



OIL SANDS - EHS MANAGEMENT SYSTEM

RESPIRATORY PROTECTION STANDARD

LMS0052A

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Document Contact: Manager, Environmental Affairs and Industrial Hygiene

SCOPE AND PURPOSE

This standard applies to all Suncor Energy Inc. Oil Sands employees, contractors, vendors and visitors and is part of the Oil Sands EHS management system.

The purpose of this standard is to outline the minimum acceptable requirements for the use of respiratory protection by Suncor personnel. The standard delineates responsibilities, establishes respirator selection criteria and defines fit testing and training requirements. The goal of the 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, prior to selecting the type of respiratory protection:

- Oxygen concentration
- Nature and physical state of airborne contaminants
- Concentration of airborne contaminants
- Duration of worker exposure
- Warning properties of the contaminants
- Toxicity of the contaminants
- Need for emergency escape

RESPIRATOR SELECTION

Selection of respiratory protection will be determined by the results of the hazard assessment. The selection process will comply with CSA Standard Z94.4-02, Selection, Use and Care of Respirators. The selection process is shown in Figure 1: Respirator Selection Flowchart. Assistance in selection of respiratory protection equipment may be obtained from Industrial Hygiene department. The Industrial Hygiene department must approve any type of respiratory protective equipment that is used on site.

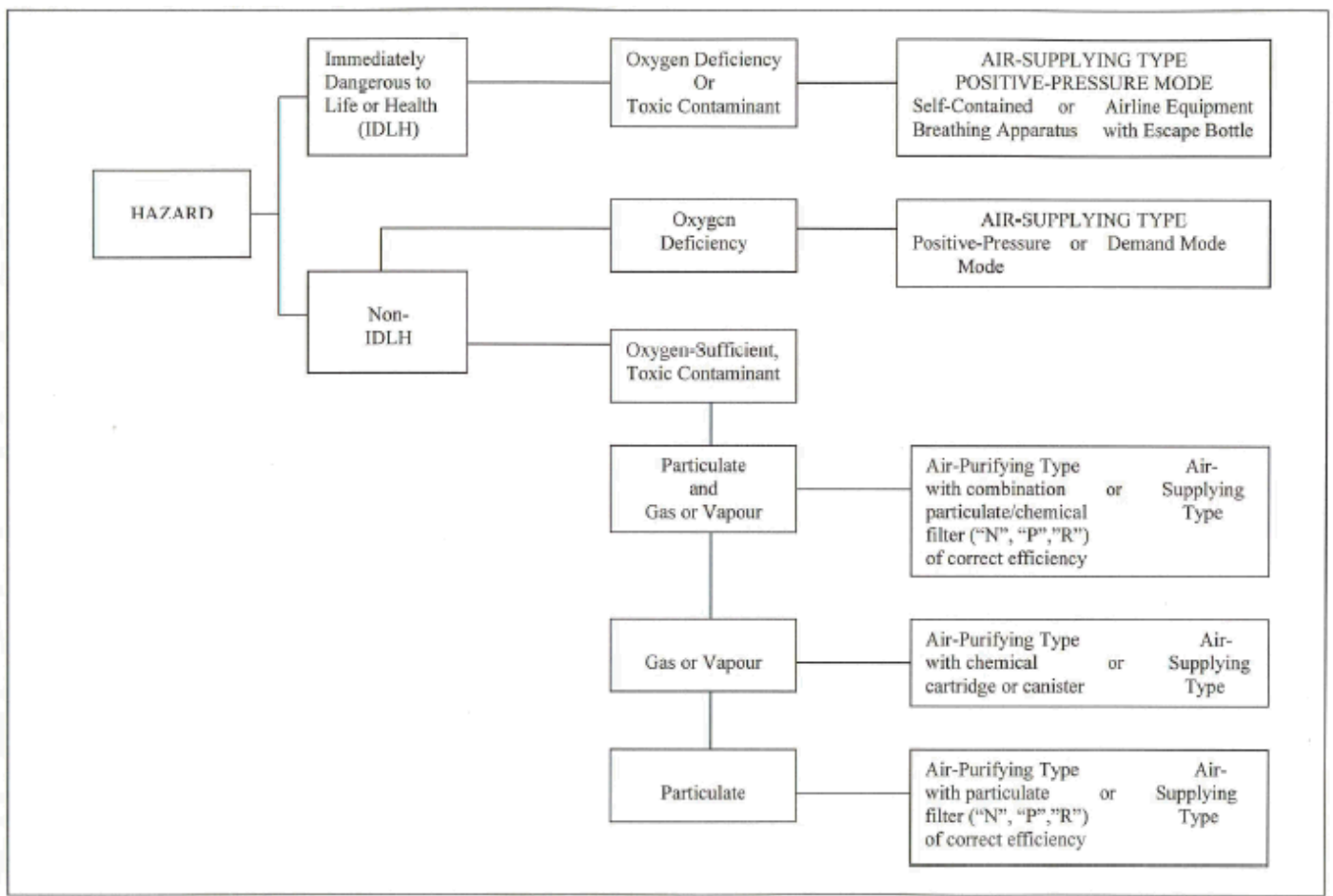
Information on any new style or type of respiratory protective equipment must be submitted to Industrial Hygiene for approval before it can be used on site.

