

03-10-10

03 15 20

DATE : _____

DAY : Sunday

DENR

IN THE NEWS

Strategic Communication and Initiative Service



LINE:

PAGE 11

DENR, SteelAsia partner for greening of Misamis Oriental

BY BERNIE CAHILES-MAGKILAT

The Department of Environment and Natural Resources (DENR) and SteelAsia Foundation, Inc. (SAFI) are jointly pursuing a five-year greening program for 23 hectares of forest land in Villanueva, Misamis Oriental.

SAFI is the corporate social responsibility (CSR) arm of SteelAsia Manufacturing Corp., the country's leading steel firm. With one of its steel mills located in Misamis Oriental, SteelAsia hopes to mitigate the manufacturing plant's impact on the environment through carbon dioxide sequestration by planting and nurturing trees.

"We have always been mindful of our role as stewards of the environment in the communities where we operate. Thus, we employ the latest technologies to ensure the most sustainable ways in operating our manufacturing plants," SteelA-

sia Chairman and CEO Benjamin O. Yao said.

DENR and SAFI signed a memorandum of agreement (MOA) recently to formalize the collaboration for the greening of Villanueva, Misamis Oriental.

During the signing ceremony, DENR Secretary Roy A. Cimatu urged more private sector participation in the Enhanced National Greening Program (ENGP) which is the flagship reforestation initiative of the government aimed at increasing the country's forest cover. Implemented in 2015, the ENGP seeks to cover the remaining 7.1 million hectares of open, degraded and denuded forests in the country by 2028.

For its part, SAFI Trustee Leena Y. Go said that the ENGP is very much aligned with the company's commitment to environmental sustainability. "We hope that this new partnership with the DENR will further invigorate our efforts

and strengthen our commitment to nourish our environment and enhance the communities where we operate," she said.

Established in 2018, SAFI supports the new global agenda on sustainable development of the United Nations Environment Program through the promotion of environmental sustainability as a crucial enabling factor in implementing the UN's sustainability development goals.

Pursuing a holistic approach to its CSR programs, SAFI is focused on four advocacy pillars – environment, education, health, and livelihood for its host communities.

Aside from Sec. Cimatu and Go, also present during the MOA signing were other SAFI Trustees Adrian S. Cristobal Jr. and Tina Y. Yu and other DENR officials, including Usec. Juan Miguel Cuna and Forester Aldrich Resma, Provincial Environment and Natural Resources Officer (PENRO) of Region 10.



Water allocation sa MM, balik na sa normal-NWRB

Itinaas at naibalik na ng National Water Resources Board (NWRB) sa normal ang water allocation ng suplay ng tubig sa Metro Manila.

Ayon ito kay Executive Director Sevilla David Jr ng NWRB kasabay nang pagsasabing bunga ito ng pagtaas ng demand sa tubig ng mga taga-Metro Manila at karatig lalawigan dahil na rin sa palagiang paggamit ng tubig lalo na sa paghugas ng kamay na isang paraan upang maiwasan ang pagkalat ng nakamamatay na COVID-19.

Ayon kay David, mula March 12, 2020 ay itinaas na ng ahensiya at naibalik na nila sa 46 cubic meters per second ang water allocation ng Maynilad at Manila Water na isusuplay sa mga water consumers mula sa dating 42 cubic meters per second.

Sinabi ni David na kaya pang pangalagaan ng wa-

ter level ng Angat dam ang pangangailangan sa tubig ng mga taga-Metro Manila hanggang sa sumapit ang panahon ng tag-ulan.

"Kahapon nasa 200 meters pa naman ang water level sa Angat so kaya pa niyang punuan ang needs sa suplay ng Metro Manila hanggang sa mag tag-ulan", pahayag ni David.

Anyang La Mesa dam naman ay maaaring mapagkunan din ng suplay ng tubig pero ito ngayon ay nananatiling buffer stock at hindi pa kailangan.

Niliwanag din ni David na dahil sa ginawa nilang pagtataas sa water allocation ng water concessionaires na Maynilad at Manila Water, magiging minimal na lamang o 'di kaya'y hindi na mararanasan ang pagkakaroon ng water interruption sa maraming lugar sa Kalakhang Maynila. (Angie dela Cruz)



TITLE:

PAGE 1/



ALIN ANG NAIBA

NI ALIN FERRER

UMABOT na sa 25 taon ang pagpapatupad ng Philippine Mining Act, mula nang ipasa ito noong Marso 1995.

