Respiratory Protection Program

Purpose

This procedure defines Marathon Los Angeles Refinery's (LAR) requirements regarding the usage of respiratory protection. The control of employee exposure to air contaminants is accomplished by means of engineering controls. During the time when engineering controls are being installed, when controls are not feasible, or during emergency or breakdown periods, appropriate respiratory protection must be used to prevent employee exposure to air contaminants. This document addresses the selection and use of respiratory protection.

Scope

This procedure applies to all employees, visitors, and contractors working at LAR excluding those employees listed under Procedure, **3.3 Respirator Program Exceptions.**

Records Retention

Printed copies of this document should not be retained more than 12 months. Any revision to this document will be retained a maximum of 10 years following the revision.

Table of Contents

1.0 References

1.1 Refining References

The table below lists the LAR references applicable to this document.

Number	Description
HLT-2005	Respiratory Protection Program
TSHS-203	Medical Surveillance
TSHG-021	Respiratory Protection
TSHG-018	Breathing Air Guidance Document
LAR HSS-013	Site Access
LAR HSS-201	Permit To Work
LAR FS-780	Safety Attendant Standard
SAF-006	Safety Watch
HSS-410	Asbestos Exposure Prevention Program

1.2 Industry References

The table below lists the MPC references applicable to this document.

Number	Description
ANSI Z88.2-2015	Respiratory Protection

1.3 Regulatory References

The table below lists the Regulatory references used with this document.

Number	Description
T8CCR Group 16, §5144	Respiratory Protection
T8CCR Group 16, §5155	Air Contaminants
T8CCR 1529	Asbestos
CFR 29, 1910.134	Respiratory Protection

1.4 Terms The table below lists the MPC references applicable to this document. Terms and Definitions.

Table 1 Definitions

Term	Description
Air-Purifying Respirators (APRs)	Respirators in which the ambient air is passed through an air-purifying element that removes contaminants. APRs can be a half mask, or a full-face mask fitted with filters and/or cartridges.
Atmosphere-Supplying Respirator	A respirator that supplies the user with breathing air from a source independent of the ambient atmosphere and includes supplied-air respirators (SARs) and self-contained breathing apparatus (SCBA) units.
Breathing Air Compressor System	A system comprising the use of (1) a compressor, (2) a Grade-D filtration/monitoring device, (3) a full-face respirator (Type CE for abrasive blasting), and (4) is linked with approved hose assemblies. This system shall deliver Grade-D breathing air to the respirator user.
Contaminant	A harmful, irritating, or nuisance airborne material.
Fit testing procedures	Use of a non-hazardous material (qualitative) or leak rate detection instrumentation (quantitative) to evaluate the respirator fit on the user.
Grade D Breathing Air	Compressed breathing air as described in CFR, 1910.134 and CCR, 5144, to include: an oxygen content between 19.5 to 23.5 percent (v/v), a hydrocarbon (condensed) content of 5 mg/m³ or less, a carbon monoxide (CO) content of 10 ppm or less, a carbon dioxide (CO2) content of 1000 ppm or less, and a lack of noticeable odor.
High Efficiency Particulate Air (HEPA) filter	HEPA filters are the most efficient filters available for use in air purifying respirators. HEPA filters are used for dust, fumes, mists, and fibers; they are identified by having a magenta color code, signifying a P100 rating with a 99.97% capture efficiency, and include resistance to oil aerosols.
NIOSH IDLH	The National Institute for Occupational Safety and Health established Immediately Dangerous to Life or Health air concentration values (1) to ensure that the worker can escape from a given contaminated environment in the event of failure of the respiratory protection equipment and (2) to indicate a maximum level above which only a highly reliable breathing apparatus, providing maximum worker protection, is permitted.
Particulate Not Otherwise Regulated / Nuisance Dust	Airborne materials with low toxicity, which have little harmful effects on the lungs and do not produce significant disease or harmful effects when exposures are kept under reasonable control. High levels of nuisance particulates may reduce visibility and can get into the eyes, ears, and nose. Based on monitoring data and Safety Data Sheets, Calcium silicate (CalSil) material and coke dust are considered nuisance dusts at LAR.
Protection factor	The expected workplace level of respiratory protection that would be provided by a properly functioning respirator or a class of respirators to properly fitted and trained users.
Self-Contained Breathing Apparatus (SCBA)	An atmosphere-supplying respirator in which the breathing air source is designed to be carried by the wearer and of grade D breathing air quality.

	5-minute egress bottles are not considered SCBAs and are never to be used as a standalone system. Egress bottles are only allowed when used in conjunction with a supplied air set up or when switching from an air-purifying mode to a supplied air mode for escape purposes.
Supplied-Air Respirator (SAR)	An atmosphere-supplying respirator in which the breathing air source is not designed to be carried by the wearer. Breathing air is supplied by a cylinder, an airline hose attached to the respirator, and of grade D breathing air quality. The airline hose length shall not exceed 150 feet. SARs shall be used with a fully charged 5-minute egress bottle. Egress bottles contain a limited quantity of air and shall be used for escape purposes only.

2.0 Responsibilities

2.1 All Personnel

2.1.1 All Personnel (direct MPC employees and contractors) who:

a. enter into PSM regulated areas (e.g., Process Units) or
b. are required by regulation (i.e., Scope of Work hazard potential) or
c. in compliance with posted area hazard signs (requiring respiratory protection) or
d. due to work procedures or permit requirements (indicating respiratory protection is required)

shall be respirator trained, maintain acceptable facial requirements, i.e., be clean shaven, (**see** **Appendix C** Acceptable Facial Hair Requirements), be fit-tested, and medically cleared to follow the respiratory use instruction below:

e. The following respirator user instructions, presented in training, including but not limited to the following:

i. Performing positive and negative seal checks per respirator manufacturer instructions when donning the respirator.

ii. Inspecting and if needed, cleaning or replacing the respirator before or after use.

iii. Utilizing new respirator filters or cartridges, when required, every shift.

iv. Correctly storing the respirator when not in use.

v. Immediately reporting any problems with or caused by respirator use; and,

vi. Using the correct respirator for workplace conditions.

