Trash burning and the environment

The Agency has been overwhelmed by complaints from various quarters on air pollution mostly emanating from backyard trash burning as well as the burning of trash in skip bins in and around the central business district. Undoubtedly, trash burning has become a common method to dispose of garbage due to various reasons chief among them being the local authorities' failure to regularly collect refuse. Besides polluting the air, the burning of trash raises a lot of health concerns. Most people who burn waste do not realise how harmful this practice is to their health, that of others and the negative impact this has on the environment. Pollutants from backyard burning of trash are released primarily into the air- close to ground level-with no pollution controls unlike industrial air pollution which can be regulated though the use of cleaner air pollution abatement technologies. Today's trash contains a lot of plastics and paper treated with chemicals, coatings and ink. The burning of such releases toxic chemicals and produces many pollutants including carbon monoxide, particle pollution, ash, dioxins (a group of highly toxic chlorinated organic chemicals which are produced primarily as a result of human activity) thus presenting dangerous health conditions that can be caused by inhaling or ingesting small amounts of these pollutants. Vulnerable groups such as small children, especially those under the age of five, the elderly and people with pre-existing respiratory conditions are at great risk of being affected.

Much of the pollutants released into the air through backyard burning settles on plants which are eaten by animals and people are exposed to them by eating meat, fish and dairy products. Some of these chemicals can remain in the environment for a long time. Particle pollution also referred to as particulate matter refers to micro particles released by open burning. Particles small enough to get into lungs can aggravate respiratory conditions such as asthma and bronchitis and have been associated with heart irregularities and attacks.

Open burning also contributes to ground level ozone pollution, also known as smog which can worsen respiratory, heart and other existing health problems. It can also lead to eye, nose and throat irritation, damage to the central nervous system among other effects. Environmentally, smog inhibits plant growth and can cause widespread damage to crops and forests. Vegetation plays a critical role in absorbing carbon dioxide and releasing the oxygen that we breathe, if we destroy it through excessive pollution we put ourselves at great risk. Carbon dioxide is a major greenhouse gas which drives global warming.

Ash residue from burning can contain toxic metals such as mercury, lead, chromium, and arsenic. Unaware of the potential danger some people scatter ash in their gardens or bury in their properties. Garden vegetables can absorb these chemicals and can make them dangerous to eat. Children can ingest soil containing these metals whilst rain can wash the ash into underground water and surface water, contaminating drinking water and food.

What are the dangers of open burning?

• It contributes to air pollution;

- Burning plastic, rubber or painted material does not only create an unpleasant smell, it produces a range of poisonous compounds;
- Smoke may cause problems for asthmatics, bronchitis patients and people with heart conditions;
- Fire can spread and result in extensive damage to the environment and property.

How can we break the habit of backyard burning?

Here are some simple tips to avoid the need to burn your trash.

Reduce

Avoid generating waste by buying only what you need, buy in bulk and select products with the least packaging.

Reuse

Buy products that can be re-used and/or come in containers that can be refilled.

Recycle

Pre-sorting waste at home makes it easy to transfer recyclables to recycling companies. Play your part as a recycling conscious consumer by buying recycled products.

Compost

Compost all biodegradable waste, the aaccumulation of waste at poorly designed landfills contributes to air pollution by releasing methane. In Zimbabwe 90% of our waste is biodegradable, composting this would greatly reduce the amount of waste we generate.

Other causes of air pollution.

Air pollution is not just limited to backyard burning; there are various other sources of air pollution which include the following;

.Smoke and gases from vehicular emissions;

- Burning of vehicle tyres;
- · Operation of incinerators;
- · Poorly maintained fuel burning appliances such as generators and

.Veld fires

What are the effects of air pollution?

Some of the effects include

- · Global Warming;
- · Climate Change;
- · Biodiversity Loss;
- · Smog;
- · Acid Rain and
- . Health Effects (asthma, cancers, bronchitis)

What does the law say?

The Environmental Management Act (Chapter 20:27) states that everyone has a right to live in a clean safe and healthy environment. It is therefore our duty as citizens to ensure that we uphold this right so as not infringe on other citizens' enjoyment of this right. The Act also gives us a duty to protect the environment for the benefit of present and future generations; averting air pollution is one of the ways of doing so. Remember you share the same air with everyone in your community. Individuals, industrialists, companies and developers are not allowed to emit substances which cause substantial air pollution (that is, by the emission of substances in excess of prescribed amount for a particular source) in contradiction of emission standards established under the EMA. Industrialists are encouraged to practice cleaner production mechanisms which reduce pollution.

Penalty for air pollution

- The polluter is liable to imprisonment for a period of not more than **five years** or to a fine not exceeding **level fourteen** (5 000,00) or to both such fine and such imprisonment.
- The polluter will in addition to any sentence or fine imposed on him/her:
- Pay the cost of the removal of pollution, including any cost which may be incurred by any government agency in the restoration of the environment damaged or destroyed as a result of the emission; and
- Render reparation, restoration, restitution or compensation to third parties affected by the offence as determined by the court upon application by such third parties.

Entrepreneurs can obtain an emission license from the Environmental Management

Agency. The license can be cancelled if:

- The polluter contravenes any provision of the Environmental Management Act; or
- The polluter fails to comply with any condition specified in the license; or
- The Board considers it in the interest of the environment or in the public interest to do so.

Please talk to us we are always ready to listen. Email: <u>eep@ema.co.zw</u> or 04 305543 / Toll free 08080028, sms/whatsapp 0779 777 094, Like our Facebook Page-Environmental Management Agency or follow us on Twitter @EMAeep.