

Environmental Monitoring Report

Project Number: 43253-027
Semestral Report (February–July 2019)
July 2019

INDIA: Karnataka Integrated Urban Water
Management Investment Program (Tranche 2)

Appendices (PART C)

Prepared by Karnataka Urban Infrastructure Development and Finance Corporation, Government of Karnataka for the Asian Development Bank.

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Hubert Enviro Care Systems (P) Ltd.

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Laboratory Services Division

Accredited by NABL in the fields of Chemical
ISO 9001, 14001 & OHSAS 18001 Certified.

Certificate No. TC-5786

TEST REPORT OF AMBIENT AIR QUALITY MONITORING

Name of the Customer	Ms. Laxmi Civil Engineering Services Pvt. Limited
Address of the Customer	C.S.NO. 1031 / K2, E Ward, 3rd Floor, Sterling Tower, Gavati Mandai, Kolhapur, Maharashtra - 416001
Name of the work / site	Ref. 02KDP01 dt. 19.12.2017. Construction of Works and Services for Operation and Management of 24 x 7 Water Supply System for Kundapura town, Udupi Dt. Karnataka - 576201
Sample Description	AAQ1: Ambient Air Quality Monitoring
Sample Collected by	Hubert Enviro Care Systems (P) Ltd
Sampling Location	Old Bus stand - Kundapura
Date of Sample Receipt	14.02.2019
Analysis Commenced On	14.02.2019
Completed On	23.02.2019
Report Date	25.02.2019
Report No	HECS/AAQ/003/140219

RESULTS

Date of Sampling	SO ₂	NO ₂	RSPM	SPM
	$\mu\text{g}/\text{m}^3$			
14.02.2019	27.5	30.3	59.7	126.4
NAAQ Standards	80	80	100	-

Note: * : 24 hours average; ** : 8 hours average; *** : Annual average

Test Methods Followed:

SPM : IS 5182 (Pt 4): 1999 (RA 2005) (Gravimetric)

RSPM : IS 5182 (Pt 23): 2006 (RA 2017) (Gravimetric)

SO₂ : IS 5182 (Pt 2): 2001 (RA 2017) (Improved wet and Geake method)

NO₂ : IS 5182 (Pt 6): 2006 (RA 2017) (Jacob and Hochheiser modified method)

BDL =Below detection limit; DL - Detection Limit; SPM- Suspended Particulate matter, RSPM- Respirable Suspended Particulate matter;
SO₂ - Sulphur dioxide; NO₂ - Nitrogen-di-oxide; $\mu\text{g}/\text{m}^3$ - microgram per cubic meter.

CONCLUSION: ALL THE PARAMETERS ARE WITHIN THE PERMISSIBLE LIMIT

*****End of Report *****



Authorized Signatory
(Dr K Ganesan - Lab Manager)

1. The report in full or part shall not be used for any promotional or publicity purpose without written consent by HECS organization. 2. Samples are not drawn by HECS unless or otherwise mentioned. 3. Unless specifically requested by customer the test items will not be retained more than 15 days from the date of issue of test report. 4. Under no circumstances lab accepts any liability or loss / damage caused by use or misuse of test report after invoicing or issue of test report. 5. The test results relate only to the test items. 6. # not under scope of accreditation.

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TEST REPORT OF AMBIENT AIR QUALITY MONITORING

Name of the Customer	Ms. Laxmi Civil Engineering Services Pvt. Limited
Address of the Customer	C.S.NO. 1031 / K2 , E Ward, 3rd Floor, Sterling Tower, Gavati Mandai, Kolhapur, Maharashtra - 416001
Name of the work / site	Ref. 02KDP01 dt. 19.12.2017. Construction of Works and Services for Operation and Management of 24 x 7 Water Supply System for Kundapura town, Udupi Dt. Karnataka - 576201
Sample Description	AAQ1: Ambient Air Quality Monitoring
Sample Collected by	Hubert Enviro Care Systems (P) Ltd
Sampling Location	Parijatha Circle
Date of Sample Receipt	14.02.2019
Analysis Commenced On	14.02.2019
Completed On	23.02.2019
Report Date	25.02.2019
Report No	HECS/AAQ/004/140219

RESULTS

Date of Sampling	SO ₂	NO ₂	RSPM	SPM
	µg/m ³			
14.02.2019	24.6	26.2	51.7	103.8
NAAQ Standards	80*	80*	100*	-

Note: * : 24 hours average; ** : 8 hours average; *** : Annual average

Test Methods Followed:

SPM : IS 5182 (Pt 4): 1999 (RA 2005) (Gravimetric)

RSPM : IS 5182 (Pt 23): 2006 (RA 2017) (Gravimetric)

SO₂ : IS 5182 (Pt 2): 2001 (RA 2017) (Improved wet and Geake method)

NO₂ : IS 5182 (Pt 6): 2006 (RA 2017) (Jacob and Hochheiser modified method)

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TEST REPORT OF AMBIENT AIR QUALITY MONITORING

Name of the Customer	Ms. Laxmi Civil Engineering Services Pvt. Limited
Address of the Customer	C.S.NO. 1031 / K2 , E Ward, 3rd Floor, Sterling Tower, Gavati Mandai, Kolhapur, Maharashtra - 416001
Name of the work / site	Ref. 02KDP01 dt. 19.12.2017. Construction of Works and Services for Operation and Management of 24 x 7 Water Supply System for Kundapura town, Udupi Dt. Karnataka - 576201
Sample Description	AAQ1: Ambient Air Quality Monitoring
Sample Collected by	Hubert Enviro Care Systems (P) Ltd
Sampling Location	Office (Nearby Land Post)
Date of Sample Receipt	15.02.2019
Analysis Commenced On	15.02.2019
Completed On	23.02.2019
Report Date	25.02.2019
Report No	HECS/AAQ/005/150219

RESULTS

Date of Sampling	SO ₂	NO ₂	RSPM	SPM
	$\mu\text{g}/\text{m}^3$			
15.02.2019	22.7	24.0	48.2	89.4
NAAQ Standards	80	80	100	-

Note: : 24 hours average; : 8 hours average; : Annual average

Test Methods Followed:

- SPM : IS 5182 (Pt 4): 1999 (RA 2005) (Gravimetric)
RSPM : IS 5182 (Pt 23): 2006 (RA 2017) (Gravimetric)
SO₂ : IS 5182 (Pt 2): 2001 (RA 2017) (Improved wet and Geake method)
NO₂ : IS 5182 (Pt 6): 2006 (RA 2017) (Jacob and Hochheiser modified method)

BDL =Below detection limit; DL - Detection Limit; SPM- Suspended Particulate matter, RSPM- Respirable Suspended Particulate matter;
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CONCLUSION: ALL THE PARAMETERS ARE WITHIN THE PERMISSIBLE LIMIT

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TEST REPORT OF AMBIENT AIR QUALITY MONITORING

Name of the Customer	Ms. Laxmi Civil Engineering Services Pvt. Limited
Address of the Customer	C.S.NO. 1031 / K2, E Ward, 3rd Floor, Sterling Tower, Gavati Mandai, Kolhapur, Maharashtra - 416001
Name of the work / site	Ref. 02KDP01 dt. 19.12.2017. Construction of Works and Services for Operation and Management of 24 x 7 Water Supply System for Kundapura town, Udupi Dt. Karnataka - 576201
Sample Description	AAQ1: Ambient Air Quality Monitoring
Sample Collected by	Hubert Enviro Care Systems (P) Ltd
Sampling Location	Basroor Main Road
Date of Sample Receipt	15.02.2019
Analysis Commenced On	15.02.2019
Completed On	23.02.2019
Report Date	25.02.2019
Report No	HECS/AAQ/006/150219

RESULTS

Date of Sampling	SO ₂	NO ₂	RSPM	SPM
	µg/m ³			
15.02.2019	25.9	28.4	42.5	76.1
NAAQ Standards	80*	80*	100*	-

Note: * : 24 hours average; ** : 8 hours average; *** : Annual average

Test Methods Followed:

SPM : IS 5182 (Pt 4): 1999 (RA 2005) (Gravimetric)
RSPM : IS 5182 (Pt 23): 2006 (RA 2017) (Gravimetric)
SO₂ : IS 5182 (Pt 2): 2001 (RA 2017) (Improved wet and Geake method)
NO₂ : IS 5182 (Pt 6): 2006 (RA 2017) (Jacob and Hochheiser modified method)

BDL =Below detection limit; DL - Detection Limit; SPM- Suspended Particulate matter, RSPM- Respirable Suspended Particulate matter;
SO₂- Sulphur dioxide; NO₂ - Nitrogen-di-oxide; µg/m³ - microgram per cubic meter.

CONCLUSION: ALL THE PARAMETERS ARE WITHIN THE PERMISSIBLE LIMIT

*****End of Report *****



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Name of the Customer	Ms. Laxmi Civil Engineering Services Pvt. Limited
Address of the Customer	C.S.NO. 1031 / K2 , E Ward, 3rd Floor, Sterling Tower, Gavati Mandai, Kolhapur, Maharashtra - 416001
Name of the work / site	Ref. 02KDP01 dt. 19.12.2017. Construction of Works and Services for Operation and Management of 24 x 7 Water Supply System for Kundapura town, Udupi Dt. Karnataka - 576201
Sample Description	AAQ1: Ambient Air Quality Monitoring
Sample Collected by	Hubert Enviro Care Systems (P) Ltd
Sampling Location	Church Road
Date of Sample Receipt	16.02.2019
Analysis Commenced On	16.02.2019
Completed On	23.02.2019
Report Date	25.02.2019
Report No	HECS/AAQ/007/160219

RESULTS

Date of Sampling	SO ₂	NO ₂	RSPM	SPM
	$\mu\text{g}/\text{m}^3$			
16.02.2019	23.5	25.2	43.6	82.1
NAAQ Standards	80*	80*	100*	-

Note: * : 24 hours average; ** : 8 hours average; *** : Annual average

Test Methods Followed:

SPM : IS 5182 (Pt 4): 1999 (RA 2005) (Gravimetric)

RSPM : IS 5182 (Pt 23): 2006 (RA 2017) (Gravimetric)

SO₂ : IS 5182 (Pt 2): 2001 (RA 2017) (Improved wet and Geake method)

NO₂ : IS 5182 (Pt 6): 2006 (RA 2017) (Jacob and Hochheiser modified method)

BDL =Below detection limit; DL - Detection Limit; SPM- Suspended Particulate matter, RSPM- Respirable Suspended Particulate matter;
SO₂ - Sulphur dioxide; NO₂ - Nitrogen-di-oxide; $\mu\text{g}/\text{m}^3$ - microgram per cubic meter.

