

A. 1. PROJECT BASIC INFORMATION

Name of Project:	TAGANITO HYDROMETALLURGICAL PROCESSING PLANT
Name of Proponent:	TAGANITO HPAL NICKEL CORPORATION
Address:	Taganito Special Economic Zone, Brgy. Taganito, Claver, Surigao del Norte
Project Cost:	\$ 1.3 B
Project Life:	30 years
Legal Basis:	
a. Mineral Production Sharing Agreement Date Issued	MPSA No. 266-2008-XIII-SMR – c/o TMC JUNE 18, 2009
b. Environmental Compliance Certificate Date Issued	ECC CO. 1403-0007 (transferred from TMC to THPAL) JANUARY 14, 2015
c. Mineral Processing Permit Date Issued	MPP NO.: 14-2013-XIII SEPTEMBER 24, 2013
d. Ecozone Export Enterprise	Taganito Special Economic Zone REG. NO. 10-02 JANUARY 7, 2010
Employees (present number):	2,617 as of May 2016 (this Include contractor employees)
Processing Method:	HIGH PRESSURE ACID LEACH PROCESS
Process Commodity/ies:	Ni and Co mixed sulfides Hematite & Chromite
Pollution Control Officers:	ARTURO T. MANTO VP- Environment and External Affairs COA No. 2015-RXIII-025 ALEX C. CANONoy COA No. 2015-RXIII-023 LEMUEL S. GAMBIN COA No. 2015-RXIII-024
Contact Persons:	TAKESHI KUBOTA <i>President</i> MUNEKAZU KAWATA <i>EVP/Plant Manager</i> MAKOTO TAKAHASHI <i>EMO/CIVIL Acting Manager</i> ALEX C. CANONoy <i>MEPEO/EMO Section Head</i>

A.2 COMPANY BACKGROUND

Taganito HPAL Nickel Corporation is a sister company of Coral Bay Nickel Corporation, the first successful company in the world to employ the efficient pressure acid leaching technology to turn waste ore into something of high commercial value. It is also a majority-owned subsidiary of Sumitomo Metal Mining Co., Ltd. which is based at 11-3 Shimbashi 5-Chome, Minato-ku, Tokyo, Japan. THPAL was incorporated in the Philippines on August 22, 2008 to engage mainly in the manufacture and export of mixed sulphide (Nickel and Cobalt). It started commercial operations in September 2013.

The Taganito HPP project was issued an Environmental Compliance Certificate by the DENR on September 3, 2008. The ECC was first amended on September 3, 2009 which covered the transfer of location of the HPP and all associated facilities from brgy. Hayanggabon to brgy. Taganito. The ECC which was issued on September 3, 2009 was again amended Last January 14, 2015 for the expansion projects. On April 24, 2015, the ownership of the ECC issued on January 14, 2015 was transferred to Taganito HPAL Nickel Corporation from TMC.

The company is a registered Ecozone Export Enterprise located at Taganito Special Economic Zone, Brgy. Taganito, ClaverSurigaodel Norte.

PROJECT LOCATION



- Municipality of Claver, Surigao del Norte
- Brgys Taganito, Hayanggabon, Urbiztondo, & Cagdianao (Population: 2010 NSO Census ~ 8760)



A.3 PROJECT DESCRIPTION

The Hydrometallurgical Processing Plant (HPP) is designed to produce 30,000T of Nickel and 2,640T of Cobalt as Mixed Sulfides (MS) at high recovery rates by the acid leaching of low-grade lateritic ore. This low-grade ore is supplied by Taganito Mining Corporation. HPP uses sulfuric acid at high pressure and temperature in an autoclave. The process selectively leaches Nickel and Cobalt by sulfuric acid, control the leaching of iron, aluminum and silicon and produce a solution of nickel sulfate and cobalt sulfate. The solution is transformed into Nickel/Cobalt Mixed Sulfide by reacting with hydrogen sulfide. The stages of the processing are (1). Ore Preparation; (2) High Pressure Acid Leach; (3) Pre-Neutralization / Countercurrent Decantation; (4) Neutralization; (5) Zinc Removal; (6) Mixed Sulfide Production; (7) Final Neutralization.

