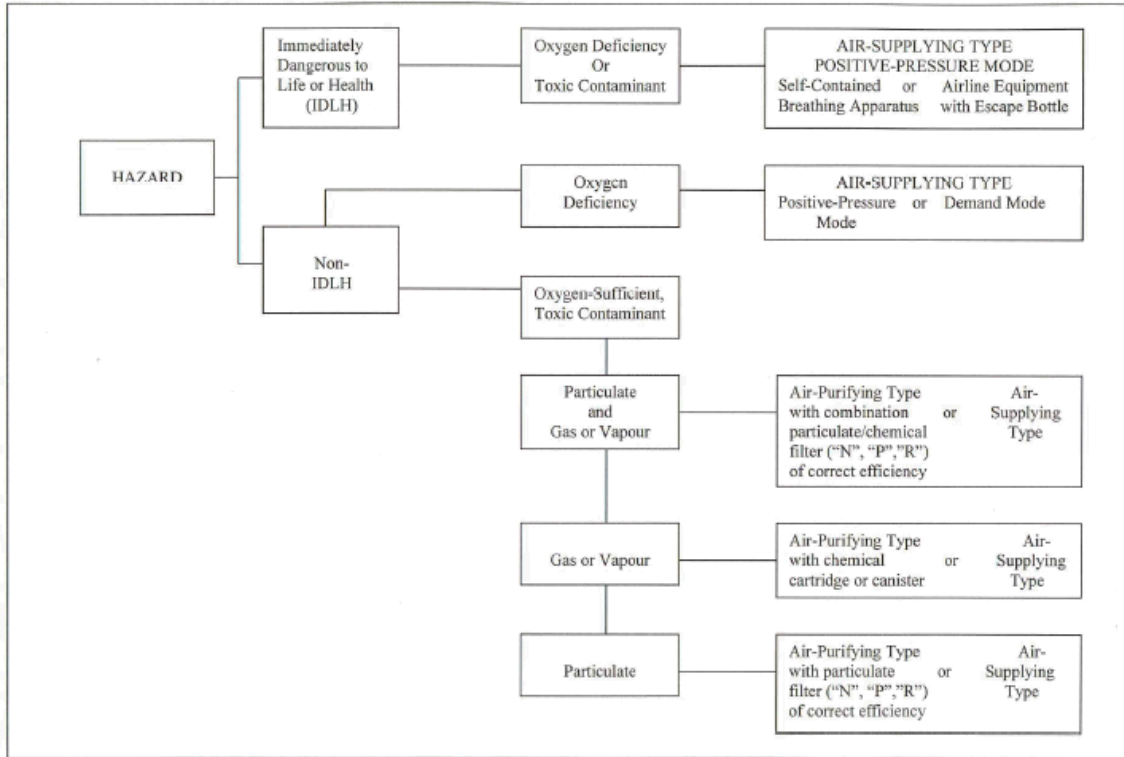
- oxygen concentration
- nature and physical state of airborne contaminants or biohazardous material
- types of all airborne contaminants
- concentration of airborne contaminants
- duration of worker exposure
- operations conditions, processes or tasks
- warning properties of the contaminants
- toxicity of the contaminants
- need for emergency escape
- cartridge end of service indicators / change out schedules
- LEL and IDLH levels of contaminants

Respirator Selection

Selection of respiratory protection equipment (RPE) will be determined by the results of the hazard assessment. Hazard assessment should be conducted by supervisors for ensuring that all tasks and processes that do require the use of RPE are identified for their work areas. Hazard assessment results must be provided to Industrial Hygiene to assist with the selection of proper respirators. The selection process will comply with CSA Standard Z94.4-11, Selection, Use and Care of Respirators. The selection process is shown in Figure 1: Respirator Selection Flowchart. The Industrial Hygiene department must approve any type of respiratory protective equipment that is used (Suncor personnel and contractors) on site.

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Figure 1: Selection of Appropriate Respiratory Protective Equipment



Contractors may use Suncor approved respirators or any other RPE that meets or exceeds Suncor requirements, if fit for task and approved by IH.

Any additions to the RPE Inventory will have to go through the PPE Approval process.

Air-purifying respirators and supply air respirators approved for use on site shall meet NIOSH specifications. Refer to the appendices for approved RPE based on hazards and worker position.

Employees shall be provided with the type of respiratory protective equipment identified in Appendix I: Selection of Respiratory Protective Equipment by Hazard. Respiratory equipment that provides equivalent or better protection to that listed in Appendix I may be used if approved by the area Industrial Hygienist. Respiratory equipment requirements must be specified on the area work permit or in the work procedures, standards or rules.

Respirators can only be used at the allowed maximum use concentration (MUC) or less than MUC. The maximum concentration of an airborne contaminant for respirators should be determined by multiplying the assigned protection factor (Table 1) for a respirator by the respective occupational exposure limit.

Table 1: Assigned Protection Factor for Respirators

Type of Mask Used	Fit Testing Method	Assigned Protection Factors
N95 Dust Mask	Qualitative Fit Testing (QLFT) or Quantitative Fit Testing (QNFT)	10
Half Face Respirator	QLFT or QNFT	10
Full Face Respirator	QLFT	10
Full Face Respirator	QNFT	50
Powered Air Purifying Helmet /Hood without SWPF	No Fit Testing Required	25
Powered Air Purifying Helmet /Hood with SWPF	No Fit Testing Required	1000
Powered Air Purifying Full Face	QNFT	1000
SCBA Pressure-Demanding Full Face	QNFT	10000

SWPF: simulated workplace protection factor

Training

Using CSA Standard Z94.4-11 as a guideline, training is provided for personnel who may be required to don respiratory protective equipment.

Type of respirator training required is listed in Table 2 below.

Table 2: Respiratory Protection training requirements

Training	Target Audience	Recertification Requirements
Air Purifying Respirator (including a dust mask)	For all personnel required to use air purifying respirator for their job	2 years
Respiratory Protective Equipment	For all personnel required to use supplied air respirators for their job	2 years

Suncor recognizes and accepts Respirator Training conducted at Syncrude, including other pre-approved third party RPE vendor course content. For a complete list of approved 3rd party RPE courses, contact Suncor's Learning and Capability Department.

Training shall cover the following topics, as a minimum:

- The importance of engineering or administrative controls
- Facial hair requirements
- Types of respirators and the uses of each
- Protection factors, limitations and cartridge life
- Donning, removal and disinfection.
- Mechanical fit testing
- Cold weather use
- Equipment checking, cleaning, maintenance and storage
- General hazard identification

Training requirements are listed in Appendix II: Fit Testing and Training Requirements by Position. Training is conducted within the first month of employment but as a minimum, before a worker uses a respirator in a work situation. Recertification of RPE and APR training shall take place at least every 2 years.