Air-purifying respirators approved for use on site shall meet NIOSH specifications. The primary air-purifying respirators are the North 7700 and 7600 series. The back-up air-purifying respirator is the 3M 6000 series. The back-up respirator is selected if the worker cannot achieve a facial seal with the primary respirator. Industrial Hygiene should indicate the kind of back-up air-purifying respirator cartridges for each hazard.

Supplied Air Respirators approved for use on site shall comply with the requirements outlined in CSA Standard Z180.0-00, Compressed Breathing Air and Systems. Supplied Air Respirators used on site shall be positive pressure for all types. Compressed breathing air shall meet the purity requirements outlined in Part 15 of CSA Standard CAN/CSA Z180.1-00.

Employees shall be provided with the type of respiratory protective equipment identified in Appendix I: Selection of Respiratory Protective Equipment by Material. 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.

Figure 1: Selection of Appropriate Respiratory Protective Equipment



TRAINING

Using CSA Standard Z94.4-02 as a guideline, training is provided for both employees who may be required to wear respiratory protective equipment and supervisors who supervise employees required to use RPE. The Respiratory Protective Equipment training course for workers using the equipment is available from the Risk Management Learning Centre. Supervisors of workers required to wear respiratory protective equipment must ensure that they have received the Respiratory Protective Equipment for Supervisors certificate of training, also available at the Risk Management Learning Centre. Suncor recognizes and accepts Respirator Training conducted at Syncrude.

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. Re-certification of RPE training shall take place at a minimum of once a year.

USE OF RESPIRATORS

Respiratory protective equipment must be used as per manufacturer's instructions and is not to be modified in any way.

Workers donning any tight-fitting face piece must ensure that they are clean shaven. In addition, any facial jewelry 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 III: Approved Respiratory Protective Equipment. Prescriptions must be dated within 12 months of an examination by an 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. Contact lenses are not permitted to be worn with a full face mask.

Air-purifying respirators

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.**

Prior to 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 facepiece collapses slightly, and hold breath for 10 seconds. The face to facepiece seal is considered to be acceptable if the facepiece remains slightly collapsed and no inward leakage of air is noticed.



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 facepiece. The seal is considered to be acceptable if slight positive pressure can be built up inside the facepiece 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 report to the supervisor.

Supplied Air Respirators

Supplied Air Respirators includes both Self Contained Breathing Apparatus (SCBA) and Remote Supplied Breathing Apparatus (RSBA). All Supplied Air Respirators shall be positive pressure.

