

STRATEGIC COMMUNICATION AND INITIATIVES SERVICE

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BusinessWorld

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Benguet unit won't renew permit to process Balatoc

LISTED Benguet Corp.'s subsidiary, Balatoc Gold Resources Corporation (BGRC) has withdrawn its application to renew its Mineral Processing Permit (MPP) for the Balatoc tailings project (BTP) due in part to the low price of gold.

In a disclosure to the local bourse on Friday, Benguet Corp. attached a resolution issued by the Mine Rehabilitation Fund (MRF) Committee of the BTP endorsing the request of the management of the BGRC to withdraw its permit application. The permit is MPP No.13-201-CAR for the BTP, "which they will no longer pursue."

The abandonment of the permit renewal is accompanied by the withdrawal of P18 million in deposits at the Baguio branch of the United Coconut Planters Bank to cover the Final Mine Rehabilitation and Decommissioning Funds (FMRDF), intended for the reconditioning of pre-existing structures such as tunnels, among others.

"Implementation of the project by BGRC suffered delays due to technical and land issues as well as the low price of gold," read the disclosure. The move

will reconvey the interest in the BTP to Benguet Corp.

BGRC failed to bring the BTP, which is potentially the country's first large-scale gold recovery project from mill tailings, into full operation upon receiving its original MPP in 2010 until the permit's expiration last year, according to the resolution. The BTP involves the reprocessing of tailings of the Acupan mine in Itogon, Benguet for the recovery of residual gold.

Benguet's fully-owned subsidiary was not able to implement major rehabilitation works due to the non-commercial status of the BTP.

The resolution, however, added that BGRC started implementing projects under the five-year environmental protection program.

The resolution of the MRF Committee of the Mines and Geosciences Bureau (MGB) of the Cordillera Administrative Region will be submitted to the office of the Contingent Liability and Rehabilitation Fund Steering Committee at the MGB central office for consideration and approval. - **Janina C. Lim**

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A little goes a long way towards marine life conservation

Recognizing the critical role of communities in environmental protection and conservation, PLDT's wireless unit Smart Communications (Smart) and the World Wide Fund for Nature-Philippines (WWF-Philippines) recently held another Project Connect session in Barangay Fishing Village, Malita, Davao del Sur.

Launched in 2010, Project Connect involves a series of workshops held nationwide to promote a greener lifestyle among communities.

As a coastal area adjacent to the expansive Davao Gulf where 70 percent of the population are working fishermen, the learning session in Barangay Fishing Village mainly covered marine life and conservation topics. Children were taught to identify endangered marine animals while adults and

During the learning session, Ruel Bate, unit head of environmental education of WWF, shared important guidelines on marine rescue and response should endangered animals windup stranded in shores.

By immediately notifying marine experts, the community can keep people away from potential danger while at the same time protect endangered marine animals.

Bate added that it is important for kids to be educated, too.

"Teaching them the values of respecting the environment at a young age goes a long way," he said. "This gives them a deep understanding of the livelihood that keeps the community sustained."

The kids, after being taught how to protect marine animals, took part in a coloring session that made them write down a promise for the environment.

Robert Aldous, a 13-year-old resident of the barangay, wrote: "I promise to throw waste properly so that these will not be eaten by the dolphins."

Kids were also given animal plush toys to remind themselves to love the inhabitants of the sea and to protect them.

To further reinforce environmental responsibility, learning materials (posters and workbooks), which includes informative coloring books published by Smart and WWF for children, were also turned over to the barangay.

Apart from Project Connect, WWF also partnered with Smart to develop an SMS-based platform, Text-to-Donate, which allows Smart and TNT subscribers to be part of the fundraising efforts of WWF for the environment, especially the Davao Gulf.

