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05/14/18 Date

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06/04/18 Effective Date Respirator Use and Issuance

REVISION LOG

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1.0 INTRODUCTION

1.1 Purpose

This procedure describes the requirements for the use, cleaning and sanitation, storage, inspection, maintenance, medical evaluation, and training of respiratory protective equipment by the Respirator User, Issuer, and Cleaner. Respiratory equipment includes dust masks, half- and full-face air purifying respirators, powered air-purifying respirators (PAPR), and atmosphere-supplying respirators.

1.2 Scope

This procedure applies to construction craft and non-manual workers assigned to locations within the UPF (Uranium Processing Facility) construction site and/or support areas. Applicability to subcontractors is in accordance with the contract language. This procedure covers the following topics:

- Respirator qualifications
- Respirator user
- Respirator issuance
- Seal checks
- General use requirements
- Respirator return and exchange
- Voluntary respirator use
- Respirator cleaning and sanitation
- Respirator inspection and storage
- Respirator out of service and maintenance repairs
- Breathing air quality

This procedure does not provide details on respiratory protection use, care, or maintenance of emergency response equipment.

2.0 **RESPONSIBILITIES**

2.1 Construction Manager

The Construction Manager is responsible for implementing this procedure and ensuring that all Project/facility entities are in compliance.

2.2 Environment, Safety and Health (ES&H) Manager

The ES&H Manager is responsible for the following:

- Interpretation of the regulations associated with this procedure
- Interpretation of the procedure as to intent and application
- Approval of procedure variances

2.3 Respiratory Protection Program Administrator

The position of Respiratory Protection Program Administrator (RPPA) is assigned by Environment Safety and Health manager. For the UPF Project, the Industrial Hygiene Lead is the RPPA. Responsibilities include the following:

- Administering and overseeing the respiratory protection program
- Conducting evaluations of the program effectiveness
- Implementing program changes based upon evaluations

2.4 Supervisor

The Supervisor is responsible for the following:

- Reviewing and planning work to ensure that personnel are medically qualified, fit tested, and trained for tasks requiring respiratory protection
- Ensuring that Respirator User wears proper personal protection equipment in accordance with the job hazard analysis (JHA)
- Coordinating the development of JHA

2.5 Occupational Medical Provider

The Occupational Medical Provider is responsible for the following:

- Conducting medical evaluations for the Respirator User
- Issuing respirator qualification card to Respirator User

2.6 Industrial Hygiene

Industrial Hygiene is responsible for the following:

- Assisting with developing the JHA that specifies the respirator, cartridge/canister type, and change out schedules
- Conducting respirator fit tests
- Evaluating proposed and ongoing work activities
- Incorporating controls from the worker exposure assessments into the work control document
- Issuing dust masks under voluntary use only

2.7 Respirator User

The Respirator User is responsible for understanding the requirements of this procedure as it relates to their responsibilities, including the following:

- Obtaining a respirator qualification, which is a successfully completed medical evaluation, fit testing, and training, prior to using a respirator
- Providing, as requested, valid respirator qualification card to respirator issuer
- Reporting to work clean-shaven and with hair cut or secured as necessary to ensure a proper fit when wearing a respirator
- Using only approved/designated respiratory equipment
- Inspecting respirators and perform a seal check each time the respirator is donned and periodically while in use

- Using respirators in accordance with manufacturer's instructions and safe work
 processes
- Exiting hazardous areas if problems are encountered, and contacting Supervisor and/or Industrial Hygiene
- Returning respirator to cleaning station/issue point

2.8 Respirator Issuer

The Respirator Issuer, for UPF Project, is the RPPA and trained designees. They are responsible for understanding the requirements of this procedure as it relates to their responsibilities, including the following:

- Issuing respirators for which the Respirator User is qualified to wear based upon the respirator qualification card
- Issuing cartridge/canister to respiratory user, as applicable
- Coordinating the repair or replacement of respiratory protective equipment resulting from deterioration and/or damage

2.9 Respirator Cleaner

The Respirator Cleaner, for UPF Project is the RPPA and trained designees. They are responsible for understanding the requirements of this procedure as it relates to their responsibilities, including the following:

- Coordinating the repair or replacement of respiratory protective equipment resulting from deterioration and/or damage
- Ensuring that routinely used respiratory equipment is regularly cleaned, inspected, sanitized, and stored.

3.0 PROCESS

This procedure provides information to the field personnel (Respirator User and Issuer, and Cleaner) on the steps to be taken throughout the cycle of respirator use on the UPF Project.

