

M-7 Air Quality and Noise Monitoring Plan

Aim and Objective					
The purpose of M-7 Air Quality and Noise Monitoring Plan (AQNMP) is to implement a regular monitoring program that meets operational needs and permitting requirements for the project to ensure the impacts of noise, vibration and airborne contaminants (dust, gaseous emissions, odours) are maintained at a safe level and do not impact on affected communities and environment.					
Summary of Impacts and Risks					
During the construction phase of the Project, activities including but not limited to earthworks, demolition, blasting, construction of infrastructure, and operating of vehicles, machinery and stationary plants will generate noise and particulates. The specific Impacts, risks and mitigation and management measures associated with air quality and noise generation from project construction is summarised in P-15 Air Quality Management and Dust Control Plan (AQMDCP) and C-13 Noise and Vibration Management Plan (NVMP).					
Mitigation and Management Actions					
#	Issue or Risk	Action	Timing / Frequency	Responsibility	
M-7-1.	Generation of gaseous and particulate emissions	Implementation of management actions as specified in the other ESMPs, particularly C-9 Spoil and Topsoil Management Plan , C-11 Drill and Blast Management Plan , P-11 Traffic Management Plan , P-15 Air Quality Management and Dust Control Plan (AQMDCP) and C-13 Noise and Vibration Management Plan (NVMP).	Throughout construction	HEC EHS Manager HEC Construction Manager	
Monitoring Requirements					
#	Title	Description	Target / Performance Indicator	Timing / Frequency	Responsibility
M-7-A.	Air Quality	<u>Confined spaces</u> <ul style="list-style-type: none">A ventilation system and comprehensive air quality monitoring programme will be developed for the tunnel, ensuring the safety of workers, with reference to industry standards for tunnel air quality. This will include but not be limited to continuous monitoring (autologgers with alarms) of oxygen levels and noxious gases to ensure that working conditions are safe.For short-term entry into other confined space, if required, continuous handheld monitoring shall be conducted. <u>Construction site dust monitoring</u> <ul style="list-style-type: none">Daily – Visual site inspections for dust generation across the active construction areas shall be undertaken. Weekly 1-hour hand-held monitoring (below) to be increased to daily monitoring during periods of peak activity.Weekly – 1-hour monitoring using a hand-held dust monitor (particulate meter for PM₁₀ and PM_{2.5}) to demonstrate the efficiency of site mitigation during weekly inspections, targeting dust-prone areas e.g. concrete batching plant, crusher plant, blast sites, material storage areas, spoil disposal, site offices, and access roads. The hand-held monitor will have a sufficient detection limit and particle size range for ambient air quality monitoring. <u>Sensitive receptors</u> <ul style="list-style-type: none">Monthly – 24-hour continuous air quality monitoring will be conducted at the locations nominated in Annex M-7-II Air and Noise Monitoring Locations. The following parameters shall be monitored:<ul style="list-style-type: none">Particulate Matter PM_{2.5}Particulate Matter PM₁₀Sulphur Dioxide (SO₂)Nitrogen Dioxide (NO₂)More frequent (daily) 24-hour continuous monitoring will be conducted following exceedances or complaints, in order to investigate the event and inform remedial actions. Monitoring at new locations may need be added following complaints.	No exceedance of WHO Ambient Air Quality Guidelines in the IFC EHS Guidelines (Table 1.1.1): PM _{2.5} = 25 µg/m ³ (24 hours) PM ₁₀ = 50 µg/m ³ (24 hours) SO ₂ = 20 µg/m ³ (24 hours) NO ₂ = 200 µg/m ³ (1 hour) A wider range of parameters shall be monitored in the tunnel (to be specified in Annex M-7-I). The parameters will be refined once the tunnelling method is confirmed.	Continuous, daily, weekly and monthly as detailed Results shall be provided in the HEC Monthly Project Report and Quarterly E&S Monitoring report Tunnel air quality monitoring programme to be developed once tunnelling method and contractor confirmed	HEC HSE Manager Tunnelling Contractor THL/OE (review)
M-7-B.	Noise	<u>Construction related noise and vibration</u> <ul style="list-style-type: none">Daily – Check that workers are wearing appropriate PPE, and that noise bunds or barriers are installed (where required). The use of hearing protection should be enforced actively when the equivalent sound level over 8 hours reaches 85 dB(A), the peak sound levels reach 140 dB(C), or the average maximum sound level reaches 110 dB(A).Prior to drilling and/or blasting – Inspect the operation site to ensure the blasting charges are properly covered with blasting mats and screens. Check that appropriate hearing protection and warning system are being used as per C-11 Drill and Blast Management Plan. Ensure that notifications of the blasting activity have been provided to the affected community at least one week (7 days) in advance, and recorded in the Stakeholder Engagement Management Database. <u>Traffic and machinery related noise and vibration</u> <ul style="list-style-type: none">One Off Prior to Main Works – identify any properties or structures near the access road or tunnel that may be susceptible to vibration (such as concrete or mud housing) and conduct a photographic survey of condition, against which to monitor any claims for damage.Weekly – As part of weekly inspections, check implementation of the measures detailed in C-13 Noise and Vibration Management Plan and P-11 Traffic Management Plan.Monthly – Continuous 1-hour LAeq noise level monitoring for a minimum of 24 hours (7am to 7am) using a Type 1 or Type 2 sound level meter at each of the locations detailed in Annex M-7-II. Noise impacts should not exceed the target levels or result in a maximum increase in background 1-hour LAeq levels of 3 dB(A) at the nearest receptor location off-site.	As per IFC EHS Guidelines: <u>Construction Sites:</u> 1 hr LAeq 70 dB(A)* 8 hr LAeq 85 db(A)** LA _{Max} fast 140 dB(C)** *Maximum level at site boundary. **No employee should be exposed to a noise level >85 dB(A) for a duration of more than 8 hr/day without hearing protection. ***Maximum instantaneous noise level without hearing protection. <u>Villages / Sensitive Receptors:</u> Day 7am-10pm: 1hr LAeq 55 dB(A) Night 10pm-7am: 1hr LAeq 45 dB(A) or 3 dB(A) increase vs. background Note: Equipment should be located approximately 1.5 m above the ground and no closer than 3 m to any wall.	Daily, weekly and monthly as detailed Results shall be provided in the HEC Monthly Project Report and Quarterly E&S Monitoring report	HEC Construction Manager HEC HSE Manager

M-7-C.	Worker or community grievances	<ul style="list-style-type: none"> Local communities shall be notified at least one week (7 days) prior to blasting or other very noisy or vibrating activities in accordance with P-3 Stakeholder Engagement and Communications Plan. Investigate any air, noise and vibration complains in accordance with P-6 Grievance Redress Mechanism Consider increasing the location and frequency of assessment and monitoring in response to any complaints, alongside changes to mitigation and management (if required) until the issue is resolved. 	Zero grievances associated with air, noise, vibration	Reported in Monthly HEC Project Reports and Quarterly E&S Reports	HEC HSE Manager
Supporting Documents					
Annex	Name		Description		
M-7-I.	Tunnelling Air Quality Monitoring Programme (to be finalised by the tunnelling contractor)		Comprehensive air quality monitoring programme for tunnel construction		
M-7-II.	Air and Noise Monitoring Locations		Locations for monthly air and noise monitoring		
M-7-III.	Air Quality and Noise Baseline Results		Baseline monitoring as reported in M-7 approved for roads Lot 2 and 3.		

ANNEX M-7-I TUNNELLING AIR QUALITY MONITORING PROGRAMME

(PENDING - TO BE PREPARED PRIOR TO TUNNEL CONSTRUCTION)

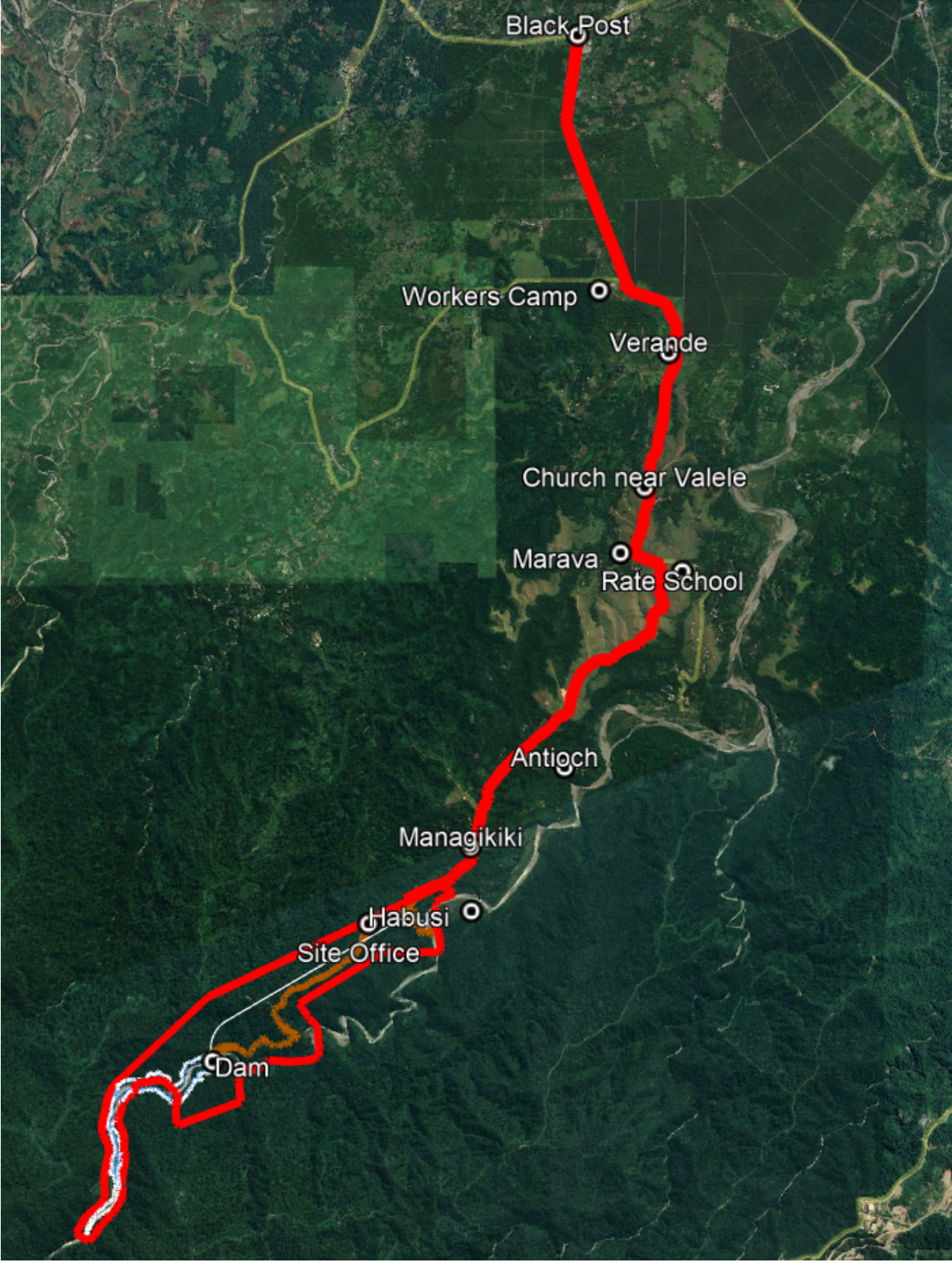
ANNEX M-7-II AIR AND NOISE MONITORING LOCATIONS

AIR AND NOISE MONITORING LOCATIONS



Monthly monitoring shall be conducted at the following site locations:

#	Name	Type	Coordinates
1	Black Post Road Junction	Sensitive Receptor	9°26'26.41"S, 160° 6'3.52"E
2	Workers Accommodation Camp	Construction site	9°28'12.19"S, 160° 6'12.59"E
3	Verande Village	Sensitive Receptor	9°28'37.95"S, 160° 6'41.82"E
4	Church near Valele Village	Sensitive Receptor	9°29'33.75"S, 160° 6'31.71"E
5	Marava Village	Sensitive Receptor	9°30'0.94"S, 160° 6'21.54"E
6	Rate School	Sensitive Receptor	9°30'8.65"S, 160° 6'47.54"E
7	Anitoch Village	Sensitive Receptor	9°31'29.81"S, 160° 5'58.05"E
8	Managikiki Village	Sensitive Receptor	9°32'2.75"S, 160° 5'18.59"E
9	Habusi Village	Sensitive Receptor	9°32'29.38"S, 160° 5'18.85"E
10	Site Office	Construction site	9°32'34.54"S, 160° 4'35.63"E
11	Dam Site	Construction site	9°33'31.70"S, 160° 3'30.09"E

*Habusi Village has no road access but is the closest village to the powerhouse. It should be monitored for a minimum of 24 hours on a monthly basis, or continuously if access is a problem. Alternatively, monitoring shall move to the powerhouse (new site) and weekly 1-hour handheld monitoring shall be conducted at Habusi.



ANNEX M-7-III AIR QUALITY AND NOISE BASELINE RESULTS

	AIR QUALITY AND NOISE MONITORING PLAN		
TINA RIVER HYDROPOWER DEVELOPMENT PROJECT	HEC-CDSB-CESMP-MP-007	REV. 7	PAGE 54 OF 57

NOISE MONITORING BASELINE

Tina River Hydropower Development Project

Noise Monitoring Report

Log Sheet

#	Date of Monitoring	Date of Reporting	Reporting Month	Location	Duration	Monitoring By	Reporting By	Approved by	Remarks
1	27.05.2020 28.05.2020 29.05.2020	29.05.2020	May	Rate School	48 Hours	Edmond Jr Bate	Edmond Jr Bate	Kim D Y	
2	05.06.2020 06.06.2020 08.06.2020 09.06.2020	10.06.2020	June	Marava	48 Hours	Joash Sanga	Edmond Jr Bate	Kim D Y	
3	12.06.2020 13.06.2020 14.06.2020	15.06.2020	June	Managikkiki	48 Hours	Joash Sanga	Edmond Jr Bate	Kim D Y	
4	10.06.2020 11.06.2020 12.06.2020	15.06.2020	June	Verakabikabi	48 Hours	Joash Sanga	Edmond Jr Bate	Kim D Y	
5	14.06.2020 15.06.2020 16.06.2020	17.06.2020	June	Pavu	48 Hours	Joash Sanga	Edmond Jr Bate	Kim D Y	
6	17.06.2020 18.06.2020 19.06.2020	19.06.2020	June	Verande	48 Hours	Joash Sanga	Edmond Jr Bate	Kim D Y	
7	10.06.2020 11.06.2020 12.06.2020	20.06.2020	June	Crusher Plant Site	48 Hours	Joash Sanga	Edmond Jr Bate	Kim D Y	
8	21.06.2020 22.06.2020 23.06.2020	23.06.2020	June	Black Post	48 Hours	Joash Sanga	Edmond Jr Bate	Kim D Y	
9	25.06.2020 26.06.2020 27.06.2020	28.06.2020	June	Habusi	48 Hours	Joash Sanga	Edmond Jr Bate	Kim D Y	



Tina River Hydro Development Project
Solomon Islands
ENVIRONMENTAL NOISE MONITORING REPORT

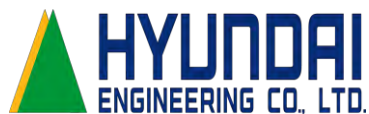
Date of Reporting:
29th May 2020

Reporting Month:
May 2020

Date of Monitoring	27 th - 29 th MAY 2020	Monitoring Frequency	Single Event (Baseline)
Equipment Make/Model	Green Mate HLES-01 Noise Statistical Analyzer	Serial Number	
References	M7- AIR QUALITY AND NOISE MONITROING PLAN C13 – NOISE AND VIBRATION MANAGEMENT PLAN		

Monitoring Location No	Location Name	GPS Coordinates	Date of Monitoring	Time of Monitoring	Duration of Monitoring	Leq dB(A)	Lae dB(A)	Lmax dB(A)	Lmin dB(A)	Remarks
N1	RATE SCHOOL	57 L 0622210 8949443 E	27 th - 28 th of May 2020	10:14AM to 10:14AM	24 Hours	60.5	109.9	92.6	32.2	5m from the Road (right side) and 10m from school buildings (Ref # 001)
N2	RATE SCHOOL	57 L 0622210 8949443 E	28 th - 29 th of May 2020	12:52 PM to 12:52 PM	24 Hours	61.2	110.6	84.3	32.3	5m from the Road (right side) and 10m from school buildings (Ref # 002)
Average					48 Hours	60.9	110.3	88.45	32.25	

Monitoring by: Edmond Jr Bate E and S Officer	Sign:	Reporting By: Edmond Jr Bate E and S Officer	Sign:	Checked By: KIM D Y HSE Manager	Sign:	Page No: 1
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Tina River Hydro Development Project
Solomon Islands
ENVIRONMENTAL NOISE MONITORING REPORT

Date of Reporting:
29th May 2020

Reporting Month:
May 2020

Notes/ Observations	Day 1 <ul style="list-style-type: none">- Clear and sunny in the morning and partly cloudy with brief showers during the afternoon.- Road here is also used by logging trucks to transport logs- Road is also used by public transport and private vehicles- The school compound is noisy and loud during school lunch hour and after school hours
	Day 2 <ul style="list-style-type: none">- Cloudy and sunny in the morning- Dull and rainy in the afternoon
Attachment:	1. Record Analysis Graph (Instrument Reading)
	2. Photographs of Monitoring Setup and Locations

Monitoring by: Edmond Jr Bate E and S Officer	Sign:	Reporting By: Edmond Jr Bate E and S Officer	Sign:	Checked By: KIM D Y HSE Manager	Sign:	Page No: 2
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2. Photographs of Noise Monitoring



Noise Analyzer set up @ Rate School
5m from the Road (right side) and 10m from school buildings
(Ref # 001) 57 L 0622210, 8949443 E

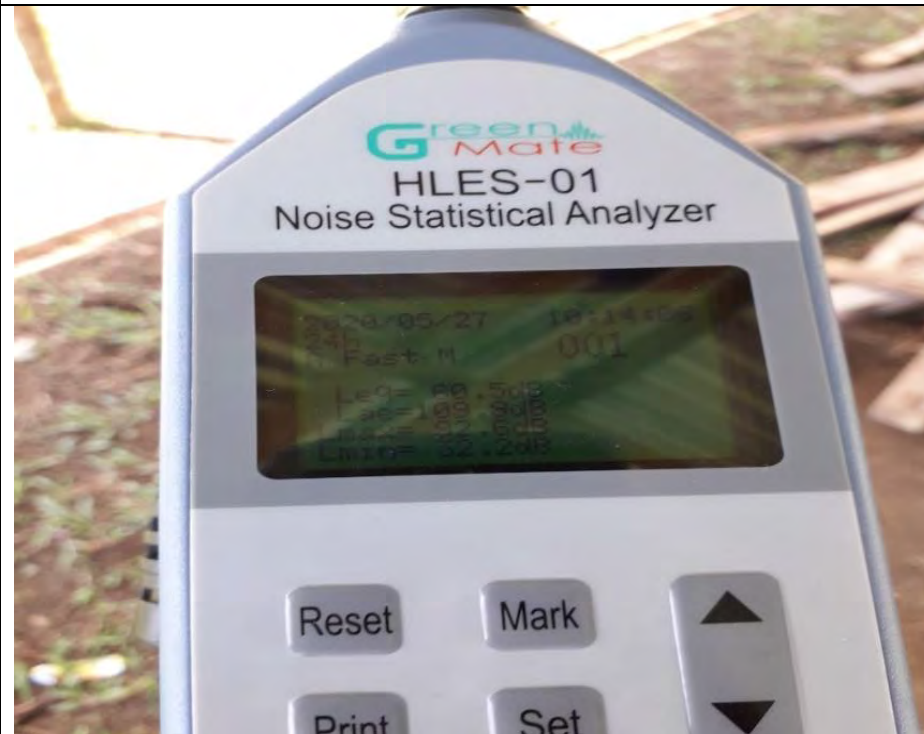


Photo of Noise data recorded by the noise analyzer after 24 Hours @ Rate School (See in table above).

