

The Laguna Lake Development Authority (LLDA), by virtue of Republic Act No. 4850, was created to promote and accelerate the development and balanced growth of the Laguna Lake area and its surrounding provinces, cities and towns. It was created to carry out provisions for environmental management and control, preservation of the quality of human life and ecological systems and prevention of undue ecological disturbances, deterioration and pollution.

Issuance of LLDA Clearance and Discharge Permit

The aggregate number of clearances and permits issued by the Authority as of December 31, 2020, are as follows:

Table 19. Number of LLDA clearances and discharge permits issued

APPLICATION	NO. OF NEW APPLICATIONS RECEIVED	NO. OF APPLICATIONS ACTED UPON	NO. OF APPROVED APPLICATIONS WITHIN 20 DAYS
LLDA Clearance (LC)	883	846	701
Discharge Permit (DP)	3,336	3,132	2,294

***The indicated numbers include application for DP (new, renewal, revalidation and interconnected) and LC (new, expansion, exemption and amendments).*

Compliance Monitoring

A total of 1,711 industries were monitored / inspected. Also, a total of 418 NOVs and non-compliance were issued.

Issuance of Cease and Desist Orders

As of December 31, 2020, CDOs were issued to twenty-five (25) establishments: sixteen (16) for water pollution and nine (9) for operating without the necessary LLDA Clearance (LC) and Discharge Permit (DP).

	Name of Establishment	Address	Date of Enforcement	Nature of violation
1	Tagaytay Slaughterhouse	Mahogany Market Kaybagal, Tagaytay City, Cavite	03-Jan-20	water pollution
2	Mang Inasal - Taguig (Mother Unit Corp.)	Lot 2 Manalac Ave. Bagong Tanyag, Taguig City, MM	27-Jan-20	water pollution
3	Rene Coronado Farm (Sherly Farm)	Oobi, Majayjay, Laguna	29-Jan-20	water pollution
4	Uno Seafood Wharf Palace Inc. (Uno Seafood Rest.)	270-272 Calvo Bldg., Escolta St. Brgy. 291, Binondo, Manila City, MM	04-Feb-20	water pollution
5	Orient THE Original Buko Pie Bakeshop	National Highway Anos, Los Banos, Laguna	12-Feb-20	water pollution
6	Ocean Bay Restaurant	8001 Financial Center Roxas Blvd., Pasay City, MM	09-Mar-20	water pollution
7	ZHI-Brother's Restaurant	8001 Financial Center Roxas Blvd., Pasay City, MM	09-Mar-20	water pollution
8	BHP1 Autoworks	8001 Financial Center Roxas Blvd., Pasay City, MM	09-Mar-20	water pollution
9	Songdo Won Premium Korean Meat Grill House	8001 Financial Center Roxas Blvd., Pasay City, MM	09-Mar-20	water pollution
10	Da Rae Jung Restaurant	U-19, 20 HK Sun Plaza Brgy. 76, Roxas Blvd., Pasay City, MM	09-Mar-20	water pollution
11	Sunny Villas Condominium - Phinma Property Holdings, Corp.	Pearl St. cor. Camaro St. Fairview, Quezon city, MM	10-Nov-20	water pollution
12	Dona Isabel Building	2240 Taft Ave. Pasay City, MM	17-Nov-20	operating without LLDA Clearance and Discharge Permit
13	JCR Holdings Corporation (Ritzwood Lane Exec. Townhomes)	#12 Ipil St. coner West Drive, Marikina Heights, Marikina, Quezon City	11-Nov-20	operating without LLDA Clearance and Discharge Permit
14	Kings Building	No. 2218 F.B. Harrison St., Pasay City, MM	17-Nov-20	operating without LLDA Clearance and Discharge Permit
15	Shakey's - Taytay	Ortigas Avenue Extension, Brgy. San Isidro, Taytay, Rizal	11-Nov-20	operating without LLDA Clearance and Discharge Permit
16	Pangasinan Five Star Bus Co., Corp. (Terminal)	2220 Tramo St. Pasay City, MM	17-Nov-20	operating without LLDA Clearance and Discharge Permit
17	Atherton Place Condo. Corp.	Tomas Morato corner Rocas Avenue, Laging Handa, Quezon City	11-Nov-20	operating without LLDA Clearance and Discharge Permit
18	2Go Group, Inc. - Motorpool	Pier 2, North Harbour Manila City, MM	17-Nov-20	operating without LLDA Clearance and Discharge Permit
19	RC Building	M. De Santos cor. Camba St., Binondo Manila City, MM	17-Nov-20	operating without LLDA Clearance and Discharge Permit
20	Filinvest Cyberparks, Inc. (Filinvest Cyberzone Bay City)	Super Block A Bay City, Zone 10 Brgy. 76, Pasay City	07-Dec-20	water pollution
21	Eastfield Properties & Land Devt. Corp.	Diosdado Macapagal Blvd., MOA Complex, Brgy. 76, Pasay City	07-Dec-20	water pollution
22	Hotel Sogo - Monumento	EDSA Monumento, Calocan City	09-Dec-20	operating without LLDA Clearance and Discharge Permit
23	Chowking (P.F. Foods Corp.)	475 P. Faura cor. M.H. Del Pilar Sts., Brgy. 667 Ermita, Manila	15-Dec-20	water pollution
24	Abenson, Inc. (abenson Shopping Center-Macapagal)	D. Macapagal Blvd. corner Coral Way ST., Pasay City	22-Dec-20	water pollution
25	Hemotek Renal Center, Inc. (Malate Branch)	463 Remedios ST., Brgy. 699 Malate, Manila	22-Dec-20	water pollution

