MAYNILAD WATER SERVICES, INC.

Project Description/ Initial Environmental Examination

Project 7 Sewage and Septage Treatment Plant

St Anthony Village, Project 7, Quezon City

15 August 2006

Environment Management Department
Maynilad Water Services, Inc.
Katipunan Road, Balara, Quezon City
Tel. No. 928-1454
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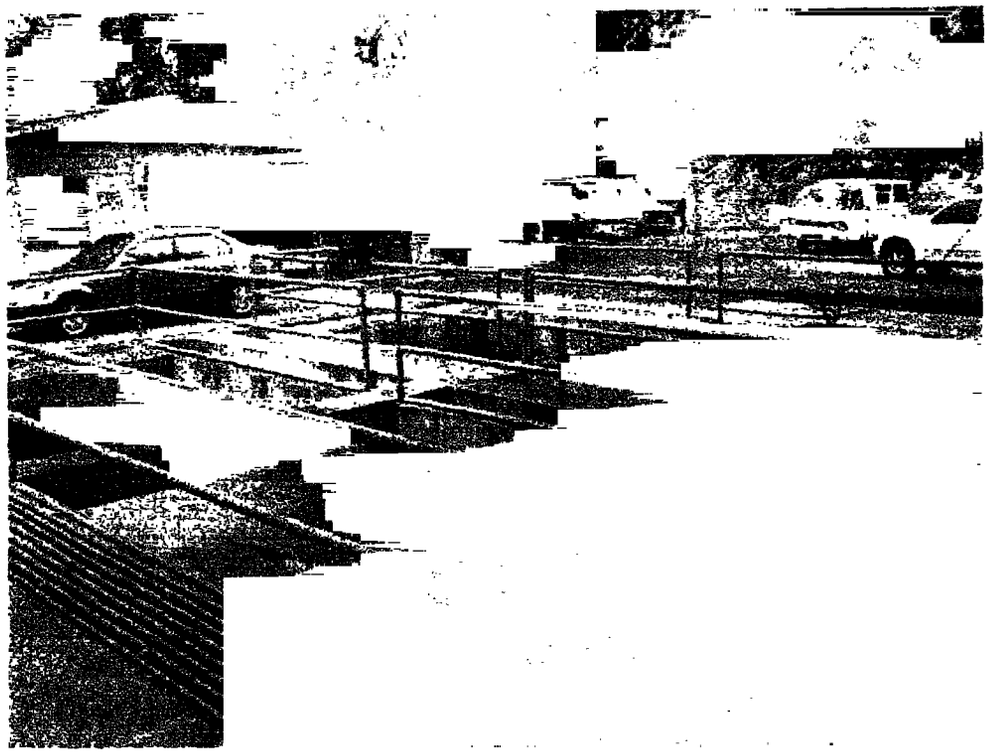
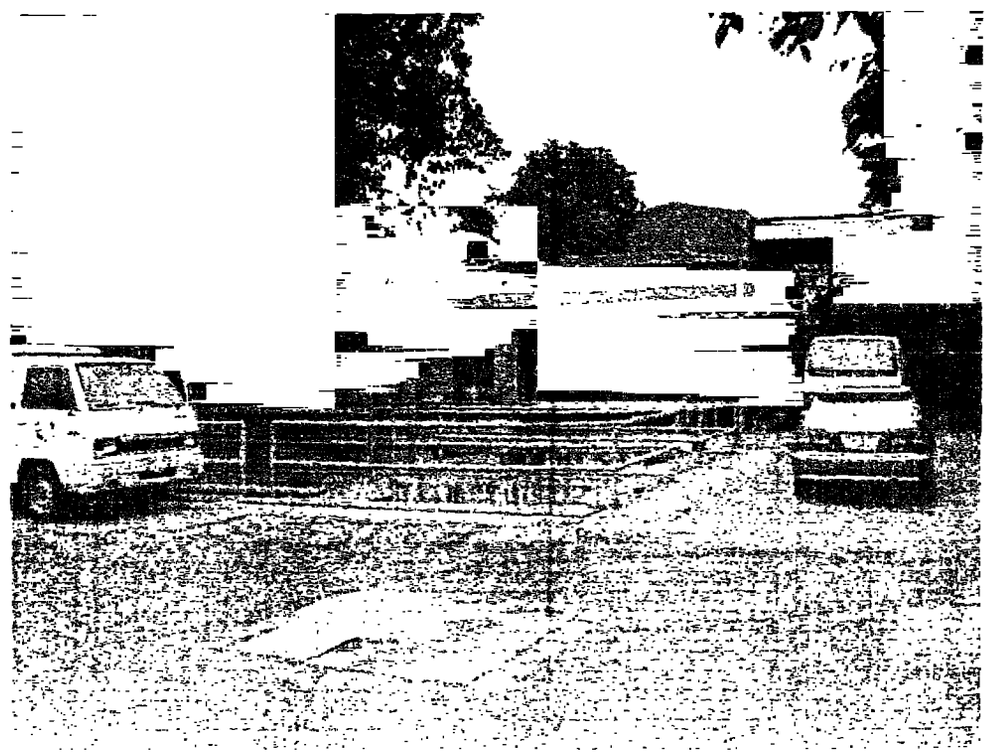
PROJECT 7 SEWAGE TREATMENT PLANT