Use of Respirators

Respiratory protective equipment must be used as per manufacturer's instructions and is not to be modified in any way. Any workers going into areas where respirator use is required, either mandated by area or through FLHA assessment must ensure respirators are equipped with proper cartridges and filters.

Workers donning any tight-fitting face piece must ensure that they are clean shaven. In addition, any facial jewellery that could impede the respirator seal must be removed. If a full face mask is worn, hair must be pulled back from the forehead and away from the respirator seal.

Employees who must wear tight-fitting full-face respirators and require prescription lenses shall be provided with an appropriate eyeglass insert that can be used with the face piece. The eyeglass insert shall have prescription safety lenses inserted into the required frame. The eyeglass insert shall be provided by the Business Area. The specific type of eyeglass inserts for each type of tight-fitting full face respirator is identified in Appendix 3: Approved Respiratory Protective Equipment. Prescriptions must be dated within 12 months of an examination by an approved optometrist. New lenses will be provided as often as a prescription changes, however, only one pair of eyeglass inserts shall be provided every two years. Exceptions shall be reviewed on a case by case basis, based on appropriate medical documentation and area needs.

Respirators (air purifying and supplied air masks) and regulators shall not be shared. If a manifold system is being used, each airline must have its own regulator.

Air-Purifying Respirator

Air-purifying respirators include dust masks, half masks and full masks. Those required to work in an operations and process area (fixed plants, Mine, Tailings, TRO, Reclamation, NPA Areas, Maintenance Facilities, Laydown Yard, etc.), or designated clean shaven area must be fit tested and clean shaven at all times.

Exceptions include:

- Contractors who travel to process areas loading and/or unloading materials.
 - o The contractors must not be based at site
 - o must be in an enclosed vehicle with windows up
 - o must not need to be outdoors beyond loading and/or unloading materials and
 - o must not need a respirator for an immediately acute health hazard (for example hydrocarbons and H₂S)
- Visitors and office workers who are not entering operations and process areas listed above.

Air-purifying respirators shall be made available to workers from within the Business Area, generally through a tool crib. Workers requesting air-purifying equipment must provide proof that they have been fit-tested to ensure they receive the proper sized mask.

Before donning the respirator, workers must inspect the respirator for damage or defects. At a minimum, the following items must be inspected:

- distortion, cracks, tearing or dirt in the inhalation and exhalation valves and valve seats
- proper seating of the cartridge
- use of the correct cartridge for your needs
- cuts, tear, flexibility of face piece and elasticity of straps

When using air-purifying respirators, workers must perform a field seal check to ensure mask is properly sealed. The field seal check consists of a Negative and Positive Pressure check. The Negative Pressure check (Figure 2) is conducted by closing off the inlet opening with the palm of the hand. Inhale so that the face piece collapses slightly, and hold breath for 10 seconds. The face to face piece seal is considered to be acceptable if the face piece remains slightly collapsed and no inward leakage of air is noticed.

Field Seal Check for Half-Face Respirators



Figure 2: Negative Pressure Check



Figure 3: Positive Pressure Check

The Positive Pressure check (Figure 3) is conducted following the Negative Pressure check. Cover the exhalation valve with hand and exhales gently into the face piece. The seal is considered to be acceptable if slight positive pressure can be built up inside the face piece without detection of outward leakage of air.

If the seal check fails, the respirator should be re-checked for tears, cuts or distorted or missing valves. The respirator can also be re-adjusted. Continued failure of the seal check should be reported to the supervisor.

Field Seal Check for N95 Dust Mask

Steps to check for proper fit and seal of N95 respirator without a valve

1. Completely cover the outside of the respirator with both hands. Do not push the respirator against your face.
2. With your hands in place on the surface of the respirator, exhale, or breath out sharply.
3. If you feel air blowing on your face or eyes, the respirator needs to be adjusted.
4. To adjust, repeat the steps on how to put on the respirator.
5. When the respirator is a good fit, you will not feel any air blowing on your face or eyes.
6. If you cannot get a good fit, try a different model respirator for which you have been fit tested.

Steps to check for proper fit and seal of N95 respirator with a valve

1. Completely cover the outside of the respirator with both hands.
2. Do not push the respirator against your face.
3. With your hands in place on the surface of the respirator, inhale, or breathe in sharply. The respirator should collapse slightly.
4. If air leaks between the face and the face seal of the respirator, the respirator needs to be adjusted. To adjust, repeat the user instructions on how to put on the respirator.
5. When the respirator is a good fit, you will not feel any air leaking between the face and the face seal.
6. If you can't get a good fit, try a different model respirator for which you have been fit tested.

Supplied Air Respirators

Supplied Air Respirators include both Self Contained Breathing Apparatus (SCBA) and Remote Supplied Breathing Apparatus (RSBA). All Supplied Air Respirators shall be full-face style and be positive pressure. Other styles of respirators will require Industrial Hygiene review and approval.

Supplied Air Respirators are obtained from the Emergency Services Department (ESD) Maintenance Shop at Oil Sands and Fort Hills or through HSE Integrated at In Situ. Fort Hill's designated location is yet to be determined. The supervisor requesting the Supplied Air Respirator (SAR) equipment must ensure they have a valid Respiratory Protective Equipment for Supervisors certificate of training. All Suncor owned Supplied Air Respirators issued for maintenance work shall be returned to the ESD Maintenance Shop. All Suncor owned SAR equipment shall be tested by the Emergency Services Respiratory Maintenance Shop located at base plant. At In Situ HSE Integrated maintains SARs and Suncor Firebag Operations SCBA. Used equipment is to be sent to the ESD Maintenance shop at Oil Sands or HSE Integrated at In Situ for maintenance purposes. Contact and consult the ESD Respirator Maintenance group before purchasing supplied breathing air equipment.

Contractors may use their own SAR equipment upon approval from IH. Contractors using their own SAR shall have an RPE program, which meets or exceeds Suncor's RPE Standard requirements. Additionally contractors shall follow CSA Z94.4, Z180.1 and other applicable standards stated therein when servicing or maintaining SAR.

Appendix D of CSA Standard Z94.4-11 shall be followed for use of supplied air respirators in low temperature environments. Low temperature environments are when the atmospheric temperature is below 5°C. Extremely low temperature environments are when the atmospheric temperature is below -30°C. RSBA systems that involve storage of breathing air in hoardings or trailers shall meet the CSA Z180.1 dew point requirements for use and storage in low temperature. If dew point requirements are not met other means of temperature control such as heated hoardings are required to ensure supplied air equipment is kept warm when atmospheric temperature is below 5°C. Use of supplied air in extremely low temperature environments should be avoided and only be considered on an emergency basis. A documented risk assessment must be conducted before using supplied air in extremely low temperature environments. Tasks involving the use of SCBA require at a minimum one stand-by stationed outside the hazard area. Tasks involving the use of RSBA require at a minimum one standby and one bottle watch stationed outside the hazard area. Stand-by and bottle watch personnel may not directly participate in the execution of the task.

