



Mandalay City Development Committee  
Mandalay Urban Services Improvement Project  
No. 79 / MUSIP - 11/ 2018  
Date: March 14, 2018

To

Mr. Eiichiro Cho, Director General

Japan International Cooperation Agency (JICA), Tokyo Headquarter.

Subject : Environment Monitoring Report

Mandalay City Development Committee (MCDC) has been implementing a JICA grant project which is called "The Improvement of Water Supply System in Mandalay City". MCDC and Tobishima Corporation has signed the construction agreement to implement this Project.

We would like to report Noise Monitoring Results for Environment Monitoring System which we agreed to measure in Preliminary Survey.

Sincerely,

Handwritten signature and date: 14/3/18

Daw Khin May Htay

Project Manager (Mandalay Urban Services Improvement Project)

Mandalay City Development Committee, Mandalay

Republic of the Union of Myanmar

Copy;

- Committee Member (Water & Sanitation Department, MCDC)
- Mr. Wataru Yanagida, TEC International



Environmental Monitoring (09 October 2017 ~ 27 February 2018)

1. Groundwater Level ; There was not a location in the Project sites for monitoring of the groundwater

Item	Unit	Stage	Measured Value		Remarks			
			Value (Mean)	Value (Max)	Location	Frequency	Implementation	Supervision
Groundwater Level	m	Design stage	-	-	-	-	-	-
		Construction stage	-	-	-	-	-	-
		Operation stage	-	-	-	-	-	-

2. Noise

1) Design and Construction Stage

Item	One hour LAeq	Unit	Measured Value (Mean)	Measured Value (Max)	World Bank Guideline	Remarks		
						Location	Frequency	Implementation
Noise	Daytime (7:00-22:00)	Db	60.1	70.1	55	Sites which was worked with noise	4days~11days per month	TOBISHIMA CORPORATION
	Night time (22:00-7:00)	Db	55.3	66.0	45			TECI

2) Operation Stage

Item	One hour LAeq	Unit	Measured Value (Mean)	Measured Value (Max)	World Bank Guideline	Remarks		
						Frequency	Implementation	Supervision
Noise	Daytime (7:00-22:00)	Db	-	-	55	-	-	-
	Night time (22:00-7:00)	Db	-	-	45	-	-	-

### 3. Vibration

#### 1) Design Stage

Item	Unit	Frequency band	Measured Value (Mean)	Measured Value (Max)	Location	Remarks		
						Frequency	Implementation	Supervision
Vibration	mm/sec	0-10 Hz	-	-	-	-	-	-
		10-50 Hz	-	-	-	-	-	-
		Over 50 Hz	-	-	-	-	-	MCDC



2) Construction Stage

Item	Unit	Frequency band	Measured Value (Mean)	Measured Value (Max)	Remarks		
					Location	Frequency	Implementation
Vibration	mm/sec	0-10 Hz	-	-	-	-	MCDC
		10-50 Hz	-	-	-	-	
		Over 50 Hz	-	-	-	-	

3) Operation Stage

Item	Unit	Frequency band	Measured Value (Mean)	Measured Value (Max)	Remarks		
					Location	Frequency	Implementation
Vibration	mm/sec	0-10 Hz	-	-	-	-	MCDC
		10-50 Hz	-	-	-	-	
		Over 50 Hz	-	-	-	-	