2.1.2 All full-face mask respirators, procured by Marathon personnel, shall be returned to the sites Safety Equipment Issue building at the end of their use for maintenance and re-issue. Contractors shall follow their company standards on returning respiratory equipment.

2.1.3 All half-face mask respirators and respirator cartridges/filters shall be disposed of into yellow drums at the end of their use.

2.1.4 If an emergency use/response SCBA is utilized, then a notification shall be made to the Safety Department for maintenance and re-issue.

2.2 Occupational Health Group

2.4.1 The Occupational Health group is responsible for the following:

a. Overall administration of this program.

b. Conducting employee exposure assessments to identify potential tasks that may need to be managed with engineering controls (e.g., local exhaust ventilation) when feasible or respiratory protection.

c. Approving an assortment of respirators that provide adequate protection against potential airborne contaminants in the workplace.

d. Determining what level of respiratory protection is adequate for tasks. Adequacy of protection is assessed by comparing respirator protection factors, the applicable exposure limits and airborne contaminant concentrations that could be encountered in the workplace.

e. Determining which if any process areas are to be posted as temporary regulated areas with respiratory protection required for entry.

f. Determining if routine job assignments or work tasks require the use of respiratory protection.

g. Assisting with decisions on which type of respiratory equipment would provide appropriate protection for unusual work tasks or potential exposures.

2.3 Safety Department

2.4.2 Safety Department personnel are responsible for the following:

a. Assisting in determining what level of respiratory protection is adequate for tasks.

b. Assisting in determining which if any process areas are to be posted temporarily as regulated areas with respiratory protection required for entry.

c. Assisting in determining if routine job assignments or work tasks require the use of respiratory protection.

d. Assisting with decisions on which type of respiratory equipment would provide appropriate protection for unusual work tasks or potential exposures.

e. Ensuring emergency use/response SCBAs and (standalone) cascade system bottles/cylinders meet the grade D air criteria as defined in this standard and maintain records of the quality assurance testing for the system through the Fire & Safety Maintenance Group. The quality of breathing air from a fixed or portable breathing air compressor shall be tested at least on a quarterly frequency.

f. Providing appropriate full-face mask eyewear mounting kits for those individuals which require prescription eyeglasses and are subject to this program; this will be facilitated through Safety Equipment Issue.

g. Providing initial training on the use of an SCBA unit to new employees that may be required to use an SCBA. This training will be administered by the Fire Chief's designee.

h. Providing initial training on the use of an airline respirator system for new employees that may be required to use an SAR.

2.4 Safety Equipment Issue

2.4.1 Safety Equipment Issue is responsible for the following:

a. Issuing and maintaining inventory of atmosphere-supplying respirators.

b. Receiving, inspecting, maintaining, cleaning, repairing, bag sealing, and ensuring functional atmosphere-supplying full-face respirators are available for issue.

c. Receiving, inspecting, maintaining, cleaning, repairing, bag sealing, and returning air-purifying full-face respirators to the Storehouse for re-issue.

d. Providing compressed breathing air cylinders/bottles for airline respirator systems. Certificate of analysis for Grade D breathing air requirements shall be adhered to the cylinders/bottles.

2.5 Medical Department

2.2.1 Medical Department personnel are responsible for the following:

2.2.2 Evaluating employees required to wear respirators, per the respirator medical surveillance requirements outlined in **HLT-2025 Employee Health Monitoring.**

2.2.3 Examination Protocols

2.2.4 Standard.

a. Performing and/or reviewing results of respirator fit testing as part of the medical clearance determination.

b. Notifying employees and their supervision of medical clearance determinations for respirator use.

2.6 Storehouse

2.6.1 The Storehouse Staff is responsible for the following:

a. Ensuring adequate supplies of approved air-purifying respirators and equipment such as filters, cartridges, and sanitizers are stocked.

b. Ensuring this equipment will be accessible for employees during routine conditions and for non-routine activities such as turnarounds.

2.7 Supervisory Personnel

2.8.1 Supervisory personnel are responsible for the following:

a. To contact the Health & Safety Department for assistance in selecting the correct respiratory protection equipment for unusual work tasks or if there is any question about which type of respirator is appropriate.

b. Incorporating respiratory protection requirements into standard operating procedures.

c. Utilizing this procedure, Safety Data Sheets (SDS), or a Health group representative to identify the appropriate minimum respiratory protection for tasks.

d. Ensuring that employees and contractors wear respirators if required in areas or for work assignments under their supervision.

e. In their area(s) of responsibility, ensuring that respirators are worn only by employees who have been respirator-trained, fit tested, and medically cleared.

f. Ensuring employees are supervised correctly on how to maintain, clean and store respiratory protection equipment.

g. Ensuring that personnel under their supervision conform to the facial hair requirements outlined under this procedure for Respirator Usage Restrictions. If an employee exceeds the facial hair requirements, it is the Supervisor's responsibility to counsel the employee to ensure conformance with the requirements shown in Appendix C Acceptable Facial Hair Requirements**.**

2.8 Engineering Personnel

2.8.1 Engineering personnel are responsible for specifying and requiring, if feasible, new and replacement equipment that controls or eliminates concentrations of airborne contaminants to levels below applicable exposure limits.

2.9 Learning & Development Department

2.9.1 The Learning & Development Department is responsible for the following:

a. Responsible for annual training and record retention on the use, care, fitting, and maintenance of respiratory protection available at LAR.

b. Maintain records of training for initial and recurring annual training for atmosphere-supplying respirators.

c. Maintenance Group trainers will assist, when needed, in the initial training for the use of an airline respirator.

