LELAND OLDS STATION SAFETY PROCEDURE				
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Affected Department (s):	epartment (s): Origination		artment	
			SAFETY	
ALL		Final Approval		Date
		Plant	Manager	9-25-2023
Subject				
RESPIRATORY PROTECTION PROGRAM				

#### I. PURPOSE

- A. To establish positive controls to protect the health of employees who may be exposed to hazardous atmospheres in the conduct of their work through the proper selection, maintenance and use of respirators.
- B. Where feasible, exposure to hazardous atmospheres will be eliminated or controlled by engineering and/or administrative controls, (i.e. general and local ventilation, enclosure or isolation, substitution of less hazardous process or material, and limiting exposure).

#### II. SCOPE

- A. Respirators will be used when engineering and/or administrative controls of respiratory hazards when it is not feasible or while engineering controls are being installed.
- B. This procedure applies to all employees who wear a respirator to safely perform their assigned duties.
- C. This procedure describes the respiratory protection program. It is intended for Supervisors and all employees. Should any additional information be needed regarding the best respiratory protective device for a particular problem, the availability of approved respirators, or items not specifically covered in this procedure, contact your supervisor or the Safety Department.
- D. This procedure shall apply to all personnel who are required to wear a respirator (including contractors) to perform assigned duties. Contractor supplied respiratory equipment must meet or exceed the same specifications in this procedure.

#### III. DEFINITIONS

Air-Purifying Respirator	Respirator with an air-purifying filter, cartridge, or canister that removes specific air contaminants by passing ambient air through the air-purifying element.
Assigned Protection Factor (APF)	The level of respiratory protection that a respirator or class of respirators is designated by OSHA to provide to employees when properly worn. The actual protection factor measured by quantitative fit testing is called a fit factor and is expected to be higher than the assigned protection factor.
Atmosphere Supplying Respirator	Respirator that supplies the respirator user with breathing air from a source independent of the ambient atmosphere, and includes supplied-air respirators (SAR) and self-contained breathing apparatus (SCBA).
<u>Canister</u> <u>or Cartridge</u>	Container with a filter, sorbent, or catalyst, or combination of these items, which removes specific contaminants from the air passed through the container.



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Oxygen Deficient Atmosphere	Atmosphere with oxygen content below 19.5% by volume.
Negative Pressure Respirator (tight fitting)	Respirator in which the air pressure inside the facepiece is negative during inhalation with respect to the ambient air pressure outside the respirator.
Inhalation Valve	Device that allows respirable air to enter the facepiece and prevents exhaled air from leaving the facepiece through the intake opening.
IDLH	Immediately Dangerous to Life and Health.
HEPA High efficiency particulate filter	A filter that is at least 99.97% efficient in removing mono-dispersed particles of 0.3 micrometers in diameter. The equivalent NIOSH 42 CFR Part 84 particulate filters are the N100, R100, and P100 filters
Half-Mask	Respirator face piece covering nose and mouth and extending over the chin, used with air-purifying filters or chemical cartridges.
Grade D Breathing Air	Compressed or supplied air that meets specifications detailed in G7.1 of the Compressed Gas Association's publication entitled "Commodity Specification for Air", which include: Oxygen (19.5%-23.5%), Carbon Monoxide (no more than 10 ppm, Carbon Dioxide (No more than 100 ppm), Oil (condensed hydrocarbons no more than 5 mg/m³), and Odor (no noticeable).
Full-Face	Respirator face piece covering the full face, used with air-purifying filters or chemical cartridges
Fit-Test	The use of a protocol to qualitatively or quantitatively evaluate the fit of a respirator on an individual. (See also Qualitative fit test QLFT and Quantitative fit test QNFT.)
Fit Factor	A quantitative estimate of the fit of a particular respirator to a specific individual. Typically estimates the ratio of the concentration of a substance in ambient air to its concentration inside the respirator when worn.
Filter Air Purifying Element	A component used in respirators to remove solid or liquid aerosols from the inspired air.
Facepiece	That portion of a respirator that covers the wearer's nose and mouth in a half-mask facepiece; or nose, mouth and eyes in a full facepiece. It is designed to make a gas tight or dust tight fit with the face and includes the headbands, exhalation valve(s), and connections for air-purifying device or respirable gas source or both.
Exhalation valve	A device that allows exhaled air to leave a respirator and prevents outside air from entering through the valve.
Demand-Respirator	An atmosphere-supplying respirator that admits breathing air to the facepiece only when a negative pressure is created inside the facepiece by inhalation.
Covered Employee	An employee that is a member of a Similar Exposure Group or performs tasks that require the use of respiratory protection.



