Greetings!

Best practices in diesel storage and handling

Diesel is refined from crude oil and is one of the most common fuels used by some business and industries across the world, for varied ways. Most of the products we currently consume such as food, drinks and many others are transported by trucks that have diesel engines. Did you also know that some of the construction and farming equipment that we use at home and in our facilities have diesel powered engines? Some power generators that provide electricity for our facilities, either as a main source of power or as a backup are powered using diesel. These are just some of the many benefits that we derive from this energy resource.

Some businesses store diesel in their premises to meet their daily demands like those already mentioned above. However, diesel has potential for adverse impacts on human health and environment if not handled and stored appropriately. This is due to its physical and chemical characteristics such as flammability and toxicity. The term flammability refers to its ability to react with air if ignited, for example using a match stick or lit cigarette. On the other hand, toxicity refers to its ability to cause harm to the human body for example if you ingest it, inhale directly or expose it to your skin accidentally. Some of the potential negative environmental impacts of diesel include: pollution of water and soil resulting in diseases such as cancer and loss of living organisms. This week we will share with you some of the best practices you can implement, to protect the environment and also the health and safety, of both your employees and guests.

Proper Storage

The right choice of container to store diesel perhaps is not well known to most people! Yet it is one of the most important decisions to be made when planning to store the diesel. Choosing the
The right container will help you a great deal not only to maintain health and safety standards in your facility but also to protect the environment around you. Metallic containers are the most preferred and should always be sealed. This is because they cannot be damaged easily compared to other containers such as plastic (which should only be used in immediate transfer). It therefore means that the likelihood of accidental spills into the environment is reduced. However, periodic inspections of the containers are still essential, to identify any leaks. If leaks are detected, timely repair or replacement of the containers is of essence. It is important to note that, the exact size of storage container you purchase for your storage will depend on the quantity you intend to store. For example, if you need to store diesel in small quantities you can use the 20 litres metallic jericans, while for large quantities consider using 200 litres metallic drums, such as the one illustrated below.

(Source: https://www.smithsofthedean.co.uk/)

Some facilities also store their diesel in underground or above ground tanks. This is especially common where bulk storage is required. Although there are many safety advantages of underground storage such as reduced risk of fire, leaks of diesel can go undetected for long periods of time. It is therefore important that volumes of diesel stored are regularly checked to identify any leaks. If leaks are detected, carry out repairs or replace the tank.

**Caging of diesel storage area (if stored outdoor)**

As already mentioned above diesel is a flammable liquid, therefore protecting the health and safety of workers and visitors is of great importance! When you plan to store your diesel outside, make sure it’s caged and always locked. Only authorized persons should be granted access to the diesel storage area.
Signage

Signage is an important part of an overall strategy you can implement to manage the risks in your facility. Because of the significant risk associated with diesel, its storage area should be clearly marked with a safety signage. If your diesel storage area is not marked, it will end up affecting your ability to manage the risks and potential accidents such as fire. Ensure you make a decision to mark your diesel storage area to save life and that cash in your pocket! It is also important that you use the correct signage, for example in the case of diesel you will need to pass the information that it is flammable if ignited (see the illustration below).

(Source: https://www.safetysign.com/search?page=1&)

Impervious surface

It is paramount that the storage areas for diesel be made of impervious surfaces to contain any accidental spill or leaks that might occur. This is because diesel can be classified as a hazardous pollutant with the ability to contaminate the soil and water supplies. Water supplies from the lakes, rivers or even boreholes, serve us drinking water for people and wildlife alike. This water can also be used for irrigation of gardens and other vegetation. Constructing an impervious surface is not a difficult task; all you need is a concrete surface made from cement, fine (sand) and coarse aggregates. In addition ensure the impervious surface is bunded to prevent accidental spillages and leaks of diesel from entering the immediate environment. A bund is basically an embankment of concrete, which forms part of the storage area (see illustration below).
We therefore hope that this article has increased your awareness and you will implement some of these practices in the spirit of promoting responsible tourism.