CONCLUSION: ALL THE PARAMETERS MEET THE NAAQ STANDARDS

*****End of Report *****



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Address of the Customer	C.S.NO. 1031 / K2 , E Ward, 3rd Floor, Sterling Tower, Gavati Mandai, Kolhapur, Maharashtra - 416001
Name of the work / site	Ref. 02KDP01 dt. 19.12.2017. Construction of Works and Services for Operation and Management of 24 x 7 Water Supply System for Kundapura town, Udupi Dt. Karnataka - 576201
Sample Description	AAQ1: Ambient Air Quality Monitoring
Sample Collected by	Hubert Enviro Care Systems (P) Ltd
Sampling Location	M. Kodi
Date of Sample Receipt	16.02.2019
Analysis Commenced On	16.02.2019
Completed On	23.02.2019
Report Date	25.02.2019
Report No	HECS/AAQ/008/160219

RESULTS

Date of Sampling	SO ₂	NO ₂	RSPM	SPM
	$\mu\text{g}/\text{m}^3$			
16.02.2019	21.7	24.1	39.4	72.0
NAAQ Standards	80	80	100	-

Note: : 24 hours average; : 8 hours average; : Annual average

Test Methods Followed:

SPM : IS 5182 (Pt 4): 1999 (RA 2005) (Gravimetric)

RSPM : IS 5182 (Pt 23): 2006 (RA 2017) (Gravimetric)

SO₂ : IS 5182 (Pt 2): 2001 (RA 2017) (Improved wet and Geake method)

NO₂ : IS 5182 (Pt 6): 2006 (RA 2017) (Jacob and Hochheiser modified method)

BDL =Below detection limit; DL - Detection Limit; SPM- Suspended Particulate matter, RSPM- Respirable Suspended Particulate matter;
SO₂- Sulphur dioxide; NO₂- Nitrogen-di-oxide; $\mu\text{g}/\text{m}^3$ - microgram per cubic meter.

CONCLUSION: ALL THE PARAMETERS ARE WITHIN THE PERMISSIBLE LIMIT

*****End of Report *****



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TEST REPORT OF AMBIENT AIR QUALITY MONITORING

Name of the Customer	Ms. Laxmi Civil Engineering Services Pvt. Limited
Address of the Customer	C.S.NO. 1031 / K2 , E Ward, 3rd Floor, Sterling Tower, Gavati Mandai, Kolhapur, Maharashtra - 416001
Name of the work / site	Ref. 02KDP01 dt. 19.12.2017. Construction of Works and Services for Operation and Management of 24 x 7 Water Supply System for Kundapura town, Udupi Dt. Karnataka - 576201
Sample Description	AAQ1: Ambient Air Quality Monitoring
Sample Collected by	Hubert Enviro Care Systems (P) Ltd
Sampling Location	OHT Kodi
Date of Sample Receipt	16.02.2019
Analysis Commenced On	16.02.2019
Completed On	23.02.2019
Report Date	25.02.2019
Report No	HECS/AAQ/009/160219

RESULTS

Date of Sampling	SO ₂	NO ₂	RSPM	SPM
	µg/m ³			
16.02.2019	21.3	23.9	39.2	71.3
NAAQ Standards	80*	80*	100*	-

Note: * : 24 hours average; ** : 8 hours average; *** : Annual average

Test Methods Followed:

SPM : IS 5182 (Pt 4): 1999 (RA 2005) (Gravimetric)
RSPM : IS 5182 (Pt 23): 2006 (RA 2017) (Gravimetric)
SO₂ : IS 5182 (Pt 2): 2001 (RA 2017) (Improved wet and Geake method)
NO₂ : IS 5182 (Pt 6): 2006 (RA 2017) (Jacob and Hochheiser modified method)

BDL =Below detection limit; DL - Detection Limit; SPM- Suspended Particulate matter, RSPM- Respirable Suspended Particulate matter;
SO₂ - Sulphur dioxide; NO₂ - Nitrogen-di-oxide; µg/m³ - microgram per cubic meter.

CONCLUSION: ALL THE PARAMETERS ARE WITHIN THE PERMISSIBLE LIMIT

*****End of Report *****



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(Dr K Ganesan - Lab Manager)

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TEST REPORT OF AMBIENT AIR QUALITY MONITORING

Name of the Customer	Ms. Laxmi Civil Engineering Services Pvt. Limited
Address of the Customer	C.S.NO. 1031 / K2 , E Ward, 3rd Floor, Sterling Tower, Gavati Mandai, Kolhapur, Maharashtra - 416001
Name of the work / site	Ref. 02KDP01 dt. 19.12.2017. Construction of Works and Services for Operation and Management of 24 x 7 Water Supply System for Kundapura town, Udupi Dt. Karnataka - 576201
Sample Description	AAQ1: Ambient Air Quality Monitoring
Sample Collected by	Hubert Enviro Care Systems (P) Ltd
Sampling Location	Public Park (Near Juma Masjid)
Date of Sample Receipt	16.02.2019
Analysis Commenced On	16.02.2019
Completed On	23.02.2019
Report Date	25.02.2019
Report No	HECS/AAQ/010/160219

RESULTS

Date of Sampling	SO ₂	NO ₂	RSPM	SPM
	µg/m ³			
16.02.2019	16.3	18.7	23.4	47.3
NAAQ Standards	80*	80*	100*	-

Note: * : 24 hours average; ** : 8 hours average; *** : Annual average

Test Methods Followed:

SPM : IS 5182 (Pt 4): 1999 (RA 2005) (Gravimetric)
RSPM : IS 5182 (Pt 23): 2006 (RA 2017) (Gravimetric)
SO₂ : IS 5182 (Pt 2): 2001 (RA 2017) (Improved wet and Geake method)
NO₂ : IS 5182 (Pt 6): 2006 (RA 2017) (Jacob and Hochheiser modified method)

BDL =Below detection limit; DL - Detection Limit; SPM- Suspended Particulate matter, RSPM- Respirable Suspended Particulate matter;
SO₂ - Sulphur dioxide; NO₂ - Nitrogen-di-oxide; µg/m³ - microgram per cubic meter.

CONCLUSION: ALL THE PARAMETERS ARE WITHIN THE PERMISSIBLE LIMIT

*****End of Report *****




Authorized Signatory
(Dr K Ganesan - Lab Manager)

TEST REPORT OF NOISE LEVEL MONITORING

Name of the Customer	Ms. Laxmi Civil Engineering Services Pvt. Limited
Address of the Customer	C.S.NO. 1031 / K2 , E Ward, 3rd Floor, Sterling Tower, Gavati Mandai, Kolhapur, Maharashtra - 416001
Name of the work / site	Ref. 02KDP01 dt. 19.12.2017. Construction of Works and Services for Operation and Management of 24 x 7 Water Supply System for Kundapura town, Udupi Dt. Karnataka - 576201
Sample Description	NM1: Noise Monitoring
Sample Collected by	Hubert Enviro Care Systems (P) Ltd
Sampling Location	Shastri Circle (24 hrs on hourly basis)
Report Date	14.02.2019
Report No	HECS-LCESPL/NM/001/140219

S. No	Day / Night	Time (hrs)	Leq Noise Level (Hourly), dB
			14.02.2019
1	Day Time	06-07	53.2
2		07-08	54.6
3		08-09	56.3
4		09-10	60.7
5		10-11	60.5
6		11-12	60.8
7		12-13	62.8
8		13-14	61.7
9		14-15	59.8
10		15-16	62.6
11		16-17	63.5
12		17-18	60.5
13		18-19	57.3
14		19-20	56.9
15		20-21	54.6
16		21-22	55.7
17	Night Time	22-23	49.2
18		23-00	47.7
19		00-01	47.3
20		01-02	47.3
21		02-03	48.6
22		03-04	50.3
23		04-05	50.5
24		05-06	51.5
MIN			47.30
MAX			63.50
Day dB(A)			58.28
Night dB(A)			49.03

Limits: Industrial Area: Day Time-75 dB (A), Night Time-70 dB (A). Commercial Area: Day Time-65 dB (A), Night Time-55 dB (A). Residential Area: Day Time-55 dB (A), Night Time-45 dB (A). Silence Zone: Day Time-50 dB (A), Night Time-40 dB (A).

Note: Monitoring Date represents 24 hours from 6:00 am to 6:00am next day. Legend: Leq- Equivalent Noise Level (hourly); Ld-Day Time Equivalent Noise Level (06:00-22:00 hrs); Ln-Night Time Equivalent Noise Level (22:00-06:00 hrs); and Ldn-24 hourly Equivalent Noise Level.

Reference: The Noise Pollution (Regulation and Control) Rules, 2000, CPCB, New Delhi.



Authorized Signatory
(Dr K Ganesan - Lab Manager)

TEST REPORT OF NOISE LEVEL MONITORING

Name of the Customer	Ms. Laxmi Civil Engineering Services Pvt. Limited		
Address of the Customer	C.S.NO. 1031 / K2 , E Ward, 3rd Floor, Sterling Tower, Gavati Mandai, Kolhapur, Maharashtra - 416001		
Name of the work / site	Ref. 02KDP01 dt. 19.12.2017. Construction of Works and Services for Operation and Management of 24 x 7 Water Supply System for Kundapura town, Udupi Dt. Karnataka - 576201		
Sample Description	NM2: Noise Monitoring		
Sample Collected by	Hubert Enviro Care Systems (P) Ltd		
Sampling Location	OHT Halekote (24 hrs on hourly basis)		
Report Date	14.02.2019		
Report No	HECS-LCESPL/NM/002/140219		
S. No	Day / Night	Time (hrs)	Leq Noise Level (Hourly), dB)
			14.02.2019
1	Day Time	06-07	47.6
2		07-08	48.2
3		08-09	47.9
4		09-10	48.4
5		10-11	48.5
6		11-12	48.7
7		12-13	49.3
8		13-14	46.8
9		14-15	47.1
10		15-16	48.3
11		16-17	49.9
12		17-18	48.7
13		18-19	47.8
14		19-20	46.6
15		20-21	46.3
16		21-22	45.8
17	Night Time	22-23	45.5
18		23-00	42.1
19		00-01	39.4
20		01-02	38.1
21		02-03	34.4
22		03-04	37.7
23		04-05	38.8
24		05-06	41.6
MIN			34.40
MAX			49.90
Day dB(A)			47.73
Night dB(A)			38.87

Limits: Industrial Area: Day Time-75 dB (A), Night Time-70 dB (A). Commercial Area: Day Time-65 dB (A), Night Time-55 dB (A). Residential Area: Day Time-55 dB (A), Night Time-45 dB (A). Silence Zone: Day Time-50 dB (A), Night Time-40 dB (A).

Note: Monitoring Date represents 24 hours from 6:00 am to 6:00am next day. Legend: Leq- Equivalent Noise Level (hourly); Ld-Day Time Equivalent Noise Level (06:00-22:00 hrs); Ln-Night Time Equivalent Noise Level (22:00-06:00 hrs); and Ldn-24 hourly Equivalent Noise Level.

