Environmental Monitoring Plan (For the Project Construction Phase)

(1) North Nawin

<u>Monitoring Form (For the Project Construction Phase)</u> (North Nawin Dam, January, 2018)

(1) Response and actions by the government

Monitoring Item	Monitoring Results during Report Period	Responsible Agency
Number and contents of formal comments made by the public	No comment	CON(2) and MDBW
Number and contents of responses from the people	No response	CON(2) and MDBW

		(2) Air Pol	llution				
ltem	Unit	Measured Value (Mean)	Measured Value (Max)	Country's Standards	Referred Japanese Standards	Remarks (Measurement Point, Frequency, Method, etc.)	Responsible Agency
At cons	struction s	site					
SO ₂	ppm	0.00	0.00	-	average daily less or equal 0.04ppm/hr and less or equal 0.1ppm/hr	under limit	Investigation Branch
со	ppm	0.00	0.00	-	average daily less or equal 10ppm/hr and average 8hr less or equal 20ppm/hr	under limit	Investigation Branch
SPM	mg/m ³	0.013	0.023	-	average daily less or equal 0.10mg/m ³ /hr and less or equal 0.20mg/m ³ /hr	under limit	Investigation Branch
NO ₂	ppm	0.00	0.00		average daily less or equal 0.04 - 0.06ppm/hr	under limit	Investigation Branch
Ox	ppm	0.00	0.00		less or equal 0.06ppm/hr	under limit	Investigation Branch

(3) Waste

Environmental parameter	Monitoring	Measures	Monitoring	Responsible
	results	taken	date	Agency
Excavated soils and old bricks	Properly handled	confirmed by check sheet for safety control	every day	CON(2) and MDBW

(4) Noise / Vibration

Item	Unit	Measured Value (Mean)	Measured Value (Max)	Country's Standards	Referred Japanese Standards	Remarks (Measurement Point, Frequency, Method, etc.)	Responsible Agency
Noise	dB	54.1	64.5	-	85	3 points, January, 2018	Investigation Branch
Vibration	dB	30.18	39.9	-	75	3 points, January, 2018	Investigation Branch

Environmental parameter	Monitoring results	Measures taken	Monitoring date	Responsible Agency
Safety check for carrying the heavy machineries into the work area.	All right	confirmed by check sheet for safety control	Every day	CON(2) and MDBW
Safety check for refueling car accessing the work sites.	All right	Ditto	ditto	CON(2) and MDBW
Safety check for carrying-out of the heavy machineries from the work sites.	All right	Ditto	ditto	CON(2) and MDBW
Checking of the heavy machineries if keeping correct routes and speed.	All right	ditto	ditto	CON(2) and MDBW
Installation of project sign board around the field.	All right	ditto	ditto	CON(2) and MDBW

(5) Working environment (Include working safety)/ Accident

Recommendations:

For SPM: To need frequent watering access roads especially near villages and working sites. Operator and Worker should use mask especially in working area of highly or busy road sites.

Improving social awareness: According to local people responses, BWID project constructed new bridges over canals, drainage canals (not include original design) and upgrading local access near canal bridges to improve transportation and social awareness of the project.

<u>Waste</u>: In principle, re-use excavated soils as back-filling materials, re-use the removed bricks out of the dilapidated main canal portions for the protection/ lining of tributary canals, and re-use the dilapidated concrete portions of access road for basement of concrete pavement. Further, remaining ones which cannot be re-used will be dumped and buried in the ID owned lands stretching alongside the canals.

	ny Nan									ago Rej				(L) .
Number: SYN	r KKT .				Metrol	ogical P	henoine	000						
Manager						me		ather		erature		oisture ercent)	Wind direction	Wind speed (m/s)
Date N Location : 1) Air Pollution E	75 19	504			10 -	50	clou	udy	25			2.4		3,6
Detailed Location		Unit	0 (hr)	1 (hr)	2 (br)	3 (hr)	4 (hr)	5 (hr)	6 (hr)	7 (hr)	8 (hr)	hourly	1	1
	CO		0						1			maxi-	Day Average	Remark
	100	.ppm ug/m3	. 10	Ø	0	0					1.1			
	SPM	ug/m3	22	10	8	.13	3	8.	10	.9.	8			
	NO ₁	ppm			17	.23	16	15	21	20	18			
	Ox	ppm	0	0	0	0								
				urement		During	g time		isured ilue		Service 1	and and		
	SO2	ppm				10 mm		0	đ	144 C 12			C. A. Cherry	
2) Noise (working sta	ite)									CONTRACTOR OF				2
Detailed Location	Unit		Time		Le	vel (dB		3)	Measure-		Ν	dain Sourc	ce	Remark
	-					Lm			height(m)					
						.63-3			1,2m					
	dB					64.5		-	1.2 m					
				-			7-		1.2 m					
) Vibration (working	state)													
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						L10		cond			14	aan oodre	ic .	Remark
					2	1.5								
	dB					4.6								-
					20	9-4.								

Dam Namer NGG	h Naw	tion Supp In											Jan, 20	18 B
Connect :					Metrol	ogical P	henome	non						
Measurer : 3 YN					T	me	We	ather		erature gree)		oisture ercent)	Wind direction	Wind speed (m/s)
Date			1.6		11 !	10	010	udy	27	°.C		2 - 6		2-8
1) Air Pollution E	95 24'	53'									:		1	
Detailed Location			0 (hr)	1 (hr)	2 (hr)	3 (hr)	4 (hr)	5 (hr)	6 (hr)	7 (hr)	8 (br)	hourly		1
Detailed Location		Unit										maxi- mum	Day Average	Remark
	CO	.ppm	0	0	0	0					1			
	SPM	µg/m3 µg/m3	:5 h	5 9	5	.6	-6	6.	7	8	6			
	NO ₂	ppm	0	0	9	12	n'	13	15.	15.	14.			
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				irement		Durin	g time		sured					
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) Noise (working sta	te)					- Corrent	1	0	Q	Print Party	100	1.000		
Detailed Location	Unit		Time		Le	vel (dB	< 85 (dl	B)	Measure-	[Aain Sour		Remark
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						43.8								
	dB					47.3								
						.51.1	_							
Vibration (working	state)													
				T					1				*measure	ment time: 10 min
Detailed Location	Unit		Time	H	Level (dB < 75	(dB)	Gro	und		N	fain Sourc	'P	Remark
						L10		cond	ition					Kelhark
	dB					31 . 2								
	ab					31.2								

Project Name : Imp Dam Namet		100								1. 1.14			Jan, 201	0
Number :				•	Metrol	ogical P	honoine	non						
Measurer : A + M , Date					1;	me	We	ather	(deg		(pe	nisture rcent)	Wind direction	Wind speed (m/s)
Date Location : N 1) Air Pollution E	18 57	55 .	, ¹² -],		11:0	50	Clou	udy	24	·J-	32	60		6-8
		12	1		2 (hr)	3 (hr)	4.0.5	6.0.2	(4)			hourly		
Detailed Location	Item	Unit	0 (11)	1 (111)	2 (10)	5 (ar)	4 (nr)	5 (hr)	6 (hr)	7 (hr)	8 (hr)	maxi-	Day .	Remark
	CO	. ppm	0	0	0	8	-				*	mum	Average	
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		µg/m3	fi	8	17	.9	18	.11	9.	10	9			
	NO ₂	ppm	0	0	0	5						1111111		
•	Ox	ppm	0	0	Ø	0							14	
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	SO ₂	ppm				10000		0						
) Noise (working sta	te)					er alle service de				PT-50276345	-1499 Baby 1	D G. LANGANG	C SALEY CONTRACTOR	
Detailed Location	Unit		Time		Le	vel (dB	< 85 (d	B)	Measure-		N	fain Sour		Remark
		-				Lm	ax		height(m)			initi oour		Remark
						814								
	dB					50.1								
						58.4								
Vibration (working	state)												*maaging	nent time: 10 mi
Detailed Location	Unit				Level (dB < 75	(dB)	+	1					ient time: 10 mi
, inclusion rocation	Unit		Time	Ī		L10	(ac)	Gro cond			N	fain Sourc	æ	Remark
					3	9-9		cond	nou					
	dB	_				9.8								
						2.7.								

Monitoring Form (For the Project Construction Phase) (North Nawin Dam, February, 2018)

(1) Response a	nd actions by the government	
Monitoring Item	Monitoring Results during Report Period	Responsible Agency
Number and contents of formal comments made by the public	No comment	CON(2) and MDBW
Number and contents of responses from the people	No response	CON(2) and MDBW

(2) Air Pollution

			huton				
Item	Unit	Measured Value (Mean)	Measured Value (Max)	Country's Standards	Referred Japanese Standards	Remarks (Measurement Point, Frequency, Method, etc.)	Responsible Agency
At con	struction	site					
SO ₂	ppm	0.00	0.00	-	average daily less or equal 0.04ppm/hr and less or equal 0.1ppm/hr	under limit	Investigation Branch
со	ppm	0.00	0.00	-	average daily less or equal 10ppm/hr and average 8hr less or equal 20ppm/hr	under limit	Investigation Branch
SPM	mg/m ³	0.076	0.098	-	average daily less or equal 0.10mg/m ³ /hr and less or equal 0.20mg/m ³ /hr	under limit	Investigation Branch
NO ₂	ppm	0.00	0.00		average daily less or equal 0.04 - 0.06ppm/hr	under limit	Investigation Branch
Ox	ppm	0.00	0.00		less or equal 0.06ppm/hr	under limit	Investigation Branch

(3) Waste				
Environmental parameter	Monitoring results	Measures taken	Monitoring date	Responsible Agency
Excavated soils	Properly handled	confirmed by check sheet for safety control	every day	CON(2) and MDBW

(4) Noise / Vibration

Item	Unit	Measured Value (Mean)	Measured Value (Max)	Country's Standards	Referred Japanese Standards	Remarks (Measurement Point, Frequency, Method, etc.)	Responsible Agency
Noise	dB	47.42	54.3	-	85	3 points, February, 2018	Investigation Branch
Vibration	dB	32.96	52.7	-	75	3 points, February, 2018	Investigation Branch

(5) Working environment (Include working safety)/ Accident

Environmental parameter	Monitoring results	Measures taken	Monitoring date	Responsible Agency
Safety check for carrying the heavy machineries into the work area.	All right	confirmed by check sheet for safety control	Every day	CON(2) and MDBW
Safety check for refueling car accessing the work sites.	All right	ditto	ditto	CON(2) and MDBW
Safety check for carrying-out of the heavy machineries from the work sites.	All right	ditto	ditto	CON(2) and MDBW
Checking of the heavy machineries if keeping correct routes and speed.	All right	ditto	ditto	CON(2) and MDBW
Installation of project sign board around the field.	All right	ditto	ditto	CON(2) and MDBW

Recommendations:

For SPM: To need frequent watering access roads especially near villages and working sites because SMP level must be reduce in working hours as much as possible. Operator and Worker should use mask especially in working area of highly or busy road sites.

Improving social awareness

Social Welfare Works are bridges& cart bridges, farm road and tube wells.

Waste Management

In principle, re-use excavated soils as back-filling materials, re-use the removed bricks out of the dilapidated main canal portions for the protection/ lining of tributary canals, and re-use the dilapidated concrete portions of access road for basement of concrete pavement. Further, remaining ones which cannot be re-used will be dumped and buried in the ID owned lands stretching alongside the canals.