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Continued - Supplied Air Respirators

Before donning Supplied Air Respirators, workers must complete a pre-use inspection. Once the equipment has been donned, workers must conduct a seal check to ensure they can achieve an adequate facial seal with the mask. Procedures for the pre-use inspection and the seal check are provided in the Respiratory Protective Equipment training course.

RSBA systems must be fitted with escape bottles whenever they are used in Immediately Dangerous to Life or Health (IDLH) situations. Ensure only NIOSH approved airline hoses or NIOSH equivalent with locking collar couplings are used. Airline hoses other than those approved by NIOSH can be permeable to substances such as aromatic hydrocarbons. The NIOSH approved respirator includes air supplied hoses and male/female quick disconnect fittings, therefore, substitution of other hose or other respirator manufacturers' air supply hoses or fittings voids the approval, and the respirator is no longer considered acceptable.

When using Scott Safety 26369 series supply hose with stainless steel Hansen HK couplings, the maximum recommended length of airline hose for warm weather conditions (greater than 5°C) is 150 feet from the service outlet. The recommended length of airline hose for low temperature conditions is 100 feet.

The use of airlines beyond the recommended maximum length up to a maximum of 300 feet requires a documented risk assessment and the approval of the Suncor area maintenance manager. Airline lengths exceeding 150 feet in length requires the use of Scott Safety 30010 Series supply hose with brass Hansen couplings, available from the Respiratory Maintenance shop.

Cleaning, Inspection, Maintenance, and Storage

Inspection, cleaning and servicing of all types of RPE will be conducted according to manufacturer instructions and performed by trained workers. Servicing of any Suncor owned air supplied respiratory equipment can only be conducted by trained respirator maintenance technicians within the ESD Maintenance Shop. Inspection, cleaning and servicing of Suncor owned air purified respirator can be conducted by trained respirator maintenance technicians within the ESD Maintenance Shop. Contractors using their own RPE with the approval from Industrial Hygiene should meet the requirements of respirator care and maintenance procedure and facility (Appendix 5).

Suncor Industrial Hygiene will conduct a pre-operation inspection of the facility and an audit of respirator cleaning and maintenance procedures. Industrial Hygiene will also conduct a periodic audit of the work practice for compliance purposes.

Air-Purifying Respirators

Air purifying respirators should be returned to the place of issue at regular intervals. Designated personnel within the Business Area shall be responsible for returning used masks to the ESD Maintenance Shop for cleaning, inspection and repair.

Area specifications may allow air purifying respirators to be reused. Manufacturer's instructions must be followed to ensure that mask is inspected, disinfected and cartridges changed, if required. Respirators that are being re-used cannot be shared.

Cartridge or filter change-out schedule

The useful service life of a gas/vapour cartridge or a particulate filter is affected by several factors, including:

- chemical properties of contaminant,
- physical state and concentration,
- the environment, temperature, humidity, and atmospheric pressure;
- the breathing rate and volume of the respirator user,
- the pattern of use, whether continuous or intermittent.

A change-out schedule for the replacement of air purifying filter or cartridge of respirator should be established before their useful service life is ended.

Gas/vapour cartridges change-out schedule

- Gas/vapour-removing cartridges equipped with an end-of-service-life indicator shall be replaced when the indicator dictates.
- Gas/vapour-removing cartridges not equipped with an end-of-service-life indicator shall be replaced based on manufacturers maximum use time or calculated schedule by Industrial Hygiene using the manufacturer (North or 3M) product information or estimated based on knowledge of the effectiveness of the cartridge.

Particulate filter change-out schedule

- When breathing resistance becomes difficult
- When the filter becomes unacceptably dirty or physical damage occurs

Supplied Air Respirators

All Supplied Air Respirators that are placed in operating areas on a standby basis shall be inspected by Operations as part of their safety checks on a monthly basis to ensure that the SCBA is fully charged, clean, free of damage and fully operational.

Any time a standby Suncor owned Supplied Air respirator is used it must be returned as soon as possible to ESD Maintenance Shop at Oil Sands. Equipment not owned by Suncor but used by Suncor personnel (e.g. In Situ sites) will be sent to third party (e.g., HSE Integrated at In Situ) for servicing. If it is not possible to return used standby equipment at the time of usage, it shall be tagged out of service. The equipment must be returned for service during the shift it was used.

Following inspection, cleaning and necessary repair, Supplied Air Respirators will be stored to protect against dust, sunlight, heat, extreme cold, excessive moisture or damaging chemicals.

Functional testing of Supply Air Respirators will be conducted by ESD Maintenance Shop at Oil Sands or HSE Integrated at In Situ every 2 years. Functional testing for all SCBA for Emergency Services will be conducted annually. Tests and inspections shall be carried out as per manufacturer instructions.

The technician at the ESD Maintenance Shop at Oil Sands or HSE integrated at In Situ shall affix a seal tag to the supplied air respirator equipment case to prevent tampering and indicating the date when the respirator is to be returned to Respirator Maintenance for functional testing.

The technician shall affix a label to the supplied air respirator indicating the date of its next required functional test.

Supplied air respirators that are near or past the required testing date must be returned to the Respirator Maintenance Shop at Oil Sands or HSE Integrated at In Situ for exchange.

The compressed breathing air must meet the specifications outlined in Part 15 of CSA standard Z180.1-00. A sample of breathing air shall be sent for analysis at least quarterly.

Health Assessment and Fit Testing

Personnel required to wear respiratory protection during their work shall undergo a medical assessment once every 2 years. The medical assessment shall consist of a questionnaire and fit testing. The questionnaire shall be used to identify any health condition that would affect their ability to use a respirator. Fit testing is performed on each model (each model is associated with its own part number) and each type of tight-fitting mask the worker may use to ensure they can achieve an adequate facial seal. Should a worker demonstrate respiratory symptoms, or make reference to abnormalities on the questionnaire, additional tests may be conducted.

Fit testing procedures shall meet the requirements outlined in CSA Standard Z94.4-11. Suncor and embedded contractor employees required to wear respiratory protection shall undergo the medical assessment and fit testing within the first month of employment and before wearing respiratory protection devices. Workers must be clean shaven when a fit test is to be conducted. Appendix 2 lists the positions and the type of masks for which they must be fit tested.

Fit testing is repeated for every new type of tight-fitting respirator (dust mask (N95), half face and full face) the employee may use. Fit-testing will need to be repeated for any worker that has a change in their physical condition that could affect fit of the respirator. The physical changes could include significant weight gain or loss, introduction of dentures, facial scarring or changes in facial structure.

All other contractors will be expected to ensure their employees have access to appropriate respiratory protection that provides an adequate facial seal as per Alberta OH&S Act, and OH&S Code, Part 18 Sections 244 through 255.

Program Evaluation

An evaluation of the effectiveness of the respiratory protection standard shall be conducted on a yearly basis by Industrial Hygiene.

