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| **ABC COMPANY – Occupational Health and Safety Program** | | |
| **Occupational Health Plan - Guide** | | Issue date: DD/MM/YYYY  Review date: DD/MM/YYYY |
| Approved by: | Reviewed by: | |

Please note the following document is a guide to help you develop specific Occupational Health Plans. Occupation Health Plans required under the NL OHS Legislation include, but not limited to:

* Chemical and biological control program or plan
* Lead exposure plan (applicable to workplaces that have lead exposure for 30 days or greater in a calendar year)
* Hearing conservation program (applicable to workplaces that use hearing protection)
* Respiratory protection program (applicable to workplaces that use respiratory protection)
* Air quality program (applicable to mines and quarries)
* WHMIS education program
* Asbestos management plan (applicable to building owners and employers with asbestos hazards)

# 1.0 PURPOSE

Occupational health conditions (e.g., cancer, respiratory diseases, hearing loss, etc.) are caused by exposure to hazardous substances or environments in the workplace or as part of work activities. Preventing these conditions requires the elimination or reduction of hazardous exposures, and the control of risks. It is important that employers and workers take an active role in preventing exposures that are known to cause an occupational disease.

This Occupational Health Plan aims to prevent occupational diseases resulting from exposure to hazardous substances or environments in the workplace. By identifying health hazards and implementing appropriate controls. This plan aligns with legislative requirements and emphasizes the active role of both employers and workers in mitigating health risks.

# 2.0 RESPONSIBILITIES

**Employer:**

* Provide necessary resources for implementing the occupational health plan.
* Ensure compliance with legislation regarding health assessments and exposure limits.

**Supervisor:**

* Facilitate the implementation of the occupational health plan and oversee hazard assessments.
* Ensure workers are trained in their roles and responsibilities within the plan.
* Ensure workers adhere to the plan through routine inspections.

**OHS Committee, WHS Representative or Designate:**

* Participate in the development and review of the occupational health plan.
* Assist in communicating health hazards and corrective actions to workers.

**Worker:**

* Participate in training and adhere to safety protocols.
* Report any health hazards or incidents to supervisors immediately.

**Contractors and Visitors:**

* Follow all safety protocols and report hazards as per the occupational health plan.

# 3.0 HAZARD ASSESSMENT AND CONTROL

Regular hazard assessments will be conducted to identify health hazards associated with workplace activities. Assessments will involve the identification of hazardous agents, potential exposure pathways, and the evaluation of current control measures.

3.1 Identify Potential Sources of Exposure

What type of work is being completed? How is the work being completed?

* Are the workers using chemicals or other products during their work that may present unique hazards? Some examples could be ammonia gas used as a refrigerant, chlorine gas used as a disinfectant during water treatment, etc.
* Does the nature of their work exposure workers to unique hazards? Some examples include cutting or grinding concrete (silica exposure), preservation of specimens (formaldehyde exposure). building demolition (asbestos, lead based paints, mercury, PCBs), etc.
* Does a work process use chemicals or create hazardous exposure sources during the process? Some examples include:
  + Heat released from the process or working in extreme cold
  + Pentane gas released from making Styrofoam
  + Combustion of hydrocarbons - carbon monoxide, carbon dioxide, nitrous compounds, sulfur compounds, particulate matter
  + Noise generated while using a grinder
  + Manganese, nickel, and other metal fumes released from welding or cutting metal
  + Ionizing radiation – Naturally Occurring Radioactive Materials (NORM), Medical Scanning (X-Ray), etc.

3.2 Assess workplace for hazards identified.

Some examples include a noise survey using a personal noise dosimeter. personal and ambient air quality testing, etc.

* 1. Compare workplace sampling results to latest ACGIH Threshold Limit Value.

If the sampling result is below the applicable TLV, no further action is required at this time. Retest workspace in ~3-5 years to ensure conditions have not changed.

If results are above the applicable TLV, proceed to Step 3.4.

## 3.4 Control hazards to As Low As Reasonably Achievable (ALARA).

*Hierarchy of Controls:* Most effective to least effective.

**Example:** A boat is in dry dock in which flaking paint and rust will need to be removed from the hull before applying new paint. Abrasive blasting using fine grit sand-based blasting media was the chosen method to remove the unwanted materials from the vessel. Exposure to respirable silica dust has been identified as a health hazard for the worker - how can we reduce exposure to silica?