Number :	th no				Metrol	onical P	henome	non _						· · ·
Measurer : \$300 Date					Time ,				Weather (degr		(pe	isture rcent)	Wind direction	Wind speed (m/s)
Location :	8:54 3	0365C	95 23	44			Sur	sonny 3		. 8	38	~5	N	1.6
Detailed Location	Item	Unit	1	1	2 (hr)	3 (hr)	4 (hr)	5 (hr)	6 (hr)	-7-(hr)	8 (hī)	hourly maxi-	Day	Remark
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Liniag		ug/m3	:43	0 42	40	0	0	39	45	43	42			
Boekhoe	SPM	µg/m3	98	28	250	24	36.	80	95	90	95			
	NO ₂	ppm .	0	0	0	0	0	,		-14	10			
	Ox	ppm	0	0	0	0	0						1	
			Measurement tin		t time During tim		g time	Measured value						
	SO ₂	ppm						0	0	1. A. A.	- Contract		Star Black	3
2) Noise (working sta	te)									- shalot S		A Shake collect and	Sandi Bran, Alashi, Berkhuri Bar	
Detailed Location	Unit	-	Time		Level (dB < 85 (B)	Measure- meat	Main Source			ce .	Remark
mixerand		1			44.1	Lm	lax		height(m)					
lining	dB				48.				1.2m					
Backhoe	dB				46.				1.20					
3) Vibration (working	state)												*measure	ment time: 10 mi
Detailed Location	Unit		Time		Level (dB < 75	5 (dB)		ound		N	lain Sour		Remark
			L10		cond	lition	h							
	dB				30.4			-	-	- James				
					32.0						1			

Project Name : Imp Dam Namer - CON Number :	CAP 0	court o							Course in	ago Rej	21011			
wurnen .					Metro	logical i	hename	enon_						
Measurer: Syn	, AT	w 20	72500		-	ime	We	ather		Temperature (degree)		nisture rcent)	Wind direction	Wind speed (m/s)
Measurer : Sg n Date Location : root 1) Air Pollution	8 55 1	nt Bi	15 19	45	9:30 SC			my.	16-	8	हिष्	ref		2-5.
Detailed Location	Item	Unit	1	1 (hr)	2 (hr)	3 (hr)	4 (hr)	5 (hr)	6 (hr)	7 (hr)	8 (hr)	hourly		-
									1			maxi- mum	Day .	Remark
miscer and	CO	.ppm	0	0	0	0	0					mum	Average	
Lining .	SPM	µg/m3	42	41	42	42	A1	45	42	43	4.1			
Backhoe	NO,	µg/m3	92	94		.84	90	90		85	80			
Backhoe	Ox	ppm	0	0	0	0				1				
•	Ox	ppm	0	0	0	0	0							
-	SO ₂		Meas	urement	time	Durin	g time		isured				insi har	Cine 1
		ppm						O	0	14 / 12 T			COP SE AL ALLAN	
2) Noise (working stat	e)									C. States			and the second second second	
Detailed Location	Unit		Time		Le	vel (dB		dB) Measure- meat			M	lain Sourc	e .	Remark
mare and						Lm	ax		height(m)					
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Beekhoe.	dB				50.	and the statements			1.2.M					
					48.	.6			1.2m	- e				
Vibration (working	state)													
D				.	Tanti	ID . OC							*measurem	ent time: 10 minute
Detailed Location	Unit		Time	H	Level (dB < 75	(dB)	Gro	und		М	ain Sourc	-	Remark
			:			L10		cond	ition		1.1	an sourc		Kemark
	dB		52.5											
	ub -				36.0									
		0.010	_		28.	7								

Attachment-17

Project Name : Imp	plementa	tion Supr	port for	Irrieati	on Dev	clanme	nt Prois	of in D	oring She	aus Dis				Feb, 2018
Dam Namer - 120-	rth	accurit	Y			e of meet	actroje	CC III II	cours n	ago reg	uon			
Number :		7		•	Metrol	ogical F	henorne	non						
Measurer : Syn					T	ime	Weather		Temperature (degree)		Moisture (percent)		Wind direction	Wind speed (m/s)
Location : NIS	9915	Eas	1.		21	And the second se	Scen	ny.	1.27.	2	20.	4	N	406
1) Air Pollution		270	r to L	6	L				L	in a		l		1.0
i) An Follation	1	1	1				-							~
Detailed Location	Item	Unit	0 (hr)	1 (hr)	2 (hr)	3 (hr)	4 (hr)	5 (hr)	6 (hr)	7 (hr)	8 (hr)	hourly maxi-	Day	Remark
anter Gringer	CO	ppm	0	0	0	0	0					mum	Average	
and the second	SPM	µg/m3	:41	AI	41	41	41	45	43	40	42			Ava 0.076
precessing.	1 Carlos	µg/m3	77	86	82	.86	77	80	82	29				maz. 0.098
	NO ₂	ppm	0	0	0	0	0			1				Think cropp
	Ox	ppm		0	0	0	0						1.1.1	
1.1.1	Measuremen		t time During time			value		sured lue		a ir				
	SO2	ppm						Ø	0	12.75	Barring .		C. R. Chen	
2) Noise (working sta	te)	-	- at-										ALC: ALC: LINE STRALLING	
Detailed Location	Unit		Time		Le	Level (dB < 85 (dB)				Main Source				Remark
and the second			_		-	Lm	ax		meat height(m)					Kethank
					54.				1.nn					AVQ 47.42
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				-	45:	FT_			1.2m					
) Vibration (working	state)			-	1.11									
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Detailed Location	Unit		Time	-	Level ((dB)	Gro	und		M	ain Sourc	e	Remark
	-			L10		cond	ition		1					
	dB		17:5									Ava. 32.96		
				1	23.5									Mar 52,7

<u>Monitoring Form (For the Project Construction Phase)</u> (North Nawin Dam, March, 2018)

(1) Response a	nd actions by the government	
Monitoring Item	Monitoring Results during Report Period	Responsible Agency
Number and contents of formal comments made by the public	No comment	CON(2) and MDBW
Number and contents of responses from the people	No response	CON(2) and MDBW

			JIULION				
ltem	Unit	Measured Value (Mean)	Measured Value (Max)	Country's Standards	Referred Japanese Standards	Remarks (Measurement Point, Frequency, Method, etc.)	Responsible Agency
At con	struction	site					
SO ₂	ppm	0.00	0.00	-	average daily less or equal 0.04ppm/hr and less or equal 0.1ppm/hr	under limit	Investigation Branch
со	ppm	0.00	0.00	-	average daily less or equal 10ppm/hr and average 8hr less or equal 20ppm/hr	under limit	Investigation Branch
SPM	mg/m ³	0.082	0.098	-	average daily less or equal 0.10mg/m ³ /hr and less or equal 0.20mg/m ³ /hr	under limit	Investigation Branch
NO ₂	ppm	0.00	0.00		average daily less or equal 0.04 - 0.06ppm/hr	under limit	Investigation Branch
Ох	ppm	0.00	0.00		less or equal 0.06ppm/hr	under limit	Investigation Branch

(2) Air Pollution

(3) Waste				
Environmental parameter	Monitoring results	Measures taken	Monitoring date	Responsible Agency
Excavated soils	Properly handled	confirmed by check sheet for safety control	every day	CON(2) and MDBW

(4)	Noise /	Vibration
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Item	Unit	Measured Value (Mean)	Measured Value (Max)	Country's Standards	Referred Japanese Standards	Remarks (Measurement Point, Frequency, Method, etc.)	Responsible Agency
Noise	dB	48.48	60.5	-	85	3 points, March, 2018	Investigation Branch
Vibration	dB	27.65	36.4	-	75	3 points, March, 2018	Investigation Branch

(5) Working environment (Include working safety)/ Accident

Environmental parameter	Monitoring results	Measures taken	Monitoring date	Responsible Agency
Safety check for carrying the heavy machineries into the work area.	All right	confirmed by check sheet for safety control	Every day	CON(2) and MDBW
Safety check for refueling car accessing the work sites.	All right	ditto	ditto	CON(2) and MDBW
Safety check for carrying-out of the heavy machineries from the work sites.	All right	ditto	ditto	CON(2) and MDBW
Checking of the heavy machineries if keeping correct routes and speed.	All right	ditto	ditto	CON(2) and MDBW
Installation of project sign board around the field.	All right	ditto	ditto	CON(2) and MDBW

Recommendations:

For SPM: To need frequent watering access roads especially near villages and working sites because SMP level must be reduce in working hours as much as possible. Operator and Worker should use mask especially in working area of highly or busy road sites.

Improving social awareness

Social Welfare Works are bridges& cart bridges, farm road and tube wells.

Waste Management

_In principle, re-use excavated soils as back-filling materials, re-use the removed bricks out of the dilapidated main canal portions for the protection/ lining of tributary canals, and re-use the dilapidated concrete portions of access road for basement of concrete pavement. Further, remaining ones which cannot be re-used will be dumped and buried in the ID owned lands stretching alongside the canals.

		1010												
Number :					Metrol	ogical P	henoune	nan		0.944	2			
Measurer : Sy~	AT-	~			Time		Weather		ther (degree)				Wind direction	Wind speed (m/s)
Location : N	18'56	58%			8:3	0	fine	-	25.	ι.	69	14	Etow	1-G .
1) Air Pollution E	95	7'3"			L		1		L					
Detailed Location	Item	Unit	0 (hr)	1 (hr)	2 (hr)	3 (hr)	4 (hr)	5 (hr)	6 (hr)	7 (hr)	8 (hr)	hourly maxi-	Day	
	-	1									126-1	mum	Average	Remark
maerond	CO	. ppm	0	0	0	0								max 0.09
vining	SPM	µg/m3	15	42	40	39	42	42	40	39.	40			Ava 0.09
	NO ₂	ppm	98	79	80	74	16	79	80	71.	80			1
	Ox	loom	0	0	0	0								
		1 ppm	0	0	0	0	-			an and				
	SO ₂ Dpm		uremen				Measured value			States -				
		ppm				low		0	0	Ne	Toring 1.	12180	Con Class	
2) Noise (working stat	e)								Service Constant					
Detailed Location	Unit		Time		Level (dB < 85 (dB)			B)	Measure-	Main Source		ce	Remark	
misenad	152.5				36	I.m	ax		beight(m)					
Uning									1.20		10-10-10-10-10-10-10-10-10-10-10-10-10-1			max 60.5
	dB				49	Course & Street or other			1.run			and and a state		Ava 18.48
1					38	••1			rism					
) Vibration (working	state)					3							*manara	nent time: 10 min
Detailed Location	Unit				Level (dB < 75	(dB)		1				measurer	nent ume: 10 min
Detailed Location	Unit		Time	. [L10	(0.0)	Ground		Main Source			æ	Remark
	dB				3100									man 36.4
L	uß				19.3									Ava 27.65
			2		19.G									and and and a

Environmental Monitoring Sheet Project Name : Implementation Support for Irrigation Development Project in Western Bago Region March, 18 Number : Metrological Phonomenon

1

Number :					Metrol	logical P	henome							
Measurer : 3] *	, ki	xT				ime .	We			erature gree)		pisture ercent)	Wind direction	Wind speed (m/s)
Location :	185	6 Y	5951	9'50	14:1	0	Scenary 27:9		9-58-5-		5	my.		
Botailed Location	Ltem	Unit	0 (hr)	1 (hr)		3 (hr)	4 (hr)	5 (hr)	6 (hr)	7 (hr)	8 (hr)	hourly maxi-	Day	Remark
mixer and	co								1		15	mum	Average	Keinark
Vining		.ppm µg/m3	90	0	0	0								
- second	SPM	µg/m3	175	4i	41	48	41	42	41	42	41			
	NO ₂	ppm	10	TT	-80	82	86	79	82	84	7F			
	Ox	ppm	0	0	0	0								
	Measureme		irement				Measured value				10001 (000			
	SO ₂	ppm				lond		0	C		1200 PA		and the second	
) Noise (working sta	te)								0		Sector, 1		C. R. Chan	
Detailed Location	Unit		Time		Level (dB < 85						N	fain Sourc	e .	Remark
mixer and					60.	the second s	tx		height(m)					
Uning	dB			- 1	56				1-2m					
	uB				50/				1.200					
1									1200					
Vibration (working	state)													
Detailed Location	Unit	-	Time		Level (dB < 75	(dB)	Gro	und			lain Sourc		ent time: 10 mi
				3 1		L10		cond			IVI	ain Sourc	e	Remark
					33-5	,								
	dB				24.9									
					35.0	2							-	

Project Name : Implementation Support for	Environmental Monitoring Sheet Irrigation Development Project in Western Bago Region	March, 18	3)
Number :			

Measurer : くりい Date	. Kk	T R.D	25+8	8		me	We	ather		erature gree)		rcent)	Wind direction	Wind speed (m/s)
Location :	8 54'2				919	5	Sur	ny	37.	9.	38	9	N	1.7
Detailed Location	Item	Unit		1 (hr)	2 (hr)	3 (hr)	4 (hr)	5 (hr)	6 (hr)	7 (hr)	8 (hr)	hourly maxi-	Day	Remark
mixerand	CO	. ppm	0.	0	0	0	0	0				mum	Average	
Painia	SPM	µg/m3 µg/m3	93	43	81	43	43	40 81	àq	40	39	-		
Backhae	NO ₂	ppm	0	0	0	0	98	0	80	81-	81			
	Ox	ppm	6	0	0	0		0						
1			Measu	irement	time	During	time	-	sured		ANA	1 		
	SO ₂	ppm				10mm		0	0		A STATE OF	1.12	and said	
Noise (working sta	te)										Contraction 1	1.2.5	C- Cielu	7.1
Detailed Location	Unit		Time	H	Le	vel (dB	< 85 (dI	3)	Measure- megt		M	fain Sourc	e	Remark
mischand		1			NE A		ax		height(m)					
Lining	dB				45-2				(inn					
Preckhoe	ub				55.		1		1.2m					
Vibration (working	state)												-	
,	T		-										*measurem	ent time: 10 mi
Detailed Location	Unit		Time		Level (<u>B < 75</u> L10	(dB)	Gro			м	ain Sourc	e	Remark
1111					36.4	210		cond	tion					
	dB				21.6									
					22.0							200		

t

(2) South Nawin

<u>Monitoring Form (For the Project Construction Phase)</u> (South Nawin Dam, January, 2018)

(1) Response and	actions by the government	
Monitoring Item	Monitoring Results during Report Period	Responsible Agency
Number and contents of formal comments made by the public	No comment	CON(2) and MDBW
Number and contents of responses from the people	No response	CON(2) and MDBW