2.10 Contract Personnel

2.10.1 Contract Personnel are responsible for the following:

a. Contractors are responsible for complying with all requirements of this respiratory protection program and with all requirements of the California Code of Regulations §5144. Respiratory protection program requirements for contractors include but are not limited to the following:

i. Have an established respiratory protection program.

ii. Contractors must have instructed and trained employees required to wear respiratory protection in the need, use, sanitary care and limitations of respiratory equipment being used when respiratory equipment is deemed necessary by the hazard. Contractor employees must be instructed in how to properly fit and test respiratory equipment and how to check the facepiece fit.

iii. Contractors must medically evaluate employees prior to wearing respiratory protection. The medical status of employees wearing respirators must be evaluated by the contractor annually.

iv. Contract Companies must provide respiratory protective equipment to their employees conducting activities expected to exceed established Permissible Exposure Limits or site-specific established requirements.

2.10.2 Adhering to the facial hair requirements shown in Appendix C Acceptable Facial Hair Requirements for employees expected to wear a respirator while performing their task, unless their own requirements dictate a more restrictive requirement.

3.0 Procedure

3.1 Hierarchy of Controls for Respiratory Hazards

3.1.1 Exposure to airborne contaminants including dust, fumes, mists, aerosols, fibers, gases, or vapors shall be controlled to concentrations lower than permissible exposure limits when feasible by engineering control measures.

3.1.2 Engineering controls used to prevent or control potential airborne concentrations include but are not limited to:

a. Eliminate or substitute toxic materials.

b. Enclosure or confinement of the point of operation or the emission source.

c. Local or source point exhaust ventilation; and,

d. General dilution ventilation.

3.1.3 When effective engineering controls are not feasible, or while they are being installed, respiratory protection shall be used to prevent or control potential exposure to airborne contaminants that may exceed an *Occupational Exposure Limit*.

3.2 Respiratory Protection Overview

3.2.1 The purpose of respiratory protection is to prevent the inhalation of airborne contaminants in the workplace. This is achieved through the use of air-purifying or atmosphere-supplying respirators.

3.2.2 Respiratory protection shall be used when Health or Safety has deemed it necessary through exposure monitoring or hazard evaluation.

3.2.3 Respiratory protection program requirements apply to the following groups of ***Covered Employees***; including contractors who perform similar work to those listed below:

a. Operations personnel

b. Maintenance personnel

c. Inspection personnel

d. Engineering personnel

e. Refinery Support personnel

f. Laboratory personnel

Note: For more details regarding covered employees see Coved Job Categories

3.3 Respirator Program Exceptions

3.3.1 Approved exceptions to this program, including the clean-shaven facial hair requirements in Appendix C Acceptable Facial Hair Requirements, are as follows:

a. Delivery personnel whose activities are restricted to the Storehouse and our Main/Field Office Buildings outside the process unit areas, provided they proceed by a direct route from the entry gate and depart promptly via the same route.

Note: Specialty contractors or Delivery drivers whose scope of work beyond the refinery gates but will not expose them to a respiratory hazard require an approved site variance to be exempted from participating in this program.

b. LAR personnel whose duties do not require them to be fit tested or wear a respirator or enter into PSM regulated areas (e.g., Process Units) AND, whose duties do not require them to participate in an emergency response, enter a regulated respiratory protection area, or conduct a task which identifies the potential use of respiratory protection as a control for Permit To Work inside unit areas (e.g., HVAC personnel, janitorial services, mail couriers, summer youth, etc.); or,

c. Visitors (e.g., external auditors, agency representatives, etc.) to process and maintenance areas for the purpose of observation / audit only, when escorted by site representative at all times and not entering a regulated respiratory protection area.

3.3.2 An employee who is exempt from participating in this program and who chooses to wear a half mask or full-face air-purifying / atmosphere-supplying respirator voluntarily when not required by the specific job task shall notify the Occupational Health Group and meet the following requirements.

Exception Clarification: The voluntary use of a filtering facepiece (dust mask) does not apply to this section.

a. A Voluntary Respirator Use Form shall be provided to the employee (Appendix D OSHA Letter of Interpretation).

b. All elements of this written respiratory protection program will be implemented, including being clean shaven.

c. A medical evaluation will be provided to ensure respirator usage does not present a health hazard to the user.

Note: Any additional exemption or deviation to this standard requires an approved site variance from the Safety Manager.

3.4 Respirator Selection

3.4.1 LAR provides 5 types of respiratory protection: Disposable filtering facepieces, Half Mask APRs, Full-Face APRs, Supplied Air Respirators, and Self-Contained Breathing Apparatus'.

3.4.2 Disposable filtering facepieces (dust masks) for the control of nuisance dust in the presence of adequate breathing air. These may be used as a recommended control on a Safe Work Permit (SWP) for certain applications involving dust nuisance and are also available for voluntary use.

Note: Filtering facepieces shall not be used for the control of any oil-based particles or regulated air contaminants (e.g., asbestos fibers, lead, hexavalent chromium, silica)

3M 8210, N95

3M 8212, N95

3M 8212, N95 dust mask is recommended during welding activities that do not require the minimum use of a half mask APR (see **Appendix B**).

3.4.3 Half Mask Air-Purifying Respirator for the control of air contaminants at concentrations of up to 10 times the Cal-OSHA Permissible Exposure Limit (PEL) in the presence of adequate breathing air.

3M 6000 Series: (S) (M) (L)

3.4.4 Full-Face Air-Purifying Respirator for the control of air contaminants at concentrations up to 50 times the Cal-OSHA PEL in the presence of adequate breathing air.

3M 6000 Series: (S) (M) (L)

3.4.5 At LAR, we utilize two types of full-face masks for atmosphere supplying respirators dependent on-site location (i.e., Carson or Wilmington):

MSA Ultra Elite:(S) (M) (L) **Scott AV-2000:(S) (M/L) (XL)**

3.4.6 Supplied-Air (airline) Respirator for the control of air contaminants at concentrations of up to 1,000 times the Cal-OSHA PEL. Requires the use of a fully charged 5-minute egress bottle.