Reference: The Noise Pollution (Regulation and Control) Rules, 2000, CPCB, New Delhi.



[Signature]
 Authorized Signatory
 (Dr K Ganesan - Lab Manager)

TEST REPORT OF NOISE LEVEL MONITORING

Name of the Customer	Ms. Laxmi Civil Engineering Services Pvt. Limited
Address of the Customer	C.S.NO. 1031 / K2 , E Ward, 3rd Floor, Sterling Tower, Gavati Mandai, Kolhapur, Maharashtra - 416001
Name of the work / site	Ref. 02KDP01 dt. 19.12.2017. Construction of Works and Services for Operation and Management of 24 x 7 Water Supply System for Kundapura town, Udupi Dt. Karnataka - 576201
Sample Description	NM3: Noise Monitoring
Sample Collected by	Hubert Enviro Care Systems (P) Ltd
Sampling Location	Old Bus Stand - Kundapura (24 hrs on hourly basis)
Report Date	14.02.2019
Report No	HECS-LCESPL/NM/003/140219

Report No		PCC/CCSI/2/111/005/140219	
S. No	Day / Night	Time (hrs)	Leq Noise Level (Hourly), dB
			14.02.2019
1	Day Time	06-07	59.7
2		07-08	60.8
3		08-09	64.8
4		09-10	66.7
5		10-11	67.3
6		11-12	68.9
7		12-13	69.3
8		13-14	68.8
9		14-15	70.6
10		15-16	71.8
11		16-17	72.9
12		17-18	68.8
13		18-19	65.7
14		19-20	58.9
15		20-21	54.8
16		21-22	53.6
17	Night Time	22-23	52.6
18		23-00	52.4
19		00-01	51.1
20		01-02	52.1
21		02-03	49.8
22		03-04	50.5
23		04-05	51.4
24		05-06	51.3
MIN			49.80
MAX			72.90
Day dB(A)			64.47
Night dB(A)			51.23

Limits: Industrial Area: Day Time-75 dB (A), Night Time-70 dB (A). Commercial Area: Day Time-65 dB (A), Night Time-55 dB (A). Residential Area: Day Time-55 dB (A), Night Time-45 dB (A). Silence Zone: Day Time-50 dB (A), Night Time-40 dB (A).

Note: Monitoring Date represents 24 hours from 6:00 am to 6:00am next day. Legend: Leq- Equivalent Noise Level (hourly); Ld-Day Time Equivalent Noise Level (06:00-22:00 hrs); Ln-Night Time Equivalent Noise Level (22:00-06:00 hrs); and Ldn-24 hourly Equivalent Noise Level.

Reference: The Noise Pollution (Regulation and Control) Rules, 2000, CPCB, New Delhi.



Authorized Signatory
(Dr K Ganesan - Lab Manager)

TEST REPORT OF NOISE LEVEL MONITORING

Name of the Customer	Ms. Laxmi Civil Engineering Services Pvt. Limited
Address of the Customer	C.S.NO. 1031 / K2 , E Ward, 3rd Floor, Sterling Tower, Gavati Mandai, Kolhapur, Maharashtra - 416001
Name of the work / site	Ref. 02KDP01 dt. 19.12.2017. Construction of Works and Services for Operation and Management of 24 x 7 Water Supply System for Kundapura town, Udupi Dt. Karnataka - 576201
Sample Description	NM4: Noise Monitoring
Sample Collected by	Hubert Enviro Care Systems (P) Ltd
Sampling Location	Parijatha Circle (24 hrs on hourly basis)
Report Date	14.02.2019
Report No	HECS-LCESPL/NM/004/140219

S. No	Day / Night	Time (hrs)	Leq Noise Level (Hourly), dB)
			14.02.2019
1	Day Time	06-07	49.8
2		07-08	50.7
3		08-09	54.3
4		09-10	58.5
5		10-11	56.2
6		11-12	56.8
7		12-13	57.3
8		13-14	58.1
9		14-15	57.5
10		15-16	52.1
11		16-17	53.8
12		17-18	55.3
13		18-19	57.2
14		19-20	56.7
15		20-21	53.5
16		21-22	49.3
17	Night Time	22-23	42.8
18		23-00	42.4
19		00-01	41.8
20		01-02	39.7
21		02-03	40.1
22		03-04	39.8
23		04-05	40.3
24		05-06	48.4
MIN			39.70
MAX			58.50
Day dB(A)			54.11
Night dB(A)			41.79

Limits: Industrial Area: Day Time-75 dB (A), Night Time-70 dB (A). Commercial Area: Day Time-65 dB (A), Night Time-55 dB (A). Residential Area: Day Time-55 dB (A), Night Time-45 dB (A). Silence Zone: Day Time-50 dB (A), Night Time-40 dB (A).

Note: Monitoring Date represents 24 hours from 6:00 am to 6:00am next day. Legend: Leq- Equivalent Noise Level (hourly); Ld-Day Time Equivalent Noise Level (06:00-22:00 hrs); Ln-Night Time Equivalent Noise Level (22:00-06:00 hrs); and Ldn-24 hourly Equivalent Noise Level.

Reference: The Noise Pollution (Regulation and Control) Rules, 2000, CPCB, New Delhi.



[Signature]
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(Dr K Ganesan - Lab Manager)

TEST REPORT OF NOISE LEVEL MONITORING

Name of the Customer	Ms. Laxmi Civil Engineering Services Pvt. Limited
Address of the Customer	C.S.NO. 1031 / K2 , E Ward, 3rd Floor, Sterling Tower, Gavati Mandai, Kolhapur, Maharashtra - 416001
Name of the work / site	Ref. 02KDP01 dt. 19.12.2017. Construction of Works and Services for Operation and Management of 24 x 7 Water Supply System for Kundapura town, Udupi Dt. Karnataka - 576201
Sample Description	NM5: Noise Monitoring
Sample Collected by	Hubert Enviro Care Systems (P) Ltd
Sampling Location	Office (Near HEAD Post office) (24 hrs on hourly basis)
Report Date	14.02.2019
Report No	HECS-LCESPL/NM/005/140219

S. No	Day / Night	Time (hrs)	Leq Noise Level (Hourly), dB
			14.02.2019
1	Day Time	06-07	42.5
2		07-08	44.3
3		08-09	46.7
4		09-10	47.6
5		10-11	48.4
6		11-12	49.8
7		12-13	52.1
8		13-14	51.6
9		14-15	50.5
10		15-16	49.9
11		16-17	51.8
12		17-18	50.3
13		18-19	47.8
14		19-20	45.7
15		20-21	46.3
16		21-22	44.5
17	Night Time	22-23	43.4
18		23-00	39.6
19		00-01	32.2
20		01-02	33.1
21		02-03	32.3
22		03-04	39.2
23		04-05	40.2
24		05-06	42.4
MIN			32.20
MAX			52.10
Day dB(A)			47.84
Night dB(A)			37.00

Limits: Industrial Area: Day Time-75 dB (A), Night Time-70 dB (A). Commercial Area: Day Time-65 dB (A), Night Time-55 dB (A). Residential Area: Day Time-55 dB (A), Night Time-45 dB (A). Silence Zone: Day Time-50 dB (A), Night Time-40 dB (A).

Note: Monitoring Date represents 24 hours from 6:00 am to 6:00am next day. Legend: Leq- Equivalent Noise Level (hourly); Ld-Day Time Equivalent Noise Level (06:00-22:00 hrs); Ln-Night Time Equivalent Noise Level (22:00-06:00 hrs); and Ldn-24 hourly Equivalent Noise Level.

Reference: The Noise Pollution (Regulation and Control) Rules, 2000, CPCB, New Delhi.



[Signature]
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Laboratory Services Division

Accredited by NABL in the fields of Chemical
ISO 9001, 14001 & OHSAS 18001 Certified.

TEST REPORT OF NOISE LEVEL MONITORING

Name of the Customer	Ms. Laxmi Civil Engineering Services Pvt. Limited
Address of the Customer	C.S.NO. 1031 / K2 , E Ward, 3rd Floor, Sterling Tower, Gavati Mandai, Kolhapur, Maharashtra - 416001
Name of the work / site	Ref. 02KDP01 dt. 19.12.2017. Construction of Works and Services for Operation and Management of 24 x 7 Water Supply System for Kundapura town, Udupi Dt. Karnataka - 576201
Sample Description	NM6: Noise Monitoring
Sample Collected by	Hubert Enviro Care Systems (P) Ltd
Sampling Location	Basoor Main Road (24 hrs on hourly basis)
Report Date	14.02.2019
Report No	HECS-LCESPL/NM/006/140219

S. No	Day / Night	Time (hrs)	Leq Noise Level (Hourly), dB
			14.02.2019
1	Day Time	06-07	42.2
2		07-08	42.8
3		08-09	44.4
4		09-10	46.7
5		10-11	47.4
6		11-12	48.7
7		12-13	49.1
8		13-14	51.2
9		14-15	50.4
10		15-16	55.6
11		16-17	54.7
12		17-18	56.5
13		18-19	55.2
14		19-20	54.2
15		20-21	53.6
16		21-22	49.4
17	Night Time	22-23	43.5
18		23-00	44.5
19		00-01	38.2
20		01-02	37.3
21		02-03	36.4
22		03-04	35.2
23		04-05	40.5
24		05-06	41.6
MIN			35.20
MAX			56.50
Day dB(A)			49.74
Night dB(A)			39.10

Limits: Industrial Area: Day Time-75 dB (A), Night Time-70 dB (A). Commercial Area: Day Time-65 dB (A), Night Time-55 dB (A). Residential Area: Day Time-55 dB (A), Night Time-45 dB (A). Silence Zone: Day Time-50 dB (A), Night Time-40 dB (A).

Note: Monitoring Date represents 24 hours from 6:00 am to 6:00am next day. Legend: Leq- Equivalent Noise Level (hourly); Ld-Day Time Equivalent Noise Level (06:00-22:00 hrs); Ln-Night Time Equivalent Noise Level (22:00-06:00 hrs); and Ldn-24 hourly Equivalent Noise Level.

Reference: The Noise Pollution (Regulation and Control) Rules, 2000, CPCB, New Delhi.