B. PHOTOGRAPHS





Panoramic view of Taganito Hydrometallurgical Processing Plant Complex



Geotagged photo of Tailings Storage Facility



Panoramic view of Tailings Storage Facility



Geotagged photo of Wharf area



Panoramic view of Wharf area

C. PERMITS AND CLEARANCES

Date Issued	Permit/Clearance	Status (Date of Expiry)
	ECC	
January 14, 2015	Hydrometallurgical Processing Plant (HPP) Amended ECC (ECC CO-1403-007)	
January 29, 2015	THPAL Staff Housing (ECC No. ECC-R13-15-1-0011)	
January 13, 2016	THPAL Sanitary Landfill (ECC No. ECC-R13-1601-0001)	
September 24, 2013	Mineral Processing Permit (MPP No. 14-2013-13)	Every 5 years renewal (September 23, 2018)
	Wastewater Discharge Permits	
December 1, 2014	Settling Pond No 1. (Permit No. 2014-WDP-L-1367-288)	Every 5 years renewal (December 1, 2019)
December 1, 2014	Settling Pond No 2. (Permit No. 2014-WDP-L-1367-287)	Every 5 years renewal (December 1, 2019)
December 1, 2014	Settling Pond No 3. (Permit No. 2014-WDP-L-1367-286)	Every 5 years renewal (December 1, 2019)
December 1, 2014	Settling Pond No 4. (Permit No. 2014-WDP-L-1367-285)	Every 5 years renewal (December 1, 2019)

Date Issued	Permit/Clearance	Status (Date of Expiry)
December 1, 2014	Settling Pond No 5. (Permit No. 2014-WDP-L-1367-282)	Every 5 years renewal (December 1, 2019)
December 1, 2014	Sewerage Treatment Plant (Security Barracks) (Permit No. 2014-WDP-L-1367-284)	Every 5 years renewal (December 1, 2019)
August 24, 2012	Sewerage Treatment Plant (Plantsite) (Permit No. 2012-WDP-H-1367-104)	Every 5 years renewal (August 24, 2017)
August 24, 2012	Sewerage Treatment Plant (Dormitory) (Permit No. 2012-WDP-H-1367-105)	Every 5 years renewal (August 24, 2017)
August 24, 2012	Sewerage Treatment Plant (Wharf) (Permit No. 2012-WDP-H-1367-105)	Every 5 years renewal (August 24, 2017)
December 1, 2014	Tailings Storage Facility (Permit No. 2014-WDP-L-1367-283)	Every 5 years renewal (December 1, 2019)
January 6, 2015	Hazardous Waste Storage Building Oil & Water Separator (2015-WDP-A-1367-004)	Every 5 years renewal (January 06, 2020)
Permit to Operate		
January 06, 2015	2 Units Identical Package Boiler (Permit No. 2015-POA-A-1367-003)	Every 5 years renewal (January 06, 2020)
December 8, 2014	2 Units Deutz-Weichai Diesel Engine Generators Set (Permit No. 2014-POA-L-1368-280)	Every 5 years renewal (December 8, 2019)
December 1, 2014	2 Units Kohler Generator Set (Permit No. 2014-POA-L-1367-277)	Every 5 years renewal (December 1, 2019)
December 1, 2014	2 units Autoclave w/ 2 units Scrubber System (Permit No. 2014-POA-L-1367-276)	Every 5 years renewal (December 1, 2019)
December 1, 2014	7 units Acid Mist Eliminator (Permit No. 2014-POA-L-1367-276)	Every 5 years renewal (December 1, 2019)
December 1, 2014	2 Units Fume Scrubber & 1 Unit Dust Collector (Permit No. 2014-POA-L-1367-276)	Every 5 years renewal (December 1, 2019)
December 1, 2014	1 Unit Process Gas Scrubber; 1 Unit Emergency Gas Scrubber, 1 Unit Gas Leak Scrubber & 1 Unit Tank Vent Scrubber (Permit No. 2014-POA-L-1367-276)	Every 5 years renewal (December 1, 2019)
December 1, 2014	1 Unit Filter Bags and Hopper Dust Catcher (Permit No. 2014-POA-L-1367-276)	Every 5 years renewal (December 1, 2019)
December 1, 2014	1 Unit Filter Bags and NaOH Scrubber System (Permit No. 2014-POA-L-1367-276)	Every 5 years renewal (December 1, 2019)