Note: Egress bottles contain a limited quantity of air and shall be used for escape purposes only.

Breathing Air Cylinders **Breathing Air Hoses (Max 150 ft.)**

MSA PremAire Escape **Scott SKA-PAK Escape**

3.4.7 Self-Contained Breathing Apparatus (SCBA) for the control of air contaminants at concentrations over 1,000 times the Cal-OSHA PEL.

MSA AirHawk SCBA System **Scott ISCBA System**

3.4.8 The Health and Safety Departments will determine proper respiratory protection for specific circumstances. Considerations for respirator selection include the following:

a. Type of hazards (e.g., oxygen deficiency, contaminant, etc.)

b. Physical and chemical properties of the contaminant.

c. Airborne concentration of contaminant.

d. Protection factor of the respirator.

3.4.9 Specific respiratory protection requirements for particular tasks are provided in Appendix A-Minimum Respirator Requirements per Covered Job Task.

3.4.10 Air-Purifying Respirators (APRs) are issued at the Storehouse counter for all fit tested Marathon personnel.

3.4.11 Supplied-Air Respirators (SARs), along with egress bottles, are provided at the Safety Equipment Issue for all fit tested personnel working at LAR.

3.4.12 SCBAs are provided at Safety Equipment Issue for all fit tested personnel working at LAR.

3.5 Respirator Use

3.5.1 All employees subject to this program shall be medically evaluated and cleared for respirator use before initiating a task requiring respiratory protection. An initial and annual medical clearance along with a fit test of the respirators offered at LAR will be facilitated by the LAR Medical Department.

3.5.2 Whenever a respirator is donned, personnel shall evaluate the fit of the respirator with the following fit checks to ensure adequate use:

a. **Negative Pressure Method** – Place the palms of your hands over the inlet surface of the filter cassettes and inhale.

i. The test is successful if a negative pressure is created (the facepiece appears to be sucked in toward the face) without leaks (air coming into the facepiece).

ii. If air leaks inside, adjust the facepiece straps and try again.

3.5.3 **Positive Pressure Method** – Place the palm of your hand over the exhaust valve and gently exhale.

a. The test is successful if a slight positive pressure is established inside the facepiece.

b. If a positive pressure is not established (air leaks out of the facepiece), adjust the facepiece straps and try again.

3.5.4 Personnel identifying a defective respirator should place a tag on the respirator, marking it not acceptable for use, and return it to Safety Equipment Issue for repair or replace as necessary.

3.6 APR Filter and Cartridge Guide

3.6.1 LAR provides 3 types of filters and cartridges for use with our approved Air-Purifying Respirators: Particulate Filters, Gas & Vapor Cartridges, and Combination Cartridge/Filters.

a. Cartridges and filters shall be replaced after each shift.

b. Used cartridges and filters can be disposed of in yellow waste drums.

Table 2. LAR APR Filter and Cartridge Guide

TYPE	NIOSH Color	Image	Description
Particulate Filters	3M Code 2097 **Magenta**		NIOSH approved HEPA filter (P-100), which provides a 99.97% minimum efficiency in trapping aerosols (e.g., dust, mists, fumes, smoke, mold, bacteria, etc.).
Gas & Vapor Cartridge	3M Code 6009S **Orange**		NIOSH approved for limited protection against mercury vapor, chlorine, sulfur dioxide, and certain particulates.
Combination Cartridge/Filter	3M Code 60926 **Olive/Magenta**		NIOSH approved for limited protection against volatile organic compounds (VOCs), chlorine, hydrogen chloride, ammonia, sulfur dioxide, hydrogen sulfide, and particulates with a HEPA filter.

3.7 Atmosphere-Supplying Respirators

3.7.1 Use of Atmosphere-Supplying Respirators requires that the wearer be medically cleared for respirator use, fit tested and trained in the use and care of the specific type of Atmosphere-Supplying Respirator in use.

3.7.2 Supplied-air respirators (airline) shall be used with a fully charged 5-minute egress bottle. Egress bottles contain a limited quantity of air and shall be used for escape purposes only.

3.7.3 The length of the breathing air hose cannot exceed 150 feet.

3.7.4 All personnel using these respirators shall have a stand-by attendant with an SCBA available in case of emergency.

3.7.5 A self-contained breathing apparatus (SCBA) is an atmosphere-supplying respirator with the breathing air source designed to be carried by the wearer.

a. This respirator type includes a full-face mask, breathing air cylinder, and a regulator to control airflow.

b. SCBAs typically provide breathing air cylinders with nominal 30-minute capacity. The actual time duration that an SCBA will provide breathing air will vary with the user.

3.7.6 Safety Equipment Issue personnel shall ensure that cylinders used to supply breathing air to respirators meet the following requirements:

a. Cylinders are tested and maintained as cited on California Code of Regulations §5144 (4)(A);

b. Cylinders of purchased breathing air have a certificate of analysis from the supplier that the breathing air meets the requirements for Grade D breathing air; and

c. The moisture content in the cylinder does not exceed a dew point of (-50 deg. F) at 1 atmosphere pressure.

3.8 Breathing Air Supplied by Compressors

3.8.1 All breathing air couplings must be incompatible with outlets for non-respirable worksite air or other gas systems. No asphyxiating substance shall be introduced into breathing air lines.

3.8.2 Air compressor systems utilized for breathing air must be certified to produce Grade D breathing air and situated to prevent entry of contaminated air into the air-supply system.

a. Compressors must have suitable in-line air-purifying sorbent beds and filters to further ensure breathing air quality.

b. Sorbent beds and filters must be inspected, maintained, recharged and/or replaced following the manufacturer's instructions.

c. Minimize moisture content so that the dew point at 1 atmosphere pressure is 10 degrees F below the ambient temperature.

3.8.3 To ensure that breathing air meets Grade D requirements, the quality of breathing air from the air compressor system shall be tested at least on a quarterly frequency.