Walang duda na mahalaga ang mga mineral sa industriya at may papel ang mga ito sa patuloy na pag-unlad ng isang bansa.

Kailangan natin ng bakal at ibang mga metal sa konstruksyon, sa mga makinarya, mga kotse at trasportasyon at pati na

rin sa kuryente.

Malaki ang pakinabang sa bagong teknolohiya tulad ng mga kompyuter at cellphone, at gawa ang mga ito sa mga metal na minina.

'Ika nga, eh, kung hindi 'yan tumutubo, kailangan mong minahin.

Pero hindi maikakaila na malaki rin ang epekto ng pagmimina sa kalikasan dahil halos lahat ng minahan ay nasa kabundukan at mga kagubatan.

Malakas ding gumamit ng tubig ang mga minahan at bago mo makuha ang mga minas, huhukayin at babaguhin ng permanente ang hitsura at gamit ng lupa.

Kaya nga itinulak ni Pangulong Duterte ang "responsableng pagmimina", at 'pag hindi raw ay ipasasara niya ang mga ito.

Nagsabi na rin siya na 'pag nagmatigas ang mga minahang kompanya, at hindi inayos ang kanilang mga trabaho, magpapatupad siya ng "ban" o pagbabawal sa open-pit mi-

ning.

Pero meronng bang "responsableng pagmimina"?

Paliwanag ng mga minero, pwede itong mangyari, lalo na nga kung sundin ng mga kompanya ang mga batas, tutuparin ang kanilang mga obligasyon sa kontrata at kung gagawin ng DENR ang kanyang mandato na i-regulate nang tama ang pagmimina sa bansa.

Puna naman ng mga maka-kalikasang grupo, panaginip lang ang "responsableng pagmimina", at ang pinakamalaking ebidensya raw ay ang

mga resulta ng "mine audit" na ginawa ni ex-DENR Secretary Gina Lopez.

Sa sobrang dami ng paglabag sa mga batas ng mga minahan, itinulak non ni Lopez ang pagpasara at suspensyon ng 26 na minahan sa bansa.

Kailangan natin ng balanse sa pagkalinga sa kalikasan at patuloy na pag-unlad.

Dapat siguruhin ng pamahalaan na ang mga Filipino ang totooong makinabang sa ating mga mineral.

'Yun ang responsableng pamamahala ng ating mga likas-yaman.

RESPONSABLENG PAGMIMINA?



'No Sail Policy' sa Manila Bay

NI BETHEENA KAE UNITE

Hindi muna maaaring maglayag sa Manila Bay habang ipinagbabawal rin ang domestic sea travel papasok at palabas ng Port of Manila, mula ngayong Linggo hanggang sa Abril 14, bilang bahagi ng isang buwang community quarantine sa Metro Manila.

Matapos ang deklarasyon ng Code Red Sublevel 2 dahil sa patuloy na lumalaking bilang ng mga nagpapositibo sa coronavirus disease-2019 (COVID-19) sa bansa, isinailalim na ang Philippine Coast Guard sa full alert status sa pagsisimula ng mas pinahigpit na pagbabantay sa sea travel.

Ayon kay Admiral Joel Garcia, Coast Guard commandant, ang "no sail policy" ay ipatutupad sa lahat ng pasahero at mga pribadong sasakyang-pandagat.

Magpapakalat naman ng Composite law enforcement at medical teams ng Coast Guard, Philippine

National Police, at Armed Forces of the Philippines upang maipatupad ang health protocols at safety guidelines sa mga pasahero at crew member ng domestic at foreign passenger ships, domestic at foreign cargo vessels, fishing boats, motorbancas, private watercrafts, government vessels, tugboats, at pilot boats sa Manila Bay at kalapit nitong lugar kabilang ang-- Pasig River, Navotas River, Cainta River, Laguna de Bay, Parañaque River, Manggahan Floodway, Marikina River, at Las Piñas Bay.

