DEC 2019 | ISSUE 3



Let's SOAR!

Stop Pollution Obey Laws Always Improve Reduce Waste



In this newsletter:

World Soil Day Page 01

Great Facts About the Clean Air Act Page 02

Tracking Emissions on JBSA Page 03

O Tannenbaum! Page 04

If you would like to contribute to this newsletter, please contact Sarah Otto. sarah.otto.1@us.af.mil

WORLD SOIL DAY - DEC 5 Stop Soil Erosion, Save Our Future SARAH OTTO

"A nation that destroys its soils destroys itself." - Franklin D. Roosevelt

World Soil Day celebrates the importance of soil as a critical component of our ecosystem. From it we grow food for our tables, feed for our livestock, fibers for our clothes, and wood for our homes.

There is a delicate balance to the complex ecosystem of plants, animals, bacteria and fungi that make up the chemistry of our soil.

Healthy soil can help manage flooding; it can hold more water and drain better, storing and filtering our water. And soil can store more carbon than all of the plants on Earth.

But there are dangers to our soils. Expanding cities "seal" our soils underneath miles of asphalt and concrete; deforestation and overgrazing causes the loss of nutrient-rich topsoil through erosion; and pollution and even poor agricultural practices are degrading the health of our soils.

World Soil Day is celebrated December 5th each year. Spread the word on the importance of protecting and improving our soils as a resource for our food and so much more.

GREAT FACTS ABOUT THE CLEAN AIR ACT

KIMBERLY HOLLAND

1963/ CLEAN 1970 AIR ACT

On average, we breathe over 3,000 gallons of air each day. Did you know that breathing polluted air can make you sick? Air pollution damages the natural environment and reduces how far one can see in national parks and cities, it even interferes with aviation.

SINCE 1970

- 6 common air pollutants have decreased by more than 50%
- Air toxics from large industrial sources have been reduced by nearly 70%
- New cars are more than 90% cleaner
- production of most ozone-depleting chemicals has ceased

All While:

- US GDP has tripled
- Energy consumption has increased by 50%
- vehicle use has grown by almost 200%

In October 1948, a thick cloud of air pollution formed above the industrial town of Donora, Pennsylvania. The cloud lingered for 5 days, killed 20 people and caused sickness in 6,000 of the town's 14,000 people.

Over 3,000 people died in 1952 in what became known as London's "Killer Fog." The cold and windless London weather, combined with increased coal usage and the presence of an anticyclone, caused dense smog to form. The smog was so thick that buses could not run without guides walking ahead of them with lanterns.

Events like these alerted us to the dangers that air pollution poses to public health. Several federal and state laws were passed, including the original Clean Air Act of 1963, which established funding for the study and cleanup of air pollution. But there was no comprehensive federal response to address air pollution until Congress passed a much stronger Clean Air Act in 1970. That same year Congress created the Environmental Protection Agency (EPA) and gave it the primary role in carrying out the law. Since 1970, the EPA has been responsible for a variety of Clean Air Act programs to reduce air pollution nationwide.

In 1990, Congress dramatically revised and expanded the Clean Air Act, providing EPA even broader authority to implement and enforce regulations reducing air pollutant emissions. By reducing air pollution, the Clean Air Act has led to significant improvements in human health and the environment in the United States.

TRACKING EMISSIONS ON JBSA

SARAH OTTO, STEVE SAN MIGUEL, MARIA GUTIERREZ, KIMBERLY HOLLAND

The Clean Air Act is a federal law that regulates air emissions from stationary and mobile sources, these regulations are enforced by the Environmental Protection Agency (EPA) and by the Texas Commission on Environmental Quality (TCEQ).

To comply with these regulations, we track emissions on JBSA and we obtain permits for applicable boilers, generators, degreasers, etc. All other emission sources that require a permit fall under Permit by Rule (PBR). A PBR covers authorization for activities that produce more than a negligible amount of emissions, but is too little for other permitting options.

JBSA tracks the following emission sources:

GREENHOUSE GASSES MISCELLANEOUS CHEMICALS DEGREASERS EXTERNAL COMBUSTION FUEL LOADING/DISPENSING FUEL STORAGE TANKS **INTERNAL COMBUSTION ENGINES MUNITIONS OPEN BURN/PEN** DETONATION **OZONE DEPLETING CHEMICALS EMISSION EVENTS ABRASIVE CLEANING BULB CRUSHING** FUEL CELL MAINTENANCE **COOLING TOWERS FIRE TRAINING** JET ENGINE TESTING HERBICIDE/PESTICIDE APPLICATION SURFACE COATING WELDING WOODWORKING CHEMICAL WARFARE AGENT TRAINING FIBERGLASS NONDESTRUCTIVE INSPECTION GRINDING

Every shop on JBSA gets an internal inspection, at least annually, by our F2F contractors and our Air Team, to make sure that we are ready for the annual TCEQ inspections and the biennial EPA inspections.

In order for our inspectors to confirm that we are following the requirements of our permits, and to avoid any findings or Notice of Violations with our regulators, good documentation and record-keeping is crucial!

Keep records in APIMS up to date, and make sure electronic or paper copies are readily available for review.

We want to recognize the efforts of the operators at the Central Energy Plant for meticulous record-keeping, marking time run and fuel consumption, and vigilance on permit requirements, for the hospital boilers and emergency back-up generators.

If you have any questions on what records you need, or on the inspection process, please contact our Air Team!

Air Team Lead: Steve San Miguel: 210-6714959 steven.san_miguel.17@us.af.mil LAK Environmental Office: 210-671-4844

O TANNENBAUM!



Many of you will be displaying an ornament-covered tree in your living room this holiday season. If you've already got an artificial tree and are happy with it, no worries! BUT, if it's time for a new one, you need to decide: real? or artificial?

There are the obvious pros and cons of each tree:

- With artificial trees, you pull it out of storage, set it up, decorate it, and done! No sap, no watering. And then you take it down and put it away for next year, storing it for 10-11 months. You don't get that fresh pine smell, or the experience of going and picking out a tree and bringing it home.
- With real trees you go out, pick the perfect tree, and set it up without having to "fluff" each and every branch, decorate it, and smell that piney goodness through the season until it's time to take it down and put it on the curb. And then you need to clean up the mess of pine needles, sap, and spilled water.

But here's something else to consider; which one is better for the environment?

Artificial trees are used year after year, so you're not killing a new tree every year and then throwing it out, but keep in mind that more than likely, the artificial tree was made overseas, and is made out of non-recyclable and non-biodegradable materials, so that when it is time to throw it out, it will stay in a landfill for 100s of years.

Trees bought at a tree farm are grown locally, and are replaced when they are harvested. They take less than a decade to reach 5' - 6', and while they do, they clean the air and provide watersheds and habitats for wildlife. Then, after the holidays, they are biodegradable.



Whatever you decide, know that your tree is just a small part of what you can do to make the season more green. Be aware of the environmental impacts of your choices this season, and together we can make a difference.