Supplied Air Respirators are obtained from the Emergency Services Department (ESD) Maintenance Shop. To obtain the required equipment, requestors must complete a Respiratory Protective Equipment Request Form (OSG-1052) found in Appendix IV and provide a cost centre number. The supervisor requesting the Supplied Air Respirator equipment must ensure

they have a valid Respiratory Protective Equipment for Supervisors certificate of training. Supplied Air Respirators issued for maintenance work shall be returned to the ESD Maintenance Shop within 24 hours of issue if it is used.

Appendix D of CSA Standard Z94.4-02 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. Operations requiring use of supplied air in extremely low temperature environments should be avoided and only be considered on an emergency basis. A Hazard and Operability study must be conducted before using supplied air in extremely low temperature environments. Heated hoarding or other suitable means must be used to ensure that the supplied air equipment is kept warm when atmospheric temperature is below 5°C.

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 stand-by 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.

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. The maximum recommended length of hose for warm weather conditions (greater than 5°C) is 150 feet. The maximum recommended length of hose for low temperature conditions is 100 feet.

CLEANING, INSPECTION, MAINTENANCE, AND STORAGE

Inspection, cleaning and servicing of all types of respiratory protective equipment will be conducted according to manufacturer's instructions and performed by certified respiratory maintenance technicians within the ESD Maintenance Shop.

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.

Supplied Air Respirators

All Supplied Air Respirators that are placed in operating areas on a standby basis shall be returned to the ESD Maintenance Shop at least quarterly for maintenance inspection. Any time a standby Supplied Air respirator is used it must be returned as soon as possible to ESD Maintenance Shop for servicing. If it is not possible to return used standby equipment at the time of usage, it shall be tagged out of service. In any case it must be returned for service

during the shift it was used.

Supplied Air Respirators being returned for servicing to the ESD Maintenance Shop must be accompanied by a Respiratory Protective Equipment Request Form OSG-1052, found in Appendix IV.

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.

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. The ESD Maintenance Shop technician shall affix a seal tag to the supplied air respirator equipment case indicating the date of inspection. Supplied Air Respirators are valid for 90 days from the date on the tag. Units with a date that exceeds 90 days must be returned to the ESD Maintenance Shop for exchange.

MEDICAL SURVEILLANCE AND FIT TESTING

Personnel required to wear respiratory protection during their work shall undergo a medical assessment once every two 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 type of tight-fitting mask the worker may use to ensure they can achieve an adequate facial seal.** Pulmonary function tests may be conducted on any worker with respiratory symptoms who use any type of respirator or have significant abnormalities on the Questionnaire.

Fit testing procedures shall meet the requirements outlined in CSA Standard Z94.4-02. **Suncor, TransAlta, and Transfield Asset Management System employees required to wear respiratory protection shall under go the medical assessment and fit testing within the first month of employment and before starting wearing respiratory protection devices.** Workers must be clean-shaven when a fit test is to be conducted. Appendix II 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 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 that 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 audit of the effectiveness of the respiratory protection standard shall be conducted on a yearly basis, with reports issued to the appropriate Business Area General Managers.

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

Business Area General Managers are responsible to ensure that records are kept for supplied air respirator training, 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 & RESPONSIBILITIES

The Manager of Environmental Affairs and Industrial Hygiene is accountable for the yearly evaluation, maintenance and revision of this standard. The Industrial Hygiene department shall be responsible for the yearly audit 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, Emergency Services is responsible for ensuring the maintenance program for the various types of respiratory protection complies with manufacturer's 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.

Oil Sands 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.

EXCEPTIONS

Appendices I, II and III 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 prior to implementing the update or change.

DEFINITIONS

Supplied Air Systems include Self Contained Breathing Apparatus (SCBA), Skat Paks, and ancillary equipment such as regulators, hoses 50' and 100' 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 for 1/2 inch on either side of the sealing edge, moustaches to be trimmed to the corner of the mouth, and sideburns shall not extend more than 1/2 inch below the earlobe and inwards on the face.

