



**IPS** ★ **ITCS**  
Industrial Performance Services      Industrial Tubular Catalyst Services

# RESPIRATORY PROTECTION PROCEDURE

V:2023.1

# Respiratory Protection Procedure

January 2023

## RESPIRATORY PROTECTION PROGRAM

### A. POLICY

All employees will be protected from exposure to airborne radioactive, chemical, or biological contamination by installing, implementing, or instituting feasible engineering or administrative controls. If these controls do not prove feasible, or while they are being installed/instituted, appropriate respiratory protection will be provided. For some experiments, respiratory protection may be provided as an additional safeguard against exposure.

It is IPS★ITCS policy to provide employees with a safe and healthful working environment. This is accomplished by utilizing facilities and equipment that have all feasible safeguards incorporated into their design. When effective engineering controls are not feasible, or when they are being initiated, protection shall be used to ensure personnel protection.

This program does not apply to contractors as they are responsible for providing their own respiratory protection programs and respiratory protective equipment.

### B. DEFINITIONS

1. Respirator – A device provided to protect the wearer from inhalation of harmful or nuisance atmospheres. Respirators may function by air purifying and/or air supplying techniques.
2. Air Purifying Respirator – A respirator that filters and/or absorbs contaminants from the ambient air being inhaled by the wearer.
3. Supplied Air Respirator – A respirator in which clean air is supplied to the facepiece from an auxiliary source away from the wearer.
4. Self-Contained Breathing Apparatus – A respirator in which the air supply is carried by the wearer.
5. Atmospheric Contamination – The term applies equally to gases such as nitrogen, carbon monoxide, and carbon dioxide; the vapors of volatile substances such as benzene and carbon tetrachloride; toxic dusts and fumes; radioactive materials; and so forth.
6. Respirator Fit Test – A test used to determine a proper match or fit between the facepiece of the respirator and face of the wearer.

### C. RESPONSIBILITIES

#### 1. Supervisor

Supervisors will ensure each employee under their supervision using a respirator has received appropriate training in its use and an annual medical evaluation. Supervisors will ensure the availability of appropriate respirators and accessories, provide adequate storage facilities, and encourage proper respirator equipment maintenance.

Supervisors must be aware of tasks requiring the use of respiratory protection, and ensure all employees engaged in such work use the

appropriate respirators at all times. The Supervisors are responsible for the following:

- a. Ensures that all employees who wear respiratory protective devices are thoroughly trained in their use.
- b. Provides employees with the respiratory protection appropriate for the operation and ensures the use of such devices.
- c. Identifies potentially hazardous conditions and immediately notifies the HSEQT Manager for corrective action.

Supervisors shall contact the HSEQT Manager prior to non-routine work, which may expose workers to hazardous substances or oxygen deficient atmospheres. Examples of work, which may require the use of respirators includes, but are not limited to:

- Asbestos abatement activities
- Abrasive blasting
- Cutting or melting lead or stripping lead-based paints from surfaces
- Welding or burning
- Painting, especially with epoxy or organic solvent coatings
- Using solvents, thinners, or degreasers
- Any work which generates large amounts of dust
- Working in a confined space
- Using formaldehyde to decontaminate a space
- Bio-aerosols

## 2. Employee

- a. Uses respiratory protective equipment as instructed and required under hazardous agent protocols.
- b. Stores respirator properly to prevent damage and inspects prior to each use.
- c. Reports any malfunction of respiratory protective equipment to the immediate supervisor.

## 3. Others

Personnel, such as employees, inspectors, and visitors, who must enter an area where the use of respiratory protective equipment is required, even when their stay time in the area may be 15-minutes or less, shall be provided with and use appropriate equipment, including instructions regarding use and limitations. Personnel shall be fit tested and medically qualified to wear the respirator being issued prior to entry to the site.

Contractors are required to develop and implement a respiratory protection program for their employees who must enter or work in areas where exposure to hazardous materials cannot be controlled or avoided. This program must meet OSHA regulations and include issuance of respirators, medical evaluations, fit testing, and training.