Authorized Signatory
(Dr K Ganesan - Lab Manager)

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TEST REPORT OF NOISE LEVEL MONITORING

Name of the Customer	Ms. Laxmi Civil Engineering Services Pvt. Limited
Address of the Customer	C.S.NO. 1031 / K2 , E Ward, 3rd Floor, Sterling Tower, Gavati Mandai, Kolhapur, Maharashtra - 416001
Name of the work / site	Ref. 02KDP01 dt. 19.12.2017. Construction of Works and Services for Operation and Management of 24 x 7 Water Supply System for Kundapura town, Udupi Dt. Karnataka - 576201
Sample Description	NM7: Noise Monitoring
Sample Collected by	Hubert Enviro Care Systems (P) Ltd
Sampling Location	Church Road (24 hrs on hourly basis)
Report Date	14.02.2019
Report No	HECS-LCESPL/NM/007/140219

S. No	Day / Night	Time (hrs)	Leq Noise Level (Hourly), dB)
			14.02.2019
1	Day Time	06-07	42.9
2		07-08	44.8
3		08-09	42.4
4		09-10	48.6
5		10-11	55.3
6		11-12	55.9
7		12-13	57.4
8		13-14	58.2
9		14-15	61.6
10		15-16	60.2
11		16-17	61.9
12		17-18	65.4
13		18-19	54.1
14		19-20	53.8
15		20-21	51.6
16		21-22	50.4
17	Night Time	22-23	47.9
18		23-00	47.5
19		00-01	46.9
20		01-02	45.8
21		02-03	45.2
22		03-04	43.9
23		04-05	44.4
24		05-06	46.5
MIN			42.40
MAX			65.40
Day dB(A)			53.67
Night dB(A)			45.74

Limits: Industrial Area: Day Time-75 dB (A), Night Time-70 dB (A). Commercial Area: Day Time-65 dB (A), Night Time-55 dB (A). Residential Area: Day Time-55 dB (A), Night Time-45 dB (A). Silence Zone: Day Time-50 dB (A), Night Time-40 dB (A).

Note: Monitoring Date represents 24 hours from 6:00 am to 6:00am next day. Legend: Leq- Equivalent Noise Level (hourly); Ld-Day Time Equivalent Noise Level (06:00-22:00 hrs); Ln-Night Time Equivalent Noise Level (22:00-06:00 hrs); and Ldn-24 hourly Equivalent Noise Level.

Reference: The Noise Pollution (Regulation and Control) Rules, 2000, CPCB, New Delhi.



[Signature]
Authorized Signatory
(Dr K Ganesan - Lab Manager)

Hubert Enviro Care Systems (P) Ltd.

C-45, Industrial Estate, Baikampady, Mangalore, Karnataka - 575011.

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Laboratory Services DivisionAccredited by NABL in the fields of Chemical
ISO 9001, 14001 & OHSAS 18001 Certified.**TEST REPORT OF NOISE LEVEL MONITORING**

Name of the Customer	Ms. Laxmi Civil Engineering Services Pvt. Limited
Address of the Customer	C.S.NO. 1031 / K2 , E Ward, 3rd Floor, Sterling Tower, Gavati Mandai, Kolhapur, Maharashtra - 416001
Name of the work / site	Ref. 02KDP01 dt. 19.12.2017. Construction of Works and Services for Operation and Management of 24 x 7 Water Supply System for Kundapura town, Udupi Dt. Karnataka - 576201
Sample Description	NM8: Noise Monitoring
Sample Collected by	Hubert Enviro Care Systems (P) Ltd
Sampling Location	M Kodi (24 hrs on hourly basis)
Report Date	14.02.2019
Report No	HECS-LCESPL/NM/008/140219

S. No	Day / Night	Time (hrs)	Leq Noise Level (Hourly), dB)
			14.02.2019
1	Day Time	06-07	42.9
2		07-08	44.1
3		08-09	48.5
4		09-10	53.6
5		10-11	54.2
6		11-12	52.6
7		12-13	56.5
8		13-14	59.6
9		14-15	57.9
10		15-16	58.1
11		16-17	59.2
12		17-18	51.4
13		18-19	52.2
14		19-20	53.7
15		20-21	50.1
16		21-22	48.8
17	Night Time	22-23	47.9
18		23-00	45.8
19		00-01	43.2
20		01-02	41.6
21		02-03	42.1
22		03-04	43.2
23		04-05	45.8
24		05-06	42.2
MIN			41.60
MAX			59.60
Day dB(A)			52.43
Night dB(A)			43.41

Limits: Industrial Area: Day Time-75 dB (A), Night Time-70 dB (A). Commercial Area: Day Time-65 dB (A), Night Time-55 dB (A). Residential Area: Day Time-55 dB (A), Night Time-45 dB (A). Silence Zone: Day Time-50 dB (A), Night Time-40 dB (A).

Note: Monitoring Date represents 24 hours from 6:00 am to 6:00am next day. Legend: Leq- Equivalent Noise Level (hourly); Ld-Day Time Equivalent Noise Level (06:00-22:00 hrs); Ln-Night Time Equivalent Noise Level (22:00-06:00 hrs); and Ldn-24 hourly Equivalent Noise Level.

Reference: The Noise Pollution (Regulation and Control) Rules, 2000, CPCB, New Delhi.



[Signature]
Authorized Signatory
(Dr K Ganesan - Lab Manager)

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Laboratory Services Division

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TEST REPORT OF NOISE LEVEL MONITORING

Name of the Customer	Ms. Laxmi Civil Engineering Services Pvt. Limited
Address of the Customer	C.S.NO. 1031 / K2, E Ward, 3rd Floor, Sterling Tower, Gavati Mandai, Kolhapur, Maharashtra - 416001
Name of the work / site	Ref. 02KDP01 dt. 19.12.2017. Construction of Works and Services for Operation and Management of 24 x 7 Water Supply System for Kundapura town, Udupi Dt. Karnataka - 576201
Sample Description	NM9: Noise Monitoring
Sample Collected by	Hubert Enviro Care Systems (P) Ltd
Sampling Location	OHT Kodi (24 hrs on hourly basis)
Report Date	14.02.2019
Report No	HECS-LCESPL/NM/009/140219

S. No	Day / Night	Time (hrs)	Leq Noise Level (Hourly), dB
			14.02.2019
1	Day Time	06-07	44.7
2		07-08	45.9
3		08-09	54.2
4		09-10	55.9
5		10-11	56.1
6		11-12	58.3
7		12-13	57.7
8		13-14	53.8
9		14-15	53.5
10		15-16	53.8
11		16-17	54.2
12		17-18	49.9
13		18-19	42.8
14		19-20	43.5
15		20-21	46.8
16		21-22	39.2
17	Night Time	22-23	38.2
18		23-00	42.6
19		00-01	37.6
20		01-02	38.9
21		02-03	37.9
22		03-04	36.7
23		04-05	39.8
24		05-06	40.5
MIN			36.70
MAX			58.30
Day dB(A)			49.91
Night dB(A)			39.14

Limits: Industrial Area: Day Time-75 dB (A), Night Time-70 dB (A). Commercial Area: Day Time-65 dB (A), Night Time-55 dB (A). Residential Area: Day Time-55 dB (A), Night Time-45 dB (A). Silence Zone: Day Time-50 dB (A), Night Time-40 dB (A).

Note: Monitoring Date represents 24 hours from 6:00 am to 6:00am next day. Legend: Leq- Equivalent Noise Level (hourly); Ld-Day Time Equivalent Noise Level (06:00-22:00 hrs); Ln-Night Time Equivalent Noise Level (22:00-06:00 hrs); and Ldn-24 hourly Equivalent Noise Level.

Reference: The Noise Pollution (Regulation and Control) Rules, 2000, CPCB, New Delhi.



Authorized Signatory
(Dr K Ganesan - Lab Manager)

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Laboratory Services Division

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TEST REPORT OF NOISE LEVEL MONITORING

Name of the Customer	Ms. Laxmi Civil Engineering Services Pvt. Limited
Address of the Customer	C.S.NO. 1031 / K2 , E Ward, 3rd Floor, Sterling Tower, Gavati Mandai, Kolhapur, Maharashtra - 416001
Name of the work / site	Ref. 02KDP01 dt. 19.12.2017. Construction of Works and Services for Operation and Management of 24 x 7 Water Supply System for Kundapura town, Udupi Dt. Karnataka - 576201
Sample Description	NM10: Noise Monitoring
Sample Collected by	Hubert Enviro Care Systems (P) Ltd
Sampling Location	Public Park (24 hrs on hourly basis)
Report Date	14.02.2019
Report No	HECS-LCESPL/NM/010/140219

S. No	Day / Night	Time (hrs)	Leq Noise Level (Hourly), dB
			14.02.2019
1	Day Time	06-07	42.4
2		07-08	42.5
3		08-09	45.3
4		09-10	50.2
5		10-11	56.4
6		11-12	57.6
7		12-13	56.5
8		13-14	56.8
9		14-15	55.3
10		15-16	54.9
11		16-17	54.2
12		17-18	54.6
13		18-19	53.7
14		19-20	54.1
15		20-21	53.9
16		21-22	53.4
17	Night Time	22-23	52.1
18		23-00	41.9
19		00-01	40.2
20		01-02	39.6
21		02-03	38.7
22		03-04	38.5
23		04-05	30.9
24		05-06	40.4
MIN			30.90
MAX			57.60
Day dB(A)			52.58
Night dB(A)			38.60

Limits: Industrial Area: Day Time-75 dB (A), Night Time-70 dB (A). Commercial Area: Day Time-65 dB (A), Night Time-55 dB (A). Residential Area: Day Time-55 dB (A), Night Time-45 dB (A). Silence Zone: Day Time-50 dB (A), Night Time-40 dB (A).

Note: Monitoring Date represents 24 hours from 6:00 am to 6:00am next day. Legend: Leq- Equivalent Noise Level (hourly); Ld-Day Time Equivalent Noise Level (06:00-22:00 hrs); Ln-Night Time Equivalent Noise Level (22:00-06:00 hrs); and Ldn-24 hourly Equivalent Noise Level.

Reference: The Noise Pollution (Regulation and Control) Rules, 2000, CPCB, New Delhi.