PROJECT DESCRIPTION

MWSS received Technical Assiistance (TA) financing from the World Bank in 2005 to partially update their Water Supply Master Plan and to prepare a comprehensive Master Plan for Sewerage and Sanitation for its service area to the year 2025. The 2005 Master Plan proposed a decentralized small-bore sewerage approach and 16 new regional combined STP-SpTP's, utilizing anaerobic biological treatment.

Combination sewage-septage treatment plants are common in the US (25% of the US population have septic tank) and Australia, with septage to sewage portions usually less than 5%. One combined plant in Greece treats up to 40% sepatge with sewage. The advantages of combined sewage-septage treatment plants include I) Possible revenue for the treatment plant from independent haulers, ii) Use of excess treatment plant capacity maximum utilization of vacuum trucks, iii) Availability of a legitimate septage disposal site for independent haulers, and iv) Regional centralization of waste treatment facilities to name a few.

The MWSI Project 7 Communal Septic Tank is conceived for a proposed protoype Sewage-Septage Treatment Plant in 11 Road A, St Anthony Village, Quezon City which drains 45.6 ha. Of sewerage reticulation. It was selected due to a number of advantages, including a) site is in MWSI's area b) Project 7 currently has a poorly operating treatment system the pollutes Culiat Creek c) The site area consists of about 1200 sq.m. d) There are no informal settlers on the site e) The site is government owned f) there are significant numbers of septic tanks in adjacent areas to draw septage g) access road is reasonable and trucks regularly come and go from the site h) the site is close to MWSI offices in Balara for monitoring, and I) sewage flow is something less than about 2 MLD.

The process design consist of a anaerobic (UASB) – aerobic (SBR) biological treatment plant. Other process components would include possible reuse of the imhoff tanks for balancing, new sewage inlet works, a septage acceptance area, biosolids dewatering building and equipment, new chlorination disinfection system and contact tank, and odor control. The process will used 10% septage (240 m^3/d), anaerobic-aerobic biotreatment.

Project 7 would help MWSI better utilize their current fleet of 32 septic tank pumpout trucks (includes 7 Mobile Dewatering Units). MWSI estimated that the current average for truck trips to Dagat-Dagatan STP-SpTP is about 1.2 or 257 m^3 septage/day. At that frequency, the number of 5 m^3 septic tanks desludged annually (300days/year) is about 15,700.

Project 7 could potentially increase the number of trips per day per truck to a treatment facility to 1.5 (estimate by MWSI). At that frequency, the number of 5 m^3 septic tanks desludged annually (300 days/year) would be about 19,500 (24% increase), with the septage delivered being about 321m3/day (25% increase). A more

detailed traffic/septic tank pumpout study would be required to fully verify the effect of adding Project 7.

Another point worthy of note is that West Quezon City (QC) has a high sanitation target for MWSI by the year 2021. A STP-SpTP in West Quezon City would be well placed to help deliver on this target.