#### 4. HSEQT Manager

- a. Develops and implements all aspects of the respiratory protection program.
- b. Develops training programs and standard operating procedures to fulfill the requirements of existing OSHA regulations and amendments.
- c. Purchases, selects, inspects, maintains, cleans, stores, and fit tests respiratory protective equipment.
- d. Periodically inspects and replaces all respiratory protective devices stored for emergency use.

#### D. PROCEDURES

1. Selection – Respirators shall be NIOSH-approved and selected on the basis of the potential hazards to which the worker is exposed. The following factors shall be ascertained by the Health and Safety Branch to ensure that the device selected for the employee will provide satisfactory protection when used properly:

- a. Chemical, physical, and toxicological properties of the contaminant(s).
- b. Review of actual and potential hazards to assess extent of injurious effects produced under all conditions of potential exposure.
- c. Evaluation of the duties to be performed by the wearer as they relate to restriction of movement and duration of potential exposure.
- d. An understanding of the principles, design, scope of use, limitations, advantages, and disadvantages of the available respirators. Respiratory equipment selected will be approved by IPS★ITCS or will otherwise be in accordance with existing OSHA regulations.
- e. If the amount of exposure is not known or the atmosphere is known to be IDLH, IPS★ITCS will go to the highest level of protection.

2. Medical Evaluations – It is the responsibility of the Health and Safety Branch to review the health status of all employees who may be required to wear respiratory equipment. The employee shall fill out a Medical Evaluation Questionnaire (MEQ) before being fit tested. The MEQ must be confidential, administered during normal working hours, understandable, and the employee must be given the chance to discuss the results with PLHCP. In the event of prolonged respirator use, the wearer should have a medical examination to determine if they are medically able to wear respiratory protective equipment without aggravating a pre-existing medical condition

Medical considerations include, but are not limited to the following:

- History of asthma or emphysema
- Difficulty in breathing
- Previously documented lung problems
- High blood pressure
- Stress Factors
- Artery diseases
- Documented heart problems
- Missing or arthritic fingers
- Facial scars
- Claustrophobia
- Poor eyesight

3. Fitting – Each individual required to use a respirator of any type will be fitted by the HSEQT Manager prior to using any such device. The fit test will include a demonstration of proper donning, wearing, and field fit testing techniques, an extensive leak test using a solution of isoamyl acetate as the test vapor and a quantitative fit test using a respirator fit tester. Any individual with a beard or other facial hair that may prevent a proper facepiece-to-face seal will not be fit tested until the hair has been removed. A separate Respirator Fitting and Training Record shall be maintained for each participating individual.

a. Respirator Fit Testing

A fit test shall be used to determine the ability of each individual respirator wearer to obtain a satisfactory fit with any air-purifying respirator. Both quantitative and qualitative fit tests will be performed. Personnel must successfully pass the fit test before being issued an air-purifying respirator.

No Company employee is permitted to wear a negative-pressure respirator in a work situation until they have demonstrated that an acceptable fit can be obtained. Respirator fitting is conducted initially upon assignment to a task requiring use of a respirator. Refitting is conducted annually thereafter upon successful completion of the respirator training.

Fit testing will be conducted by the HSEQT Manager, and the test results will be the determining factor in selecting the type, model, and size of negative-pressure respirator for use by each individual respirator wearer.

b. Fit Checking

Each time a respirator is donned, the user will perform positive and negative pressure fit checks. These checks are not a substitute for fit testing. Respirator users must be properly trained in the performance of these checks and understand their limitations.

### c. Negative Pressure Check

**Applicability/Limitations:** This test cannot be carried out on all respirators; however, it can be used on facepieces of air purifying respirators equipped with tight-fitting respirator inlet covers and on atmosphere supplying respirators equipped with breathing tubes which can be squeezed or blocked at the inlet to prevent the passage of air.

