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| --- | --- | --- | --- |
| **Company Name:** | | | **Workplace location:**    Varied: Extraction Facility |
| **Prepared by:** | | | **Date:** |
| **Tasks / Activities** | **Hazard** | **Risk Level** | **Control Measures** |
| **Hydrocarbon Extraction** | Explosion/  Flammable | **Moderate** | * Ensure proper ventilation in extraction room (always check to ensure ventilation/exhaust equipment is working properly) * Ensure worker is wearing appropriate PPE (if respirator is required – fit testing will be required) * Properly store all solvents in flammable cabinets when not in use * Decant solvents into proper labelled containers and in an area with proper ventilation * Worker operating extraction must be deemed competent to operate * Worker follows manufacturers manual while operating extraction equipment * Worker follows maintenance schedule for extraction equipment as set out by manual * All repairs/service on extraction equipment is performed by a qualified person * Worker inspects extraction equipment prior to use |
| Inhalation/Skin Exposure | **Low** | * Ensure proper ventilation in extraction room (always check to ensure ventilation/exhaust equipment is working properly) * Ensure worker is wearing appropriate PPE (if respirator is required – fit testing will be required) * Decant solvents into proper labelled containers and in an area with proper ventilation * Worker has completed WHMIS course and has been trained on site with chemicals that will be used during the extraction process |
| **CO2 Extraction** | High Pressure | **Low** | * Worker operating extraction must be deemed competent to operate * Worker follows manufacturers manual while operating extraction equipment * Worker follows maintenance schedule for extraction equipment as set out by manual * All repairs/service on extraction equipment is performed by a qualified person * All high vessel pressures are secured * Worker inspects extraction equipment prior to use * Worker has completed WHMIS course |
| High Temperature | **Low** | * Worker dons PPE prior to handling any aspect of the equipment that will experience high temperatures * Any part of the extraction equipment that will experience high temperatures is identified |
| Explosion/  Flammable  (winterization) | **Moderate** | * Ensure proper ventilation in extraction room (always check to ensure ventilation/exhaust equipment is working properly) * Ensure worker is wearing appropriate PPE (if respirator is required – fit testing will be required) * Properly store all solvents in flammable cabinets when not in use * Decant solvents into proper labelled containers and in an area with proper ventilation |
| Inhalation/Skin Exposure  (winterization) | **Moderate** | * Ensure proper ventilation in extraction room (always check to ensure ventilation/exhaust equipment is working properly) * Ensure worker is wearing appropriate PPE (if respirator is required – fit testing will be required) * Decant solvents into proper labelled containers and in an area with proper ventilation * Worker has completed WHMIS course and has been trained on site with chemicals that will be used during the extraction process |
| **Alcohol/Ethanol Extraction** | Explosion/  Flammable | **Moderate** | * Ensure proper ventilation in extraction room (always check to ensure ventilation/exhaust equipment is working properly) * Ensure worker is wearing appropriate PPE (if respirator is required – fit testing will be required) * Properly store all solvents in flammable cabinets when not in use * Decant solvents into proper labelled containers and in an area with proper ventilation * Worker operating extraction must be deemed competent to operate * Worker follows manufacturers manual while operating extraction equipment * Worker follows maintenance schedule for extraction equipment as set out by manual * All repairs/service on extraction equipment is performed by a qualified person * Worker inspects extraction equipment prior to use |
| Inhalation/Skin Exposure | **Low** | * Ensure proper ventilation in extraction room (always check to ensure ventilation/exhaust equipment is working properly) * Ensure worker is wearing appropriate PPE (if respirator is required – fit testing will be required) * Decant solvents into proper labelled containers and in an area with proper ventilation * Worker has completed WHMIS course and has been trained on site with chemicals that will be used during the extraction process |
| Cold Exposure | **Low** | * Ensure worker is wearing proper PPE when super cooling ethanol |
| Ethanol Storage | **Low** | * This method requires a great deal of Ethanol, ensure ethanol is stored properly in flammable cabinets or storages facilities that meet regulatory requirements. |
| **Agitation Extraction** | Entanglement | **Low** | * Ensure worker does not open lid/access mixture when operating (agitating) * Worker operating extraction must be deemed competent to operate * Worker follows manufacturers manual while operating extraction equipment * Worker follows maintenance schedule for extraction equipment as set out by manual * All repairs/service on extraction equipment is performed by a qualified person * Worker inspects extraction equipment prior to use |
| Cold Exposure (ice/dry ice) | **Low** | * Ensure worker is wearing proper PPE when handling ice/dry ice * Ensure dry ice is stored properly (do not fix lid on storage vessel (dry ice expands and could cause the vessel to rupture if lid is fixed in place) |
| **Heat and Pressure Extraction** | High Pressure | **Low** | * Worker operating extraction must be deemed competent to operate * Worker follows manufacturers manual while operating extraction equipment * Worker follows maintenance schedule for extraction equipment as set out by manual * All repairs/service on extraction equipment is performed by a qualified person * All high vessel pressures are secured * Worker inspects extraction equipment prior to use * Worker has completed WHMIS course |
| High Temperature | **Low** | * Worker dons PPE prior to handling any aspect of the equipment that will experience high temperatures * Any part of the extraction equipment that will experience high temperatures is identified |
| **Notes:** | | | |