"Cargo vessels, fishing boats, tugboats, and government vessels may be allowed to sail, provided that crew members onboard shall be subjected to health protocols," ayon kay Garcia.

Agad umanong isasailalim sa isolation at itu-turn-over sa medical teamang mga pasahero at crew na kakikitaan ng sintomas ng COVID-19. Habang huhuhihin naman ang

magpapasaway at hindi susunod sa guidelines.

NO EXEMPTIONS

Nilinaw naman na ang "only passenger ships and motorbancas carrying passengers will not be allowed to enter Port of Manila." Ibig sabihin ang mga cargo vessels na may kargang nasa probisyon ayt papayagang makapasok at makapagpatuloy ng operasyon, ayon kay Commodore Armand Balilo.

Wala naman umanong exemption sa no sail at restriction policy na ipatutupad ng Coast Guard.

"Wala po tayong ipapatupad na exemptions kasi hindi natin alam kung sino ang may dala ng virus. Ibang klaseng giyera po ito. Practically, we are at war," paghilingaw ni Garcia.

"Itong giyera na ito, ibang klase (This is a different war). We do not know who our enemies are. So practically we are at war against COVID-19," dagdag pa nito.



Dinner for Greener Earth slated

Sheraton Manila Bay will be one with the world in the observance of Earth Hour on Saturday, 28 March 2020, as the hotel will not only switch off lights in its main public and office areas from 8:30 p.m. to 9:30 p.m. but it will also serve a 4-course set dinner for a cause at the Pacific Lounge for only P1,500 net per person.

This Earth Hour "Dinner for A Greener Earth" gourmet set menu consists of Grilled Pickled Mackerel Scad, Chicken and Spinach Terrine, Herb Sautéed Fresh Local Anchovies; Pumpkin Velouté; Pan Roasted Dorada "Meurette"; Raspberry Mellow, French Chocolate Gateau, Honeycomb Caramel;

and freshly brewed coffee and a selection of fine international teas.

Part of the proceeds will be for the benefit of World Wide Fund – Philippines.

Sheraton Manila Bay will also host a ceremonial Parade of Lights at the lobby and restaurants culminating at the symbolical lighting of the Earth Hour 60+ logo installation at the 7th floor as part of the hotel's awareness effort to educate the public on the effects of global warming.

Also to further the cause and collective effort to stop climate change, Marriot International shall donate US\$3 to World Wide Fund for every use of #MIEarthHour #Serve360 hashtags on

Twitter or Instagram.

For reservation, call +632 5318 0788 or email reservations.manilabay@sheraton.com.

The World Wide Fund for Nature (WWF) Philippines is partnering with Sheraton as it launches the #ChangeTheEnding campaign.

Over the next five years, the WWF will work closely with its partners in focusing on scaled solutions to address the monumental and very urgent environmental challenges facing the present and next generations of Filipinos.

"We want everyone to know that while the situation is grim, we can still

#ChangeTheEnding if we start acting today. We want all Filipinos to raise their voice for the planet, and to make nature matter," said the WWF.

"We now stand at a flashpoint in human history. Our actions today will determine the course of all our futures. This Earth Hour, we invite everyone to join us in living differently today, for the sake of our planet and our shared tomorrow," it added.

Faced with the enormity of the task ahead, the WWF Philippines is expanding its work in the holistic conservation of our natural resources and the protection of our planet's biodiversity – from ridge to river to reef.



Could worms be one solution to the plastic problem?



DR. Mercola, Guest

Waking Times

In 2013, the world produced 299 million tons of plastic, of which polystyrene — one brand name is Styrofoam — is one part. A report by the Worldwatch Institute showed that this number increased by 3.9% from the year before. As demonstrated in this short video, polystyrene currently may account for one-third of the contents of landfills; worms may be one answer to the problem.

Expanded polystyrene foam (EPF) was first discovered in 1839, becoming popular during World War II in material used to build military aircraft. Production grew at a phenomenal rate during this time; in 1946 Dow Chemical Company began working to make it more flexible. This resulted in the polystyrene product we now know: It's moisture resistant and light weight because 98% of it is air.

Unfortunately, polystyrene doesn't decompose. It does degrade somewhat, but not enough to keep marine life from eating it, filling their stomachs with plastic so they essentially starve to death for lack of nourishment. The chemicals in polystyrene harm wildlife on land, too, as they leach out and eventually make their way into the food chain.