Date Issued	Permit/Clearance	Status (Date of Expiry)
December 1, 2014	2 Units Vent Scrubber (Permit No. 2014-POA-L-1367-276)	Every 5 years renewal (December 1, 2019)
December 1, 2014	1 Unit 312 kVA Volvo Penta Genset (Permit No. 2014-POA-L-1367-278)	Every 5 years renewal (December 1, 2019)
December 1, 2014	2 units 300 kVA Komatsu Gensets (Permit No. 2014-POA-L-1367-278)	Every 5 years renewal (December 1, 2019)
December 1, 2014	1 Unit 200 kVA Komatsu Genset (Permit No. 2014-POA-L-1367-278)	Every 5 years renewal (December 1, 2019)
December 1, 2014	5 Units 150 kVA Mitsubishi Gensets (Permit No. 2014-POA-L-1367-278)	Every 5 years renewal (December 1, 2019)
December 1, 2014	5 Units 125 kVA Mitsubishi Gensets (Permit No. 2014-POA-L-1367-278)	Every 5 years renewal (December 1, 2019)
December 1, 2014	14 Units 90 kVA Hino Gensets (Permit No. 2014-POA-L-1367-278)	Every 5 years renewal (December 1, 2019)
December 1, 2014	8 Units 45 kVA Hino Gensets (Permit No. 2014-POA-L-1367-278)	Every 5 years renewal (December 1, 2019)
December 1, 2014	8 Units 25 kVA Isuzu Power Gensets (Permit No. 2014-POA-L-1367-278)	Every 5 years renewal (December 1, 2019)
December 1, 2014	9 Units 25 kVA Airman Isuzu Gensets (Permit No. 2014-POA-L-1367-278)	Every 5 years renewal (December 1, 2019)
December 1, 2014	5 Units 45 kVA Nissya Hino Generator Sets (Permit No. 2014-POA-L-1367-278)	Every 5 years renewal (December 1, 2019)
December 1, 2014	1 Unit 60 kVA Generator Set (Permit No. 2014-POA-L-1367-278)	Every 5 years renewal (December 1, 2019)
December 1, 2014	12 Units 90 kVA Nissya Generator Sets (Permit No. 2014-POA-L-1367-278)	Every 5 years renewal (December 1, 2019)
December 1, 2014	3 Units 125 kVA Denyo Mitsubishi Generator Sets (Permit No. 2014-POA-L-1367-278)	Every 5 years renewal (December 1, 2019)
December 1, 2014	5 Units 125 kVA Denyo Mitsubishi Generator Sets (Permit No. 2014-POA-L-1367-278)	Every 5 years renewal (December 1, 2019)
December 1, 2014	1 Unit 200 kVA Dinyo Komatsu Generator Set (Permit No. 2014-POA-L-1367-278)	Every 5 years renewal (December 1, 2019)
December 1, 2014	3 Units 300 kVA Denyo Komatsu Generator Sets (Permit No. 2014-POA-L-1367-278)	Every 5 years renewal (December 1, 2019)
December 1, 2014	1 Unit 45 kVA Hino Genset (Permit No. 2014-POA-L-1367-278)	Every 5 years renewal (December 1, 2019)
December 1, 2014	1 Unit 60 kVA Denyo Generator Set (Permit No. 2014-POA-L-1367-278)	Every 5 years renewal (December 1, 2019)