Monitoring by: Edmond Jr Bate E and S Officer	Sign:	Reporting By: Edmond Jr Bate E and S Officer	Sign:	Checked By: KIM D Y HSE Manager	Sign:	Page No: 3
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Noise Source: Log trucks



Noise source: Public Transport vehicles

Monitoring by: Edmond Jr Bate E and S Officer	Sign:	Reporting By: Edmond Jr Bate E and S Officer	Sign:	Checked By: KIM D Y HSE Manager	Sign:	Page No: 4
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Environment Sound Level measurement

Record Analysis

Monitor Start Time: 2020-05-27 10:14

Record Length: 24h

Instrument: HLES-01B

SN: 20170910001

Measurements

Leq: 60.5

Lae: 109.9

Lmax: 92.6

Lmin: 32.2

Time weighting: Fast

Frequency weighting: dB(A)

Description

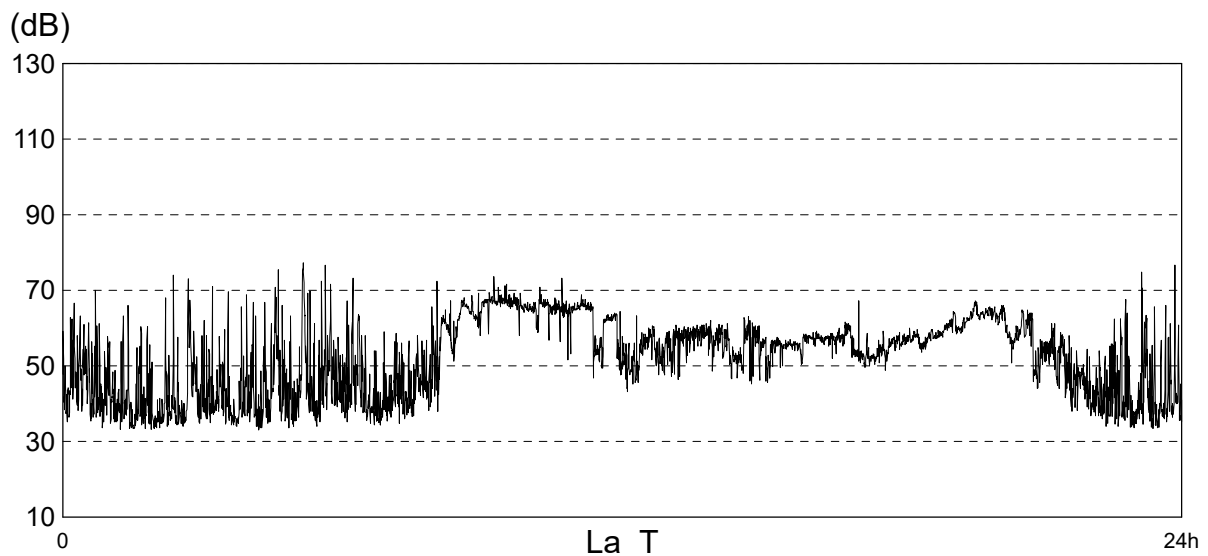
Project: Tina River Hydro Dev

Operator: Edmond Jr Bate

Company: Hyundai Engg Company

Location: Rate School

Remark: RemarkHongLim





HongLim Co., Ltd

Environment Sound Level measurement

Record Analysis

Monitor Start Time: 2020-05-28 12:52

Record Length: 24h

Instrument: HLES-01B

SN: 20170910001

Measurements

Leq: 61.2

Lae: 110.6

Lmax: 84.3

Lmin: 32.3

Time weighting: Fast

Frequency weighting: dB(A)

Description

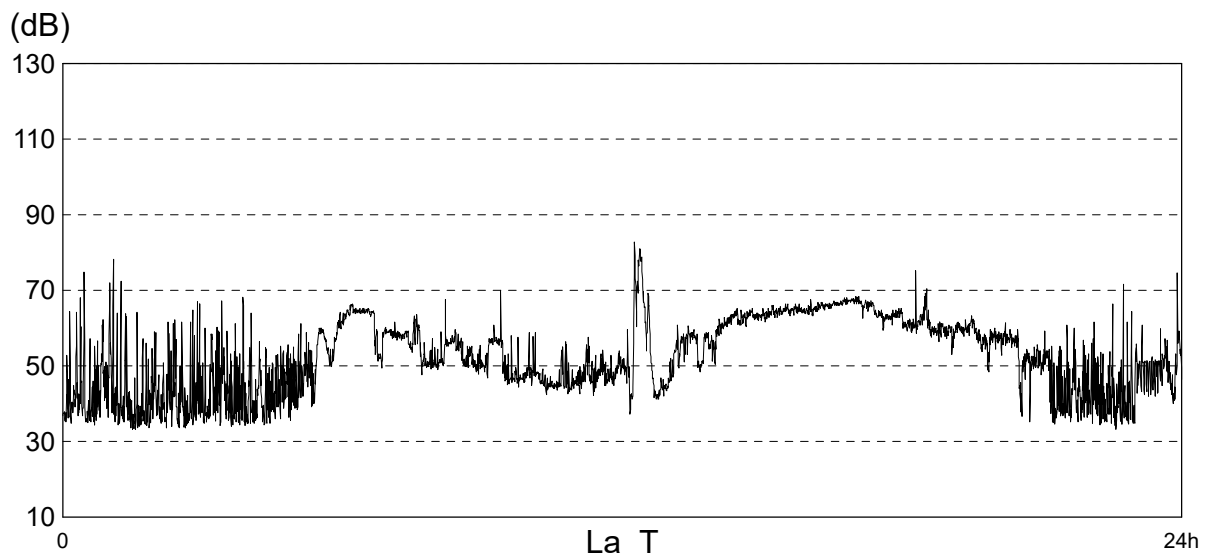
Project: Tina River Hydro Dev

Operator: Edmond Jr Bate

Company: Hyundai Engg Company

Location: Rate School

Remark: RemarkHongLim





Tina River Hydro Development Project
Solomon Islands
ENVIRONMENTAL NOISE MONITORING REPORT

Date of Reporting:
10th June 2020

Reporting Month:
June 2020

Date of Monitoring	5 th - 6 th June 2020 And 8 th - 9 th June 2020	Monitoring Frequency	Single Baseline
Equipment Make	Green Mate HLES-01 Noise Statistical Analyzer	Serial Number	
References	M7- AIR QUALITY AND NOISE MONITROING PLAN C13 – NOISE AND VIBRATION MANAGEMENT PLAN		

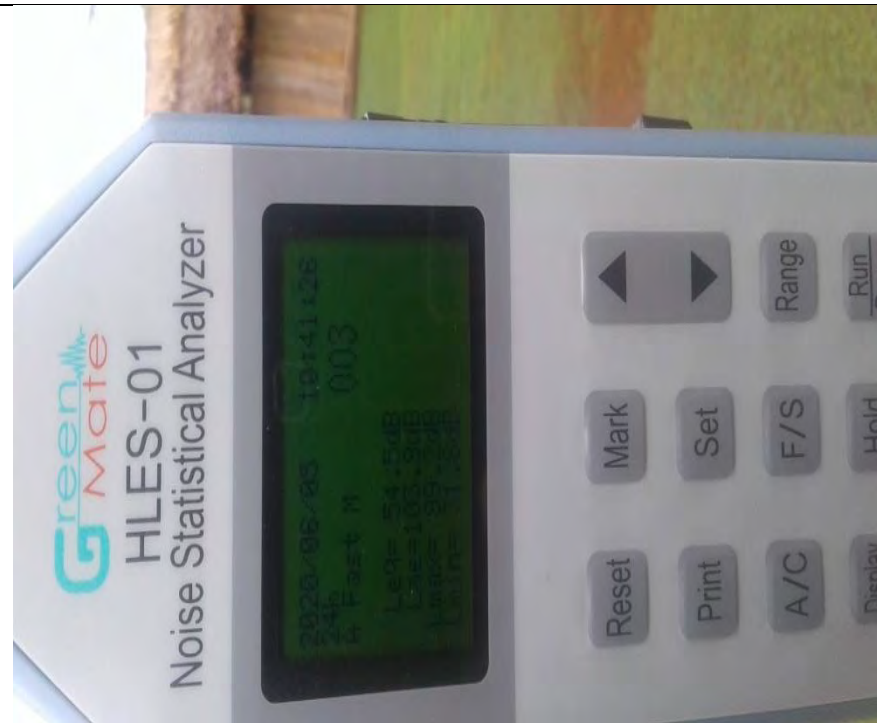
Monitoring Location No	Location Name	GPS Coordinates	Date of Monitoring	Time of Monitoring	Duration of Monitoring	Leq dB(A)	L _{ae} dB(A)	L _{max} dB(A)	L _{min} dB(A)	Remarks
N1	Marava Village	57 L 0621638, 8949339	05 th -06 th of June 2020	10:45am to 10:45m	24 Hours	54.5	103.9	99.2	31.8	Set up @ 10m from the road & 3m from buildings. coordinates
N2	Marava Village	57 L 0621638, 8949339	08 th – 09 th of June 2020	2:24pm to 2:24pm	24 Hours	50.8	100.2	89.7	31.9	
Average				48 Hours		52.7	102.1	94.5	31.9	
Notes/ Observations	1. It is a dull & cloudy day 2. Village setting close to access road. High traffic area. 3. Sources of noise were identified to be from vehicles and machines, domestic animals (Dogs and Roosters), and community people.									
Attachment:	1. Record Analysis Graph (Instrument Reading) 2. Photographs of Monitoring Setup and Locations									

Monitoring by: Joash Sanga Civil Engineer	Sign:	Reporting By: Edmond Jr Bate E and S Officer	Sign:	Checked By: KIM D Y HSE Manager	Sign:	Page No: 1
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Photographs



1. Set up of noise monitor on first day. 3m from residential area
Coordinates (57 L 0621638, 8949339)



2. Noise reading after first 24 hours of monitoring

Monitoring by: Joash Sanga Civil Engineer	Sign:	Reporting By: Edmond Jr Bate E and S Officer	Sign:	Checked By: KIM D Y HSE Manager	Sign:	Page No: 2
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Environment Sound Level measurement

Record Analysis

Monitor Start Time: 2020-06-05 10:41

Record Length: 24h

Instrument: HLES-01B

SN: 20170910001

Measurements

Leq: 54.5

Lae: 103.9

Lmax: 99.2

Lmin: 31.8

Time weighting: Fast

Frequency weighting: dB(A)

Description

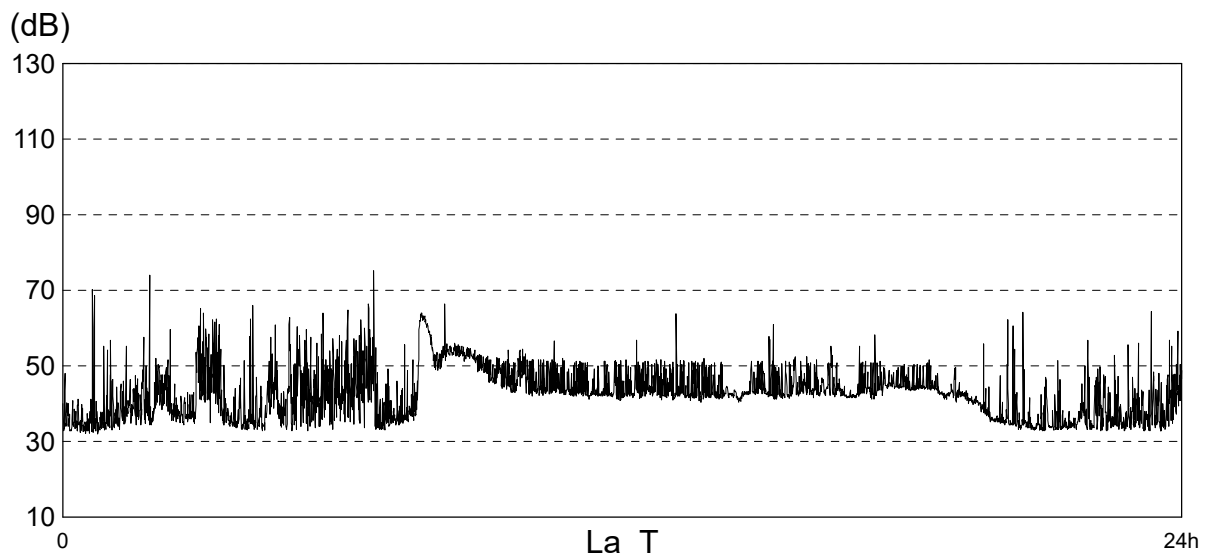
Project: Tina River Hydro Dev

Operator: Edmond Jr Bate

Company: Hyundai Engg Company

Location: Marava

Remark: RemarkHongLim





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Environment Sound Level measurement

Record Analysis

Monitor Start Time: 2020-06-08 14:23

Record Length: 24h

Instrument: HLES-01B

SN: 20170910001

Measurements

Leq: 50.8

Lae: 100.2

Lmax: 89.7

Lmin: 31.9

Time weighting: Fast

Frequency weighting: dB(A)

Description

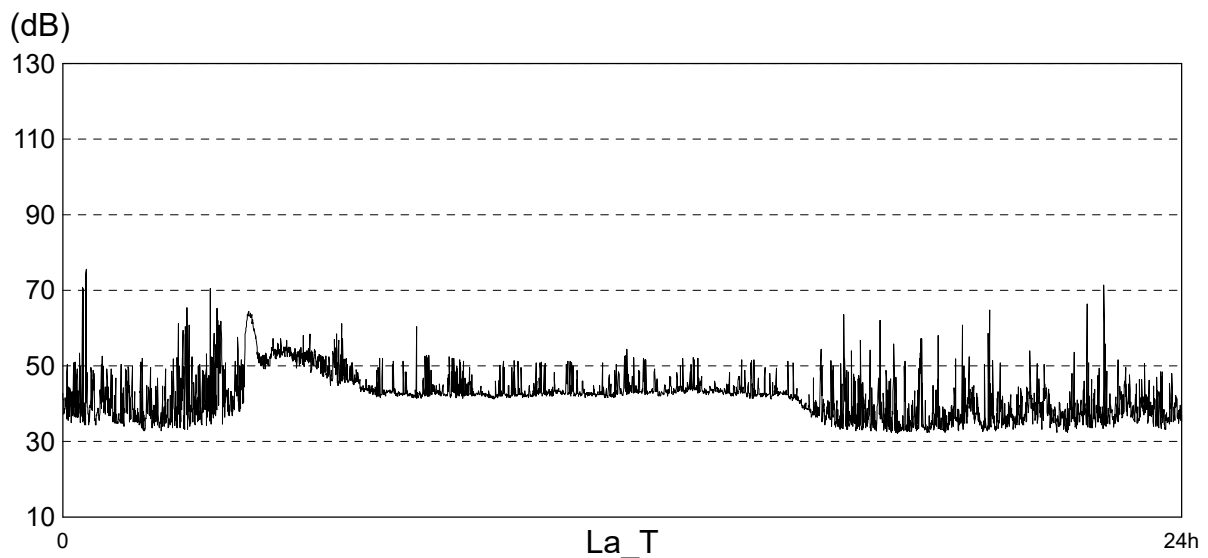
Project: Tina River Hydro Dev

Operator: Edmond Jr Bate

Company: Hyundai Engg Company

Location: Marava

Remark: RemarkHongLim





Tina River Hydro Development Project
Solomon Islands
ENVIRONMENTAL NOISE MONITORING REPORT

Date of Reporting:
15TH JUNE 2020

Reporting Month:
JUNE 2020

Date of Monitoring	12 TH - 14 TH JUNE 2020	Monitoring Frequency	SINGLE BASELINE
Equipment Make	Green Mate HLES-01 Noise Statistical Analyzer	Serial Number	
References	M7- AIR QUALITY AND NOISE MONITROING PLAN C13 – NOISE AND VIBRATION MANAGEMENT PLAN		

Monitoring Location No	Location Name	GPS Coordinates	Date of Monitoring	Time of Monitoring	Duration of Monitoring	Leq dB(A)	Lae dB(A)	Lmax dB(A)	Lmin dB(A)	Remarks
N1	Managikiki 1	57 L 0619540.41 8946222.99	12 th -13 th of June 2020	2:41pm to 2:41pm	24 Hours	56.6	106.0	99.9	33.1	
N2	Managikiki 2	57 L 0619540.41 8946222.99	13 th -14 th of June 2020	16:09 pm to 16:09 pm	24 Hours	55.0	104.4	105.0	34.1	
Average					48 Hours	55.8	105.2	102.5	33.6	
Notes/ Observations	1. Village setting on a hill top. The next village is at least 1km away. 2. Noise sources are observed to be from people; domestic animals such as Dogs & Roosters, and vehicles									
Attachment:	1. Record Analysis Graph (Instrument Reading) 2. Photographs of Monitoring Setup and Locations									

Monitoring by: Joash Sanga Civil Engineer	Sign:	Reporting By: Edmond Jr Bate E and S Officer	Sign:	Checked By: KIM D Y HSE Manager	Sign:	Page No: 1
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Photographs



1. Set up at Managikiki on first monitoring day. 5m from residential building



2. Noise readings after the first 24hrs.

Monitoring by: Joash Sanga Civil Engineer	Sign:	Reporting By: Edmond Jr Bate E and S Officer	Sign:	Checked By: KIM D Y HSE Manager	Sign:	Page No: 2
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3. Set up at Managikiki on second monitoring day. 5m from residential building



4. Noise readings after the last 24hrs.

Monitoring by: Joash Sanga Civil Engineer	Sign:	Reporting By: Edmond Jr Bate E and S Officer	Sign:	Checked By: KIM D Y HSE Manager	Sign:	Page No: 3
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HongLim Co., Ltd

Environment Sound Level measurement

Record Analysis

Monitor Start Time: 2020-06-12 15:41

Record Length: 24h

Instrument: HLES-01B

SN: 20170910001

Measurements

Leq: 56.6

Lae: 106.0

Lmax: 99.9

Lmin: 33.1

Time weighting: Fast

Frequency weighting: dB(A)

Description

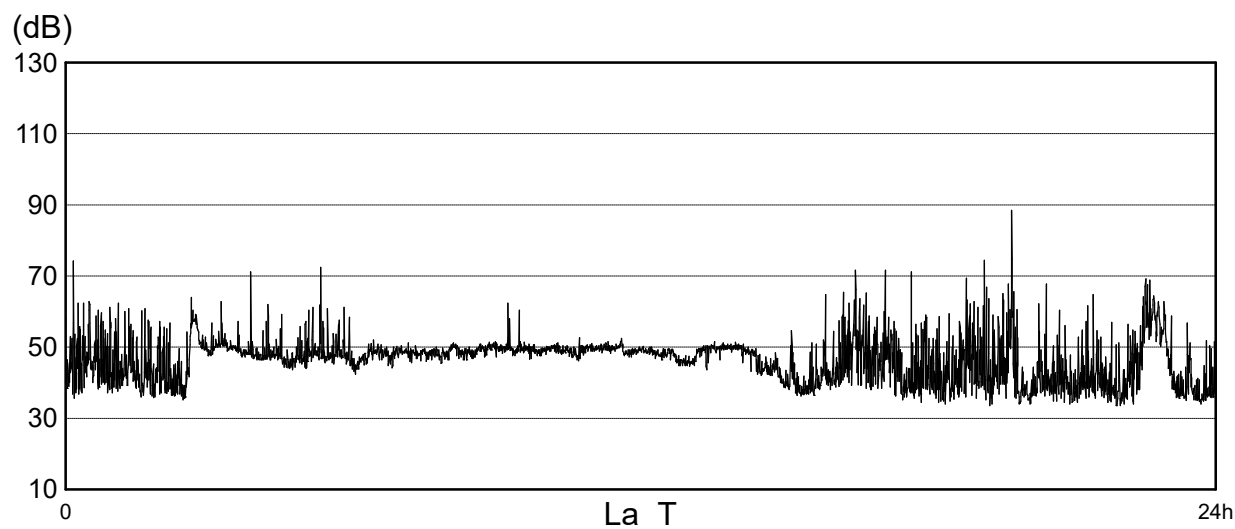
Project: Number of Project1

Operator: Joash Sanga

Company: Hyundai Engineering

Location: LocationB

Remark: Noise Monitoring





HongLim Co., Ltd

Environment Sound Level measurement

Record Analysis

Monitor Start Time: 2020-06-13 16:09

Record Length: 24h

Instrument: HLES-01B

SN: 20170910001

Measurements

Leq: 55.0

Lae: 104.4

Lmax: 105.0

Lmin: 34.1

Time weighting: Fast

Frequency weighting: dB(A)

Description

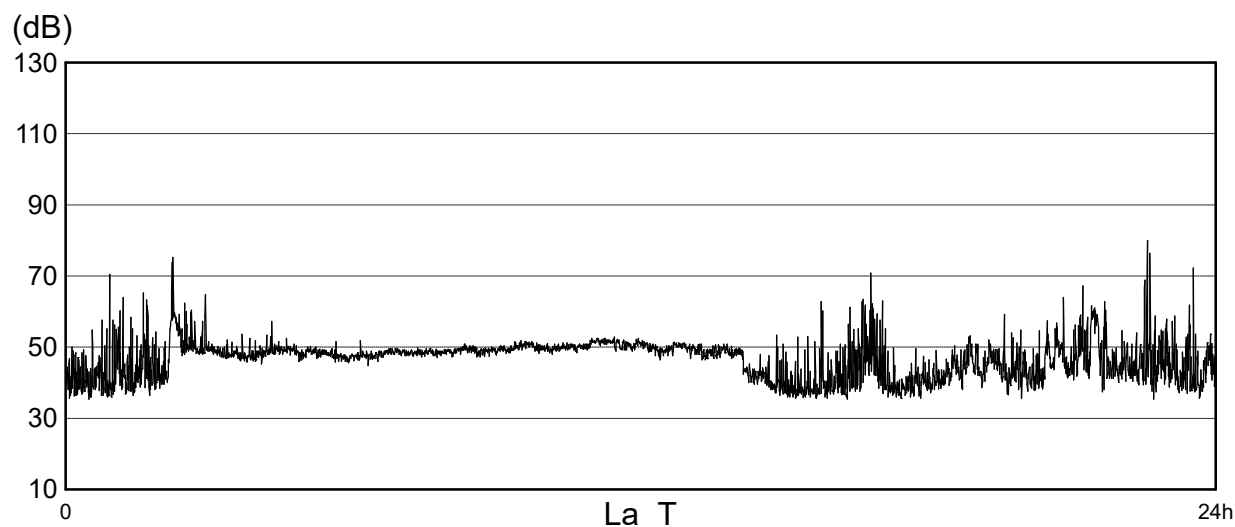
Project: Number of Project1

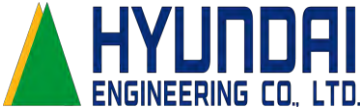
Operator: Joash Sanga

Company: Hyundai Engineering

Location: LocationB

Remark: Noise Monitoring



	Tina River Hydro Development Project Solomon Islands ENVIRONMENTAL NOISE MONITORING REPORT	Date of Reporting: 15 th June 2020
		Reporting Month: JUNE 2020

Date of Monitoring	10 th - 12 th June 2020	Monitoring Frequency	
Equipment Make	Green Mate HLES-01 Noise Statistical Analyzer	Serial Number	
References	M7- AIR QUALITY AND NOISE MONITROING PLAN C13 – NOISE AND VIBRATION MANAGEMENT PLAN		

Monitoring Location No	Location Name	GPS Coordinates	Date of Monitoring	Time of Monitoring	Duration of Monitoring	Leq dB(A)	Lae dB(A)	Lmax dB(A)	Lmin dB(A)	Remarks
N1	Verakabikabi 1	57 L 0621866 8950293	10 th -11 th of June 2020	9:52pm to 9:52PM	24 Hours	50	99.4	91.3	32.5	5m from residential buildings and 50m from access road
N2	Verakabikabi 2	57 L 0621866 8950293	11 th -12 th of June 2020	15:16PM to 15:16PM	24 Hours	55.3	104.7	106.2	32.7	5m from residential buildings and 50m from access road
Average					48 Hours	52.7	102.1	98.8	32.6	

Monitoring by: Joash Sanga Civil Engineer	Sign:	Reporting By: Edmond Jr Bate E and S Officer	Sign:	Checked By: KIM D Y HSE Manager	Sign:	Page No: 1
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Tina River Hydro Development Project
Solomon Islands
ENVIRONMENTAL NOISE MONITORING REPORT

Date of Reporting:
15th June 2020

Reporting Month:
JUNE 2020

Notes/ Observations	Rural village setting. Main sources of noise are observed from community people and domesticated animals such as dogs, roosters etc...
Attachment:	1. Record Analysis Graph (Instrument Reading)
	2. Photographs of Monitoring Setup and Locations

Monitoring by: Joash Sanga Civil Engineer	Sign:	Reporting By: Edmond Jr Bate E and S Officer	Sign:	Checked By: KIM D Y HSE Manager	Sign:	Page No: 2
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Photographs



Set up of Noise monitor at Verekabikabi for Day 1 & 2



Field readings for day 1

Monitoring by: Joash Sanga Civil Engineer	Sign:	Reporting By: Edmond Jr Bate E and S Officer	Sign:	Checked By: KIM D Y HSE Manager	Sign:	Page No: 3
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HongLim Co., Ltd

Environment Sound Level measurement

Record Analysis

Monitor Start Time: 2020-06-11 15:17

Record Length: 24h

Instrument: HLES-01B

SN: 20170910001

Measurements

Leq: 55.3

Lae: 104.7

Lmax: 106.2

Lmin: 32.7

Time weighting: Fast

Frequency weighting: dB(A)