3.8.4 Breathing air compressors must be equipped with an operational and calibrated in-line carbon monoxide alarm, which require a calibration check within one month of use to ensure correct operation.

3.8.5 The in-line air monitoring systems must be operating such that the airline users are notified immediately if the compressor fails to provide an adequate air supply, or if contamination is detected at alarm levels in the breathing air supply.

3.8.6 Documentation must be attached to the air compressor system listing the following:

a. Certification that the breathing air compressor system delivers Grade D air.

b. The carbon monoxide calibration date.

c. The filter or sorbent bed change out or cleaning date.

d. The person authorized to perform the calibration and change out service.

e. The craft supervisor overseeing the task at hand

3.9 Placement of Respirator

3.9.1 Always keep the respirator firmly in place when it is being worn.

3.9.2 Always have neck straps attached and all straps tight.

3.9.3 Always keep the respirator in a sealed bag which is clean and dry when not in use.

3.9.4 Never leave a respirator mask hanging from equipment in the unit.

3.9.5 Personnel who are subject to respiratory protection use and require prescription glasses to work will be provided with appropriate masks, lens, and mounting kits issued by the Safety Department; this will be facilitated through Safety Equipment Issue

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3.10 Respirator Usage Restrictions: Facial Hair Requirements

3.10.1 All personnel who are required to use respirators per Section 2.1.1, must adhere to the LAR Facial Hair Requirements, i.e. be clean shaven to guarantee a tight respirator seal.

3.10.2 Cal-OSHA regulations require that a tight facial seal must be obtained when wearing respiratory protective equipment. It has been determined under test conditions that certain types of facial hair (e.g., beards, goatees, long sideburns, etc.) hinder or prevent a proper seal, and thus limit the effectiveness of the respirator.

3.10.3 Any facial hair that interferes with the respirator's seal area is prohibited. For guidance on acceptable facial hair, please refer to the facial hair diagram in **Appendix C Acceptable Facial Hair Requirements**. No more than 24 hours beard growth is acceptable for the same reason.

3.10.4 If an employee's facial hair exceeds the above requirements, it is their Supervisor's responsibility to counsel the employee to ensure conformance with the requirements this standard**.**

3.11 Respirator Maintenance

3.11.1 Reusable Respirators

3.11.2 Reusable respirators include 3M 6000 series full-face respirators and respirators used for supplied air.

3.11.3 When not in use, respirators are returned to Safety Equipment Issue for storage in sealed bags to prevent them from becoming contaminated by dust or moisture.

3.11.4 Emergency SCBAs are inspected on a monthly basis. SCBAs are also sanitized and inspected after each use; this is facilitated through the Fire & Safety Maintenance Group.

3.11.5 Do not use a respirator that has been used by another individual until it has been inspected and sanitized by Safety Equipment Issue personnel.

3.11.6 Reusable respirators should be promptly returned to Safety Equipment Issue after each use for inspection.

3.11.7 Disposable Respirators

3.11.8 The 3M filtering facepiece respirator (dust mask) is for single use only.

3.11.9 The 3M 6000 series half mask respirators shall be stored in a plastic bag when not in use.

3.11.10 If kept clean, 3M 6000 series half mask respirators can be used up to five times.

3.11.11 Used disposable respirators can be disposed of in yellow waste drums.

3.11.12 Respirator cleaning wipes are available at the Storehouse.

3.12 Emergency Response Respiratory Protection

3.12.1 SCBA respirators are stored in cabinets at each unit and in some Emergency Response Vehicles. These SCBAs are designated for emergency response and are not to be used for routine purposes.

a. These respirators are inspected monthly by the Fire & Safety Maintenance Group.

b. These respirators are recharged with Grade D breathing air and cleaned after each use.

c. Personnel that have utilized an emergency use SCBA shall notify Fire & Safety Personnel to ensure that the SCBA is inspected, recharged, and cleared for re-issue.

4.0 Training

4.1 All MPC Employees

4.1.1 All MPC employees identified in Section 2.1.1 and will be provided with Respiratory Protection Overview training at the time of employment. Initial and recurring training covers the use, limitations, and care of respirators, as well as all sections of this procedure. Recurring annual training will be conducted via our computer-based training software administered by the **Learning & Development Department.**

4.1.2 Operations, Maintenance, and field support personnel who are required to wear a supplied air respirator or SCBA, and are not active members of the fire brigade, will be provided with initial training at the time of employment, which covers the use of an airline respirator system and / or an SCBA unit.

4.1.3 Initial training on the use of an SCBA will be provided by the LAR Fire Chief designee (i.e., Safety Coordinator or an active member of the fire brigade).

4.1.4 Initial training on the use of an airline respirator will be provided by a Safety coordinator or a Learning and Development Maintenance Group Trainer.

4.1.5 Recurring annual training for the use of an airline respirator or an SCBA will be conducted via our computer-based training software administered by the Learning & Development Department.

4.1.6 Departments, through their training groups, will ensure that all employees covered in Section 2.1.1 receive initial and annual refresher training on the use, limitations, and care of respirators, as well as all sections of this procedure.

5.0 Management of Change

5.1 MOC Point of Contact

5.1.1 As additional information or regulation on respiratory protection becomes available, the Occupational Health Group will make changes accordingly, both in the training programs and the procedure, with guidance from the Local Program Administrator – LAR Health Superintendent.

6.0 Recordkeeping

6.1 Additional Recordkeeping Requirements

6.1.1 Records of completed training and assessments will be kept with the Learning and Development Department.

6.1.2 The Safety Department will maintain records of equipment maintenance.

6.1.3 The Medical Department will maintain records of medical qualification and fit testing.

Appendix A-Minimum Respirator Requirements per Covered Job Task

Corporate LAR- Covered Jobs List link.