Date Issued	Permit/Clearance	Status (Date of Expiry)
December 1, 2014	2 Units 60 kVA NissyaGenSets (Permit No. 2014-POA-L-1367-278)	Every 5 years renewal (December 1, 2019)
December 1, 2014	1 Unit 250 kVA Osaka Seimitsu Genset (Permit No. 2014-POA-L-1367-278)	Every 5 years renewal (December 1, 2019)
December 1, 2014	7 Units 300A TLW300SSK Welding Gensets (Permit No. 2014-POA-L-1367-278)	Every 5 years renewal (December 1, 2019)
December 1, 2014	1 Unit 300A Welding Genset (Permit No. 2014-POA-L-1367-278)	Every 5 years renewal (December 1, 2019)
December 1, 2014	5 Units Air Compressor Airman (Permit No. 2014-POA-L-1367-278)	Every 5 years renewal (December 1, 2019)
December 1, 2014	2 Units Air Compressor PDS 185S (Permit No. 2014-POA-L-1367-278)	Every 5 years renewal (December 1, 2019)
December 1, 2014	1 Unit Air Compressor PDS (Permit No. 2014-POA-L-1367-278)	Every 5 years renewal (December 1, 2019)
December 1, 2010	DENR Hazardous Waste Generator's Registry No. (ID No.16-67-0078)	
	Philippine Inventory of Chemicals and Chemical Substances (PICCS) Certification	
October 12, 2012	Sulfuric Acid w/ CAS No. 7664-93-9 (Code No. PICCS-2012-13-001)	
October 12, 2012	Sodium Hydroxide w/ CAS No. 1310-73-2 (Code No. PICCS-2012-13-002)	
October 12, 2012	Polyaluminum Chloride w/ CAS No. 1327-41-9 (Code No. PICCS-2012-13-003)	
October 12, 2012	Sodium Hypochlorite w/ CAS No. 7681-52-9 (Code No. PICCS-2012-13-004)	
February 11, 2013	Calcium hydroxide w/ CAS No. 1305-62-0 (Code No. PICCS-2013-13-001)	
February 11, 2013	Polydiallyldimethyl Ammonium Chloride w/ CAS No. 26062-79-3 (Code No. PICCS-2013-13-002)	
February 11, 2013	Methyl alcohol w/ CAS No. 67-56-1 (Code No. PICCS 2013-13-001)	
February 11, 2013	Sulfur w/ CAS No. 7704-34-9 (Code No. PICCS-2013-13-004)	
February 11, 2013	Anthracite coal w/ CAS No. 8029-10-5 (Code No. PICCS-2013-13-005)	

Date Issued	Permit/Clearance	Status (Date of Expiry)
February 11, 2013	Sodium Hydrosulfide w/ CAS No. 16721-80-5 (Code No. PICCS-2013-13-006)	
May 18, 2016	CCO Registration Certificate for PCB's (CCO No. CCO-PCB-R13-TAG-183)	
OTHER PERMITS/CLEARANCES		
	Certificate of Approval	
February 24, 2016	a. Annual Environmental Protection and Enhancement Program 2016	RXIII-AEPEP-2016-0010
March 10, 2016	b. Annual Social Development and Management Program 2016	RXIII-ASDMP-2016-005

D. ENVIRONMENTAL PERFORMANCE

Date	Activity	Summary of Findings
October 27-29, 2011	MMT Inspection	<ol style="list-style-type: none"> Construction activities by contractor's and sub-contractors are on-going. Structural accomplishments of various facilities are as follow: <ul style="list-style-type: none"> HPP – 21% TSF – 33% Wharf- 100% Coal-fired Power Plant - 24% Diversion channel (5m x 2.5m) of Hayanggabon River/Pangabhion River to bypass the tailings and discharge directly to decantation pond was estimated to be 9 kilometers. 36 drums of used oil ready for transport by Gulf Oil properly kept at used oil storage building at Core Burrow area of SMCC. Construction of used oil water separator just started. 2 hectares of sporadic areas of planted slope along the Plant site was damaged by fire during the

Date	Activity	Summary of Findings
		<p>October 3, 2011 incident.</p> <ol style="list-style-type: none"> 5. Mangrove plantation intended for National greening Program (NGP) covering 7 has. At Tayaga and enrichment planting of 3 has. At Bagakay in Municipality of Claver is 100% completed. Estimated survival rate is 90%. 6. Oil spill from submerge cargo vessel and tugboats contained by installing spill boom. On-going recovery of oil conducted by SMCC and THPAL personnel. Coast Guard personnel supervised the activity. 1 ½ drums of oil already recovered. 7. Burned equipment was observed at THPAL wharf area and accordingly subject for investigation of the Insurance Company. 8. Good housekeeping was observed at EEI campsite. 9. Extra water drums for fire used are not covered that might be potential breeding ground for mosquitoes at SMCC campsite. 10. Drainage outlet at the SMCC carwash area in front of the Central Site Office was clogged with various debris and collector sump was already filled with silt materials,
<p>April 11-13, 2012</p>	<p>MMT Inspection</p>	<ol style="list-style-type: none"> 1. Construction activities by 7 contractors and sub-contractors ongoing. Structural accomplishments of various facilities are as follow: <ul style="list-style-type: none"> • HPP – 30% • TSF – 48% • Wharf - 100% • Coal-fired Power Plant – 31% • Over-all accomplishment - 52% <p>WHARF</p> 2. The remaining submerged boat already floated on the evening of April 11, 2012.