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

REFERENCES TO RELATED DOCUMENTS

Workplace Health and Safety Bulletin: Guideline for the Development of a Code of Practice for Respiratory Protective Equipment. PE004, May 2007

Workplace Health and Safety Bulletin: Respiratory Protective Equipment: An Employer's Guide. PPE001, October 2007

Canadian Standards Association Standard Z94.4-02 Selection, Use and Care of Respirators

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

APPENDIX I: SELECTION OF RESPIRATORY PROTECTIVE EQUIPMENT BY MATERIAL

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	North 7700	North N7500-4
Ammonia	Upgrading - Vessel entry in Plant 7 and 55	North 7700	North N7500-4
		North 7600	North N7500-4
Asbestos	Plant wide ¹ - Low and Medium Risk Procedure	North 7700	North 7580 P100
		North 7600	North 7580 P100
	Plant wide - High Risk Procedures	North 7600 with North Compact Air PAPR assembly	
		Supplied Air Respirator	
Anthrosite	Firebag – Area 3000	3M-8210 or 3M-8511	
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
Biological Hazards	Plant wide - Sewage Handling Plant wide – Clean up of Rodent droppings	North 7700	North 7580 P100
Caustic Soda	PCPS - Boiler Cleanouts Extraction – Plant 3 Caustic mixing/loading facility and Plant 82 tanker trailer Firebag – water treatment	North 7700	North 7580 P100
		North 7600	North 7580 P100
		Supplied Air Respirator	
Calcium Chloride	Plant wide - De-icing	3M-8210 or 3M-8511	
Calcium Silicate, Fibre Glass and other non-asbestos insulation	Plant wide - 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 PCPS - Changing cylinders in Water Treatment Plant	Supplied Air Respirator	

RESPIRATORY PROTECTION

APPENDIX I: SELECTION OF RESPIRATORY PROTECTIVE EQUIPMENT BY MATERIAL

HAZARDS	LOCATION /CONDITION	MASK	CARTRIDGE
	PCPS - Checking chlorine room (no cylinder change)	North 7600	North N7500-3
Cleaners/Degreasers, hydrocarbon based (e.g. Action products, Penmul, Citrikleen,)	Extraction Plants Firebag Plants	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
	PCPS - Powerhouse tripper gallery, crusher house, ballmill maintenance and #5 conveyer	North 7600	North 7583 P100
Confined Space Entry (Level 1)	Plant Wide	Supplied Air Respirator	
Control OS 5900 Control OS 5612	PCPS - Water Treatment Plant	North 7700 1	North N7500-4
Dearborn VOS 68	PCPS - Spill Cleanup	North 7700	North N7500-4
Disodium Phosphate	Upgrading - Plant 6 PCPS - Water Treatment Plant	3M-8210 or 3M-8511	
Dust, Nuisance	PCPS - handling of magnesium oxide, alum, phosphate and resin	3M-8210 or 3M-8511	
Emergency Response	Plant wide – Large Spill Cleanup	Supplied Air Respirator	
Fiberglass	Laboratory – Small Spill Cleanup	Refer to MSDS	
Fiberglass Epoxy	Mining - Body Work Firebag Piping and Tank Repairs	3M-8210 or 3M-8511	
Floor Dry	Plant wide - Extensive application by brush	North 7700	North N7500-3
Fly Ash	Plant Wide	3M-8210 or 3M-8511	
Gas Oil	PCPS - Fly Ash Silo, ESP 5 th Level, PCPS - Maintenance activities, ESP 3 rd Level	North 7700	North 7580 P100
Hydrogen Chloride	Upgrading - Sampling, spills or maintenance in open pipes or vessels Firebag – Area 3000 and DWT acid tanks leaks	North 7700	North N7500-3
	Handling liquid	Supplied Air Respirator	
		North 7700	North N7500-3
		North 7600	North N7500-3