	Task	Respiratory Minimum Protection
Abrasive Blasting	Abrasive blasting on metals coated with lead-containing paints and primers (inside walk-in enclosures)	Supplied air respirator or SCBA
	Cleaning out and/or changing filters on abrasive blasting hood enclosures in Maintenance shops	Half mask respirator with HEPA (magenta) cartridges with goggles or full-face respirator with HEPA (magenta) filters
	Cleaning of the abrasive blast booth after blasting using compressed air.	Supplied air respirator
Disturbing Lead Containing Paint or Primer	Power tool cleaning of painted/primed surfaces that contain 0.06% or greater lead. Power tool cleaning includes disc, electric or peanut grinding, needle gun, wire wheel brush or sanding.	Half mask respirator with HEPA (magenta) filters
	Disturbing lead conduit or other lead-containing materials during demolition by means of band saw, Sawzall, etc.	Half mask respirator with HEPA (magenta) filters
Blinding	Blinding process lines that house Naphtha range streams (Benzene)	Half mask respirator with Combination Olive/Magenta cartridges
	Blinding and opening equipment that contains highly hazardous materials (e.g. Hydrogen Sulfide, Nickel Carbonyl)	Supplied air respirator or SCBA
	Blinding/Line Breaks that house Mercaptan streams (ex., 52 Vac 1st, 2nd and 3rd Stage Jet Condensate System)	Half mask respirator with Combination olive/magenta cartridges
	Blinding and opening equipment that contains ammonia	Full-face respirator with Combination Olive/Magenta cartridges
Catalyst Loading and Dumping	Dumping catalyst or absorbent from process unit reactors (within 10 feet of nozzle)	Supplied air respirator or SCBA
	Loading catalyst using hopper on top of process vessel	Half mask respirator with HEPA (magenta) filters
	Loading catalyst or absorbent inside process unit reactors	Full-face respirator with HEPA (magenta) filters
	Connecting and disconnecting hoses to transfer catalyst from vacuum truck to FCC Hot Storage	Half mask respirator with HEPA (magenta) filters
	Connecting and disconnecting hoses to load catalyst from the ESP Hoppers	Half mask respirator with HEPA (magenta) filters
	Vacuuming residual catalyst at grade after loading	Half mask respirator with HEPA (magenta) filters
Concrete, Insulation and Refractory	Handling, removing, or disturbing Refractory Brick or Castable Refractory.	Half mask respirator with HEPA (magenta) cartridges with goggles or Full-face respirator with HEPA (magenta) filters
	Handling, removing, or disturbing Refractory Brick or Castable Refractory in a confined space.	Full-face respirator with HEPA (magenta) filters
	Disturbing or removing asbestos-containing material (ACM)	Half mask respirator with HEPA (magenta) filters, goggles, gloves, and two (2) disposable coveralls (e.g. Tyvek), with outer being FRC.
	Handling insulation and refractory (i.e., removing old refractory/mixing new refractory)	Half mask respirator with HEPA (magenta) filters, goggles, gloves, and disposable coveralls (e.g. Tyvek), with outer being FRC.
	Mixing, chipping, jackhammering, demolishing concrete.	Half mask respirator with HEPA (magenta) filters; filtering facepieces not allowed.
	Concrete disturbance in a Confined Space	Full-face respirator with HEPA (magenta) filters

	Task	**Respiratory Minimum Protection**
	Handling or disturbing Man-Made Mineral Fiber (RCF, Kaowool, mineral wool, fiberglass) insulation	Half mask respirator with HEPA (magenta) filters with goggles or Full-face respirator with HEPA (pink) cartridges
	Handling or disturbing Calcium Silicate (CalSil) insulation	Disposable filtering facepiece with goggles or Half mask respirators with HEPA (magenta) filters with goggles
	Asbestos removal by a certified asbestos worker including glove-bag	Half mask respirator with HEPA (magenta) filters
Equipment: Depressuring, Venting, Draining, Opening, or Bundle Pulling	Depressuring loading line of anhydrous ammonia tank without diffuser (ex., Coker Gas Fract (Alky))	Full-face respirator with Combination Olive/Magenta/HEPA (olive/magenta) cartridges
	Depressuring Bensat reactor at the Isom	Half mask respirator with Combination Olive/Magenta cartridges
	Venting equipment with unknown composition of sulfide species (e.g., the COS Adsorber, Odorant Skid Expansion Tank), OR high mercaptan and/or H2S potentially present.	Supplied air respirator or SCBA
	Draining equipment that houses Naphtha range streams (Benzene) (**Turnaround Only)**	Half mask respirator with Combination Olive/Magenta cartridges
	Removing plugs and cleaning fin fans in Naphtha (Benzene) service	Half mask respirator with Combination Olive/Magenta cartridges
	Removing bottom head and screens from Cat Poly Reactors	Half mask respirator with HEPA (magenta) cartridges, disposable coveralls, and gloves
	Opening Process Vessels in Naphtha (Benzene) Service that were not or cannot be adequately steamed. **(Turnaround Only)**	Full-face respirator with Combination Olive/Magenta cartridges
	Opening plugged Sulfur Loading Rack loading arms for Maintenance	Full-face respirator with Combination Olive/Magenta cartridges
	Opening lift station/waste water Separator roof panels and/or removing/replacing screens	Full-face respirator with Combination Olive/Magenta cartridges
	Opening or pulling bundles from heat exchangers that house Naphtha range streams (Benzene)	Half-mask respirator with Combination Olive/Magenta cartridges
	Opening or pulling Dehex bundles from shell	Full-face respirator with Combination Olive/Magenta cartridges
Equipment: Leaks or Releases	Tightening up or responding to leaks/releases on equipment in Sweet Naphtha or lighter range	Half mask respirator with Combination Olive/Magenta cartridges
	Tightening up or responding to leaks/releases on equipment in H2S service	Supplied air respirator or SCBA
Excavating VOC Contaminated Soil	If breathing zone VOC concentrations reach 50 ppm **or** odors become bothersome	Half mask respiratory protection with Combination Olive/Magenta
Leaks or Odor Issues	Contact Health on radio channel C-2. Minimum requirements to be determined after an evaluation by Health.	
Painting	Spray painting with Isocyanate-containing paints	Supplied air respirator or SCBA
	Spray painting with zinc-based paints. Zinc based paints contain a trace amount of lead.	Half mask respirator with Combination Olive/Magenta cartridges
Regulated Areas	Entering Benzene regulated areas	Half-mask respirator with Combination Olive/Magenta cartridges
	Entering Polycyclic Aromatic Hydrocarbons (PAHs) regulated areas	Half mask respirator with Combination Olive/Magenta cartridges
Sampling	Collecting sample from #51 Vac Seal Drum 3rd Stage Jet Condensate line	Half mask respirator with Combination Olive/Magenta cartridges
Skimming	Operator skimming of wastewater system	Half mask respirator with Combination Olive/Magenta cartridges
Tanks: Sampling or Gauging	See F/S 660 Safe Entry on Tops of Tanks in Service, Appendix A: Tank Roof Access Requirements	