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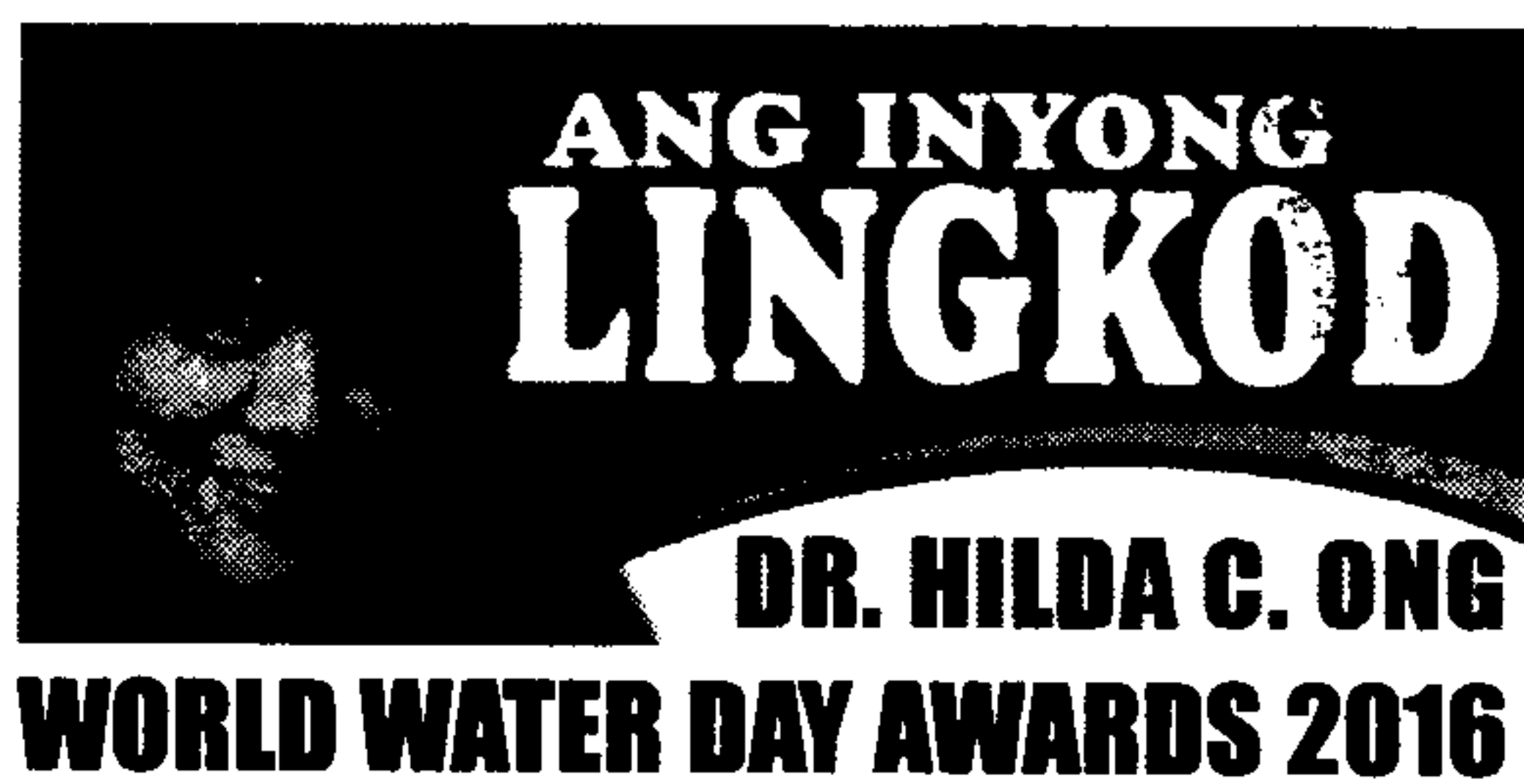
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ANG National Water Resources Board (NWRB) ay isa sa mga ahensya ng pamahalaan na namuno sa World Water Day Awards 2016, ito ay ginanap sa Novotel Hotel, Araneta Center Cubao, Q.C. Inisponsoran ng ahensya ang pagbibigay ng "Water-Wise City Award" kung saan ipinagkaloob ang parangal sa Lungsod ng Marikina para sa kanilang Rain Water Harvesting Program.

Ang WWD Awards ay isang pagkilalang ibinibigay sa mga institusyon dahil sa kanilang pagsisikap pangalagaan ang kapaligiran. Nabigyan ng parangal ang water districts ng Plaridel, Palayan at Bacolod; ang City Government of Marikina; Dagupan City's Bonoan Boquig Elementary School at ang Land Bank of the Philippines.

Kinikilala rin ang mga sumusunod na institusyon at mga kompanya: Society for the Conservation of Philippine Wetlands, Manila Bay Sunset Partnership Program, Inc., Aseana Business Park Estate Association, Inc., Mach Union Water Lab, Inc., at social enterprise Tubig Pag-asa.



Binigyan ng individual awards ang Laguna de Bay Environmental Army member Generosa V. Espiritu, LIMAS MARINA River Rehabilitation and Protection Council president Edgardo A. Reyes ("Kampeon ng Lawa"), waste recycling advocate Emma Suico Ventura ("Kawal ng Kalikasan"), Pasig River Rehabilitation Commission executive director Ramil R. Tan ("Water Warrior Award - Bayani ng Ilog"), community leader Edisa Don ("Water Warrior Award for Community Mobilization"), and artist Tata Raul Funilas ("Water Warrior Award for Environmental Education").

