

## FAQ's

### **What are the main concerns with respect to oil pollution?**

An oil spill happens when liquid petroleum is released into the environment by vehicle, vessel or pipeline. It happens on a large scale and is mostly seen in water bodies. It happens due to human negligence and is a major form of pollution. The source of the spill are many. Crude oil can be released by tankers on land. In water bodies, the spill occurs due to drilling rigs, offshore oil platforms and well. An oil spills and their effects can also be experienced with refined petroleum or even waste oil from large scale industries. What is common in all of them is that the damage caused by them is permanent and takes a long time to clean up.

As oil spill, it floats on water and prevents sunlight to pass through it. The shiny substance that you see sometimes on top layer of water is nothing but oil which makes it difficult for plants and sea animals to survive. Cleaning up of oil spill is no easy task. Various factors need to be considered before carrying out operations. Some of them being amount of oil spilled, temperature of water, type of beaches and many more.

### **Effects of Oil Spills**

**1. Environmental Effects:** First of these is the environmental effect. The animal life that lives in the water or near the shore are the ones most affected by the spill. In most cases, the oil simply chokes the animals to death. Others that live face a number of other problems. The oil works its way into the fur and plumage of the animals. As a result, both birds and mammals find it harder to float in the water or regulate their body temperatures.

Many baby animals and birds starve to death, since their parents cannot detect their natural body scent. Birds that preen themselves to get rid of the oil accidentally swallow the oil and die due to the toxic effects. In many cases, the

animals become blind due to repeated exposure to the oil. Dolphins, sea otters, fish, countless species of birds and many oceanic mammals face these consequences. Countering these effects and cleaning the oil can take anywhere between a few weeks to many years, depending on the damage caused.

**2. Effect on Economy:** The second major effect of the oil spill is seen on the economy. When precious crude oil or refined petroleum is lost, it effects the amount of petroleum and gas available for use. This means more barrels have to be imported from other countries. Then comes the process of cleaning the oil spill, which requires a lot of financing. Although the company responsible for the oil spills and their effects has to clean it up, there is a lot of government help required at this point.

The workers that are brought on board to clean up the spill face tremendous health problems later in life as well. Their medical treatment has to be paid for and becomes the responsibility of the government. Putting all the methods of recovery into place and monitoring them takes away resources from other more important work and hits the economy in subtle but powerful ways.

**3. Effect on Tourism Industry:** The local tourism industry suffers a huge setback as most of the tourists stay away from such places. Dead birds, sticky oil and huge tarballs become common sight. Due to this, various activities such as sailing, swimming, rafting, fishing, parachute gliding cannot be performed. Industries that rely on sea water to carry on their day to day activities halt their operations till it gets cleaned.

While the long term issues caused by oil spills and their effects is yet to be fully observed, the daily problems are clear. However, most corporations still do not have a solid plan in place for when this emergency may strike.

## **How can garbage pollution in water bodies be reduced?**

### *1. Wean yourself off disposable plastics.*

Ninety percent of the plastic items in our daily lives are used once and then chucked: grocery bags, plastic wrap, disposable cutlery, straws, coffee-cup lids. Take note of how often you rely on these products and replace them with reusable versions. It only takes a few times of bringing your own bags to the store, silverware to the office, or travel mug to Starbucks before it becomes habit.

### *2. Stop buying water.*

Each year, close to 20 billion plastic bottles are tossed in the trash. Carry a reusable bottle in your bag, and you'll never be caught having to resort to a Poland Spring or Evian again. If you're nervous about the quality of your local tap water, look for a model with a built-in filter.

### *3. Boycott microbeads.*

Those little plastic scrubbers found in so many beauty products—facial scrubs, toothpaste, body washes—might look harmless, but their tiny size allows them to slip through water-treatment plants. Unfortunately, they also look just like food to some marine animals. Opt for products with natural exfoliants, like oatmeal or salt, instead.

### *4. Cook more.*

Not only is it healthier, but making your own meals doesn't involve takeout containers or doggy bags. For those times when you do order in or eat out, tell the establishment you don't need any plastic cutlery or, for some serious extra credit, bring your own food-storage containers to restaurants for leftovers.

### *5. Purchase items secondhand.*

New toys and electronic gadgets, especially, come with all kinds of plastic packaging—from those frustrating hard-to-crack shells to twisty ties. Search the shelves of thrift stores, neighborhood garage sales, or online postings for items that are just as good when previously used. You'll save yourself a few bucks, too.

### *6. Recycle (duh).*

It seems obvious, but we're not doing a great job of it. For example, less than 14 percent of plastic packaging is recycled. Confused about what can and can't go in the bin? Check out the number on the bottom of the container. Most beverage and liquid cleaner bottles will be #1 (PET), which is commonly accepted by most curbside recycling companies. Containers marked #2 (HDPE; typically slightly heavier-duty bottles for milk, juice, and laundry detergent) and #5 (PP; plastic cutlery, yogurt and margarine tubs, ketchup bottles) are also recyclable in some areas.

### *7. Support a bag tax or ban.*

Urge your elected officials to follow the lead of those in San Francisco, Chicago, and close to 150 other cities and counties by introducing or supporting legislation that would make plastic-bag use less desirable.

### *8. Buy in bulk.*

Single-serving yogurts, travel-size toiletries, tiny packages of nuts—consider the product-to-packaging ratio of items you tend to buy often and select the bigger container instead of buying several smaller ones over time.

*9. Bring your own garment bag to the dry cleaner.*

Invest in a zippered fabric bag and request that your cleaned items be returned in it instead of sheathed in plastic. (And while you're at it, make sure you're frequenting a dry cleaner that skips the perc, a toxic chemical found in some cleaning solvents.)

