

Q 23.

There are many procedures used to both minimise and manage chemical spills in the Primary Industry workplace, when attempting to minimise chemical spills there are four major components in managing this situation. **Isolate, Contain, decontaminate, dispose.**

When managing a chemical spill the first objective is to isolate the chemical and its surrounding environment this may involve moving all people away from the chemical as well as livestock which may conflict serious injury if they contact the chemical. After isolating the area it is important that all appropriate personal protective Equipment is sourced due to the major risk of poisoning from the chemical through injection, inhalation, ingestion or dermal Absorption. After PPE is found

continue in to isolate the area in regard to other chemicals. Remove these chemicals from the area, this is due to the major risk of Synergism, when two or more chemicals unite to create a far more toxic chemical. §

The second objective in managing a chemical spill is to contain the chemical through appropriate material, such as sand bags, or just sand, to prevent any run off of the chemical which would lead to devastating effects on the environment. Chemical spills can have a disastrous effect on native flora and fauna as well as natural water ways such as rivers creeks and gullies.

The third Objective in managing chemical spills is to decontaminate the chemical, this involves placing the uncontaminated chemical back

in the original container, then the contaminated chemical needs to be soaked up using appropriate material such as sand, this material used to decontaminate the area then needs to be properly disposed. After the material is removed the area then needs to be decontaminated through applying materials such as lime to the area, this will dilute the area of any contamination due to the chemical spillage.

After the area has been ~~decontaminated~~ decontaminated, the contaminated material then needs to be disposed. This can occur through a range of methods which apply with authorities such as Environment Protection Authority (EPA). This authority sets guidelines for the disposal of chemicals. Methods include, triple rinsing the container and returning it

to the supplier, hole and crushing the material or burying it if applicable.

Within the entire chemical spill management constant referral to the material Safety Data Sheet is Essential to find all information need from PPE to with holding periods of the chemical. All equipment used throughout the management process shown shall be thoroughly cleaned with warm soapy water.

The evaluation of the procedures presented to manage a chemical spill basically are the recommendation from the Relevant Authorities like the Environmental Protection Authority, After they are notified of the spill within the Isolation stage, they will continually examine the procedures.

used in managing the chemical spill and ~~can~~ can develop an environmental impact study. The success of the procedure is base upon the impact it ~~has~~ ^{has} on its surrounding environment.

Minimising Chemical Spills

Storage

- locked cupboard
- above flood water level
- well ventilated
- concrete floor
- Material Safety data sheet close by
- spillage equipment present
- chemicals segregated in groups
- level surface

Application

- Read Material Safety Data sheet
- Wear PPE

TRANSPORT

- Always carry the correct amount
- Hazchem cards
- Stable chemicals
- transport chemicals within same chemical group to reduce risk of Synergism.