Iba pang aktibidad na sinuportahan ng NWRB ay ang WWE event kabilang ang WWD Run sa Marikina Sports Complex (DILG), Lake Pandin Tour sa Laguna (LLDA) at ang Pasig River Tour

(PRRC).

--oOo--

Nais kong batiin ng magiging kaarawan ang mga sumusunod: Gloria Macalalad (May 9), Isidra Penaranda (May 15), Jed Rick Manaois (May 18), Maria Cristina Arellano (May 21), Ranelo Dometita at Meady Salutillo (May 22), Erwin Francisco (May 23), Antonio Clarete Jr., (May 25) at Aiza Torres (May 30).

TANGKILIKIN ang programang **"HEALTH & Travel @ SERBISYO PUBLIKO"**, sa DWBL 1242 kHz (8:00-9:00 a.m.) Monday to Friday at DWSS 1494 kHz (9:00-10:00 a.m.), Saturday & Sunday. Mababasa ang kanyang mga article sa Dr. Hilda Ong FB Fan Page.

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WHO: Rising air pollution in cities killing millions

GENEVA (AP) — Almost everyone in large cities in poor and middle-income countries faces excessively high air pollution, a growing problem that is killing more than three million people prematurely each year and “wreaking havoc on human health,” the World Health Organization (WHO) said Thursday.