(2) Air Pollution

		(Z) AILPO	nution				
ltem	Unit	Measured Value (Mean)	Measured Value (Max)	Country's Standards	Referred Japanese Standards	Remarks (Measurement Point, Frequency, Method, etc.)	Responsible Agency
At cons	struction s	site					
SO ₂	ppm	0.00	0.00	-	average daily less or equal 0.04ppm/hr and less or equal 0.1ppm/hr	under limit	Investigation Branch
со	ppm	0.00	0.00	-	average daily less or equal 10ppm/hr and average 8hr less or equal 20ppm/hr	under limit	Investigation Branch
SPM	mg/m ³	0.015	0.018	-	average daily less or equal 0.10mg/m ³ /hr and less or equal 0.20mg/m ³ /hr	under limit	Investigation Branch
NO ₂	ppm	0.00	0.00		average daily less or equal 0.04 - 0.06ppm/hr	under limit	Investigation Branch
Ox	ppm	0.00	0.00		less or equal 0.06ppm/hr	under limit	Investigation Branch

(3) Waste

Environmental parameter	Monitoring	Measures	Monitoring	Responsible
	results	taken	date	Agency
Excavated soils and old bricks	Properly handled	confirmed by check sheet for safety control	every day	CON(2) and MDBW

(4) Noise / Vibration

Item	Unit	Measured Value (Mean)	Measured Value (Max)	Country's Standards	Referred Japanese Standards	Remarks (Measurement Point, Frequency, Method, etc.)	Responsible Agency
Noise	dB	61.98	69.3	-	85	3 points, January, 2018	Investigation Branch
Vibration	dB	29.8	36.8	-	75	3 points, January, 2018	Investigation Branch

Environmental parameter	Monitoring results	Measures taken	Monitoring date	Responsible Agency
Safety check for carrying the heavy machineries into the work area.	All right	confirmed by check sheet for safety control	Every day	CON(2) and MDBW
Safety check for refueling car accessing the work sites.	All right	ditto	Ditto	CON(2) and MDBW
Safety check for carrying-out of the heavy machineries from the work sites.	All right	ditto	Ditto	CON(2) and MDBW
Checking of the heavy machineries if keeping correct routes and speed.	All right	ditto	Ditto	CON(2) and MDBW
Installation of project sign board around the field.	All right	ditto	Ditto	CON(2) and MDBW

(5) Working environment (Include working safety)/ Accident

Recommendations:

For SPM: To need frequent watering access roads especially near villages and working sites. Operator and Worker should use mask especially in working area of highly or busy road sites.

Improving social awareness: According to local people responses, BWID project constructed new bridges over canals, drainage canals (not include original design) and upgrading local access near canal bridges to improve transportation and social awareness of the project.

<u>Waste</u>: In principle, re-use excavated soils as back-filling materials, re-use the removed bricks out of the dilapidated main canal portions for the protection/ lining of tributary canals, and re-use the dilapidated concrete portions of access road for basement of concrete pavement. Further, remaining ones which cannot be re-used will be dumped and buried in the ID owned lands stretching alongside the canals.

Contra to Restar	h Naki	11 1-												
Number :					Metrol	ogical P	hanome	non						
Measurer : 3YN +	KKT.				Ti	me	We	ather	Tempe (deg	erature		nisture rcent)	Wind direction	Wind speed (m/s)
Date Location : N	18 51	" . R	P 480	00	9:4	5	Fil	De.	23,	1.		8.9	N	5.0
1) Air Pollution E	95 26	2″ K												
Detailed Location	Item	Unit	0 (hr)	1 (hr)	2 (hr)	3 (hr)	4 (hr)	5 (hr)	6 (hr)	7 (hr)	8 (hr)	hourly maxi-	Day	
												mum	Average	Remark
mixer and	CO	. ppm	0	0	0	0							Threage	
lining	SPM	µg/m3	:8	q	8	8.	8	9-	8	7.	8			
Baekhor.	NO ₂	µg/m3	15	18	17	15.	16	17	16	1.5.	18.			
	Ox	ppm	0	0	0	0								
•	OX	ppm	0	0	0	0							÷	
			Meas	urement	time	Durin	g time		sured lue		ISTN DE L	之"。 第43年,		
	SO2	ppm				10 min		0	0	No. 1 221			C. Z. Mary	
) Noise (working sta	ate)									C. Stadet 9	Contraction of the	68.78°-66°2666°-2	Sector Contraction and Contract of Contraction of C	
Detailed Location	Unit		Time		Le	vel (dB	< 85 (d)	B)	Measure-		N	fain Sour	ce	Remark
						1.m	ax		height(m)					
miner and	-					57.6			1.2m					
lang acher.	dB					58,0			1,2m					
GOL NOY.	1					58.1			1,2 m					
) Vibration (working	state)													
					T	ID - 75	curs 1		1				*measuren	nent time: 10 mi
Detailed Location	Unit		Time	-	Level ((dB)	Gro	und		N	fain Sour	ce	Remark
						L10		cond	ition					K
	dB					1-4								
	aB					3 1								
					30	6.8								

Attachment-17

Dam Namer South		un-			Metrol	ogical P	henome	non						9.
Measurer : K K ₹					Ti	me	1	ather		erature	1. 2.00	oisture ercent)	Wind	Wind speed (m/s)
Date Location : N 19	3 40 4	24			Nº 1	5	gun	ym	29.	2		9.8	ancouon	3-9
1) Air Pollution E	95 27	26	1				1	1					1	
Detailed Location	Item	Unit	0 (hr)	1 (hr)	2 (hr)	3 (hr)	4 (hr)	5 (hr)	6 (hr)	7 (hr)	8 (hr)	hourly		
Backnoe	CO	. ppm	0						1			maxi- mum	Day Average	. Remark
10-0-0-0-0	1	µg/m3	10	0	60	0	.6	-						
	SPM	ug/m3	12	12	12	, 14	12	9-	8	7.	8			
	NO2	ppin	6	8	0	0	12	6.	15	1.6.	16			
•	Ox	ppm	0	0	C	0								
_			Meas	irement	time	Durin	g time		sured					
	SO ₂	ppm		1		Iomin		0	a					
) Noise (working sta	ite)									ETE22.941	The second			
Detailed Location	Unit		Time		Le	vel (dB		B)	Measure- meat		Ν	Aain Sourd	.e	Remark
ackhoe						Lm	ax		hcight(m)					
acce no c						2,2			1.2m					
	dB					7.3			1.2m					
	1			1	6	511.3			1.200					
Vibration (working	state)								1				*measure	ment time: 10 min
Detailed Location	Unit		Time		Level (dB < 75	(dB)	Gro	bau			fain Sourc		
						L10		cond			IV	iain Sourc	e	Remark
					31-	2								
	dB				31,									
					21,	2.		and the second				11-12-11-11		

Number :					Metrol	ogical P	henoine	non						3
Measurer : 3 - Y » N Date			21 3 15 1		Time (0:30		We	Weather Fine		erature gree)	Moisture (percent)		Wind direction	Wind speed (m/s)
Date N 18 Location : N 18 1) Air Pollution E	95 24	20							24.	¢.			14	6.6.
Detailed Location		Unit	0 (hr)	1 (hr)	2 (hr)	3 (hr)	4 (hr)	5 (hr)	6 (hr)	7 (hr)	8 (hr)	hourly maxi-	Day	
mover and	co	. ppm	0	0	0	Ø						mum	Average	Remark
lining	SPM	µg/m3 µg/m3	17	6	6	6	.6	8.	9	7.	7			
	NO ₂	ppm	0	0	13	13. Ø	12	15	18	16.	15.			
•	M		Ø Measi	urement	ð time			time Meas						
	SO ₂	ppm				1 cmm		0	0		t television I Considerat		Contractor	
) Noise (working sta	te)	1		1						r				
Detailed Location	Unit		Time	ł	Le	vel (dB · Lm		3)	Measure- meat		Ν	Main Sourc	e	Remark
iper and					67	2.9			height(m)					
meng	dB					3.8								
Vibration (working	state)													
Detailed Location	Unit		Time		Level (dB < 75	(dB)	Gro	und		Ν	fain Sourc		ment time: 10 min Remark
					31,	L10		condition						
	dB				26.									140
					26.	Q								

<u>Monitoring Form (For the Project Construction Phase)</u> (South Nawin Dam, February, 2018)

(1) Response ar	nd actions by the government	
Monitoring Item	Monitoring Results during Report Period	Responsible Agency
		Agency
Number and contents of formal comments made by the public	No comment	CON(2) and
comments made by the public	No comment	MDBW
Number and contents of	Namanaa	CON(2) and
responses from the people	No response	MDBW

Item	Unit	Measured Value (Mean)	Measured Value (Max)	Country's Standards	Referred Japanese Standards	Remarks (Measurement Point, Frequency, Method, etc.)	Responsible Agency
At con	struction	site					
SO ₂	ppm	0.00	0.00	-	average daily less or equal 0.04ppm/hr and less or equal 0.1ppm/hr	under limit	Investigation Branch
со	ppm	0.00	0.00	-	average daily less or equal 10ppm/hr and average 8hr less or equal 20ppm/hr	under limit	Investigation Branch
SPM	mg/m ³	0.108	0.181	-	average daily less or equal 0.10mg/m ³ /hr and less or equal 0.20mg/m ³ /hr	under limit	Investigation Branch
NO ₂	ppm	0.00	0.00		average daily less or equal 0.04 - 0.06ppm/hr	under limit	Investigation Branch
Ox	ppm	0.00	0.00		less or equal 0.06ppm/hr	under limit	Investigation Branch

(2) Air Pollution

(3) Waste

Environmental parameter	Monitoring	Measures	Monitoring	Responsible
	results	taken	date	Agency
Excavated soils	Properly handled	confirmed by check sheet for safety control	every day	CON(2) and MDBW

(4) Noise / Vibration

Item	Unit	Measured Value (Mean)	Measured Value (Max)	Country's Standards	Referred Japanese Standards	Remarks (Measurement Point, Frequency, Method, etc.)	Responsible Agency
Noise	dB	54.45	74	-	85	3 points, February, 2018	Investigation Branch
Vibration	dB	34.97	50.0	-	75	3 points, February, 2018	Investigation Branch

Environmental parameter	Monitoring results	Measures taken	Monitoring date	Responsible Agency
Safety check for carrying the heavy machineries into the work area.	All right	confirmed by check sheet for safety control	Every day	CON(2) and MDBW
Safety check for refueling car accessing the work sites.	All right	ditto	ditto	CON(2) and MDBW
Safety check for carrying-out of the heavy machineries from the work sites.	All right	ditto	ditto	CON(2) and MDBW
Checking of the heavy machineries if keeping correct routes and speed.	All right	ditto	ditto	CON(2) and MDBW
Installation of project sign board around the field.	All right	ditto	ditto	CON(2) and MDBW

(5) Working environment (Include working safety)/ Accident

Recommendations:

For SPM: To need frequent watering access roads especially near villages and working sites because SMP level must be reduce in working hours as much as possible.

Operator and Worker should use mask especially in working area of highly or busy road sites.

Improving social awareness:

Social Welfare Works are bridges& cart bridges, farm road and tube wells.

Waste :

In principle, re-use excavated soils as back-filling materials, re-use the removed bricks out of the dilapidated main canal portions for the protection/ lining of tributary canals, and re-use the dilapidated concrete portions of access road for basement of concrete pavement. Further, remaining ones which cannot be re-used will be dumped and buried in the ID owned lands stretching alongside the canals.

Re-use excavated soil as back-filling IP and NIP burms.

Project Name : Imp Dam Name: - Sour	lementa	tion Supp	ort for)	Irrigati					estern B	igo Reg	ion			Feb, 2019
Number :					Metrol	ogical P	henomer	non	-		-			
Measurer : Syn	, KK	τ			Time .				ather (degr			isture rcent)	Wind direction	Wind speed (m/s)
Date Location :	8 38'	03"	Eas	210					35-1	°P	571	7	S	ret
) Air Pollution	1	1	-		1							1		
Detailed Location	Item	Unit	0 (hr)	1 (hr)	2 (hr)	3 (hr)	4 (hr)	5 (hr)	6 (hr)	7 (hr)	8 (hr)	hourly maxi-	Day	Remark
	co	ppm	0	0	0	0	0					mum	Average	
Boekhoe		µg/m3	:61	61	61	5.9	59	59	60	58	1			
	SPM	µg/m3	134	134	45	112		112	119	110				
	NO ₂	ppm	0	0	O	Ø	0							
	Ox	ppm	0	0	0	0	0							
	Measuren			uremen	nent time During			ng time Mea				10 - 17 - 1 10 - 17 - 1		
	SO ₂	ppm						0	0	MELL MORE AND	20100 10 10 10		1	
) Noise (working sta	te)												CALCULATION, AND AND ADDRESS OF	
Detailed Location	Unit		Time		Le	evel (dB	< 85 (dl	B)	Measure- ment height(m)		· N	fain Sour	ce	Remark
					42				1.2m					
beckhoe	dB	-	-		41	- 5			inon					
	ab				39				w 2m					
		1												
Vibration (working	state)						•					1	*measurer	ment time: 10 minute
Detailed Location	etailed Location Unit Time			Level	(dB < 75	(dB)		ound		N	fain Sour	ce	Remark	
				- 5	34.	L10		cond	lition		-			
	dB				50.									
	/				37-		-							