The Laguna de Bay Watershed Greening Program is the counterpart of LLDA to the National Greening Program implemented within the LDB Region in collaboration with the local government units, private and public institutions, NGOs, and other organizations.



Figure 18.1 Tree planting activity at Brgy. Tunasan, Muntinlupa City on February 4, 2020 in partnership with BFAR and the City Government of Muntinlupa

For this year, an aggregate total of 34,749 seedlings of various species were planted/dispersed in the Region. The LLDA nursery have produced 105,236 various seedlings and bamboo propagules and have collected 44,581 seeds and wildlings. The total planted area is only 40.7 hectares due to deferment of tree planting activities to follow the health and safety guidelines in the prevention of COVID-19 pandemic.



Figure 18.2 Transplanted seeds (left) and planting of bamboo culm cuttings at the misting chamber (right)

An umbrella project of the Laguna de Bay Watershed Greening Program is the Bamboo for Life Project, where a 5-hectare area in Tanay, Rizal which was donated by the Provincial Government of Rizal is being developed into a bamboo nursery or bambusetum. The misting chamber and safe house were already constructed in the first quarter of 2020, while fencing of the property, installation of water system, and electrical system started in the fourth quarter.



Figure 18.3 Fencing of the bamboo nursery vicinity and putting up of signages

Control and Management of Water Hyacinth

This project is in support to the Manila Bay Rehabilitation Program which started the implementation this year. The project has (two) 2 components namely, physical removal of water hyacinth and heavy metal content study and ecological assessment.



Figure 18.4 Physical removal of water hyacinth at Napindan Channel

The implementation of component 1 was already completed and executed from October 14 to November 16, 2020 with 346 tons of water hyacinth removed from Napindan Channel, while component 2 of the project will commence on July 2021.

Manila Baywalk Dye Testing

The discovery of different outfalls along the shore of Manila Bay has reached the attention of the Department of Environment and Natural Resources (DENR). Through the Environmental Management Bureau (EMB), the LLDA, in collaboration with the Metro Manila Development Authority (MMDA), Maynilad and the City Government of Manila were requested to conduct a dye testing in Roxas Boulevard, Manila to determine if the different establishments situated along Manila Bay are connected to the sewer line of Maynilad or if their wastewater directly discharge to the said outfalls.