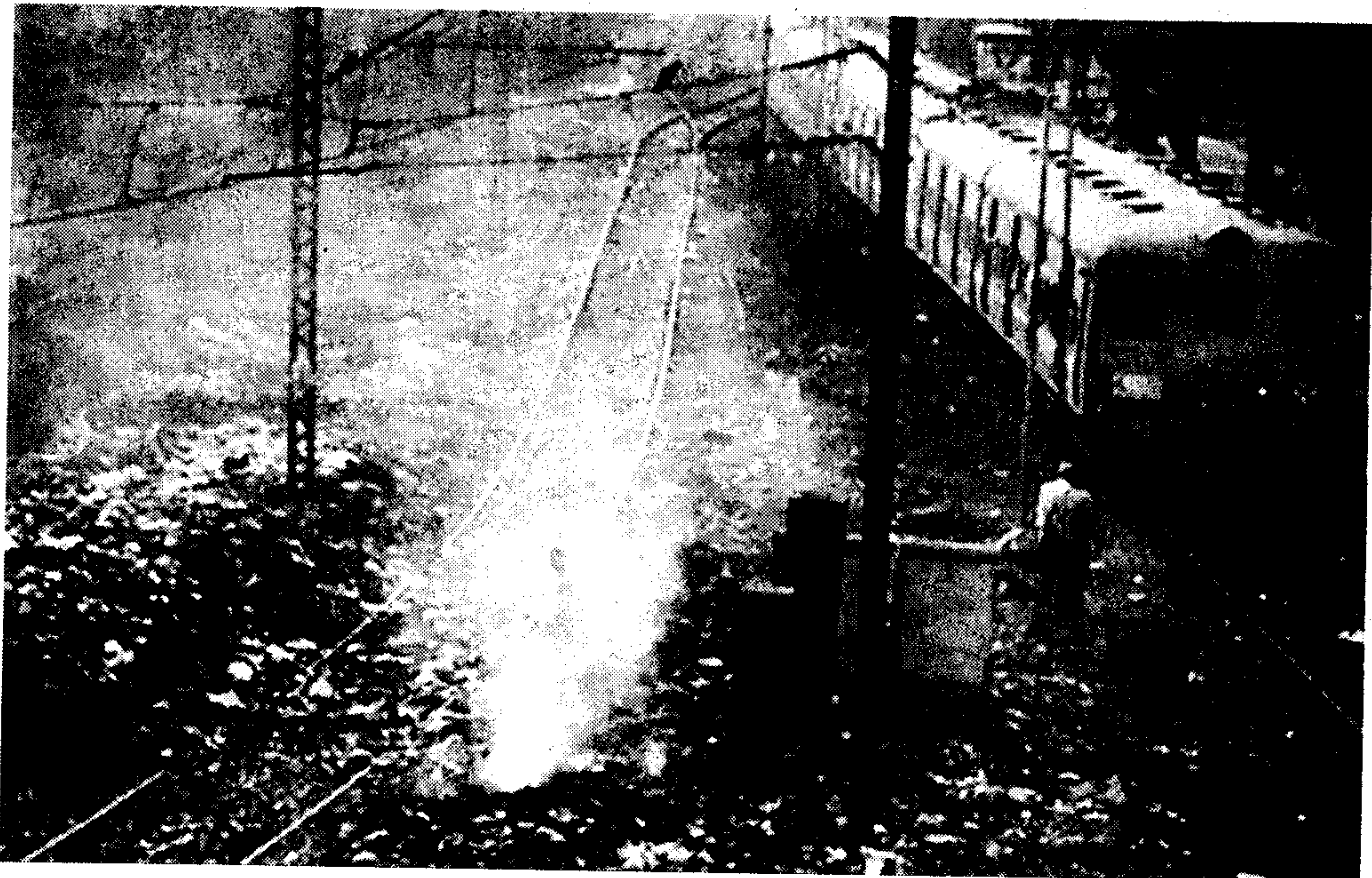
4 out of 5 city dwellers suffer

The UN health agency says more than four out of five city dwellers worldwide live in cities that don't meet WHO air quality guidelines — 98 percent in poorer countries and 56 percent even in high-income countries.

“Ambient air pollution, made of high concentrations of small and fine particulate matter, is the greatest environmental risk to health, causing more than three million premature deaths worldwide every year,” WHO said.

The findings are part of WHO's third Global Urban Ambient Air Pollution Database, which examines outdoor air in 3,000 cities, towns and villages — but mostly cities — across 103 countries.

It's based on country reports and other sources for the period from 2008 to 2013, although some nations, including many in Africa, don't contribute data.



Garbage burns as the train passes an Indian city recently.

THE PHILIPPINE STAR

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P.2 WHO: Rising air pollution in cities killing millions

Air pollution rising at alarming rate

An accompanying UN news release said global urban air pollution levels rose eight percent over that time span "despite improvements in some regions," and noted that people face a higher risk of strokes, heart disease, lung cancer and respiratory diseases as air quality worsens.

"Urban air pollution continues to rise at an alarming rate, wreaking havoc on human health," said Dr. Maria Neira, a WHO director for environment and public health. "At the same time, awareness is rising and more cities are monitoring their air quality. When air quality improves, global respiratory and cardiovascular-related illnesses decrease."

The agency's database named Zabol, Iran, as the city with the highest annual mean concentration of particulate matter of less than 2.5 microns in diameter – a key measure of air pollution that could damage health. By that measure, India stood out as home to more than half of the 21 most polluted cities on the WHO list.

New Delhi, which had previously topped the list, dropped to No. 11. The Indian capital has managed to decrease its annual average concentration of particulate matter by about 20 percent from 2013 to 2015. The change coincides with a series of air-clearing measures including banning older cars and cargo trucks from the city, introducing steep fines

for construction pollution or garbage burning, and shutting down an old coal-fired power plant.

"New Delhi has succeeded in arresting the trend, which shows that if you take action, you will see results," said Anumita Roychowdhury of the Delhi-based Center for Science and Environment.

But India overall is still struggling. The WHO data showed four other Indian cities - Gwalior, Allahabad, Patna and Raipur – surpassing New Delhi to rank within the world's top ten polluted cities – coming in second, third, sixth and seventh, respectively.

In Europe, the Bosnian city of Tuzla had the worst air on the continent, although its pollution level was far less than in much larger cities in India, Pakistan and China. The worst air pollution in a US city was in California's Visalia-Porterville area, but it too ranked far lower – 1,080th – than many developing-world cities.

Paris came in at 1116th most polluted, London at 1,389th and the New York-Northern New Jersey-Long Island region at 2,369th.

The database's cleanest town was Sinclair, Wyoming, ranking 2,973th with a particulate matter (PM 2.5) of 3, compared to 217 for the most polluted city, Zabol.

The agency praised efforts by policymakers to promote cleaner transportation, more efficient energy sources and better waste management.

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EDITORIAL

The cost of pollution

Public dissatisfaction over the acute inadequacy of mass transportation facilities and transport-related services particularly in Metro Manila is seen to be among the reasons for the rejection of President Aquino's anointed successor.

Now here's another reminder to the incoming administration about the need to give priority to efficient mass transportation: a study conducted by the World Health Organization showed that 98 percent of people living in low- and middle-income countries are exposed to air pollution levels way above limits set by the WHO.

The Philippines, classified as a lower middle income nation, had particulate matter levels measured from 2008 to 2013 that were more than double the WHO-set limits, according to the organization's 3rd Global Urban Ambient Air Pollution Database released last week.

Much of the air pollution has been attributed to vehicular and industrial emissions, with people in poor countries the worst hit. The WHO warned that poor urban air quality raised the risks of stroke, heart disease, lung cancer, and chronic and acute respiratory illnesses including asthma.