**Procedure:** Close off the inlet opening of the respirator's canister(s), cartridge(s), or filter(s) with the palm of the hand or squeeze the breathing air tube or block its inlet so that it will not allow the passage of air. Inhale gently and hold for at least 10 seconds. If the facepiece collapses slightly and no inward leakage of air into the facepiece is detected, it can be reasonably assumed that the respirator has been properly positioned and the exhalation valve and facepiece are not leaking.

### d. Positive Pressure Check

**Applicability/Limitations:** This test cannot be carried out on all respirators; however, respirators equipped with exhalation valves can be tested.

Close off the exhalation valve or the breathing tube with the palm of the hand. Exhale gently. If the respirator has been properly positioned, a slight positive pressure will build up inside the facepiece without detection of any outward air leak between the sealing surface of the facepiece and the face.

### e. Qualitative Fit Testing

Federal regulations (29 CFR 1910.1001) require qualitative fit tests of respirators and describe step-by-step procedures. This test checks the subject's response to a chemical introduced outside the respirator facepiece. This response is either voluntary or involuntary depending on the chemical used. Several methods may be used. The two most common are the irritant smoke test, and the odorous vapor test.

### f. Irritant Smoke

The irritant smoke test is an involuntary response test. Air purifying respirators must be equipped with a high efficiency particulate air (HEPA) filter for this test. An irritant smoke, usually either stannic chloride or titanium tetrachloride, is directed from a smoke tube toward the respirator. If the test subject does not respond to the irritant smoke, a satisfactory fit is assumed to be achieved. Any response to the smoke indicates an unsatisfactory fit.

The irritant smoke is an irritant to the eyes, skin, and mucous membranes. It should not be introduced directly onto the skin. The test subject must keep their eyes closed during the testing if a full facepiece mask is not used.

g. Odorous Vapor

The odorous vapor test is a voluntary response test. It relies on the subject's ability to detect an odorous chemical while wearing the respirator. Air purifying respirators must be equipped with an organic cartridge or canister for this test. Isoamyl acetate (banana oil) is the usual test. An isoamyl acetate-saturated gauze pad is placed near the facepiece-to-face seal of the respirator of the test subject's skin. If the test subject is unable to smell the chemical, then a satisfactory fit is assumed to be achieved. If the subject smells the chemical, the fit is unsatisfactory.

If the subject cannot smell the chemical, the respirator will be momentarily pulled away from the subject's face. If the subject is then able to smell the chemical, a satisfactory fit is assumed. If the subject cannot smell the chemical with the respirator pulled away from the face, this test is inappropriate for this subject, and a different test will be used.

This test is limited by the wide variation of odor thresholds among individuals and the possibility of olfactory fatigue. Since it is a voluntary response test it depends upon an honest response.

h. Quantitative Fit Testing

Quantitative fit testing, using the Portacount Plus fit test system, is generally performed on both full-face and half-face negative pressure respirators. Fit factors are determined by comparing the particle concentration outside the respirator with the concentration inside the respirator facepiece. An acceptable fit is achieved when the respirator wearer successfully completes a series of six programmed exercises (normal breathing, deep breathing, moving head up and down, moving head side to side, reading, and normal breathing) with a fit factor of 100 or more.

i. Special Problems

(a). Facial Hair

No attempt is made to fit a respirator on an employee who has facial hair which comes between the sealing periphery of the facepiece and the face, or if facial hair interferes with normal functioning of the exhalation valve of the respirator.

(b). Glasses and Eye/Face Protective Devices

Proper fitting of a respiratory protective device facepiece for individuals wearing corrective eyeglasses or goggles,



may not be established if temple bars or straps extend through the sealing edge of the facepiece. If eyeglasses, goggles, face shield or welding helmet must be worn with a respirator, they must be worn so as not to adversely affect the seal of the facepiece. If a full-facepiece respirator is used, special prescription glasses inserts are available if needed.

