



## COMPLIANCE INSPECTION FOR WATER QUALITY MANAGEMENT



Department: ENVIRONMENTAL MONITORING AND ENFORCEMENT DIVISION-WATER AIR QUALITY MONITORING SECTION

(1<sup>st</sup> Quarter SMR Evaluation)Report Control Number: WATER - 05-08Date of Inspection: May 18, 2020

Mission Order No.: \_\_\_\_\_

<b>1. GENERAL INFORMATION</b>		
Name of Establishment: <b>TBK Manufacturing Corp.</b>		
Address: <b>Hollywood, Brgy.74, Nula-Tula, Tacloban City</b>		Geo Coordinates: <b>11.24542 124.99966</b>
Nature of Business: <b>Carrageenan Extraction and Refining</b>		
PSIC Code: <b>10205</b>	Product: <b>Carrageenan Powder</b>	Year Established: <b>1999</b>
Operating hours/day: <b>24</b>	Operating days/week: <b>6</b>	Operating days/year: <b>312</b>

Product Lines	Production Rate as Declared in the ECC (unit/day)	Actual Production Rate (unit/day)
<b>Caraggeenan Powder</b>	<b>570 MT</b>	<b>1000kg</b>
		<b>65000 kg (1<sup>st</sup> quarter)</b>
Name of Managing Head: <b>Mr. Peter Tan</b>		
Name of PCO: <b>Engr. Jeffrey A. Sinodivilla</b>		
PCO Accreditation No.:	<b>COA NO. 2020-RVIII-0013</b>	Date of Effectivity: <b>January 13, 2020</b>
Phone/Fax:	<b>888-3252/09434036459</b>	Email: <b>jeffrey@tbk.com.ph</b>

<b>2. PURPOSE OF INSPECTION</b>		
<input type="checkbox"/> Verify accuracy of information submitted by the establishment pertaining to new permit applications, renewals, or modification		
<input type="checkbox"/> New	<b>New</b>	<b>Renewal</b>
<input type="checkbox"/> Renewal		
<input type="checkbox"/> PMPIN Application	<input type="checkbox"/>	<input type="checkbox"/>
<input type="checkbox"/> Hazardous Waste ID Registration	<input type="checkbox"/>	<input type="checkbox"/>
<input type="checkbox"/> Hazardous Waste Transporter Registration	<input type="checkbox"/>	<input type="checkbox"/>
<input type="checkbox"/> Hazardous waste TSD Registration	<input type="checkbox"/>	<input type="checkbox"/>
<input type="checkbox"/> Permit to Operate Air Pollution Control Installation	<input type="checkbox"/>	<input type="checkbox"/>
<input type="checkbox"/> Discharge Permit	<input type="checkbox"/>	<input type="checkbox"/>
<input type="checkbox"/> Others _____	<input type="checkbox"/>	<input type="checkbox"/>

<input checked="" type="checkbox"/> Determine compliance status with the environmental regulations, permit conditions, and other requirements	
<input type="checkbox"/> Investigate community complaints	
<input type="checkbox"/> Check status of voluntary commitment	
<input type="checkbox"/> Industrial Ecowatch	
<input type="checkbox"/> Philippine Environmental Partnership Program (PEPP)	
<input type="checkbox"/> Pollution Adjudication Board (PAB)	
<input type="checkbox"/> Others _____	
<input type="checkbox"/> Others _____	
Name of Contact Person	<b>Engr. Jeffrey A. Sinodivilla</b>
Position / Designation	<b>Pollution Control Officer</b>

3. COMPLIANCE STATUS

3.1 DENR Permits/Licenses/Clearance

Environmental Law		Permits	Date of Issue	Expiry Date
PD 1586	ECC1	08-000321-0083	03/28/2000	
	ECC2	ECC-R08-1701-0002	01/13/2017	
	ECC3			
RA 6969	DENR Registry ID	GR-R8-37-0061	08/17/2016	
	PCL Compliance Certificate			
	CCO Registry			
	Permit to Transport			
RA 8749	POA No.	POA-2019-E-0837-0144	5/17/2019	5/17/2024
RA 9003	ECC for Sanitary Landfill			
RA 9275	DP No.	DP-R08-19-02546	9/3/2019	9/3/2020