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Positive Pressure Respirator	Respirator in which the pressure inside the respiratory inlet covering exceeds the ambient air pressure outside the respirator.
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Pressure Demand- Respirator	A respirator in which the pressure inside the respiratory inlet covering exceeds the ambient air pressure outside the respirator.
Qualified Employee	Qualified employee is an individual that has been trained on and understands the Respiratory Protection Program Requirements.
QLFT Qualitative Fit Test	A pass/fail fit test to assess the adequacy of respirator fit that relies on the individual's subjective response to the test agent.
QNFT Quantitative Fit Test	An assessment of the adequacy of respirator fit by numerically measuring the amount of leakage into the respirator.
Self-Contained Breathing Apparatus (SCBA)	Atmosphere-supplying respirator for which the breathing air source is designed to be carried by the user.
Service Life	Period of time that a respirator, filter or sorbent or other respiratory equipment provides adequate protection to the wearer.
<u>User Seal Check</u>	An action conducted by the respirator user to determine if the respirator is properly seated to the face

### IV. REFERENCES

### A. Regulatory References

Number	Description
29 CFR 1910.134	Respiratory Protection Program
29 CFR OSHA 1910.134 Appendix A	Fit Testing Procedures
29 CFR OSHA 1910.134 Appendix B-1	User Seal Check Procedures
29 CFR OSHA 1910.134 Appendix B-2	Respirator Cleaning Procedures
29 CFR OSHA 1910.1000 (Subpart Z – Toxic & Hazardous Substances)	Air Contaminants
AVS Safety Procedures	Welding and Cutting Procedure No. 252

#### B. Industrial References

Number	Description
ANSI Z88.2 - 2015	Practices for Respiratory Protection
ANSI Z88.6 - 2006	Respiratory Protection – Respirator Use – Physical Qualifications for Personnel



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ANSI Z88.7 - 2001	Color Coding of Air-Purifying Respirator Canisters, cartridges, and filters
CGA G-7.1-2018	Commodity Specification for Air

#### V. RESPONSIBILITIES

- A. Respirator Program Administrator responsibilities are of the Safety Coordinator.
  - 1. The Safety Coordinator is responsible for implementing and maintaining the respiratory protection program at the Leland Olds Station and conducting evaluations to determine the program's effectiveness.
  - 2. Identifying work areas, processes or tasks that require workers to wear respirators, and evaluating hazards.
  - 3. Selection of respiratory options.
  - Monitoring respirator use to ensure that respirators are used in accordance with their certifications.
  - 5. Arranging for and/or conducting training.
  - 6. Ensure proper storage and maintenance of respiratory protection equipment.
  - 7. Arranging for and/or conducting quantitative fit testing.
  - 8. Maintaining records required by the program.
  - 9. Updating the written program, as necessary, to reflect workplace changes that affect respirator use.
- B. DGC Medical Department is responsible for:
  - 1. Evaluating the medical status of employees who may be required to wear respiratory equipment to determine if they are physically capable of performing work while wearing a respirator.
  - 2. Retaining all medical evaluations (questionnaires and pulmonary function tests)
- C. Supervisors are responsible for:
  - 1. Supervisors are responsible for ensuring that this Respiratory Protection Program is implemented in their particular areas and initiating discussions regarding respiratory protection prior to applicable work tasks.
  - 2. In addition to being knowledgeable about the program requirements for their own protection, Supervisors must also ensure that the program is understood and followed by all employees under their supervision.
  - 3. Ensure that employees under their supervision (including new hires) have received appropriate training, fit testing, and annual medical evaluation.



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- 4. Recording complaints related to respirator usage; acting promptly to investigate complaints, correcting hazards, and directing personnel to DGC Medical for a medical evaluation if necessary.
- 5. Be aware of tasks requiring the use of respiratory protection and ensure that employees working in hazardous atmospheres are wearing appropriate respiratory protection.
- 6. Ensuring that employees that voluntarily wear a respirator have been medically qualified.
- 7. Monitoring work areas and enforcing Respirator Program requirements.