Recordkeeping

Records of the quantitative fit testing and medical assessments for each worker are placed in the employees' medical files. The record shall include:

- name of person being tested
- make, model and size of respirator
- name of tester
- date
- results of the test
- comments on personal fitting problems

Suncor's Learning and Capability group is responsible to ensure records are kept for at least the duration of employment of the person trained for supplied air respirator, air purifying respirator training and site specific respirator training.

Records of all maintenance and servicing activities performed on any type of respiratory protective equipment shall be kept by the ESD Maintenance Shop. The records shall include:

- date
- type of respirator
- specific servicing and maintenance performed
- name of service technician

Roles and Responsibilities

The Manager of Industrial Hygiene is accountable for the evaluation, maintenance, and revision of this standard. The Industrial Hygiene department shall be responsible for the review of the respiratory protection program.

The Manager of the Health and Wellness Centre is accountable for the medical surveillance and fit testing programs.

The Manager, Regional Emergency Management Group is responsible for ensuring the maintenance program of Suncor owned equipment for the various types of respiratory protection complies with manufacturer specifications.

The Emergency Services Maintenance Supervisor is responsible for ensuring maintenance technicians are certified and that the quality of the compressed breathing air meets minimum requirements (only within Suncor shop).

Line management is responsible for ensuring the implementation and adherence to this standard. Business Area management is responsible for providing workers with approved respiratory protective equipment as identified in this standard.

Learning & Capability's business area training coordinators are responsible for the ensuring profiles of workers requiring RPE and APR training are updated.

Facilities at each site is responsible to approve setting up and maintenance of the Contractor's respirator maintenance stations/trailers, if applicable.

Exceptions

Appendices 1, 2 and 3 associated with this standard are exempt from the requirement for a Management of Change process should they need to be updated or changed. The updates or changes to the standards would reflect a change that has taken place in the Business Area. This exception is to ensure that the information in the appendices is correct and current. Appropriate levels of management in the Business Areas would be consulted before implementing the update or change.

Definitions

Supplied Air Systems include Self Contained Breathing Apparatus (SCBA), Ska Paks, and ancillary equipment such as regulators, breathing air lines and cylinders.

Clean Shaven is defined as having no visible whiskers or stubble between the sealing edge of the respirator face piece and the skin, goatees are not allowed and moustaches to be trimmed to the corner of the mouth, and sideburns shall not extend below the earlobe and inwards on the face. For many, this requires being clean-shaven within the previous 24 hour or preferably 12 hour to ensure that hair neither infringes on the sealing surface of the respirator nor interferes with valve or respirator function.

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Continued - Definitions

Fit test, the use of qualitative or quantitative method to evaluate the fit of a particular model, make, and size of respirator on an individual.

Assigned protection factor (APF) — the anticipated level of respiratory protection that would be provided by a properly functioning respirator or class of respirators to properly fitted and trained users.

Maximum use concentration (MUC) — the maximum concentration of an airborne contaminant from which an employee is expected to be protected when wearing a respirator, determined by the assigned protection factor of the respirator or class of respirators and the occupational exposure limit for that contaminant. The MUC is usually determined mathematically by multiplying the assigned protection factor specified for a respirator by the occupational exposure limit, which can include a short-term exposure limit and a ceiling limit or any other exposure limit used for that chemical agent, as defined by the authority having jurisdiction.

References to Related Documents

Workplace Health and Safety Bulletin: Guideline for the Development of a Code of Practice for Respiratory Protective Equipment. PE004, July 2009

Workplace Health and Safety Bulletin: Respiratory Protective Equipment: An Employer's Guide. PPE001, July 2009

Canadian Standards Association Standard Z94.4-11 Selection, Use and Care of Respirators

Canadian Standards Association Standard Z180.1-00 Compressed Breathing Air and Systems

Suncor Work Practice [PMW0021A](#) Use of Supplied Air Respiratory Protective Equipment in Upgrading

Prescription inserts: <http://thecore.network.lan/en/depts/os/ehs/Pages/PrescriptionSafetyGlassesProcess.aspx>

Appendix 1: Selection of Respiratory Protective Equipment by Hazard

Note: Fort Hills is currently using North and 3M Respirators. For North respirators listed below the 3M equivalent is acceptable at Fort Hills if the worker is fit tested for the 3M respirator.

Hazards	Location /Condition	Mask	Cartridge
Activated Charcoal	Upgrading - Filter change in 6T-5, 8T-14 and 53T-201 Firebag – Produced Water and Vapour Recovery Systems	3M-8210 or 3M-8511	
Amine	Upgrading - Maintenance on amine system in Plants 8 and 53 MacKay River Firebag	North 7700	North N7500-4
Ammonia	Upgrading - Vessel entry in Plant 7 and 55	North 7700	North N7500-4
	In Situ ammonia co-injection project	North 7600	North N7500-4
Asbestos	Base Plant - Low and Medium Risk Procedure	North 7700	North 7580 P100
		North 7600	North 7580 P100
	Base Plant - High Risk Procedures	North 7600 with North Compact Air PAPR assembly	
		Supplied Air Respirator	
Belt Splicing Chemicals (Toluene, Xylene, Glues, MDI)	Extraction – washing and splicing conveyer belts	North 7600	North 7583 P100
Belzona Repairs Kits	Extraction – hot surfaces	North 7700	North 7583 P100
Biohazardous materials	Health care practitioners	3M-1860 or 3M-1860S	N95
Biological Hazards	Upstream - Sewage Handling		
	Upstream – Cleanup of Rodent droppings	North 7700	North 7580 P100
Benzene	Firebag- Water treatment	North 7600 Supplied Air	North N7500-3
Caustic Soda	E&U - Boiler Cleanouts Base Plant Extraction – Plant 3 Caustic mixing/loading facility and Plant 82 tanker trailer	North 7700	North 7580 P100
		North 7600	North 7580 P100
	Fort Hills Primary Extraction- loading facility Firebag – Water treatment MacKay River- Water treatment	Supplied Air Respirator	
Calcium Chloride	Upstream - De-icing	3M-8210 or 3M-8511	
Carbon Monoxide	E&U- Powerhouse boiler flue gas to ESP where concentration is above 25 ppm		
	Upstream - Furnace flue gas leaking where concentration is above 25 ppm	Supplied Air Respirator	