With the government expanding the coverage of PhilHealth, the impact of poor air quality on public health is going to be felt by taxpayers. Higher health risks mean bigger spending for public health care, which is inadequate enough in developing countries.

The WHO database on urban air quality has expanded over the years and now covers 3,000 cities in 103 countries. The study emphasized the need for speedy action to curb air pollution. Poor and rich countries alike suffer from smog.

Several advanced economies that now rank high in terms of air quality also used to be heavily polluted due to industrialization, proving that cleaning up the air is possible. Many of them have expressed willingness to share their experience with cities in developing nations in curbing air pollution.

Apart from learning from others, countries such as the Philippines can tap development aid for the substantial initial investment needed for green fuel and technology. Multilateral lenders have expressed readiness to provide financing for improving air quality in mega-cities. There's a lot of help available in cleaning up the air we breathe. What is needed is political will and efficient implementation.

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The cost of pollution



THE EXPONENT OF PHILIPPINE PROGRESS
SINCE 1900

MANILA BULLETIN

THE NATION'S LEADING NEWSPAPER

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MMDA to test Oplan on floods and geo-hazards

By ANNA LIZA VILLAS-ALAVAREN

The Metropolitan Manila Development Authority (MMDA) will put to the test its "Oplan Metro Yakal Plus (OMYP)," an integrated contingency plan for earthquake and related geological hazards that will incorporate data coming from the West Valley Fault System Atlas.

OMYP will be implemented on June 22 at exactly 9 a.m. as the MMDA holds another earthquake drill simultaneous to the Nationwide Simultaneous Earthquake Drill (NSED).

The OMYP outlines what the agencies should do when a 7.2-magnitude earthquake hits the metropolis, and if there are associated threats of landslides, liquefaction, or tsunami in Metro Manila.

Under the OMYP, MMDA Chairman Emerson Carlos, who will be acting as the Metro Manila Disaster Response Council head, said four provinces — Cavite, Laguna, Bulacan, and Rizal — will also be tapped to conduct similar drills and help victims of natural disasters.

"We want to improve the communication among government agencies

and stakeholders," said Carlos.

As agreed during a coordinating meeting last week, Carlos said each local government unit will have its own operations center.

Like the first metro-wide earthquake drill, Metro Manila will also be divided into four quadrants, but will have designated command and control center this time.

"The quadrants will not have designated evacuation centers but a command center where disaster personnel and concerned agencies can converge, where the relief goods will come from," said Carlos.

The western quadrant will be composed of Navotas, Malabon, and Manila. The location of the command and control center will be at Intramuros Golf Course.

The northern quadrant, composed of Quezon City, Caloocan, Valenzuela, San Juan, will have Veterans Memorial Medical Center Golf Course as its command and control center.

The eastern quadrant, composed of Marikina and Pasig, will have the LRT 2 Santolan Depot as command and control center.

The southern quadrant, com-

posed of Pasay, Makati, Parañaque, Las Piñas, Muntinlupa, Pateros, and Taguig, will have Villamor Golf Course as command and control center.

Meanwhile, Undersecretary Alexander Pama of the National Disaster Risk Reduction and Management Council (NDRRMC) said the objective of the Oplan Metro Yakal Plus is to "avoid an organized confusion" during a catastrophic earthquake as each agency has been tasked respective roles and responsibilities to play.

"We in the national (level) will be providing resources that the regions could not provide," he said.

Aside from instilling the "duck, cover, hold" position, Pama said the earthquake drill will be increasing the awareness of people to learn to survive and be able to assist potential victims as well.

For his part, Philippine Institute of Volcanology and Seismology director Renato Solidum said different scenarios will be realistically simulated in various areas when the West Valley Fault moves and when the alarm sounds to signal the start of the drill around 9 a.m.