#### D. Qualified Employees are responsible for:

- 1. Each employee has the responsibility to wear their respirator when and where required, and in the manner in which they were trained.
- 2. Checking their respirator prior to assignment to be sure that it is the proper type for the exposure and work to be performed.
- Inspecting the respirator immediately before each use, in accordance with training provided.
- Performing negative and positive-fit test procedures to ensure a proper fit and wearing the correct respirator and filter/cartridge combinations for the specific job or task.
- 5. Adhering to restrictions placed on work activities by DGC Medical Department.
- 6. Immediately reporting any defects in the respiratory protection equipment to their supervisor. Whenever there is a respirator malfunction, immediately evacuate to a safe area, report the malfunction to your immediate Supervisor.
- 7. Prompt reporting of any symptoms of illness that may be related to respirator use or exposure to hazardous atmospheres. Health concerns or changes in health status related to respirator use will be reported to DGC Medical Department.
- 8. Proper maintenance, care, and storage of their respirator. Reusable respirators should be washed at the end of each work shift, when used, and disinfected at least weekly. Self-Contained Breathing Apparatus (SCBA) will be disinfected following each use.
- 9. Qualified Employees must be clean-shaven in all facial areas, prior to each work shift where the respirator contacts and seals to the face. If the employee is not clean shaven, they will be required to take vacation hours until they are clean shaven. Facial hair in the respirator seal areas is not permitted. An unshaven condition to the extent of heavy stubble or a single, full day's growth is prohibited.
- 10. Headpieces, band-aids, goggle straps, or other items are not permitted beneath the sealing surface of a respirator.



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- 11. Short mustaches, soul patch and sideburns that are trimmed so that no hair underlies the seal of the respirator are permitted.
- 12. See Attachment 2 for more detail.

#### VI. MEDICAL APPROVAL FOR RESPIRATOR USE

- A. All respirator users shall complete a Respirator Medical Evaluation Questionnaire administered by DGC Medical Department annually. Further medical tests may be required by DGC Medical based on responses recorded on the questionnaire.
- B. A medical re-evaluation shall be required if:
  - 1. The employee reports signs or symptoms related to the inability to wear a respirator.
  - The DGC Medical Department, Safety Coordinator, or Supervisor determines a need.
  - 3. A change in the workplace conditions substantially increases the physiological burden placed on the employee.
- C. DGC Medical Department will provide a written certification that lists any restrictions on the employee's use of respiratory protection. The certification shall not disclose any confidential medical information but shall clearly list or describe restrictions to be observed. A copy shall be provided to the employee, their supervisor and respirator administrator.
  - If an employee is not authorized to use a respirator, then he/she will not be assigned work that requires the use of a respirator, nor will he/she be allowed to use a respirator.

#### **VII. FIT TESTING**

- A. The Safety Coordinator and Administrative Assistant(s) are responsible for conducting quantitative fit testing.
- B. Employees directed or required to wear respirators to perform work at the station will be fit tested at least annually. Depending on work assignments, employees will be fit tested on a half-mask and/or full-face respirator.
- C. Employees must obtain an overall fit factor of 100 or above for half-mask respirators and 500 or above for full-face respirators.
- D. Upon completion of fit testing, employees can obtain a half mask and/or full-face cartridge respirator from the warehouse.
- E. Additional fit testing will be repeated immediately if an employee has; a weight change of 20 pounds or more, significant facial scarring in the area of the face piece seal, significant dental changes, i.e., multiple extraction without prosthesis, or dentures, reconstructive or cosmetic surgery and any other condition that may interfere with face piece sealing.



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#### VIII. WORKSITE-SPECIFIC PROTECTION PLAN

- A. Each job that involves the required use of a respirator will have a job-specific respiratory plan and be documented using the Job Safety Analysis (JSA) form.
- B. The contaminants must be known in order to determine the type of respiratory equipment needed for a particular job. Employees will check the Safety Data Sheet (SDS) for the chemical being worked with to identify specific chemical ingredients and personal protective equipment requirements.
- C. Where the presence or potential presence of airborne contaminants is recognized or suspected, the Safety Coordinator or supervisor may be called upon for further direction.
- IX. When hazardous atmospheres are recognized, elimination of the hazardous material or feasible engineering and work practice controls shall be instituted to reduce contaminant levels to within allowable limits. If such measures are not completely successful or if the condition is temporary, personal protective equipment, including respiratory protection shall be selected and worn.