Description

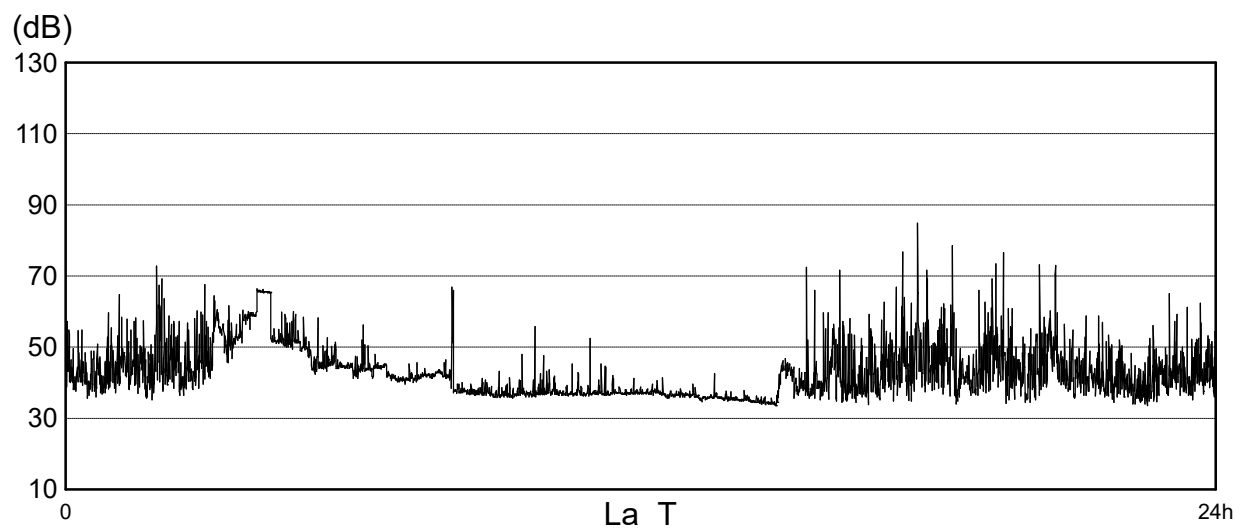
Project: Number of Project1

Operator: Joash Sanga

Company: Hyundai Engineering

Location: LocationB

Remark: Noise Monitoring





Tina River Hydro Development Project
Solomon Islands
ENVIRONMENTAL NOISE MONITORING REPORT

Date of Reporting:
17TH JUNE 2020

Reporting Month:
JUNE 2020

Date of Monitoring	14 TH - 16 TH JUNE 2020	Monitoring Frequency	SINGLE BASELINE
Equipment Make	Green Mate HLES-01 Noise Statistical Analyzer	Serial Number	
References	M7- AIR QUALITY AND NOISE MONITROING PLAN C13 – NOISE AND VIBRATION MANAGEMENT PLAN		

Monitoring Location No	Location Name	GPS Coordinates	Date of Monitoring	Time of Monitoring	Duration of Monitoring	Leq dB(A)	Lae dB(A)	Lmax dB(A)	Lmin dB(A)	Remarks
N1	Pavu	9°29'10.16"S, 160° 6'36.72"E	14 th -15 th to June 2020	17:04pm	24 Hours	54.7	104.1	94.1	32.6	
N2	Pavu	9°29'10.16"S, 160° 6'36.72"E	15 th -16 th to June 2020	17:17pm	24 Hours	54.0	103.4	89.7	33.1	
Average					48 Hours	54.4	103.8	92.0	32.9	
Notes/ Observations	1. Village setting very close to access road in Lot 1. 2. Noise sources are observed to be from vehicles and machines. People and domestic animals such as Dogs & Roosters also contributes to the noise 3. Clear & sunny day									
Attachment:	1. Record Analysis Graph (Instrument Reading) 2. Photographs of Monitoring Setup and Locations									

Monitoring by: Joash Sanga Civil Engineer	Sign:	Reporting By: Edmond Jr Bate E and S Officer	Sign:	Checked By: KIM D Y HSE Manager	Sign:	Page No: 1
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Photographs:



1. Noise monitor set up @Pavu, 5m from the road and 5m from residential building.

Monitoring by: Joash Sanga Civil Engineer	Sign:	Reporting By: Edmond Jr Bate E and S Officer	Sign:	Checked By: KIM D Y HSE Manager	Sign:	Page No: 2
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HongLim Co., Ltd

Environment Sound Level measurement

Record Analysis

Monitor Start Time: 2020-06-14 17:04

Record Length: 24h

Instrument: HLES-01B

SN: 20170910001

Measurements

Leq: 54.7

Lae: 104.1

Lmax: 94.1

Lmin: 32.6

Time weighting: Fast

Frequency weighting: dB(A)

Description

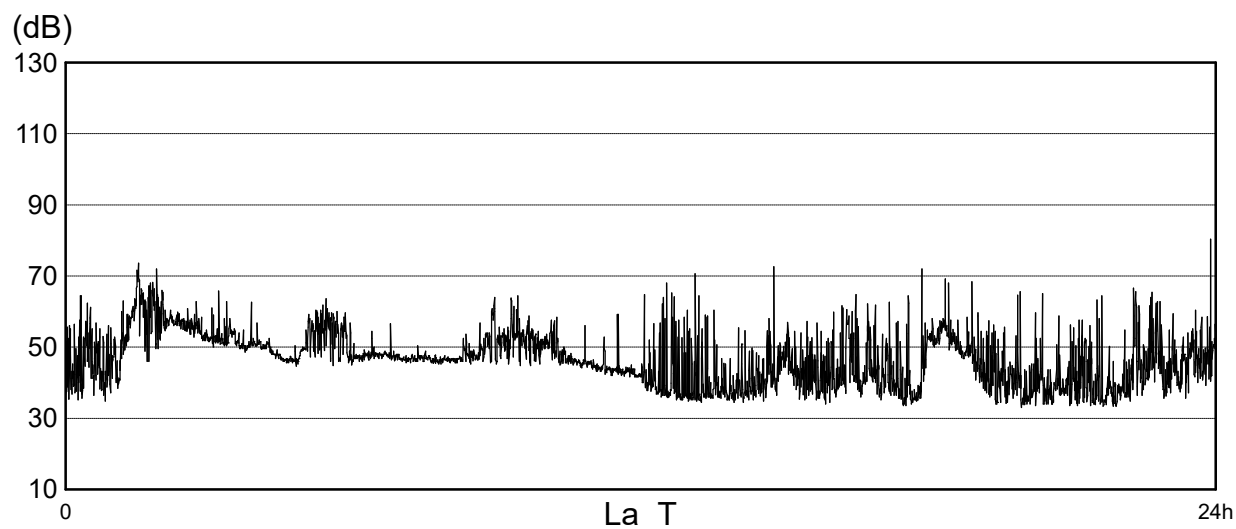
Project: Number of Project1

Operator: Joash Sanga

Company: Hyundai Engineering

Location: LocationB

Remark: Noise Monitoring





HongLim Co., Ltd

Environment Sound Level measurement

Record Analysis

Monitor Start Time: 2020-06-15 17:17

Record Length: 24h

Instrument: HLES-01B

SN: 20170910001

Measurements

Leq: 54.0

Lae: 103.4

Lmax: 89.7

Lmin: 33.1

Time weighting: Fast

Frequency weighting: dB(A)

Description

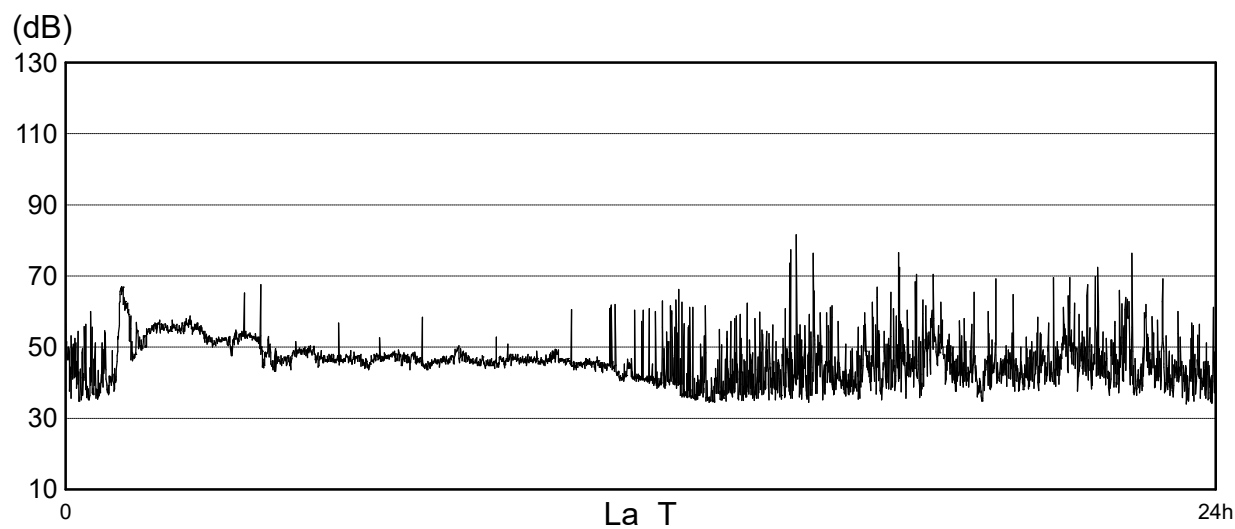
Project: Number of Project1

Operator: Joash Sanga

Company: Hyundai Engineering

Location: LocationB

Remark: Noise Monitoring





Tina River Hydro Development Project
Solomon Islands
ENVIRONMENTAL NOISE MONITORING REPORT

Date of Reporting:
19TH JUNE 2020

Reporting Month:
JUNE 2020

Date of Monitoring	17 TH - 19 TH JUNE 2020	Monitoring Frequency	SINGLE BASELINE
Equipment Make	Green Mate HLES-01 Noise Statistical Analyzer	Serial Number	
References	M7- AIR QUALITY AND NOISE MONITROING PLAN C13 – NOISE AND VIBRATION MANAGEMENT PLAN		

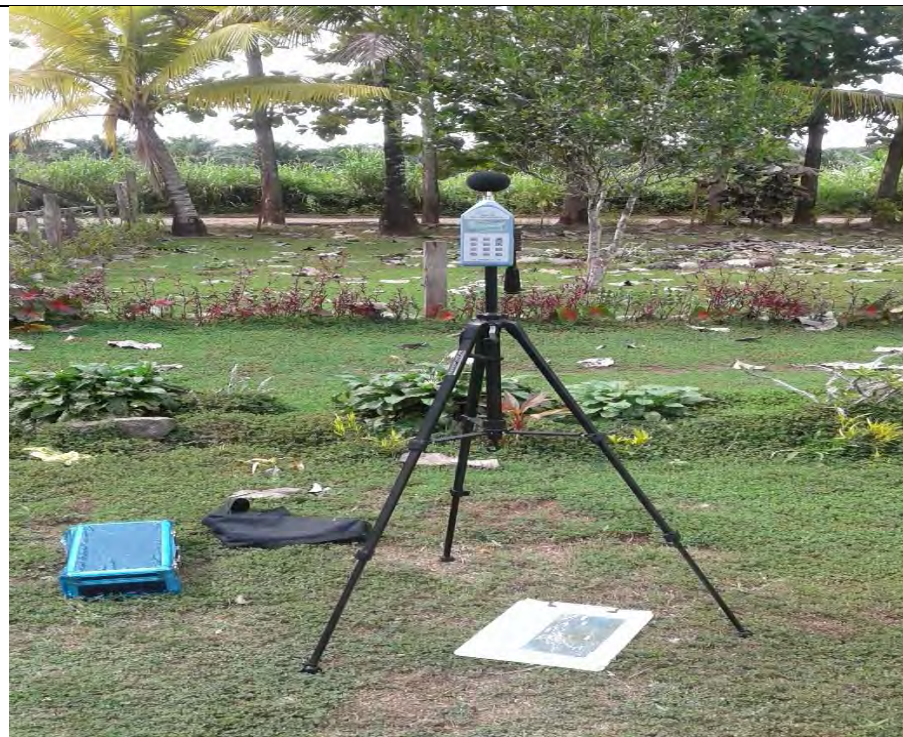
Monitoring Location No	Location Name	GPS Coordinates	Date of Monitoring	Time of Monitoring	Duration of Monitoring	Leq dB(A)	Lae dB(A)	Lmax dB(A)	Lmin dB(A)	Remarks
N1	Verande 1	9°28'33.00"S, 160° 6'41.98"	17 th -18 th of June 2020	11:10am	24 Hours	65.9	115.3	113.6	32.4	10m from residential buildings & 20m from access road
N2	Verande 2	9°28'33.00"S, 160° 6'41.98"	18 th -19 th of June 2020	1:07 pm	24 Hours	54.9	104.3	97.7	32.9	10m from residential buildings & 10m from access road
Average	48 Hour					60.4	109.8	105.7	32.7	
Notes/ Observations	Village located 10m from access road. High traffic area. Sources of noise were observed from traffic, animals and people.									
Attachment:	1. Record Analysis Graph (Instrument Reading)									
	2. Photographs of Monitoring Setup and Locations									

Monitoring by: Joash Sanga Civil Engineer	Sign:	Reporting By: Edmond Jr Bate E and S Officer	Sign:	Checked By: KIM D Y HSE Manager	Sign:	Page No: 1
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Photographs:



1. Noise monitor set up @ Verande day 1



Noise monitor set up @ Verande day 2

Monitoring by: Joash Sanga Civil Engineer	Sign:	Reporting By: Edmond Jr Bate E and S Officer	Sign:	Checked By: KIM D Y HSE Manager	Sign:	Page No: 2
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HongLim Co., Ltd

Environment Sound Level measurement

Record Analysis

Monitor Start Time: 2020-06-17 11:10

Record Length: 24h

Instrument: HLES-01B

SN: 20170910001

Measurements

Leq: 65.9

Lae: 115.3

Lmax: 113.6

Lmin: 32.4

Time weighting: Fast

Frequency weighting: dB(A)

Description

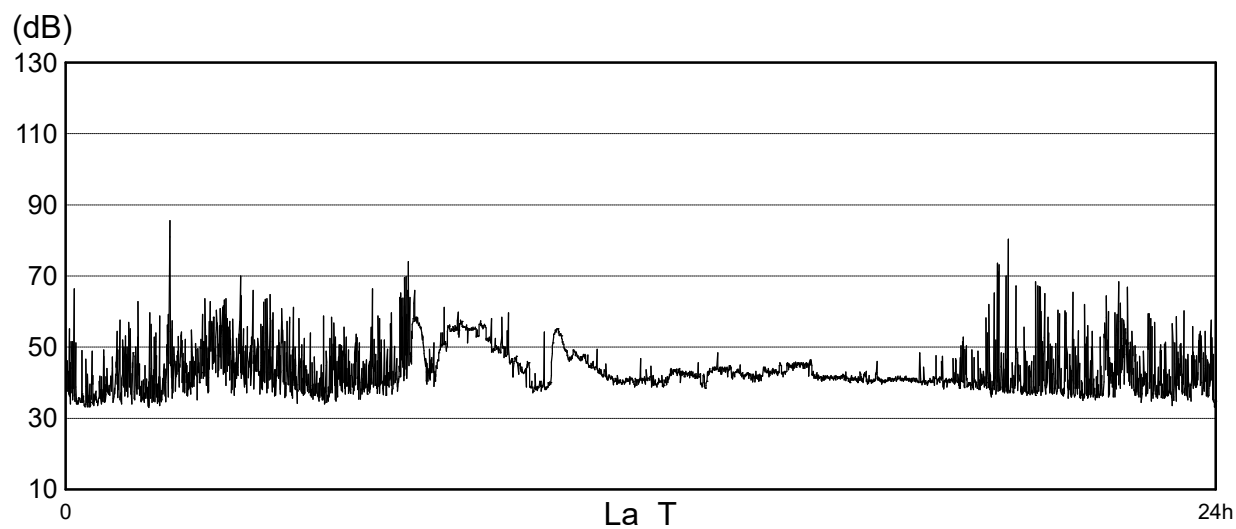
Project: Number of Project1

Operator: Joash Sanga

Company: Hyundai Engineering

Location: LocationB

Remark: Noise Monitoring





HongLim Co., Ltd

Environment Sound Level measurement

Record Analysis

Monitor Start Time: 2020-06-18 13:07

Record Length: 24h

Instrument: HLES-01B

SN: 20170910001

Measurements

Leq: 54.9

Lae: 104.3

Lmax: 97.7

Lmin: 32.9

Time weighting: Fast

Frequency weighting: dB(A)

Description

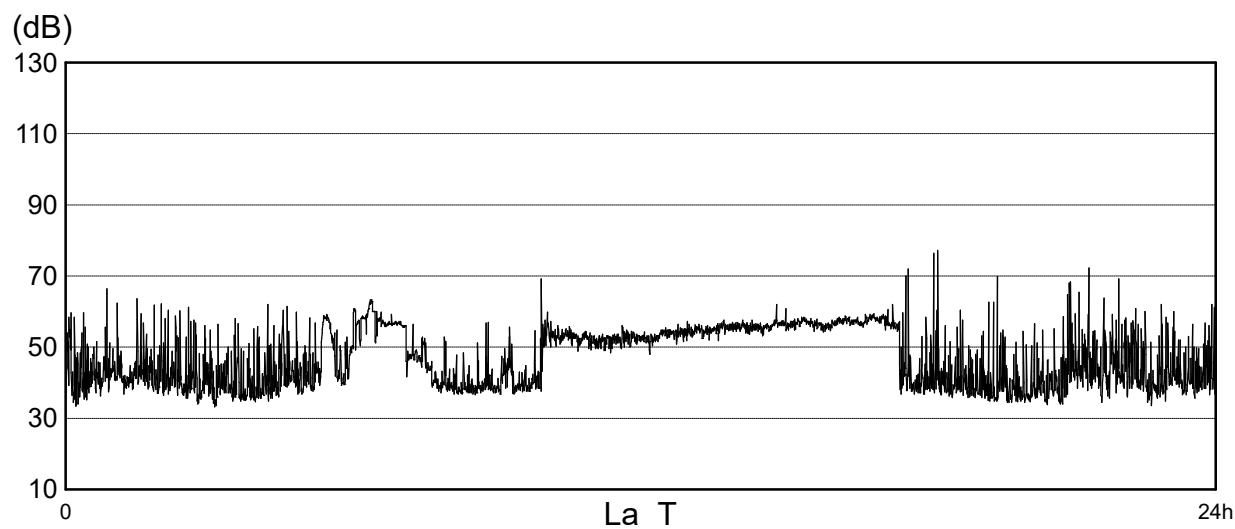
Project: Number of Project1

Operator: Joash Sanga

Company: Hyundai Engineering

Location: LocationB

Remark: Noise Monitoring





Tina River Hydro Development Project
Solomon Islands
ENVIRONMENTAL NOISE MONITORING REPORT

Date of Reporting:
20th June 2020

Reporting Month:
JUNE 2020

Date of Monitoring	10 th -12 th June 2020	Monitoring Frequency	Single Baseline
Equipment Make	Green Mate HLES-01 Noise Statistical Analyzer	Serial Number	
References	M7- AIR QUALITY AND NOISE MONITROING PLAN C13 – NOISE AND VIBRATION MANAGEMENT PLAN		

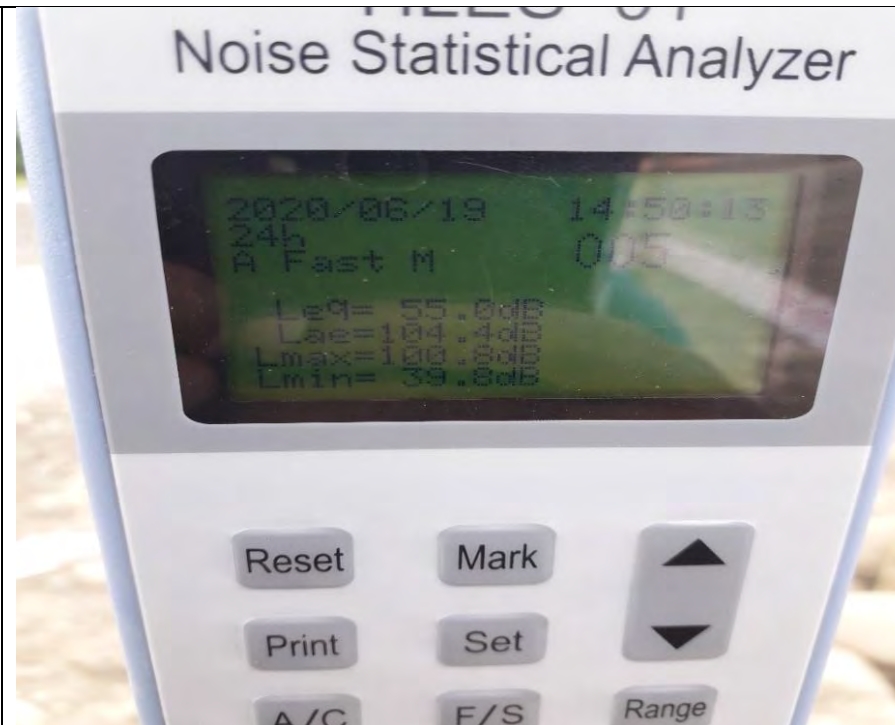
Monitoring Location No	Location Name	GPS Coordinates	Date of Monitoring	Time of Monitoring	Duration of Monitoring	Leq dB(A)	Lae dB(A)	Lmax dB(A)	Lmin dB(A)	Remarks
N1	Crusher Plant 1	9°31'15.94"S 160° 7'5.92"E	19 th -20 th to June 2020	14:50pm to 14:50pm	24 Hours	55	104.4	100.8	39.8	
N2	Crusher Plant 2	9°31'15.94"S 160° 7'5.92"E	20 th -21 th to June 2020	14:58pm to 14:58pm	24 Hours	54.1	103.5	98.3	38.6	
Average					48 Hours	54.6	103.9	99.6	39.2	
Notes/ Observations	<ul style="list-style-type: none"> - Weather on day 1 of monitoring was cloudy and dull. - Source of noise from construction machines, logging vehicles and machines and public transport vehicles (buses & taxi) 									
Attachment:	1. Record Analysis Graph (Instrument Reading)									
	2. Photographs of Monitoring Setup and Locations									

Monitoring by: Joash Sanga Civil Engineer	Sign:	Reporting By: Edmond Jr Bate E and S Officer	Sign:	Checked By: KIM D Y HSE Manager	Sign:	Page no: 1
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Photographs:



Noise monitoring set up location at Crusher plant
10m from construction site and 20m from the river



Screen record of day 1 data.