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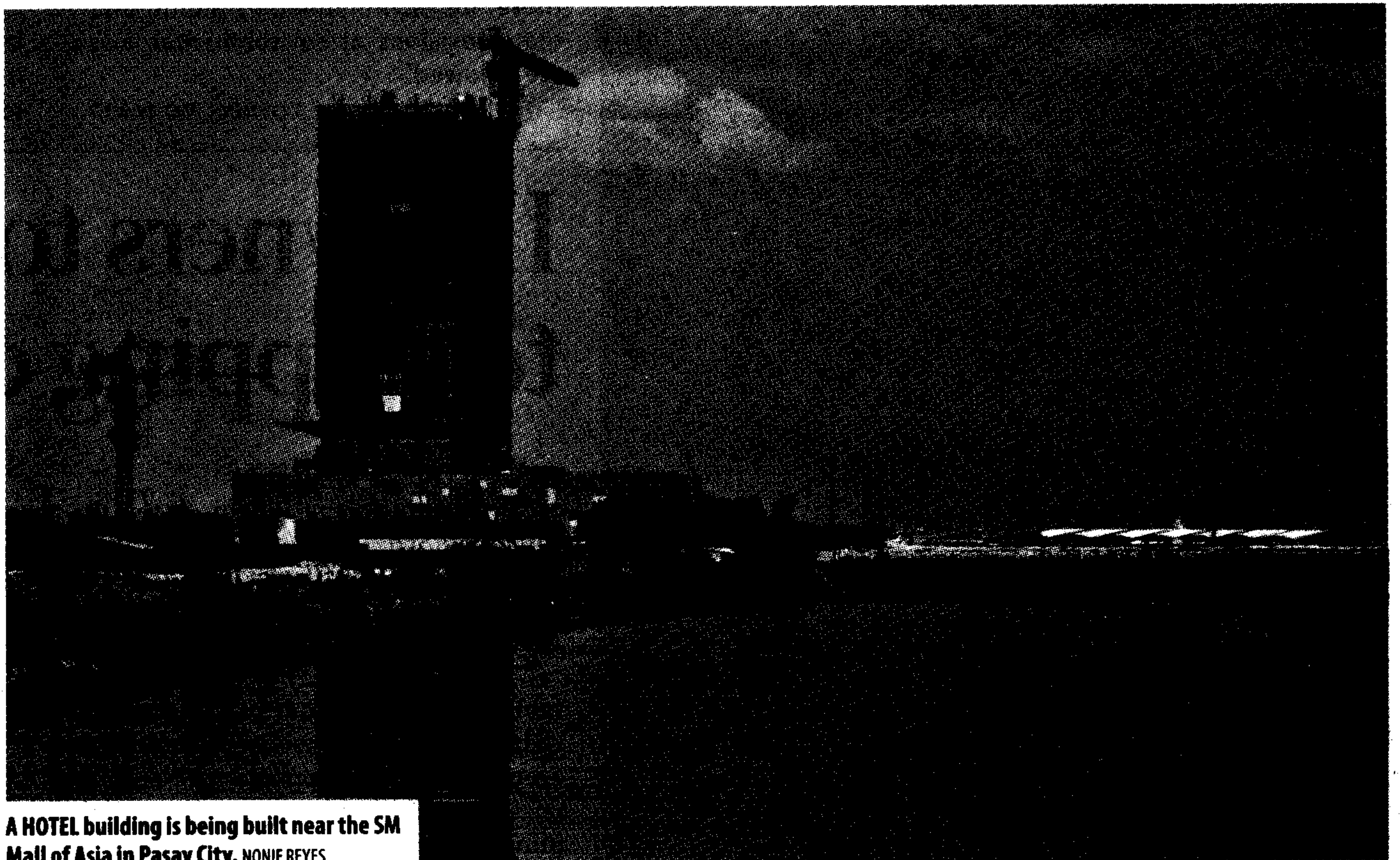
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STRATEGIC COMMUNICATION AND INITIATIVES SERVICE

BMReports

Land-reclamation tack fraught with challenges, opportunities



A HOTEL building is being built near the SM Mall of Asia in Pasay City. NONIE REYES

BY JONATHAN MAYUGA

@jonlmayuga

First of three parts

WITH the country's rapidly increasing population vis-à-vis limited land resources, the prospect of land reclamation, basically a strategy for urban expansion, continues to stir debate among stakeholders.

Despite strong opposition, massive land reclamation is a strategy being pursued by the government

to further boost the country's economy, as space has become a scarce resource.

The issue of land reclamation becomes even more pressing with the advent of climate change, with fears that human folly, in pursuit of development at the expense of nature, may eventually lead to problems of catastrophic proportions in the end.

Up in arms against massive land-reclamation projects, environmentalists and fishermen argue that

more ecologically unsound projects would further damage the country's already-vulnerable marine ecosystem, affect the country's food-production capacity and endanger the lives of tens of thousands of people living in coastal areas.

Under the administration of President Aquino, two small land-reclamation projects were successfully implemented, according to the Philippine Reclamation Authority (PRA).

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Land-reclamation tack fraught with challenges, opportunities

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These are the P360-million reclamation component of the Manila North Harbour Port Inc. involving 3 hectares and the P190-million reclamation component of the Batangas Agro-Industrial Development Corp. covering 4 hectares. Both were implemented through the public-private partnership (PPP) strategy of the Aquino administration.