#### X. AVAILABLE RESPIRATORY EQUIPMENT

- A. Reusable cartridge respirators are available from the warehouse and are used to protect the wearer from limited exposures to specific substances, depending on the cartridge selected.
- B. Reusable cartridge respirators must <u>NOT</u> be used in oxygen deficient atmospheres where the oxygen content is at or below 19.5 percent, or above 23 percent. The following types are currently available:
  - 1. 3M half-mask cartridge respirators in three sizes: small, medium, and large.
  - 2. North Half-masked cartridge respirators in 2 sizes: medium and large
- C. Respirator cartridges/filters are labeled and color-coded with the NIOSH approval label. Respirator users shall ensure the label is not removed and remains legible. The following types are currently available:
  - 1. 3M 60926, Pink Color, Used for protection against Ammonia, Chlorine, Chlorine Dioxide, Formaldehyde, Hydrogen Chloride, Hydrogen Fluoride, Hydrogen Sulfide, Methylamine, Organic Vapor, Sulfur Dioxide. 3M-2097, Round, Purple or Pink Color, HEPA, P100 Particulate filter with nuisance level organic vapor (odor) relief below the OSHA PEL. Used for solids such as those from processing coal dust and fly ash. Liquid or oil based particles from sprays that do not emit harmful vapors. Metal fumes produced from welding, brazing, cutting and other operations involving heating of metals. Approved for Asbestos.
  - 2. 3M-2097, Round, Purple or Pink Color, HEPA, P100 Particulate filter with nuisance level organic vapor (odor) relief below the OSHA PEL. Used for solids such as those from processing coal dust and fly ash. Liquid or oil-based particles from sprays that



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do not emit harmful vapors. Metal fumes produced from welding, brazing, cutting, and other operations involving heating of metals.

- 3. 3M-5N11, Pre-Filter Pads For Chemical Cartridge, N95 Particulate. Pre-Filter is designed for protection against certain non-oil particulate. Pre-Filter pads with retainers are available for use over chemical cartridges, such as yellow, organic vapor/acid gas to remove particulates, dusts, mists, fumes, radionuclides, radon daughters and prevent fouling of the chemical cartridge. Not For Asbestos.
- 3M-8210 (N95) Disposable Filter Masks. Used for nuisance dusts and liquid particles from sprays that do not emit harmful vapors. Voluntary Use Only- NOT TO BE USED IN RESPIRATOR REQUIRED AREAS.
- 5. North N75003L (Organic Vapor/Acid Gas)-Approved for Chlorine, Hydrogen Chlorine, Sulfur Dioxide, Hydrogen Fluoride, Hydrogen Sulfide, Chlorine Dioxide)
- 6. North 75FFP100- For all particulates

Recommended Useful Life of Cartridges/Scheduled Change-Out

- 7. To protect employees, the chemical cartridge must be changed before a significant breakthrough occurs. The service life of cartridges is dependent upon the environment in which they are used.
- 8. If filter becomes damaged, soiled, or breathing becomes difficult, leave the contaminated area and dispose of the filter. Dispose of it immediately if you can smell, taste or irritation occurs. If used in environments containing only oil aerosols, dispose of filter after 40 hours of use or 30 days, whichever is first.
- 9. Always leave the contaminated area before changing cartridges.

Self-Contained Breathing Apparatus (SCBA)

- 10. Self-contained breathing apparatus will provide protection in toxic atmospheres with concentrations to the OSHA IDLH (Immediately Dangerous to Life & Health) or when oxygen levels are in the range of 17 to 19.5 percent. Users of self-contained breathing apparatus shall be trained members of the LOS First Response Team Only.
- 11. Available self-contained breathing apparatus equipment includes the following:
  - a) MSA Firehawk is a positive pressure, self-contained, breathing apparatus that can be used independently or with an airline for confined space entry, rescue, etc. This unit is rated for 30 minutes of moderate work.
- D. Other



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- Air supplying/airline respirators are intended to protect from limited exposures to specific toxic substances.
- 2. MSA Prem Aire Cadet 5-minute SKA-Pak is a positive pressure, self-contained unit intended for escape only or to supplement airline equipment providing escape abilities.
- 3. Special Air Supplied Respiratory Equipment. Sand blasting hood with airflow supply from an oil-free Allegro air pump (for use only in non-toxic atmospheres with oxygen content between 19.5 and 23 percent).