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Calcium Silicate, Fibre glass & other non- asbestos insulation	Upstream - Cutting or handling insulation	3M-8210 or 3M-8511	
Catalyst	Upgrading - Catalyst loading or unloading during shutdowns in Plants 6/7/8/53/54/55 Firebag – Sulpha Treat	North 7700	North 7580 P100
Chlorine	Upgrading - Changing cylinders Plant 56 E&U - Changing cylinders in Water Treatment Plant	Supplied Air Respirator	
	E&U - Checking chlorine room (no cylinder change)	North 7600	North N7500-3
Citric Acid	Fort Hills- Utilities	North 7700	North 7580 P100
Cleaners / Degreasers, hydrocarbon based (Action products, Penmul, Citrikleen,)	Extraction Plants Firebag MacKay River	North 7700	North 7583 P100
Coke Dust and Coal Tar Pitch Volatiles	Upgrading - Coker cutting decks, Upgrading - Coker bottom heads, Mining - Coke pits, restricted area within 40 metres of coke chute wall, unless inside operating equipment with HEPA filtration	North 7700	North 7583 P100
	E&U - Powerhouse tripper gallery, crusher house, ball mill maintenance and No. 5 conveyer	North 7600	North 7583 P100
Confined Space Entry (Level 1)	Upstream	Supplied Air Respirator	
Control OS 5900 Control OS 5612	E&U- Water Treatment Plant	North 7700 1	North N7500-4
Dearborn VOS 68	E&U - Spill Cleanup	North 7700	North N7500-4
Defoamer	Fort Hills- Secondary Extraction	North 7700	North 7583 P100
Disodium Phosphate	Upgrading - Plant 6 E&U - Water Treatment Plant	3M-8210 or 3M-8511	
Dispersant	Fort Hills- Secondary Extraction	North 7700	North 7583 P100
Dust, Nuisance	Upstream - handling of magnesium oxide, lime, soda ash, alum, phosphate and resin	3M-8210 or 3M-8511	
Emergency Response	Plant wide – Large Spill Cleanup	Supplied Air Respirator	
	Laboratory – Small Spill Cleanup	Refer to MSDS	
Fiberglass	Mining - Body Work Firebag Piping and Tank Repairs	3M-8210 or 3M-8511	

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Fiberglass Epoxy	Upstream - Extensive application by brush	North 7700	North N7500-3
Floor Dry	Upstream	3M-8210 or 3M-8511	
Fly Ash	E&U - Fly Ash Silo, ESP 5th Level, Flyash pond and Pond 6	North 7700	North 7580 P100
	E&U - Maintenance activities, ESP 3rd Level	North 7600	North 7580 P100
Froth/bitumen	Fort Hills Primary Extraction	North 7700	North N7500-3
Gas Oil	Upgrading - Sampling, spills or maintenance in open pipes or vessels	North 7700	North N7500-3
Hydrogen Chloride	Firebag MacKay River	Supplied Air Respirator	Hydrochloric Acid
	Handling liquid	North 7700	North N7500-3
		North 7600	North N7500-3
Hydrogen Sulphide	Upgrading and Firebag - Taking sour samples, breaking flanges, vessel entry, Plant H2S Alarm Firebag – Tank venting, Water treatment MacKay River - Water treatment	Supplied Air Respirator	
	Escape from Coke Pit	Scat-Pak Air Supply	
Isocyanate	OSIS and Fort Hill Extraction, Facilities pipe or roof repair by spray method or using non-spray method but in a poor ventilated area	North 7600	North 7580 P100
	OSIS and Fort Hill Extraction, Facilities pipe or roof repair non-spray method in well ventilated areas	North 7700	North 7580 P100
Kerosene	Upgrading - Sampling, spills or maintenance in open pipes or vessels Firebag – Used for Herman Nelson heaters	North 7700	North N7500-3
Kleen MCT 511	E&U - RO Units	North 7700	North N7500-3
Lead Containing Materials	OSIS - Lead Paint removal OSIS- Lead Soldering	North 7700	North 7580 P100
Lime	E&U - Water Treatment Plant	North 7700	North 7580 P100
		North 7600	North 7580 P100
		3M-8511	
	Firebag - Water treatment Mackay River- Water treatment	North 7600	North 7580 P100
Magnesium Oxide	Firebag - Water treatment MacKay River- Water treatment	North 7600	North 7580 P100
Mercaptan	E&U - Mercaptan Loading	North 7700	North N7500-3
Mercury	Laboratory – spill response	North 7700	North N7500-52
	Upgrading – 52E-302	North 7700	North 75852 P100

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Metal Dusts	Upstream - Grinding or cutting	3M-8210 or 3M-8511	
Miscellaneous Chemicals	Upstream	Refer to MSDS	
Mold	Upstream	3M8511	
		North 7700	North 7580 P100
		North 7600	North 7580 P100
		Supplied Air Respirator	
Naphtha, Diluent Naphtha	Upgrading - Sampling, spills or maintenance in open pipes or vessels Extraction - Plant 4 bird seal leaks Extraction - Plant 82 crane level Extraction - Plant 86 launder area Extraction - Pond 2/3 BRFT tailings discharge Firebag – Diluent Naphtha at Sales tank and associated piping	North 7700	North N7500-3
	Upgrading – Sampling at 20D-71	North 7600	North N7500-3
	Upgrading – vessel entry, tank farm Extraction - Vessel entry in Plants 4/16/87	Supplied Air Respirator	
Naturally Occurring Radioactive Material (NORM)	Upstream – refer to RHS00006 for specific locations	North 7700	North 7580 P100
Optisperse	E&U - Water Treatment Plant	North 7700	North 7583 P100
Oxygen Deficiency	Upstream - Entry into confined spaces	Supplied Air Respirator	
Paint – Vapour or Aerosols Paint Thinners	Upstream - Painting	North 7700	North 7583 P100
Pentane	Fort Hills- Secondary Extraction	North 7600 Supplied Air	North N7500-3
Petrosol Parts Wash Solvent	OSIS - Maintenance shops	North 7700	North N7500-3
Polychlorinated biphenyls (PCBs)	Upstream	North 7700	
		North 7600	
		Supply air respirator	
Potassium Carbonate	Upgrading - Plant 6 loading into sump	North 7700	North 7580 P100
Refractory Ceramic Fibre (Kaowool)	Upstream - Cutting or handling RCF insulation	North 7700	North 7580 P100
Respirable particulate matter from wildfire smoke	All sites	North 7600 or 3M-8210 or 3M-8511 or 3M-8110S or 3M-9211	P100