#### E. TRAINING

Appropriate training and instructions in the proper use of each type of respirator shall be provided by the HSEQT Manager. Respirator users and their supervisors will receive training on the contents of this Respiratory Protection Program and their responsibilities under it. They will be trained on the proper selection and use, as well as the limitations of the respirator. Training also covers how to ensure a proper fit before use and how to determine when a respirator is no longer providing the protection intended.

The HSEQT Manager provides training of respirator wearers in the use, maintenance, capabilities, and limitations of respirators are initially upon assignment of personnel to tasks requiring the use of respirators. Retraining is given annually thereafter and only upon successful completion of the medical evaluation.

Respirator training will be properly documented (Appendix A) and will include the type and model of respirator for which the individual has been trained and fit-tested.

This training will include, but not be limited to:

- a. Nature and degree of respiratory hazard
- b. Respirator selection, based on the hazard and respirator capabilities and limitations
- c. Donning procedures and fit tests including hand's-on practice to ensure an effective face piece to face seal
- d. Actual handling of the respirator and wearing it for a period in a test atmosphere.
- e. A discussion of respirators construction, operating principles and limitations.
- f. Care of the respirator, e.g., need for cleaning, maintenance, storage, and/or replacement
- g. Instruction on the nature of the hazard, including information on its physical properties, possible concentrations, modes of physiological action and means of detection.
- h. Use and limitations of respirator
- i. Discussions of maintenance and inspection procedures.

1. Inspection – For sanitary and health reasons, clean respirators shall be used by one individual only and shall be returned to the HSEQT Manager for cleaning, maintenance, and repairs. Cleaning and disinfecting of reusable components of a respirator unit will be performed by utilizing recognized procedures corresponding to the exposure atmosphere. Disposable respirators will be discarded properly after use by the individual. Inspection frequency for all unused devices shall be monthly. Units receiving routine use shall be inspected by the employee before and after each use. The inspection shall include the following checks when applicable.

- a. Tightness of connections
- b. Condition of facepiece, headbands, exhalation, and inhalation valves, connecting tube, and canister
- c. Pressure in cylinders (do not initiate use if less than 1500 psi)
- d. Deterioration of all rubber parts
- e. Regulator mechanism
- f. Lens of facepieces
- g. Warning alarm (self-contained units)
- h. Seal on cartridge package

2. Location and Storage of Respirators – Location and storage of all respiratory devices shall be controlled by the HSEQT Manager. When the need for respiratory equipment is anticipated, approval by the HSEQT Manager should be obtained in advance.

After inspection, cleaning, and any necessary minor repairs, store respirators to protect against sunlight, heat, extreme cold, excessive moisture, damaging chemicals or other contaminants. Respirators placed at stations and work areas for emergency use shall be stored in compartments built for that purpose, shall be quickly accessible at all times and will be clearly marked. Routinely used respirators, such as half-mask or full-face air-purifying respirators, shall be placed in sealable plastic bags. Respirators may be stored in such places as lockers or toolboxes only if they are first placed in carrying cases or cartons. Respirators shall be packed or stored so that the facepiece and exhalation valves will rest in a normal position and not be crushed. Emergency use respirators shall be stored in a sturdy compartment that is quickly accessible and clearly marked.

3. Self-Contained Breathing Apparatus – Emergency respirators in carrying cases shall be in areas designated by the HSEQT Manager. These respirators are provided for emergency situations only, and for use by authorized personnel. Any conditions requiring the use of these devices shall be reported to HSEQT Manager.

4. Special Requirements for Confined Spaces – In areas immediately hazardous to life or health, self-contained breathing apparatus, airline respirators or hose masks with blowers shall be used. For emergency rescue, a standby person with suitable self-contained breathing apparatus shall be at the nearest fresh air base. Communications (visual, voice or signal line) shall be maintained between all individuals present.

Persons using airline respirators and hose masks with blowers shall be equipped with safety harnesses and safety lines for lifting or removing them from hazardous atmospheres, or other equivalent provisions for rescue from hazardous atmospheres shall be used. More details concerning respiratory protection for confined space entry can be found in IPS★ITCS' Confined Space Program.