The Manila Third Sewerage Project (MTSP) – Global Environmental Facility (GEF) proposed prototype STP-SpTP will likely be the first of many similar decentralized sewerage and treatment plants if the 2005 Master Plan is implemented. Sixteen regional STP-SpTP's wer proposed to be operating by 2025 to address the most serious of the pollution hot spots in the MWSS service area. The fact that the proposed Project 7 site, one of about 1,200m^2, can support both 2.4 MLD of sewage, plus up to 15% septage (or 360 m^3/d) also contributes to the replication concept around land-scarce Metro Manila

INITIAL ENVIRONMENTAL EXAMINATION (IEE) REPORT

For

Collection, Transport, Treatment and Disposal of Sewage

Below is the IEE Report Checklist for Collection, Transport, Treatment and Disposal of Sewage. Read the questions carefully before answering in the space provided. Use additional sheets if necessary and indicate this in an appropriate space.

Misleading or erroneous answer are the basis for legal actions and/or denial of ECC

PROJECT LOCATION: 11A Road A,, Project 7, Quezon City

NAME OF PROPONENT: Maynilad Water Services, Inc.

ADDRESS: MWSS Compound, Katipunan Road, Balara, Quezon City

A. GENERAL INFORMATION

1. Project Ownership
   Single Proprietorship _____ Partnership _____ Corporation __X__

2. Capitalization & Project Cost
   a. Capitalization: Authorized: Php 6B
      Paid up: Php 5.24B

   b. Estmated Project Cost: Php 230 Million

3. Project Components: Prototype Treatment Plant for Sewage and Septage

4. Project Site (Attach location and vicinity maps and photographs of front, left, right and rear views for project site as Annex 1 for Treatment and Disposal components only)

   a. Land:
      i. Total Land Area: 1,200 m^2
      ii. Proposed land area to be occupied: 309 m^2
      iii. Is the area owned or leased? MWSS owned
         1. If leased, period covered

(Attach document, TCT as Annex 2)

iv. Access road construction

b. Classification

Industrial _____ Residential ___X_____

Commercial _____ Other, pls. specify _____

5. Description of Project Phases

a. Collection

i. Manpower Requirement:

ii. Equipment to be used

Equipment	Quantity
MDU	5
Service Cleaning Truck	2

Use additional sheet if necessary

iii. Completion time (from site to transport vehicle)

ii. Transport

i. Manpower Requirement:

iii. Equipment to be used

Equipment	Quantity
Dump truck (for sludge)	2

Use additional sheet if necessary

iii. Completion Time (truck to treatment/disposal site)

c. Treatment (Sewage/Septage Treatment Plant)

i. Pre-Operational Construction Phase

Activity	Timeframe
Plans/Design	180 days
Permits/Clearances	60 days
Site Preparation and Clearing	30 days

Excavation	To be determined by final proj. giving design and report
Civil Works	"
Finishing	"
Installation of Equipment	".
Commissioning and Start-up	"

iv. Manpower Requirement:
v. Facilities Requirement:

- Water Supply

Source	Consumption/day
Local Water District	
Deepwell	
Surface Water	

- Power Supply

Source	Consumption/day
Local Electric Utility	2,547 KWh
Generator	Back-up
Others (pls specify)	

vi. Operation Phase
- Capacity of Plant/day: 2.4 MLD
- Process Flowchart: See Annex 1
- Manpower Requirement: 11
- Other Waste Generated

Type of Waste	Source of Waste	Volume of Waste	Mode of Disposal
Treated domestic wastewater (effluent)	Employees of treatment facility	2,605 cum/day	By gravitational flow to receiving body of water after treatment
Sludge	Septage/Sewage	26 m^3/day	Transported to lahar area and used as soil conditioner

vii. Abandonment Phase (None)