1. *Eliminate:* Can we do the work without using abrasive blasting? Can we use a paint stripper to remove the paint versus removing the paint with blasting media? This will remove the silica exposure hazard all together.
2. *Substitute:* Can we use another blasting media instead of fine grit sand? Perhaps we can use a natural material such as ground walnut shell? This may require more blasting media to be used during the process, however, the respirable silica hazard has been removed.
3. *Engineering:* It is determined that using fine grit sand is the only option to remove the unwanted paint material. How can we engineer the workplace to be safer using this blast media?
   1. We can enclose the work space and place it under negative pressure. Doing so will protect the worker performing abrasive blasting and workers nearby, while helping keep the workplace clean.
   2. Using high efficiency particulate air filters (HEPA) on the air moving equipment will also remove silica contaminants from the air stream as it is exhausted form the workspace itself.
4. *Administrative:* What can we do to reduce worker exposure overall?
   1. We can educate workers so that they are aware of the hazard present, the severity of the hazard, and can identify when work should be stopped to prevent dangerous situations.
   2. We can rotate workers performing the task to reduce their exposure to the contaminant.
5. *Personal Protective Equipment (PPE):* Our last line of defense once all options have been exhausted.
   1. We will provide the worker with a NIOSH approved helmet, blast apron, and gloves to protect their body from abrasion.
   2. The helmet will also be connected to a compressed breathing air supply. This will ensure that the worker has a constant supply of safe breathing air.

## 3.5 Reassess workplace for contaminants.

This will be used as a guide to determine if the controls we have put in place during Step 4 are effective in lowering the exposure to ALARA. When the results are reviewed adjustments can be made to the controls to further enhance worker safety. Repeat this process regularly as needed to achieve maximum safety for workers. It is important to note that this will be an ongoing process.

# 4.0 REVIEW AND UPDATE PROCESS

The occupational health plan will be reviewed annually or whenever significant changes occur in the workplace.

Updates will be made based on changes in legislation, the introduction of new processes, or after incidents that highlight deficiencies in the existing plan.

# 5.0 EXPOSURE CONTROL PROCEDURES

Procedures will be implemented to ensure that exposure to hazardous agents is kept as low as reasonably practicable and does not exceed Threshold Limit Value (TLV) guidelines prescribed by the American Conference of Governmental Industrial Hygienists (ACGIH).

* Engineering controls (e.g., ventilation, wet dust suppression) will be prioritized to minimize exposure.
* Administration controls such as training and worker rotation will be used to minimize exposure.
* Proper personal protective equipment (PPE) will be provided in conjunction with engineering and administrative controls as needed

# MAINTENANCE OF HAZARD CONTROLS

Regular inspections and maintenance of engineering controls and PPE will be scheduled to ensure their effectiveness.

Training will be provided to workers about hazard controls to ensure worker competency.

Supervisors are responsible for ensuring that these controls are functioning properly, and workers are trained to use them.

# 7.0 HEALTH SURVEILLANCE

Following a thorough hazard assessment, designated personnel will perform health surveillance for workers exposed to hazardous conditions, ensuring compliance with health monitoring requirements, where needed.

# OCCUPATIONAL HEALTH HAZARD ASSESSMENTS PROCEDURES

Assessments will be performed by trained personnel using recognized methodologies. Anyone conducting assessments must be qualified, possessing relevant certifications and experience.

## 8.1 Assessment Documentation:

Each assessment will include:

* Date(s) of the assessment.
* Details of the identified hazards.
* Description of the work area and workers involved.
* Methodologies for hazard assessment, including sampling and laboratory analysis.
* Occupational exposure limits for the assessed hazards, if applicable.
* Results that indicate whether exposures exceeded OELs.
* Corrective actions for any identified risks, including responsible parties, timelines for completion, and follow-up dates for effectiveness.
* Communication plan for sharing assessment results and corrective actions with workers.
* Signature and date of the assessor(s).

# 9.0 COMMUNICATION AND TRAINING

Results of hazard assessments and any required corrective actions must be communicated to all affected workers through meetings, memos, or postings. Individuals assigned specific roles in the occupational health plan will receive appropriate training regarding their responsibilities and the procedures outlined in this plan.

# 10.0 MEDICAL SURVEILLANCE

Based on the hazard assessment conducted, medical surveillance may be required if there is a significant risk of workers developing an occupational disease. Medical surveillance may be required for the following, but not limited to:

* Workers performing work in areas where the OEL is significantly exceeded.
* Workers are exposed to cancer or potentially cancer-causing causing contaminants (Carcinogenic – such as asbestos, silica, gamma radiation etc.)
* The work being conducted relies heavily on the workers’ PPE vs. other control methods.

If such conditions exist at the workplace, medical surveillance is warranted. Consulting with a third-party medical professional can help determine biological sampling methods and frequencies for the contaminant workers are exposed to. All biological exposures will be compared to the American Conference of Industrial Hygienists (ACGIH) Biological Exposure Indices (BEI), where applicable.

Records must be kept for while the worker is employed with the organization and made available upon request. Some contaminants have specific retention times with respect to medical surveillance records. Worker confidentiality must be prioritized and maintained by the employer during this process.

This medical surveillance must be communicated to workers.

This Occupational Health Plan is designed to protect workers from occupational diseases by systematically identifying and controlling health hazards. Regular monitoring, evaluation, and communication will ensure the plan remains effective and compliant with legislative requirements.