Date	Activity	Summary of Findings
		<p>3. Vessel carrying two units' autoclave with carrying capacity of approximately 1,000 cubic meters arrived early of April 12, 2012 ready to be transported to the site.</p> <p>4. Good housekeeping was observed at the area.</p> <p>PLANTSITE</p> <p>5. Water flowing along cross section of upstream Taganito River and batching plant. However, discoloration was observed in confluence of Daku Creek and Taganito River which is allegedly attributed to SP Phase 3 expansion project of TMC starting November 11, 2011. The activity was temporarily stopped due to frequent rains in the area.</p> <p>6. Construction of TSF is 48% completed. Hayanggabon River was permanently diverted for the construction of tailings dam,</p> <p>CORE BURROW AREA</p> <p>7. 23 drums containing used oil at core burrow yard ready for disposal for accredited transporter/treater.</p> <p>8. Traces of oil and fuel were observed along the discharge canal of core burrow area.</p> <p>9. Some new and used tires are not covered.</p> <p>SOLID WASTE DISPOSAL AREA</p> <p>10. Collected solid waste at disposal area was noted mixed, indicating that there is no segregation at source.</p> <p>SMCC CENTRAL OFFICE</p> <p>11. Sediment pit along the national highway was observed full of silt material.</p> <p>12. Concreted Sidewalk complete with wooden rails was noted along</p>

Date	Activity	Summary of Findings
		<p>national highway with total length of approximately 440 meters and with of 1.5 meters.</p> <p>2011 NGP</p> <p>13. Survival rate of NGP mangrove plantation at Brgy. Tayaga, Calver with 7 has. Was approximately 60% and the enrichment planting of 3 has. was approximately 80%.</p> <p>14. No signage provided for the protection of the plantation.</p> <p>COMPLIANCE TO THE COMMITMENT ON THE NOV ISSUED LAST FEBRUARY 6, 2012</p> <p>15. Commitment 1, mechanical dredging at Hayanggabon River was already 90% accomplished based on the original survey. 37 household settling along the river bank will be resettled under THPAL SDMP fund.</p> <p>16. Commitment 2, construction of rock-fill dike with grouted riprap at either side of the embankment is 10%. Boulders are collected from PGMC area by the contractor.</p> <p>17. Commitment 3, riprapping of hillside canal and open areas is 5% completed with 9 kilometers target.</p> <p>OTHERS</p> <p>18. Newly constructed settling pond at ore preparation area has no discharge permit yet.</p>
September 26-28, 2012	MMT Inspection	<p>1. Construction activities by 7 contractors and sub-contractors on-going. Structural accomplishments of various facilities are as follow:</p> <ul style="list-style-type: none"> • HPP – 80% • TSF – 95% • Coal-fired Power Plant – 90% • Over-all accomplishment - 88%

Date	Activity	Summary of Findings
		<p>PLANTSITE</p> <ol style="list-style-type: none"> 2. Road, drainage canal and settling ponds are well maintained. 3. Installation of metal fence with the height of 2 meters and earth flat forming and riprapping along Taganito River on-going. 4. Warning signages visible at critical areas. <p>TSF AREA</p> <ol style="list-style-type: none"> 5. Construction of flood gate at hillside-1 stream line no.9 completed to allow turbid water to flow at tailings dam during heavy rains. 6. On-going construction of two (2) CR and lay-outing of additional warehouse at core burrow area were observed. 7. Good housekeeping at Core Burrow area was observed. 8. Warning signages visible at critical areas. <p>CONTRACTOR'S CAMP SITE</p> <ol style="list-style-type: none"> 9. Good housekeeping at TJCP and SMCC was observed with sufficient number of garbage bins around the camp site. However at ATS camp site, domestic wastes observed scattered along the drainage canal with no drainage basin provided. <p>NURSERY</p> <ol style="list-style-type: none"> 10. Forest and fruit seedling production of various species on-going. Total seedlings stock 4,383 pieces. Some seedlings do not bear appropriate label. <p>WHARF</p> <ol style="list-style-type: none"> 11. Area well-maintained. Installation of pipelines (acid and supernatant) observed. <p>STATUS OF NOV ISSUED ON</p>