Facilities to be Abandoned	Waste Generated	Restoration Plan
Local Electric Utility		
Generator		

b.□ Disposal

a. Pre-Operational Construction Phase

Activity	Timeframe
Plans/Desighn	To be determined by final project giving design and report
Permits/Clearances	"
Site Preparation and Clearing	"
Excavation	"
Civil Works	"
Finishing	"
Installation of Equipment	"
Commissioning and Start-up	"

b. Manpower Requirement:

b.1 Facilities Requirement

i. Water Supply

Source	Consumption/day
Local Water District	
Deepwell	
Surface Water	5 cum/day

ii. Power Supply

Source	Consumption/day
Local Electric Utility	
Generator	

Others (pls specify)	

iii. Operation Phase

iv. Capacity of Plant/day:
v. Process Flowchart
vi. Manpower Requirement
vii. Other Waste Generated

Type of Waste	Source of Waste	Volume of Waste	Mode of Disposal
Solid Wastes	Construction waste/spoil materials	to be determined by final project giving design and report	Landfill

c. Abandonment Phase

Facilities to be Abandoned	Waste Generated	Restoration Plan
Local Electric Utility	NA	NA
Generator		

B. DESCRIPTION OF ENVIRONMENTAL SETTING (For Treatment and Disposal Components Only)

1. Physical Environment

1.a Description of Terrain (% slope)
Flat or Level (0-3) flat
Level to undulating (3-8) ____
Undulating to rolling (8-18) ____
Rolling to Moderately steep (8-30) ____
Moderately steep to steeply mountainous (30-50) ____
Very Steeply mountainous (above 50) ____

1.b Is the area erosion prone? No
If so, what is the status: slight ___ Moderate ___ Severe ___

1.c Are there existing natural hazards in the area, e.g. landslides, gullying, subsidence, etc? None
If yes, please enumerate them _____

1.d Is the site situated along a flood prone/storm surge area? ____

1.e Is the project beside or near the shoreline? No
If yes, how far?

1.f Are there water bodies found inside or near the project site? Yes
If yes, please enumerate them: Culiat Creek
What is the quality of water?
Fresh X (but highly silted and polluted) Brackish_____
Saline/Salty__

1.h What is the quality of air?
Poor ____ Fair X Good _____

2. Biological Environment

2.a Is the project immediately adjacent to a natural ecosystem? No
If yes, Please check:
Forest ___ Coastal/Marine _____ Marshland _____
Grassland ____ Mangrove ____ Wetland _____
Others, Please specify _____

2.b Are there any wildlife in the area? None
If yes, Please identify and enumerate: _____
_____

2.c Are there trees within the project site? Yes
If yes, please identify and enumerate: Mango, Tamarind, Duhat, and Santol _____

2.d Is there other vegetation within the project site? No
If yes, please identify and enumerate:

3. Socio-Economic Environment

3.a Total household to be affected? _____
What will happen to them? These are adjacent areas which will be affected by the noise, air pollution (particulates) during construction, this is temporary, and traffic due to hauling of construction materials. The adjacent area during operations will be benefited by regular septage collection and the treatment of their wastewater.

3.b Will you employ vulnerable groups? ___No_____
If yes, please enumerate: Elderly ___Children ___ Handicapped __

3.c Are there health facilities within the project site? None (once operational, we will put satellite health facilities for employees) ___

3.d Are there required benefits under the labor code and other regulations to be enjoyed by the staff? Yes___
If yes, please enumerate: Treatment plant operators, who are regular employees of Maynilad, will receive and enjoy the company benefits given to a regular employees and the corresponding hazard pay relative to workers on sewage.

3e. Are the local inhabitants to be benefited by the project? Yes, wastewater generated by each households will be properly treated at the sewage treatment plant to be constructed. Hence, effluent will meet the environmental standards set by the government and will eliminate disease causing organisms, odor, water pollution caused by untreated wastewater

3.f Are the cultural norm/ morals and lifestyle of the local inhabitants to be affected by the project? No
Please elaborate: The design of the STP-SpTP will abide with the government environmental regulations.. However, homeowners will be made aware of their social responsibility on proper disposal of wastes to prevent clogging of sewer pipes to help maintain an efficient sewerage network and treatment plant

3.g Are there oppositions to the project? None. Endorsements from the barangay and/or Homeowner's Association of the project site are currently being processed. A Memorandum of Agreement (MOA) will be executed between the company and the appropriate party as needed.