Other than these two, land-fill projects that took place since June 2010 were made without the approval of the PRA, the agency that regulates land-reclamation projects.

Currently, the government is evaluating eight big land-reclamation projects in Metro Manila, Metro Cebu and Davao City, PRA Assistant General Manager Joselito D. Gonzales told the BUSINESSMIRROR in an interview.

These projects are expected to boost local and national development by way of capital inflow, wealth creation, job generation and increased government revenues, he said.

"Historically, mankind has always been attracted to beachfronts, not only because of its aesthetic beauty [but] because it has always been attractive to trade and commerce," Gonzales said, explaining the global trend of urban expansion.

"If an [area of an] LGU [local government unit] is congested and there're development opportunities, an LGU cannot encroach [on] its [neighboring LGU]," Gonzales said. That leaves the LGU "no other choice but to expand in coastal areas."

Environmental impact

CLEMENTE BAUTISTA of the environmental group Kalikasan-People's Network for the Environment (Kalikasan-PNE) is averse to land reclamation, especially on coastal areas.

Bautista said the destruction of coastal habitats will lead to reduction of fish catch and productivity at the local level. Bautista, Kalikasan-PNE national coordinator, added such move will also increase the country's

vulnerability to climate change, such as supertyphoons, flooding and storm surges.

"These [projects] will lead to higher economic value of damages, particularly in urban areas."

Moreover, Bautista said the opportunity to rehabilitate a coastal area, like the Manila Bay, will be lost. As such, he said, environmental services, like carbon capture and ecotourism, will also be lost.

However, Theresa Mundita S. Lim of the Biodiversity Management Bureau (BMB) of the Department of Environment and Natural Resources (DENR) said there are environmental laws that provide a safeguard against excesses in land-reclamation projects. These protect the country's rich biodiversity against unbridled development, Lim, BMB director, said.

"We appreciate that safeguards are observed in every development projects, because we really need to protect our rich biodiversity against destructive activities," Lim added.

In case of massive land reclamation, Lim said such activities should be conducted outside marine protected areas or away from areas with high concentration of biodiversity.

"That is why before undertaking [a] development project, we encourage proponents to do baseline studies as proof that the proposed project will not in any way harm our biodiversity."

Risk perceptions

WHILE environmentalists warn against potential adverse impact of land reclamation to the environment, small fishermen generally oppose such activities, complaining of declining fish catch with the loss of important ecosystem, including breeding grounds of fish and other marine life.

Underscoring the economic opportunities in land reclamation, however, Gonzales said the only expressed dangers of land reclamation are the perception of certain sectors of society.

"A properly engineered reclamation is expected to withstand acts of nature. It could last up to a thousand or even 10,000 years," he said.

In fact, Gonzales said land reclamation can provide coastal defense.

According to him, land reclamation can prevent storm surges and flooding, as the structures on the reclaimed land will act as a barrier against sea-level rise, tsunami or storm surge. Gonzales said this can be achieved without financial burden to the government by allowing reclamation for mixed-use development.

"In the case of Manila Bay, at an elevation sufficient enough for the new land mass [reclaimed land can] serve as barrier for the low lying areas around the bay," Gonzales, a lawyer, told the BUSINESSMIRROR. "Hydraulic structures can be designed and installed between the islands to regulate the flow of water, particularly during inclement weather conditions."

According to Gonzales, the benefits of land reclamation may outweigh the risks if the project is implemented accordingly.



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Land-reclamation tack fraught with
challenges, opportunities

Engineering interventions

ACCORDING to Gonzales, coastal defense can be done either through hard- or soft-engineering interventions.

Hard engineering involves the construction of concrete structures, while soft engineering involves the massive rehabilitation or reforestation of coastal areas.

Gonzales added that contrary to speculation, land reclamations are done in coordination with concerned government agencies, such as the Department of Agriculture (DA), particularly the Bureau of Fisheries and Aquatic Resources (BFAR).

He said the DENR, which issues Environmental Compliance Certificate (ECC), is also involved in such projects to ensure these are environmentally sound and that provisions of environmental laws are followed.

"Before we approve a project, we see to

it that the BFAR and the DENR are involved," he said. "If it's [involving] a key biodiversity area, we would not have approved it."

Opportunities teem

PRA's Gonzales said land reclamation offers an opportunity for a well-planned and modern urban expanse. It could also enhance coastal environment in urban setting and provide coastal defense through hard engineering interventions in the face of intensifying typhoons being experienced in many parts of the country.