Date	Activity	Summary of Findings
		<p>FEBRUARY 6, 2012</p> <ul style="list-style-type: none"> • Commitment 1, mechanical dredging at Hayanggabon River was already 100% accomplished. • Commitment 2, construction of rock-fill dike with grouted riprap at either side of the embankment is 100% completed. • Commitment 3, riprapping of hillside canal and open areas is 90% completed with 9 kilometers target. <p>OTHERS</p> <p>12. Delineated 1 hectare for MMT Tree Park. 30 Mango seedlings planted and provided with tree guards by the members.</p> <p>13. PEZA representative actively participated the MMT inspection.</p>
April 3-5, 2013	MMT Inspection	<p>Plant site and its facilities is 97% completed.</p> <ol style="list-style-type: none"> 1. Test run of the Plant is tentatively by 2nd quarter 2013 as per THPAL Representatives. 2. Some stretches of gabions installed opposite to the Plant site were heavily damaged. 3. Intake dam across Taganito River was already full of silt. 4. The diverted Taganito River stream bed was observed to be shallow due to deposition of sand, silt and cobbles.
March 5- 7, 2014	MMT Inspection	<ol style="list-style-type: none"> 1. The MMT verified the issue about the unpleasant odor emanating from the plant. The company presented the countermeasures such as: <ol style="list-style-type: none"> a. Lower the detections of H₂S detectors from 1PPM to 0.2PPM b. Installation of additional; spray nozzles at the final neutralization tanks c. Installation of scrubber at the final neutralization facility. The

Date	Activity	Summary of Findings
		<p>MMT did not smell same or similar odor within the plant site at the time of inspection.</p> <ol style="list-style-type: none"> It was observed that the hillside channel overflows directly to Hayanggabon River. However, the company explained that during inclement weather, the discharge will be diverted to the decant pond to allow the silts to settle down. The recurring deposition of silts which becomes worst during inclement weather makes the dredging activities in the coastal area very expensive.
August 27-29, 2014	MMT Inspection	<ol style="list-style-type: none"> Company is experiencing water shortage at the time of monitoring. Sources of water such as rivers and creeks were observed at critical level. Hydro-seeding was conducted at the slopes of hillside channel. It was noted that growth of the sprayed grass species was concentrated at the bottom of the slope. Extension of slurry discharge pipe was noted. Slurry is directly discharged to the water level of TSF to minimize detected odor.
April 28-30, 2015	MMT Inspection	<ol style="list-style-type: none"> The company just finished its annual preventive maintenance shutdown during the site inspection and validation. Reforested area for NGP was planted with mangrove seedlings and most of it is located at Brgy. Wangke, Claver, Surigaodel Norte. The company was unable to accomplish these targets based on the 1st Quarter CY 2015 AEPEP: <ol style="list-style-type: none"> Coffer dam desilting below the Rock Quarry Area at Taga 3 Desilting of Water Intake Dam going upstream at Taganito River. Widening and cement treatment of

Date	Activity	Summary of Findings
		<p>hillside channel access is on-going. Berms were also constructed in some areas near the channel.</p> <ol style="list-style-type: none"> 5. The structure of drainage canals in HPP complex is efficient in directing waste water towards the settling ponds. However, there is enough accumulation of silts and needs desilting. 6. Settling Ponds 1 & 2 are well maintained. It maintains a pH Of 6.5-9.0. However, Settling Pond No. 3 needs to be desilted. 7. Riprapping of Hayanggabon Creek is on-going. 8. Hayanggabon River, the receiving water body of discharged water from the Decant pond, is silted during inspection. 9. The Tailings Storage Facility sufficiently holds enough volume of tailings from the plant. It is best viewed at the Viewing Deck of THPAL (along with the decant pond). 10. Good housekeeping in the Chemical Warehouse. The following equipment were purchased during the 1st Quarter : <ol style="list-style-type: none"> a. Air compressor for scuba tank refilling (1 unit) b. Diving gears (2 sets) c. Sampler for Acid Mist Sampling (2 units) d. Oil Spill Response Equipment 11. A big room for improvement for housekeeping in VSLC area. Empty sacks and other materials are piled/stored improperly. 12. The waste water (basic) level in the Storm Drainage Pit (SDP) of VSLC is high. This is due to the preventive maintenance shutdown of the plant. However, it can be re-used during the normal operation. 13. Relative to the H2S gas leak last April 14, 2015, the damaged