4. Water Supply and Wastewater Generation

A. Water Sources						
Sources of Water Supply	Daily (m <sup>3</sup> /day)	Annual (m <sup>3</sup> /day)	Specify if Others			
Surface water (river, lakes, etc.)						
Groundwater						
Water utilities	24	7488				
Others (specify)						
B. Wastewater Sources						
Water Use / Sources of Wastewater	Consumed (m <sup>3</sup> /day)	Generated (m <sup>3</sup> /day)	Specify if Others			
Process Water	10	10				
Domestic Water	1	1				
Cooling Water						
Maintenance (washing of floors and equipment)	2	2				
Storm drain						
Others (specify)	1	1				
Recycled	10	10				
C. Quality of Abstracted Water (No sampling conducted)						
Sources of Water Supply	BOD/ COD	TSS	AVFP	Heavy Metals		Specify if Others

5. Information on Wastewater Pollution

A. Does the Establishment have a Wastewater Treatment Plant?	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No
B. What type of WWTP?	<input checked="" type="checkbox"/> Physical <input checked="" type="checkbox"/> Biological <input checked="" type="checkbox"/> Chemical <input type="checkbox"/> Others
C. WWTP Detail (Sequential Batch Reactor)	
1. Date Installed	1999



2. Design Capacity	18 m <sup>3</sup>		
3. Cost of WWTP	1,000,000		
4. Annual Maintenance Cost (Php/year)	906,000		
5. Location of Discharge Point(s)	Receiving Water Body		Classification of Water Body
Near rear of the Boiler Building	San Juanico Strait		SC
	<input checked="" type="checkbox"/> V-weir		Other (specify) _____
6. Flow Metering Device Use	<input type="checkbox"/> Flow Meter		
7. Flow Rate	Influent	Effluent	Others (specify)
	22 m <sup>3</sup>	22 m <sup>3</sup>	

A. Components of WWTP			
Primary	Biological	Chemical	Others
<input type="checkbox"/> Screening <input checked="" type="checkbox"/> Primary Treatment <input type="checkbox"/> Grit Removal <input type="checkbox"/> Oil/Water Separator <input type="checkbox"/> Equalization Tank <input type="checkbox"/> Others (specify) _____	<input type="checkbox"/> Activated Sludge <input checked="" type="checkbox"/> Anaerobic Digestion <input type="checkbox"/> Trickling Filter <input type="checkbox"/> Oxidation/Stabilization Pond <input type="checkbox"/> Sequencing Batch Reactor <input checked="" type="checkbox"/> Others (specify) <u>Aeration Tank</u>	<input checked="" type="checkbox"/> pH Adjustment <input type="checkbox"/> Disinfection <input type="checkbox"/> Oxidation/Reduction <input type="checkbox"/> Flocculation/ Coagulation <input type="checkbox"/> Others (specify) _____	

B. Condition of the WWTP	
1. What is the general condition of the WWTP during sampling?	<input type="checkbox"/> Properly maintained <input type="checkbox"/> Inadequately maintained <input type="checkbox"/> Poor maintenance <input checked="" type="checkbox"/> Others
2. Is the WWTP under construction or undergoing rehabilitation?	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No
3. If the answer is No. 2 is YES, has this been reported to EMB/LLDA?	N/A
4. Which System or units are under construction or being modified?	N/A
5. Estimated date of completion	N/A
6. Treatment units utilized to treat wastewater	N/A

Water Quality Field Date						
Sampling Station	V-Weir after Stabilization Pond		Sampling Date/ Time:		Average results for January 2020	
Type of Sample	Wastewater					
Result Analysis						
Parameter	Value	Unit	DENR Effluent Standards	Compliant		Remarks
				Yes	No	
BOD	37	mg/L	100	/		Passed
pH	8.07		6.0-9.0	/		Passed
COD	21	mg/L	200	/		Passed (01/31/2020)

Water Quality Field Date						
Sampling Station	V-Weir after Stabilization Pond		Sampling Date/ Time:		Average results for February 2020	
Type of Sample	Wastewater					
Result Analysis						
Parameter	Value	Unit	DENR Effluent Standards	Compliant		Remarks
				Yes	No	
BOD	46	mg/L	100	/		Passed
pH	7.93		6.0-9.0	/		Passed

Water Quality Field Date



Sampling Station	V-Weir after Stabilization Pond		Sampling Date/ Time:	Average results for March 2020		
Type of Sample	Wastewater					
Result Analysis						
Parameter	Value	Unit	DENR Effluent Standards	Compliant		Remarks
				Yes	No	
BOD	44.02	mg/L	100	/		Passed
pH	8.02		6.0-9.0	/		Passed
TSS	37	mg/L	200	/		Passed (03/06/2020)