3.1 Respirator Qualification

Any employee assigned work that requires respiratory protection must first be medically evaluated and cleared for respirator use by the Occupational Healthcare Provider. The Y-12 National Security Complex (Y-12) Occupational Health Services will be the medical provider for direct hire craft and Bechtel National Inc. (BNI) employees. The worker's evaluation is effective for a 12-month period, after which an annual re-evaluation is required by the Occupational Healthcare Provider. To establish a worker as respirator-qualified involves three components:

- 1. A physical examination performed by the Occupational Healthcare Provider to determine if the worker's health/physical condition can support the added stresses imposed by respirator use. The process for worker medical respiratory evaluation is presented in Occupational Healthcare Provider documents, Respirator Certification Process and Occupational Safety and Health Administration (OSHA) Mandatory Respirator Medical Evaluation.
- 2. A Fit Test for use of negative pressure respirators to ensure that the worker, when wearing the respirator, can be adequately protected by the respirator.
- 3. Completion of the required training for Respirator Users.

Respirator Use and Issuance

Medical records are maintained by the Y-12 Occupational Medical department, and are controlled by the Health Information Privacy Act of 1999.

3.2 Supervisor

- 3.2.1 The Supervisor shall perform the following:
 - Provide scope of task.
 - Designate respirator-qualified workers for tasks requiring respiratory protection
 - Ensure that the correct respiratory protection is being worn in accordance with the JHA, and that procedures outlined in the document are being followed.

3.3 Respirator Use

Direct hire and BNI employees are only allowed to use respirators that have been issued by employer on the UPF Project, including dust masks.

The following subsections address the respiratory protection procedures conducted and/or completed by the Respirator User. The items include issuance, inspections, seal checks, general use requirements, respirator return and exchange, and voluntary respirator use.

- **NOTE:** Employees who need to use a respirator and do not have a respirator qualification card will need to contact their supervisors to request to use a respirator. For employees requesting filtering face piece respirators (dust masks), the supervisor will refer them to Industrial Hygiene.
- 3.3.1 Respirator Types

Respirator configurations are summarized below and in Table 1.

- Air-purifying respirator (APR) means a respirator with an air-purifying filter, cartridge, or canister that removes specific air contaminants by passing ambient air through the airpurifying element.
- Negative pressure respirator (tight fitting) means a respirator in which the air pressure inside the face piece is negative during inhalation with respect to the ambient air pressure outside the respirator.
 - Filtering face piece (dust mask) means a negative pressure particulate respirator with a filter as an integral part of the face piece or with the entire face piece composed of the filtering medium.
 - Tight-fitting face piece (half-mask respirator and full face piece respirator) means a respiratory inlet covering that forms a complete seal with the face.
- Positive pressure respirator means a respirator in which the pressure inside the respiratory inlet covering exceeds the ambient air pressure outside the respirator.
 - PAPR means an air-purifying respirator that uses a blower to force the ambient air through air-purifying elements to the inlet covering. Respirator types that can be used: tight-fitting face piece, hood/helmet, and loose-fitting face piece.
 - Supplied-air respirator (SAR), or airline respirator, means an atmosphere-supplying respirator for which the source of breathing air is not designed to be carried by the user. Respirator types that can be used: Tight-fitting face piece, hood/helmet, and loose-fitting face piece. These respirators have three possible modes of operation:
 - Demand
 - Continuous flow
 - Pressure-demand or other positive-pressure.

- Tight-fitting face piece means a respiratory inlet covering that forms a complete seal • with the face.
- Hood/Helmet means a respiratory inlet covering that completely covers the head and neck and may also cover portions of the shoulders and torso.
- Loose-fitting face piece means a respiratory inlet covering that is designed to form a ٠ partial seal with the face.

| Type of Respirator | Half- Mask | Full Face piece | Helmet/ Hood | Loose- Fitting Face piece |
|---|---------------|-----------------------|-----------------|------------------------------------|
| 1. Air-Purifying Respirator | Х | х | | |
| 2. Powered Air-Purifying Respirator (PAPR) | х | х | х | х |
| 3. Supplied-Air Respirator (SAR) or Airline Respirator | | | | |
| Demand Mode | х | х | | |
| Continuous flow mode | х | х | Х | х |
| Pressure-demand or other positive pressure mode | х | х | | |

Table 1. Mask Configuration for Each Type of Respirator

3.3.2 Respirator Issuance

The process followed during issuance of respirators from the issue point is as follows:

- User must be clean shaven for tight-fitting face-piece respirators and hooded PAPR with a seal along the face, unless used for weekends or off normal shifts. User will meet requirements for being clean shaven at time of use.
- User must have respirator qualification card that indicates that he/she is qualified to wear a respirator (make, model, and size), and that respiratory training and medical/fit test are current. If the respirator qualification card is not current, contact Supervisor and Industrial Hygiene.
- User provides respirator qualification card to respirator issuer while at the issuing station, and requests specific respirator and cartridge/canister, if applicable, as identified in the JHA.