	Task	**Respiratory Minimum Protection**
Tunneling	Tunneling/opening inner manways for the C3 Splitter Tower	Half mask with Combination Olive/Magenta cartridges
	Tunneling/opening inner manways	Full-face respirator with Combination Olive/Magenta cartridges if: 1) Confined Space Entry gas checks fall within acceptable ranges; **and** 2) There is no standing liquid
Vacuuming	Vacuuming Ammonium Bisulfate Salts	Half mask respirators with HEPA (magenta) filters
Welding / Hot Work Activities	See Welding Chart, Minimum Respiratory Protection Requirements for Welding/Hot Work. Filtering facepieces (dust masks) are not allowed for the control of welding fumes from alloy metals or if torch cutting / arc gouging.	
Welding / Hot Work Activities: NEW TANK CONSTRUCTION	Welding during new tank construction where metal has not been in service.	Minimum requirements to be determined after an evaluation of the space by Health. Requirements may change as space changes to confined space.

Appendix B- Minimum Respiratory Protection Requirements for Welding/Hot Work

Marathon Los Angeles Refinery
Minimum Respiratory Protection Requirements for Welding/Hot Work

Open Space = Half Mask HEPA (HH), Full-face HEPA (FFH)[1], or Supplied Air (SA)				
	Carbon	Stainless or Alloys	Coated Metals, (e.g., galvanized structures) **<0.06% lead**	Coating of lead-containing material, including galvanized coating **at or above 0.06% lead**[2]
Grinding	Not Required	HH	HH	HH w/ goggles or FFH [2]
Stick	Not Required	HH	See Note 4 below. Remove any coating to base metal and proceed with chart requirement or use SA.	See Note 2 below. Remove lead coating to base metal and proceed with chart requirement or use SA.
TIG or Heli-Arc	Not Required	HH		
MIG	Not Required	HH		
Oxy/Acetylene Torch Cutting	HH	HH		
Arc Gouging	HH	HH		
Confined Space = Supplied Air (SA), Half Mask HEPA (HH) or Full-face HEPA (FFH)[1]				
	Carbon	Stainless or Alloys	Coated Metals, (e.g., galvanized structures) **<0.06% lead**	Coating of lead-containing material, including galvanized coating (**at or above 0.06% lead**)[2]
Grinding	HH	HH	HH	HH w/ goggles or FFH [2]
Stick	HH	HH	See Note 4 below. Remove any coating to base metal and proceed with chart requirement or use SA.	See Note 2 below. Remove lead coating to base metal and proceed with chart requirement or use SA.
TIG or Heli-Arc	SA	SA		
MIG	SA	SA		
FCAW	SA	SA		
PAC/W	SA	SA		
Oxy/Acetylene Torch Cutting	SA	SA		
Arc Gouging	SA	SA		
Thermal Metal Application[3]	SA	SA	N/A	

1. When metal has been in sour service, a full-face respirator with combination (Multi Gas/HEPA) cartridges must be used due to the generation of sulfur dioxide unless supplied air respirators are required.
2. Lead-containing material must be handled by documented Lead-Awareness Trained Personnel per MRAL06.
3. A Chromium (VI) decontamination plan is required before proceeding with this type of work.
4. Coatings shall be stripped at least 4 inches from both sides of a weld per Cal-OSHA 1537, or SA is required.
5. **New construction welding in confined spaces must be evaluated by the Health group (Radio Cc-15; Wc-2).**

Minimum Respiratory Protection Requirements for Turnaround Activities		
Location	**Type of Work**	**Respirator Requirements**
FCC Regenerator & Disengager	Welding while refractory work is occurring in a confined space	Full-face HEPA
Calciner Kiln Cooler	Welding and thermal spraying in a confined space	Supplied Air

Notes:

a) The type of respirator that is selected is determined by the airborne concentration and physical state of the contaminant, not the user's personal preference.