RESPIRATORY PROTECTION

APPENDIX I: SELECTION OF RESPIRATORY PROTECTIVE EQUIPMENT BY MATERIAL

HAZARDS	LOCATION /CONDITION	MASK	CARTRIDGE
Hydrogen Sulphide	Upgrading and Firebag - Taking sour samples, breaking flanges, vessel entry, Plant H ₂ S Alarm Firebag – Tank venting	Supplied Air Respirator	
Kerosene	Escape from Coke Pit	Scat-Pak Air Supply	
Kleen MCT 511	Upgrading - Sampling, spills or maintenance in open pipes or vessels Firebag – Used for Herman Nelson heaters PCPS - RO Units	North 7700 North 7700	North N7500-3 North N7500-3
Lead Containing Materials	Plant wide - Lead Paint removal Plant wide - Lead Soldering	North 7700	North 7580 P100
Lime	PCPS - Water Treatment Plant	North 7700 North 7600 3M-8212 or 3M-8293	North 7580 P100 North 7580 P100 North 7580 P100
Magnesium Oxide	Firebag - warm lime softener	North 7700	North 7580 P100
Mercaptan	Firebag - warm lime softener PCPS - Mercaptan Loading	North 7700	North 7580 P100
Mercury	Laboratory – spill response Upgrading – 52E-302	North 7700 North 7700	North N7500-3 North N7500-52 North 75852 P100
Metal Dusts	Plant wide - Grinding or cutting Plant Wide	3M-8210 or 3M-8511 Refer to MSDS	
Miscellaneous Chemicals			
Mold	Plant Wide	North 7700 North 7600 Supplied Air Respirator	North 7580 P100 North 7580 P100

APPENDIX I: SELECTION OF RESPIRATORY PROTECTIVE EQUIPMENT BY MATERIAL

HAZARDS	LOCATION /CONDITION	MASK	CARTRIDGE
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
Naturally Occurring Radioactive Material (NORM)	Upgrading – vessel entry, tank farm Extraction - Vessel entry in Plants 4/16/87	Supplied Air Respirator	
	Upgrading – refer to LMS0079A for specific locations	North 7700	North 7580 P100
Optisperse	PCPS - Water Treatment Plant	North 7700	North 7583 P100
Oxygen Deficiency	Plant wide - Entry into confined spaces	Supplied Air Respirator	
Paint – Vapour or Aerosols Paint Thinners	Plant wide - Painting	North 7700	North 7583 P100
	Plant wide - Maintenance shops	North 7700	North N7500-3
Petrosol Parts Wash Solvent	Plant wide	North 7700	North 7583 P100
		Supply air respirator	
Polychlorinated biphenyls (PCBs)	Plant wide	North 7600	North 7583 P100
		Supply air respirator	
Potassium Carbonate	Upgrading - Plant 6 loading into sump	North 7700	North 7580 P100
Refractory Ceramic Fibre (Kaowool)	Plant wide - Cutting or handling RCF insulation	North 7700	North 7580 P100
Scaletrol PCD9317	PCPS - Water Treatment Plant	North 7700	North 7580 P100
Silica, contained in Refractory, Limestone or Tailings Sand or Mine Sand	Upgrading - Refractory maintenance work PCPS - FGD plant	North 7700	North 7580 P100
	Extraction Tailings – pipeline construction Firebag - Refractory maintenance work and DWT Filter Press	North 7600	North 7580 P100
	Mining - Limestone pit, Mine operation areas with elevated airborne dust	North 7700	North 7580 P100
	Mining - Mining engineering working areas with elevated airborne dust	North 7600	North 7580 P100