Respirators may be issued during normal shifts for off-normal shifts (e.g., weekends NOTE: and holidays).

- User checks the plastic bag containing the respirator that it is sealed
- User checks the make, model, and size of the respirator provided by respirator issuer and requests exchange if issued wrong respirator
- User inspects respirator for damage prior to use
- User checks cartridges/canisters provided by the respirator issuer to verify that the • appropriate cartridges/canisters were provided and that the expiration date has not been exceeded

- User signs respiratory log and records the respirator number received from the Respirator Issuer
- User installs cartridges/canisters on the respirator, if applicable, prior to use.

A re-sealable plastic bag will be distributed with an expiration date, the name of the user and respirator cleansing wipes. The expiration date will be 30 days from issuance. The user will return the bagged respirator to the issue point or designated area when expired or if wet wiping does not adequately clean and a new one will be reissued. Users will perform an interim cleaning wipe down (face piece and other accessible surfaces) of respirators at a minimum after each shift and/or use, let them dry and appropriately store them in a sealed plastic bag and in an area specific location (cabinet or equivalent in a temperature controlled environment). In general, P100 cartridges will not be replaced unless conditions warrant change out within the month. Chemical cartridges change out schedule will be documented in the JHA.

After respirators are returned to the issue point or designated area either the respirators will be disposed of per waste management guidance or cleaned and disinfected per Section 3.4.3. Cartridges will be disposed of per waste management guidance.

- **NOTE:** In general, respirator work will be periodic in nature. Typical use will be less than few hours a day and a couple times a month. If use typically exceeds this, it is recommended that the assigned respirator be returned to issue point and a new one acquired.
- 3.3.3 Respirator Inspections

The Respirator User shall follow these OSHA inspection check procedures and/or manufacturers recommendations prior to each use:

- a. User inspects the following items before donning respirator:
 - 1. Tightness of connection
 - 2. Condition of face-piece
 - 3. Head straps
 - 4. Valve and connecting tube
 - 5. Cartridge/canister
 - 6. Elastic parts (for pliability)
 - 7. Respirator function.

3.3.4 Respirator Seal Checks

The Respirator User shall follow the OSHA seal check procedure or manufacturer's recommendations prior to each use.

The following are the procedures identified by OSHA:

- User shall conduct negative-pressure seal check on tight-fitting respirators each time they don the respirator and prior to entering the hazardous atmosphere using the following procedures:
 - Close off inlet openings of the respirator, canister(s), cartridge(s), or filter(s) by covering with palm of hands; by replacing the inlet seal on the canister(s); or by squeezing a breathing tube or blocking its inlet to stop the passage of air.
 - Inhale gently and hold your breath for ten seconds.
 - A satisfactory fit is achieved if the face-piece collapses slightly and no inward leakage of air into face-piece is detected.

- User shall conduct positive-pressure seal check on tight-fitting respirators each time they put on the respirator and prior to entering the hazardous atmosphere using the following procedures
 - Close exhalation valve or breathing tube, or both, then exhale gently.
 - A satisfactory fit is achieved if a slight buildup of positive pressure is generated on the inside of the face-piece and no outward leakage between the sealing surface and the face is detected.
 - If outward leakage is detected, reposition the face seal and/or straps and repeat this sequence until a satisfactory seal check is obtained

3.3.5 General Use Requirements

The Respirator User Requirements during general use are as follows:

- Users may make adjustment to respirators (e.g., head straps), but Respirator Users are not allowed to make modifications or interchange parts from other respirators.
- Users don respirator in clean areas.
- Users shall not remove their respirator while in a hazardous atmosphere.
- Users shall leave the work area to wash face and respirator face piece as necessary to prevent eye or skin irritation associated with respirator use.
- Users shall leave the hazardous atmosphere immediately if they smell, taste, or otherwise detect vapors inside an air-purifying mask, or if breathing difficulty occurs.
- When using respirators during a work shift, users are to store and protect their assigned respirators when the respirators are not being worn. The respirators are to be kept clean (e.g., place them back in the bag they came in) and out of the elements, including direct sunlight (e.g., kept in in job boxes, in shaded areas, or returned to a drop off location, if no longer required for task). If using for longer than one shift then respirator shall be cleaned after shift and stored appropriately (e.g., a cabinet in a temperature controlled area).
- Users are responsible for knowing and following the change-out schedule for cartridges/canisters used.
- Users' cartridge/canister change out schedule is provided in the JHA.
- Users contact the Supervisor and/or Industrial Hygiene after experiencing respirator mechanical failure, and shall leave the work area immediately.