Authorized Signatory
(Dr K Ganesan - Lab Manager)

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WATER ANALYSIS TEST REPORT

Page No. 1 of 2

Name of the Customer	Ms. Laxmi Civil Engineering Services Pvt. Limited
Address of the Customer	C.S.NO. 1031 / K2, E Ward, 3rd Floor, Sterling Tower, Gavati Mandai, Kolhapur, Maharashtra - 416001
Name of the work / site	Ref. 02KDP01 dt. 19.12.2017. Construction of Works and Services for Operation and Management of 24 x 7 Water Supply System for Kundapura town, Udupi Dt. Karnataka - 576201
Sample Description	Raw Water
Sample Mark	RW-1
Sample Drawn by	Hubert Enviro Care Systems (P) Ltd
Date of Sampling	14.02.2019
Qty. of sample received	5 L in HDPE Can
Date of Sample Receipt	14.02.2019
Analysis Commenced On	15.02.2019
Completed On	23.02.2019
Report No	HECS/W/001/140219
Report Date	25.02.2019

RESULTS

S.No	Parameters	Units	Results	Test Method Followed
1.	Color	HU	BDL (DL 1)	IS 3025 (Pt 4): 1983 (RA 2017)
2.	Odour	-	Agreeable	IS 3025 (Pt 5): 1983 (RA 2018)
3.	Conductivity at 25°C	µS/cm	41	IS:3025: (Pt-14): 1983 (RA 2006)
4.	pH @ 25°C	-	7.47	IS 3025 (Pt 11): 1983 (RA 2017)
5.	Total Dissolved Solids	mg/L	34	IS 3025 (Pt 16): 1984 (RA 2017)
6.	Turbidity	NTU	BDL (DL 0.1)	IS:3025: (Pt-10): 1984 (RA 2006)
7.	Total Alkalinity	mg/L	8.64	IS 3025 (Pt 23): 1986 (RA 2009)
8.	Total hardness as CaCO ₃	mg/L	21.34	IS 3025 (Pt 21): 1983 (RA 2006)
9.	Chloride as Cl	mg/L	5.38	IS 3025 (Pt 32): 1988 (RA 2009)
10.	Sulphate as SO ₄	mg/L	9.066	IS 3025 (Pt 24): 1986 (RA 2009)
11.	Total Chromium as Cr	mg/L	BDL (0.01)	IS 3025 (Pt 52): 2003 (RA 2009)
12.	Calcium as Ca	mg/L	5.44	IS 3025 (Pt 40): 1991 (RA 2009)
13.	Magnesium as Mg	mg/L	1.89	IS 3025 (Pt 46): 1994 (RA 2009)
14.	Total Iron	mg/L	BDL (DL 0.02)	IS 3025 (Pt 53): 2003 (RA 2009)
15.	Sodium	mg/L	1.5	3500 Na B APHA 23 rd Edition, 2017
16.	Potassium	mg/L	3.5	3500 Na B APHA 23 rd Edition, 2017
17.	Cyanide as CN	mg/L	BDL (DL 0.01)	IS 3025 (Part - 27): 1986

Note: NP - HU - Hazen Unit; µS/cm - micro Siemens per centimeter; NTU - Nephelometric Turbidity Unit; mg/L - milligram per liter;

BDL - Below Detection Limit; DL - Detection Limit;

*****End of Report*****



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Hubert Enviro Care Systems (P) Ltd.

C-45, Industrial Estate, Baikampady, Mangalore, Karnataka - 575011.
Ph: 0824 - 2408111, Email: kro@hecs.in, Website: www.hecs.in

H.O.: # 18, 92nd Street, Ashok Nagar, Chennai - 600 083.
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Laboratory Services Division

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WATER ANALYSIS TEST REPORT

Page No. 2 of 2

Name of the Customer	Ms. Laxmi Civil Engineering Services Pvt. Limited
Address of the Customer	C.S.NO. 1031 / K2, E Ward, 3rd Floor, Sterling Tower, Gavati Mandai, Kolhapur, Maharashtra - 416001
Name of the work / site	Ref. 02KDP01 dt. 19.12.2017. Construction of Works and Services for Operation and Management of 24 x 7 Water Supply System for Kundapura town, Udupi Dt. Karnataka - 576201
Sample Description	Raw Water
Sample Mark	RW-1
Sample Drawn by	Hubert Enviro Care Systems (P) Ltd
Date of Sampling	14.02.2019
Qty. of sample received	5 L in HDPE Can
Date of Sample Receipt	14.02.2019
Analysis Commenced On	15.02.2019
Completed On	23.02.2019
Report No	HECS/W/001/140219
Report Date	25.02.2019

RESULTS

S.No	Parameters	Units	Results	Test Method Followed
18.	Fluoride	mg/L	BDL (DL 0.01)	IS 3025 (Part - 60):2008
19.	Biological Oxygen Demand at 27 °C, 3 days	mg/L	2.2 (DL 2)	IS 3025 (Pt 44): 1993 (RA 2014)
20.	Chemical Oxygen Demand	mg/L	7.84	IS 3025: (Pt 58): 2006 (RA 2017)
21.	Nitrate as NO ₃	mg/L	BDL (DL 0.01)	ASTM (Part - 31)1978
22.	Aluminium as Al	mg/L	BDL (DL 0.03)	IS 3025 (Part - 55):2003
23.	Boron as B	mg/L	BDL (DL 0.1)	IS:3025 (Part - 57):2003
24.	Phenolic Compounds	mg/L	BDL (DL 0.001)	IS 3025 (Part - 43)1992
25.	Zinc as Zn	mg/L	BDL (DL 0.1)	IS 3025 (Part 49)-1994 (Reaff 2009)
26.	Copper as Cu	mg/L	BDL (DL 0.01)	IS 3025 (Pt 42)-1992(Reaff :2009)
27.	Manganese as Mn	mg/L	BDL (DL 0.05)	IS 3025:(Part - 59):2006
28.	Cadmium as Cd	mg/L	BDL (DL 0.001)	IS 3025: (Part - 41)1991
29.	Lead as Pb	mg/L	BDL (DL 0.005)	IS 3025: (Part - 47)1994(Reaff 2009)
30.	Selenium as Se	mg/L	BDL (DL 0.005)	IS 3025: Part (56)2003
31.	Arsenic as As	mg/L	BDL (DL 0.005)	IS 3025: (Part-37):1988(Reaff 2009)
32.	Mercury as Hg	mg/L	BDL (DL 0.0005)	IS 3025: (Part 48):1994 RA 1999
33.	Residual Free Chlorine	mg/L	BDL (DL 0.1)	IS 3025 (Part - 26):1986

Note: NP - HU - Hazen Unit; $\mu\text{S}/\text{cm}$ - micro Siemens per centimeter; NTU - Nephelometric Turbidity Unit; mg/L - milligram per liter;

BDL - Below Detection Limit; DL - Detection Limit;

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WATER ANALYSIS TEST REPORT

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Name of the work / site	Ref. 02KDP01 dt. 19.12.2017. Construction of Works and Services for Operation and Management of 24 x 7 Water Supply System for Kundapura town, Udupi Dt. Karnataka - 576201
Sample Description	Surface Water - I
Sample Mark	SW-1
Sample Drawn by	Hubert Enviro Care Systems (P) Ltd
Date of Sampling	14.02.2019
Qty. of sample received	2.5 L in HDPE Can
Date of Sample Receipt	14.02.2019
Analysis Commenced On	15.02.2019
Completed On	23.02.2019
Report No	HECS/W/002/140219
Report Date	25.02.2019

RESULTS

S.No	Parameters	Units	Results	Test Method Followed
1.	Color	HU	BDL (DL 1)	IS 3025 (Pt 4):1983 (RA 2017)
2.	Odour	-	Agreeable	IS 3025 (Pt 5):1983 (RA 2018)
3.	Taste	-	Agreeable	IS 3025 (Part - 8):1984
4.	pH @ 25°C	-	7.45	IS 3025 (Pt 11): 1983 (RA 2017)
5.	Total Dissolved Solids	mg/L	11400	IS 3025 (Pt 16): 1984 (RA 2017)
6.	Turbidity	NTU	BDL (DL 0.1)	IS:3025: (Pt-10): 1984 (RA 2006)
7.	Total Alkalinity	mg/L	28.8	IS 3025 (Pt 23): 1986 (RA 2009)
8.	Total hardness as CaCO ₃	mg/L	2677.7	IS 3025 (Pt 21): 1983 (RA 2006)
9.	Chloride as Cl	mg/L	6266.3	IS 3025 (Pt 32): 1988 (RA 2009)
10.	Sulphate as SO ₄	mg/L	784.84	IS 3025 (Pt 24): 1986 (RA 2009)
11.	Total Chromium as Cr	mg/L	BDL (0.01)	IS 3025 (Pt 52): 2003 (RA 2009)
12.	Calcium as Ca	mg/L	194.39	IS 3025 (Pt 40): 1991 (RA 2009)
13.	Magnesium as Mg	mg/L	532.7	IS 3025 (Pt 46): 1994 (RA 2009)
14.	Total Iron	mg/L	BLD (DL 0.02)	IS 3025 (Pt 53): 2003 (RA 2009)

Note: NP - HU - Hazen Unit; μ S/cm - micro Siemens per centimeter; NTU- Nephelometric Turbidity Unit; mg/L - milligram per liter;

BDL - Below Detection Limit; DL - Detection Limit;

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WATER ANALYSIS TEST REPORT

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Name of the Customer	Ms. Laxmi Civil Engineering Services Pvt. Limited
Address of the Customer	C.S.NO. 1031 / K2, E Ward, 3rd Floor, Sterling Tower, Gavati Mandai, Kolhapur, Maharashtra - 416001
Name of the work / site	Ref. 02KDP01 dt. 19.12.2017. Construction of Works and Services for Operation and Management of 24 x 7 Water Supply System for Kundapura town, Udupi Dt. Karnataka - 576201
Sample Description	Surface Water - I
Sample Mark	SW-1
Sample Drawn by	Hubert Enviro Care Systems (P) Ltd
Date of Sampling	14.02.2019
Qty. of sample received	2.5 L in HDPE Can
Date of Sample Receipt	14.02.2019
Analysis Commenced On	15.02.2019
Completed On	23.02.2019
Report No	HECS/W/002/140219
Report Date	25.02.2019

RESULTS

S.No	Parameters	Units	Results	Test Method Followed
15.	Fluoride	mg/L	0.031	IS 3025 (Part - 60):2008
16.	Nitrate as NO ₃	mg/L	2.17	ASTM (Part - 31):1978
17.	Aluminium as Al	mg/L	BDL (DL0.03)	IS 3025 (Part - 55):2003
18.	Boron as B	mg/L	6.2 (DL0.1)	IS:3025 (Part - 57):2003
19.	Phenolic Compounds	mg/L	BDL (DL0.001)	IS 3025 (Part - 43):1992
20.	Zinc as Zn	mg/L	3.1 (DL 0.1)	IS 3025 (Part49)-1994 (Reaff 2009)
21.	Copper as Cu	mg/L	0.6 (DL 0.01)	IS 3025 (Pt 42)-1992(Reaff :2009)
22.	Manganese as Mn	mg/L	0.24 (DL 0.05)	IS 3025:(Part - 59):2006
23.	Cadmium as Cd	mg/L	BDL (DL 0.001)	IS 3025: (Part - 41):1991
24.	Lead as Pb	mg/L	BDL (DL 0.005)	IS 3025: (Part - 47):1994(Reaff 2009)
25.	Selenium as Se	mg/L	BDL (DL 0.005)	IS 3025: Part (56):2003
26.	Arsenic as As	mg/L	BDL (DL 0.005)	IS 3025: (Part-37):1988(Reaff 2009)
27.	Mercury as Hg	mg/L	BDL (DL 0.0005)	IS 3025: (Part48):1994 RA 1999
28.	Residual Free Chlorine	mg/L	BDL (DL0.1)	IS 3025 (Part - 26):1986

Note: NP - HU - Hazen Unit; μ S/cm - micro Siemens per centimeter; NTU - Nephelometric Turbidity Unit; mg/L - milligram per liter;