Continued on next page

Continued - Appendix 1: Selection of Respiratory Protective Equipment by Hazard

Scaletrol PCD9317	E&U - Water Treatment Plant	North 7700	North 7580 P100
Silica, contained in Refractory, Limestone or Tailings Sand or Gypsum	Upgrading - Refractory maintenance work	North 7700	North 7580 P100
	E&U - FGD plant and Pond 4 Extraction Tailings – pipeline construction and Tailings ponds Firebag - Refractory maintenance work	North 7600	North 7580 P100
Silica, contained in Limestone or Oil Sand	Mining - Limestone pit, Mine operation areas with elevated airborne dust	North 7600 or 3M-8210 or 3M-8511 or 3M-8110S or 3M-9211	North 7580 P100
	Mining - Mining engineering working areas with elevated airborne dust Mining - Mining maintenance work areas with elevated airborne dust Mine complex - warehouse laydown yard		
Soda Ash	Firebag – Water treatment MacKay River- Water treatment	North 7600	North 7580 P100
Sodium Bisulphite	Fort Hills Utilities – loading facility	North 7600	North 7581 P100
Sodium Hydroxide	Upgrading - Plant 6 & off plots	North 7600	North 7580 P100
	Firebag – Water treatment MacKay River- Water treatment		
Steamate NA9680	E&U - Water Treatment Plant	North 7700	North N7500-4
Sodium Bisulphite	Fort Hills- Utilities	North 7700	North 7582 P100
Sodium Nitrate	E&U - Water Treatment Plant	North 7700	North 7580 P100
Sulphur Dioxide	Upgrading - Sulphur Pits as required	North 7700	North 7583 P100
	Upgrading - Plant 53 structure above sulphur pits Mining - Coke pits, restricted area within 40 meters of coke chute wall Mining - Coke Dump at Pond 4 E&U - Powerhouse where concentration is above 1 ppm Firebag – Steam Gens, Flares, and SRU MacKay River	North 7600	North 7583 P100
Sulfuric Acid	Fort Hills Primary Extraction- loading facility	North 7600	North 7583 P100
Welding Fume	Upstream – Various maintenance shops and plant areas where welding activities are conducted	North 7700 with North BP1000	North 7580 P100 North 7581 P100 North 7583 P100 North 75FFP100
		3M Breathe Easy17 PAPR with Welding Headgear Assembly	3M Type P3 or 3M Type FR-57
		3M Ad-Flo PAPR with Speedglass 9002 Welding Helmet	AdFlo HE or AdFlo HE + OV/SD/CL/HC
		3M Fresh-air II Supplied Air System with Speedglass 9000 Welding Helmet	Not Required

Appendix 2: Fit Testing and Training Requirements by Position- Oil Sands

Business Area	Department	Position	Fit Testing				Training			
			3M-8210 or 3M8511, or 3M9211+ or 3M8110S	North 7600	North 7700	AV-2000	APR	Supplied Air	PAPR	Scat-Pak
Upgrading	Operations	Operators,	X		X	X	X	X		
		Shift Supervisors	X		X	X	X	X		
	Maintenance	Millwrights	X		X		X			
		Shift Millwrights	X		X	X	X	X		
		Insulators	X	X	X	Designated	X	Designated	X	
		Electricians/Instrumentation Techs	X		X	X	X	X		
		Labourers	X		X	X	X	X		
		Pipefitters	X		X	X	X	X		
		Boilermakers	X		X	X	X	X		
		Specialists, Supervisors	X		X	X	X	X		
Engineering	Process Engineers	X		X		X				
QA	Inspectors, Supervisors	X		X	X	X	X			
Energy & Utilities	Operations	Operators	X		X	X	X	X		
	Maintenance	Insulators	X	X	X		X		X	
		Labourers	X	X	X		X		X	
		Vessel Entry Monitors	X			X		X		
		All Other Trades	X		X		X			
	Engineering	Process Engineer	X		X		X			
QA	Inspectors	X		X	X	X	X			
Extraction	Operations	Fixed Plant Operators	X		X	X	X	X		
		Shift Supervisors	X		X	X	X	X		
		Plant 82/85 Operators and Cleaning Crew	X		X		X			
		Tailings Operators / Shift Supervisors / Linemen /Labourers	X		X		X			
		TRO Field Operators / Polymer Truck Drivers	X		X		X			
	Maintenance	All trades in Plants 4/16/87 and Response Crew	X		X	X	X	Designated		
Maintenance Coordinators, Supervisors in		X		X	X	X	X			

Business Area	Department	Position	Fit Testing			Training				
			3M-8210 or 3M8511, or 3M9211+ or 3M8110S	North 7600	North 7700	AV-2000	APR	Supplied Air	PAPR	Scat-Pak
		Plants 4/16/87								
Extraction (Cont't)	Maintenance (Cont't)	All trades in Plants 3/82/85/86/FTPH/B RFT/Offplots	X		X		X			
		Maintenance Coordinators, Supervisors in Plants 3/82/85/86/FTPH/B RFT/Offplots	X		X		X			
		All Trades in Plant 82/85 Maintenance	X		X		X			
	Tailings Maintenance	Boom Crew, Welders, Maintainers/Operators	X		X		X			
		Supervisors, Maintenance Coordinators	X		X		X			
	TRO Maintenance	Shift supervisors, millwrights steamfitters /pipefitters	X		X		X			
		Welders	X		X		X		X	
	Engineering	Process Engineer, Reliability Engineer	x		X		X			
	QA	NDT technician	X		X		X			
	QA	Inspectors, Supervisors	X		X	X	X	X		
Growth Integration and Turnaround	All	Supervisors, Specialists, Maintenance Coordinators,	X		X	X	X	X		
	Shift Operations	Process Operators	X		X	X	X	X		
	Mechanical/E & I	Electricians/Instrumentation Techs	X		X	X	X	X		
Firebag and MacKay River	Operations	Operators, Supervisors, General Foreman	X		X	X	X	X		
	Maintenance	All positions	X	X	X	X	X	X		
Mining	Operations	Coke Dump Operators	X		X		X			X
		Mine Ops personnel and shift supervisors	X		X		X			
	Mine Technical Services	E7/E8 Field Service Workers	X		X		X			
		Contractor	X		X		X			

Business Area	Department	Position	Fit Testing			Training				
			3M-8210 or 3M8511, or 3M9211+ or 3M8110S	North 7600	North 7700	AV-2000	APR	Supplied Air	PAPR	Scat-Pak
		Coordinators								
		Contact Engineers	X		X		X			
Mining (Cont'd)	Reclamation	Field Position Workers	X		X		X			
		Supervisors	X		X		X			
	MEM	Mine Maintenance Personnel	X		X		X			
		Mine steam bay attendant	X	X	X		X			
		Welders	X		X		X		X	
	Mine Reliability & Engineering	Engineers and inspectors	X		X		X			
Operations Support	Laboratory	Technicians, Specialists,	X		X		X			
		Unit Leaders, Supervisors, Safety Reps	X		X	X	X	X		
Sustainability	EH&S	Industrial Hygienists	X		X	X	X	X		
	Emergency Services	Emergency Response Officers	X		X	X	X	X		
	Emergency Services	Nurse	X							
Maintenance & Construction	Site Wide Services	Electricians, HVAC Technicians, Instrument Mechanics	X		X	X	X	X		
Non Production Assets	Facility Maintenance	Electricians, HVAC Technicians, Millwrights, Plumbers, Shift Supervisors, & Fire Protection Workers	X		X		X			
Non Production Assets	Roads & Ground	Operators	X		X		X			
SCM	Warehouse and laydown yard	Technicians	X		X		X			