3.3.6 Respirator Return and Exchange

Respirator Users' Return and Exchange procedures are as follows:

- User returns respirator to the cleaning station/distribution prior to expiration date (maximum of 30 days after issuance) or when the task requiring respirator is completed.
- User contacts distribution point/cleaning station personnel using posted instructions if cleaning station personnel are not present.
- User stores respirator in a plastic bag and performs one of the following procedures if the cleaning station is closed for the day:
 - Places respirator into a drop box at the cleaning station, or
 - Secures respirator on-site and return respirator as soon as feasible
- User informs Issuer and/or cleaning station personnel of any respirator problems encountered during the shift/task.

3.3.7 Voluntary Respirator Use

Respirator Use and Issuance

- Dust masks/filtering face-pieces are only issued under voluntary use.
- Employees can request voluntary use of a dust mask by contacting Industrial Hygiene and providing the information about the task being conducted and the reason the dust mask is being requested. Industrial Hygiene evaluates the information and approves the request if no additional hazards will be introduced to the task by the use of a dust mask.
- Employees approved for voluntary dust mask use shall be provided the information contained and will read and sign UCN-23310.
- Voluntary Respirator Users, whose sole use of respirators involves the voluntary use of dust masks, are not included in the requirements of the respiratory protection program.

3.4 Respirator Issuer/Cleaner

The following subsections address the respiratory protection procedures conducted and/or completed by the respirator issuer. The items include verification and issuance, return and exchange, cleaning and sanitation, inspection and storage, and out of service and maintenance repairs.

- 3.4.1 Respirator Use Verification and Issuance
 - Issuer shall observe Respirator User to confirm that they are clean shaven for tightfitting face-piece respirators and hooded PAPR with a seal along the face, unless off shift work or weekend work require early distribution.
 - Issuer and user completes UCN-23309.
 - Issuer will view user's respirator qualification card prior to issuing respirator and cartridges/canisters.
 - Issuer locates the respirator (make, model, and size) requested by the user.
 - Issuer verifies that respirator container storage device (plastic bag) is sealed and that no tampering has occurred and writes expiration date on the bag along with users name
 - Issuer provides respirator to Respirator User.
 - Issuer removes appropriate respirator cartridge/canister from storage area, if applicable, and verifies items have not expired.
 - Issuer provides user with appropriate respirator cartridge/canister, if applicable.
- 3.4.2 Respirator Return and Exchange
 - Cleaning station personnel receive respirators as follows:
 - Receive respirator directly from the user at the end of the 30 day period, task or shift.
 - Retrieve respirator that was placed in the drop box. Cleaning station personnel notate respirator return on the respirator log (if applicable).
 - Cleaning station or issuing personnel remove from service defective and/or damaged respirators and tag them with a "DANGER Defective Tool/Equipment DO NOT USE."
- **NOTE:** In general, half-face APRs will not be cleaned but rather be disposed of after use.
- 3.4.3 Respirator Cleaning and Sanitation
 - Cleaning station personnel disassemble respirators and inspect respirator parts for damage and/or malfunctions.

- Cleaning station personnel can clean and sanitize respirators according to the manufacturer recommendations as follows:
 - Respirators will be cleaned and sanitized after each use. Commercially available mild detergents or cleaner/sanitizer recommended by the manufacturer shall be used. Cleaning, disinfecting, and storage of respirators shall be performed as follows:
 - Remove filters, cartridges, or canisters. Disassemble face-piece by removing speaking diaphragms, demand and pressure-demand valve assemblies, hoses, and any additional components recommended by the manufacturer. Discard or repair any defective parts.
 - Wash components in warm (43° C [110° F] maximum) water with a mild detergent or with a cleaner recommended by the manufacturer. A stiff bristle (not wire) brush can be used to facilitate the removal of dirt.
 - Rinse components thoroughly in clean, warm (43° C [110° F] maximum), (preferably) running water. Drain excess water.