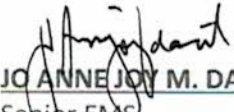
### III. SUMMARY OF FINDINGS

Legal Reference	Compliance Requirements	Compliant			Remarks
		Y	N	N/A	
DAO 2005-10 Rule 13.1	1. Does the establishment pay the required wastewater charge?	/			Loadbase Fee of Php 492.80 O.R. No. : 5606421 / 5608678
DAO 2005-10 Rule 14.1	2. Does the establishment have a Discharge Permit?	/			DP issued with DP No. DP-R08-19-02546
DAO 2005-10 Rule 14.5	3. Does the establishment pay the required discharge permit fee?	/			Php 2200.00 O.R. No. : 5606421 / 5608678
DAO 2005-10 Rule 14.9	4. Is the permit available and valid?	/			DP issued is valid until September 3, 2020.
DAO 2005-10 Rule 14.11	5. Do the discharge points correspond to those declared in the discharge permit?	/			
	6. Is the volume discharged within the allowable volume declared in the discharge permit?	/			Reported in 1st Quarter SMR, the total wastewater generated is 22 m <sup>3</sup> /day but 10 m <sup>3</sup> is being recycled/reused in the process.
	7. Is the permit posted in a proper area?	/			
DAO 2005-10 Rule 14.16	8. Are the SMRs submitted quarterly and on time?	/			1 <sup>st</sup> Quarter – May 8, 2020
DAO 1990-35 Section 4-6	9. Are the effluent parameters compliant with the standards in DENR existing effluent standards?	/			
DAO 1990-35 Section 8	10. Does the establishment comply with the additional requirements stated in DAO 1990-35?	/			
DAO 1990-35 Section 9	11. Are the pollution control facilities properly and continuously operated?	/			
DAO 1990-35 Section 10	12. Are the methods of analysis used for effluent samples in accordance with the prescribed methods of the Department?	/			
Other Requirements	13. Are the copies of water analysis reports available?	/			
	14. Are the correspondence between the establishment and EMB documented?	/			
	15. Are the establishment's compliance violations and exceedances documented?	/			
	16. Are there any pending litigation/PAB cases?			/	

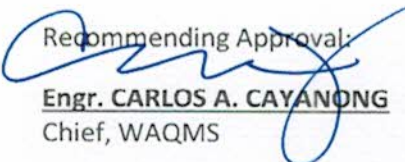
17. Are there spill prevention contingency plans?	/			
18. Are there spill containment facilities available?	/			

<b>Other Observations:</b>				
<div>1. TBK Manufacturing Corp. was issued with Discharge Permit (DP-RO8-19-02546) on September 3, 2019 valid until September 3, 2024.</div> <div>2. 1<sup>st</sup> quarter SMR was submitted on May 8, 2020. Results in the submitted SMR are within the DENR Standards for BOD and pH.</div> <div>3. Water pollution data in Module 3 provides a total of 21 m3/day wastewater generation which exceeds the 14 m3/day maximum allowable discharge per Discharge Permit. The 10m3/day recycled wastewater was not indicated in the water pollution data table under Module 3.</div> <div>4. Pollution Control Officer is accredited.</div>				
<b>Remarks and Recommendation:</b>				
<div>1. Per DENR Administrative Order No. 2016-08, significant parameters for wastewater effluent include temperature, pH, COD and TSS. BOD is not a significant parameter for the industry category but rather COD which should be prioritized in the in-house analysis.</div> <div>2. Include volume of recycled wastewater in the water pollution data of Module 3.</div> <div>3. Apply for DP renewal online prior expiration of DP.</div> <div>4. Submit TSS analysis of the abstracted water or source of water supply. (e.g. deep well water, tap water, water distributed by peddlers, etc.) at least two (2) months prior to the expiration of Discharge Permit.</div> <div>5. Submit Certificate of desludging/siphoning of the Septic Tank and treatment of the same by an accredited service provider per DP condition.</div> <div>6. Computation of Load Base Fee should be based on the TSS result.</div>				
<b>List of Documents Reviewed:</b>				
ECC, SMR, CMR, DP				

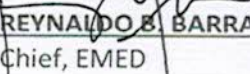
Submitted by:

  
JO ANNE JOY M. DAÑAL  
Senior EMS

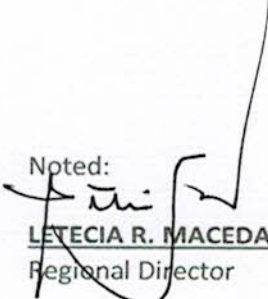
Recommending Approval:

  
Engr. CARLOS A. CAYANONG  
Chief, WAQMS

Approval:

  
REYNALDO B. BARRA, PME  
Chief, EMED

Noted:

  
LETICIA R. MACEDA  
Regional Director