BDL - Below Detection Limit; DL - Detection Limit;

*****End of Report*****




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WATER ANALYSIS TEST REPORT

Page No. 1 of 2

Name of the Customer	Ms. Laxmi Civil Engineering Services Pvt. Limited
Address of the Customer	C.S.NO. 1031 / K2, E Ward, 3rd Floor, Sterling Tower, Gavati Mandai, Kolhapur, Maharashtra - 416001
Name of the work / site	Ref. 02KDP01 dt. 19.12.2017. Construction of Works and Services for Operation and Management of 24 x 7 Water Supply System for Kundapura town, Udupi Dt. Karnataka - 576201
Sample Description	Surface Water - II
Sample Mark	SW-2
Sample Drawn by	Hubert Enviro Care Systems (P) Ltd
Date of Sampling	14.02.2019
Qty. of sample received	2.5 L in HDPE Can
Date of Sample Receipt	14.02.2019
Analysis Commenced On	15.02.2019
Completed On	23.02.2019
Report No	HECS/W/003/140219
Report Date	25.02.2019

RESULTS

S.No	Parameters	Units	Results	Test Method Followed
1.	Color	HU	BDL (DL 1)	IS 3025 (Pt 4): 1983 (RA 2017)
2.	Odour	-	Agreeable	IS 3025 (Pt 5): 1983 (RA 2018)
3.	Taste	-	Agreeable	IS 3025 (Part - 8): 1984
4.	pH @ 25°C	-	7.36	IS 3025 (Pt 11): 1983 (RA 2017)
5.	Total Dissolved Solids	mg/L	11400	IS 3025 (Pt 16): 1984 (RA 2017)
6.	Turbidity	NTU	BDL (DL 0.1)	IS:3025: (Pt-10): 1984 (RA 2006)
7.	Total Alkalinity	mg/L	57.6	IS 3025 (Pt 23): 1986 (RA 2009)
8.	Total hardness as CaCO ₃	mg/L	2677.2	IS 3025 (Pt 21): 1983 (RA 2006)
9.	Chloride as Cl	mg/L	6702.18	IS 3025 (Pt 32): 1988 (RA 2009)
10.	Sulphate as SO ₄	mg/L	774.02	IS 3025 (Pt 24): 1986 (RA 2009)
11.	Total Chromium as Cr	mg/L	BDL (0.01)	IS 3025 (Pt 52): 2003 (RA 2009)
12.	Calcium as Ca	mg/L	225.4	IS 3025 (Pt 40): 1991 (RA 2009)
13.	Magnesium as Mg	mg/L	513.74	IS 3025 (Pt 46): 1994 (RA 2009)
14.	Total Iron	mg/L	BLD (DL 0.02)	IS 3025 (Pt 53): 2003 (RA 2009)

Note: NP - HU - Hazen Unit; µS/cm - micro Siemens per centimeter; NTU- Nephelometric Turbidity Unit; mg/L - milligram per liter;

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**WATER ANALYSIS TEST REPORT**

Page No. 2 of 2

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Name of the work / site	Ref. 02KDP01 dt. 19.12.2017. Construction of Works and Services for Operation and Management of 24 x 7 Water Supply System for Kundapura town, Udupi Dt. Karnataka - 576201
Sample Description	Surface Water - II
Sample Mark	SW-2
Sample Drawn by	Hubert Enviro Care Systems (P) Ltd
Date of Sampling	14.02.2019
Qty. of sample received	2.5 L in HDPE Can
Date of Sample Receipt	14.02.2019
Analysis Commenced On	15.02.2019
Completed On	23.02.2019
Report No	HECS/W/003/140219
Report Date	25.02.2019

RESULTS

S.No	Parameters	Units	Results	Test Method Followed
15.	Fluoride	mg/L	0.023	IS 3025 (Part - 60):2008
16.	Nitrate as NO ₃	mg/L	1.97	ASTM (Part - 31):1978
17.	Aluminium as Al	mg/L	BDL (DL0.03)	IS 3025 (Part - 55):2003
18.	Boron as B	mg/L	5.4 (DL0.1)	IS:3025 (Part - 57):2003
19.	Phenolic Compounds	mg/L	BDL (DL0.001)	IS 3025 (Part - 43):1992
20.	Zinc as Zn	mg/L	2.6 (DL 0.1)	IS 3025 (Part49)-1994 (Reaff 2009)
21.	Copper as Cu	mg/L	0.4 (DL 0.01)	IS 3025 (Pt 42)-1992(Reaff :2009)
22.	Manganese as Mn	mg/L	0.13 (DL 0.05)	IS 3025:(Part - 59):2006
23.	Cadmium as Cd	mg/L	BDL (DL 0.001)	IS 3025: (Part - 41):1991
24.	Lead as Pb	mg/L	BDL (DL 0.005)	IS 3025: (Part - 47):1994(Reaff 2009)
25.	Selenium as Se	mg/L	BDL (DL 0.005)	IS 3025: Part (56):2003
26.	Arsenic as As	mg/L	BDL (DL 0.005)	IS 3025: (Part-37):1988(Reaff 2009)
27.	Mercury as Hg	mg/L	BDL (DL 0.0005)	IS 3025: (Part48):1994 RA 1999
28.	Residual Free Chlorine	mg/L	BDL (DL0.1)	IS 3025 (Part - 26):1986

Note: NP - HU - Hazen Unit; µS/cm - micro Siemens per centimeter; NTU- Nephelometric Turbidity Unit; mg/L - milligram per liter;

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WATER ANALYSIS TEST REPORT

Page No. 1 of 2

Name of the Customer	Ms. Laxmi Civil Engineering Services Pvt. Limited
Address of the Customer	C.S.NO. 1031 / K2, E Ward, 3rd Floor, Sterling Tower, Gavati Mandai, Kolhapur, Maharashtra - 416001
Name of the work / site	Ref. 02KDP01 dt. 19.12.2017. Construction of Works and Services for Operation and Management of 24 x 7 Water Supply System for Kundapura town, Udupi Dt. Karnataka - 576201
Sample Description	Drinking - Treated RO Water
Sample Mark	DW-RO
Sample Drawn by	Hubert Enviro Care Systems (P) Ltd
Date of Sampling	14.02.2019
Qty. of sample received	5 L in HDPE Can
Date of Sample Receipt	14.02.2019
Analysis Commenced On	15.02.2019
Completed On	23.02.2019
Report No	HECS/W/004/140219
Report Date	25.02.2019

RESULTS

S.No	Parameters	Units	Results	Test Method Followed
1.	Color	HU	BDL (DL 1)	IS 3025 (Pt 4) :1983 (RA 2017)
2.	Odour	-	Agreeable	IS 3025 (Pt 5):1983 (RA 2018)
3.	pH @ 25°C	-	7.47	IS 3025 (Pt 11): 1983 (RA 2017)
4.	Total Dissolved Solids	mg/L	36	IS 3025 (Pt 16): 1984 (RA 2017)
5.	Turbidity	NTU	BDL (DL 0.1)	IS:3025: (Pt-10): 1984 (RA 2006)
6.	Total Alkalinity	mg/L	9.6	IS 3025 (Pt 23): 1986 (RA 2009)
7.	Total hardness as CaCO ₃	mg/L	21.34	IS 3025 (Pt 21): 1983 (RA 2006)
8.	Chloride as Cl	mg/L	9.29	IS 3025 (Pt 32): 1988 (RA 2009)
9.	Sulphate as SO ₄	mg/L	35.18	IS 3025 (Pt 24): 1986 (RA 2009)
10.	Total Chromium as Cr	mg/L	BDL (0.01)	IS 3025 (Pt 52): 2003 (RA 2009)
11.	Calcium as Ca	mg/L	6.99	IS 3025 (Pt 40): 1991 (RA 2009)
12.	Magnesium as Mg	mg/L	0.942	IS 3025 (Pt 46): 1994 (RA 2009)
13.	Total Iron	mg/L	BDL (DL 0.02)	IS 3025 (Pt 53): 2003 (RA 2009)
14.	Sodium	mg/L	0.5	3500 Na B APHA 23 rd Edition, 2017
15.	Potassium	mg/L	2.4	3500 Na B APHA 23 rd Edition, 2017
16.	Cyanide as CN	mg/L	BDL (DL0.01)	IS 3025 (Part - 27):1986
17.	Anionic Detergents as MBAS	mg/L	BDL (DL0.05)	Annex K of IS 13428-2005
18.	Pesticides	mg/L	BDL (DL 0.0005)	HECS/W&WW/SOP/063
19.	Nickel	mg/L	BDL (DL 0.05)	IS 3025:(Part-54):2003(Reaff 2009)
20.	Ammonia as NH ₃	mg/L	BDL (DL0.02)	IS 3025 (Part - 34) 1982
21.	Barium as Ba #	mg/L	BDL (DL 0.1)	HECS/W&WW/SOP/066

Note: NP - HU - Hazen Unit; μ S/cm - micro Siemens per centimeter; NTU- Nephelometric Turbidity Unit; mg/L - milligram per liter;

BDL - Below Detection Limit; DL - Detection Limit;

*****End of Report*****



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Sample Description	Drinking - Treated RO Water
Sample Mark	DW-RO
Sample Drawn by	Hubert Enviro Care Systems (P) Ltd
Date of Sampling	14.02.2019
Qty. of sample received	5 L in HDPE Can
Date of Sample Receipt	14.02.2019
Analysis Commenced On	15.02.2019
Completed On	23.02.2019
Report No	HECS/W/004/140219
Report Date	25.02.2019

RESULTS

S.No	Parameters	Units	Results	Test Method Followed
22.	Fluoride	mg/L	BDL (DL 0.01)	IS 3025 (Part - 60):2008
23.	Nitrate as NO ₃	mg/L	BDL (DL 0.01)	ASTM (Part - 31):1978
24.	Aluminium as Al	mg/L	BDL (DL 0.03)	IS 3025 (Part - 55):2003
25.	Boron as B	mg/L	BDL (DL 0.1)	IS:3025 (Part - 57):2003
26.	Phenolic Compounds	mg/L	BDL (DL 0.001)	IS 3025 (Part - 43):1992
27.	Zinc as Zn	mg/L	BDL (DL 0.1)	IS 3025 (Part 49):1994 (Reaff 2009)
28.	Copper as Cu	mg/L	BDL (DL 0.01)	IS 3025 (Pt 42):1992(Reaff :2009)
29.	Manganese as Mn	mg/L	BDL (DL 0.05)	IS 3025:(Part - 59):2006
30.	Cadmium as Cd	mg/L	BDL (DL 0.001)	IS 3025: (Part - 41):1991
31.	Lead as Pb	mg/L	BDL (DL 0.005)	IS 3025: (Part - 47):1994(Reaff 2009)
32.	Selenium as Se	mg/L	BDL (DL 0.005)	IS 3025: Part (56):2003
33.	Arsenic as As	mg/L	BDL (DL 0.005)	IS 3025: (Part-37):1988(Reaff 2009)
34.	Mercury as Hg	mg/L	BDL (DL 0.0005)	IS 3025: (Part 48):1994 RA 1999
35.	Residual Free Chlorine	mg/L	BDL (DL 0.1)	IS 3025 (Part - 26):1986
36.	Silver as Ag	mg/L	BDL (DL 0.05)	HECS/W&WW/SOP/066
37.	Alpha Emitters	Bq/l	BDL (DL 0.01)	IS 14194 (Part - 2):1994
38.	Beta Emitters	Bq/l	BDL (DL 0.1)	IS 14194 (Part - 1):1994
39.	Chloramines	mg/L	BDL (DL 0.01)	IS 3025 (Part - 26):1986
40.	Molybdenum #	mg/L	BDL (DL 0.01)	HECS/W&WW/SOP/066
41.	Polychlorinated Biphenyls	mg/L	BDL(DL 0.0001)	ASTM 5173
42.	Bromoform	mg/L	BDL(DL 0.0001)	APHA 6232
43.	Dibromochloromethane	mg/L	BDL (DL 0.0001)	APHA 6232