4. Project Impacts

4.a.1 For Collection and Transport of Sewage

Components /Parameters	Answer		Describe Impacts	Describe your Mitigating/Enhancement Measures
	Yes	No		
Will it affect ambient air quality in the area?		X		
Will the collection/transport process distract on-going activities in the immediate vicinity?		X	• Sewage collection will be transported from households to the plant through sewage pipelines by gravity (existing, some additional lines have to be laid)	
Will the collected sewage immediately proceed to the treatment or disposal area	X		• Overflow due to breakdown of equipment may also occur	Regular maintenance and management of equipment
Will the equipment used be immediately cleaned after the respective activities?	X		• Use of degreasers and cleaning solutions may leak to water environment	Program of regular and preventive maintenance will be implemented to ensure efficient plant operations Use of environmental friendly cleaning solution Use of oil separators

4.a.2 For Collection and Transport of Sludge

Components /Parameters	Answer		Describe Impacts	Describe your Mitigating/Enhancement Measures
	Yes	No		
Will it affect ambient air quality in the area?	X		• Trucks may generate odors from the composition and concentrations of Hydrogen Sulfide and Ammonia from sludges • Particulates from tires / engines	Trucks will be regularly cleaned, maintained and properly covered. Proper maintenance of vehicles
Will the collection/transport process distract on-going activities in the immediate vicinity?	X		• Traffic may be affected • Vehicles parking outside the premises	Assignment of workers to direct traffic in the area Program for traffic plan and management Sufficient parking area for operational vehicles
Will the collected sludge immediately proceed to the treatment or disposal area		X		
Will the equipment used be immediately cleaned after the respective activities?	X		• Use of cleaning solutions for trucks may leak to water environment	Program of regular and preventive maintenance will be implemented to ensure efficient plant operations Use of environmental friendly cleaning solution Use of oil separator Treatment of warm water

4.b For Treatment and Disposal

1. Pre-Construction Details				
Components /Parameters	**Answer**		**Describe Impacts**	**Describe your Mitigating/Enhancement Measures**
	Yes	**No**		
Is there land clearing	X		• Water Quality Demolition of existingstructures and hauling debris (minimal) Erosion which might result in frequent flooding in the area (minimal)	Timing of demolition during dry season. Proper orientation for the demolition contractor on the conditions of the ECC by the proponent
			• Solid Waste Demolition of existingstructures and hauling debris (minimal) Disposal of demolished debris and scrap materials (minimal)	Waste segregation, recycling/re-use and proper disposal of debris Part of provision of contract for construction given to contractor Will be sold as scrap materials or as filing materials for concrete debris
			Handling of Asbestos waste materials, minimal (for confirmation)	Materials for re-used To be used as back fill
			• Increase in accident/incidents for workers and pedestrians	Provision of personal protective equipment Fencing of the area to be demolished Implementation of safety management plan
			• Traffic Congestion Demolition of existing structures and hauling debris (minimal)	Hauling of debris to be done during non-rush hours

				Proper orientation for the demolition contractor on the conditions of the ECC by the proponent Assignment of workers to direct traffic in the area
Is there vegetation clearing?	X		• Removal of fruit bearing trees	Will secure permit to cut/relocation of trees Plant new trees
Is there tree cutting?	X		• Removal of fruit bearing trees	Will secure permit to cut/relocation of trees Plant new trees
Is there topsoil removal/replace ment?	X		• Topsoil will be temporarily disturbed during construction	Topsoil will be replaced
Is there excavation works and cut & fill activities?		X		.
Is there other earthmoving activities	X		• Air/Noise Demolition of existing structures and hauling of debris (minimal) Increased TSP and noise level in the area (minimal) • Solid Waste Demolition of existing structures and hauling of debris (minimal) Disposal of demolished debris and scrap materials (minimal)	Use of well maintained hauling equipment Regular watering of TSP sources Fencing of the area to be demolished Regular cleaning of the vicinity of the project site particularly the roadways Waste segregation, recycling/re-use and proper disposal of debris Part of provision of contract for construction given to contractor Will be sold as scrap materials or as filling materials for concrete