Appendix 3: Fit Testing and Training Requirements by Position- Fort Hills

Business Area	Department	Position	Fit Testing				Training			
			3M-8210 or 3M8511. or 3M9211+ or 3M8110S	North 7600 or 3M FF-400	North 7700 or r 3M 6500 QL	AV-2000	APR	Supplied Air	PAPR	Scat-Pak
Utilities	Operations	Operators	X		X	X	X	X		
	Maintenance	Insulators	X	X	X		X		X	
		Labourers	X	X	X		X		X	
		Vessel Entry Monitors	X			X		X		
		All Other Trades	X		X		X			
	Engineering	Process Engineer	X		X		X			
	QA	Inspectors	X		X	X	X	X		
Extraction	Operations	Operators	X		X	X	X	X		
		Shift Supervisors	X		X	X	X	X		
	Maintenance	Labourers	X		X	X	X	X		
		Craft	X		X	X	X	X		
	Engineering	Process Engineer, Reliability Engineer	x		X		X			
	QA	NDT technician	X		X		X			
	QA	Inspectors, Supervisors	X		X	X	X	X		
Turnaround	All	Supervisors, Specialists, Maintenance Coordinators,	X		X	X	X	X		
	Shift Operations	Process Operators	X		X	X	X	X		
	Mechanical/ E&I	Electricians/Instrumentation Techs	X		X	X	X	X		
Mining Mining	Operations	Mine and tailings operators and shift supervisors	X		X		X			
	Mine Technical Services	Contractor Coordinators	X		X		X			
		Contact Engineers	X		X		X			
	Reclamation	Field Position Workers	X		X	X	X	X		
		Supervisors	X		X		X			
	MEM	Mine Maintenance Personnel	X		X		X			
		Mine steam bay attendant	X	X	X		X			
		Welders	X		X		X		X	
Mine Reliability & Engineering	Engineers and inspectors	X		X		X				
Operations Support	Laboratory	Technicians, Specialists,	X		X		X			
		Unit Leaders, Supervisors,	X		X	X	X	X		

Business Area	Department	Position	Fit Testing				Training			
			3M-8210 or 3M8511. or 3M9211+ or 3M8110S	North 7600 or 3M FF-400	North 7700 or 3M 6500 QL	AV-2000	APR	Supplied Air	PAPR	Scat-Pak
		Safety Reps								
Sustainability	EH&S	Industrial Hygienists	X		X	X	X	X		
	Emergency Services	Emergency Response Officers	X		X	X	X	X		
	Emergency Services	Nurse	X							
Maintenance & Construction	Site Wide Services	Electricians, HVAC Technicians, Instrument Mechanics	X		X	X	X	X		
Non Production Assets	Facility Maintenance	Electricians, HVAC Technicians, Millwrights, Plumbers, Shift Supervisors, & Fire Protection Workers	X		X		X			
Non Production Assets	Roads & Ground	Operators	X		X		X			
SCM	Warehouse and laydown yard	Technicians	X		X		X			

Appendix 4: Approved Respiratory Protective Equipment

Type of Equipment	Model	Stock Code
Disposable Dust Mask	3M-8210 N95	
	3M-8511 N95	1000213398
	3M-8110S N95	1000216110
	3M-9211+ N95	1000216221
	3M-1860 or 1860S (for Health & Wellness only)	
Elastomeric Face Pieces	North 7600 Full Face mask	1000015833
	North 7700-30L Large Half Mask	1000015824
	North 7700-30M Medium Half Mask	1000015825
	North 7700-30S Small Half Mask	1000015826
	3M 6300 Large Half Mask	1000015831
	3M 6200 Medium Half Mask	1000015830
	3M 6100 Small Half Mask	1000015829
	3M 6900 Large Full Face Mask	On Demand
	3M 6800 Medium Full Face Mask	On Demand
	3M 6700 Small Full Face Mask	On Demand
Fort Hills Elastomeric Face Pieces	3M 6501QL Half Mask- Small	LVHV item
	3M 6502QL Half Mask- Medium	LVHV item
	3M 6503QL Half Mask- Large	LVHV item
	3M FF-401 Full Face - Small	LVHV item
	3M FF-402 Full Face - Medium	LVHV item
	3M FF-403 Full Face - Large	LVHV item
Welder's Respirators	North 760008AW Full face welding respirator	On Demand
	North BP1000 Welder's Backpack, attached to North 7700 series half masks	1000015835
	3M AdFlo PAPR System with Speedglass 9100 Series Welding Helmet	On Demand
	3M Fresh Air Supplied Air System with Speedglass 9100FX Series Welding Helmet	On Demand
	3M Adflo PAPR with 9100MP with Speed Glass Welding Helmet	On Demand
	3M Breathe Easy System PAPR ALP3 OV, AG, HEPA	On Demand
Powered Air Purifying Respirators (PAPR)	North 7600 with North CA102D Compact Air Blower & Battery Assembly	On Demand
Cartridges	North 7583-P100 Organic vapour/Acid gas/P100 (purple/yellow)	1000015838
	North 7580 P100 Particulates (purple)	1000015840
	North N7500-3 Organic vapour/Acid gas (yellow)	1000015841
	North N7500-4 Amine/Ammonia (green)	1000015842
	North 75FFP100 P100 pancake filter (purple)	1000015844
	North 75852 P100 Mercury/P100	On Demand
	3M 60923 Organic vapour/Acid gas/Particulate (pink/yellow)	1000015843
	3M 2091 P100 pancake filter (pink)	1000015837
	3M 2097 P100 pancake filter with nuisance level organic vapour relief	On Demand
	3M 6003 Organic vapour/Acid gas (yellow)	On Demand