Note: NP - HU - Hazen Unit; µS/cm - micro Siemens per centimeter; NTU- Nephelometric Turbidity Unit; mg/L - milligram per liter;

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1. The report in full or part shall not be used for any promotional or publicity purpose without written consent by HECS organization. 2. Samples are to be drawn by HECS unless or otherwise mentioned. 3. Unless specifically requested by customer the test items will not be retained more than 15 days from the date of issue of test report. 4. Under no circumstances lab accepts any liability or loss / damage caused by use or misuse of test report after invoicing or issue of test report. 5. The test results relate only to the test items. 6. Not under scope of accreditation.

Note on consultation with the farmer using back wash water for agriculture purpose near the WTP premises in Japthi, Kundapaura

ADB Mission visited WTP in Japthi Kundapura on 10.4.2019 and the Mission suggested to conduct a consultation with the farmers who are using back wash water from the WTP for their agriculture purpose and also to document their opinions, views and suggestions about ensuring zero discharge from the WTP through back wash treatment plant.

Accordingly, on 11.6.2019, Team Leader of EGIS and Social Development Specialists of both EGIS and GKW Consultancies visited the WTP site and also the farmer's agriculture land who is using back wash water from the WTP for his agriculture. It was observed that the back wash water is flowing from the discharge outlet and it further it is flowing through a forest area which is adjacent to the WTP site and reaching to a lake belongs to the farmer Mr. Madhavan nair which is about 1.5 KMs from the WTP. It is also observed that only one farmer is using the back wash water for agriculture purpose.

During the visit to Mr. Madhavan Nair's agriculture field and during the discussion with him he told that he is having 10 acres of agriculture land and in which he is having his own 3 perennial lakes to fetch water for his agriculture land. In continuation he also told that he is not depending on back wash water for his agriculture purpose and his agriculture will not be affected if zero discharge maintained at WTP Japthi, Kundapur. He expressed that he will be happy if the back wash water treated and zero discharge is ensured at WTP site.

The following photographs show the flow of back wash water from the WTP site to Mr. Madhavan Nair's lake:



WTP Japthi Kundapura

Back wash water discharging outlet in the WTP



Back wash water flowing towards Mr. Madhavan Nair's lake.

Back wash water flow is connected to this lake



Another perennial lake of Mr. Madhavan Nair



Consultation with Mr. Madhavan Nair



Consultation with Mr. Madhavan Nair



Mr. Madhavan Nair

Name of the ULB: Town Municipal Council Kundapur


Date: 11.6.2019

Sub project component: Construction of Back wash treatment plant at Japthi, Kundapur WTP Site

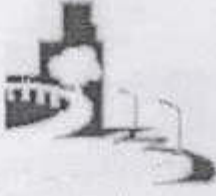
Consultations/ Discussions with Stakeholders/ Community

Sl. No	Name and address of the person consulted	Contact No	Issues discussed	Contacted person is the beneficiary of the proposed project Yes/ No	Proposed project cause any social issue? Yes/ No If yes provide details	suggestions for the proposed project Yes/ No (If Yes provide details)	Signature
1.	<u>Mr. N. A. Madhavan</u> <u>Natr</u> <u>S/o M.F. Ramakrishna</u>	<u>9448843908</u>	<u>Back wash water from the WTP Japthi will be used at WTP itself and Zero discharge from the WTP will be maintained in future. Back wash treatment plant will be constructed at WTP site and Zero discharge from the WTP will be ensured.</u>	<u>- NO -</u>	<u>- NO -</u>	<u>He will not be affected if the back wash water flow stopped from the WTP. He is happy if the back wash water utilized at WTP itself. He is having his own lake for his agriculture and he will not be affected by back wash treatment plant.</u>	<u>normal</u>


Team Leader
Egis India Consulting Engineers Pvt. Ltd.
Mangaluru-575002


M. Venkatramana
Social Development
Specialist
EGIS


BALAKRISHNA M. R.
Social Development Specialist
GKW Consult GmbH
Mangalore - 575 002



Karnataka Urban Infrastructure Development & Finance Corp. Ltd.,
Karnataka Integrated Urban Water Management and Investment
Programme (KIUWMIP) "Jalasiri" - Tranche 2
Regional Programme Management Unit (RPMU),
First Floor, Mangalore City Corporation Commercial Complex,
Mallikatta Kadri, Mangaluru - 575002
E-mail: jalasiritranch2dpd@gmail.com Tel: 0824-2981109

No:KIUWMIP/RPMU/CR.88/2017-18 / 389

ದಿನಾಂಕ:23-08-2018

ಟಾಸ್ಕ್ ಮ್ಯಾನೇಜರ್

ಕರ್ನಾಟಕ ನಗರ ಮೂಲಸೌಕರ್ಯ ಅಭಿವೃದ್ಧಿ ಮತ್ತು ಹಣಕಾಸು ನಿಗಮ ನಿಯಮಿತ

ನಗರಾಭಿವೃದ್ಧಿ ಭವನ, # 22, 17 ನೇ 'ಎಫ್' ಕ್ರಾಸ್ ರಸ್ತೆ,

ಹಳೆ ಮದ್ರಾಸ್ ರಸ್ತೆ, ಇಂದಿರಾ ನಗರ, 2ನೇಹಂತ

ಬಿಎಂಟಿಸಿ ಬಸ್ ಡಿಪೋ ಹತ್ತಿರ, ಬೆಂಗಳೂರು-560038

ಮಾನ್ಯರೇ,

ವಿಷಯ: ಕ್ರಿಮಿಪ್ ಟ್ರಾಂಚ್ -2 ಯೋಜನೆಗೆ ಸಂಬಂಧಿಸಿದಂತೆ ನಗರಾಡಳಿತ ಸಂಸ್ಥೆಗಳ ವ್ಯಾಪ್ತಿಯಲ್ಲಿ
ಕೈಗೊಳ್ಳುವ ಕಾಮಗಾರಿಗಳ ಅನುಷ್ಠಾನ ಸಮಯದಲ್ಲಿ ಉದ್ಭವಿಸಬಹುದಾದ ಸಮಸ್ಯೆಗಳ
ಬಗ್ಗೆ ಜಿಲ್ಲಾ ಮಟ್ಟದ "ಕುಂದುಕೊರತೆ ಪರಿಹಾರ ಸಮಿತಿ" ರಚನೆ ಧೃಡೀಕರಿಸುವ ಕುರಿತು.


ಉಲ್ಲೇಖ: 1)ತಮ್ಮ ಕಛೇರಿಯ ದೂರವಾಣಿ ಕರೆ. ದಿನಾಂಕ: 23-08-2018

2)ಈ ಕಛೇರಿಯ ಪತ್ರ ಸಂಖ್ಯೆ:KIUWMIP/RPMU/CR.88/2017-18 / 54 ದಿನಾಂಕ:24-04-2018

ಮೇಲಿನ ವಿಷಯಕ್ಕೆ ಸಂಬಂಧಪಟ್ಟಂತೆ ಮಂಗಳೂರು, ಉಡುಪಿ, ಕುಂದಾಪುರ ಮತ್ತು ಪುತ್ತೂರು ನಗರಗಳಲ್ಲಿ
ಈಗಾಗಲೇ ಕುಂದುಕೊರತೆ ಪರಿಹಾರ ಸಮಿತಿ Grievance Redressal committee (GRC) ಗಳನ್ನು ರಚಿಸಲಾಗಿದೆ.
ಕಾಮಗಾರಿ ಪ್ರಾರಂಭಿಸಿದ ನಂತರ ಬರಬಹುದಾದ ದೂರುಗಳು / ಕುಂದುಕೊರತೆಗಳನ್ನು ಪರಿಹರಿಸಲು ಈ ಸಮಿತಿ ಅಸ್ತಿತ್ವದಲ್ಲಿ
ಇರುತ್ತದೆ.

ಈ ಬಗ್ಗೆ ಉಲ್ಲೇಖ(2) ರಂತೆ ದಿನಾಂಕ:24-04-2018 ರಂದು ತಮ್ಮ ಕಛೇರಿಗೆ ವರದಿ ಸಲ್ಲಿಸಲಾಗಿದೆ. ಅದರ ಪ್ರತಿಯನ್ನು
ತಮ್ಮ ದಯಾಪರ ಅವಗಾಹನೆಗಾಗಿ ಇದರೊಂದಿಗೆ ಲಗತ್ತಿಸಿ ಸಲ್ಲಿಸಿದೆ.

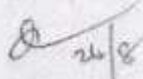
ತಮ್ಮ ವಿಶ್ವಾಸಿ


(ಡಿ.ಮಂಜುನಾಥಯ್ಯ)

ಉಪಯೋಜನಾ ನಿರ್ದೇಶಕರು

KIUWMIP-RPMU

ಮಂಗಳೂರು





Karnataka Urban Infrastructure Development & Finance Corp. Ltd.,
Karnataka Integrated Urban Water Management and Investment
Programme (KIUWMIP) "Jalasiri" - Tranche 2
Regional Programme Management Unit (RPMU),
First Floor, Mangalore City Corporation Commercial Complex,
Mallikatta Kadri, Mangaluru - 575002
E-mail : jalasiritranche2dpd@gmail.com Tel : 0824-2981109

No: KIUWMIP/RPMU/CR.88/2017-18/54

Date:24-04-2018

Task Manager,
KUIDFC- KIUWMIP,
Nagarabhirudhi Bhavan, Indiranagar,
Bengaluru 560038
Sir,

Subject : ADB Assisted KIUWMIP-Tranche-2 Mangaluru-"Jalasiri" - Constitution of Grievance Redressal Committee to receive complaints, evaluate concerns and address grievances of the affected person-reg.