Attachment-17

Project Name : Imp Dam Namer Soul	demental	tion Supp	ort for l	Irrigati					oring She estern B		ion			Feb, 2019		
Number :				•	Metrol	orical P	henoiner	100								
Measurer : Syr	. AT.	2				me .	Wea			erature		isture rcent)	Wind direction	Wind speed (m/s)		
Date					9:4	5	Seen	ing	33:0	L	53	9	3	1.6.		
Location : N L8	140'0	9 6	95 28	" 00"			1		L		1 '		1			
Detailed Location	Item	Unit	1 1	1 (hr)	2 (hr)	3 (hr)	4 (hr)	5 (hr)	6 (hr)	7 (hr)	8 (hr)	hourly maxi-	Day	Remark		
	CO	ppm	0	0	0	0	0					mum	Average			
Rockhoe	SPM	µg/m3	38	28	29	27	22	75	76	73	28			AVA 0.108		
		µg/m3	183	179	178	181	151	1,55		150	766			Max 0.181		
	NO ₂	ppm	0	0	0	0	0									
•	Ox	ppm	0	0	0	0	0			-	10000	100 TO - 10 A	the second second	-		
			Meas	urement	time	time During		During time			asured			10 AN		
	SO ₂	ppm		1				0	0	Caller.	- downers		Server Mark	4		
2) Noise (working sta	te)			1		· · · ·										
Detailed Location	Unit		Time		Le		< 85 (d)	3)	Measure- meat		N	Iain Sour	· ·	Remark		
					50.	1.m	nax		height(m).			•		N. C. AC		
Boekhoe	dB				54.				wirm					Ava 54.45 Max 74		
	dB				59.			7	1.20					1		
the second								1								
) Vibration (working	state)						··· .						*measure	ement time: 10 minute		
Detailed Location	Unit	-	Time		Level	(dB < 7	5 (dB)		ound	2	N	Main Sou	rce	Remark		
				1	30.	L10		COD	dition					4 . 21.02		
	dB ·				- 30									AVQ. 34.97 Mar 50.0		
					22				• • •		-			1. un 50.0		

<u>Monitoring Form (For the Project Construction Phase)</u> (South Nawin Dam, March, 2018) ...:

(1) Response a	and actions by the government	
Monitoring Item	Monitoring Results during Report Period	Responsible Agency
Number and contents of formal comments made by the public	No comment	CON(2) and MDBW
Number and contents of responses from the people	No response	CON(2) and MDBW

		(2) Air Po	ollution				
ltem	Unit	Measured Value (Mean)	Measured Value (Max)	Country's Standards	Referred Japanese Standards	Remarks (Measurement Point, Frequency, Method, etc.)	Responsible Agency
At con	struction	site					
SO ₂	ppm	0.00	0.00	-	average daily less or equal 0.04ppm/hr and less or equal 0.1ppm/hr	under limit	Investigation Branch
со	ppm	0.00	0.00	-	average daily less or equal 10ppm/hr and average 8hr less or equal 20ppm/hr	under limit	Investigation Branch
SPM	mg/m ³	0.06	0.08	-	average daily less or equal 0.10mg/m ³ /hr and less or equal 0.20mg/m ³ /hr	under limit	Investigation Branch
NO ₂	ppm	0.00	0.00		average daily less or equal 0.04 - 0.06ppm/hr	under limit	Investigation Branch
Ox	ppm	0.00	0.00		less or equal 0.06ppm/hr	under limit	Investigation Branch

(2) Air Dollutio

(3) Waste

Environmental parameter	Monitoring	Measures	Monitoring	Responsibl
	results	taken	date	e Agency
Excavated soils	Properly handled	confirmed by check sheet for safety control	every day	CON(2) and MDBW

Item	Unit	Measured Value (Mean)	Measured Value (Max)	Country's Standards	Referred Japanese Standards	Remarks (Measurement Point, Frequency, Method, etc.)	Responsible Agency
Noise	dB	58.6	62.6	-	85	3 points, March, 2018	Investigation Branch
Vibration	dB	33.4	48.3	-	75	3 points, March, 2018	Investigation Branch

(4) Noise / Vibration

(5) Working environment (Include working safety)/ Accident

Environmental parameter	Monitoring results	Measures taken	Monitoring date	Responsible Agency
Safety check for carrying the heavy machineries into the work area.	All right	confirmed by check sheet for safety control	Every day	CON(2) and MDBW
Safety check for refueling car accessing the work sites.	All right	ditto	ditto	CON(2) and MDBW
Safety check for carrying-out of the heavy machineries from the work sites.	All right	ditto	ditto	CON(2) and MDBW
Checking of the heavy machineries if keeping correct routes and speed.	All right	ditto	ditto	CON(2) and MDBW
Installation of project sign board around the field.	All right	ditto	ditto	CON(2) and MDBW

Recommendations:

For SPM: To need frequent watering access roads especially near villages and working sites because SMP level must be reduce in working hours as much as possible.

Operator and Worker should use mask especially in working area of highly or busy road sites.

Improving social awareness:

Social Welfare Works are bridges& cart bridges, farm road and tube wells.

Waste :

In principle, re-use excavated soils as back-filling materials, re-use the removed bricks out of the dilapidated main canal portions for the protection/ lining of tributary canals, and re-use the dilapidated concrete portions of access road for basement of concrete pavement. Further, remaining ones which cannot be re-used will be dumped and buried in the ID owned lands stretching alongside the canals.

Re-use excavated soil as back-filling IP and NIP burms.

Messurer : Syan Date Location : N	kk	TRO	44000		T	me	And in case of the local division of the loc	ather	(deg		(pe	isture rcent)	Wind direction	Wind speed	(m/s)	
ocation : N	66.5-	. · ·			8.15		scenny		20-1		72-5		IN LOE	Garg		
) Air Pollution	851 10	4 69	5 26	st.	L		1									
Detailed Location	Item	Unit	0 (hr)			3 (hr)	4 (hr)	5 (hr)	6 (hr)	7 (hr)	8 (hr)	hourly maxi-	Day			
10	100										12 3	mum	Average	1 '	Remark	
Brekhoe	CO	. ppm	0	0	0	0							Trituge	max	0.08	
Dorer	SPM	µg/m3	33	33	35	3.3	32	52	32	33	32				0,06	
Demppet	NO ₂	µg/m3	62	60	60	65	68	60	65	65	60			1,000	0,06	
	Ox	ppm	0	0	0	0										
	102	ppm			0	0										
	0	1	Measu	irement	time	During	During time		sured							
	SO ₂	ppm				10mm		0	0	- Cui	1		Court Alena			
Noise (working sta	te)						2.000							-		
Detailed Location	Unit		Time	-	Le	evel (dB < 85 (dB)		B)	Measure-		Main Source			Remark		
Backhee						I.m.	ax		height(m)				100			
Sofer					Ge-	the second se			Urm					max	62.6	
Dunger	dB				Ga				Urm					Ava.	58.4	
					Sec.	3			1.200							
Vibration (working	state)								-							
	1						· · ·						*measurer	nent tim	e: 10 min	
Detailed Location	Unit		Time	· -	Level (dB < 75 L10	(dB)	Gro			M	ain Sourc	e	R	emark	
			Section and the	1	48.1			cond	ition							
	dB				23.9									max.	48.3	
					30.9			12						Ava.	33. 9	
									1		1 X 1					

Environmental Monitoring Sheet

Environmental Monitoring Sheet Project Name : Implementation Support for Irrigation Development Project in Western Bago Region MacOn, 10 3 Number : Metrological Phenomenon

Number :					Metrol	ogical F	hename	non			·			
Measurer : Syn	TA .	~			-	ine -		ather		erature gree)		oisture ercent)	Wind direction	Wind speed (m/s)
					910	0	Sun	J_	29:	7.	69	-0	5'	1.5
1) Air Pollution	18 9	8 33	E95	26'83	**							,	1	
Detailed Location	Item	Unit	0 (hr)		2 (hr)	3 (hr)	-4 (hr)	5 (hr)-	6 (hr)	7 (hr)	8 (hr)	hourly	T	
		Cint						1				maxi- mum	Day Average	Remark
Backhop	CO	. ppm	0	0	0	0				1		mun	Average	
10.00.	SPM-	µg/m3	94	5.9	47	43	51	44	47	43	5.9			
30-300	NO ₂	µg/m3	26	32	23	21	28	26			32			
Jean piper		ppm	0	0	0	0					0			
•	Ox	ppm	0	0	0	0								
			Meas	arement	time	Durin	g time		sured		S. MAR			
	SO ₂	ppm				10mm		0	O		Veral An		Sound State	
) Noise (working stat	te)							-	0		and the state	C S CALEGO	C. Sten	
Detailed Location	Unit		Time		Le		< 85 (d)	B)	Measure-		N	fain Source	e i	Remark
Backheo						Lm	ax		height(m)					Remark
Bordrange					60.				in					
Demboot	dB				61.				1.2m					
					51:	3			in					
Vibration (working														
+ Toration (working	state)					1.1.1							*measurem	ent time: 10 mi
n					T	ID	(10)							To mi

Detailed Location	Unit	Time	Level (dB < 75 (dB) L10	Ground condition	Main Source	Remark
	dB		34-9 48.3			
			16-7			1

Attachment-17

Number :							t Proje							
		C		•	Metro	logical P	henome	non_						
Measurer : Syn						ime	We	ather		erature gree)	1	rcent)	Wind	Wind
Date			· . · .		919	5	son	my	30.2		53.		S	speed (m/s)
Location : N 18	2413	8 E	:95 2º	'q,".				-				1-	1.5	3-2.
) Air Pollution													1	
Detailed Location	Item	Unit	0 (hr)	1 (hr)	2 (hr)	3 (hr)	4 (hr)	5 (hr)	6 (hr)	7 (hr)	8 (hr)	hourly		
Mischand	co	-									257	maxi- mum	Day Average	Remark
	0	ppm	2	0	0	0				1				
Lining	SPM	µg/m3	37	36	37	36	38	35.	37	3.6	3.Ŧ			
Backhoe	NO,	ug/m3	144	68	TO	79	¥¥.	80	千年	74	70			
		ppm	0	0	0	0							1	
	Ox	ppm	0	0	0	0								
	1.1		Meas	Measurement time		During	, time		sured		Sare de la		STATE AND	
	SO ₂	ppm				10mm		V.I.	ue	E-1222.00	2000 20		ALL SALE FREE	

Detailed Location	Unit	Time	Level (dB < 85 (d)	B) Measure-		
1 al ad			Lmax	beight(m)	Main Source	Remark
whing			57.9:	van		
BOCKLOQ	dB		59.2	Lani		
130 00 1			59.7.	1.200		
Detailed Location	Unit	Time	Level (dB < 75 (dB) L10	Ground	Main Source	Remark
				condition		
	_	1	31.4			
	dB		31.4			

(3) Wegyi

<u>Monitoring Form (For the Project Construction Phase)</u> (Wegyi Dam, January, 2018) 41

	<u>(1109): Dani, Danaa ji 2010/</u>	
(1) Response a	nd actions by the government	
Monitoring Item	Monitoring Results during Report Period	Responsible Agency
Number and contents of formal comments made by the public	No comment	CON(2) and MDBW
Number and contents of responses from the people	No response	CON(2) and MDBW

		(2) Air Po	ollution				
Item	Unit	Measured Value (Mean)	Measured Value (Max)	Country's Standards	Referred Japanese Standards	Remarks (Measurement Point, Frequency, Method, etc.)	Responsible Agency
At con	struction	site					
SO ₂	ppm	0.00	0.00	-	average daily less or equal 0.04ppm/hr and less or equal 0.1ppm/hr	under limit	Investigation Branch
со	ppm	0.00	0.00	-	average daily less or equal 10ppm/hr and average 8hr less or equal 20ppm/hr	under limit	Investigation Branch
SPM	mg/m ³	0.103	0.124	-	average daily less or equal 0.10mg/m ³ /hr and less or equal 0.20mg/m ³ /hr	under limit	Investigation Branch
NO ₂	ppm	0.00	0.00		average daily less or equal 0.04 - 0.06ppm/hr	under limit	Investigation Branch
Ox	ppm	0.00	0.00		less or equal 0.06ppm/hr	under limit	Investigation Branch

(3) Waste				
Environmental parameter	Monitoring results	Measures taken	Monitoring date	Responsible Agency
Excavated soils	Properly handled	confirmed by check sheet for safety control	every day	CON(2) and MDBW

(2) Air Dollutio

Item	Unit	Measured Value (Mean)	Measured Value (Max)	Country's Standards	Referred Japanese Standards	Remarks (Measurement Point, Frequency, Method, etc.)	Responsible Agency
Noise	dB	59.5	69.3	-	85	3 points, January, 2018	Investigation Branch
Vibration	dB	40.7	45.3	-	75	3 points, January, 2018	Investigation Branch

(4) Noise / Vibration

(5) Working environment (Include working safety)/ Accident

Environmental parameter	Monitoring results	Measures taken	Monitoring date	Responsible Agency
Safety check for carrying the heavy machineries into the work area.	All right	confirmed by check sheet for safety control	Every day	CON(2) and MDBW
Safety check for refueling car accessing the work sites.	All right	ditto	ditto	CON(2) and MDBW
Safety check for carrying-out of the heavy machineries from the work sites.	All right	ditto	ditto	CON(2) and MDBW
Checking of the heavy machineries if keeping correct routes and speed.	All right	ditto	ditto	CON(2) and MDBW
Installation of project sign board around the field.	All right	ditto	ditto	CON(2) and MDBW

Recommendations:

For SPM: To need frequent watering access roads especially near villages and working sites because SMP level must be reduce in working hours as much as possible.