Despite this knowledge, some sing the praises of this plastic, citing an overall lifecycle assessment that has a lower footprint than

other types of packaging material. However, despite the accolades, New York Mayor Bill de Blasio did not agree and, in 2015, he announced a law to ban its use in all five boroughs, "removing nearly 30,000 tons of ... waste from our landfills, streets and waterways."

The ban was not enforced until July 1, 2019, making New York the largest city to ban the product from use. Miami Beach, Seattle, San Diego and Washington, D.C., also have bans in place, while the states of Connecticut, Maine and Maryland are in various stages of legislation to ban use.

Polystyrene Responsible for One-Third of Landfill Content

In 2017 Metro New York reported that New York City's department of sanitation handled 12,000 tons of garbage every day. On a nationwide scale, EPA data from 2017 showed that the U.S. generated 263 million tons of waste, of which 13% was plastic.

While that doesn't tell you how much of the city's or nation's trash is polystyrene, researchers at Stanford University found that Americans dispose of 2.5 billion plastic foam cups every year.

That represents only a small portion of the plates, takeout containers and building materials in which polystyrene is used. But to give you an idea of how serious this issue is, the Los Angeles Times re-

ported in 2017 that, of the 9.1 billion tons of plastics ever produced, 5.4 billion has ended up in landfills or somewhere else in the environment.

The ban on polystyrene in New York was triggered in part by its physical properties. It is easily carried by the wind and difficult to remove because it is brittle. It develops an electrostatic charge causing it to cling to other material. The ban in New York affected 850,000 students served lunches on foam trays.

To give the product other attributes, the foam can be laced with chemicals such as flame retardants and other endocrine disrupting chemicals. But, exposure to flame retardants during pregnancy is associated with a lower IQ in children and neurodevelopmental disorders. One way this might happen is the influence flame retardants have on thyroid hormones.

Environmental Impact of Mealworms May Be Profound

In a detailed 45-page report, Styrofoam critics presented evidence rebutting multiple arguments that polystyrene has a smaller carbon footprint and that society could not continue to function without it. The researchers concluded:

Though Styrofoam is relatively inexpensive to produce, the social costs of its production involve the use of hazardous chemicals, fossil fuels, and the

emission of greenhouse gases.

The lightweight yet durable nature of Styrofoam that makes it good for single-use consumer products also yields it not readily recyclable and leads to its accumulation in landfills and as litter in waterways and highways. Finally, though Styrofoam itself is unreactive, the compounds used in its production have been identified as harmful to human health."

To say this is a serious issue is an understatement — however, there may be hope in a recent study by Stanford researchers who found that little mealworms may hold part of the answer to the giant plastics problem facing the Earth. In past research, data showed mealworms could eat through the foam and other forms of plastic.

In January 2018 a published study revealed the optimal conditions for consuming plastic happened at 77 Fahrenheit (25 Celsius) with 6% to 11% of bran supplementing the polystyrene. This same study found the second generation of mealworms fed a bran and polystyrene mixture could degrade more plastic, faster.

A new team looked at whether the same species of mealworms could eat polystyrene laced with toxic chemicals and still be safely consumed by livestock. The researchers sought to determine where the toxic chemicals would be deposited after the mealworms consumed the plastic, hop-



DATE: Could worms be one solution to the plastic
Problem?

PAGE: 2

ing for a proof of concept to derive some value from the tons of plastic waste littering the planet.

In this study the worms were fed a steady diet of plastic infused with HBCD, a chemical the EU plans to ban because it is a neurotoxin and an endocrine disruptor. After eating the plastic, the worms excreted 90% of the HBCD in 24 hours and the remaining after 48 hours.

What's more, the worms appeared as healthy as those fed a normal diet, and the shrimp that ate the experimental worms also appeared to remain healthy. One of team members commented: "This is definitely not what we expected to see. It's amazing that mealworms can eat a chemical additive without it building up in their body over time."

The mealworms were able to degrade the plastic during digestion. They also were able to separate the toxic chemical from the plastic and concentrate it, possibly making it easier to control. The researchers note while this may be helpful, it is not nearly as effective as eliminating the use of neurotoxic chemicals.