#### XI. RESPIRATOR SELECTION

- A. Respirator selection must be determined from data, exposure duration, environmental or working conditions and route of exposure. Additional consultation from the Safety Department may be necessary to help determine adequate protection.
- B. The Safety Coordinator or immediate supervisor will assist areas in the evaluation, measurement of job hazards and ultimately recommend the type of respirator to be used.
- C. Respirators will be issued by the warehouse and worn by exposed employees whenever airborne contamination levels are not otherwise reduced to within the allowable limits. Employees are not permitted to supply their own respiratory protection equipment.
- D. Spectacle kit with corrective lenses will be provided as needed to each employee required to wear a full-face respirator.
- E. The following areas and/or assignments require the use of respiratory protection:

AREA OR JOB	RESPIRATOR TYPE	LIMITS OF USE
Working in Sewage Lift	Self-Contained Scott Air	IDLH as determined by atmospheric
Station	Pack (SCBA)	monitoring
Sandblasting	Sandblasting Hood and filtered air supply to hood.	IDLH as determined by atmospheric monitoring
AREA OR JOB	RESPIRATOR TYPE	LIMITS OF USE
Fly Ash Silo Mining	Half Mask, 3M 6000, 7000	3M-2097 HEPA Cartridge, P100
Baghouse Bag     Repair &     Replacement	Or Full Face 3M 7000 Series	Particulate filter approved for nuisance level organic vapor (odor) relief below the OSHA PEL. Approved for solids such as those
3. Grinding, cutting, welding, or assisting in operations with specialty metals, such as stainless steel, galvanized	Respirator with 3M-2097 HEPA cartridges or 3M 60296 multi-gas/vapor cartridges.  Or	from processing coal dust and fly ash. Liquid or oil-based particles from sprays that do not emit harmful vapors. Metal fumes produced from welding, brazing, cutting, and other operations involving heating of
metals or those	<u> </u>	metals. Approved for Asbestos