Operator and Worker should use mask especially in working area of highly or busy road sites.

Improving social awareness: According to local people responses, BWID project constructed new bridges over canals, drainage canals (not include original design) and upgrading local access near canal bridges to improve transportation and social awareness of the project.

<u>Waste</u>: In principle, re-use excavated soils as back-filling materials, re-use the removed bricks out of the dilapidated main canal portions for the protection/ lining of tributary canals, and re-use the dilapidated concrete portions of access road for basement of concrete pavement. Further, remaining ones which cannot be re-used will be dumped and buried in the ID owned lands stretching alongside the canals.

Attachment-17

Project Name : Imp Dam Mamer - We Number :	9yi	-	port for	irngan		etopmer logical P			estern B	ago Reg	ion	1.6	1.C	\bigcirc
Measurer : Mir			ke			Time Weather Temperature Moisture (degree) (percent)				Wind direction	Wind speed (m/s)			
Location : \mathcal{N} 18 1) Air Pollution $\boldsymbol{\Xi}$	28 .638	.257			9:00		Fie	ine 2		23.8		.5	N	1.6
Detailed Location	Item	Unit	0 (hr)	1 (hr)	2 (hr)	3 (hr)	4 (hr)	5 (hr)	6 (hr)	7 (hr)	8 (hr)	hourly maxi- mum	Day Average	Remark
Backhoe	CO	. ppm	0	0	0							man	Average	
	SPM	μg/m3 μg/m3	55	55	54	124	54	54	55	54	54			
	NO ₂	ppm	0	0	0				115	110	114			
	Ox	ppm	0	0	0							1997 - 1997 - 1997 - 1997 - 1997 - 1997 - 1997 - 1997 - 1997 - 1997 - 1997 - 1997 - 1997 - 1997 - 1997 - 1997 -		
	Measuremen		urement	time	During	g time		sured lue						
	SO ₂	ppm				10 mi	l	0	0	the state			1. A.	
) Noise (working sta	te)									and the second	and the second state of the			
Detailed Location	Unit		Time		Level (dB < 85 (dB)			Measure-	Main Source				Remark	
Backhoe,	×					Lm	ax		height(m)	-				roman
JULIKIUE						F.6			1.27					
	dB					•5			1.2m					
		-			60	.3			1.2m					
Vibration (working	state)	1.		1		100			·				*	
				T	Tanal	ID . CC							*measure	ment time: 10 minu
Detailed Location	Unit		Time	F	Level (dB < 75	(aB)	Gro	und		M	ain Sourc	e	Remark
Backboe						L10		cond	ition			Joure	-	Komark
DUCKIDE	dB	298	State of State			2.5								
	ub	1	1			3.2								

amer					Metro	logical P	henom	enon	Ċ.			L.M	Ки 51700 . С	0005		
Measurer : Min Date	Kyae	o Hłi	ke		Time Weather 9:00		Temperature (degree)		e) (percent)		Wind direction	Wind speed (m/s)				
Docation : N.	18 28	.800			9:	90	<u> </u>		20	.9	75	. 1	N	1.2		
Detailed Location	Item	Unit	0 (hr)	1 (hr)	2 (hr)	3 (hr)	4 (hr)	5 (hr)	6 (hr)	7 (hr)	8 (hr)	hourly maxi-	Day	Remark		
Lining	co	ppm	0	0					ļ			mum	Average			
	SPM	µg/m3	50	50	49	48	48	46	44	16	418		1			
	NO ₂	µg/m3	95		98	100	96	96	83	101	96		Contra 117			
	Ox	ppm	0	0	0				1	1.1	-					
				irement		During	g time		sured lue		1.00					
N	SO ₂	ppm				10 mi	n	0	0	A AL AL	ALL STATE		Talance Anton			
Noise (working star	te)										and the first of the local sector in			1		
Detailed Location	Unit		Time	ł	Level (dB < 85 (d)			B)	Measure- ment		N	fain Sourc	e	Remark		
lining						59.5	ax		height(m)							
	dB -					2.3			1.27							
		100 mm			1	59.8			1.2m							
Vibration (working	state)	19. 19														
Detailed Location	Unit		Time		Level (dB < 75	(dB)) Ground						ment time: 10 m		
inima						L10		condi			M	lain Sourc	e	Remark		
ining	dB	-			35											
· · · · · · · · · · · · · · · · · · ·					37 34			-								

Attachment-17

A Name : Ing am Name - Jos Number	eggi-	- Dan	~		Metrol	orical P							-	۲
Measurer: AKWA Date N L Location: 7	-MRH	R	D 56-	400	Metrological Phenomenon Time Weather			Temperature (degree)		oisture rcent)	Wind direction	Wink spec		
Location : 1) Air Pollution 9	5 33	. 730			9:	45	fin	e	2.3	3	67	-9	N	1:4
Detailed Location	Item	Unit		1 (hr)		3 (hr)	4 (hr)	5 (hr)	6 (hr)	7 (hr)	8 (hr)	hourly maxi-	Day	*
Lining	co	ppm	0	0	0				1			mum	Average	
0	SPM	µg/m3	49	50	48	51	51.	54	48	48	54			-
	NO ₂	µg/m3	93	9,5	105	96.	96	124		103	95			
	-	ppm	9	0	0				1	1.5	1-1			
	Ox	ppm	0	0	0									
		8.	Measurement		t time During		ing time		sured					~
	SO ₂	ppm				10 mins		0.	0	1	Corregi		1. 1. 1. 1. 1. 1. 1. 1. 1. 1. 1. 1. 1. 1	1
2) Noise (working sta	te)													
Detailed Location	Unit		Time						Measure- ment	Main Source				
lining						-43.			height(m) 1-2 M					
	dB				\$	54-	5		1-2n					
						62-	8		1 - 2nd					
) Vibration (working	rtata)							i						
, theradion (working	state)												*measuren	ent temi
Detailed Location	Unit		Time	L	Level (dB < 75	(dB)	Gro	and		14			
						L10		condi			Ma	in Source		
liking		1. 1990				45-	3							
0	dB				-	43.	41							
						42-	61							

<u>Monitoring Form (For the Project Construction Phase)</u> (Wegyi Dam, February, 2018)

	<u>(</u>	
(1) Response ar	nd actions by the government	
Monitoring Item	Monitoring Results during Report Period	Responsible Agency
Number and contents of formal comments made by the public	No comment	CON(2) and MDBW
Number and contents of responses from the people	No response	CON(2) and MDBW

(2) Air Pollution

Item	Unit	Measured Value (Mean)	Measured Value (Max)	Country's Standards	Referred Japanese Standards	Remarks (Measurement Point, Frequency, Method, etc.)	Responsible Agency
710 0011					average daily less		
SO ₂	ppm	0.00	0.00	-	or equal 0.04ppm/hr and less or equal 0.1ppm/hr	under limit	Investigation Branch
со	ppm	0.00	0.00	-	average daily less or equal 10ppm/hr and average 8hr less or equal 20ppm/hr	under limit	Investigation Branch
SPM	mg/m ³	0.113	0.156	-	average daily less or equal 0.10mg/m ³ /hr and less or equal 0.20mg/m ³ /hr	under limit	Investigation Branch
NO ₂	ppm	0.00	0.00		average daily less or equal 0.04 - 0.06ppm/hr	under limit	Investigation Branch
Ox	ppm	0.00	0.00		less or equal 0.06ppm/hr	under limit	Investigation Branch

(3) Waste

Environmental parameter	Monitoring	Measures	Monitoring	Responsible
	results	taken	date	Agency
Excavated soils	Properly handled	confirmed by check sheet for safety control	every day	CON(2) and MDBW

(4) Noise / Vibration

Item	Unit	Measured Value (Mean)	Measured Value (Max)	Country's Standards	Referred Japanese Standards	Remarks (Measurement Point, Frequency, Method, etc.)	Responsible Agency
Noise	dB	49.1	55.3	-	85	3 points, February, 2018	Investigation Branch
) (line (line		37.0	45.9			3 points,	Investigation
Vibration	dB			-	75	February, 2018	Branch

Environmental parameter	Monitoring results	Measures taken	Monitoring date	Responsible Agency
Safety check for carrying the heavy machineries into the work area.	All right	confirmed by check sheet for safety control	Every day	CON(2) and MDBW
Safety check for refueling car accessing the work sites.	All right	ditto	ditto	CON(2) and MDBW
Safety check for carrying-out of the heavy machineries from the work sites.	All right	ditto	ditto	CON(2) and MDBW
Checking of the heavy machineries if keeping correct routes and speed.	All right	ditto	ditto	CON(2) and MDBW
Installation of project sign board around the field.	All right	ditto	ditto	CON(2) and MDBW

(5) Working environment (Include working safety)/ Accident

Recommendations:

For SPM: To need frequent watering access roads especially near villages and working sites because SMP level must be reduce in working hours as much as possible.

Operator and Worker should use mask especially in working area of highly or busy road sites.

Improving social awareness:

Social Welfare Works are bridges& cart bridges, farm road and tube wells.

Waste :

In principle, re-use excavated soils as back-filling materials, re-use the removed bricks out of the dilapidated main canal portions for the protection/ lining of tributary canals, and re-use the dilapidated concrete portions of access road for basement of concrete pavement. Further, remaining ones which cannot be re-used will be dumped and buried in the ID owned lands stretching alongside the canals.

Re-use excavated soil as back-filling IP and NIP burms.

Environmental Monitoring Sheet $^{\odot}$ Project Name : Implementation Support for Irrigation Development Project in Western Bago Region Dam Namet MCColl CFCb > Number: Myo kyaw Aring Metrological Phenomenon, Temperature Wind Moisture Wind Measurer: NJ. 18 28-7.55" Weather Time (degree) (percent) direction speed (m/s) Date 10:30 Fine 55:7 Location: F. 95 29.618 ... 32.3 0 38 mm) 1) Air Pollution 0 (hr) 1 (hr) 2 (hr) 3 (hr) 4 (hr) 5 (hr) 6 (hr) 7 (hr) 8 (hr) hourly Detailed Location Item Unit maxi-Day Remark mum Average Backhoe + CO Ŀ, Ave=0.113 Truck SPM 60 58 Max = 0.156 NO₂ 102 103 110 00 Ox ppm 0 0 0 0 0 Measured Measurement time During time value ar of SO2 ppm 0 0 Environment 1150 2) Noise (working state) Level (dB < \$5 (dB) Detailed Location Measure-meat -height(m) Unit Time Main Source Remark I.max Backhoet 55.3 1.2m Ave = (19.1 Max = 55.3 Truck dB 52.8 1A 52.2 h 3) Vibration (working state) *measurement time: 10 minute Level (dB < 75 (dB) Detailed Location Unit Time Ground Main Source Remark L10 condition Backhoe + 29.4 Ave = 37.0 dB Truck 37.7 Ma= 45.9

*measurement time: 10 minute

0

Environmental Monitoring Sheet Project Name : Implementation Support for Irrigation Development Project in Western Bago Region Dam Name: Meder C.Feb >

Measurer : AJ 18 Date Location : F 95	25.78	39',	RMC		- 1			ather	(de	erature gree)	(pe	oisture ercent)	Wind direction	Wind speed (m/s)
Location : F 95	35-5	564.			9:	15	Fir	20	.2.7.	8	-7	0.	-	0
1) Air Pollution					L			_						
Detailed Location	Item	Unit	0 (hr)	1 (hr)	2 (hr)	3 (hr)	4 (br)	5 (hr)	6 (hr)	7 (hr)	8 (hr)	*hourly maxi-	Day	
	199	-					· · ·	•		• •	10%	mum	Average	Remark
Lining +	CO	ppm	0	0	0	0	0	_				indin	Arrelage	
mixer	SPM	µg/m3	55	55	49	48	50	54	45	49	52			
	NO ₂	µg/m3	liÖ	126	102	106	93	195	92	101	9Ge			
•	Ox	ppm	0	0	0	0	0							
	1	1 ppm		0	0	0	0						1	
	SO,		Measu	urement	time	During	g time		sured lue		Contraction of the second	24 H		1
		ppm						0	0	2.121	1		C. A. Cherry	1
) Noise (working sta	te)									- statet a				
Detailed Location	Unit		Time	-	Le		< 85 (dI	3)	Measure-		N	fain Source	ce .	Remark
liningt						I.m.	ax		hcight(m)	. ·				
Liningt						4.9			1.2 m					
	dB				- 4	4.7								
1					- 4	5.0								
Vibration (working	state)													
	A		1.1	. 1	Taul	10 . 76	(m)						measuren	ent time: 10 min
Detailed Location	Unit	·	Time	H	Level ((dB)	Gro	und		N	fain Sourc	c	Remark
Liniaal				11		L10		cond	ition					Kelitark.
Liningt mixer	dB				37.2			141		× •				
include a	~~				39.6									

Environmental Monitoring Steet Project Name : Implementation Support for Irrigation Development Project in Western Bagn Region (3) Dam Name : Moregin (Feb.) Number : May legar Aung Metrological Phonomenon.