RESPIRATORY PROTECTION

APPENDIX I: SELECTION OF RESPIRATORY PROTECTIVE EQUIPMENT BY MATERIAL

HAZARDS	LOCATION /CONDITION	MASK	CARTRIDGE
	Mining - Mining maintenance field work areas with elevated airborne dust	3M-8210 or 3M-8511as temporary use	
Soda Ash	Firebag – warm lime softener	North 7700	North 7580 P100
Sodium Hydroxide	Upgrading - Plant 6 & offplots Firebag – Water Treatment Areas	North 7600	North 7580 P100
Steamate NA9680	PCPS - Water Treatment Plant	North 7700	North N7500-4
Sodium Nitrate	PCPS - 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 metres of coke chute wall Mining - Coke Dump at Pond 4 PCPS - Powerhouse where concentration is above 1 ppm Firebag – Steam Gens, Flares, and SRU	North 7600	North 7583 P100
Welding Fume	Plant wide - Various maintenance shops and plant areas where welding activities are conducted	North 7700 with North BP1002 North 7600 with welding attachment and BP1002	North 7580 P100 North 7583 P100 North 7583 P100 North 75FFP100
		3M-8212 or 3M-8293	
		3M Breathe Easy17 PAPR with Welding Headgear Assembly 3M Ad-Flo PAPR with Speedglas 9002 Welding Helmet 3M Fresh-air II Supplied Air System with Speedglas 9000 Welding Helmet	3M Type P3 or 3M Type FR-57 AdFlo HE or AdFlo HE + OV/SD/CL/HC Not Required

The term Plant Wide includes both Firebag and Oilsands operations

RESPIRATORY PROTECTION

APPENDIX II: FIT TESTING AND TRAINING REQUIREMENTS BY POSITION

Business Area	Department	Position	Fit Testing				Training				
			3M-8210 or 3M8511	North 7600	North 7700	AV-2000	APR	Supplied Air	PAPR	Scat- Pak	
Upgrading	Operations	Operators,			X	X	X	X			
		Shift Supervisors			X	X	X	X			
		Millwrights			X		X				
	Maintenance	Shift Millwrights			X	X	X	X			
		Insulators		X	X	Designated	X	Designated	X		
		Electricians/Instrumentation Techs			X	X	X	X			
		Laborers			X	X	X	X			
		Pipefitters			X	X	X	X			
		Boilermakers			X	X	X	X			
		Specialists, Supervisors			X	X	X	X			
Engineering	Process Engineers			X		X					
	QA			X	X	X	X				
	Inspectors, Supervisors			X	X	X	X				
PCPS	Operations	Operators			X	X	X	X			
		Insulators		X	X		X		X		
		Labourers		X	X		X		X		
	Maintenance	Vessel Entry Monitors				X		X			
		All Other Trades			X		X				
		Process Engineer			X		X				
		Inspectors			X	X	X	X			
	Engineering	Operators			X	X	X	X			
		Shift Supervisors			X	X	X	X			
		All trades in Plants 4/16/87 and Response Crew			X	X	X	X			
QA	Maintenance Coordinators, Supervisors in Plants 4/16/87			X	X	X	X				
	Supervisors in Plants 4/16/87			X	X	X	X				
	All trades in Plants			X	X	X	X				
Extraction	Maintenance	All trades in Plants			X	X	X				
		Maintenance Coordinators, Supervisors in Plants 4/16/87			X	X	X	X			
		Supervisors in Plants 4/16/87			X	X	X	X			

APPENDIX II: FIT TESTING AND TRAINING REQUIREMENTS BY POSITION

Business Area	Department	Position	Fit Testing				Training						
			3M-8210 or 3M8511	North 7600	North 7700	AV-2000	APR	Supplied Air	PAPR	Scat- Pak			
		3/82/85/86/FTPH/BRFT/Offplots											
		Maintenance Coordinators, Supervisors in Plants 3/82/85/86/FTPH/BRFT/Offplots			X				X				
	Tailings Maintenance	Boom Crew, Welders, Maintainers/Operators Supervisors, Maintenance Coordinators			X				X				
	Engineering	Process Engineer, Reliability Engineer			X				X				
	QA	Inspectors, Supervisors			X				X				
	All	Supervisors, Specialists, Maintenance Coordinators,			X				X				
Growth Integration and Turnaround	Shift Operations	Process Operators			X				X				
	Mechanical/E&I	Electricians/Instrumentation Techs			X				X				
	Operations	Operators, Supervisors, General Foreman			X				X				
Firebag	Maintenance	All positions		X					X				
		Coke Dump Operators			X				X				X
	Operations	Haul and fuel truck, grader and backhoe operators and shift supervisors	X		X				X				
		Field mechanics and supervisors	X		X				X				
		Electricians and utilities workers	X		X				X				
	MEM	Lubeman	X		X				X				
		Millwright	X		X				X				
		Welders	X		X				X				X
		Steam Bay Attendants	X		X				X				