				debris Proper orientation for the demolition contractor on the conditions of the ECC by the proponent
			Handling of Asbestos waste materials (for confirmation)	Materials for re-used To be used as back fill
			• Traffic Congestion Demolition of existing structures and hauling debris	Hauling of debris to be done during non-rush hours Assignment of workers to direct traffic in the area Proper orientation for the demolition contractor on the conditions of the ECC by the proponent
			• Increase in accident/incidents for workers and pedestrians	Provision of personal protective equipment Fencing of the area to be demolished Implementation of safety management plan
Is there stockpiling of sand gravel material in the site?	X		• Stockpiling of construction materials will use the vacant/unutilized spaces	Stockpiling of construction materials will be stockpiled just enough for the on-going activity. - Good construction practices and orderly site keeping will be effected
Is there drilling, boring & hammering activities?	X		• Air/Noise Demolition of existing structures and hauling of debris (minimal)	Use of well maintained hauling equipment
			Increased TSP and noise level in the area (minimal)	Regular watering of TSP sources Fencing of the area to be demolished Regular cleaning of the vicinity of the project site

				particularly the roadways
			• Solid Waste Demolition of existing structures and hauling of debris (minimal) Disposal of demolished debris and scrap materials (minimal)	Waste segregation, recycling/re-use and proper disposal of debris Part of provision of contract for construction given to contractor Will be sold as scrap materials or as filling materials for concrete debris Proper orientation for the demolition contractor on the conditions of the ECC
			Handling of Asbestos waste materials (for confirmation)	Materials for re-used To be used as back fill
			• Traffic Congestion Demolition of existing structures and hauling debris	Hauling of debris to be done during non-rush hours Assignment of workers to direct traffic in the area Proper orientation for the demolition contractor on the conditions of the ECC by the proponent
			• Increase in accident/incidents for workers and pedestrians	Provision of personal protective equipment Fencing of the area to be demolished Implementation of safety management plan
Is there any slope modification or ground leveling?		X		
Is there increased traffic movement in the area?	X		• Traffic Congestion Demolition of existing structures and hauling debris	Hauling of debris to be done during non-rush hours

				Assignment of workers to direct traffic in the area Proper orientation for the demolition contractor on the conditions of the ECC by the proponent
Is the public/community access to/through the area affected?	X		• Traffic Congestion Demolition of existing structures and hauling debris	Hauling of debris to be done during non-rush hours Assignment of workers to direct traffic in the area Proper orientation for the demolition contractor on the conditions of the ECC by the proponent
Is there an increased economic activity in the area?	X		• Increase in number of employees may generate economic activities in the area.	
Is there an increase in the availability of employment?	X		• Increase employment for construction workers	Recruitment (preference on local hires)
Is there displacement of people in the area?		X		
Does the displacement involve relocation of affected parties?	NA	NA		

2. Construction Details				
Components /Parameters	**Answer**		**Describe Impacts**	**Describe your Mitigating/Enhancement Measures**
	Yes	**No**		
Is there land clearing		X		
Is there vegetation clearing?		X		
Is there tree cutting?		X		
Is there topsoil removal/replacement?	X		• Topsoil will be temporarily disturbed during construction • Water Quality Excavation works for building foundation Erosion/siltation which might result in frequent flooding in the area	Topsoil will be replaced Proper spoils management Timing of construction activity during dry season Proper orientation for yhe contractor/s on the conditions of the ECC by the proponent
Is there excavation works and cut & fill activities?	X		• Air/Noise Construction of the buildings/superstructure, operation of heavy equipment, movement of vehicles to and from the site • Untreated sewage Discharge of untreated sewage from construction employees • Solid Waste Improper disposal of	Use of new and well maintained earthmoving equipment Regular watering of TSP sources Fencing of the construction area Regular cleaning of the vicinity of the project site particularly the roadways Provision of temporary facility/portalets for construction workers Waste segregation,

