POWER GENERATION CORPORATION 1

DA NHIM – HAM THUAN - DA MI HYDRO POWER JOINT STOCK COMPANY

Ref: 210 /TB-TDDHD

SOCIALIST REPUBLISH OF VIETNAM Independence - Freedom - Happiness

Lam Dong, October 12,2017.

ENVIRONMENTAL MONITORING PUBLISHMENT DA NHIM HYDROPOWER PLANT EXPANSION PROJECT 3rd QUARTER, 2017

1. Responses/Actions to Comments and Guidance from Government Authorities and the Public

Monitoring item	Monitoring results during report period
Responses/Actions to Comments and	The Employer has carried out Monitoring Plan in
Guidance from Government Authorities	compliance with Government Authorities
	Guidance.

2. Mitigation Measures

[Pre-Construction Phase]

- Land Acquisition

Land Acquisition Activities	Planned Total	Unit	Progress in Quantity	Progress in %	Expected Date of Completion
Progress of Compensation Payment					
 - Hydropower Station Expansion - Valve House and its Access Road - Adit 1 and its Access Road Construction - Intake Construction 	17.29	Bil. VND	21.33	100%	28 August 2015
Progress of Land Acquisition					
 - Hydropower Station Expansion - Valve House and its Access Road - Adit 1 and its Access Road Construction - Intake Construction 	31.25	ha	29.48	100%	28 August 2015

- Lost Assets



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Progress of Compensation Payment	Planned Total	Unit (No. of PAPs)	Progress in Quantity	Progress in %	Expected Date of Completion
Lost Tree					
- Hydropower StationExpansion- Valve House and itsAccess Road	30.3	ha	17.41	100%	28 August 2015
- Adit 1 and its Access Road Construction		****			
- Intake Construction					
Lost Crop					
- Hydropower Station Expansion					
- Valve House and its Access Road	0.95	0.95 ha	12.07	100%	13 April 2015
- Adit 1 and its Access Road Construction		7,00			
- Intake Construction					
Lost Assets (other than Tree and Crop)					
- Hydropower Station Expansion					
- Valve House and its Access Road	NA		NA		
- Adit 1 and its Access Road Construction					
- Intake Construction					

[Construction Phase]

- Air Quality (Emission Gas / Ambient Air Quality)

Monitoring item	Measurement point	Frequency	Monitoring result during report period
Sprinkle water to control dust	Construction site	Daily	The Employer instructed
			the Contractor at site.
Minimize travel distance	Construction site	Daily	The Employer instructed
	23 CSF		the Contractor at site.
Regular checking of engine	Construction site	Monthly	The Employer instructed
and exhaust of machinery and		*	the Contractor at site.
its recording and reporting			
Respiratory protection for	Construction site	Daily	The Employer instructed
worker at site		970	the Contractor at site.



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- Water Quality (Effluent/Wastewater/Ambient Water Quality)

Item	Unit	Measured value (average)	Country's standards QCVN 08:2015/BTNMT	Remarks (measurement point, frequency)
pН	-	7.0	6-8.5	Intake, near construction site of new intake, tailrace: monthly
SS (Suspended Solid)	mg/l	13.025	30	Intake, near construction site of new intake, tailrace: monthly
BOD5	mg/l	11.25	6	Intake, near construction site of new intake, tailrace: monthly
DO	mg/l	5.475	≥5	Intake, near construction site of new intake, tailrace: monthly
Ammonia Nitrogen	mg/l	0.1525	0.3	Intake, near construction site of new intake, tailrace: monthly
Total Phosphorus	mg/l	0.0225	0.2	Intake, near construction site of new intake, tailrace: monthly

Based on the category of B1- for irrigation purpose or other purposes with demand for similar quality water or other purpose of B2 in NATIONAL TECHNICAL REGULATIONS ON SURFACE WATER QUALITY, QCVN 08:2015/BTNMT

- Waste

Monitoring item	Measurement point	Frequency	Monitoring result during report period
Dispose of material to	Construction site	Monthly	-The Contractor has settled
approved area so as not	(New Intake, Adit		containers at some fixed
to disturb scenery and	Tunnel, Headrace		locations at the construction
not to contaminate	Tunnel, Surge Tank,		site to collect and classify
water	Valve House,		domestic waste including:
	Penstock,		Recycle waste, organic waste
	Powerhouse,		and hazardous waste.
	Worker's Camp)		- The disposed material was gathered at approved areas.

