Pollution Incident Response Management plan of Causmag International

Causmag International manufactures Calcined Magnesia (MgO) from Magnesite ore, obtained from its own mines located at Thuddungra. Causmag is located at 2 Park Avenue, Young, NSW 2594. No solvents or chemicals are used in our manufacturing process, and our product is organic and environmentally friendly. It is non-hazardous and a flame retardant. It is used in fertilizer, animal health, pharmaceuticals, water treatment, and soil remediation (to control leaching of heavy metals and toxic chemicals).

I. Description and likelihood of hazards

- Magnesite ($MgCO_3$) ore is fired with the help of natural gas in two kilns at 800 to 1000 deg. C to remove CO_2 from magnesite and convert it into Calcined Magnesia (MgO). During the process of firing, burnt exhaust gases are generated that carry some dust along with them. The kilns are fitted with chimneys to emit these gases to the atmosphere.
- We use lubricants and hydraulic oils in our machinery and gear boxes.
- We use acetylene gas in cylinders, but very less use, in flame cutting equipments.
- Storm water from the premises.

II. Preemptive actions to minimize risk from above hazards

- The dust from exhaust gases emitted via chimneys is collected with filter bags so that the dust emitted to the atmosphere is always below 50 mg/m^3. Both the kilns are fitted with bag houses to filter and remove the dust carried with exhaust gases.
- The waste lubricants and oil are collected in drums and handed over to waste oil disposal agencies at regular intervals.
- There is an identified place to store gas cylinders. A copy of the MSDS is placed near the storage point.
- The storm water from the premises is collected in a sediment retention pond and only clean water is allowed to overflow into the nearby creek.

III. Inventory of pollutants

A register of pollutants, like waste oil, lubricants, hydraulic oil, gas cylinders, etc is maintained.

IV. Safety equipment

All the staff working in the plant are provided with dust masks, helmets, safety glasses, safety boots and hand gloves. A fume mask is also provided during welding.

V. Contact details

The most likely pollution incident that can happen is the emission of dust through two chimneys of kilns. Whenever dust emission is observed for more than five minutes the plant is stopped to prevent further emission. The dust is not harmful to people and the environment. It is a non-hazardous product and is extensively used in soil remediation. However, it can be a nuisance. The potential cost of cleaning and removing dust emitted from the premises does not pose a risk of material harm.

Nevertheless, the attached notification protocol has been kept ready to be prepared for any emergency, however unlikely it may be.

VI. Communications with neighbours and the local community

If dust emission is observed continuously from the chimneys for more than five minutes, Causmag will inform the neighbors in person, and assist them with any concerns.

VII. Minimizing harm to persons on the premises:

Our product is non-hazardous and a flame retardant, there is low risk of harm to persons on the premises. The amount of lubricants, oil, and inflammable gases stored in our premises is not high.

VIII: Maps: enclosed

IX. Actions that are to be initiated during and after the incident:

- When there is emission of dust through chimney, the plant has to be stopped immediately. This has been advised to all production operators since 2009.
- Arrange to clean dust from the premises of neighbors, if required.
- If the retention pond water level reaches the high level marker point on the pond level depth gauge, the overflow pipe cap shall be removed to discharge overflow water to the creek via discharge №5.
- Clean the floor or earth if there is any oil spillage.
- Fire extinguishers are provided to put out fires, if any, caused by using inflammable gases for welding. The injured person is to be given first aid and rushed to the hospital.

X. Training of staff.

- The maintenance crew is familiar with proper maintenance of bag houses to avoid dust emission through chimneys and also in handling the waste oil and inflammable gases.

- Production operators are extensively trained in the operation of the bag houses by virtue of dust emission monitoring, control, and maintenance performed several times per day. Operators have independent authority to stop the plant if needed.
- Maintenance crew and production operators will be trained by refreshing and reiterating the following:
    - environmental operating license requirements
    - baghouse maintenance procedures
    - discussing this plan, and by
    - getting feedback and striving for continuous improvement
- Frequency of training: once a year
- Date of last training: 04/12/2024

Testing:

Manner of testing: Causmag will use a practical drill to test this plan. If needed, the local emergency service crew and Young Shire Council will be requested to participate.

Last date of update of plan: 04/12/2024

Last date of testing: 04/12/2024
(The date of testing must not exceed one year, or one month from a pollution incident, whichever is sooner.)

Names of employees participating in last test: Dave Cummins, Amanda, Gurlal Singh, Patrick Haskard, Mark Best and Amanda Clarke

Emergency contact number:

Lavanth Kumar Baddevolu
0415465406
lavanth@causmag.com.au