Same 1. 20 16	gai in	ng			Aletrol	ogical P	honome	non	2011					
Measurer : n 12	5 28.0	iog				ime		ather	(de	erature gree)	(pe	nisture rcent)	Wind direction	Wind speed (m/s)
Location : E 95	29.	478 .	. · · .		8:	30	Fir	1e	31.		-43	8 -	Nu	0-5
1) Air Pollution			1.0		·				L				1	
Detailed Location	Item	Unit	0 (hr)	1 (hr)	2 (hr)	3 (hr)	4 (hr)	5 (hr)	6 (hr)	7 (hr)	8 (hr)	hourly maxi-	Day	
lining +	co	0.000	0								$\sum_{i=1}^{n} \sum_{j=1}^{n-1} \sum_{i=1}^{n-1} \sum_{j=1}^{n-1} \sum_$	mum	Average	Remark
milere		ug/m3	75	0	0	0	0	0						
Truck	SPM	ug/m3	156	70	69	72	62	65	59	60	65			
main	NO,	ppm	0	130	125	142	110	125	103	11.4.	130	10 C		
	Ox	ppm	0	0	0	0	00	0						
	1	1. ppin	101			0	0						1	
			Measu	urement	time	Durin	gtime		sured		ester Sel	a dar		
	SO ₂	ppm						The subscription of the local	Q		1012 74		*****	4
2) Noise (working stat	te)					-			10		Safe in the	100	Se China	
Detailed I and				1	Ie	anal (4D	< 85 (dI	23						4
Detailed Location	Unit		Time	t	Le	Lm		3)	Measure- meat height(m)		N	fain Sour	ce	Remark
Lining + miler +	2.11.1					49.			1º2m					
MIREFY	dB					47.9			4					
Truck		Sec.	-1.4.4			50.2			4					
								1	-					
) Vibration (working	state)												*manauran	ent time: 10 mi
Detailed Location	Unit		Time		Level.(dB < 75	(dB)	Gro	und		N.	lain Sourd		- 1 A M
				3 .		L10		cond			IV	am Sour	ce	Remark
Liningt			1997		37	5								
mixer +	dB					5.9		· · ·						
Truck				4	L+L									

Monitoring Form (For the Project Construction Phase) (Wegyi Dam, March, 2018)

(1) Response a	nd actions by the government	
Monitoring Item	Monitoring Results during Report Period	Responsible Agency
Number and contents of formal comments made by the public	No comment	CON(2) and MDBW
Number and contents of responses from the people	No response	CON(2) and MDBW

(2) Air Pollution

						_	
ltem	Unit	Measured Value (Mean)	Measured Value (Max)	Country's Standards	Referred Japanese Standards	Remarks (Measurement Point, Frequency, Method, etc.)	Responsible Agency
At con	struction	site					
SO ₂	ppm	0.00	0.00	-	average daily less or equal 0.04ppm/hr and less or equal 0.1ppm/hr	under limit	Investigation Branch
со	ppm	0.00	0.00	-	average daily less or equal 10ppm/hr and average 8hr less or equal 20ppm/hr	under limit	Investigation Branch
SPM	mg/m ³	0.105	0.180	-	average daily less or equal 0.10mg/m ³ /hr and less or equal 0.20mg/m ³ /hr	under limit	Investigation Branch
NO ₂	ppm	0.00	0.00		average daily less or equal 0.04 - 0.06ppm/hr	under limit	Investigation Branch
Ox	ppm	0.00	0.00		less or equal 0.06ppm/hr	under limit	Investigation Branch

(3) Waste

Environmental parameter	Monitoring	Measures	Monitoring	Responsible
	results	taken	date	Agency
Excavated soils	Properly handled	confirmed by check sheet for safety control	every day	CON(2) and MDBW

(4) Noise / Vibration

Item	Unit	Measured Value (Mean)	Measured Value (Max)	Country's Standards	Referred Japanese Standards	Remarks (Measurement Point, Frequency, Method, etc.)	Responsible Agency
Noise	dB	57.3	69.7	-	85	3 points, March, 2018	Investigation Branch
Vibration	dB	42.5	47.1	-	75	3 points, March, 2018	Investigation Branch

Environmental parameter	Monitoring results	Measures taken	Monitoring date	Responsible Agency
Safety check for carrying the heavy machineries into the work area.	All right	confirmed by check sheet for safety control	Every day	CON(2) and MDBW
Safety check for refueling car accessing the work sites.	All right	ditto	ditto	CON(2) and MDBW
Safety check for carrying-out of the heavy machineries from the work sites.	All right	ditto	ditto	CON(2) and MDBW
Checking of the heavy machineries if keeping correct routes and speed.	All right	ditto	ditto	CON(2) and MDBW
Installation of project sign board around the field.	All right	ditto	ditto	CON(2) and MDBW

(5) Working environment (Include working safety)/ Accident

Recommendations:

For SPM: To need frequent watering access roads especially near villages and working sites because SMP level must be reduce in working hours as much as possible. Operator and Worker should use mask especially in working area of highly or busy road sites.

Improving social awareness:

Social Welfare Works are bridges& cart bridges, farm road and tube wells.

Waste :

In principle, re-use excavated soils as back-filling materials, re-use the removed bricks out of the dilapidated main canal portions for the protection/ lining of tributary canals, and re-use the dilapidated concrete portions of access road for basement of concrete pavement. Further, remaining ones which cannot be re-used will be dumped and buried in the ID owned lands stretching alongside the canals.

Re-use excavated soil as back-filling IP and NIP burms.

Number: Mgo 1	cyavs	Aung			Metrol	ogical P	hanna							
Measurer : N. 15 Date Location : E- 9	-		. Ď.	nc	T	me		ather		erature gree)		pisture ercent)	Wind	Wind speed (m/s)
	5 29.	645	1 1/2N	ac	8:	00	Fin	e	28.	6		-5	ru	0.8
1) Air Pollution	1	1												
Detailed Location	Item	Unit	0 (hr)	1 (hr)	2 (hr)	3 (hr)	4 (hr)	5 (hr)	6 (hr)	7 (hr)	8 (hr)	hourly maxi- mum	Day Average	Remark
Lining	CO	.ppm	0	0	0	0	0					mum	Average	Ave-0.10
	SPM		83	86	50	45	55	52	48	50	52			Max =0.18
	NO ₂	µg/in3	157	180	105	93	110	191	96	103	98			100 -0.18
	Ox	ppm	0	0	0	0	0							
	· · .	ppin		urement		During	0 g time		isured					
	SO ₂	ppm						0	0	e a la	1			1
) Noise (working sta	te)													
Detailed Location	Unit		Time		Le	vel (dB Lm		B)	Measure- meat beight(m)		Ņ	fain Sour	ce	Remark
lining	~					51-4			1.2m					A.0. 62.2
	dB					57.6	,		4					Aue = 57.3 Max = 69.7
	· ·					62.8			. 4					
Vibration (working	state)													
Detailed Location	Unit		Time		Level (dB < 75	(dB)	Gro	und			fain Sour		nent time: 10 minut
1				3		L10			ition		N	an Sour	Je -	Remark
Lining				,	47	.1							1 A A A A A	Ave = 42.5
	dB	-			44	-			1.1					Max = 47.1
					36									

*measurement time: 10 minute

Environmental Monitoring Sheet Project Name : Implementation Support for Irrigation Development Project in Westera Bago Region Dam Namer - Meggin (Mgrch) Number : Mgo Kyawa Aang Marchard and

Measurer : NJ 18 Date F ac	- 28.0	92 3	24 - 1	3	10	me		ather	(deg	erature gree)	(pe	rcent)	Wind direction	Wind speed (m/s)
Date Location : E 95	20.	12 .	, * - · .		LOE	00	San	ny	36:	5	54.9		no	0-7
1) Air Pollution													1	
Detailed Location	Item	Unit	0 (hr)	1 (hr)	2 (hr)	3 (hr)	4 (br)	5 (hr)	6 (hr)	7 (hr)	8 (hr)	hourly		
AND CH	co								×		1997	maxi- mum	Day Average	Remark
Miller +	100	ppm	0	0	0	0	0						6.	
Lening +	SPM	µg/m3	50	70	60	50	48	52	45	62	55			
Willage Roso	NO ₂	µg/m3	100	144	222	96	103	105	45	114.	tio			
		ppm	0	0	0	0	0							
•	Ox	ppm	0	0	0	0	0							
<u> </u>	1.		Meas	urement	time	During	gtime		sured lue		STR. P			6
	SO ₂	ppm	I	1				0	O		1212/24	1. A 1. A	an owned that	
2) Noise (working sta	te)							0		· 本公司	Car in A	100	C: Chilling	
														1
Detailed Location	Unit	1	Time	ł	Le	vel (dB Lm	< 85 (dl	B)	Measure- meat		Ν	fain Sourc	ce i	Remark
Mixer t									height(m)					- (
lining 4						9.7			1.2m				1. S.	
allage Road	dB					59.3			4					
inge kund						50.7	-		u					
) Vibration (working	state													
, string			-										*measurer	nent time: 10 min
Detailed Location	Unit		Time	(Level (dB < 1 L10		(dB)	Gro	und	121	M	lain Sourc	æ	Remark
Mixer t				-				cond	ition					A
lining +	dB				40	7								
uning +	un l													
illage Road					46	- 1								

3

Environmental Monitoring Sheet Project Name : Implementation Support for Irrigation Development Project in Western Bago Region Dam Names Meggi (Masch) Number : May know Awag Metrological Photomanan

								(deg	gree)			Wind direction	Wind speed (m/s)	
00 46	2 .								28.6		5.	N	0.4	
29.9.						Fin	e						- piq	
Itam	1 11-14	0 (hr)	1 (hr)	2 (hr)	3 (hr)	4 (hr)	5 (hr)	6 (hr)	7 (hr)	8 (hr)	hourly			
nem	Onit			1						- (·)	maxi-	Day	Remark	
CO	nom							1			mum	Average	1.1.1.1	
1														
SPM								59	50	62				
NO.							101	103	98.	103				
												1		
0.	ppm	0	0	0	0	0						1997 - 1997 - 1997 - 1997 - 1997 - 1997 - 1997 - 1997 - 1997 - 1997 - 1997 - 1997 - 1997 - 1997 - 1997 - 1997 -		
1.1		Measu	irement	t time Durin		During time		Measured		STATE!	12 1 1 1 1 1 1 1	these hose		
SO2	ppm		1		1			0	a seren a			A COLOR OF STREET		
te)							0	0	E He SA	Constant, N				
													1	
Unit		Time	Level (dB < 85 (dB)				Measure-							
					Im	av l		meat		N	ain Sourc	e	Remark	
ID														
aB														
					.04.7	2		4						
state						· · · · · ·								
1		1						~ * * ~				*measurer	ment time: 10 m	
Unit		Time		Level (dB < 75	(dB)	C						1. A.	
			· • • [1.10	-			Main 5		lain Sourc	rce Remar		
			1	24			cond	ition						
dB														
ub														
	29.46 Item CO SPM NO ₂ Ox Ox SO ₂ te) Unit dB state)	CO ppm Jug/m3 SPM µg/m3 NO2 ppm Ox ppm SO2 ppm te) Unit dB	2.9.462 Item Unit CO ppm O spM µg/m3 30 µg/m3 63 NO2 ppm Ox ppm Ox ppm Ox ppm Unit Time dB	29.462 Item Unit CO ppm O O SPM ug/n3 ug/n3 63 SP ppm O O SPM ug/n3 G3 58 NO2 ppm O O SO2 ppm Ite Ite Unit Time dB Ite Unit Time	$\begin{array}{c c c c c c c c c c c c c c c c c c c $	$2q - 4 \in 2$ 8×15 Item Unit 0 (hr) 1 (hr) 2 (hr) 3 (hr) CO ppm O O O O SPM µg/m3 30 2 2×3 2 $\infty 6 \times 3$ NO2 ppm O O O Ox ppm O O O Ox ppm O O O SO2 ppm O O O Imit Time Level (dB GB 57.0 54.9 state) Time Level (dB < 75	$\begin{array}{c c c c c c c c c c c c c c c c c c c $	$\begin{array}{c c c c c c c c c c c c c c c c c c c $	$\begin{array}{c c c c c c c c c c c c c c c c c c c $	$\begin{array}{c c c c c c c c c c c c c c c c c c c $	$\begin{array}{c c c c c c c c c c c c c c c c c c c $	$\begin{array}{c c c c c c c c c c c c c c c c c c c $	$\begin{array}{c c c c c c c c c c c c c c c c c c c $	

(4) Taung Nyo

<u>Monitoring Form (For the Project Construction Phase)</u> (Taungnyo Dam, January, 2018) ctic th

	<u>Tradinginge Danig Canada ji 2010 j</u>								
(1) Response and actions by the government									
Monitoring Item	Monitoring Results during Report Period	Responsible Agency							
Number and contents of formal comments made by the public	No comment	CON(2) and MDBW							
Number and contents of responses from the people	No response	CON(2) and MDBW							