*10. Put pressure on manufacturers.*

Though we can make a difference through our own habits, corporations obviously have a much bigger footprint. If you believe a company could be smarter about its packaging, make your voice heard. Write a letter, send a tweet, or hit them where it really hurts: Give your money to a more sustainable competitor.

## **What is noise pollution?**

**Noise pollution** or **noise disturbance** is the disturbing or excessive noise that may harm the activity or balance of human or animal life. The source of most outdoor noise worldwide is mainly caused by machines and transportation systems, motor vehicles, aircraft, and trains. Outdoor noise is summarized by the word environmental noise. Poor urban planning may give rise to noise pollution, since side-by-side industrial and residential buildings can result in noise pollution in the residential areas. Documented problems associated with urban noise go back as far as Ancient Rome.

Outdoor noise can be caused by machines, building activities, and music performances, especially in some workplaces. Noise-induced hearing loss can be caused by outside (e.g. trains) or inside (e.g. music) noise.

## **Discuss major causes and effects of noise pollution.**

### **Causes of Noise Pollution**

**1. Industrialization:** Most of the industries use big machines which are capable of producing large amount of noise. Apart from that, various equipments like compressors, generators, exhaust fans, grinding mills also participate in producing big noise. Therefore, you must have seen workers in these factories and industries wearing ear plugs to minimize the effect of noise.

**2. Poor Urban Planning:** In most of the developing countries, poor urban planning also play a vital role. Congested houses, large families sharing small space, fight over parking, frequent fights over basic amenities leads to noise pollution which may disrupt the environment of society.

**3. Social Events:** Noise is at its peak in most of the social events. Whether it is marriage, parties, pub, disc or place of worship, people normally flout rules set by the local administration and create nuisance in the area. People play songs on full volume and dance till midnight which makes the condition of people living nearby pretty worse. In markets, you can see people selling clothes via making loud noise to attract the attention of people.

**4. Transportation:** Large number of vehicles on roads, aeroplanes flying over houses, underground trains produce heavy noise and people get it difficult to get accustomed to that. The high noise leads to a situation wherein a normal person lose the ability to hear properly.

**5. Construction Activities:** Under construction activities like mining, construction of bridges, dams, buildings, stations, roads, flyovers take place in almost every part of the world. These construction activities take place everyday as we need more buildings, bridges to accommodate more people and to reduce traffic congestion. The down point is that these construction equipments are too noisy.

**6. Household Chores:** We people are surrounded by gadgets and use them extensively in our daily life. Gadgets like TV, mobile , mixer grinder, pressure cooker, vacuum cleaners , washing machine and dryer, cooler, air conditioners are minor contributors to the amount of noise that is produced but it affects the quality of life of your neighborhood in a bad way.

While this form of pollution may seem harmless, it in fact has far reaching consequences. The adverse effects on the health of the environment are quite severe. Not only is the local wildlife affected by the pollution, humans also face a number of problems due to it.

### **Effects of Noise Pollution**

**1. Hearing Problems:** Any unwanted sound that our ears have not been built to filter can cause problems within the body. Our ears can take in a certain range of sounds without getting damaged. Man made noises such as jackhammers, horns, machinery, airplanes and even vehicles can be too loud for our hearing range. Constant exposure to loud levels of noise can easily result in the damage of our ear drums and loss of hearing. It also reduces our sensitivity to sounds that our ears pick up unconsciously to regulate our body's rhythm.

**2. Health Issues:** Excessive noise pollution in working areas such as offices, construction sites, bars and even in our homes can influence psychological health. Studies show that the occurrence of aggressive behavior, disturbance of sleep, constant stress, fatigue and hypertension can be linked to excessive noise levels. These in turn can cause more severe and chronic health issues later in life.

**3. Sleeping Disorders:** Loud noise can certainly hamper your sleeping pattern and may lead to irritation and uncomfortable situations. Without a good night sleep, it may lead to problems related to fatigue and your performance may go down in office as well as at home. It

is therefore recommended to take a sound sleep to give your body proper rest.

**4. Cardiovascular Issues:** Blood pressure levels, cardiovascular disease and stress related heart problems are on the rise. Studies suggest that high intensity noise causes high blood pressure and increases heart beat rate as it disrupts the normal blood flow. Bringing them to a manageable level depends on our understanding noise pollution and how we tackle it.

**5. Trouble Communicating:** High decibel noise can put trouble and may not allow two people to communicate freely. This may lead to misunderstanding and you may get difficult understanding the other person. Constant sharp noise can give you severe headache and disturb your emotional balance.

**6. Effect on Wildlife:** Wildlife faces far more problems than humans because noise pollution since they are more dependent on sound. Animals develop a better sense of hearing than us since their survival depends on it. The ill effects of excessive noise begin at home. Pets react more aggressively in households where there is constant noise.

They become disoriented more easily and face many behavioral problems. In nature, animals may suffer from hearing loss, which makes them easy prey and leads to dwindling populations. Others become inefficient at hunting, disturbing the balance of the eco-system.

Species that depend on mating calls to reproduce are often unable to hear these calls due to excessive man made noise. As a result, they are unable to reproduce and cause declining populations. Others require sound waves to echo-locate and find their way when migrating. Disturbing their sound signals means they get lost easily and do not migrate when they should. To cope up with the increasing sound around them, animals are becoming louder, which may further add to the pollution levels. This



is why understanding noise pollution can help us lower the impact it has on the environment.

As of now, there do not exist many solutions to reduce sound pollution. On a personal level, everybody can help reducing the noise in their homes by lowering the volume of the radio, music system and the television. Listening to music without headphones is also a good step forward. Removal of public loudspeakers is another way in which the pollution can be countered.