NOTE: The importance of thorough rinsing cannot be overemphasized. Detergents or disinfectants that dry on face pieces and contact the user's skin can result in dermatitis. In addition, some disinfectants can cause deterioration of rubber or corrosion of metal parts if not completely removed.

- Components are hand-dried with a clean, lint-free cloth or air dried.
- Reassemble face-piece and replace filters, cartridges, and canisters where necessary.
- Inspect the respirator to ensure that all components work properly per manufacturer guidelines.
- 3.4.4 Respirator Inspection and Storage
 - Cleaning station personnel shall inspect respirators, both during and after completion of cleaning and sanitation, for the following defects and/or malfunctions or as identified per the manufacturer and shall document on UCN-23308.
 - Tightness of connection
 - Condition of face-piece
 - Head straps
 - Valve and connecting tube
 - Cartridge/canister
 - Elastic parts (for pliability)
 - Respirator function.
 - Cleaning station personnel shall store cleaned and sanitized respirators to protect them from damage, contamination, dust, sunlight, extreme temperatures, excessive moisture, and damaging chemicals, and they shall be packed or stored to prevent deformation of the face-piece and exhalation valve.
- 3.4.5 Respirator Out-of-Service and Maintenance
 - Cleaning station personnel remove from service the defective and/or damaged respirators.
 - Cleaning station personnel can repair and/or replace items for which they are trained in accordance to manufacturer's specifications.

- Cleaning station personnel are not trained to conduct repairs to the exterior shell of • respirator helmets or hoods.
- Cleaning station personnel immediately remove from service any equipment found to be • defective and/or damaged, and which is to be repaired, with a "Danger: Defective Tool/Equipment. DO NOT USE" tag, with the specific defect(s) noted in the remarks section of the tag.
- Repairs are made prior to use or re-use. Repairs shall be made only by appropriately • trained personnel utilizing manufacturer's National Institute for Occupational Safety and Health (NIOSH) approved replacement parts.
- Cleaning station personnel immediately dispose of defective equipment and parts not to be repaired in a container label as trash or "Danger: Defective Tool/Equipment. DO NOT USE."

3.5 **Breathing Air Quality**

Industrial Hygiene shall ensure that the breathing-air quality meets the regulatory requirements and the process shall be documented separately if applicable.

3.6 **Respirator Selection for UPF**

- The Respiratory Protection Program Administrator evaluates the respiratory hazard(s) in the workplace, and identifies relevant workplaces and user factors for respirator needs to conduct work on the UPF Site. Listed in this section are the types of respirators available for selection and their limits.
 - Filtering face piece (dust mask) for voluntary use only.
 - Negative pressure respirator (tight fitting: half-mask respirator, and full face piece respirator) - for other than immediately dangerous to life or health (IDLH) atmospheres as stated in the JHA.
 - PAPR for other than IDLH atmospheres as stated in the JHA.
 - SAR or airline respirator for other than IDLH atmospheres as stated in the JHA (mainly used for abrasive blasting and some painting).
- The Respiratory Protection Program Administrator monitors the need for new types and • styles of respirators, based on changes to current and new hazards, with consideration for location where work is to be conducted, to determine the need for the following:
 - Respirators for IDLH atmospheres (full face piece pressure demand supplied-air respirator with auxiliary self-contained air supply).
 - Respirators for Emergency Situation means any occurrence, such as, but not limited to, equipment failure, rupture of containers, or failure of control equipment that may, or does, result in an uncontrolled significant release of an airborne contaminant.
 - Respirator for Escape-Only means a respirator intended to be used only for emergency exit.
- 3.6.1 Emergency Response Coverage:

The Y-12 Fire Department is the emergency response provider for the UPF Project. The group is trained and qualified to respond to all types of emergency situations, including the use of respirators for various conditions including and IDLH atmosphere.

RECORDS 4.0

Respirator Use and Issuance

Records generated by this procedure shall be maintained in accordance with Y15-95-800, *UPF Document Management*. Record types for documents submitted to the UPF DMC are identified in ML-PS-801768-A001, *Uranium Processing Facility Project Master Document Type List*. Quality Type is listed as Quality-Lifetime (QA-L), Quality-Nonpermanent (QA-NP), or Non-Quality (Non-QA).