A government-owned and -controlled corporation (GOCC), PRA regulates land-reclamation projects and serves as property development and management of public estates or lands belonging to, managed and/or operated by the government.

Reclamation, defined as the deliberate action of filling up foreshore, offshores or submerged areas of public domain for specific use using acceptable filling materials and appropriate technology, is being done in many parts of the world.

The World Bank, for one, has loaned Japan in 2010 for land reclamation in Northern Japan. The Hong Kong Disneyland Resort, Hong Kong International Airport and its predecessor Kai Tak Airport were all built on reclaimed land. Singapore's Ministry of National Development has also released a land reclamation plan for housing and recreation use by 2030.

Land reclamation in the Philippines, according to the PRA, has always been for expansion of highly urbanized areas, such as Metro Manila and Cebu. In some cases, land reclamation was undertaken for port expansion. It is also being done to provide for back-up areas for port facilities and for expansion of businesses thriving along seafronts.

Proponents, advocates

GONZALES clarified that the PRA is not a promoter of land-reclamation projects. Being the primary regulatory body tasked to evaluate proposed projects that involve reclamation, the PRA only evaluates the proposals that fall on its lap, he explained.

"I just want to make it clear, again, because we are being heavily criticized from all sectors as the promoter of land reclamation," Gonzales said. "I would like to emphasize, we are not the promoters. Applications and proposals just come in, mostly local government unit who submit proposals."

Citing PRA records, of the archipelago's 36,000 kilometers shoreline, only 10 km have, so far, been subjected to land-reclamation activities, covering approximately 2,000 hectares. The main concentration of these projects is the urban areas, like Metro Manila and Metro Cebu.

"The small projects are spread over different areas of the country and are mostly for port-related reclamations."

Manila Bay is where most of these land reclamation areas took place, Gonzales said. Cebu is in far second, also because of the extensive reclamation done there.

Rise in heat waves tied to kidney disease 'epidemics'

An increase in heat waves worldwide linked to climate change may be behind epidemics of kidney disease detected in workers who are increasingly exposed to heat and dehydration, according to a research review.

Global warming has increased temperatures overall by nearly one degree Celsius (just under two degrees Fahrenheit) over the past century, and they are expected to rise by another three to four degrees C by the end of this century, the authors write. Heat waves have also become more common, with about three quarters of the increase blamed on climate change, they add.

Heat waves increase with climate change

"There's evidence that long periods of heat waves have increased more significantly with climate change, when it's extremely hot the risk for kidney damage begins to really become evident," said senior study author Dr. Richard Johnson of the University of Colorado, Denver.

Extreme heat exposure can have immediate health effects, causing dehydration, heat exhaustion and heat stroke, as well as worsening pre-existing chronic disease, which can be fatal, Johnson and his colleagues write in

the *Clinical Journal of the American Society of Nephrology*.

Although chronic kidney disease is often caused by diabetes or high blood pressure, it can also be the result of recurrent heat exposure with physical activity and not enough hydration, which puts a heavy strain on the kidneys.

Chronic kidney disease often has no symptoms and has to be diagnosed by blood test. In early stages it may be treated with medications, but as kidneys fail over time they may require dialysis to filter the blood, and ultimately they can fail entirely, leading to death or kidney transplant.

Kidney disease cases rising

Johnson and his coauthors studied reports of upticks in cases of chronic kidney disease detected in hot climates and among populations without regular access to healthcare, such as poor agricultural workers.

A recent epidemic of chronic kidney disease in Central America, particularly among male sugarcane workers on the Pacific coast, was initially suspected to be linked to chemicals or other toxins, for example.

But the kidney damage was found to be more common among sugarcane cutters than among pesticide applicators, and less

common at higher altitudes where temperatures are cooler - suggesting that workers with the greatest exertion and heat exposure had the highest risk.

A similar epidemic is currently affecting about 100,000 individuals in northern Sri Lanka, primarily among young to middle-aged male rice farmers and women working in the fields, the authors write. Still another epidemic is affecting Andhra Pradesh on the southwestern coast of India, an area with some of the longest heat waves in the country.

Heat waves occur when sustained temperatures reach 40 degrees C (104 degrees F), or the temperature increases by five to six degrees C over the normal maximum temperature of the region or any time temperatures reach 45 degrees C (113 degrees F) or greater.

"It is undeniable that there will be numerous direct and indirect health effects as a result of climate change," said Rebecca Laws, a postdoctoral associate at Boston University School of Public Health who was not part of the new study. "We could be witnessing one such direct health effect, as epidemics of (chronic kidney disease) become more apparent in hot and humid regions throughout the world," she said.

— Reuters