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1. Sweeping in Coal System or when coal dust is present. 2. When fly ash is visible in Scrubber/Bagho use Areas. 3. Cleaning Fly ash Duct Work 4. Baghouse Bag Repair & Replacement 5. Fly Ash Silo Mining  Mining  Mining  Half Mask, 3M 6000, 7000 Series Or  Series O	coated with chromium, copper, chlorine, fluorine or bromine.	North Half-Masked 7700 Series	Approved for respiratory protection against dust and mists having a time weighted average not less than .05 milligram per cubic meter or 2 million particles per cubic foot. Not for use in atmospheres containing less than 19.5% oxygen. Not for entry into atmospheres immediately dangerous to life or death.  North N75003L (Organic Vapor/Acid Gas)-Approved for Chlorine, Hydrogen Chlorine, Sulfur Dioxide,
Coal System or when coal dust is present.  2. When fly ash is visible in Scrubber/Bagho use Areas.  3. Cleaning Fly ash Duct Work  4. Baghouse Bag Repair & Replacement  5. Fly Ash Silo Mining  Cor North Half-Mask 7700 series  Replacement  6. Full Face 3M 6000,7000 Series – Respirator with 3M-2097 HEPA Cartridges or 3M 60296 multigas/vapor cartridges.  Or North Half-Mask 7700 series  Particulate filter approved for nuisance level organic vapor (odor) relief below the OSHA PEL. Approved for solids such as those from processing coal dust and fly ash. Liquid or oil-based particles from sprays that do not emit harmful vapors. Metal fumes produced from welding, brazing, cutting, and other operations involving heating of metals. Approved for respiratory protection against dust and mists having a time weighted average not less than .05 milligram per cubic meter or 2 million particles per cubic foot. Not for use in atmospheres containing less than 19.5% oxygen. Not for entry into atmospheres immediately dangerous	1 Sweening in	Half Mask 3M 6000 7000	Hydrogen Fluoride, Hydrogen Sulfide, Chlorine Dioxide)  North 75FFP100- For all particulates
use Areas.  3. Cleaning Fly ash Duct Work  4. Baghouse Bag Repair & Replacement  5. Fly Ash Silo Mining  Mining  Or North Half-Mask 7700 series  or 3M 60296 multigas/vapor cartridges.  Or North Half-Mask 7700 series  Or North Half-Mask 7700 series  or 3M-2097 HEPA Cartridge, P100 Particulate filter approved for nuisance level organic vapor (odor) relief below the OSHA PEL. Approved for solids such as those from processing coal dust and fly ash. Liquid or oil-based particles from sprays that do not emit harmful vapors. Metal fumes produced from welding, brazing, cutting, and other operations involving heating of metals. Approved for respiratory protection against dust and mists having a time weighted average not less than .05 milligram per cubic meter or 2 million particles per cubic foot. Not for use in atmospheres containing less than 19.5% oxygen. Not for entry into atmospheres immediately dangerous	Coal System or when coal dust is present.  2. When fly ash is visible in	Series Or Full Face 3M 6000,7000 Series – Respirator with	Particulate filter approved for nuisance level organic vapor
North N75003L (Organic Vapor/Acid	use Areas. 3. Cleaning Fly ash Duct Work 4. Baghouse Bag Repair & Replacement 5. Fly Ash Silo	or 3M 60296 multi- gas/vapor cartridges.  Or  North Half-Mask 7700	Particulate filter approved for nuisance level organic vapor (odor) relief below the OSHA PEL.  Approved for solids such as those from processing coal dust and fly ash. Liquid or oil-based particles from sprays that do not emit harmful vapors. Metal fumes produced from welding, brazing, cutting, and other operations involving heating of metals. Approved for Asbestos Approved for respiratory protection against dust and mists having a time weighted average not less than .05 milligram per cubic meter or 2 million particles per cubic foot. Not for use in atmospheres containing less than 19.5% oxygen. Not for entry into atmospheres immediately dangerous to life or death.



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		Hydrogen Chlorine, Sulfur Dioxide, Hydrogen Fluoride, Hydrogen Sulfide, Chlorine Dioxide)
		North 75FFP100- For all particulates
Spray Painting in Spray Booth	Half Mask, 3M 6000, 7000 Series Or Full Face 3M 7000 Series – Respirator with 3M- 60926 multi-gas/vapor cartridges	Used for protection against certain organic vapors and acid gases, including chlorine, hydrogen chloride and sulfur dioxide

- F. Employees may voluntarily use, issued half mask, full-face cartridge or disposable respirators when exposure to contaminant levels is within allowable limits, or when exposed to nuisance dusts, molds, pollen, etc. Reasonable efforts should be made to reduce such exposures.
- G. Employees choosing to voluntarily use a respirator are required to successfully complete a medical evaluation to ensure they are medically approved to wear respiratory equipment.
- H. Employees who voluntarily use a respirator when not required under the OSHA Respiratory Standard are required to review the following information:
  - 1. Respirators are an effective method of protection against designated hazards when properly selected and worn.
  - 2. Respirator use is encouraged, even when exposures are below the exposure limit, to provide an additional level of comfort and protection for workers.
  - 3. However, if a respirator is used improperly or not kept clean, the respirator itself can become a hazard to the worker.
  - 4. Sometimes, workers may wear respirators to avoid exposures to hazards, even if the amount of hazardous substance does not exceed the limits set by OSHA standards.
  - 5. If your employer provides respirators for your voluntary use, or if you provide your own respirator, you need to take certain precautions to be sure that the respirator itself does not present a hazard.
  - 6. You should do the following:
    - a) Read and heed all instructions provided by the manufacturer on use, maintenance, cleaning and care, and warnings regarding the respirator's limitations.



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- b) Choose respirators certified for use to protect against the contaminant of concern. NIOSH, the National Institute for Occupational Safety and Health of the U.S. Department of Health and Human Services, certifies respirators. A label or statement of certification should appear on the respirator or respirator packaging. It will tell you what the respirator is designed for and how much it will protect you.
- c) Do not wear your respirator into atmospheres containing contaminants for which your respirator is not designed to protect against. For example, a respirator designed to filter dust particles will not protect you against gases, vapors, or very small solid particles of fumes or smoke.
- d) Keep track of your respirator so that you do not mistakenly use someone else's respirator.