Figure 18.5 Dye Testing Area along Manila Bay

The LLDA's inspection covered 75 establishments, of which, 21 were confirmed to be connected to the Maynilad's sewer line, 8 establishments connected to the drainage while the remaining 46 were unverified due to clogged and blackish stagnant water both at the sewer and drainage line in the area during inspection. The unverified establishments will be scheduled for another inspection. It was also confirmed by Maynilad that all these sewer pipes will go to their Tondo Sewage Pumping Plant (TSPP). Cease and Desist Order (CDO) and other legal sanctions were issued to establishments with violations. Compliance monitoring will also be conducted regularly in these establishments.

Table 20. Number of Industries with Legal Orders issued

LEGAL ORDER ISSUED	NO. OF INDUSTRIES
Cease and Desist Order	2
Notice of Violation (LLDA Clearance)	19
Notice of Violation (Discharge Permit)	23
Notice of Violation (Water Pollution)	4
Refusal of Entry	1
TOTAL	49

The MGB also used Ground Penetrating Radar (GPR) to find out if there were hidden pipes perpendicular to the Bay, however, only leakages were detected underneath. Storm drainage was subjected to flushing at the southbound area of Manila Bay and it was observed that water goes to secondary canal before the seawall and not at the bay itself. To date, leakages flowing to the bay were still there not knowing their exact sources. Recent discussions suggested to construct secondary canal beside the seawall to catch these illegal leakages or seal the leakages directly to the bay.

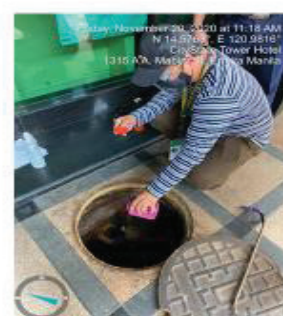




Figure 18.6 Actual dye testing of sewer lines

Central Business Park Inspection

The DENR requested the LLDA to identify the source of high coliform levels being discharged to Manila Bay. The LLDA, in collaboration with MMDA and Central Business Park (CBP), conducted inspections of 75 establishments situated in this area. Wastewater samples were collected in all firms found to be discharging during the inspection. The effluent samples were mostly collected at the tapping points instead of from the Sewage Treatment Plant (STP) outfalls to capture the total establishment discharges.

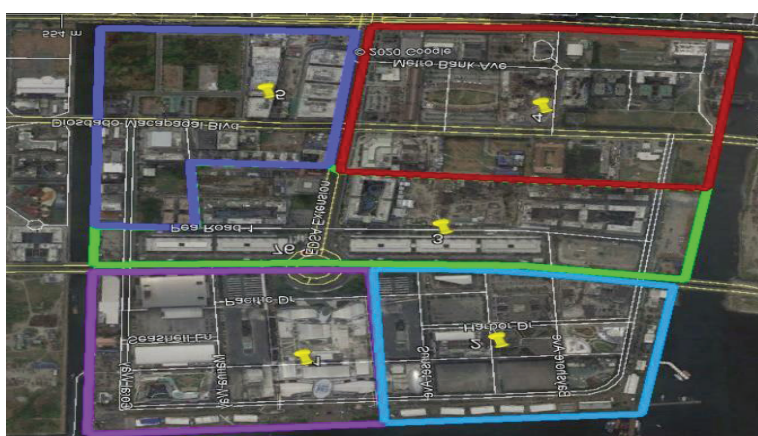


Figure 18.7 Central Business Park Area for Inspection

Based on the initial results of the inspection, 14 out of 75 establishments are operating without LC. In terms of DP coverage, 30 out of 75 establishments have already secured a DP from the Authority, 25 were operating without a DP, 11 have pending DP application and 6 establishments were operating with an expired DP. The establishments with no DP were required to secure necessary permits from the Authority, while permittees with pending water pollution case shall be under the supervision of Enforcement Division. Lastly, the establishments without a collected wastewater sample due to the absence of effluent during inspection and those with failed effluent quality will be under compliance monitoring of LLDA.



Figure 18.8 Collection of waste water samples

(Source: LLDA)