- Soil contamination

Monitoring item	Measurement	Frequency	Monitoring result during
_	point	(200)	report period
Capture insulation oils in	Construction	Monthly	The Contractor has been
barrel and use oil proof	site		instructed to keep oil in the oil
sheet to avoid any leakage			tanks to avoid any leaking.

- Noise / Vibration

Monitoring item	Measurement point Frequency		Monitoring result during report period	
Instruction to driver to	Construction	Monthly	The Contractor installed signs	
comply speed limit	site		to limit speed of construction	



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			vehicles at site.	
Check proper material	Construction	Monthly	The Contractor was requested	
loading and uploading	site		to check proper materia	
			loading and uploading at site.	
Use silencer and muffler for	Construction	Monthly	The Contractor was requested	
equipment	site		to use silencer and muffler for	
			equipment at site.	

- Flora, Fauna and Biodiversity

Monitoring item	Measurement point	Frequency	Monitoring result during report period
Regular water sampling and quality analysis		(See Water	Quality)

- Landfill Site Management

Monitoring item	Measurement point	Frequency	Monitoring result during report period
Construction waste soil	Construction site	Monthly	The Contractor disposed
needs disposed of the			waste soil properly.
designated site			

- Topography and Geology

Monitoring item	Measurement point	Frequency	Implementation phase	Monitoring result during report period
Site rehabilitation	Construction	-	At finishing	This works will be
with topsoil	site		stage of	executed at next
recovery,			construction	steps.
reshaping,			phase	
re-vegetation and				8
remediation with				
site cleanup work				

- Existing Social Infrastructures and Services

Monitoring item	Measurement point	Frequency	Monitoring result during report period
Check proper amount of	Construction site	Monthly	The Contractor carried out
material loading	3 8		checking material loading for
			every delivery.

- Sanitation

Monitoring item	Measurement point	Frequency	Monitoring result during report period
Provision of proper sanitation with septic facilities (prohibition of untreated human waste to	Construction site/Worker's camp	Monthly	The Contractor provided proper sanitation at site.
enter any watercourse)			



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[Operation Phase]

- Flora, Fauna, and Biodiversity/Hydrology/Social and Economic Environment/Public Safety/Water Usage or Water Rights of Common

Monitoring item	Measurement point*	Frequency	Monitoring result during report period
Minimum water requirement requested from DARD shall be observed	Hydropower Station	Daily	NA

- Water Quality

Item	Unit	Measured value (Mean)	Measured value (Max.)	Country's standards	Remarks (measurement point, frequency, implementation phase)
pH	-	This work executed	will be at the	5 9-9	Intake, New intake, Tailrace: Monthly
SS (Suspended Solid)	mg/l	operation pl	nase.	50	Intake, New intake, Tailrace: Monthly
BOD5	mg/l			1.5	Intake, New intake, Tailrace: Monthly
DO	mg/l	₹ _{#2} , .		≥4	Intake, New intake, Tailrace: Monthly
Ammonia Nitrogen	mg/l			0.5	Intake, New intake, Tailrace: Monthly
Total Phosphorus	mg/l	2.0 12		0.3	Intake, New intake, Tailrace: Monthly

Based on the category of B1- for irrigation purpose or other purposes with demand for similar quality water or other purpose of B2 in NATIONAL TECHNICAL REGULATIONS ON SURFACE WATER QUALITY, QCVN 08:2008/BTNMT

Da Nhim Hydropower Plant Expansion

RAN QUÁN LA DIRECTOR

NHÀ MÁY THỦY ĐIỆN ĐA NHIM CHI NHÀNH CONG TY ĐƠ PHÂN THỦY ĐIỆN ĐA NHIM

Dinh Chien

C/c:

- Director General (for report);

- Store: Achieves, DNEX.