Date	Activity	Summary of Findings
		<p>electronic isolation valve was already replaced with a new one. There is also an additional automatic on-off block valve installed. However, there was an observed deformation of the cladding material near the valve. This may cause possible related problem in the future.</p> <p>14. The company committed to distribute emergency kits to residents of Brgy. Taganito in relation to the H₂S gas leak incident.</p> <p>15. Water trucks were seldom seen during the inspection, especially along the road going to the wharf. Dust emission is excessive.</p> <p>16. The Scrap yard area houses reusable materials, metal scraps, scrap woods, among others, Since the area is an open space, these materials may contribute to land and water pollution.</p> <p>17. The company's landfill caters to biodegradable and residual wastes. Industrial wastes are ready for disposal thru an accredited waste transporter. There is a large amount of residual wastes that may contribute to land and water pollution. (leachate)</p> <p>18. The company has closely monitored the quality of air, water and biota within its area. Results indicated that all values are within DENR standards.</p>
August 18-20, 2015	MMT Inspection	<p>1. The company is in its normal operation during the time of inspection.</p> <p>2. Reforestation (NGP) accomplishment for the 2nd quarter is only 16% of the target. Seedlings and fertilizers were already delivered to Bucas Grande Farmers Association, Inc. but</p>

Date	Activity	Summary of Findings
		<p>planting is yet to commence.</p> <ol style="list-style-type: none"> 3. Construction of additional hardening beds is not yet complete. Young seedlings were placed in an open area where it is directly exposed to sunlight. This may affect its growth and survival rate. 4. Extension, cement treatment, slope stabilization and widening of hillside channel were observed during inspection. The hillside is well-maintained. 5. Desilting of settling pond #1 is on-going. Desilting of settling pond # 3 will follow as committed during the 1st Quarter MMT. 6. Drainage canals within the plant site are well-maintained. 7. There was no observed siltation at the Coffe Dam during the inspection. 8. Actual desilting in downstream of intake dam of Taganito River was observed. Due to intense heat, some portions of the river are dried up. 9. Street sweepers were observed along the road from the plant to the wharf. 10. Mixed wastes were disposed to the disposal facility. 11. MRF has limited space to accommodate all kinds of wastes. 12. Housekeeping needs improvement at the Earth Works Camp (subcontractor). 13. Emergency kits to residents of Brgy. Taganito were not yet distributed. 14. The Staff Housing Project was visited. Land Preparation and slope stabilization using coconet and shotcreting are completed. 15. Environmental monitoring in land, water, air and biota were conducted during the 2nd quarter. The MMT was able to conduct

Date	Activity	Summary of Findings
		<p>confirmatory water sampling at the discharge point of the Decant Pond and supernatant discharge to wharf. All results will be presented at the MRFC.</p>
<p>May 2-4, 2016</p>	<p>MMT Inspection</p>	<ol style="list-style-type: none"> 1. The company is on temporary shutdown since April 18, 2016 due to blow back vessel incident. 2. THPAL presented to the MMT the status of the investigation of the incident and the team conducted inspection at the site. THPAL representative committed to replace the equipment with a new unit. 3. No physical activity observed relative to expansion projects. 4. Extension of hillside channel (550 meters), cement treatment of access road (3,960 meters) and hillside channel expansion (4,820 meters) were noted. 5. Revegetation and slope stabilization along the edges of the housing facility was also observed. 6. The company replanted 1,700 mangrove propagules in Brgy. Panatao 7. 2015 AEPEP achieved 79% financial accomplishment (PhP2,172,721,083.27 over PhP2,747,316,149.0 budget) and 88% physical accomplishment. 8. 2016 AEPEP Annual Budget is PhP1,899,845,312.0. 9. For the 1st quarter 2016 accomplishment, the company spent a total of PhP 495,174,818.0 against PhP 422,340,246.0 budget which is 117% financial accomplishment with 84% physical accomplishment. 10. On-going desilting activities were observed at Taganito River near Ore Preparation area. 11. Recovered cobbles and silts were stockpiled at the upstream of