## F. TYPES OF RESPIRATORS

### 1. Air-Purifying Respirator

These respirators remove air contaminants by filtering, absorbing, adsorbing, or chemical reaction with the contaminants as they pass through the respirator canister or cartridge. This respirator is to be used only where adequate oxygen (19.5 to 23.5 percent by volume) is available. Air-purifying respirators can be classified as follows:

2. Particulate removing respirators, which filter out dusts, fibers, fumes, and mists. These respirators may be single-use disposable respirators or respirators with replaceable filters.

**NOTE:** Surgical masks do not provide protection against air contaminants. They are never to be used in place of an air-purifying respirator. They are for medical use only.

3. Gas and vapor-removing respirators, which remove specific individual contaminants or a combination of contaminants by absorption, adsorption or by chemical reaction. Gas masks and chemical-cartridge respirators are examples of gas- and vapor-removing respirators.

4. Combination particulate/gas- and vapor-removing respirators, which combine the respirator characteristics of both kinds of air-purifying respirators.

### 5. Supplied-Air Respirators

These respirators provide breathing air independent of the environment. Air must be Grade D or better and cylinders containing air must meet DOT requirements. A Certificate of Analysis must accompany any cylinder that is being used for breathing air. Such respirators are to be used when the contaminant has insufficient odor, taste or irritating warning properties, or when the contaminant is of such high concentration or toxicity that an air-purifying respirator is

inadequate. Supplied- air respirators, also called air-line respirators, are classified as follows:

a. Demand

This respirator supplies air to the user on demand (inhalation), which creates a negative pressure within the facepiece. Leakage into the facepiece may occur if there is a poor seal between the respirator and the user's face.

b. Pressure-Demand

This respirator maintains a continuous positive pressure within the facepiece, thus preventing leakage into the facepiece.

c. Continuous Flow

This respirator maintains a continuous flow of air through the facepiece and prevents leakage into the facepiece.

## 6. Self-Contained Breathing Apparatus (SCBA)

This type of respirator allows the user complete independence from a fixed source of air and offers the greatest degree of protection but is also the most complex. Air must be Grade D or better and cylinders containing air must meet DOT requirements. A Certificate of Analysis must accompany any cylinder that is being used for breathing air. Training and practice in its use and maintenance is essential. This type of device will be used in emergency situations only.

## 7. Identification of Respirator Cartridges and Gas Mask Canisters

Respirator cartridges and canisters are designed to protect against individual or a combination of potentially hazardous atmospheric contaminants and are specifically labeled and color coded to indicate the type and nature of protection they provide.

An approved label on the respirator will also specify the maximum concentration of contaminant(s) for which the cartridge or canister is approved. For example, a label may read:

**“DO NOT WEAR IN ATMOSPHERES IMMEDIATELY DANGEROUS TO LIFE. MUST BE USED IN AREAS CONTAINING AT LEAST 20 PERCENT OXYGEN. DO NOT WEAR IN ATMOSPHERES CONTAINING MORE THAN ONE-TENTH PERCENT ORGANIC VAPORS BY VOLUME. REFER TO COMPLETE LABEL ON RESPIRATOR OR CARTRIDGE CONTAINER FOR ASSEMBLY, MAINTENANCE, AND USE.”**

## 8. WARNING SIGNS OF RESPIRATOR FAILURE

(i). Particulate Air-Purifying

When breathing difficulty is encountered with a filter respirator (due to partial clogging with increased resistance), the filter(s) must be replaced. Disposable filter respirators must be discarded.

(ii). Gas or Vapor Air-Purifying

If, when using a gas or vapor respirator (chemical cartridge or canister), any of the warning properties (e.g., odor, taste, eye irritation, or respiratory irritation) occur, promptly leave the area and check the following:

- Proper face seal
- Damaged or missing respirator parts
- Saturated or inappropriate cartridge or canister

If no discrepancies are observed, replace the cartridge or canister. If any of the warning properties appear again, the concentration of the contaminants may have exceeded the cartridge or canister design specification. When this occurs an airline respirator or SCBA is required.