Monitoring by: Joash Sanga Civil Engineer	Sign:	Reporting By: Edmond Jr Bate E and S Officer	Sign:	Checked By: KIM D Y HSE Manager	Sign:	Page no: 2
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HongLim Co., Ltd

Environment Sound Level measurement

Record Analysis

Monitor Start Time: 2020-06-19 14:50

Record Length: 24h

Instrument: HLES-01B

SN: 20170910001

Measurements

Leq: 55.0

Lae: 104.4

Lmax: 100.8

Lmin: 39.8

Time weighting: Fast

Frequency weighting: dB(A)

Description

Project: Number of Project1

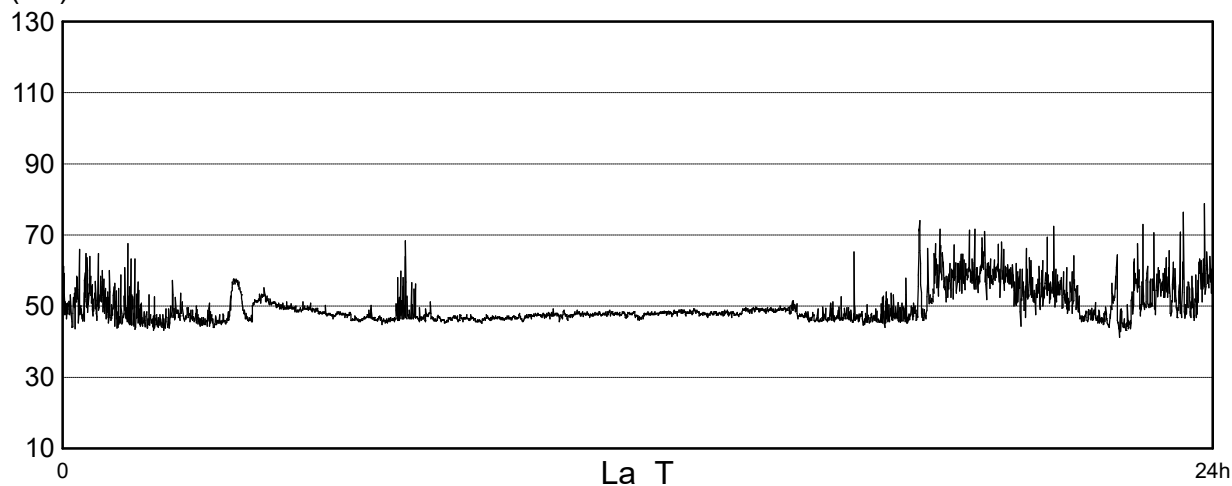
Operator: Joash Sanga

Company: Hyundai Engineering

Location: LocationB

Remark: Noise Monitoring

(dB)





HongLim Co., Ltd

Environment Sound Level measurement

Record Analysis

Monitor Start Time: 2020-06-20 14:58

Record Length: 24h

Instrument: HLES-01B

SN: 20170910001

Measurements

Leq: 54.1

Lae: 103.5

Lmax: 98.3

Lmin: 38.6

Time weighting: Fast

Frequency weighting: dB(A)

Description

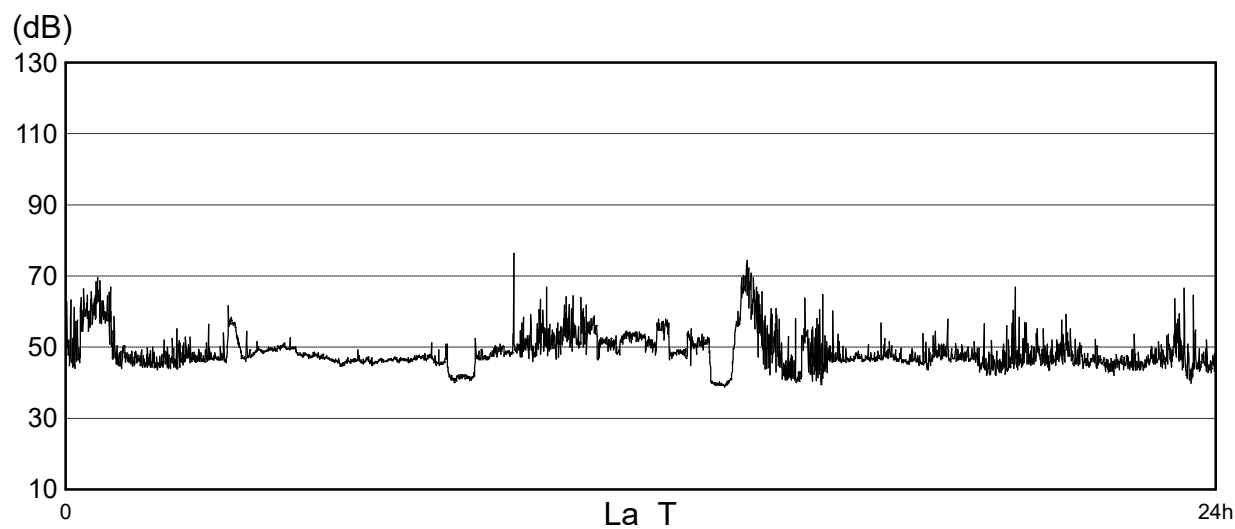
Project: Number of Project1

Operator: Joash Sanga

Company: Hyundai Engineering

Location: LocationB

Remark: Noise Monitoring





Tina River Hydro Development Project
Solomon Islands
ENVIRONMENTAL NOISE MONITORING REPORT

Date of Reporting:
23RD June 2020

Reporting Month:
JUNE 2020

Date of Monitoring	21 ST – 23 RD June 2020	Monitoring Frequency	Single Baseline
Equipment Make	Green Mate HLES-01 Noise Statistical Analyzer	Serial Number	
References	M7- AIR QUALITY AND NOISE MONITROING PLAN C13 – NOISE AND VIBRATION MANAGEMENT PLAN		

Monitoring Location No	Location Name	GPS Coordinates	Date of Monitoring	Time of Monitoring	Duration of Monitoring	Leq dB(A)	Lae dB(A)	Lmax dB(A)	Lmin dB(A)	Remarks
N1	Black Post 1	9°26'28.51"S, 160° 6'2.76"E	21 ST -22 ND of June 2020	16:48	24 Hours	55.7	105.1	99.8	34.8	
N2	Black Post 2	9°26'28.51"S, 160° 6'2.76"E	22 ND -23 RD of June 2020	17:19	24 Hours	53.9	103.3	93.1	33.6	
Average					48 Hours	58.8	104.2	96.5	34.2	
Notes/ Observations	High traffic area. Main sources of noise are observed from public and private vehicles and people.									
Attachment:	1. Record Analysis Graph (Instrument Reading)									
	2. Photographs of Monitoring Setup and Locations									

Monitoring by: Joash Sanga Civil Engineer		Reporting By: Edmond Jr Bate E and S Officer	Sign:	Checked By: KIM D Y HSE Manager	Sign:	Page No: 1
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Photographs



Set up of Noise monitor at Black Post Day 1.

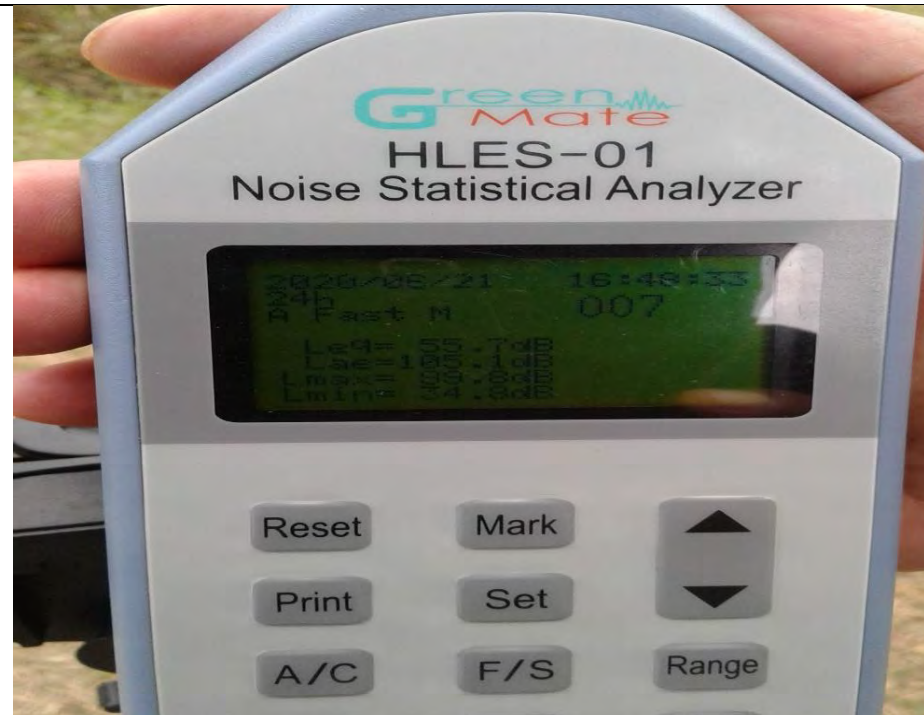


Photo of Field measurement reading – day 1

Monitoring by: Joash Sanga Civil Engineer		Reporting By: Edmond Jr Bate E and S Officer	Sign:	Checked By: KIM D Y HSE Manager	Sign:	Page No: 2
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Set up of Noise monitor at Black Post Day 2



HongLim Co., Ltd

Environment Sound Level measurement

Record Analysis

Monitor Start Time: 2020-06-21 16:48

Record Length: 24h

Instrument: HLES-01B

SN: 20170910001

Measurements

Leq: 55.7

Lae: 105.1

Lmax: 99.8

Lmin: 34.8

Time weighting: Fast

Frequency weighting: dB(A)

Description

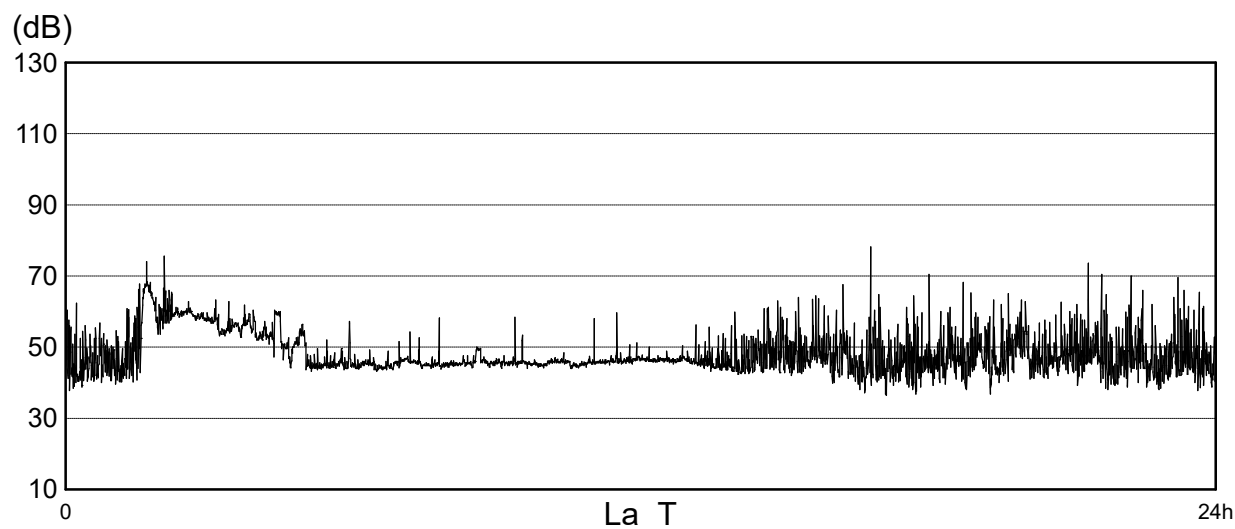
Project: Number of Project1

Operator: Joash Sanga

Company: Hyundai Engineering

Location: LocationB

Remark: Noise Monitoring





HongLim Co., Ltd

Environment Sound Level measurement

Record Analysis

Monitor Start Time: 2020-06-22 17:19

Record Length: 24h

Instrument: HLES-01B

SN: 20170910001

Measurements

Leq: 53.9

Lae: 103.3

Lmax: 93.1

Lmin: 33.6

Time weighting: Fast

Frequency weighting: dB(A)

Description

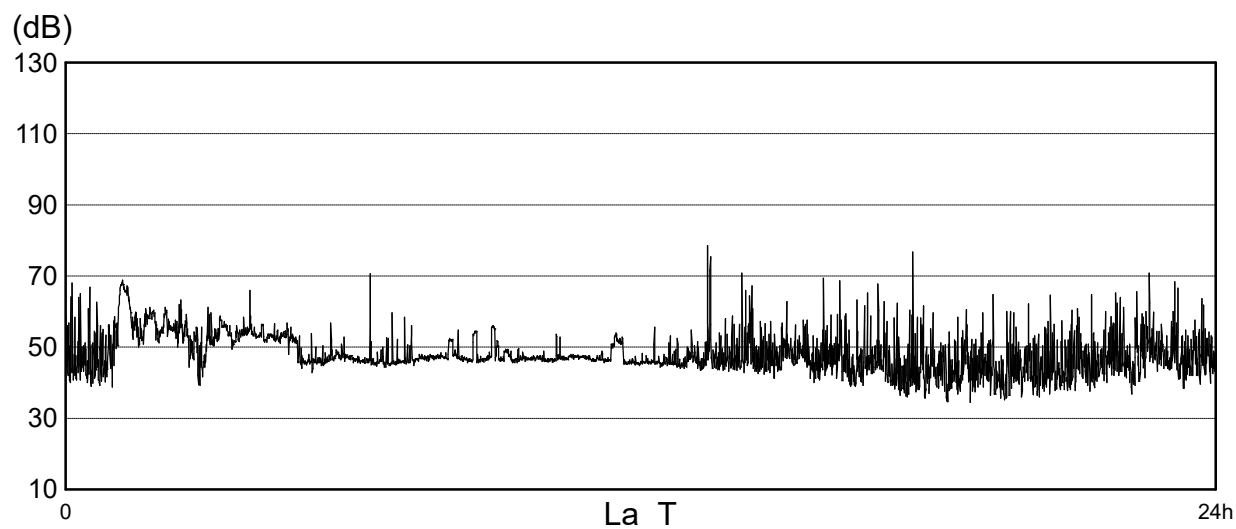
Project: Number of Project1

Operator: Joash Sanga

Company: Hyundai Engineering

Location: LocationB

Remark: Noise Monitoring





Tina River Hydro Development Project
Solomon Islands
ENVIRONMENTAL NOISE MONITORING REPORT

Date of Reporting:
28th June 2020

Reporting Month:
June 2020

Date of Monitoring	25 th – 27 th June 2020	Monitoring Frequency	Single Baseline Event
Equipment Make	Green Mate HLES-01 Noise Statistical Analyzer	Serial Number	
References	M7- AIR QUALITY AND NOISE MONITORING PLAN C13 – NOISE AND VIBRATION MANAGEMENT PLAN		

Monitoring Location No	Location Name	GPS Coordinates	Date of Monitoring	Time of Monitoring	Duration of Monitoring	L _{eq} dB(A)	L _{ae} dB(A)	L _{max} dB(A)	L _{min} dB(A)	Remarks
1	Habusi	9°32'30.63"S, 160°5'12.30"E	25 th -26 th /06/2020	14:17	24 Hours	51.4	80.9	78.4	37.9	10m from residential buildings and 50m from Tina river
2	Habusi	9°32'30.63"S, 160°5'12.30"E	26 th – 27 th /05/2020	14: 39	24 Hours	57. 0	86.5	78.7	37.4	10m from residential buildings and 50m from Tina river
Average					48 Hours	54.2	83.7	78.55	37.65	
Notes/ Observations	Very hot and dry day. Isolated rural area setting. Sources of noise are only from humans and animals such as dogs.									
Attachment:	1. Record Analysis Graph (Instrument Reading) 2. Photographs of Monitoring Setup and Locations									

Monitoring by: Joash Sanga Civil Engineer	Sign:	Reporting By: Edmond Jr Bate E and S Officer	Sign:	Checked By: KIM D Y HSE Manager	Sign:	Page No: 1
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Tina River Hydro Development Project
Solomon Islands
ENVIRONMENTAL NOISE MONITORING REPORT

Date of Reporting:
28th June 2020

Reporting Month:
June 2020

Photographs of Noise Monitoring



Set up of Noise monitor at Habusi
Day 1 & Day 2





Field reading for day 1



Field reading for day 2

Monitoring by: Joash Sanga Civil Engineer	Sign:	Reporting By: Edmond Jr Bate E and S Officer	Sign:	Checked By: KIM D Y HSE Manager	Sign:	Page No: 2
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	AIR QUALITY AND NOISE MONITORING PLAN		
TINA RIVER HYDROPOWER DEVELOPMENT PROJECT	HEC-CDSB-CESMP-MP-007	REV. 7	PAGE 57 OF 57

AIR QUALITY MONITORING BASELINE

Tina River Hydropower Development Project	
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Air Quality Monitoring Report(Baseline 4 hours)

Log Sheet

[illegible]

	Tina River Hydro Development Project Solomon Islands AIR QUALITY MONITORING REPORT	Date of Reporting: 28 th May 2020
		Reporting Month: MAY 2020

Date of Monitoring	27 th May 2020	Monitoring Frequency	Single Baseline Event
Equipment Make/Model	Temtop (M2000)	Serial Number	
Monitoring Site	RATE SCHOOL	Monitoring Duration	Four (4) Hours
References	1. M7 Air Quality and Noise Monitoring Plan 2. P15 Air Quality Management and Dust Control Plan		

Monitoring Location Number	Monitoring Time	Monitoring Duration	PM 2.5 in $\mu\text{g}/\text{m}^3$	PM 10 in $\mu\text{g}/\text{m}^3$	Particles per Litre	CO2 in ppm	HCHO in mg/m^3	Temperature In $^{\circ}\text{C}$	Humidity In %	Remarks
1	10:30 am	10 min	0.2	0.2	19	885	0.080	28.33	71	In school compound - 5m from the road, & 10 m from school buildings (Coordinates: 57 L 0621988, 8950148 E)
2	10:40 am	10 min	0.1	0.2	14	822	0.071	30.56	89	
3	10:50 am	10 min	0.1	0.2	15	787	0.054	31.67	64	
4	11:00 am	10 min	0.1	0.2	12	777	0.059	32.22	64	
5	11:10 am	10 min	0.1	0.2	13	779	0.042	32.78	61	

Monitoring by: Edmond Jr Bate E and S Officer	Sign:	Reporting by: Edmond Jr Bate E and S Officer	Sign:	Checked by: Kim D Y HSE Manager	Sign:	Page No: 1
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	Tina River Hydro Development Project Solomon Islands AIR QUALITY MONITORING REPORT		Date of Reporting: 28 th May 2020
			Reporting Month: MAY 2020

Monitoring Location Number	Monitoring Time	Monitoring Duration	PM 2.5 in $\mu\text{g}/\text{m}^3$	PM 10 in $\mu\text{g}/\text{m}^3$	Particles per Litre	CO2 in ppm	HCHO in mg/m^3	Temperature In $^{\circ}\text{C}$	Humidity In %	Remarks
6	11:20 am	10 min	0.1	0.2	16	769	0.058	32.78	62	
7	11:30 am	10 min	0.1	0.2	16	774	0.037	33.89	59	In school compound - 1m from road (road side (right)) (Coordinates 57 L 0622231, 8949447)
8	11:40 am	10 min	0.1	0.2	10	777	0.039	33.33	59	
9	11:50 am	10 min	0.1	0.2	18	770	0.017	34.44	57	
10	12:00 am	10 min	0.1	0.2	19	773	0.009	33.89	57	
11	12:10 pm	10 min	0.1	0.2	12	769	0.015	35	57	
12	12:20 pm	10 min	0.1	0.2	12	765	0.007	34.44	56	
13	12:30 pm	10 min	0.2	0.3	16	761	0.016	40	48	In school residential compound- 1m from road side (left) (coordinate: 57 L 0622222 8949461 E)

Monitoring by: Edmond Jr Bate E and S Officer	Sign:	Reporting by: Edmond Jr Bate E and S Officer	Sign:	Checked by: Kim D Y HSE Manager	Sign:	Page No: 2
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	Tina River Hydro Development Project Solomon Islands AIR QUALITY MONITORING REPORT		Date of Reporting: 28 th May 2020
			Reporting Month: MAY 2020

Monitoring Location Number	Monitoring Time	Monitoring Duration	PM 2.5 in $\mu\text{g}/\text{m}^3$	PM 10 in $\mu\text{g}/\text{m}^3$	Particles per Litre	CO2 in ppm	HCHO in mg/m^3	Temperature In $^{\circ}\text{C}$	Humidity In %	Remarks
14	12:40 pm	10 min	0.1	0.2	14	776	0.014	39.44	48	
15	12:50 pm	10 min	6.0	10.6	385	767	0.021	40	48	Logging truck carrying logs passed by and caused a lot of dust
16	1:00 pm	10 min	6.4	9.7	937	801	0.020	35.56	58	Logging truck carrying logs passed by and caused a lot of dust
17	1:10 pm	10 min	0.1	0.2	14	793	0.017	34.44	63	
18	1:20 pm	10 min	0.1	0.2	15	788	0.001	33.33	63	
19	1:30 pm	10 min	0.1	0.2	15	787	0.006	35	59	In school residential compound- 5m from road (left) & 10m from residential buildings (Coordinate: 57 L 0622205, 8949471 E)
20	1:40 pm	10 min	0.1	0.2	17	792	0.002	35	56	

Monitoring by: Edmond Jr Bate E and S Officer	Sign:	Reporting by: Edmond Jr Bate E and S Officer	Sign:	Checked by: Kim D Y HSE Manager	Sign:	Page No: 3
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	Tina River Hydro Development Project Solomon Islands AIR QUALITY MONITORING REPORT		Date of Reporting: 28 th May 2020
			Reporting Month: MAY 2020

Monitoring Location Number	Monitoring Time	Monitoring Duration	PM 2.5 in $\mu\text{g}/\text{m}^3$	PM 10 in $\mu\text{g}/\text{m}^3$	Particles per Litre	CO2 in ppm	HCHO in mg/m^3	Temperature In $^{\circ}\text{C}$	Humidity In %	Remarks
21	1:50 pm	10 min	0.2	0.3	12	793	0.001	35	55	
22	2:00 pm	10 min	0.2	0.3	11	794	0.006	37.22	52	
23	2:20 pm	10 min	0.1	0.2	18	791	0.003	37.77	51	
24	2:20 pm	10 min	0.1	0.2	10	796	0.001	38.33	49	
Average	4 Hours		0.63	1.04	68.33	786.91	0.02	34.80	58.60	
Minimum			0.1	0.2	10	761	0.001	28.33	48	
Maximum			6.4	10.6	937	885	0.08	40	89	

Monitoring by: Edmond Jr Bate E and S Officer	Sign:	Reporting by: Edmond Jr Bate E and S Officer	Sign:	Checked by: Kim D Y HSE Manager	Sign:	Page No: 4
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	Tina River Hydro Development Project Solomon Islands AIR QUALITY MONITORING REPORT		Date of Reporting: 28 th May 2020
			Reporting Month: MAY 2020

Wind Speed and Weather Conditions:	Ambient Temperature	35 °C	
	Weather	Clear Sunny in the morning and partly cloudy with brief showers in the afternoon.	
	Wind Speed	-	
	Humidity	59%	
Notes	Monitoring was done at 4 replicate locations at Rate school compound and residential compound 1. In school compound - 5m from the road, & 10 m from school buildings (Coordinates: 57 L 0621988, 8950148 E) 2. In school compound - 1m from road (road side (right)) (Coordinate: 57 L 0622231, 8949447) 3. In school residential compound- 1m from road side (left) (coordinate: 57 L 0622222, 8949461 E) 4. In school residential compound- 5m from road (left) & 10m from residential buildings (Coordinate: 57 L 0622205, 8949471 E)		
Observations	Water truck did water spraying along the Rate School road (3 times during this monitoring period).		

