

Company: Maynilad Water Services, Inc., Quezon City, Philippines

Company Description: Maynilad Water Services, Inc. (Maynilad) is the water and wastewater services provider for the 17 cities and municipalities that comprise the West Zone of the Greater Manila Area. An agent and contractor of the Metropolitan Waterworks and Sewerage System (MWSS), Maynilad is the largest water concessionaire in the Philippines in terms of customer base, currently serving about 9.5 million people.

Nomination Category: Achievement Categories

Nomination Sub Category: Achievement in Product Innovation

Nomination Title: NEW WATER: Maynilad's Foray into Potable Water Reuse



1. Which will you submit for your nomination in this category, a video of up to five (5) minutes in length about the achievements of the nominated organization since 1 January 2021, OR written answers to the questions for this category? (Choose one):

Written answers to the questions

2. If you are submitting a video of up to five (5) minutes in length, provide the URL of the nominated video here, OR attach it to your entry via the "Add Attachments, Videos, or Links to This Entry" link above, through which you may also upload a copy of your video.

3. If you are providing written answers for your submission, you must provide an answer to this first question: Briefly describe the nominated organization: its history and past performance (up to 200 words):

Total 200 words used.

Maynilad Water Services, Inc. (Maynilad) is the water and wastewater services provider for the 17 cities and municipalities that comprise the West Zone of the Greater Metro Manila area. A private concessionaire of the Metropolitan Waterworks and Sewerage System, Maynilad currently serves almost 10 million customers. It is managed by Maynilad Water Holdings Company, Inc.—a joint venture between Metro Pacific Investments Corporation, DMCI Holdings, Inc. and Marubeni Corporation. The consortium took control of Maynilad on January 24, 2007.

Water services in the West Zone improved significantly after Maynilad was re-privatized in 2007 under new owners. Prior to that period, the company's previous owners could not invest in the water and wastewater systems because of legal, financial, and regulatory issues.

The new owners were able to swiftly get Maynilad out of corporate rehabilitation. It invested \$210 billion from 2007 to 2022 to improve and expand the water and wastewater infrastructure, giving rise to tangible service enhancements.

Maynilad now operates and maintains five water treatment plants, 23 wastewater treatment plants, 38 pumping stations, 37 reservoirs, and 35 in-line boosters. It has also installed 6,125 kilometers of new water pipelines since 2007, bringing the total conveyance system to 10,778 kilometers.

4. If you are providing written answers for your submission, you must provide an answer to this second question: Outline the organization's achievements since the beginning of 2021 that you wish to bring to the judges' attention (up to 250 words):

Total 248 words used.

Angat Dam as the primary raw water source of some 15 million Metro Manila residents. This dependence on one major supply source has become problematic, as the effects of climate change on rainfall patterns and the severity of droughts and typhoons have made the availability of raw water supply in Angat Dam less predictable. Whenever supply shortages happen, Maynilad augments from smaller sources (e.g., deep wells).

To expand its alternative source options and reduce dependence on Angat Dam, Maynilad embarked on a project that would convert used water from households into drinkable supply called NEW WATER.

The move to recycle used water for drinking has never been done in the Philippines. But given the growing water demand and the strain on existing raw water sources, it could serve as a sustainable alternate supply—one that is more resilient to droughts or typhoons compared to traditional sources—thus enhancing water security and reliability.

Hence, Maynilad built the "NEW WATER Treatment Plant" to receive the treated effluent of its Parañaque Sewage Treatment Plant and convert it into water supply that meets the 2017 Philippine National Standards for Drinking Water.

Maynilad included additional testing parameters—namely, Protozoa (helminths, giardia, cryptosporidium), bacteria (salmonella, e. coli), THM, and organics—to ensure that NEW WATER is safe for drinking.

The Department of Health issued a Conditional Operational Permit on October 24, 2022, allowing Maynilad to operate its NEW WATER facility for one year. Piped-in distribution commenced on October 26, 2022, which benefitted 38,700 Parañaque City residents.