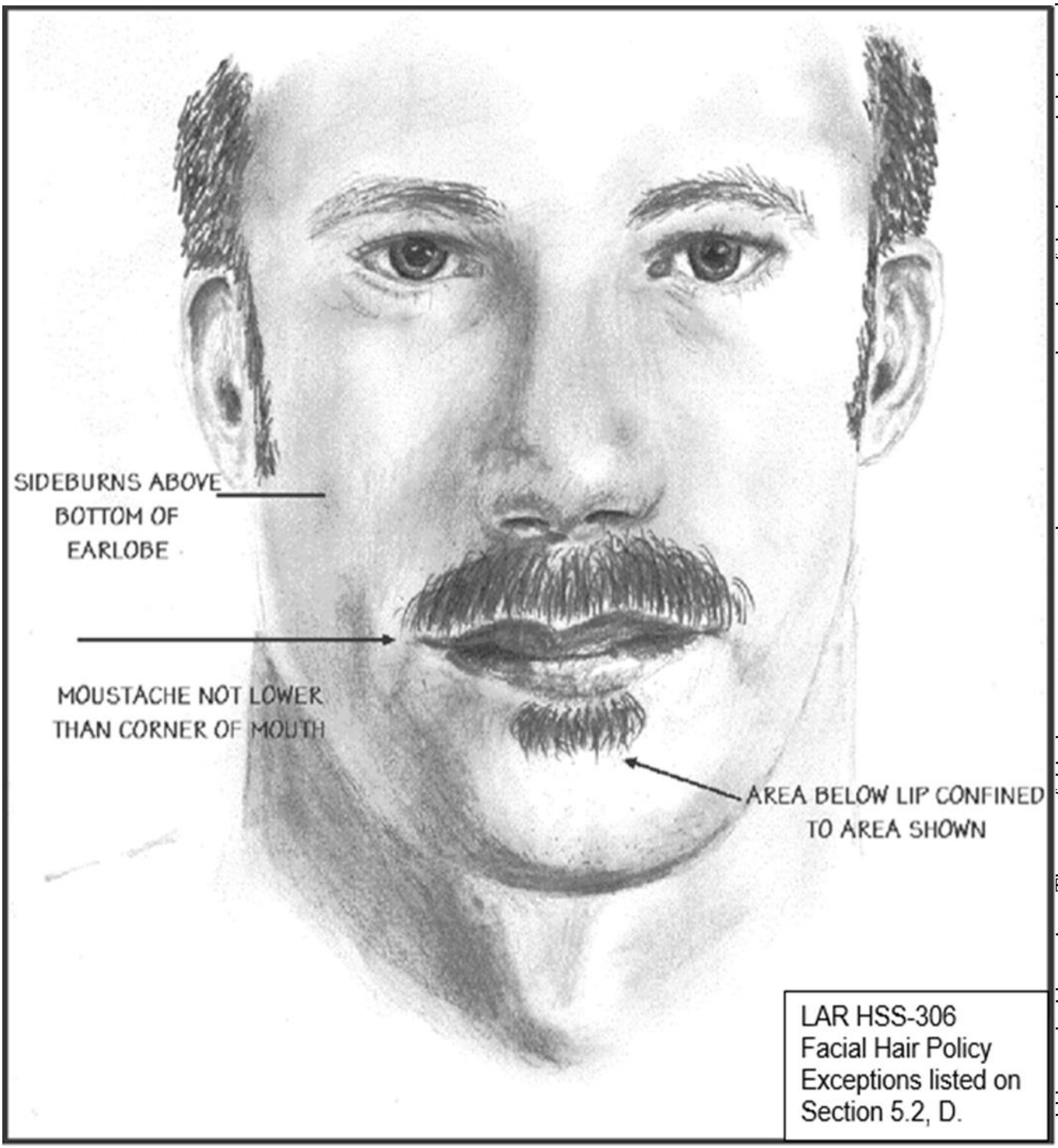
b) A loose-fitting SAR hood or half mask SAR under continuous flow / pressure demand are acceptable only in non-IDLH welding environments.

c) These respiratory protection requirements may, at any time, be upgraded based on airborne concentrations and the physical state of the contaminant.

d) The table above is not all-inclusive of all tasks that require respiratory protection.

e) Contact Health and Safety for assistance with selecting the proper respiratory protection.

Appendix C Acceptable Facial Hair Requirements



Appendix D: OSHA Letter of Interpretation

- **Part Number:** 1910
- **Part Title:** Occupational Safety and Health Standards
- **Subpart:** I
- **Subpart Title:** Personal Protective Equipment
- **Standard Number:** 1910.134 App D
- **Title:** (Mandatory) Information for Employees Using Respirators When not Required Under Standard.
- **GPO Source:** e-CFR

Appendix D to Sec. 1910.134 (Mandatory) Information for Employees Using Respirators When Not Required Under the Standard

Respirators are an effective method of protection against designated hazards when properly selected and worn. Respirator use is encouraged, even when exposures are below the exposure limit, to provide an additional level of comfort and protection for workers. However, if a respirator is used improperly or not kept clean, the respirator itself can become a hazard to the worker. 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. 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.

You should do the following:

1. Read and heed all instructions provided by the manufacturer on use, maintenance, cleaning and care, and warnings regarding the respirators limitations.

2. 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.

3. 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.

4. Keep track of your respirator so that you do not mistakenly use someone else's respirator.
[63 FR 1152, Jan. 8, 1998; 63 FR 20098, April 23, 1998]

Revision History

Document Revision History

Complete the following table for each document revision.

Revision Number	Description of Change	Custodian	Approved By	Approval Date
000	Integrated HSS for MPC LAR.	Macario Perez, Industrial Hygienist	Sharon Callahan, Health Superintendent	11/01/2018
001	Included new task (venting equipment) in Appendix A.	Macario Perez, Industrial Hygienist	Sharon Callahan, Health Superintendent	6/25/2019
002	Rephrased Section 5.2 C, to include contract personnel expectations.	Macario Perez, Industrial Hygienist	Sharon Callahan, Health Superintendent	12/04/2019
003	Closed Gap Assessment Findings with MPC HLT – 2005; included terms: Covered Employee, Covered Job List, identified Local Program Administrator, and OEL.	Macario Perez, Industrial Hygienist	Sharon Callahan, Health Superintendent	12/31/2019
004	Updated Section 5.2 removing exemption of Laboratory personnel and added the group in the Respiratory protection program.	Gemma Cortes-Fernandez HES Professional	Sharon Callahan, Safety Supervisor	7/25/2022
005	• Clarified when an employee must meet the facial requirements of this document, i.e., clean shaven, apply. • Clarified what "All Personnel" means i.e., direct MPC employees and contractors • Add links in document to covered employees from corporate. • Added HLT 2025 reference and in document for Medical Surveillance • Added Note: Any additional exemption or deviation to this standard requires an approved site variance from Safety Manager.	Rinaldo Edmonson	Natalie George, Safety Supervisor	1/10/2025