Date	Activity	Summary of Findings
		<p>Taganito River.</p> <p>12. Well-maintained nursery and fish pond with 43,740 mixed forest trees, 12,509 mixed flowers & ornamental plants with 520 vegetables seedlings. Dragon fruit seedlings, dwarf papaya and some fruit trees were also noted. Construction of butterfly garden is on-going.</p> <p>13. Vermi-composting activity already started.</p> <p>14. Hayanggabon river desilting has not yet started per schedule in the AEPEP 2016 and recommendation of special MMT last February 2016.</p> <p>15. Newly installed leachate chamber treatment facility was observed at the sanitary landfill.</p> <p>16. Composting facility is far from the leachate treatment facility where possible maximum generation of leachates can be noted.</p> <p>17. At the Slaked lime plant of VSLC, vacuum dust sweeper and bag filters were noted.</p> <p>18. New Carbon analyzer was also noted to be operational.</p> <p>19. VSLC's waste oil storage facility was not arranged properly and covered only with old tarpaulin sheet.</p> <p>20. Stockpile of fire woods was observed and accordingly to be used for firing the lime kiln furnace during pre-heating activity.</p>
June 18-22, 2016	Environmental Audit	Please refer to the attached Environmental Audit Report.

E. NOTICE OF VIOLATION

Date issued	NOV	Details of Violation	Actions Taken	Status of the NOV
February 2012	6,	Presence of silt deposits/discoloration was	1. Conducted mechanical	Already settled and closed.

Date issued	NOV	Details of Violation	Actions Taken	Status of the NOV
		<p>noted at Hayanggabon River going to Taganito Bay</p>	<p>dredging to remove the deposited silts. Maintenance of Hayanggabon River as of today is a continuous effort of the company under Adopt A River/Water-Body Program.</p> <ol style="list-style-type: none"> 2. Constructed a rock-fill dike with grouted riprap at either side of the embankment. 3. Conducted a riprapping of hillside canal and open area. 4. Settlers along the river bank were already resettled under THPAL SDMP fund. 5. Paid an Environmental Obligation amounting to PhP 1, 460, 000.00 	
May 07, 2015		<p>H2S Gas leak due to the electronic isolation valve which was not completely closed during the purging activity of the MS reactors.</p>	<ol style="list-style-type: none"> 1. Medical check-up and giving of medicines to the affected residents of brgy. Taganito. 2. Installed additional scrubber system in the Pre- 	<p>Already settled and closed.</p>

Date issued	NOV	Details of Violation	Actions Taken	Status of the NOV
			<p>Neutralization Area to capture acidic mists.</p> <ol style="list-style-type: none"> 3. Replaced the electronic valve that failed with a brand new unit. 4. Installed 35 additional H₂S detectors along the plant boundary which is automatically trigger the shutdown of H₂S Plant and MS Sulfurization if critical level of 0.02ppm of H₂S Gas is detected. 5. Installed heavy industrial fans at CCD4 and CCD5 to further disperse them to the direction away from the community. 6. Implemented a comprehensive pollution control program immediately. 7. Conducted IEC on the implementation of Comprehensive Pollution Control Program. 8. Paid an Environmental Obligation fee amounting to PhP 50,000.00. 	

F. OTHER ENVIRONMENTAL ACTIVITIES UNDERTAKEN

Date	Activity	Status
February 14, 2012 to present	Adopt An Estero, Adopt A River/Water Body Program	A Memorandum of Agreement between the brgy. Hayanggabon, THPAL and the LGU-Claver were signed last February 14, 2012. Commitments on the upkeep of Hayanggabon River as the adopted water body are a continuous effort of the company. Removal of silts through manual and mechanical desilting was done to enhance the water quality. Rock-filled dike was constructed in both side of the embankment. Riparian vegetation was also enhanced through planting of riparian species such as <i>Nypafruticans</i> . Please refer to the attached reports of the Adopt A River Program undertaken by the company.
	National Greening Program	The company was able to reforest a total of 354 has. from year 2011 - 2016. The planted areas superseded the target which is 343 has. Enhancement planting is also conducted by the company. Continuous tree planting activities is conducted by the company in support to the program. This is also a way of promoting an environment-friendly operation through environmental protection and rehabilitation efforts made by the management. Please refer to the attached NGP reports.