			solid waste	recycling/re-use and proper disposal of garbage Waste minimization such as use of steel form works
			• Traffic Congestion	Delivery of construction materials to be done during non-rush hours (9PM to 3AM) for large haulers Assignment of workers to direct traffic in the area As much as possible avoid the use of sidewalk as depository of construction materials
Is there other earthmoving activities	X		• Water quality Excavation works for building foundation Erosion/siltation which might result in frequent flooding in the area	Proper spoils management Provision of erosion control measures Timing of construction activity during dry season Proper orientation for the contractor/s on the conditions of the ECC by the proponent
			• Air/Noise Construction of the building/superstructure, operation of heavy equipment, movement of vehicles to and from the site Increased TSP and noise level in the area	Use of new and well maintained earthmoving equipment Regular watering of TSP sources Fencing of the construction area Regular cleaning of the vicinity of the project site particularly the roadways
			• Untreated Sewage Discharge of untreated sewage from construction workers	Provision of temporary facility/portalets for construction workers

			• Solid Waste Improper disposal of solid waste	Waste segregation, recycling/re-use and proper disposal of debris Waste minimization such as use of steel form works
			• Traffic Congestion Demolition of existing structures and hauling debris	Delivery of construction materials to be done during non-rush hours (9PM-3AM) for large haulers Assignment of workers to direct traffic in the area As much as possible avoid the use of sidewalk as depository of construction materials
			• Increased incidents on localized flooding	Provision of adequate drainage lines/system around the project site Coordination with the local government for its maintenance after construction Support the Social Development Program of the Barangay particularly the flood control programs
Is there stockpiling of sand gravel material in the site?	X		• Stockpiling of construction materials will use the vacant/unutilized spaces	Stockpiling of construction materials will be stockpiled just enough for the on-going activity. Good construction practices and orderly site keeping will be effected
Is there drilling, boring & hammering activities?	X		• Air/Noise Construction of the buildings/superstructure, operation of heavy	Use of new and well maintained earthmoving equipment

			equipment, movement of vehicles to and from the site	Regular watering of TSP sources Fencing of the construction area Regular cleaning of the vicinity of the project site particularly the roadways
			• Water Quality Excavation works for building foundation Erosion/siltation which might result in frequent flooding in the area	Proper spoils management Provision of erosion control measures Timing of construction activity during dry season Proper orientation for the contractor/s on the conditions of the ECC by the proponent
			• Incident of accidents on workers/pedestrians	Provision of PPE's Provision of erosion control measures Fencing of the construction site Implementation of safety management plan
Is there any slope modification or ground leveling?		X		
Is there increased traffic movement in the area?	X		• Traffic congestion during hauling of sludge and delivery to site of septage	Assignment of workers to direct traffic in the area Hauling of sludge during non-rush hours
Is the public/community access to/through the area affected?	X		• Increase incidents on localized flooding	Provision of adequate drainage lines/system around the project site Coordination with the local government for its maintenance after construction Support the Social Development Program of the Barangay particularly the flood control programs

			• Traffic Congestion • Incidents of accidents on workers/pedestrians	Delivery of construction materials to be done during non-rush hours (9PM to 3AM) for large haulers Assignment of workers to direct traffic in the area As much as possible avoid the use of sidewalk as depository of construction materials Provision of PPE's Provision of safety nets, overhead canopies, etc. to prevent and contain falling debris Implementation of safety management plan
Is there an increased economic activity in the area?	X		• Increase in number of employees may generate economic activities in the area.	
Is there an increase in the availability of employment?	X		• Increase employment for construction workers	Recruitment (preference on local hires)
Is there displacement of people in the area?		X		
Does the displacement involve relocation of affected parties?	NA	NA		