#### XII. INSPECTION, MAINTENANCE, AND STORAGE

#### A. Inspection

- 1. Employees issued a personal respirator are responsible for its inspection.
- 2. Each respirator must be inspected by its wearer immediately prior to each use, according to instructions provided in the respirator training. Any defects shall be corrected before entry into a hazardous atmosphere.
- 3. All respirators will be inspected before and after each use. General guidelines are as follows:
  - a) Check the general condition of the facepiece, head straps (excessive dirt, cracks, tears, holes or distortions from improper storage, cracked scratched or loose lens; cracked or broken cartridge holders, badly worn threads, or missing gaskets).
  - b) Check integrity of exhalation, inhalation valves, filters and cartridges (holes, dirt, or deterioration).
  - c) Check the point where the cartridge attaches into the face piece (mountings, gaskets, and valves) for residue, dirt, cracks, tears, or distorted material.
  - d) Check for tightness of all connections.
- 4. Maintenance Employees individually assigned respirators are responsible for daily care and cleaning of their respirator and shall follow manufacturer's cleaning instructions. Some disassembly of the respirator may be required when washing with a mild detergent. The cleaned respirator shall be rinsed thoroughly in clean water and toweled dry.
  - B. Storage



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- C. Respirators shall be stored air tight bags to protect against dust, sunlight, heat, extreme cold, excessive moisture and damaging chemicals. Yellow, resealable bags (CAT ID # 17531) are also available with all respirators to help protect them during storage. Additional air tight bags are available from the warehouse. Respirators shall not be stored hanging from a hook in a personal locker or stored in such a manner that equipment is not placed on top of the respirator.
- D. Respirators shall be stored in a single layer with the face piece and exhalation valve in a more or less normal position to prevent the rubber or plastic from becoming permanently distorted.
- E. Respirators that fail an inspection or are otherwise found to be defective will be removed from service and a new one issued. Bring the defective respirator to the warehouse and obtain a new one.

#### XII. TRAINING

- A. Employees will be trained in the selection, proper use, and limitations of respiratory equipment. Respiratory training will include two basic programs: New User and Refresher training.
  - New User training will be conducted by the Safety Coordinator. This training shall be conducted for new employees prior to assignment of duties that may require the use of respiratory equipment.
    - a) Training for new employees shall include at least the following topics:
      - (1) Purpose of the respirator program.
      - (2) Respiratory hazards at LOS.
      - (3) Donning, doffing, use and fit check of equipment used at LOS.
      - (4) Maintenance and storage.
      - (5) Capabilities and limitations of respiratory equipment.
      - (6) Emergency operations.
  - Refresher training requirements for employees who have been at LOS longer than
    one year shall first be based on successful completion of demonstrated knowledge
    of respiratory protection. The tests shall be administered following completion of fit
    testing efforts. Documentation of the competency tests are shown on the form found
    in Attachment 2.
  - Employee respirator retraining shall be conducted whenever the employee demonstrates that they have not retained the required basic skills, do not have the skill to understand respiratory hazards, or do not know how to correctly use respiratory equipment.



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#### XIII. CONTRACTORS

- A. Contractors performing work at LOS are expected to provide their own respiratory protection, both air purifying and air supplied as necessary. Respiratory protection shall be worn as the job dictates.
- B. Contractors are expected to understand the respiratory protection requirements for products and processes they typically use and are expected to utilize such protection as appropriate. Contractors using chemical products, such as paints, sealants, solvents, coatings, resins, and cleaning supplies, are required to wear respiratory protection where levels may be expected to exceed the OSHA permissible exposure limit.
- C. Contractors shall inform the LOS Contract Field Coordinator if they believe the service performed or products used by the contractor will create respiratory hazards for LOS personnel. SDS for those products must be provided to the LOS Maintenance Planner and LOS onsite coordinator.
- D. Class A Contractors shall follow Basin Electric's Facial Hair Policy.
- E. Contractors are required to develop and maintain a list of their jobs/tasks that require respiratory protection.