Monitoring by: Edmond Jr Bate E and S Officer	Sign:	Reporting by: Edmond Jr Bate E and S Officer	Sign:	Checked by: Kim D Y HSE Manager	Sign:	Page No: 5
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Photographs:



Site 1 @ Rate School
 In school compound - 5m from the road (right), & 10 m from school buildings
 (Coordinates: 57 L 0621988, 8950148 E)



Site 2 @ Rate School
 In school compound - 1m from road (road side (right))
 (Coordinates
 57 L 0622231, 8949447)

Monitoring by: Edmond Jr Bate E and S Officer	Sign:	Reporting by: Edmond Jr Bate E and S Officer	Sign:	Checked by: Kim D Y HSE Manager	Sign:	Page No: 6
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Site 3 @ Rate School

In school residential compound- 1m from road side (left)
(coordinate: 57 L 0622222)



Site 4 @ Rate School

In school residential compound- 5m from road (left) & 10m from residential buildings
(Coordinate: 57 L 0622205, 8949471 E)

Monitoring by: Edmond Jr Bate E and S Officer	Sign:	Reporting by: Edmond Jr Bate E and S Officer	Sign:	Checked by: Kim D Y HSE Manager	Sign:	Page No: 7
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	Tina River Hydro Development Project Solomon Islands AIR QUALITY MONITORING REPORT		Date of Reporting: 29 th May 2020
			Reporting Month: MAY 2020

Date of Monitoring	29 th May 2020	Monitoring Frequency	Single Baseline Event
Equipment Make/Model	Temtop (M2000)	Serial Number	
Monitoring Site	BLACK POST ROAD	Monitoring Duration	Four (4) Hours
References	1. M7 Air Quality and Noise Monitoring Plan 2. P15 Air Quality Management and Dust Control Plan		

Monitoring Location Number	Monitoring Time	Monitoring Duration	PM 2.5 in $\mu\text{g}/\text{m}^3$	PM 10 in $\mu\text{g}/\text{m}^3$	Particles per Litre	CO2 in ppm	HCHO in mg/m^3	Temperature In $^{\circ}\text{C}$	Humidity In %	Remarks
1	11:30AM	10 min	0.2	0.3	15	849	0.002	37.2	54	5m from road, and 5m from residential area (Coordinates: 57 L 0620844 8956177)
2	11:40AM	10 min	0.1	0.2	13	811	0.050	38.9	56	
3	11:50AM	10 min	2.0	3.5	239	796	0.043	40.6	51	
4	12:00 PM	10 min	4.5	6.5	439	817	0.001	42.2	45	
5	12:10 PM	10 min	1.5	1.7	92	817	0.001	40	48	
6	12:20 PM	10 min	2.8	4.5	314	815	0.001	38.9	51	

Monitoring by: Edmond Jr Bate E and S Officer	Sign:	Reporting by: Edmond Jr Bate E and S Officer	Sign:	Checked by: Kim D Y HSE Manager	Sign:	Page No: 1
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	Tina River Hydro Development Project Solomon Islands AIR QUALITY MONITORING REPORT		Date of Reporting: 29 th May 2020
			Reporting Month: MAY 2020

Monitoring Location Number	Monitoring Time	Monitoring Duration	PM 2.5 in $\mu\text{g}/\text{m}^3$	PM 10 in $\mu\text{g}/\text{m}^3$	Particles per Litre	CO2 in ppm	HCHO in mg/m^3	Temperature In $^{\circ}\text{C}$	Humidity In %	Remarks
7	12:30 PM	10 min	1.3	1.9	319	809	0.001	40	48	
8	12:40 PM	10 min	2.0	3.5	279	821	0.001	35	58	
9	12:50 PM	10 min	2.0	3.3	208	845	0.001	34.4	57	Measurements taken on road. Rain started raining. (Coordinates: 57 L 0620840 8956066)
10	1:00 PM	10 min	0.1	0.2	13	843	0.001	32.8	64	Rain showers
11	1:10 PM	10 min	0.2	0.3	10	840	0.001	31.7	65	Rain showers
12	1:20 PM	10 min	0.2	0.3	16	848	0.001	30.6	70	Rain showers
13	1:30 PM	10 min	0.1	0.2	11	867	0.001	29.4	71	Rain stops/cloudy skies
14	1:40 PM	10 min	0.1	0.2	16	856	0.001	28.9	74	Measurements taken 1m from the road. Weather is dull & cloudy. (Coordinates: 57 L 0620863)

Monitoring by: Edmond Jr Bate E and S Officer	Sign:	Reporting by: Edmond Jr Bate E and S Officer	Sign:	Checked by: Kim D Y HSE Manager	Sign:	Page No: 2
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	Tina River Hydro Development Project Solomon Islands AIR QUALITY MONITORING REPORT		Date of Reporting: 29 th May 2020
			Reporting Month: MAY 2020


Monitoring Location Number	Monitoring Time	Monitoring Duration	PM 2.5 in $\mu\text{g}/\text{m}^3$	PM 10 in $\mu\text{g}/\text{m}^3$	Particles per Litre	CO2 in ppm	HCHO in mg/m^3	Temperature In $^{\circ}\text{C}$	Humidity In %	Remarks
15	1:50 PM	10 min	0.1	0.2	17	881	0.001	28.9	75	
16	2:00 PM	10 min	0.1	0.2	17	913	0.001	29.4	73	
17	2:10 PM	10 min	0.1	0.2	16	898	0.001	29.4	75	
18	2:20 PM	10 min	0.1	0.2	16	948	0.001	29.4	75	
19	2:30 PM	10 min	0.1	0.2	11	909	0.001	28.9	77	
20	2:40 PM	10 min	0.1	0.2	14	1973	0.001	30	76	
21	2:50 PM	10 min	0.1	0.2	19	954	0.002	29.4	74	
22	3:00 PM	10 min	0.1	0.2	10	850	0.001	29.4	74	

Monitoring by: Edmond Jr Bate E and S Officer	Sign:	Reporting by: Edmond Jr Bate E and S Officer	Sign:	Checked by: Kim D Y HSE Manager	Sign:	Page No: 3
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	Tina River Hydro Development Project Solomon Islands AIR QUALITY MONITORING REPORT		Date of Reporting: 29 th May 2020
			Reporting Month: MAY 2020

Monitoring Location Number	Monitoring Time	Monitoring Duration	PM 2.5 in $\mu\text{g}/\text{m}^3$	PM 10 in $\mu\text{g}/\text{m}^3$	Particles per Litre	CO2 in ppm	HCHO in mg/m^3	Temperature In $^{\circ}\text{C}$	Humidity In %	Remarks
23	3:10 PM	10 min	0.1	0.2	16	851	0.001	29.4	73	
24	3:20 PM	10 min	0.1	0.2	19	894	0.002	30	71	
Average	4 Hours		0.7	1.2	89	804.4	0.005	33.1	64.8	
Minimum			0.1	0.2	10	796	0.001	28.9	45	
Maximum			4.5	6.5	439	1973	0.05	42.2	77	

Monitoring by: Edmond Jr Bate E and S Officer	Sign:	Reporting by: Edmond Jr Bate E and S Officer	Sign:	Checked by: Kim D Y HSE Manager	Sign:	Page No: 4
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		Tina River Hydro Development Project Solomon Islands AIR QUALITY MONITORING REPORT			Date of Reporting: 29 th May 2020 <hr/> Reporting Month: MAY 2020	
Wind Speed and Weather Conditions:	Ambient Temperature	33°C				
	Weather	Sunny but cloudy in the morning. Dull and rainy in the afternoon				
	Wind Speed	-				
	Humidity	65%				
Notes	Air quality testing at Black Post was conducted at three (3) locations along the road. <ol style="list-style-type: none"> In residential compound 5m from road, and 5m from residential area (left side of road) (Coordinates: 57 L 0620844, 8956177) Measurements taken on road. (left side of road) (Coordinates: 57 L 0620840, 8956066) Measurements taken 1m from the road. (right side of road) (Coordinates: 57 L 0620863, 8956143) 					
Observations	<ul style="list-style-type: none"> - Weather was sunny but cloudy in the morning. In the afternoon it was dull and raining. - Very high traffic area. - Locals in the area informed that dust has been an ongoing problem prior to the TRHDP. 					
Attachment:	1. Record Analysis Photographs					
	2. Photographs of Monitoring Setup and Locations					
Monitoring by: Edmond Jr Bate E and S Officer	Sign:	Reporting by: Edmond Jr Bate E and S Officer	Sign:	Checked by: Kim D Y HSE Manager	Sign:	Page No: 5

Photographs



Site 1 @ Black Post Road

In residential compound- 5m from the road (right), & 5 m from residential building (Coordinates: 57 L 0620844, 8956177)



Site 1 @ Black Post Road

In residential compound – 5m from road & 5m from house (Coordinates: 57 L 0620844, 8956177)

Monitoring by:
 Edmond Jr Bate
 E and S Officer

Sign:

Reporting by:
 Edmond Jr Bate
 E and S Officer

Sign:

Checked by:
 Kim D Y
 HSE Manager

Sign:

Page No:
 6



Site 2 @ Black Post Road
 Measurements taken on the road. (left side of road)
 (Coordinates: 57 L 0620840, 8956066)



Site 3 @ Black Post Road
 Measurements taken 1m from the road. (right side of road)
 (Coordinates: 57 L 0620863, 8956143)



Afternoon Weather during monitoring period at Black Post



Traffic along Black Post Road

Monitoring by:
 Edmond Jr Bate
 E and S Officer

Sign:

Reporting by:
 Edmond Jr Bate
 E and S Officer

Sign:

Checked by:
 Kim D Y
 HSE Manager

Sign:

Page No:
 8

	Tina River Hydro Development Project Solomon Islands AIR QUALITY MONITORING REPORT	Date of Reporting: 6 th JUNE 2020
		Reporting Month: JUNE 2020

Date of Monitoring	03.06.2020	Monitoring Frequency	Single Baseline Event
Equipment Make/Model	Temtop (M2000)	Serial Number	
Monitoring Site	Church (Lot 1 Sta. 6+400)	Monitoring Duration	Four (4) Hours
References	1. M7 Air Quality and Noise Monitoring Plan 2. P15 Air Quality Management and Dust Control Plan		

Monitoring Location Number	Monitoring Time	Monitoring Duration	PM 2.5 in $\mu\text{g}/\text{m}^3$	PM 10 in $\mu\text{g}/\text{m}^3$	Particles per Litre	CO2 in ppm	HCHO in mg/m^3	Temperature In $^{\circ}\text{C}$	Humidity In %	Remarks
1	10:56	10min	0.2	0.3	18	856	0.040	33.3	59	5m from the road and 7m from residential building (Coordinates: 57 L 0621713, 8950462 E)
2	11:06	10min	0.1	0.2	17	828	0.032	32.2	62	
3	11:16	10min	0.1	0.2	19	817	0.041	33.8	58	
4	11:26	10min	0.1	0.2	15	811	0.033	37.2	51	
5	11:36	10min	0.1	0.2	16	819	0.001	37.2	52	
6	11:46	10min	0.1	0.2	17	796	0.001	37.7	49	
7	11: 56	10min	0.2	0.3	18	805	0.001	38.3	48	
8	12:06	10min	0.1	0.2	16	825	0.001	36.7	51	

Monitoring by: Joash Sanga Civil Engineer	Sign:	Reporting by: Edmond Jr Bate E and S Officer	Sign:	Checked by: Kim D Y HSE Manager	Sign:	Page No: 1
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	Tina River Hydro Development Project Solomon Islands AIR QUALITY MONITORING REPORT		Date of Reporting: 6 th JUNE 2020
			Reporting Month: JUNE 2020

Monitoring Location Number	Monitoring Time	Monitoring Duration	PM 2.5 in $\mu\text{g}/\text{m}^3$	PM 10 in $\mu\text{g}/\text{m}^3$	Particles per Litre	CO2 in ppm	HCHO in mg/m^3	Temperature In $^{\circ}\text{C}$	Humidity In %	Remarks
9	12:16	10min	0.1	0.2	15	827	0.001	35.6	54	
10	12:26	10min	0.2	0.3	18	823	0.001	38.8	45	
11	12:36	10min	0.1	0.2	18	831	0.002	38.3	48	
12	12:46	10min	0.1	0.2	14	837	0.001	38.3	48	
13	12:56	10min	0.1	0.2	14	842	0.001	38.8	46	
14	1:06	10min	0.1	0.2	13	872	0.002	37.8	49	
15	1:16	10min	0.1	0.2	13	860	0.001	37.8	49	
16	1:26	10min	0.1	0.2	17	879	0.001	35.6	54	
17	1:36	10min	0.1	0.2	15	878	0.001	37.8	50	
18	1:46	10min	0.2	0.3	17	883	0.001	36.1	50	
19	1:56	10min	0.1	0.2	17	884	0.002	37.2	50	
20	2:06	10min	0.1	0.2	19	893	0.001	35.6	51	

Monitoring by: Joash Sanga Civil Engineer	Sign:	Reporting by: Edmond Jr Bate E and S Officer	Sign:	Checked by: Kim D Y HSE Manager	Sign:	Page No: 2
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	Tina River Hydro Development Project Solomon Islands AIR QUALITY MONITORING REPORT								Date of Reporting: 6 th JUNE 2020
									Reporting Month: JUNE 2020

21	2:16	10min	0.1	0.2	15	891	0.001	37.2	49	
22	2:26	10min	0.1	0.2	16	898	0.001	35.6	51	
23	2:36	10min	0.1	0.2	16	898	0.001	36.7	51	
24	2:46	10min	-	-	-	-	-	-	-	Equipment Battery died
Average	4 Hours		0.12	0.22	16.2	850.1	0.007	36.7	51.1	
Maximum			0.2	0.3	19	898	0.041	38.8	62	
Minimum			0.1	0.2	13	796	0.001	32.2	45	

Monitoring by: Joash Sanga Civil Engineer	Sign:	Reporting by: Edmond Jr Bate E and S Officer	Sign:	Checked by: Kim D Y HSE Manager	Sign:	Page No: 3
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	Tina River Hydro Development Project Solomon Islands AIR QUALITY MONITORING REPORT		Date of Reporting: 6 th JUNE 2020
			Reporting Month: JUNE 2020

Wind Speed and Weather Conditions:	Ambient Temperature	38°C	
	Weather	Sunny and cloudy day	
	Wind Speed	-	
	Humidity	51%	
Notes	1. Monitoring was conducted at only one location within the Church compound for the entire 4 hours. (Coordinates: 57 L 0621713, 8950462 E)		
Observations	1. High traffic area. Public buses, private vehicles, HEC vehicles and Logging trucks use the nearby road. 2. Dust from the road is generated mostly by passing vehicles and machines. 3. Visible dust is observed 4. Local community people mentioned that the dust is an existing problem within the area prior to TRHDP project.		
Attachment:	1. Record Analysis Photographs		
	2. Photographs of Monitoring Setup and Locations		

Monitoring by: Joash Sanga Civil Engineer	Sign:	Reporting by: Edmond Jr Bate E and S Officer	Sign:	Checked by: Kim D Y HSE Manager	Sign:	Page No: 4
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Photographs



1. Location of Air quality monitor located 5m from road
 (Coordinates: 57 L 0621713, 8950462 E)



2. Location of Air quality monitor located 7m from residential
 building (Coordinates: 57 L 0621713, 8950462 E)

Monitoring by: Joash Sanga Civil Engineer	Sign:	Reporting by: Edmond Jr Bate E and S Officer	Sign:	Checked by: Kim D Y HSE Manager	Sign:	Page No: 5
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	Tina River Hydro Development Project Solomon Islands AIR QUALITY MONITORING REPORT	Date of Reporting: 5 th June 2020
		Reporting Month: JUNE 2020

Date of Monitoring	04.06.2020	Monitoring Frequency	Single Baseline Event
Equipment Make/Model	Temtop (M2000)	Serial Number	
Monitoring Site	Antioch	Monitoring Duration	Four (4) Hours
References	1. M7 Air Quality and Noise Monitoring Plan 2. P15 Air Quality Management and Dust Control Plan		

Monitoring Location Number	Monitoring Time	Monitoring Duration	PM 2.5 in $\mu\text{g}/\text{m}^3$	PM 10 in $\mu\text{g}/\text{m}^3$	Particles per Litre	CO2 in ppm	HCHO in mg/m^3	Temperature In $^{\circ}\text{C}$	Humidity In %	Remarks
1	11:39	10 min	0.2	0.3	13	937	0.015	37.2	55	Placed 7m from resident building and 35m from road Coordinates: Lat: -9.524683 S Long: 160.097804 E
2	11:49	10 min	0.1	0.2	12	925	0.002	36.7	55	
3	11:59	10 min	0.1	0.2	14	915	0.001	36.1	54	
4	12:09	10 min	0.1	0.2	17	907	0.001	35	58	Brief rain drizzle
5	12:19	10 min	0.1	0.2	15	927	0.028	32.2	64	Moved to shelter equipment in house with no walls from rain
6	12:29	10 min	0.1	0.2	13	919	0.016	31.1	66	Equipment moved to next open location after rain stopped Coordinates: Lat: - 9.524683 S Long: 160.097804 E

Monitoring by: Joash Sanga Civil Engineer	Sign:	Reporting by: Edmond Jr Bate E and S Officer	Sign:	Checked by: Kim D Y HSE Manager	Sign:	Page No: 1
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	Tina River Hydro Development Project Solomon Islands AIR QUALITY MONITORING REPORT		Date of Reporting: 5 th June 2020
			Reporting Month: JUNE 2020

Monitoring Location Number	Monitoring Time	Monitoring Duration	PM 2.5 in $\mu\text{g}/\text{m}^3$	PM 10 in $\mu\text{g}/\text{m}^3$	Particles per Liter	CO2 in ppm	HCHO in mg/m^3	Temperature In $^{\circ}\text{C}$	Humidity In %	Remarks
7	12:39	10 min	0.1	0.2	18	916	0.002	33.3	66	
8	12:49	10 min	0.1	0.2	15	912	0.002	35	60	
9	12:59	10 min	0.1	0.2	16	917	0.005	35.5	60	
10	1:09	10 min	0.2	0.3	16	906	0.002	35.5	61	
11	1:19	10 min	0.1	0.2	17	911	0.002	36.1	59	
12	1:29	10 min	0.1	0.2	11	907	0.001	37.8	53	
13	1:39	10 min	0.1	0.2	15	905	0.001	38.9	51	
14	1:49	10 min	0.2	0.3	19	906	0.001	40	48	
15	1:59	10 min	0.1	0.2	14	921	0.001	39.4	54	
16	2:09	10 min	0.1	0.2	16	913	0.001	37.2	51	
17	2:19	10 min	0.1	0.2	13	917	0.001	38.8	50	
18	2:29	10 min	0.1	0.2	14	912	0.001	36.7	52	

Monitoring by: Joash Sanga Civil Engineer	Sign:	Reporting by: Edmond Jr Bate E and S Officer	Sign:	Checked by: Kim D Y HSE Manager	Sign:	Page No: 2
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	Tina River Hydro Development Project Solomon Islands AIR QUALITY MONITORING REPORT		Date of Reporting: 5 th June 2020
			Reporting Month: JUNE 2020

Monitoring Location Number	Monitoring Time	Monitoring Duration	PM 2.5 in $\mu\text{g}/\text{m}^3$	PM 10 in $\mu\text{g}/\text{m}^3$	Particles per Litre	CO2 in ppm	HCHO in mg/m^3	Temperature In $^{\circ}\text{C}$	Humidity In %	Remarks
19	2:39	10 min	0.1	0.2	12	897	0.001	41.1	42	
20	2:49	10 min	0.2	0.3	13	909	0.001	34.4	56	
21	2:59	10 min	0.1	0.2	16	917	0.002	31.7	64	
22	3:09	10 min	0.1	0.2	13	912	0.002	34.4	59	
23	3:19	10 min	0.1	0.2	15	806	0.001	33.9	61	
24	3:29	10 min	-	-	-	-	-	-	-	Equipment battery dead
Average	4 Hours		0.12	0.22	14.7	909.3	0.004	36	56.5	
Maximum			0.2	0.3	19	937	0.028	41.1	66	
Minimum			0.1	0.2	11	806	0.001	31.1	42	

Monitoring by: Joash Sanga Civil Engineer	Sign:	Reporting by: Edmond Jr Bate E and S Officer	Sign:	Checked by: Kim D Y HSE Manager	Sign:	Page No: 3
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	Tina River Hydro Development Project Solomon Islands AIR QUALITY MONITORING REPORT		Date of Reporting: 5 th June 2020
			Reporting Month: JUNE 2020

Wind Speed and Weather Conditions:	Ambient Temperature	36°C	
	Weather	Sunny day with brief showers in the morning. Afternoon was all sunny	
	Wind Speed	-	
	Humidity	57%	
Notes	At Antioch, monitoring was carried out at two (2) locations; 1. 7m from the a residential building (Lat: -9.524683 S, Long: 160.097804 E) 2. 5m from residential building (Lat: - 9.524683 S, Long: 160.097804 E)		
Observations	1. No visible dust is observed within the village for entire monitoring 4 hours. 2. Sources of bad air quality were observed from smoke resulting from burning organic rubbish (dead grass, debris) and from kitchen smoke. Also from exposed soil surfaces.		
Attachment:	1. Record Analysis Photographs		
	2. Photographs of Monitoring Setup and Locations		

Monitoring by: Joash Sanga Civil Engineer	Sign:	Reporting by: Edmond Jr Bate E and S Officer	Sign:	Checked by: Kim D Y HSE Manager	Sign:	Page No: 4
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Photographs



1. 7m from the a residential building (Lat: -9.524683 S, Long: 160.097804 E)



2. 5m from residential building (Lat: - 9.524683 S, Long: 160.097804 E)

Monitoring by: Joash Sanga Civil Engineer	Sign:	Reporting by: Edmond Jr Bate E and S Officer	Sign:	Checked by: Kim D Y HSE Manager	Sign:	Page No: 5
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	Tina River Hydro Development Project Solomon Islands AIR QUALITY MONITORING REPORT	Date of Reporting: 8 th June 2020
		Reporting Month: JUNE 2020

Date of Monitoring	08.06.2020	Monitoring Frequency	Single Baseline Event
Equipment Make/Model	Temtop (M2000)	Serial Number	
Monitoring Site	Marava Village	Monitoring Duration	Four (4) Hours
References	1. M7 Air Quality and Noise Monitoring Plan 2. P15 Air Quality Management and Dust Control Plan		

Monitoring Location Number	Monitoring Time	Monitoring Duration	PM 2.5 in $\mu\text{g}/\text{m}^3$	PM 10 in $\mu\text{g}/\text{m}^3$	Particles per Litre	CO2 in ppm	HCHO in mg/m^3	Temperature In $^{\circ}\text{C}$	Humidity In %	Remarks
1	10:50 am	10 min	0.1	0.20	16	960	0.001	37.2	52	Location 1. 50m from the road & 3m from buildings. coordinates (57 L 0621638, 8949339)
2	11:00 am	10 min	0.1	0.2	122	918	0.001	41.7	47	
3	11:10 am	10 min	0.1	0.2	13	903	0.003	47.2	36	
4	11:20 am	10 min	0.1	0.2	16	892	0.002	51	31	
5	11:30 am	10 min	0.1	0.2	18	919	0.001	36.6	48	Location 2 60m from road and 5m from buildings. Coordinates (57 L 0621621, 8949324) 5m from building
6	11:40 am	10 min	0.1	0.2	17	930	0.001	36.1	53	

Monitoring by: Joash Sanga Civil Engineer	Sign:	Reporting by: Edmond Jr Bate E and S Officer	Sign:	Checked by: Kim D Y HSE Manager	Sign:	Page No: 1
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	Tina River Hydro Development Project Solomon Islands AIR QUALITY MONITORING REPORT		Date of Reporting: 8 th June 2020
			Reporting Month: JUNE 2020

Monitoring Location Number	Monitoring Time	Monitoring Duration	PM 2.5 in $\mu\text{g}/\text{m}^3$	PM 10 in $\mu\text{g}/\text{m}^3$	Particles per Litre	CO2 in ppm	HCHO in mg/m^3	Temperature In $^{\circ}\text{C}$	Humidity In %	Remarks
7	11:50 am	10 min	0.2	0.3	13	924	0.002	32.8	65	
8	12:00 pm	10 min	0.1	0.2	16	932	0.001	32.8	66	
9	12:10 pm	10 min	0.1	0.2	12	937	0.001	33.8	61	
10	12:20 pm	10 min	0.2	0.3	18	931	0.001	32	65	Location 3. 45m from road and 5m from buildings. coordinates (57 L 0621605, 8949331)
11	12:30 pm	10 min	0.2	0.3	10	927	0.002	33.8	63	
12	12:40 pm	10 min	0.1	0.2	17	933	0.001	35	60	
13	12:50 pm	10 min	0.1	0.2	19	940	0.001	35	58	
14	1:00 pm	10 min	0.1	0.2	15	935	0.001	36.1	57	
15	1:10 pm	10 min	0.1	0.2	14	938	0.001	36.7	55	