Records generated by Y-12 OHS will be maintained in accordance with Y15-101, *Records and Controlled Documents*. Consolidated Nuclear Security, LLC (CNS) craft personnel's personal sampling records (e.g., sampling conducted for work on the UPF Project) will be maintained by the UPF Project through the duration of the Project and then submitted to CNS for retention. Bechtel National, Inc. (BNI) employees' personal sampling records will be retained by BNI or as specified by contract. Subcontractors shall retain records as indicated in contractual documents.

| Record Number | Record Title | Record Holder | System/ Location | Quality Type |
|-------------------|---|------------------|---------------------|-----------------|
| Document Specific | Medical Surveillance Records | Y-12 OHS | MOHIS | Non-QA |
| UCN-23308 | UPF Respirator Maintenance Log | BNI | Secure files | Non-QA |
| UCN-23309 | UPF Air Purifying Respirator and Cartridge Issuing | BNI | Secure files | Non-QA |
| UCN-23310 | UPF Filtering Facepiece Approval/Issue for Voluntary Use | BNI | Secure files | Non-QA |

Records generated during the performance of this procedure include:

5.0 REFERENCES

5.1 Source References

29 CFR 1910.134, *Respiratory Protection* 29 CFR 1926.103, *Respiratory Protection* CP-311, *Respiratory Protective Equipment* ANSI Z88.2, *Respiratory Protection*

5.2 Interfacing References

29 CFR 1910.134, Respiratory Protection

29 CFR 1910.134, Appendix D, (Mandatory) Information for Employees Using Respirators When Not Required Under the Standard

ML-PS-801768-A001, Uranium Processing Facility Project Master Document Type List

Y15-101, Records and Controlled Documents

Y15-95-800, UPF Document Management

6.0 SUPPLEMENTAL INFORMATION

Appendix A, Acronyms and Definitions

APPENDIX A Acronyms and Definitions

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ACRONYMS:

| ACGIH | American Conference of Governmental Industrial Hygienists |
|--------|---|
| APR | Air Purifying Respirator |
| ES&H | Environment, Safety & Health |
| IDLH | Immediately Dangerous to Life or Health |
| JHA | Job Hazard Analysis |
| OEL | Occupational Exposure Limit |
| OSHA | Occupational Safety Administration |
| PAPR | Powered Air-Purifying Respirator |
| PEL | Permissible Exposure Limit |
| RPPA | Respiratory Protection Program Administrator |
| SAR | Supplied Air Respirator |
| STARRT | Safety Task Risk Reduction Talk |
| STEL | Short Term Exposure Limits |
| TLV | Threshold Limit Value |
| TWA | Time Weighted Average |
| | |

DEFINITIONS:

| Activity Hazard Analysis | A process that identifies key job activities/tasks associated with a definable activity, examines key job activities/tasks to determine the foreseeable hazards associated with the task, such as chemical, biological, physical, or workplace, and establishes criteria to eliminate or control the hazards. |
|---|--|
| Cartridge/Canister | A container with a filter, sorbent, or catalyst, or combination of these items, which removes specific contaminants from the air passed through the container. |
| Doff | To take off one's respiratory protection equipment. |
| Don | To put on one's respiratory protection equipment. |
| Immediately Dangerous to Life or Health | An atmosphere that poses an immediate threat to life, would cause irreversible adverse health effects, or would impair an individual's ability to escape from a dangerous atmosphere. |
| Occupational Exposure Limit | A health-based work place standard to protect workers from adverse exposure. These are based on 8-Hour Time Weighted Average (TWAs), 15-minute TWAs (Short Term Exposure Limits [STEL]), or other applicable standards as described by the Occupational Health and Safety Administration (OSHA) or the American Conference of Governmental Industrial Hygienists (ACGIH). The Occupational Exposure Limits (OELs) are the lowest value obtained by comparing the OSHA Permissible Exposure Limit (PEL) to the ACGIH Threshold Limit Value (TLV) (10 CFR 85 1.23(a) (9). |

APPENDIX A Acronyms and Definitions

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| Occupational Health Hazard | A chemical or biological agent in the workplace having a recognized potential to cause detrimental effects to humans. |
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| Respirator Issuer/Cleaner | An employee who issues and/or cleans respiratory protective equipment. |
| Respirator Qualified | A worker is deemed respirator qualified when he/she has completed respirator training, determined physically fit by medical, and received and passed a fit test when required for negative pressure respirators. |
| Respirator User | An employee who is medically qualified and trained in the need, use, and limitations of the respiratory protective equipment. |
| Respiratory Protection Program Administrator | An individual who is responsible for administration or oversight of the Respiratory Protection Program. |
| Seal Check | An action conducted by the Respirator User each time they don a respirator and periodically while in use to determine if the respirator is properly sealed to the face. |