(iii). Service Life of Air-Purifying Respirator Canisters and Cartridges

The canisters or cartridges of air-purifying respirators are intended to be used until filter resistance precludes further use, or the chemical sorbent is expended as signified by a specific warning property, e.g., odor, taste, etc. New canisters, cartridges or filters shall always be provided when a respirator is reissued. When in doubt about the previous use of the respirator, obtain a replacement canister or cartridge.

(iv). Supplied Air Respirator

When using an airlines respirator, leave the area immediately when the compressor failure alarm is activated or if an air pressure drop is sensed. When using an SCBA leave the area as soon as the air pressure alarm is activated.

G. MAINTENANCE, CARE AND ISSUANCE OF RESPIRATORS

1. Maintenance

The maintenance of respiratory protective devices involves a thorough visual inspection for cleanliness and defects (i.e., cracking rubber, deterioration of straps, defective exhalation and inhalation valves, broken or cracked lenses, etc.). Worn or deteriorated parts will be replaced prior to reissue. No respirator with a known defect is reissued for use. No attempt is made to replace components, make adjustments or make repairs on any respirator beyond those recommended by the manufacturer. Under no circumstances will parts be substituted as such substitutions will invalidate the approval of the respirator. Any repair to reducing or admission valves, regulators, or alarms will be conducted by either the manufacturer or a qualified trained technician.

2. Cleaning of Respirators

All respirators in routine use shall be cleaned and sanitized on a periodic basis. Respirators used non-routinely shall be cleaned and sanitized after each use and filters and cartridges replaced. Routinely used respirators are maintained individually by the respirator wearer.

Replacement cartridges and filters are obtained by contacting the HSEQT Manager.

Cleaning and disinfection of respirators must be done frequently to ensure that skin-penetrating and dermatitis-causing contaminants are removed from the respirator surface. Respirators maintained for emergency use or those used by more than one person must be cleaned after each use by the user.

The following procedure is recommended for cleaning and disinfecting respirators:

- a. Remove and discard all used filters, cartridges, or canisters.
- b. Wash facepiece and breathing tube in a cleaner-disinfectant solution. A hand brush may be used to remove dirt. Solvents which can affect rubber and other parts shall not be used.
- c. Rinse completely in clean, warm water.
- d. Air dry in a clean area in such a way as to prevent distortion.
- e. Clean other respirator parts as recommended by the manufacturer.
- f. Inspect valves, head straps, and other parts to ensure proper working condition.
- g. Reassemble respirator and replace any defective parts.
- h. Place in a clean, dry plastic bag or other suitable container for storage after each cleaning and disinfection.

### 3. Issuance of Respirators

Respiratory protective equipment shall not be ordered, purchased, or issued to personnel unless the respirator wearer has received respirator training and a fit test. New employees who require respiratory protective equipment, must be placed into the respirator program before being issued equipment.

#### H. Record Keeping

1. This section requires the employer to establish and retain written information regarding medical evaluations, fit testing, and the respirator program. This information will facilitate employee involvement in the respirator program, assist the employer in auditing the adequacy of the program, and provide a record for compliance determinations by OSHA. (i) "Employee medical and exposure records." These records for each employee shall be preserved and maintained for at least the duration of employment plus thirty (30) years as specified in the 29 CFR 1910.1020.

# Revision History

Rev	Rev Date	Rev By	Approved By	Description
1.0	1/3/2022	Shayne Torrans	Shayne Torrans	Initial Procedure
1.1	11/23/2022	Shayne Torrans	Shayne Torrans	Format Revision

**Approvals:**

Procedure Owner

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# Competency Assessment

No.	Questionnaire	C/NYC
Q1		
A1		
Q2		
A2		
Q3		
A3		
Q4		
A4		
Q5		
A5		

Enclosed Attachments	
Risk Assessment	<input checked="" type="checkbox"/>
Environmental Aspect and Impact	<input checked="" type="checkbox"/>
Training and Competency	<input checked="" type="checkbox"/>
Measure and Evaluation Tools	<input checked="" type="checkbox"/>



# Competency Checklist

To be filled out by Trainer and signed by Employee, Assessor and Supervisor before being returned to the HSEQT Manager for recording purposes.