The mealworms are easy to cultivate and are known as an agricultural pest, as they eat nearly everything in their path. The scientists pointed out that it was the population of bacteria living in the worms' guts that actually degraded the plastic, not the mechanical digestion in the mealworm — so you can see that, even for a little mealworm, their gut bacteria is important.

Flame Retardant Chemicals Remain Hazardous After Eating

The mealworms may be one strategy to help reduce plastic pollution, but the danger of toxic chemicals within the plastic remains. In the mid-1970s, certain household items were required to be treated with flame retardant chemicals, including furniture, carpeting and children's clothing and toys.

Legislators may have believed they were helping preserve public health, but they failed to account for the damage the chemicals would have on children and adults as they leached out of the products into the environment.

The form of flame retar-

dant currently in use is terribly dangerous, since it may be inhaled, swallowed and absorbed through the skin, accumulating in your fatty tissue. The earlier flame retardants were from a family of polybrominated diphenyl ethers (PBDEs), which were replaced with organophosphate ester flame retardants (OPFRs) when the PBDEs were phased out.

Scientists have found OPFRs are often at levels 10 to 100 times higher in water, air and dust than were PBDEs. Additionally, they were also found in nearly every person who participated in research studies. In several, data showed the OPFRs were at levels high enough to negatively affect healthy brain development in children and fertility in adults.

It was expected OPFRs would be less persistent than PBDEs in the environment. However, predicting their presence is difficult to measure based on the compounds' physical and chemical properties. You'll find a more in-depth discussion of the dangers related to flame retardant chemicals currently in use at "Experts Fear Flame Retardants Are Triggering a Health Crisis."

Gut Bacteria Doing the Heavy Lifting

As mentioned, the researchers in the most recent study pointed to the bacteria inhabiting the mealworm gut as crucial to the process of degrading the polystyrene based on work published in 2015. In this study scientists were able to demonstrate the eradication of specific bacterial species in the mealworms' gut eliminated the ability to degrade polystyrene.

The researchers were able to stop the ability to depolymerize the plastic by feeding them gentamicin. By analyzing excrement, they found a bacterial strain, *Exiguobacterium* sp. strain YT2, in the gut of the mealworm was essential to the biodegradation of the material.

Importance of the Gut Microbiome

Evidence from small mealworms more than adequately demonstrates the importance of gut bacteria. The composition of your gut microbiome may be as distinct as your fingerprint and plays an enormous role

in your health and disease prevention. It influences your immune system and a variety of internal organs, such as your lungs, breasts and liver.

One study by the National Institutes of Health showed the gut microbiome could alter immune cells in the liver and trigger tumor growth. Your gut microbiome also has a strong influence over the development of intestinal conditions such as celiac disease or food allergies.

However, it also influences obesity, depression, chronic fatigue and Parkinson's disease. One factor may be the bidirectional role the gut plays in sleep. Research data show a link between insomnia and depression, that may be altered by the composition of the gut microbiome. Alterations in sleep cycles may increase your risk of health damage.

Although it is impossible to determine the exact diversification of an ideal microbiome, researchers have been able to change the composition in some with Type 2 diabetes to reverse the disease.

While most experienced a short-term improvement, this may have been related to the state of the gut microbiome before transplantation and the care and feeding of the new bacterial species after transplantation.

Changing Small Habits May Reap Big Rewards

An effective means of protecting the health of your gut microbiome is to provide a rich source of probiotics by eating fermented foods. You can easily and inexpensively make these at home as I demonstrate in this short video. Fermented foods can be an outstanding source of essential nutrients, such as Vitamin K2.

They help to boost your immune system and may be some of the best chelators available. As potent detoxifiers, fermented foods draw out toxins and heavy metals from the bloodstream. Fermented foods also provide a natural variety of microflora, much wider than you can receive in supplement form.

In addition to adding beneficial microflora to the gut, eating prebiotic foods can help them thrive. Prebiotics are found in fiber rich foods good bacteria prefer. On the other hand, pathogenic disease-causing microbes thrive on sugar and carbohydrates. When you focus on a whole, natural foods diet plan you support the growth of beneficial gut bacteria and help keep harmful bacteria in check.