Monitoring by: Joash Sanga Civil Engineer	Sign:	Reporting by: Edmond Jr Bate E and S Officer	Sign:	Checked by: Kim D Y HSE Manager	Sign:	Page No: 2
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	Tina River Hydro Development Project Solomon Islands AIR QUALITY MONITORING REPORT		Date of Reporting: 8 th June 2020
			Reporting Month: JUNE 2020

Monitoring Location Number	Monitoring Time	Monitoring Duration	PM 2.5 in $\mu\text{g}/\text{m}^3$	PM 10 in $\mu\text{g}/\text{m}^3$	Particles per Litre	CO2 in ppm	HCHO in mg/m^3	Temperature In $^{\circ}\text{C}$	Humidity In %	Remarks
16	1:20 pm	10 min	0.1	0.2	10	938	0.001	36.1	54	Location 4. 15m from road and 3m from buildings. coordinates (57 L 0621958, 8949429)
17	1:30 pm	10 min	0.2	0.3	15	928	0.001	33.8	61	
18	1:40 pm	10 min	0.1	0.2	11	927	0.001	32.8	63	
19	1:50 pm	10 min	0.1	0.2	16	931	0.001	32.2	64	
20	2:00 pm	10 min	0.2	0.3	16	939	0.001	30.5	66	
21	2:10 pm	10 min	0.1	0.2	13	931	0.001	30.5	68	
22	2:20 pm	10 min	0.2	0.3	19	939	0.001	30.5	68	
23	2:30 pm	10 min	0.1	0.2	14	946	0.001	30	68	

Monitoring by: Joash Sanga Civil Engineer	Sign:	Reporting by: Edmond Jr Bate E and S Officer	Sign:	Checked by: Kim D Y HSE Manager	Sign:	Page No: 3
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	Tina River Hydro Development Project Solomon Islands AIR QUALITY MONITORING REPORT		Date of Reporting: 8 th June 2020
			Reporting Month: JUNE 2020

24	2:40 pm	10 min	0.1	0.2	16	943	0.002	29.4	69	
Average	4 Hours		0.13	0.23	19.42	930.9	0.001	35.2	58.3	
Maximum			0.2	0.3	122	960	0.003	51	69	
Minimum			0.1	0.2	10	892	0.001	29.4	31	


Monitoring by: Joash Sanga Civil Engineer	Sign:	Reporting by: Edmond Jr Bate E and S Officer	Sign:	Checked by: Kim D Y HSE Manager	Sign:	Page No: 4
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	Tina River Hydro Development Project Solomon Islands AIR QUALITY MONITORING REPORT		Date of Reporting: 8 th June 2020
			Reporting Month: JUNE 2020

Wind Speed and Weather Conditions:	Ambient Temperature	35°C	
	Weather	Sunny/Cloudy	
	Wind Speed	-	
	Humidity	58%	
Notes	Monitoring at Marava is conducted at 4 locations. 1. Location 1 coordinates(57 L 0621638, 8949339) 3m from building and 50m from road 2. Location 2 coordinates (57L 0621621, 8949324) 5m from building and 60m from road. 3. Location 3 coordinates (57 L 0621605, 8949331) 5m from building and 45m from road 4. Location 4 coordinates (57 L 0621958, 8949429) 3m from building and 15m from road		
Observations	1. Village setting. 5m from access road 2. Visible dust was observed to be minimal during monitoring period 3. Source of dust from road due to high traffic area 4. Poor air quality from kitchen smoke and smoke resulted from burning of organic materials such as dead grass/leaves/debris		
Attachment:	1. Record Analysis Photographs		
	2. Photographs of Monitoring Setup and Locations		

Monitoring by: Joash Sanga Civil Engineer	Sign:	Reporting by: Edmond Jr Bate E and S Officer	Sign:	Checked by: Kim D Y HSE Manager	Sign:	Page No: 5
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	Tina River Hydro Development Project Solomon Islands AIR QUALITY MONITORING REPORT	Date of Reporting: 8th June 2020
		Reporting Month: JUNE 2020

Photographs	
	
Location 1 coordinates(57 L 0621638, 8949339) 3m from building and 50m from road	Location 2 coordinates (57L 0621621, 8949324) 5m from building and 60m from road.

Monitoring by: Joash Sanga Civil Engineer	Sign:	Reporting by: Edmond Jr Bate E and S Officer	Sign:	Checked by: Kim D Y HSE Manager	Sign:	Page No: 6
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	Tina River Hydro Development Project Solomon Islands AIR QUALITY MONITORING REPORT	Date of Reporting: 8th June 2020
		Reporting Month: JUNE 2020

	
Location 3 coordinates (57 L 0621605, 8949331) 5m from building and 45m from road	Location 4 coordinates (57 L 0621958, 8949429) 3m from building and 15m from road

Monitoring by: Joash Sanga Civil Engineer	Sign:	Reporting by: Edmond Jr Bate E and S Officer	Sign:	Checked by: Kim D Y HSE Manager	Sign:	Page No: 7
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	Tina River Hydro Development Project Solomon Islands AIR QUALITY MONITORING REPORT		Date of Reporting: 10 th JUNE 2020
			Reporting Month: JUNE 2020

Date of Monitoring	10.06.2020	Monitoring Frequency	Single Baseline Event
Equipment Make/Model	Temtop (M2000)	Serial Number	
Monitoring Site	Managikiki	Monitoring Duration	Four (4) Hours
References	1. M7 Air Quality and Noise Monitoring Plan 2. P15 Air Quality Management and Dust Control Plan		

Monitoring Location Number	Monitoring Time	Monitoring Duration	PM 2.5 in µg/m ³	PM 10 in µg/m ³	Particles per Litre	CO2 in ppm	HCHO in mg/m ³	Temperature In °C	Humidity In %	Remarks
1	10:34	10min	0.1	0.2	13	983	0.027	30	70	12m from the road (Coordinates: 57 L 0619512.81, 8946142.95 E)
2	10:44	10min	0.1	0.2	17	947	0.045	31.1	63	
3	10:54	10min	0.1	0.2	12	928	0.060	32.2	63	
4	11:04	10min	0.1	0.2	13	922	0.064	32.8	65	
5	11:14	10min	0.2	0.3	18	910	0.049	32.8	61	
6	11:24	10min	0.1	0.2	19	907	0.040	33.3	57	Moved to location 2
7	11:41	17min	0.2	0.3	14	899	0.033	36.1	55	Location 2 Coordinates: 57 L 0619577.18, 8946278.54 E)
8	11:51	10min	0.1	0.2	10	897	0.041	36.1	54	

Monitoring by: Joash Sanga Civil Engineer	Sign:	Reporting by: Edmond Jr Bate E and S Officer	Sign:	Checked by: Kim D Y HSE Manager	Sign:	Page No: 1
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	Tina River Hydro Development Project Solomon Islands AIR QUALITY MONITORING REPORT		Date of Reporting: 10 th JUNE 2020
			Reporting Month: JUNE 2020

Monitoring Location Number	Monitoring Time	Monitoring Duration	PM 2.5 in $\mu\text{g}/\text{m}^3$	PM 10 in $\mu\text{g}/\text{m}^3$	Particles per Litre	CO2 in ppm	HCHO in mg/m^3	Temperature In $^{\circ}\text{C}$	Humidity In %	Remarks
9	12:01	10min	0.1	0.2	13	892	0.033	35.6	52	
10	12:11	10min	0.1	0.2	11	886	0.030	35.6	56	
11	12:21	10min	0.1	0.2	15	888	0.023	36.1	55	
12	12:31	10min	0.1	0.2	10	891	0.028	35.6	54	
13	12:41	10min	0.1	0.2	15	881	0.009	36.1	49	Location 3 Coordinates: 57 L 0619494.68, 8946036.98 E)
14	1:51	10min	0.1	0.2	14	887	0.018	31.1	62	
15	1:01	10min	0.1	0.2	18	892	0.016	30.6	64	
16	1:11	10min	0.2	0.3	18	896	0.007	30	66	
17	1:21	10min	0.1	0.2	15	897	0.009	30	67	
18	1:31	10min	0.1	0.2	17	899	0.003	29.4	68	
19	1:41	10min	0.2	0.3	19	887	0.004	29.4	67	Location 4 Coordinates: 57 L 0619472.11, 8945949.38 E)

Monitoring by: Joash Sanga Civil Engineer	Sign:	Reporting by: Edmond Jr Bate E and S Officer	Sign:	Checked by: Kim D Y HSE Manager	Sign:	Page No: 2
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	Tina River Hydro Development Project Solomon Islands AIR QUALITY MONITORING REPORT		Date of Reporting: 10 th JUNE 2020
			Reporting Month: JUNE 2020

Monitoring Location Number	Monitoring Time	Monitoring Duration	PM 2.5 in $\mu\text{g}/\text{m}^3$	PM 10 in $\mu\text{g}/\text{m}^3$	Particles per Litre	CO2 in ppm	HCHO in mg/m^3	Temperature In $^{\circ}\text{C}$	Humidity In %	Remarks
20	1:51	10min	0.1	0.2	12	890	0.002	30	66	
21	2:01	10min	0.1	0.2	17	886	0.002	29.4	67	
22	2:11	10min	0.1	0.2	12	884	0.001	30	66	
23	2:21	10min	0.2	0.3	14	886	0.009	30	69	
24	2:31	10min	0.21	0.2	17	881	0.001	29.4	65	
Average	4 Hours		0.13	0.22	14.7	900.7	0.023	32.2	61.7	
Maximum			0.21	0.3	19	983	0.064	36.1	70	
Minimum			0.1	0.2	10	881	0.001	29.4	49	

Monitoring by: Joash Sanga Civil Engineer	Sign:	Reporting by: Edmond Jr Bate E and S Officer	Sign:	Checked by: Kim D Y HSE Manager	Sign:	Page No: 3
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	Tina River Hydro Development Project Solomon Islands AIR QUALITY MONITORING REPORT		Date of Reporting: 10 th JUNE 2020
			Reporting Month: JUNE 2020

Wind Speed and Weather Conditions:	Ambient Temperature	32.2°C	
	Weather	Sunny but cloudy day	
	Wind Speed	-	
	Humidity	61.7%	
Notes	Monitoring was conducted at 4 locations within Managikiki. 1. Location 1, 12m from the road (Coordinates: 57 L 0619512.81, 8946142.95 E) 2. Location 2: 3m from road, (Coordinates: 57 L 0619577.18, 8946278.54 E) 3. Location 3 10m from road, (Coordinates: 57 L 0619494.68, 8946036.98 E) 4. Location 4 5m from road, (Coordinates: 57 L 0619472.11, 8945949.38 E)		
Observations	1. Minor traffic area. Community and HEC Vehicles using the road. 2. Minor Dust visible from the road. 3. Sources of poor air quality are from smokes and burning activities within the villages		
Attachment:	1. Record Analysis Photographs		
	2. Photographs of Monitoring Setup and Locations		

Monitoring by: Joash Sanga Civil Engineer	Sign:	Reporting by: Edmond Jr Bate E and S Officer	Sign:	Checked by: Kim D Y HSE Manager	Sign:	Page No: 4
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Photographs



1. 12m from the road (Coordinates: 57 L 0619512.81, 8946142.95 E)



2. 3m from road, (Coordinates: 57 L 0619577.18, 8946278.54 E)

Monitoring by: Joash Sanga Civil Engineer	Sign:	Reporting by: Edmond Jr Bate E and S Officer	Sign:	Checked by: Kim D Y HSE Manager	Sign:	Page No: 5
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3. 10m from road, (Coordinates: 57 L 0619494.68, 8946036.98 E)



4. 5m from road, (Coordinates: 57 L 0619472.11, 8945949.38 E)

	Tina River Hydro Development Project Solomon Islands AIR QUALITY MONITORING REPORT		Date of Reporting: 25 th June 2020
			Reporting Month: June 2020

Date of Monitoring	25 th June 2020	Monitoring Frequency	Single Baseline Event
Equipment Make/Model	Temtop (M2000)	Serial Number	
Monitoring Site	Habusi	Monitoring Duration	Four (4) Hours
References	1. M7 Air Quality and Noise Monitoring Plan 2. P15 Air Quality Management and Dust Control Plan		

Monitoring Location Number	Monitoring Time	Monitoring Duration	PM 2.5 in $\mu\text{g}/\text{m}^3$	PM 10 in $\mu\text{g}/\text{m}^3$	Particles per Litre	CO2 in ppm	HCHO in mg/m^3	Temperature In $^{\circ}\text{C}$	Humidity In %	Remarks
1	11:21AM	10 min	0.1	0.2	14	915	0.040	31.7	61	12m away from building Location 1 Coordinates: 9°32'29.15'', E160°5'15.01''
2	11:31AM	10 min	0.1	0.2	18	891	0.054	32.2	61	
3	11:41AM	10 min	0.2	0.3	16	883	0.053	32.7	59	
4	11:51 PM	10 min	0.2	0.3	14	881	0.042	32.7	58	
5	12:01 PM	10 min	0.1	0.2	11	868	0.048	34.4	54	
6	12:11 PM	10 min	0.1	0.2	19	856	0.040	32.7	56	

Monitoring by: Joash Sanga Civil Engineer	Sign:	Reporting by: Edmond Jr Bate E and S Officer	Sign:	Checked by: Kim D Y HSE Manager	Sign:	Page No: 1
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	Tina River Hydro Development Project Solomon Islands AIR QUALITY MONITORING REPORT		Date of Reporting: 25 th June 2020
			Reporting Month: June 2020

Monitoring Location Number	Monitoring Time	Monitoring Duration	PM 2.5 in $\mu\text{g}/\text{m}^3$	PM 10 in $\mu\text{g}/\text{m}^3$	Particles per Litre	CO2 in ppm	HCHO in mg/m^3	Temperature In $^{\circ}\text{C}$	Humidity In %	Remarks
7	12:34 PM	10 min	0.1	0.2	19	864	0.028	33.3	56	5m from building Location 2 Coordinates: 9°32'29.29'', E160°5'15.63''
8	12:44 PM	10 min	0.1	0.2	16	861	0.023	33.9	59	
9	12:54 PM	10 min	0.1	0.2	19	855	0.027	33.3	55	
10	1:14PM	10 min	0.1	0.2	11	859	0.021	32.7	58	
11	1:24 PM	10 min	0.2	0.3	16	855	0.21	33.3	58	
12	1:38 PM	10 min	0.2	0.3	18	860	0.019	33.3	55	25m from buildings Location 3 Coordinates: 9°32'28.81'', E160°5'17.54''
13	1:48 PM	10 min	0.1	0.2	13	868	0.016	37.2	51	
14	1:48 PM	10 min	0.1	0.2	11	869	0.032	35.6	54	

Monitoring by: Joash Sanga Civil Engineer	Sign:	Reporting by: Edmond Jr Bate E and S Officer	Sign:	Checked by: Kim D Y HSE Manager	Sign:	Page No: 2
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	Tina River Hydro Development Project Solomon Islands AIR QUALITY MONITORING REPORT		Date of Reporting: 25 th June 2020
			Reporting Month: June 2020

Monitoring Location Number	Monitoring Time	Monitoring Duration	PM 2.5 in $\mu\text{g}/\text{m}^3$	PM 10 in $\mu\text{g}/\text{m}^3$	Particles per Litre	CO2 in ppm	HCHO in mg/m^3	Temperature In $^{\circ}\text{C}$	Humidity In %	Remarks
15	1:58 PM	10 min	0.1	0.2	18	870	0.018	35.6	54	
16	2:08 PM	10 min	0.1	0.2	10	871	0.028	38.3	48	
17	2:18 PM	10 min	0.1	0.2	19	872	0.023	36.7	49	
18	2:20 PM	10 min	0.1	0.2	12	868	0.009	40.5	45	10m from buildings Location 4 Coordinates: 9°32'28.87'', E160°5'18.97''
19	2:40 PM	10 min	0.1	0.2	15	866	0.014	33.9	52	
20	2:50 PM	10 min	0.1	0.2	12	865	0.015	32.8	55	
21	3:00 PM	10 min	0.1	0.2	10	883	0.008	32.2	57	
22	3:10 PM	10 min	0.1	0.2	19	872	0.014	31.7	58	

Monitoring by: Joash Sanga Civil Engineer	Sign:	Reporting by: Edmond Jr Bate E and S Officer	Sign:	Checked by: Kim D Y HSE Manager	Sign:	Page No: 3
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	Tina River Hydro Development Project Solomon Islands AIR QUALITY MONITORING REPORT		Date of Reporting: 25 th June 2020
			Reporting Month: June 2020

Monitoring Location Number	Monitoring Time	Monitoring Duration	PM 2.5 in $\mu\text{g}/\text{m}^3$	PM 10 in $\mu\text{g}/\text{m}^3$	Particles per Litre	CO2 in ppm	HCHO in mg/m^3	Temperature In $^{\circ}\text{C}$	Humidity In %	Remarks
23	3:20 PM	10 min	0.1	0.2	14	891	0.011	31.1	61	
24	3:30 PM	10 min	0.1	0.2	11	879	0.009	31.1	59	
Average	4 Hours		0.12	0.22	14.8	871.8	0.033	33.9	55.5	
Minimum			0.2	0.3	19	915	0.21	40.5	61	
Maximum			0.1	0.2	10	855	0.008	31.1	45	

Monitoring by: Joash Sanga Civil Engineer	Sign:	Reporting by: Edmond Jr Bate E and S Officer	Sign:	Checked by: Kim D Y HSE Manager	Sign:	Page No: 4
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	Tina River Hydro Development Project Solomon Islands AIR QUALITY MONITORING REPORT	Date of Reporting: 25 th June 2020
		Reporting Month: June 2020

Wind Speed and Weather Conditions:	Ambient Temperature	34°C	
	Weather	Sunny and hot	
	Wind Speed	-	
	Humidity	56%	
Notes	The air quality baseline monitoring at Habusi was conducted at 4 random locations as stated in the remarks above.		
Observations	Main sources of bad air quality are kitchen smoke and burning of rubbish in the area of observation.		
Attachment:	1. Record Analysis Photographs		
	2. Photographs of Monitoring Setup and Locations		

Monitoring by: Joash Sanga Civil Engineer	Sign:	Reporting by: Edmond Jr Bate E and S Officer	Sign:	Checked by: Kim D Y HSE Manager	Sign:	Page No: 5
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Photographs



Location 1 @ Habusi -12m away from building
Coordinates: 59°32'29.15'', E160°5'15.01''



Location 2 @ Habusi - 5m from building
Coordinates: 59°32'29.29'', E160°5'15.63''

Monitoring by: Joash Sanga Civil Engineer	Sign:	Reporting by: Edmond Jr Bate E and S Officer	Sign:	Checked by: Kim D Y HSE Manager	Sign:	Page No: 6
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Location 3 @ Habusi - 25m from buildings
 Coordinates: 59°32'28.81'', E160°5'17.54''



Location 4 @ Habusi - 10m from buildings
 Coordinates: 59°32'28.87'', E160°5'18.97''

Monitoring by: Joash Sanga Civil Engineer	Sign:	Reporting by: Edmond Jr Bate E and S Officer	Sign:	Checked by: Kim D Y HSE Manager	Sign:	Page No: 7
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	Tina River Hydro Development Project Solomon Islands AIR QUALITY MONITORING REPORT		Date of Reporting: 30 th March 2021
			Reporting Month: March 2021

Date of Monitoring	15 th March, 2021	Monitoring Frequency	Single Baseline Event
Equipment Make/Model	HGas 1031 AQMS	Time	0700 - 0700
Monitoring Site	BLACKPOST	Monitoring Duration	24 Hours
References	1. M7 Air Quality and Noise Monitoring Plan 2. P15 Air Quality Management and Dust Control Plan		

RESULTS		O3 in ppb	SO2 in ppb	NO2 in ppb	PM2.5 in µg/m3	PM10 in µg/m3	Remarks
Minimum	24 Hours	0	0	0	0	0	
Maximum		46	334	120	22	24	
Average		0.08	32.05	70.30	0.96	1.27	
Weather	Sunny/partly cloudy. Rained the previous night.						
Coordinates	57 L 0620844, 8956177						

Monitoring by: Raymond Kalu Civil Engineer	Sign:	Reporting by: Edmond Jr Bate E and Supervisor	Sign:	Checked by: S Tanzeel Ahmed E and S Supervisor	Sign:	Page No: 1
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Photographs:



Monitoring by: Raymond Kalu Civil Engineer	Sign:	Reporting by: Edmond Jr Bate E and Supervisor	Sign:	Checked by: S Tanzeel Ahmed E and S Supervisor	Sign:	Page No: 2
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Monitoring by: Raymond Kalu Civil Engineer	Sign:	Reporting by: Edmond Jr Bate E and Supervisor	Sign:	Checked by: S Tanzeel Ahmed E and S Supervisor	Sign:	Page No: 3
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	Tina River Hydro Development Project Solomon Islands AIR QUALITY MONITORING REPORT	Date of Reporting: 30 th March 2021 <hr/> Reporting Month: March 2021
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Guidelines:

Table 1.1.1: WHO Ambient Air Quality Guidelines ^{7,8}		
	Averaging Period	Guideline value in $\mu\text{g}/\text{m}^3$
Sulfur dioxide (SO ₂)	24-hour	125 (Interim target-1) 50 (Interim target-2) 20 (guideline)
	10 minute	500 (guideline)
Nitrogen dioxide (NO ₂)	1-year	40 (guideline)
	1-hour	200 (guideline)
Particulate Matter PM ₁₀	1-year	70 (Interim target-1) 50 (Interim target-2) 30 (Interim target-3) 20 (guideline)
	24-hour	150 (Interim target-1) 100 (Interim target-2) 75 (Interim target-3) 50 (guideline)
Particulate Matter PM _{2.5}	1-year	35 (Interim target-1) 25 (Interim target-2) 15 (Interim target-3) 10 (guideline)
	24-hour	75 (Interim target-1) 50 (Interim target-2) 37.5 (Interim target-3) 25 (guideline)
Ozone	8-hour daily maximum	160 (Interim target-1) 100 (guideline)

Attachment:

24 Hour Monitoring Report

Monitoring by: Raymond Kalu Civil Engineer	Sign:	Reporting by: Edmond Jr Bate E and Supervisor	Sign:	Checked by: S Tanzeel Ahmed E and S Supervisor	Sign:	Page No: 4
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	Tina River Hydro Development Project Solomon Islands AIR QUALITY MONITORING REPORT		Date of Reporting: 30 th March 2021
			Reporting Month: March 2021

Date of Monitoring	19 th March, 2021	Monitoring Frequency	Single Baseline Event
Equipment Make/Model	HGas 1031 AQMS	Time	0700 - 0700
Monitoring Site	CHURCH (VALELE) Lot 1 STA 6+400	Monitoring Duration	24 Hours
References	1. M7 Air Quality and Noise Monitoring Plan 2. P15 Air Quality Management and Dust Control Plan		