		(2) Air Po	ollution				
Item	Unit	Measured Value (Mean)	Measured Value (Max)	Country's Standards	Referred Japanese Standards	Remarks (Measurement Point, Frequency, Method, etc.)	Responsible Agency
At con	struction	site					
SO ₂	ppm	0.00	0.00	-	average daily less or equal 0.04ppm/hr and less or equal 0.1ppm/hr	under limit	Investigation Branch
со	ppm	0.00	0.00	-	average daily less or equal 10ppm/hr and average 8hr less or equal 20ppm/hr	under limit	Investigation Branch
SPM	mg/m ³	0.045	0.071	-	average daily less or equal 0.10mg/m ³ /hr and less or equal 0.20mg/m ³ /hr	under limit	Investigation Branch
NO ₂	ppm	0.00	0.00		average daily less or equal 0.04 - 0.06ppm/hr	under limit	Investigation Branch
Ox	ppm	0.00	0.00		less or equal 0.06ppm/hr	under limit	Investigation Branch

(3) Waste				
Environmental parameter	Monitoring results	Measures taken	Monitoring date	Responsible Agency
Excavated soils	Properly handled	confirmed by check sheet for safety control	every day	CON(2) and MDBW

(2)	Air	Pc	llution

			vibration				
Item	Unit	Measured Value (Mean)	Measured Value (Max)	Country's Standards	Referred Japanese Standards	Remarks (Measurement Point, Frequency, Method, etc.)	Responsible Agency
Noise	dB	57.5	71.8	-	85	3 points, January, 2018	Investigation Branch
Vibration	dB	44.6	48.2	-	75	3 points, January, 2018	Investigation Branch

(4) Noise / Vibration

(5) Working environment (Include working safety)/ Accident

Environmental parameter	Monitoring results	Measures taken	Monitoring date	Responsible Agency
Safety check for carrying the heavy machineries into the work area.	All right	confirmed by check sheet for safety control	Every day	CON(2) and MDBW
Safety check for refueling car accessing the work sites.	All right	ditto	ditto	CON(2) and MDBW
Safety check for carrying-out of the heavy machineries from the work sites.	All right	ditto	ditto	CON(2) and MDBW
Checking of the heavy machineries if keeping correct routes and speed.	All right	ditto	ditto	CON(2) and MDBW
Installation of project sign board around the field.	All right	ditto	ditto	CON(2) and MDBW

Recommendations:

For SPM: To need frequent watering access roads especially near villages and working sites because SMP level must be reduce in working hours as much as possible.

Operator and Worker should use mask especially in working area of highly or busy road sites. <u>Improving social awareness</u>: local rural development road of project area (Nattalin _ Damange) was repaired by the BWID project. And then, according to local people responses, BWID project constructed new bridges over canals, drainage canals (not include original design)to improve transportation and social awareness of the project.

<u>Waste</u>: In principle, re-use excavated soils as back-filling materials, re-use the removed bricks out of the dilapidated main canal portions for the protection/ lining of tributary canals, and re-use the dilapidated concrete portions of access road for basement of concrete pavement. Further, remaining ones which cannot be re-used will be dumped and buried in the ID owned lands stretching alongside the canals.

Attachment-17

Number :	ngorya	-				ogical P				ago Reg	23	500 E	worker	D
Measurer : 7. A	.K+	M.K.	н		Time			Weather (deg		erature gree)			Wind direction	Wind speed (m/s)
Date Location: ハ 18 1) Air Pollution	29.10	8			AM . 9:15 Fi		.6 75.3			2-G-N	1.6			
Detailed Location	Item	Unit	0 (hr)	1 (hr)	2 (hr)	3 (hr)	4 (hr)	5 (hr)	6 (hr)	7 (hr)	8 (hr)	hourly maxi-	Day	Remark
Mixer and	CO	ppm	9	0	0							mum	Average	
lining	SPM	μg/m3 μg/m3	23.52	23 43	24 25	23	23	23	22	23	31			
	NO ₂	ppm	0	6	0	43	43	43	50	50	62			
9	Ox	ppm	0	0	0									
	1		Meas	urement	time During ti		g time	time Meas						
	SO ₂	ppm				10 min		0	0				2	
) Noise (working sta	te)									and the second				
Detailed Location	Unit		Time	ł	Le	vel (dB		B)	Measure- ment		N	fain Sourc	e .	Remark
liscer and					10	Lm	ax		height(m)					
lining					65.				1.2m					
1	dB				67.	8		AND TRANSPORT D. LONG	1.200					3
						0			1. 2.11					
Vibration (working	state)				1								*	ment time: 10 mi
Detailed Location	Unit		Time		Level (dB < 75	(dB)	Gro	und	-				
						L10		cond			IVI	lain Sourc	e	Remark
10. 198 - 10 - 10 - 10 - 10 - 10 - 10 - 10 - 1					41.	2								
	dB				43.6									

					Metrological Phenomenon				1					
Measurer : T. A. K	+ M.k	K.H			Time 9:30					erature gree)		oisture	Wind direction	Wind speed (m/s)
Date		, Tau	ungnyc	0					27.9	acc)	(percent) 51.7		N	1.8-
Date Location : N 18 1) Air Pollution 995	29.381	· T/	V BRA	NCH-A							1	:1		1.0
1) Air Pollution 099	40.3%	00 1	R.D-5	+800									-	and a second second second
Detailed Location	Item	Unit	0 (hr)	1 (hr)	2 (hr)	3 (hr)	4 (hr)	5 (hr)	6 (hr)	7 (hr)	8 (hr)	hourly maxi-	Day	Remark
Backhoe	co	ppm	0	0	0							mum	Average	
	SPM	µg/m3	22	22	34	21	22	20	22	22	21			
		µg/m3	41	41	71	42	12	42	41	42	41			
	NO ₂ Ox	ppm	0	0	0					1	11		Sector and good	
	UX	ppm	0	0	0					-		and the second second		
			Measurement			During	g time		sured lue	1.520				
	SO ₂	ppm				10 min		0	0	in the	- Coresta			7
2) Noise (working sta	te)		4											S
Detailed Location	Unit		Time		Le	vel (dB		3)	Measure- ment		N	Aain Sour	ce	Remark
Backhoe						Lm	ax		height(m)					
Jucpine	1					8.6			1.2m					2
	dB					0.1			1.2m					1
									1. Lin					<u><u> </u></u>
) Vibration (working	state)		· · · · · · · · · · · · · · · · · · ·									all and the second	*measure	ment time: 10 minus
Detailed Location	Unit		Time	T	Level (dB < 75	(dB)	Gro	und		N	fain Sour		Remark
	1991	Time			L10		cond			1.	Jam Sour		Kelliark	
Backhee						5.3								
	dB					8.2								
and the spectra second s			1.19.24		4	6.2					San a series	and the second		1

k

Attachment-17

Number :	1et Ro	and and a second	N			Metrol	ogical P	henome	non						(5)
Measurer :	T.A.R	+ M.K	.H TA	V.BRA	VCH.A	Time								Wind direction	Wind speed (m/s)
Date Location : 1) Air Poll	N 18 E 095	29.168	, R	H TN.BRAUCH-A R.J. 4+000		10:	:00 Fi		Fine		28.3		.8	N	1.3
Detailed	Location	Item	Unit	0 (hr)	1 (hr)	2 (hr)	3 (hr)	4 (hr)	5 (hr)	6 (hr)	7 (hr)	8 (hr)	hourly maxi-	Day	Remark
Mixer	God	CO	ppm	0	0	0							mum	Average	
lining	-		µg/m3	22	21	21.	21	22	22	23	24	22			
9		SPM	µg/m3	4)	42	48	44	48	41	52	52	50			
		NO ₂	ppm	0	0	0		10	-1.		25				
		Ox	ppm	0	0	O								1.1.1	
				Meas	urement	time During time		g time		sured lue					
		SO ₂	ppm				10 min		0	0				land Part	
Noise (w	orking stat	te)									A CONTRACTOR				
Detailed I	Location	Unit		Time		Le	vel (dB		3)	Measure- ment	Main Source				Remark
1							Lm	ax		height(m)					
Tiocer	and						12.2			1.2m					
lining		dB	-				8.1			1,2m					2
						4	2 - 1			1.2m					199
Vibration	(working	state)												*	
					T									*measure	ement time: 10 min
Detailed L	ocation	Unit	Time		Level (dB < 75 (dB) L10		Gro		Main Sou		fain Sourc	ce	Remark		
lixer	and		-			49	2.1		cond	nion					
Lining		dB				48	1.2								i di
ð		1		5.5											

<u>Monitoring Form (For the Project Construction Phase)</u> (Taungnyo Dam, February, 2018)

	(
Response and actions by the government										
Monitoring Item	Monitoring Results during Report Period	Responsible Agency								
Number and contents of formal comments made by the public	No comment	CON(2) and MDBW								
Number and contents of responses from the people	No response	CON(2) and MDBW								

			mation				
ltem	Unit	Measured Value (Mean)	Measured Value (Max)	Country's Standards	Referred Japanese Standards	Remarks (Measurement Point, Frequency, Method, etc.)	Responsible Agency
At con	struction	site					
SO ₂	ppm	0.00	0.00	-	average daily less or equal 0.04ppm/hr and less or equal 0.1ppm/hr	under limit	Investigation Branch
со	ppm	0.00	0.00	-	average daily less or equal 10ppm/hr and average 8hr less or equal 20ppm/hr	under limit	Investigation Branch
SPM	mg/m ³	0.101	0.121	-	average daily less or equal 0.10mg/m ³ /hr and less or equal 0.20mg/m ³ /hr	under limit	Investigation Branch
NO ₂	ppm	0.00	0.00		average daily less or equal 0.04 - 0.06ppm/hr	under limit	Investigation Branch
Ox	ppm	0.00	0.00		less or equal 0.06ppm/hr	under limit	Investigation Branch

(2) Air Pollution

(3) Waste

Environmental parameter	Monitoring	Measures	Monitoring	Responsible
	results	taken	date	Agency
Excavated soils	Properly handled	confirmed by check sheet for safety control	every day	CON(2) and MDBW

(4) Noise / Vibration

Item	Unit	Measured Value (Mean)	Measured Value (Max)	Country's Standards	Referred Japanese Standards	Remarks (Measurement Point, Frequency, Method, etc.)	Responsible Agency
Noise	dB	53.4	60.8	-	85	3 points, February, 2018	Investigation Branch
Vibration	dB	35.7	40.4	-	75	3 points, February, 2018	Investigation Branch

Environmental parameter	Monitoring results	Measures taken	Monitoring date	Responsible Agency
Safety check for carrying the heavy machineries into the work area.	All right	confirmed by check sheet for safety control	Every day	CON(2) and MDBW
Safety check for refueling car accessing the work sites.	All right	ditto	ditto	CON(2) and MDBW
Safety check for carrying-out of the heavy machineries from the work sites.	All right	ditto	ditto	CON(2) and MDBW
Checking of the heavy machineries if keeping correct routes and speed.	All right	ditto	ditto	CON(2) and MDBW
Installation of project sign board around the field.	All right	ditto	ditto	CON(2) and MDBW

(5)	Working environment	(Include working safety)/ Accident

Recommendations:

For SPM: To need frequent watering access roads especially near villages and working sites because SMP level must be reduce in working hours as much as possible. Operator and Worker should use mask especially in working area of highly or busy road sites.

Improving social awareness

There is no information about improving social welfare.

Waste Management

In principle, re-use excavated soils as back-filling materials, re-use the removed bricks out of the dilapidated main canal portions for the protection/ lining of tributary canals, and re-use the dilapidated concrete portions of access road for basement of concrete pavement. Further, remaining ones which cannot be re-used will be dumped and buried in the ID owned lands stretching alongside the canals.