5. If you are providing written answers for your submission, you must provide an answer to this third question: Explain why the achievements you have highlighted are unique or significant. If possible compare the achievements to the performance of other players in your industry and/or to the organization's past performance (up to 250 words):

Total 249 words used.

Maynilad's NEW WATER project is the first implementation of "potable water reuse" in the Philippines, and the first "direct potable water reuse" application in Asia.

NEW WATER is compliant with the 2017 Philippine National Standards for Drinking Water (PNSDW), and the World Health Organization's guidelines on potable reuse.

When Maynilad introduced NEW WATER, the Philippines had no existing regulation on "potable water reuse". To address this, Maynilad worked with the relevant government agencies—including the Department of Health (DOH), Department of Environment and Natural Resources, and Metropolitan Waterworks and Sewerage System—to develop the guidelines, which will henceforth be adopted should other industry players choose to embark on a similar initiative.

Simultaneously, Maynilad conducted a series of social acceptability tests and public consultations involving customers, local government units, and government agencies. These showed that customers are willing to use NEW WATER after seeing the product water and understanding the idea behind it.

Maynilad thereafter launched a major information campaign about NEW WATER. The strategy was to show the consuming public that treated effluent from Sewage Treatment Plants is a reliable raw water source, and that Maynilad can effectively convert it to PNSDW-compliant water supply.

These efforts resulted in the DOH's issuance of a Conditional Operational Permit, allowing Maynilad to operate its NEW WATER facility for one year, during which time the plant will be monitored and a Permanent Permit can be issued at the end of the period.

To date, no other local industry player has pursued "potable water reuse."

6. You have the option to answer this final question: Reference any attachments of supporting materials throughout this nomination and how they provide evidence of the claims you have made in this nomination (up to 250 words):

Total 249 words used.

The table below shows that NEW WATER meets the drinking water quality standards set by the Philippine government. It is also worthy to note that NEW WATER's quality parameters are comparable with the drinking water produced by Maynilad's La Mesa Treatment Plants (LMTP), which get raw water from Angat Dam.

Water Quality Parameter	NEW WATER	Water from LMTP	PNSDW 2017
Residual Chlorine (mg/L)	1.31	1.17	0.30-1.50
Turbidity (NTU)	0.15	0.92	5
Color (ACU)	7.5	2.5	10
pH Value	6.78	7.60	6.5-8.5
Nitrate (mg/L)	5.38	0.6	50
Arsenic (mg/L)	<0.004	0.007	0.01
Cadmium (mg/L)	<0.001	<0.001	0.003
Lead (mg/L)	<0.005	<0.005	0.01
TDS (mg/L)	32	82	600
Total Coliform (CFU/100mL)	<1	<1.1	<1
E.Coli (CFU/100mL)	<1	<1.1	<1
HPC (CFU/mL)	<1	<1	<500

Meanwhile, the results of the social acceptability tests were heartening, as majority of the respondents expressed willingness to use NEW WATER after seeing the product water and understanding the idea behind it (i.e., 75% of Residential and 60% of Commercial). One insight gained from the survey is the importance of educating people about NEW WATER, as some respondents who initially expressed reticence toward NEW WATER later came to accept it after learning about Maynilad's thorough treatment process. This drove home the fact that Maynilad has to sustain public outreach to improve the image of reused water for the long term.

Attachments/Videos/Links:

[NEW WATER: Maynilad's Foray into Potable Water Reuse](#)

[Half of Metro Manila Could Soon Be Drinking Treated and Purified Used Water](#)

[Maynilad begins use of recycled water amid looming shortage](#)

[Maynilad eyes treated used water as source for drinking water](#)

[MAYNILAD'S "NEW WATER" PASSES POTABILITY TEST](#)

[MAYNILAD OFFICIALLY LAUNCHES NEW WATER](#)

[Maynilad starts piped-in distribution of "New Water" in Parañaque](#)

[New_Water_Potable_Water_Reuse_Supporting_File.pdf](#)