3. Operation and Maintenance Phase				
Components /Parameters	**Answer**		**Describe Impacts**	**Describe your Mitigating/Enhancement Measures**
	Yes	**No**		
Will the project generate wastewater?	X		• This is already treated effluent and will be discharged to a river near the plant	Meeting treatment efficiency and compliance with effluent standards
Is there an effect on the quality of the receiving body of water?	X		• Improved water quality in the receiving water bodies through treatment of the sewage. Previous plant only has physical removal	Effluent sampling will be conducted at the treatment plant weekly while water sampling will be conducted at Culiat River monthly
Is there an increase in surface run-off to other areas?		X	• Minimal increase but will improve flow in the stream (positive)	Monitoring of flow and water quality Provide good drainage for septage in the area for run-off
Is there increase in water demand?	X		• Increase in water demand from vehicles/plant maintenance	To be sent to treatment plant for proper treatment
Is there dust emission into the environment?	X		• From the generator which will be used as back up during power failures	Regular maintenance and check up of generator Use of right fuel
Will it affect the ambient air quality of the area?	X		• Air Pollution Additional pollution load resulting from the operation of generator set Odor from treatment operation and failure of odor control facility • Noise Pollution	Proper operation and maintenance of generator set Use of odor control system Regular maintenance of odor control system Proper housekeeping Regular maintenance of vehicles Good foundation design

				and proper enclosures Proper orientation for the homeowners Use of baffles
Is there air pollution sources equipment to be installed?	X		• From the generator which will be used as back up during power failures	Regular maintenance and check up of generator Use of right fuel Proper design of equipment
Are hazardous wastes to be discharged to the environment?		X	• Waste lubricants/oils from equipment/vehicle	Proper maintenance of equipment Proper design of equipment Use of degradable lubricant/oil
Is there any pollution complaint from the nearby residents?		X	(we do not anticipate)	
Is there an increased in crime / security concern in the area?		X		
Others, please specify			• Sanitation problem caused by improper disposal of solid waste (from employees)	Waste segregation adoption /following the MMDA guideline Regular collection and disposal of solid waste in coordination with the local government Provision of central garbage collection and storage area
			• Flooding incidents Instability of the soil or geology of the site which could damage /affect the integrity of the building	Proper drainage considered in the design of the building Designing the building strictly in conformance with the building code The building shall be

			• Incidents of accidents fire/safety of residents, visitors and clients	designed to meet the building, fire and safety requirement of the Building and Fire Code Conduct of annual fire driil in coordination with Quezon City Fire Department
			• Generation of sludges from treatment plant	To be sent to lahar and used as soil conditioner Monitoring of volume and quality

4. Abandonment & Rehabilitation Phase				
Components /Parameters	**Answer**		**Describe Impacts**	**Describe your Mitigating/Enhancement Measures**
	Yes	**No**		
Will any of the facilities be abandoned or demolished after the project life?		X		
Will any of the facilities need to be rehabilitated after a certain period of time?	X		• Some equipment need to be replaced due their wear and tear warranty	Regular monitoring of asset condition will be implemented to avoid facility deterioration
Is there a generation of solid waste?	X		• Piled sludges	Immediate removal
Is there an increase traffic movement in the area?	X		• Slight increase in vehicular traffic during construction	Traffic plan will be instituted
Is there an effect on the road system of the community?		X		
Is there an increase in the availability of employment?	X		• Employment rate for construction workers will increase during construction	Hiring of local residents will be prioritized during construction phase
Is there an increase in population from migration?		X		
Is there an increase in land value?	X		• Removal of facility will increase land value later on	
Will the project structure affect or obstruct the view from adjacent areas?	X		• The structure may cause aesthetic imbalance in a residential area	Proper architectural design to balance structure with the residential community
Is there an increase in crime / security concern in the area?		X		
Is there an increase in noise level in the area?	X		• Noise from vehicles and from operating of machine	Proper operation and maintenance of vehicles and operating machine

ATTACHMENTS

1. Government Permits and Clearance (attach photocopies of documents)

PERMITS / CLEARANCES	ATTACHED
Location Clearance / Certificate of Locational Viability	- To follow -
DTI / SEC Registration	"
Safety (Fire) Permit	"
Municipal / Business Permit	"
Other(s)	"

PERMITS / CLEARANCES	ATTACHED
Transfer Certificate of the Title	- To follow -
Map / Delineation of Primary & Secondary Impact Areas	"
Colored Photo of the Site (Different Perspective)	"
Construction Schedule in Chart Form	"
Endorsement from the LGU (Barangay Certificate)	"
Environmental Management Plan / Program	"