Project Name : Ing Dam Namer Jaua	QUINO	Foh)		on berg	-opineo	a r roje	ci in m	estera Di	ago reeg	ten			-
Number: Min I	11	1/11.)	·	Marral	and at D	henome							
Dam Namer - Taun Number : Mint Measurer : $M = 18$ Date = 99	28.79	Gike						Tempe		erature Moisture		Wind	Wind	
Date E - 99	5 39.0	33	• •		17 80			Weather (degr Fine 36		gree) (percent)		direction	speed (m/s)	
Location : Braac	hA.	200005.	· · · .		17.00	0		e	20		- 4	0	N	0.5
1) Air Pollution									L				1	
Detailed Location	Item	Unit	0 (hr)	1 (hr)	2 (hr)	3 (hr)	4 (hr)	5 (hr)	6 (hr)	7 (hr)	8 (hr)	hourly maxi-	Day	Remark
A	100	1				•					\mathcal{M}_{i}^{A}	mum	Average	Keinaik
Concrete	CO	ppm	9	0	9	0	0							Ave= 0.10
Miscer	SPM	µg/m3 µg/m3	51	50	:55	51	49	50	52	49	\$2			MGx = 0.12
· · · · · · · · · · · · · · · · · · ·	NO ₂	ppm		25	121	-28	105	101	10.3	108.	10-0		1.	
	Ox	ppm	0	0	0	9	0						1.	
	UN	ppin	- W			0	9			Hard Contractor	a second			
			Meas	urement	time	During	g time		sured		174.5	34 H J		
	SO ₂	ppm						0					Const Ches	
) Noise (working sta	te)		1.1							-				
Detailed Location	Unit		Time		Le	vel (dB	< 85 (d)	B)	Measure-			() ()		
						Lm	ax		meat height(m)		N	Aain Sour	ce	Remark
Concrete					5	8.2			1.2m					Ae= 53.4
Mixer	dB				4	2.5			L.					May = 60.8
					4	7.6			4					1.00 - 00.0
111														
Vibration (working	state)						· ·						*measurer	ment time: 10 minus
Detailed Location	Unit		Time		Level (dB < 75 (dB) G			und		N	lain Sour	ce	Remark	
oncred Mixer				5	20	L10		cond	ition			r		
proter rited	dB													Ave = 55.7
						.3								Max = 40.4

	Kyaw	Hike			Metro	ogical P	henome	non						
Measurer : A - 18 Date	28.9	97,			1	ime	We	ather		erature gree)		isture reent)	Wind direction	Wind speed (m/s)
Date	006862				16:	30	Ser	ing			36.3		E	0.2
1) Air Pollution	+													1
Detailed Location	Item	Unit	0 (hr)	1 (hr)	2 (hr)	3 (hr)	4 (br)	5 (hr)	6 (hr)	7 (hr)	8 (hr)	hourly maxi-	Day	Remark
lining	co	ppm	0	0	0	D	0					mum	Average	
	SPM	µg/m3	19	50	49	49	19	49.	48	49	48			
	1	µg/in3	107	110	93	107	112	112	100	107	105			
	NO ₂	ppm	0	0	0	0	0			1 P			1	
•	Ox	ppm	9	0	0	0	0		in a second					
	-		Meas	urement	time	Durinį	g time	10000	sured lue		Sites	2013 2013		
	SO ₂	ppm			-	T	-	0	0	e e v mi	2.2.4		C. Action	
) Noise (working sta	te)					V						R. S. M. Star (199	CAPITAL LOSS CARE	
Detailed Location	Unit		Time		Level (dB < 85 (dB)			B)	Measure-	Main Source			ce	Remark
lining						Lm	ax		height(m)					
and a second	-					2.2		-	1.2m					
	dB		-			0.8			4					
			-	-	6	- +0			H					
Vibration (working	state)					-							*measure	1
Detailed Location	Unit		Time		Level	dB < 75	(dB)	Gro	und		N	lain Sourd		Remark
· · · · · · · · · · · · · · · · · · ·						L10		cond	ition		10			Kenndik
intrig	dB				-10	4							And the second second	
	aB				37							2.20	Numero and and	1.
					36	.2								

Environmental Monitoring Sheet Project Name : Implementation Support for Irrigation Development Project in Western Bago Region Dam Namet - Interfigure ... (Feb)

Number: Min N-18 Measurer: E 95 Date	36.2	94	R).	6500	1	ime O Ø		ather	(de	erature gree)	(pe	oisture preent)	Wind direction	Wind speed (m/s)
Location : G(2	ramore	· ·	111	1 A	10	00	Sun	ny	33	.9°	- 3	8.2	NE	1.2
1) Air Pollution	and the				L	-	1	4						
Detailed Location	Item	Unit	0 (hr)	1 (hr)	2 (hr)	3 (hr)	4 (hr)	5 (hr)	6 (hr)	7 (hr)	8 (hr)	hourly		
Miscing	co	ppm							8		$\mathcal{D}_{\mathcal{L}}^{(n)}$	maxi- mum	Day . Average	Remark
Concrete		ug/m3	0	0	0	0								
	SPM	ug/m3	47	49	218	49	50	19	40	42	51			-
liping	NO ₂	ppm	94	93	91	.95	100	28	80	94.	96			
	Ox		0	0	0	0				-	-010			
•		ppm	0	0	0	0								
			Measu	rement	time	During	g time		sured lue		S.H. Jel			5
		ppm				1		0	nue	1 7 1 M 4	12 St	244	中的是中国的	
Noise (working star	te)						i	0	0	日本ない	Section 1	2250	C. C. Carlo	1 A A A A A A A A A A A A A A A A A A A
· • ·				1										
Detailed Location	Unit		Time	-	Le		< 85 (dE	3)	Measure-		M	fain Sourc	e	Remark
lixing						Lm	ax		height(m)					Remark
oncrete	I					.53.0			1.2m					
ning	dB						5		n					
and	ł			-		54.7	E		4					
Vibration (working :	state													
	T												*measurem	ent time: 10 min
etailed Location	Unit	- 1	ime	-	Level (d	IB < 75	(dB)	Grou	Ind	1.	M	ain Source		
lixing				31		L10		condi	tion		IVI	am Source		Remark
encrete					37	.8								
ining	dB				40	0.3								
						3.6								

Monitoring Form (For the Project Construction Phase) (Taungnyo Dam, March, 2018)

(1) Response a	and actions by the government	
Monitoring Item	Monitoring Results during Report Period	Responsible Agency
Number and contents of formal comments made by the public	No comment	CON(2) and MDBW
Number and contents of responses from the people	No response	CON(2) and MDBW

(2) Air Pollution

ltem	Unit	Measured Value (Mean)	Measured Value (Max)	Country's Standards	Referred Japanese Standards	Remarks (Measurement Point, Frequency, Method, etc.)	Responsible Agency
At con	struction	site					
SO ₂	ppm	0.00	0.00	-	average daily less or equal 0.04ppm/hr and less or equal 0.1ppm/hr	under limit	Investigation Branch
со	ppm	0.00	0.00	-	average daily less or equal 10ppm/hr and average 8hr less or equal 20ppm/hr	under limit	Investigation Branch
SPM	mg/m ³	0.104	0.133	-	average daily less or equal 0.10mg/m ³ /hr and less or equal 0.20mg/m ³ /hr	under limit	Investigation Branch
NO ₂	ppm	0.00	0.00		average daily less or equal 0.04 - 0.06ppm/hr	under limit	Investigation Branch
Ox	ppm	0.00	0.00		less or equal 0.06ppm/hr	under limit	Investigation Branch

(3) Waste

(0) Wasie				
Environmental parameter	Monitoring results	Measures taken	Monitoring date	Responsible Agency
Excavated soils	Properly handled	confirmed by check sheet for safety control	every day	CON(2) and MDBW

(4)	Noise	/ Vibration
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Item	Unit	Measured Value (Mean)	Measured Value (Max)	Country's Standards	Referred Japanese Standards	Remarks (Measurement Point, Frequency, Method, etc.)	Responsible Agency
Noise	dB	52.9	62.7	-	85	3 points, March, 2018	Investigation Branch
Vibration	dB	40.3	48.9	-	75	3 points, March, 2018	Investigation Branch

(e) rrenang	environment (inc	nade working ba		
Environmental parameter	Monitoring results	Measures taken	Monitoring date	Responsible Agency
Safety check for carrying the heavy machineries into the work area.	All right	confirmed by check sheet for safety control	Every day	CON(2) and MDBW
Safety check for refueling car accessing the work sites.	All right	ditto	ditto	CON(2) and MDBW
Safety check for carrying-out of the heavy machineries from the work sites.	All right	ditto	ditto	CON(2) and MDBW
Checking of the heavy machineries if keeping correct routes and speed.	All right	ditto	ditto	CON(2) and MDBW
Installation of project sign board around the field.	All right	ditto	ditto	CON(2) and MDBW

(5)	Working environment	(Include working	safetv)/ Accident
(~)			

Recommendations:

For SPM: To need frequent watering access roads especially near villages and working sites because SMP level must be reduce in working hours as much as possible. Operator and Worker should use mask especially in working area of highly or busy road sites.

Improving social awareness

There is no information about improving social welfare.

Waste Management

_In principle, re-use excavated soils as back-filling materials, re-use the removed bricks out of the dilapidated main canal portions for the protection/ lining of tributary canals, and re-use the dilapidated concrete portions of access road for basement of concrete pavement. Further, remaining ones which cannot be re-used will be dumped and buried in the ID owned lands stretching alongside the canals.

Dam Namer Tall	yaw	Htike			Metrol	ogical P	hunome	non						
Measurer : N 16 Date E 96 Location : 0000	cn 4	163					·			erature		oisture	Wind	Wind
Date F. Or		947	• •			me		ather		gree)		ercent)	direction	speed (m/s)
ocation : Duad	<u>.</u>	J1.	. • . · .		10 %	00	Sum	14	35	.8		36	N	2.5
1) Air Pollution									L				1	
Detailed Location	Item	Unit	0 (hr)	1 (hr)	2 (hr)	3 (hr)	4 (hr)	5 (hr)	6 (hr)	7 (hr)	8 (hr)	hourly maxi-	Day	
1	-	-	·				· ·		×		100	mum	Average	Remark
Lining	CO	ppm	0	0	0	9	0							FUE = 0.100
	SPM	µg/m3	54	54	56	52	46	50-	54	92	34			Max = 0.13;
	NO ₂	µg/m3	13.3	108	306	104	105	195	104	106	105	1.14		
•	Ox	ppm	0	0	0	0	0			-				
	UN	ppm	- 9	0	0	0	0			CULCON STREET	-			
		· · ·	Meas	arement	time	Durin	g time		sured		Carlos de la	<u>新</u> 学课了		
N	SO ₂	ppm						0	0	12.24	Same and		C. C. Cherry	1
Noise (working stat	e)													
Detailed Location	Unit		Time		Level (dB < 85 (dB)				Measure-	Main Source				Paral
	Sec. 1.					Lm	ax		ment height(m)					Remark
ining					6	2.7			1-2m					AUE = 52.9
	dB					(-7			ч					Max = 62.7
					6	0-8			ы					
														1
Vibration (working	state												*measurer	nent time: 10 minus
	state)		1	. 1										
	state) Unit		Time		Level (dB < 75	(dB)	Gro			Ν	Main Source	æ	Remark
Detailed Location			Time			L10	5 (dB)	Gro			Ν	Aain Sour	æ	
Vibration (working Detailed Location มันเกg			Time	5	Level (35. 32.	L10 2	5 (dB)				Ν	Main Sourc	ce	Remark Ave = 40-3

(2)

Environmental Monitoring Sheet Project Name : Implementation Support for Irrigation Development Project in Western Bago Region Dam Namet - Lacaquyo ... (Mosch)

Number : MCo	1 July 1		(ch)											
Same Fun	Kyaw	Hitike	/		Metrol	ogical P	henome	mon						
Namber : Min N- 19 Measurer : E - 9 Date	Time We 99800 Sur			Weather (deg		erature gree)	Moisture (percent)		Wind direction	Wind speed (m/s)				
Location : 84000						3 - 35		N	0.4					
1) Air Pollution					L				L					
Detailed Location	Item	Unit	0 (hr)	1 (hr)	2 (hr)	3 (hr)	4 (hr)	5 (hr)	6 (hr)	7 (hr)	8 (hr)	hourly maxi-	Day	Remark
Near Camp	CO	ppm	0	0	0	0	0	1				mum	Average	
and Damage	land	lug/m3	50	50	51	19	50	18	50	0				
Road	SPM	ug/m3	105	115	96	98	95	97	102	50	50			
	NO ₂	ppm	0	0	0	0	0	11	102	25	- 25			
•	Ox	ppm	O	0	0	0	0						1	
		Measurement			time During time				asured value					
	SO ₂	ppm				1		0	O		を設め		12 14 Mar	
2) Noise (working sta	ite)		1							PUHOTS WI	2.07 0+A1			
Detailed Location	Unit	Time			Level (dB < 85 (dB)				Measure- meat	Main Source			Remark	
Veas Camp	1				1	the second s	ax		height(m)					
and Jamage	dB					2.9			1.207					
Road] dB					1.0			4					
) Vibration (working	state)												*	nent time. 10 - i
Detailed Location	Unit	it Time		Level (dB < 75 (dB)			Gro	bund					nent time: 10 min	
1 1					L10		cond		Main Source			ic .	Remark	
lear camp					3	9.0								
ad Damage	dB					8.9								
oud					4	7.0								

*measurement time: 10 minute

(3

Environmental Monitoring Sheet Project Name : Implementation Support for Irrigation De elopment Project in Western Bago Region Dam Namet Lauragnya... (March) Number : Min Kyaw Milike Metrological Phenomenon. Measurer: Nº 18'27.285' BDY - 1 Date E 35'36.810' A 3'3400 Temperature Moisture Wind Wind Time Weather (degree) speed (m/s) (percent) direction Date Location: Con Ecompre: (working) Swany 15:30 35.3 36 NE 1 1) Air Pollution 0 (hr) 1 (hr) hourly 2 (hr) 3 (hr) 4 (hr) 5 (hr) 6 (hr) 7 (hr) 8 (hr) Detailed Location Item Unit maxi-Day Remark mum Average Watering and liniva co ppm 9 50 51 µg/m3 48 96 50 100 47 49 SPM ppin 9 36 NO2 0 00 Ox ppm 0 9 9 0 Measured Measurement time During time value SO_2 ppm 010 3.5

2) Noise (working state) Level (dB < 85 (dB) Detailed Location Measure-meat height(m) Unit Time Main Source Remark 1.max 4.7.1 44.3 Watering and 1.2m lining dB ъ 44.7 ~ 3) Vibration (working state) *measurement time: 10 minute Level (dB < 75 (dB) Detailed Location Unit Time Ground L10 32.8 16.0 46.3 Main Source Remark condition Watering and dB lining