#### **XIV.PROGRAM EVALUATION**

- A. The Safety Coordinator will monitor and evaluate the Respiratory Protection Program on a continuous basis. Changes and adjustments will be made as needed.
- B. The Safety Coordinator, with assistance from supervision will conduct random inspections to ensure respirator maintenance and storage is appropriate.
- C. Supervisors are required to routinely check his or her area of responsibility to ensure that respirators are being used correctly and being maintained.
- D. Employee comments regarding the program will be reviewed.



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### Attachment 1 RESPIRATORY PROTECTION PROFICIENCY EXAM

NAME:	ID # DEPARTMENT:						
JOB TITLE:		<u> </u>		SUPERVISOR:			
TEST STATION		DESCRIPTION	ON		YES	NO	Instructed
#1	HALF FAC	CE CARTRIDG	E RESPII	RATOR			
	INSPECT RESPI						
	DONS RESPIRA						
	PERFORMS POS			Т			
	PERFORMS NEC						
			I	NSTRUCTOR:			
#2	FULL FACE	TWIN CARTRII	OGE RES	PIRATOR			
	INSPECT RESPI	RATOR BEFOR	RE DONN	IING			
	DONS RESPIRA	TOR CORRECT	ΓLY				
	PERFORMS POSITIVE PRESSURE TEST						
	PERFORMS NEC	GATIVE PRESS	URE TE	ST			
			I	NSTRUCTOR:			
#3		A - SCOTT 2.2					
	INSPECT AIR-PA						
	CHECK CYLINDI						
	DON AIR PACK						
	TURN ON AIR SI						
	LOCATE/OPERA						
	LOCATE REMOT						
	UNDERSTANDS						
	USES THE DONI AIR PACK						
	CORRECTLY SH	IUTS OFF CYLI	NDER V	ALVE			
			I	NSTRUCTOR:			
		DATE:			O PAS	SS	O FAIL



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#### Respiratory Protection And Facial Hair



OSHA's guidance regarding facial hair is expressed in the standard numbered CFR 1910.134(g)(1)(i) which states that the employer shall not permit respirators with tight-fitting facepieces to be worn by employees who have facial hair that comes between the sealing surface of the facepiece and the face or that interferes with valve function; or any condition that interferes with the face-to-facepiece seal or valve function. Facial stubble exceeding more than one day is considered excessive for most individuals causing interference with a respirator facepiece seal.

#### **BEPC Station Procedures Mirror The OSHA Requirements**

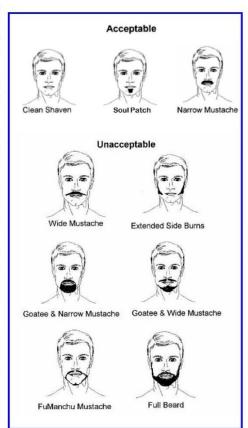
Individuals have from time to time stated that they would be able to pass a fit test even with a beard or goatee. Although this is not an option, experiments have shown that some individuals may be able to pass OSHA's minimum requirements with a beard.

The lowered fit factor experienced when facial hair is present is of such magnitude that no confidence can be placed on the protection factor of the respirator.

All respirator users experience variability of fit from time to time. This variability occurs due to changes in strap tension, positioning on the face, and a host of other variables. Facial hair introduces additional variables. Facial hair is a dynamically changing thing in that hair length is constantly changing. Beards also accumulate moisture, natural oils and debris from the workplace.

Tests have shown that the presence of facial hair produced leakage that was 50 to 1000 times greater than found with clean-shaven individuals. Leakage generally increased as the facial hair length increased.

A person who has hair such as stubble, mustache, sideburns, beard, goatee, long hairline, or bangs which are between the face and the sealing surface of the face piece shall not be permitted to wear a tight-fitting respirator. Facial hair exceeding a single, full day's growth shall not be permitted. The sketches help to illustrate what is acceptable and what is not regarding facial hair.



Don't Let Facial Hair Compromise Your Safety!



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Approved By	Approval Date
LOS Safety Coordinator	Date
BEPC Safety Director	Date
LOS Plant Superintendent	Date
AVS/LOS Operations Superintendent	Date
AVS/LOS Plant Manager	Date

Revision #	Revision Description:	Revised By:	Approved By:
3	Updates in <b>Purple</b>	Travis W/Matt M.	