Procedure	Competency	Date	Competent YES / NO	Employee Signature

(Please tick appropriate box)

This employee is competent in performing the job.


This employee has not attained the competency level.

\*

\* *If the employee has not attained all competency levels, the General Manager must assess the action to be taken, provide an extension of training or alternative action as listed below.*

Alternate action to be taken: \_\_\_\_\_

Signed By	Employee: _____	Date: _____
	Trainer: _____	Date: _____
	Assessor: _____	Date: _____
	Regional Manager: _____	Date: _____

# Environmental Aspects and Impacts

## Identified Environmental Aspects and Impacts

The following table is a summary of the likely environmental aspects and impacts that may be identified during site inspections. The significance of each impact needs to be assessed using the Risk Assessment Model.

Activity	Aspect	Impact
<b>Purchasing &amp; Administrative Work</b>	Consumption of goods	Conservation of natural resources
	Consumption of energy (eg. Electrical equipment and facilities)	Release of greenhouse gases and atmospheric pollution; Consumption of natural resources; Habitat loss
	Generation of waste (eg. Paper)	Consumption of space for waste disposal; Habitat loss
<b>Climate Control</b>	Consumption of energy	Release of greenhouse gases and atmospheric pollution; Consumption of natural resources; Habitat loss
	Generation of noise	Disturbance to community; Habitat loss
<b>Cleaning of – offices / vehicles</b>	Storage, use and release of chemicals	Contamination of air, water or soil; Risk to human health
<b>Transport (Fleet vehicles / staff travel)</b>	Consumption of energy	Release of greenhouse gases and atmospheric pollution; Consumption of natural resources; Loss of habitat at all stages of generation; Light pollution
	Consumption of goods (eg. Oil)	Consumption of natural resources; Generation of waste; Habitat loss; Biodiversity impacts
	Generation of waste (eg. Oil)	Consumption of space for waste disposal; Potential contamination of water or soil; Habitat loss
	Exhaust emission	Release of greenhouse gases and atmospheric pollution
	Use of dangerous goods (eg. Batteries)	Potential contamination of air, water or soil; Risk to human health
	Generation of noise	Disturbance to community; Habitat degradation
<b>Operations</b>		

Sample only.  
To be filled in

# Risk Assessment

Risk Assessment // insert name here					
Step No: Logical sequence	Sequence of Basic Job Steps documented in the Procedure, Work Instruction and project plans. Break down Job into steps.  Each step should be logical and accomplish a major task.	Potential Safety & Environmental Hazards/Impacts at the site of the Job  Identify the actual and potential health and safety hazards and the environmental impacts associated with each step of the job.	Risk Rating  Refer to the risk matrix or HSEQ.PRO.Risk Mgt	Recommended Corrective Action or Procedure  <i>Determine the corrective actions necessary to reduce the risk to as low as reasonably practical (ALARP) refer to HSEQ.PRO.Risk Mgt. The risk must be reduced or controlled to ALARP before work commences.</i>  Document who is responsible for implementing the controls to manage each hazard identified.	Risk Rating refer to the risk matrix or HSEQ.PRO.Risk Mgt
1.					
2.					
3.					
4.					
5.					

# Audit



<b>Process:</b> insert// <b>Procedure:</b> Insert //			Date:	Audited by:
			Location of Audit:	Area Mgr/Supervisor:
Item	Question	Evidence Sited	Comments	Conformance Score 0,3,5
1.				
2.				
3.				
4.				
5.				
6.				
7.				
AUDITOR'S SIGNATURE:		CONFORMANCE SCORE: / 25	0 – Non-Conformance	
SAFETY REP'S SIGNATURE:		CONFORMANCE %:	3 – Continuous Improvement Opportunity	
			5 – Total Conformance	