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Business Area	Department	Position	Fit Testing				Training				
			3M-8210 or 3M8511	North 7600	North 7700	AV-2000	APR	Supplied Air	PAPR	Scat- Pak	
Operations Support	Laboratory	Laborers	X		X		X				
		Technicians, Specialists, Unit Leaders, Supervisors, Safety Reps			X		X		X		
Sustainability	EHS	Industrial Hygienists			X		X		X		
	Emergency Services	Emergency Response Officers			X		X		X		
Maintenance & Construction	Site Wide Services	Electricians, HVAC Technicians, Instrument Mechanics			X		X		X		

APPENDIX III: APPROVED RESPIRATORY PROTECTIVE EQUIPMENT

Type of Equipment	Model	Stock Code
Disposable Dust Mask	3M-8210 N95	1000015827
	3M-8511 N95	On Demand
	3M-8212 N95	1000015828
	3M-8293 P100	On Demand
Elastomeric Facepieces	North 7600 Full Face Mask	1000015833
	North 7700-30L Large ½ Mask	1000015824
	North 7700-30M Medium ½ Mask	1000015825
	North 7700-30S Small ½ Mask	1000015826
Powered Air Purifying Respirators (PAPR)	3M 6300 Large ½ Mask	1000015831
	3M 6200 Medium ½ Mask	1000015830
	3M 6100 Small ½ Mask	1000015829
	3M 6900 Large Full Face Mask	On Demand
Welder's Respirators	3M 6800 Medium Full Face Mask	On Demand
	3M 6700 Small Full Face Mask	On Demand
	North 7600 Full Face Mask with 8404 Welding Attachment and BP1002 Welder's Backpack	On Demand
	North BP1002 Welder's Backpack, attached to North 7700 series ½ Masks	1000015835
Cartridges	3M AdFlo PAPR System with Speedglas 9002 Welding Helmet	On Demand
	3M Fresh Air II Supplied Air System with Speedglas 9000 Welding Helmet	On Demand
	3M Breathe Easy PAPR with Welding Headgear Assembly	On Demand
Cartridges	North 7600 with North CA102D Compact Air Blower & Battery Assembly	On Demand
	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

RESPIRATORY PROTECTION

APPENDIX III: APPROVED RESPIRATORY PROTECTIVE EQUIPMENT

Type of Equipment	Model	Stock Code
	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
	3M 6004 Amine/Ammonia (green)	On Demand
	3M 60929 P100 Mercury/P100	On Demand
	AdFlo PAPR: HE	On Demand
	AdFlo PAPR: OV/SD/CL/HC	On Demand
	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 Vapor/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

APPENDIX IV: RESPIRATORY PROTECTIVE EQUIPMENT REQUEST FORM



OIL SANDS
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' _____ HOSE 100' _____

EQUIPMENT NUMBER:

SKA PAK	SCBA	REGULATOR	HOSE	CYLINDER

ISSUED TO (PRINT)	SIGNATURE	DATE (YY/MM/DD)	TIME (24 HOUR CLOCK)
ISSUED BY (PRINT)	SIGNATURE	DATE (YY/MM/DD)	TIME (24 HOUR CLOCK)
RETURNED BY (PRINT)	SIGNATURE	DATE (YY/MM/DD)	TIME (24 HOUR CLOCK)
ACCEPTED BY (PRINT)	SIGNATURE	DATE (YY/MM/DD)	TIME (24 HOUR CLOCK)



The following individuals have approved and signed this document.

UserName: Kevin Gertken (kgertken)

Title:

Date: Monday, 01 March 2010, 10:30 AM Mountain Standard Time

Meaning: Approver 1 Signed

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