Type of Equipment	Model	Stock Code
	3M 6004 Amine/Ammonia (green)	On Demand
	3M 60929 P100 Mercury/P100	On Demand
	3M 7093B Particulates	
	3M 60926 Multi Gas/P100	
	AdFlo PAPR: HE	On Demand
	AdFlo PAPR: OV/SD/CL/HC	On Demand
Cartridges (Cont'd)	3M Breath Easy PAPR: FR-57 Organic vapour/Acid gas/Particulate (purple/yellow)	On Demand
	3M Breath Easy PAPR: Type P3 – P100 (purple)	On Demand
	North Compact Air PAPR: 40HE HEPA Filter	On Demand
	North Compact Air PAPR: 4003HE Organic Vapour/Acid Gas with HEPA Filter	On Demand
Eyeglass Inserts	Scott 804442.01 eyeglass holder, for use with Scott AV2000 face piece	On Demand
	North 760023 eyeglass frame, metal, for use with North 7600 face piece	On Demand
	3M 6878 spectacle kit, for use with 3M 6000 face piece	On Demand
Supplied Air Equipment Self Contained Breathing Apparatus (SCBA)	Scott model 2.2 AP 75i, Scott Part API452002000111	
	Scott model 2.2 AP 50, Scott Part #804272-02N	
	Scott model 4.5 AP 75 2007 NFPA Edition, Scott Part # AP2140204000311	
Supplied Air Equipment Supplied Air Breathing Apparatus (SABA)	Ska Pak Plus, Scott Part SAR322010424001	
	Ska Pak AT, Scott Part SAR4230204440001	
Supplied Air Equipment Face piece (Masks) *AV2000 CS is the default mask for use at Suncor sites. If the CS doesn't pass then they shall be fit tested on the AV 2000 Small or XL. If the end user cannot achieve a seal with either of the 3 AV 2000 models, only then should they be fit tested with an AV 3000.	Scott AV 2000, black nose cup, Kevlar head harness, EPDM Face seal, Small, Part # 804191-01	On Demand
	Scott AV 2000, black nose cup, Kevlar head harness, EPDM Face seal, X-Large, Part # 804191-03	On Demand
	Scott AV 2000, black nose cup, Kevlar head harness, EPDM Face seal, Comfort Seal, Part # 804191-08	On Demand
	Scott AV 2000 with grey nose cup, Comfort Fit, NFPA, Part # 804191-74 Kevlar	On Demand
	Scott AV 2000, grey nose cup, Small, NFPA, Part # 804191-71 Kevlar	On Demand
	Scott AV 2000, grey nose cup, X-Large, NFPA, Part # 804191-73 Kevlar	On Demand
	Scott AV 3000, black nose cup, Kevlar head harness, EPDM Face seal, Small, Part # 805773-01	On Demand
	Scott AV 3000, black nose cup, Kevlar head harness, EPDM Face seal, Medium, Part # 805773-02	On Demand
	Scott AV 3000, black nose cup, Kevlar head harness, EPDM Face seal, Large, Part # 805773-03	On Demand
	Scott AV 3000, grey nose cup, Small Kevlar, Part # 805773-81	On Demand
	Scott AV 3000, grey nose cup, Medium Kevlar, Part # 805773-82	On Demand
	Scott AV 3000, grey nose cup, Large Kevlar, Part # 805773-83	On Demand
	Scott AV 3000 HT, grey nose cup, Kevlar Head Harness, EPDM Face seal, Small, Part # 2012115-01	On Demand
	Scott AV 3000 HT, grey nose cup, Kevlar Head Harness, EPDM Face seal, Medium, part # 2012115-02	On Demand
	Scott AV 3000 HT, grey nose cup, Kevlar Head Harness, EPDM Faceseal, Large, part # 2012115-03	On Demand
	Supplied Air	Scott model Weld-O-Vista, Comfort Fit, Rubber part 805438-28

Type of Equipment	Model	Stock Code
Equipment Welding Face piece (Masks)	Scott model Weld-O-Vista, Small, Rubber part 805438-21	On Demand
	Scott model Weld-O-Vista, X-Large, Rubber part 805438-23	On Demand
	Scott model Weld-O-Vista, Comfort Fit, Kevlar part 805438-08	On Demand
	Scott model Weld-O-Vista, Small, Kevlar part 805438-01	On Demand
	Scott model Weld-O-Vista,, X-Large, Kevlar part 805438-03	On-Demand

Appendix 5: Respiratory Protective Equipment Request Form

Area	Department	Location	Date	Time
Requesting Supervisor (Print Name)		Signature		Phone
Respiratory Protective Equipment Certification Number			Account Or Work Order Number	

Equipment:

SCBA _____ SKA Pak _____ Cylinder _____

Regulator _____ Hose 50 ft _____ Hose 100' _____

Equipment Number:

SKA Pak		SCBA	Regulator		Hose		Cylinder	

Issued To (Print)	Signature	Date (yyyy/mm/dd)	Time (24 Hour Clock)
Issued By (Print)	Signature	Date (yyyy/mm/dd)	Time (24 Hour Clock)
Returned By (Print)	Signature	Date (yyyy/mm/dd)	Time (24 Hour Clock)
Accepted By (Print)	Signature	Date (yyyy/mm/dd)	Time (24 Hour Clock)

Appendix 6: Requirements of Respirator Care and Maintenance Procedure and Facility

Requirements of Respirator Care and Maintenance Facility

The maintenance of air purifying respirator equipment (APR) is a legal requirement under the Alberta OHS Code, which states that RPE should be cleaned, stored, inspected, serviced and maintained in accordance with the manufacturer's instructions. Any facility set up specifically for respirator care and maintenance on Suncor sites, must first and foremost meet Building Code requirements. IH is only responsible for validation and approval of respirator cleaning and maintenance procedures and process within the facility.

Following are minimum requirements for respirator cleaning and maintenance at a facility that has undergone the necessary Building Code inspections and approvals by Suncor's Facilities Department:

1. Program requirements: an acceptable program of respirator care and maintenance shall include:

Cleaning and sanitizing: respirator shall be cleaned and sanitized according to the respirator manufacture's instruction. If the respirator is not individually assigned, sanitizing shall be performed by a trained respiratory technician before it is handed over to the next user. The respirators should be air dried or dried using a commercial RPE drier.

Inspection: respirator shall be inspected in accordance with the manufacturer's instruction.

Storage: respirators shall be stored in a manner that will prevent deformation of rubber or other elastomeric parts and that prevents its contamination.

Dispensing: if the respirators are issued to workers after cleaning, the method to confirm fit testing and APR training requirements must be documented in the procedure and be followed by the issuers.

2. Facility requirement

Equipment: facility should provide running warm water, soap, sanitizer, soft brushes or other cleaning tools, commercial RPE drier or shelf for air drying.

Space: In the absence of a commercial RPE drier, the facility should have sufficient shelves for air drying and storage of cleaned respirators that is free of dust, ozone, sunlight, heat, extreme cold, excessive moisture, vermin, damaging chemicals, oils or greases.

3. Training requirement

Persons performing the respirator care and maintenance must be trained and competent in the inspection, cleaning and sanitizing tasks in accordance with the manufacturer's instructions. The respiratory technician will not perform repair of damaged or compromised respirators. Damaged or compromised respirators are to be replaced.

4. Program/Procedure approval and audit requirement

Before performing respirator cleaning and maintenance, submit your Respirator care and maintenance program to Industrial Hygiene for approval. This will be followed by a physical inspection of the facility and an audit of respirator cleaning and maintenance procedures. Industrial Hygiene will also conduct a periodic audit of the work practice for compliance purposes.

All of above requirements are based on the CSA Standard Z94.4-11 Selection, use and care of respirators, May 2012 and Alberta OHS Code Part 18 for respiratory protection equipment.



The following individuals have approved and signed this document.

UserName: Sheila Chernys (schernys)

Title: Dir OS Enviro & Reg

Date: Friday, 29 December 2017, 08:34 AM Mountain Time

Meaning: Approver 1 Signed

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