RESULTS		O3 in ppb	SO2 in ppb	NO2 in ppb	PM2.5 in µg/m3	PM10 in µg/m3	Remarks
Minimum	24 Hours	0	0	0	0	0	
Maximum		19	27	19	40	48	
Average		7.70	2.27	10.47	1.48	1.77	
Weather	Sunny.						
Coordinates	57 L 0621713, 8950462 E						

Monitoring by: Raymond Kalu Civil Engineer	Sign:	Reporting by: Edmond Jr Bate E and Supervisor	Sign:	Checked by: S Tanzeel Ahmed E and S Supervisor	Sign:	Page No: 1
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Photographs:



Monitoring by: Raymond Kalu Civil Engineer	Sign:	Reporting by: Edmond Jr Bate E and Supervisor	Sign:	Checked by: S Tanzeel Ahmed E and S Supervisor	Sign:	Page No: 2
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Monitoring by: Raymond Kalu Civil Engineer	Sign:	Reporting by: Edmond Jr Bate E and Supervisor	Sign:	Checked by: S Tanzeel Ahmed E and S Supervisor	Sign:	Page No: 3
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	Tina River Hydro Development Project Solomon Islands AIR QUALITY MONITORING REPORT	Date of Reporting: 30 th March 2021 <hr/> Reporting Month: March 2021
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Guideline:

Table 1.1.1: WHO Ambient Air Quality Guidelines ^{7,8}		
	Averaging Period	Guideline value in $\mu\text{g}/\text{m}^3$
Sulfur dioxide (SO ₂)	24-hour	125 (Interim target-1) 50 (Interim target-2) 20 (guideline)
	10 minute	500 (guideline)
Nitrogen dioxide (NO ₂)	1-year	40 (guideline)
	1-hour	200 (guideline)
Particulate Matter PM ₁₀	1-year	70 (Interim target-1) 50 (Interim target-2) 30 (Interim target-3) 20 (guideline)
	24-hour	150 (Interim target-1) 100 (Interim target-2) 75 (Interim target-3) 50 (guideline)
Particulate Matter PM _{2.5}	1-year	35 (Interim target-1) 25 (Interim target-2) 15 (Interim target-3) 10 (guideline)
	24-hour	75 (Interim target-1) 50 (Interim target-2) 37.5 (Interim target-3) 25 (guideline)
Ozone	8-hour daily maximum	160 (Interim target-1) 100 (guideline)

Attachment:

24 Hour Monitoring Report

Monitoring by: Raymond Kalu Civil Engineer	Sign:	Reporting by: Edmond Jr Bate E and Supervisor	Sign:	Checked by: S Tanzeel Ahmed E and S Supervisor	Sign:	Page No: 4
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	Tina River Hydro Development Project Solomon Islands AIR QUALITY MONITORING REPORT		Date of Reporting: 30 th March 2021
			Reporting Month: March 2021

Date of Monitoring	22 nd March, 2021	Monitoring Frequency	Single Baseline Event
Equipment Make/Model	HGas 1031 AQMS	Time	0700 - 0700
Monitoring Site	MARAVA	Monitoring Duration	24 Hours
References	1. M7 Air Quality and Noise Monitoring Plan 2. P15 Air Quality Management and Dust Control Plan		

RESULTS		O3 in ppb	SO2 in ppb	NO2 in ppb	PM2.5 in µg/m3	PM10 in µg/m3	Remarks
Minimum	24 Hours	0	0	0	0	0	
Maximum		18	28	21	8	6	
Average		7.15	2.11	10.30	0.10	0.22	
Weather	Sunny. Rained the previous night.						
Coordinates	57 L 0621638, 8949339 E						

Monitoring by: Raymond Kalu Civil Engineer	Sign:	Reporting by: Edmond Jr Bate E and Supervisor	Sign:	Checked by: S Tanzeel Ahmed E and S Supervisor	Sign:	Page No: 1
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Photographs:



Monitoring by:
Raymond Kalu
Civil Engineer

Sign:

Reporting by:
Edmond Jr Bate
E and Supervisor

Sign:

Checked by:
S Tanzeel Ahmed
E and S Supervisor

Sign:

Page No:
2

	Tina River Hydro Development Project Solomon Islands AIR QUALITY MONITORING REPORT	Date of Reporting: 30 th March 2021 <hr/> Reporting Month: March 2021
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Guideline:

Table 1.1.1: WHO Ambient Air Quality Guidelines ^{7,8}		
	Averaging Period	Guideline value in $\mu\text{g}/\text{m}^3$
Sulfur dioxide (SO ₂)	24-hour	125 (Interim target-1) 50 (Interim target-2) 20 (guideline)
	10 minute	500 (guideline)
Nitrogen dioxide (NO ₂)	1-year	40 (guideline)
	1-hour	200 (guideline)
Particulate Matter PM ₁₀	1-year	70 (Interim target-1) 50 (Interim target-2) 30 (Interim target-3) 20 (guideline)
	24-hour	150 (Interim target-1) 100 (Interim target-2) 75 (Interim target-3) 50 (guideline)
Particulate Matter PM _{2.5}	1-year	35 (Interim target-1) 25 (Interim target-2) 15 (Interim target-3) 10 (guideline)
	24-hour	75 (Interim target-1) 50 (Interim target-2) 37.5 (Interim target-3) 25 (guideline)
Ozone	8-hour daily maximum	160 (Interim target-1) 100 (guideline)

Attachment:

24 Hour Monitoring Report

Monitoring by: Raymond Kalu Civil Engineer	Sign:	Reporting by: Edmond Jr Bate E and Supervisor	Sign:	Checked by: S Tanzeel Ahmed E and S Supervisor	Sign:	Page No: 3
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	Tina River Hydro Development Project Solomon Islands AIR QUALITY MONITORING REPORT		Date of Reporting: 30 th March 2021
			Reporting Month: March 2021

Date of Monitoring	24 th March, 2021	Monitoring Frequency	Single Baseline Event
Equipment Make/Model	HGas 1031 AQMS	Time	0700 - 0700
Monitoring Site	RATE SCHOOL	Monitoring Duration	24 Hours
References	1. M7 Air Quality and Noise Monitoring Plan 2. P15 Air Quality Management and Dust Control Plan		

RESULTS		O3 in ppb	SO2 in ppb	NO2 in ppb	PM2.5 in µg/m3	PM10 in µg/m3	Remarks
Minimum	24 Hours	0	0	0	0	0	
Maximum		19	26	19	193	255	
Average		7.24	1.77	9.97	1.41	1.77	
Weather	Sunny. Rained the previous night						
Coordinates	57 L 0621988, 8950148 E						

Monitoring by: Joash Sanga Civil Engineer	Sign:	Reporting by: Edmond Jr Bate E and Supervisor	Sign:	Checked by: S Tanzeel Ahmed E and S Supervisor	Sign:	Page No: 1
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Photographs:



Monitoring by: Joash Sanga Civil Engineer	Sign:	Reporting by: Edmond Jr Bate E and Supervisor	Sign:	Checked by: S Tanzeel Ahmed E and S Supervisor	Sign:	Page No: 2
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Monitoring by: Joash Sanga Civil Engineer	Sign:	Reporting by: Edmond Jr Bate E and Supervisor	Sign:	Checked by: S Tanzeel Ahmed E and S Supervisor	Sign:	Page No: 3
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	Tina River Hydro Development Project Solomon Islands AIR QUALITY MONITORING REPORT	Date of Reporting: 30 th March 2021 <hr/> Reporting Month: March 2021
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Guideline:

Table 1.1.1: WHO Ambient Air Quality Guidelines ^{7,8}		
	Averaging Period	Guideline value in $\mu\text{g}/\text{m}^3$
Sulfur dioxide (SO ₂)	24-hour	125 (Interim target-1) 50 (Interim target-2) 20 (guideline)
	10 minute	500 (guideline)
Nitrogen dioxide (NO ₂)	1-year	40 (guideline)
	1-hour	200 (guideline)
Particulate Matter PM ₁₀	1-year	70 (Interim target-1) 50 (Interim target-2) 30 (Interim target-3) 20 (guideline)
	24-hour	150 (Interim target-1) 100 (Interim target-2) 75 (Interim target-3) 50 (guideline)
Particulate Matter PM _{2.5}	1-year	35 (Interim target-1) 25 (Interim target-2) 15 (Interim target-3) 10 (guideline)
	24-hour	75 (Interim target-1) 50 (Interim target-2) 37.5 (Interim target-3) 25 (guideline)
Ozone	8-hour daily maximum	160 (Interim target-1) 100 (guideline)

Attachment:

24 Hour Monitoring Report

Monitoring by: Joash Sanga Civil Engineer	Sign:	Reporting by: Edmond Jr Bate E and Supervisor	Sign:	Checked by: S Tanzeel Ahmed E and S Supervisor	Sign:	Page No: 4
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	Tina River Hydro Development Project Solomon Islands AIR QUALITY MONITORING REPORT		Date of Reporting: 30 th March 2021
			Reporting Month: March 2021

Date of Monitoring	26 th March, 2021	Monitoring Frequency	Single Baseline Event
Equipment Make/Model	HGas 1031 AQMS	Time	0700 - 0700
Monitoring Site	ANTIOCH	Monitoring Duration	24 Hours
References	1. M7 Air Quality and Noise Monitoring Plan 2. P15 Air Quality Management and Dust Control Plan		

RESULTS		O3 in ppb	SO2 in ppb	NO2 in ppb	PM2.5 in µg/m3	PM10 in µg/m3	Remarks
Minimum	24 Hours	0	0	0	0	0	
Maximum		17	24	20	388	547	
Average		7.18	1.78	9.97	1.14	1.50	
Weather	Sunny, partly cloudy.						
Coordinates	-9.524683 S, 160.097804 E						

Monitoring by: Joash Sanga Civil Engineer	Sign:	Reporting by: Edmond Jr Bate E and Supervisor	Sign:	Checked by: S Tanzeel Ahmed E and S Supervisor	Sign:	Page No: 1
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Photographs:



Monitoring by: Joash Sanga Civil Engineer	Sign:	Reporting by: Edmond Jr Bate E and Supervisor	Sign:	Checked by: S Tanzeel Ahmed E and S Supervisor	Sign:	Page No: 2
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Tina River Hydro Development Project

Solomon Islands

AIR QUALITY MONITORING REPORT

Date of Reporting:
30th March 2021

Reporting Month:
March 2021



Monitoring by: Joash Sanga Civil Engineer	Sign:	Reporting by: Edmond Jr Bate E and Supervisor	Sign:	Checked by: S Tanzeel Ahmed E and S Supervisor	Sign:	Page No: 3
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	Tina River Hydro Development Project Solomon Islands AIR QUALITY MONITORING REPORT	Date of Reporting: 30 th March 2021 <hr/> Reporting Month: March 2021
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Guidelines:

Table 1.1.1: WHO Ambient Air Quality Guidelines ^{7,8}		
	Averaging Period	Guideline value in $\mu\text{g}/\text{m}^3$
Sulfur dioxide (SO ₂)	24-hour	125 (Interim target-1) 50 (Interim target-2) 20 (guideline)
	10 minute	500 (guideline)
Nitrogen dioxide (NO ₂)	1-year	40 (guideline)
	1-hour	200 (guideline)
Particulate Matter PM ₁₀	1-year	70 (Interim target-1) 50 (Interim target-2) 30 (Interim target-3) 20 (guideline)
	24-hour	150 (Interim target-1) 100 (Interim target-2) 75 (Interim target-3) 50 (guideline)
Particulate Matter PM _{2.5}	1-year	35 (Interim target-1) 25 (Interim target-2) 15 (Interim target-3) 10 (guideline)
	24-hour	75 (Interim target-1) 50 (Interim target-2) 37.5 (Interim target-3) 25 (guideline)
Ozone	8-hour daily maximum	160 (Interim target-1) 100 (guideline)

Attachment:

24 Hour Monitoring report

Monitoring by: Joash Sanga Civil Engineer	Sign:	Reporting by: Edmond Jr Bate E and Supervisor	Sign:	Checked by: S Tanzeel Ahmed E and S Supervisor	Sign:	Page No: 4
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	Tina River Hydro Development Project Solomon Islands AIR QUALITY MONITORING REPORT		Date of Reporting: 30 th April 2021
			Reporting Month: April 2021

Date of Monitoring	19 th April, 2021	Monitoring Frequency	2 nd Single Baseline Event
Equipment Make/Model	HGas 1031 AQMS	Time	0700 - 0700
Monitoring Site	BLACKPOST	Monitoring Duration	24 Hours
References	1. M7 Air Quality and Noise Monitoring Plan 2. P15 Air Quality Management and Dust Control Plan		

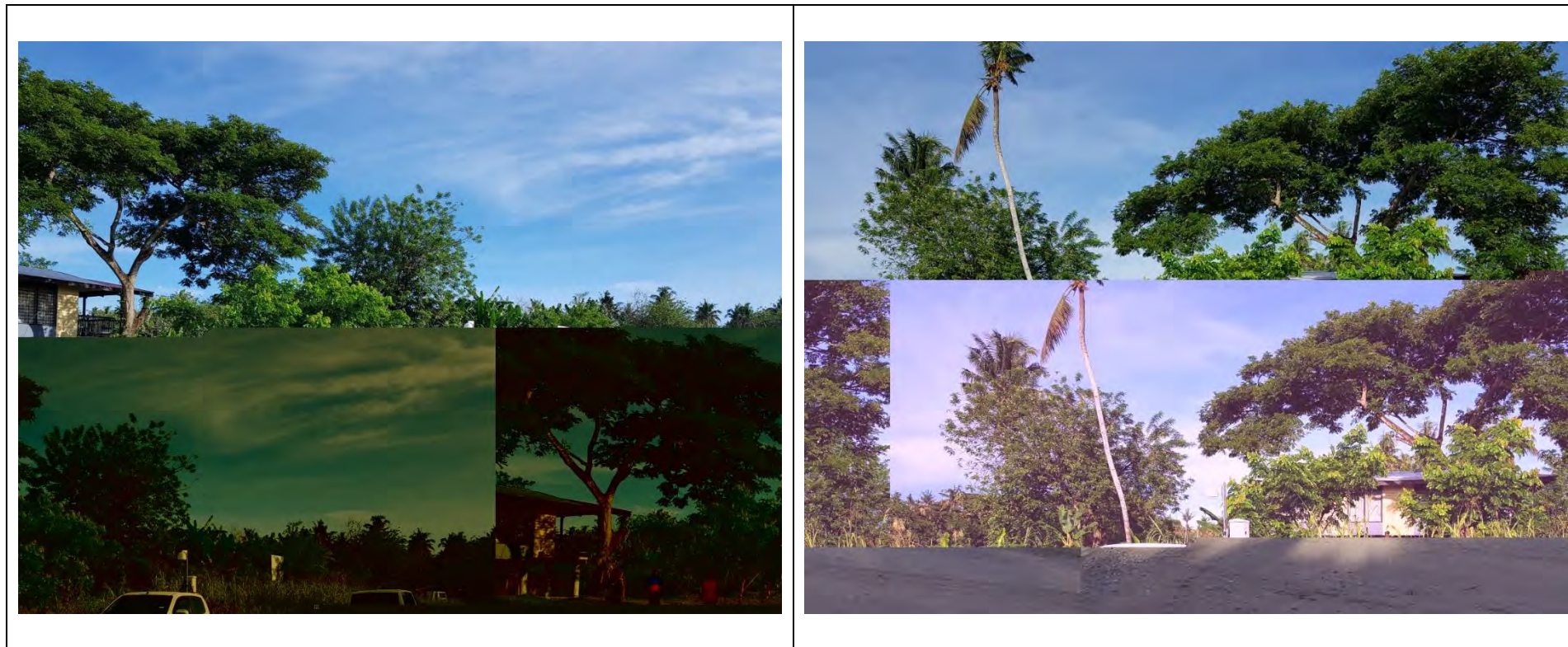
RESULTS		O3 in ppb	SO2 in ppb	NO2 in ppb	PM2.5 in µg/m3	PM10 in µg/m3	Remarks
Minimum	24 Hours	0	0	0	0	0	
Maximum		19	31	19	55	70	
Average		7.75	2.58	11.22	2.03	2.63	
Weather	Sunny/partly cloudy. Rained the previous night.						
Coordinates	57 L 0620844, 8956177						

Wind Speed and Direction:

Date	Time	Wind Speed (m/s)	Direction
19.04.2021	07:00	0.56	South East
19.04.2021	11:00	2.19	North West
19.04.2021	15:00	3.43	North West
19.04.2021	19:00	0	-
19.04.2021	22:00	0.96	South
20.04.2021	03:00	1.01	South

Monitoring by: Raymond Kalu Civil Engineer	Sign:	Reporting by: Edmond Jr Bate E and Supervisor	Sign:	Checked by: S Tanzeel Ahmed E and S Supervisor	Sign:	Page No: 1
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Photographs:





	Tina River Hydro Development Project Solomon Islands AIR QUALITY MONITORING REPORT	Date of Reporting: 30 th April 2021 <hr/> Reporting Month: April 2021
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Guidelines:

Table 1.1.1: WHO Ambient Air Quality Guidelines ^{7,8}		
	Averaging Period	Guideline value in $\mu\text{g}/\text{m}^3$
Sulfur dioxide (SO ₂)	24-hour	125 (Interim target-1) 50 (Interim target-2) 20 (guideline)
	10 minute	500 (guideline)
Nitrogen dioxide (NO ₂)	1-year	40 (guideline)
	1-hour	200 (guideline)
Particulate Matter PM ₁₀	1-year	70 (Interim target-1) 50 (Interim target-2) 30 (Interim target-3) 20 (guideline)
	24-hour	150 (Interim target-1) 100 (Interim target-2) 75 (Interim target-3) 50 (guideline)
Particulate Matter PM _{2.5}	1-year	35 (Interim target-1) 25 (Interim target-2) 15 (Interim target-3) 10 (guideline)
	24-hour	75 (Interim target-1) 50 (Interim target-2) 37.5 (Interim target-3) 25 (guideline)
Ozone	8-hour daily maximum	160 (Interim target-1) 100 (guideline)

Attachment:

24 Hour Monitoring Report

Monitoring by: Raymond Kalu Civil Engineer	Sign:	Reporting by: Edmond Jr Bate E and Supervisor	Sign:	Checked by: S Tanzeel Ahmed E and S Supervisor	Sign:	Page No: 4
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	Tina River Hydro Development Project Solomon Islands AIR QUALITY MONITORING REPORT	Date of Reporting: 30 th April 2021
		Reporting Month: April 2021

Date of Monitoring	21 st April, 2021	Monitoring Frequency	2 nd Single Baseline Event
Equipment Make/Model	HGas 1031 AQMS	Time	0700 - 0700
Monitoring Site	CHURCH	Monitoring Duration	24 Hours
References	1. M7 Air Quality and Noise Monitoring Plan 2. P15 Air Quality Management and Dust Control Plan		

RESULTS		O3 in ppb	SO2 in ppb	NO2 in ppb	PM2.5 in µg/m3	PM10 in µg/m3	Remarks
Minimum	24 Hours	0	0	1	0	0	
Maximum		16	30	17	31	38	
Average		6.84	1.74	9.49	0.58	0.80	
Weather	Sunny in the day, partly cloudy in the afternoon, drizzling rain in the night.						
Coordinates	57 L 0621713, 8950462 E						

Wind Speed and Direction:

Date	Time	Wind Speed (m/s)	Direction
21.04.2021	07:00	2.23	North
21.04.2021	11:00	1.42	North
21.04.2021	15:00	0.21	North
21.04.2021	19:00	1.25	South
21.04.2021	22:00	2.09	South
22.04.2021	03:00	1.99	South

Monitoring by: Raymond Kalu Civil Engineer	Sign:	Reporting by: Edmond Jr Bate E and Supervisor	Sign:	Checked by: S Tanzeel Ahmed E and S Supervisor	Sign:	Page No: 1
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Photographs:



Monitoring by: Raymond Kalu Civil Engineer	Sign:	Reporting by: Edmond Jr Bate E and Supervisor	Sign:	Checked by: S Tanzeel Ahmed E and S Supervisor	Sign:	Page No: 2
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Monitoring by:
Raymond Kalu
Civil Engineer

Sign:

Reporting by:
Edmond Jr Bate
E and Supervisor

Sign:

Checked by:
S Tanzeel Ahmed
E and S Supervisor

Sign:

Page No:
3

	Tina River Hydro Development Project Solomon Islands AIR QUALITY MONITORING REPORT	Date of Reporting: 30 th April 2021 <hr/> Reporting Month: April 2021
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Guidelines:

Table 1.1.1: WHO Ambient Air Quality Guidelines ^{7,8}		
	Averaging Period	Guideline value in $\mu\text{g}/\text{m}^3$
Sulfur dioxide (SO ₂)	24-hour	125 (Interim target-1) 50 (Interim target-2) 20 (guideline)
	10 minute	500 (guideline)
Nitrogen dioxide (NO ₂)	1-year	40 (guideline)
	1-hour	200 (guideline)
Particulate Matter PM ₁₀	1-year	70 (Interim target-1) 50 (Interim target-2) 30 (Interim target-3) 20 (guideline)
	24-hour	150 (Interim target-1) 100 (Interim target-2) 75 (Interim target-3) 50 (guideline)
Particulate Matter PM _{2.5}	1-year	35 (Interim target-1) 25 (Interim target-2) 15 (Interim target-3) 10 (guideline)
	24-hour	75 (Interim target-1) 50 (Interim target-2) 37.5 (Interim target-3) 25 (guideline)
Ozone	8-hour daily maximum	160 (Interim target-1) 100 (guideline)

Attachment:

24 Hour Monitoring Report

Monitoring by: Raymond Kalu Civil Engineer	Sign:	Reporting by: Edmond Jr Bate E and Supervisor	Sign:	Checked by: S Tanzeel Ahmed E and S Supervisor	Sign:	Page No: 4
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	Tina River Hydro Development Project Solomon Islands AIR QUALITY MONITORING REPORT	Date of Reporting: 30 th April 2021
		Reporting Month: April 2021

Date of Monitoring	23 rd April, 2021	Monitoring Frequency	2 nd Single Baseline Event
Equipment Make/Model	HGas 1031 AQMS	Time	0700 - 0700
Monitoring Site	MARAVA	Monitoring Duration	24 Hours
References	1. M7 Air Quality and Noise Monitoring Plan 2. P15 Air Quality Management and Dust Control Plan		

RESULTS		O3 in ppb	SO2 in ppb	NO2 in ppb	PM2.5 in µg/m3	PM10 in µg/m3	Remarks
Minimum	24 Hours	0	0	0	0	0	
Maximum		16	25	17	35	42	
Average		6.47	1.70	9.30	0.22	0.33	
Weather	Sunny in the day, partly cloudy in the afternoon, rain at night.						
Coordinates	57 L 0621638, 8949339 E						

Wind Speed and Direction:

Date	Time	Wind Speed (m/s)	Direction
23.04.2021	07:00	0.09	South
23.04.2021	11:00	2.67	South East
23.04.2021	15:00	1.62	South
23.04.2021	19:00	0	-
23.04.2021	22:00	0.41	South
24.04.2021	03:00	1.28	South East

Monitoring by: Raymond Kalu Civil Engineer	Sign:	Reporting by: Edmond Jr Bate E and Supervisor	Sign:	Checked by: S Tanzeel Ahmed E and S Supervisor	Sign:	Page No: 1
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Photographs:



Monitoring by: Raymond Kalu Civil Engineer	Sign:	Reporting by: Edmond Jr Bate E and Supervisor	Sign:	Checked by: S Tanzeel Ahmed E and S Supervisor	Sign:	Page No: 2
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Monitoring by:
Raymond Kalu
Civil Engineer

Sign:

Reporting by:
Edmond Jr Bate
E and Supervisor

Sign:

Checked by:
S Tanzeel Ahmed
E and S Supervisor

Sign:

Page No:
3

	Tina River Hydro Development Project Solomon Islands AIR QUALITY MONITORING REPORT		Date of Reporting: 30 th April 2021 Reporting Month: April 2021
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Guidelines:

Table 1.1.1: WHO Ambient Air Quality Guidelines ^{7,8}		
	Averaging Period	Guideline value in $\mu\text{g}/\text{m}^3$
Sulfur dioxide (SO ₂)	24-hour	125 (Interim target-1) 50 (Interim target-2) 20 (guideline)
	10 minute	500 (guideline)
Nitrogen dioxide (NO ₂)	1-year	40 (guideline)
	1-hour	200 (guideline)
Particulate Matter PM ₁₀	1-year	70 (Interim target-1) 50 (Interim target-2) 30 (Interim target-3) 20 (guideline)
	24-hour	150 (Interim target-1) 100 (Interim target-2) 75 (Interim target-3) 50 (guideline)
Particulate Matter PM _{2.5}	1-year	35 (Interim target-1) 25 (Interim target-2) 15 (Interim target-3) 10 (guideline)
	24-hour	75 (Interim target-1) 50 (Interim target-2) 37.5 (Interim target-3) 25 (guideline)
Ozone	8-hour daily maximum	160 (Interim target-1) 100 (guideline)

Attachment:

24 Hour Monitoring Report

Monitoring by: Raymond Kalu Civil Engineer	Sign:	Reporting by: Edmond Jr Bate E and Supervisor	Sign:	Checked by: S Tanzeel Ahmed E and S Supervisor	Sign:	Page No: 4
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	Tina River Hydro Development Project Solomon Islands AIR QUALITY MONITORING REPORT	Date of Reporting: 30 th April 2021
		Reporting Month: April 2021

Date of Monitoring	28 th April, 2021	Monitoring Frequency	2 nd Single Baseline Event
Equipment Make/Model	HGas 1031 AQMS	Time	0700 - 0700
Monitoring Site	RATE SCHOOL	Monitoring Duration	24 Hours
References	1. M7 Air Quality and Noise Monitoring Plan 2. P15 Air Quality Management and Dust Control Plan		

RESULTS		O3 in ppb	SO2 in ppb	NO2 in ppb	PM2.5 in µg/m3	PM10 in µg/m3	Remarks
Minimum	24 Hours	0	0	0	0	0	
Maximum		15	25	16	8	9	
Average		6.29	1.65	9.87	0.10	0.24	
Weather	Clear, rain in the evening						
Coordinates	57 L 0621988, 8950148 E						

Wind Speed and Direction:

Date	Time	Wind Speed (m/s)	Direction
28.04.2021	07:00	2.12	South West
28.04.2021	11:00	1.12	West
28.04.2021	15:00	0.39	East
28.04.2021	19:00	1.48	South West
28.04.2021	22:00	1.07	South East
29.04.2021	03:00	0.76	South West

Monitoring by: Raymond Kalu Civil Engineer	Sign:	Reporting by: Edmond Jr Bate E and Supervisor	Sign:	Checked by: S Tanzeel Ahmed E and S Supervisor	Sign:	Page No: 1
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Photographs:



Monitoring by:
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Reporting by:
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E and Supervisor

Sign:

Checked by:
S Tanzeel Ahmed
E and S Supervisor

Sign:

Page No:
2



	Tina River Hydro Development Project Solomon Islands AIR QUALITY MONITORING REPORT	Date of Reporting: 30 th April 2021 <hr/> Reporting Month: April 2021
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Guidelines:

Table 1.1.1: WHO Ambient Air Quality Guidelines ^{7,8}		
	Averaging Period	Guideline value in $\mu\text{g}/\text{m}^3$
Sulfur dioxide (SO ₂)	24-hour	125 (Interim target-1) 50 (Interim target-2) 20 (guideline)
	10 minute	500 (guideline)
Nitrogen dioxide (NO ₂)	1-year	40 (guideline)
	1-hour	200 (guideline)
Particulate Matter PM ₁₀	1-year	70 (Interim target-1) 50 (Interim target-2) 30 (Interim target-3) 20 (guideline)
	24-hour	150 (Interim target-1) 100 (Interim target-2) 75 (Interim target-3) 50 (guideline)
Particulate Matter PM _{2.5}	1-year	35 (Interim target-1) 25 (Interim target-2) 15 (Interim target-3) 10 (guideline)
	24-hour	75 (Interim target-1) 50 (Interim target-2) 37.5 (Interim target-3) 25 (guideline)
Ozone	8-hour daily maximum	160 (Interim target-1) 100 (guideline)

Attachment:

24 Hour Monitoring Report

Monitoring by: Raymond Kalu Civil Engineer	Sign:	Reporting by: Edmond Jr Bate E and Supervisor	Sign:	Checked by: S Tanzeel Ahmed E and S Supervisor	Sign:	Page No: 4
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	Tina River Hydro Development Project Solomon Islands AIR QUALITY MONITORING REPORT		Date of Reporting: 31 st May 2021
			Reporting Month: May 2021

Date of Monitoring	3 rd May, 2021	Monitoring Frequency	Single Baseline Event
Equipment Make/Model	HGas 1031 AQMS	Time	0700 - 0700
Monitoring Site	BLACKPOST	Monitoring Duration	24 Hours
References	1. M7 Air Quality and Noise Monitoring Plan 2. P15 Air Quality Management and Dust Control Plan		

RESULTS		O3 in ppb	SO2 in ppb	NO2 in ppb	PM2.5 in µg/m3	PM10 in µg/m3	Remarks
Minimum	24 Hours	0	0	3	0	0	
Maximum		18	28	21	56	76	
Average		7.17	1.80	12.43	4.03	4.87	
Weather	Sunny/partly cloudy.						
Coordinates	57 L 0620844, 8956177						

Wind Speed and Direction:

Date	Time	Wind Speed (m/s)	Direction
03.05.2021	07:00	0.56	North
03.05.2021	11:00	2.52	South
03.05.2021	15:00	0.61	North
03.05.2021	19:00	0.32	South
03.05.2021	22:00	0	-
04.05.2021	03:00	0.28	South

Monitoring by: Raymond Kalu Civil Engineer	Sign:	Reporting by: Edmond Jr Bate E and Supervisor	Sign:	Checked by: S Tanzeel Ahmed E and S Supervisor	Sign:	Page No: 1
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Photographs:





	Tina River Hydro Development Project Solomon Islands AIR QUALITY MONITORING REPORT	Date of Reporting: 31 st May 2021 <hr/> Reporting Month: May 2021
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Guidelines:

Table 1.1.1: WHO Ambient Air Quality Guidelines ^{7,8}		
	Averaging Period	Guideline value in $\mu\text{g}/\text{m}^3$
Sulfur dioxide (SO ₂)	24-hour	125 (Interim target-1) 50 (Interim target-2) 20 (guideline)
	10 minute	500 (guideline)
Nitrogen dioxide (NO ₂)	1-year	40 (guideline)
	1-hour	200 (guideline)
Particulate Matter PM ₁₀	1-year	70 (Interim target-1) 50 (Interim target-2) 30 (Interim target-3) 20 (guideline)
	24-hour	150 (Interim target-1) 100 (Interim target-2) 75 (Interim target-3) 50 (guideline)
Particulate Matter PM _{2.5}	1-year	35 (Interim target-1) 25 (Interim target-2) 15 (Interim target-3) 10 (guideline)
	24-hour	75 (Interim target-1) 50 (Interim target-2) 37.5 (Interim target-3) 25 (guideline)
Ozone	8-hour daily maximum	160 (Interim target-1) 100 (guideline)

Attachment:

24 Hour Monitoring Report

Monitoring by: Raymond Kalu Civil Engineer	Sign:	Reporting by: Edmond Jr Bate E and Supervisor	Sign:	Checked by: S Tanzeel Ahmed E and S Supervisor	Sign:	Page No: 4
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	Tina River Hydro Development Project Solomon Islands AIR QUALITY MONITORING REPORT	Date of Reporting: 31 st May 2021
		Reporting Month: May 2021

Date of Monitoring	5 th May, 2021	Monitoring Frequency	Single Baseline Event
Equipment Make/Model	HGas 1031 AQMS	Time	0700 - 0700
Monitoring Site	CHURCH (VALELE) Lot 1 STA 6+400	Monitoring Duration	24 Hours
References	1. M7 Air Quality and Noise Monitoring Plan 2. P15 Air Quality Management and Dust Control Plan		

RESULTS		O3 in ppb	SO2 in ppb	NO2 in ppb	PM2.5 in µg/m3	PM10 in µg/m3	Remarks
Minimum	24 Hours	0	0	1	0	0	
Maximum		15	33	14	24	25	
Average		5.96	1.75	9.43	0.53	0.72	
Weather	Sunny and partly cloudy towards evening.						
Coordinates	57 L 0621713, 8950462 E						

Wind Speed and Direction:

Date	Time	Wind Speed (m/s)	Direction
05.05.2021	07:00	1.98	North East
05.05.2021	11:00	3.58	North East
05.05.2021	15:00	1.16	North West
05.05.2021	19:00	0.85	North West
05.05.2021	22:00	1.05	North East
06.05.2021	03:00	0.54	North

Monitoring by: Raymond Kalu Civil Engineer	Sign:	Reporting by: Edmond Jr Bate E and Supervisor	Sign:	Checked by: S Tanzeel Ahmed E and S Supervisor	Sign:	Page No: 1
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Photographs:



Monitoring by: Raymond Kalu Civil Engineer	Sign:	Reporting by: Edmond Jr Bate E and Supervisor	Sign:	Checked by: S Tanzeel Ahmed E and S Supervisor	Sign:	Page No: 2
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	Tina River Hydro Development Project Solomon Islands AIR QUALITY MONITORING REPORT		Date of Reporting: 31 st May 2021 <hr/> Reporting Month: May 2021
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Guideline:

Table 1.1.1: WHO Ambient Air Quality Guidelines ^{7,8}		
	Averaging Period	Guideline value in $\mu\text{g}/\text{m}^3$
Sulfur dioxide (SO ₂)	24-hour	125 (Interim target-1) 50 (Interim target-2) 20 (guideline)
	10 minute	500 (guideline)
Nitrogen dioxide (NO ₂)	1-year	40 (guideline)
	1-hour	200 (guideline)
Particulate Matter PM ₁₀	1-year	70 (Interim target-1) 50 (Interim target-2) 30 (Interim target-3) 20 (guideline)
	24-hour	150 (Interim target-1) 100 (Interim target-2) 75 (Interim target-3) 50 (guideline)
Particulate Matter PM _{2.5}	1-year	35 (Interim target-1) 25 (Interim target-2) 15 (Interim target-3) 10 (guideline)
	24-hour	75 (Interim target-1) 50 (Interim target-2) 37.5 (Interim target-3) 25 (guideline)
Ozone	8-hour daily maximum	160 (Interim target-1) 100 (guideline)

Attachment:

24 Hour Monitoring Report

Monitoring by: Raymond Kalu Civil Engineer	Sign:	Reporting by: Edmond Jr Bate E and Supervisor	Sign:	Checked by: S Tanzeel Ahmed E and S Supervisor	Sign:	Page No: 4
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	Tina River Hydro Development Project Solomon Islands AIR QUALITY MONITORING REPORT		Date of Reporting: 31 st May 2021
			Reporting Month: May 2021

Date of Monitoring	07 th May, 2021	Monitoring Frequency	Single Baseline Event
Equipment Make/Model	HGas 1031 AQMS	Time	0700 - 0700
Monitoring Site	MARAVA	Monitoring Duration	24 Hours
References	1. M7 Air Quality and Noise Monitoring Plan 2. P15 Air Quality Management and Dust Control Plan		

RESULTS		O3 in ppb	SO2 in ppb	NO2 in ppb	PM2.5 in µg/m3	PM10 in µg/m3	Remarks
Minimum	24 Hours	0	0	0	0	0	
Maximum		17	30	19	14	15	
Average		7.03	1.60	11.75	0.26	0.22	
Weather	Sunny. Rained the previous night.						
Coordinates	57 L 0621638, 8949339 E						

Wind Speed and Direction:

Date	Time	Wind Speed (m/s)	Direction
07.05.2021	07:00	1.73	North East
07.05.2021	11:00	4.34	East
07.05.2021	15:00	3.05	East
07.05.2021	19:00	1.09	South
07.05.2021	22:00	0.59	South East
08.05.2021	03:00	0.35	South East

Monitoring by: Raymond Kalu Civil Engineer	Sign:	Reporting by: Edmond Jr Bate E and Supervisor	Sign:	Checked by: S Tanzeel Ahmed E and S Supervisor	Sign:	Page No: 1
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Photographs:



Monitoring by: Raymond Kalu Civil Engineer	Sign:	Reporting by: Edmond Jr Bate E and Supervisor	Sign:	Checked by: S Tanzeel Ahmed E and S Supervisor	Sign:	Page No: 2
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Guideline:

Monitoring by: Raymond Kalu Civil Engineer	Sign:	Reporting by: Edmond Jr Bate E and Supervisor	Sign:	Checked by: S Tanzeel Ahmed E and S Supervisor	Sign:	Page No: 3
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Table 1.1.1: WHO Ambient Air Quality Guidelines^{7,8}

	Averaging Period	Guideline value in $\mu\text{g}/\text{m}^3$
Sulfur dioxide (SO ₂)	24-hour	125 (Interim target-1) 50 (Interim target-2) 20 (guideline)
	10 minute	500 (guideline)
Nitrogen dioxide (NO ₂)	1-year	40 (guideline)
	1-hour	200 (guideline)
Particulate Matter PM ₁₀	1-year	70 (Interim target-1) 50 (Interim target-2) 30 (Interim target-3) 20 (guideline)
	24-hour	150 (Interim target-1) 100 (Interim target-2) 75 (Interim target-3) 50 (guideline)
Particulate Matter PM _{2.5}	1-year	35 (Interim target-1) 25 (Interim target-2) 15 (Interim target-3) 10 (guideline)
	24-hour	75 (Interim target-1) 50 (Interim target-2) 37.5 (Interim target-3) 25 (guideline)
Ozone	8-hour daily maximum	160 (Interim target-1) 100 (guideline)

Attachment:

24 Hour Monitoring Report

Monitoring by: Raymond Kalu Civil Engineer	Sign:	Reporting by: Edmond Jr Bate E and Supervisor	Sign:	Checked by: S Tanzeel Ahmed E and S Supervisor	Sign:	Page No: 4
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	Tina River Hydro Development Project Solomon Islands AIR QUALITY MONITORING REPORT	Date of Reporting: 31 st May 2021
		Reporting Month: May 2021

Date of Monitoring	10 th May, 2021	Monitoring Frequency	Single Baseline Event
Equipment Make/Model	HGas 1031 AQMS	Time	0700 - 0700
Monitoring Site	ANTIOCH	Monitoring Duration	24 Hours
References	1. M7 Air Quality and Noise Monitoring Plan 2. P15 Air Quality Management and Dust Control Plan		

RESULTS		O3 in ppb	SO2 in ppb	NO2 in ppb	PM2.5 in µg/m3	PM10 in µg/m3	Remarks
Minimum	24 Hours	0	0	0	0	0	
Maximum		15	35	20	85	90	
Average		6.82	1.60	11.63	1.35	1.61	
Weather	Sunny, partly cloudy.						
Coordinates	-9.524683 S, 160.097804 E						

Wind Speed and Direction:

Date	Time	Wind Speed (m/s)	Direction
10.05.2021	07:00	0	-
10.05.2021	11:00	1.67	North East
10.05.2021	15:00	1.61	North
10.05.2021	19:00	0.49	North
10.05.2021	22:00	1.05	North East
11.05.2021	03:00	0.09	East

Monitoring by: Joash Sanga Civil Engineer	Sign:	Reporting by: Edmond Jr Bate E and Supervisor	Sign:	Checked by: S Tanzeel Ahmed E and S Supervisor	Sign:	Page No: 1
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Photographs:



Monitoring by: Joash Sanga Civil Engineer	Sign:	Reporting by: Edmond Jr Bate E and Supervisor	Sign:	Checked by: S Tanzeel Ahmed E and S Supervisor	Sign:	Page No: 2
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	Tina River Hydro Development Project Solomon Islands AIR QUALITY MONITORING REPORT	Date of Reporting: 31 st May 2021
		Reporting Month: May 2021

Guidelines:

Table 1.1.1: WHO Ambient Air Quality Guidelines ^{7,8}		
	Averaging Period	Guideline value in $\mu\text{g}/\text{m}^3$
Sulfur dioxide (SO ₂)	24-hour	125 (Interim target-1) 50 (Interim target-2) 20 (guideline)
	10 minute	500 (guideline)
Nitrogen dioxide (NO ₂)	1-year	40 (guideline)
	1-hour	200 (guideline)
Particulate Matter PM ₁₀	1-year	70 (Interim target-1) 50 (Interim target-2) 30 (Interim target-3) 20 (guideline)
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Particulate Matter PM _{2.5}	1-year	35 (Interim target-1) 25 (Interim target-2) 15 (Interim target-3) 10 (guideline)
	24-hour	75 (Interim target-1) 50 (Interim target-2) 37.5 (Interim target-3) 25 (guideline)
Ozone	8-hour daily maximum	160 (Interim target-1) 100 (guideline)

Attachment:

24 Hour Monitoring report

Monitoring by: Joash Sanga Civil Engineer	Sign:	Reporting by: Edmond Jr Bate E and Supervisor	Sign:	Checked by: S Tanzeel Ahmed E and S Supervisor	Sign:	Page No: 4
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	Tina River Hydro Development Project Solomon Islands AIR QUALITY MONITORING REPORT		Date of Reporting: 31 st May 2021
			Reporting Month: May 2021

Date of Monitoring	12 th May, 2021	Monitoring Frequency	Single Baseline Event
Equipment Make/Model	HGas 1031 AQMS	Time	0700 - 0700
Monitoring Site	RATE SCHOOL	Monitoring Duration	24 Hours
References	1. M7 Air Quality and Noise Monitoring Plan 2. P15 Air Quality Management and Dust Control Plan		

RESULTS		O3 in ppb	SO2 in ppb	NO2 in ppb	PM2.5 in µg/m3	PM10 in µg/m3	Remarks
Minimum	24 Hours	0	0	0	0	0	
Maximum		17	28	21	40	53	
Average		7.76	1.66	12.22	0.53	0.84	
Weather	Clear, rain in the evening						
Coordinates	57 L 0621988, 8950148 E						

Wind Speed and Direction:

Date	Time	Wind Speed (m/s)	Direction
12.05.2021	07:00	0.12	East
12.05.2021	11:00	1.53	North East
12.05.2021	15:00	1.73	East
12.05.2021	19:00	0.29	South
12.05.2021	22:00	1.56	North East
13.05.2021	03:00	2.61	South West

Monitoring by: Raymond Kalu Civil Engineer	Sign:	Reporting by: Edmond Jr Bate E and Supervisor	Sign:	Checked by: S Tanzeel Ahmed E and S Supervisor	Sign:	Page No: 1
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Photographs:



Monitoring by:
Raymond Kalu
Civil Engineer

Sign:

Reporting by:
Edmond Jr Bate
E and Supervisor

Sign:

Checked by:
S Tanzeel Ahmed
E and S Supervisor

Sign:

Page No:
2



	<p style="text-align: center;">Tina River Hydro Development Project Solomon Islands</p> <p style="text-align: center;">AIR QUALITY MONITORING REPORT</p>		<p>Date of Reporting: 31st May 2021</p> <p>Reporting Month: May 2021</p>
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Guidelines:

Table 1.1.1: WHO Ambient Air Quality Guidelines ^{7,8}		
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Sulfur dioxide (SO ₂)	24-hour	125 (Interim target-1) 50 (Interim target-2) 20 (guideline)
	10 minute	500 (guideline)
Nitrogen dioxide (NO ₂)	1-year	40 (guideline)
	1-hour	200 (guideline)
Particulate Matter PM ₁₀	1-year	70 (Interim target-1) 50 (Interim target-2) 30 (Interim target-3) 20 (guideline)
	24-hour	150 (Interim target-1) 100 (Interim target-2) 75 (Interim target-3) 50 (guideline)
Particulate Matter PM _{2.5}	1-year	35 (Interim target-1) 25 (Interim target-2) 15 (Interim target-3) 10 (guideline)
	24-hour	75 (Interim target-1) 50 (Interim target-2) 37.5 (Interim target-3) 25 (guideline)
Ozone	8-hour daily maximum	160 (Interim target-1) 100 (guideline)

Attachment:

24 Hour Monitoring Report

Monitoring by: Raymond Kalu Civil Engineer	Sign:	Reporting by: Edmond Jr Bate E and Supervisor	Sign:	Checked by: S Tanzeel Ahmed E and S Supervisor	Sign:	Page No: 4
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	Tina River Hydro Development Project Solomon Islands AIR QUALITY MONITORING REPORT		Date of Reporting: 31 st May 2021
			Reporting Month: May 2021

Date of Monitoring	14 th May, 2021	Monitoring Frequency	Single Baseline Event
Equipment Make/Model	HGas 1031 AQMS	Time	0700 - 0700
Monitoring Site	ANTIOCH	Monitoring Duration	24 Hours
References	1. M7 Air Quality and Noise Monitoring Plan 2. P15 Air Quality Management and Dust Control Plan		

RESULTS		O3 in ppb	SO2 in ppb	NO2 in ppb	PM2.5 in µg/m3	PM10 in µg/m3	Remarks
Minimum	24 Hours	0	0	0	0	0	
Maximum		16	33	18	33	38	
Average		6.91	1.68	10.53	1.24	1.53	
Weather	Sunny and dry						
Coordinates	-9.524683 S, 160.097804 E						

Wind Speed and Direction:

Date	Time	Wind Speed (m/s)	Direction
14.05.2021	07:00	0	-
14.05.2021	11:00	1.75	North
14.05.2021	15:00	0.85	East
14.05.2021	19:00	0.45	North
14.05.2021	22:00	0.6	South West
15.05.2021	03:00	0.33	South

Monitoring by: Joash Sanga Civil Engineer	Sign:	Reporting by: Edmond Jr Bate E and Supervisor	Sign:	Checked by: S Tanzeel Ahmed E and S Supervisor	Sign:	Page No: 1
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Photographs:



Monitoring by: Joash Sanga Civil Engineer	Sign:	Reporting by: Edmond Jr Bate E and Supervisor	Sign:	Checked by: S Tanzeel Ahmed E and S Supervisor	Sign:	Page No: 2
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Guidelines:

Table 1.1.1: WHO Ambient Air Quality Guidelines ^{7,8}		
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	24-hour	75 (Interim target-1) 50 (Interim target-2) 37.5 (Interim target-3) 25 (guideline)
Ozone	8-hour daily maximum	160 (Interim target-1) 100 (guideline)

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24 Hour Monitoring report

Monitoring by: Joash Sanga Civil Engineer	Sign:	Reporting by: Edmond Jr Bate E and Supervisor	Sign:	Checked by: S Tanzeel Ahmed E and S Supervisor	Sign:	Page No: 4
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