Ref: 1) Your office OM No: KUIDFC/KIUWMIP/DLIC/2014-15/228 /1393 Dated: 28/06/2017.

2) This office letter No : KIUWMIP/RPMU/CR-11/2016-17(Land acq GRC)/612

Dated: 16-02-2018 addressed to Deputy Commissioner, D.K.Mangaluru .

3) This office letter No : KIUWMIP/RPMU/CR-13/2016-17(Land acq GRC)/599

Dated : 16-02-2018 addressed to Deputy Commissioner , Udupi.

4) This Office letter No:KIUWMIP/RPMU/CR-88/2016-17(Land acq GRC)/629

Dated : 20-02-2018 addressed to S.L.A.O MCC Mangaluru.

5) This office letter No: KIUWMIP/RPMU/CR-88/2016-17(Land acq GRC)/627

Dated : 20-02-2018 addressed to Asst.Commr, Kundapura.

6) This office letter No: KIUWMIP/RPMU/CR-88/2016-17(Land acq GRC)/613

Dated : 16-02-2018 addressed to Chief Officer , TMC , Kundapura.

7) This office Letter No: KIUWMIP/RPMU/CR-88/2016-17(Land acq GRC)/628

Dated : 20-02-2018 addressed to AC Puttur.

8) Head Office Email message dated :10.04.2018 11:45AM.

With reference to the above subject, the Grievance Redressal Committees have been formed in Mangaluru , Udupi , Puttur and Kundapura towns to receive complaints, evaluate concerns and address the grievance of Affected Persons (APs) under KIUWMIP Project while executing the works under KIUWMIP Project.

The details of the Committees Formed are as here under:

Grievance Redressal Committee (GRC) of Mangaluru City

1.	Special Land Acquisition Officer Mangaluru City Corporation, Mangaluru	President
2.	Commissioner Mangaluru City Corporation, Mangaluru	Member
3.	Executive Engineer KIUWMIP- PIU, Mangaluru (on behalf of DPD , KIUWMIP - RPMU)	Member Secretary
4.	Representative of PMDCSC (Project Management Design and Construction Supervision Consultant) Mangaluru	Member
5.	NGO / Affected Community member	Member
6.	SDO (Social Development Officer) RPMU- KIUWMIP, Mangaluru	Member

Grievance Redressal Committee (GRC) of Udupi City

1.	Assistant Commissioner Kundapura Sub division, Kundapura	President
2.	Commissioner Udupi City Municipal Council, Udupi	Member
3.	Executive Engineer KIUWMIP- PIU, Udupi (on behalf of DPD , KIUWMIP - RPMU)	Member Secretary
4.	Representative of PMDCSC (Project Management Design and Construction Supervision Consultant) Mangaluru	Member
5.	NGO / Affected Community Member	Member
6.	SDO (Social Development Officer) RPMU- KIUWMIP, Mangaluru	Member

Grievance Redressal Committee (GRC) of Kundapura Town

1.	Assistant Commissioner Kundapura Sub division, Kundapura	President
2.	Chief Officer Town Municipal Council, Kundapura	Member
3.	Asst.Executive Engineer KIUWMIP- PIU, Kundapura (on behalf of DPD , KIUWMIP - RPMU)	Member Secretary
4.	Representative of PMDCSC (Project Management Design and Construction Supervision Consultant) Mangaluru	Member
5.	NGO / Affected Community member	Member
6.	SDO (Social Development Officer) RPMU- KIUWMIP ,Mangaluru	Member

Grievance Redressal Committee (GRC) of Puttur City

1.	Assistant Commissioner Puttur Sub division, Puttur	President
2.	Commissioner City Municipal Council, Puttur	Member
3.	Executive Engineer KIUWMIP- PIU, Puttur (on behalf of DPD , KIUWMIP - RPMU)	Member Secretary
4.	Representative of PMDCSC (Project Management Design and Construction Supervision Consultant) Mangaluru	Member
5.	NGO / Affected Community member	Member
6.	SDO (Social Development Officer) RPMU- KIUWMIP ,Mangaluru	Member

Yours sincerely


 Deputy Project Director
 KIUWMIP-RPMU
 Mangaluru

Karnataka Urban Infrastructure Development Finance Corporation,
Karnataka Integrated Urban Water Management and Investment
Programme (KIUWMIP) "Jalasiri" Tranche-2
Regional Programme Management Unit (RPMU)
First Floor Mangalore City Corporation Commercial Complex,
Mallikkatte, Kadri, Mangaluru- 575002
Email: jalasiritranche2dpd@gmail.com Tel: 0824-2981109

No: KIUWMIP/RPMU/CR.88/2017-18/389

Date: 23-08-2018

Task Manager

Karnataka Urban Infrastructure Development Finance Corporation
Urban Development Building, #22,17th F cross road
Old Madras road, Indhiranagar, 2nd Stage
Near BMTC Bus Depot, Bangalore-560038

Sir,

Sub: Approval for the Grievance redressal committee formation in KIUWMIP Tranche-2 related to municipality during project implementation work arising issues at district level.

Ref: 1) Your office phone call date: 23/05/2018

2) Your office letter no: KIUWMIP/RPMU/CR.88/2017-18/54 date: 24/04/2018

With reference to the above mentioned subject of Mangalore, Udupi, Kundapura and Puttur town already Grievance Redressal committee has created and this is to essence for solving the issues after the start-up of up-coming work complaints and grievances /Grievance Redressal committee.

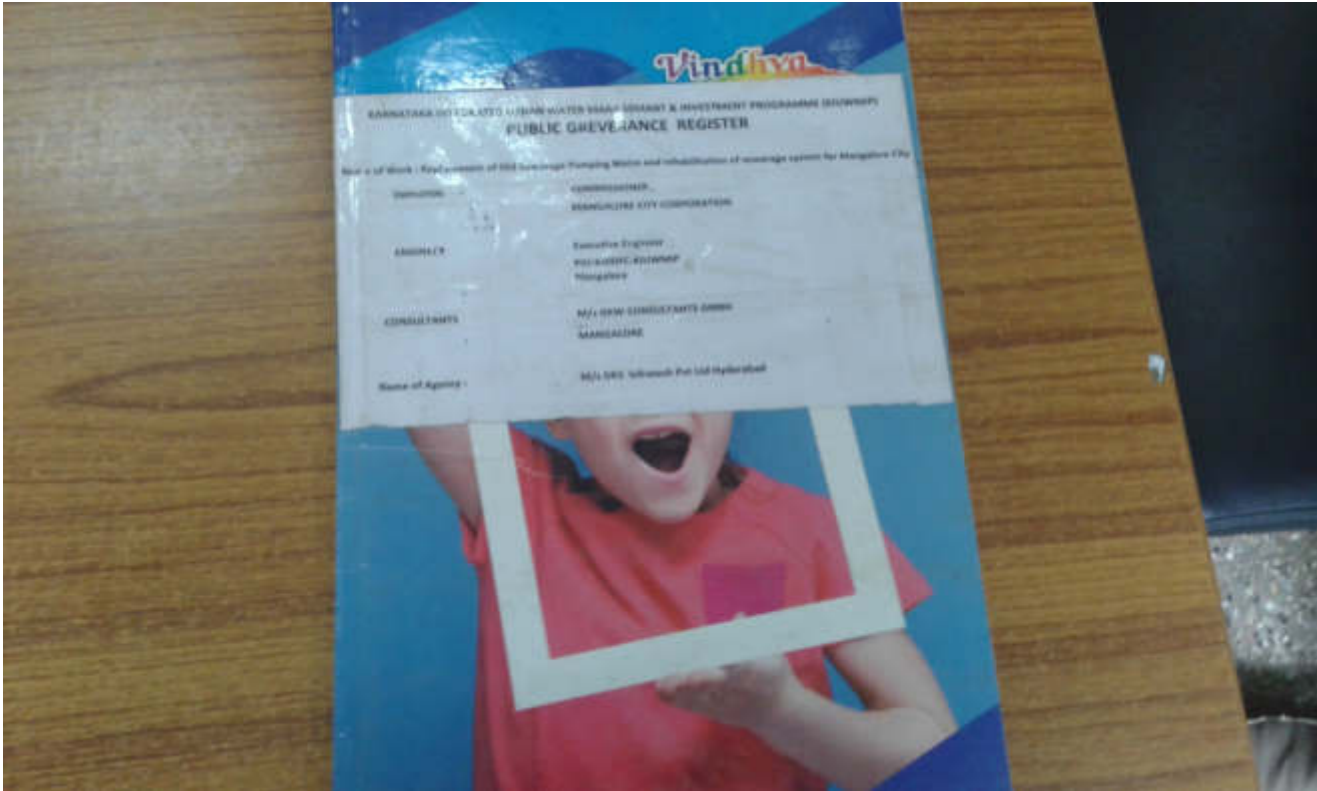
Report submitted to your office on ref (2) date 24/4/2018 with the attached copies.

Yours Faithfully

D. Manjunathaiah
Deputy Project Director
KIUWMIP/RPMU
Mangalore

Grievance register – Kundapura Bulk water supply


Grievance register - Mangalore UGD



submitted that the Public Insurance Agency
is agreed to pay the subproject cost that
incurred by the cost of replacement of
all damaged existing water and rehabilitation
of damaged water in Mangalore city
without charging any charges.



P. S. SRINIVAS
KUDREKOLUR Tranche 2
MIS - MANGALURU




K. S. SRINIVAS Tranche 2
Programme Implementation Unit
MANGALURU




K. S. SRINIVAS Tranche 2
Programme Implementation Unit
MANGALURU



Appendix -38



Site VisitNotes (Site visit date - 09 to 11 April 2019)






Town and Site	Category of Finding	Details of Finding	Photos	Recommendation	Compliance Status
Puttur- Existing Vented Dam at Nekkilady on Kumaradhra River	Ladder safety	No support available for the ladder going up the vented dam		Install handrail and horizontally installed ladder supported by monkey cage. Regulation mandates that all sloping ladder with heights of more than 1.5 m should be provided the abovementioned support.	Project is in design validation phase. asset survey is in progress. Will be complied in construction phase.
	Equipment and material safety	The crane installed at vented dam was not marked with the date of testing for safe working load and due date of testing		Obtain safe load certificates for all weight lifting equipment like cranes, whines, ropes, and other related equipment. Display the testing date and safe working load on the equipment.	Project is in design validation phase. asset survey is in progress. Will be complied in construction phase.




	Provision of Access control and warning signages	No lock or warning signs provided at access point to vented dam		<p>Enforce access control measures to all high hazard areas</p> <p>Provide proper signages, such as “authorized personnel only” to limit access of people relevant to the site</p>	
Puttur- WTP built during the KUDCEMP	Hazardous material	Asbestos sheet found lying on site during the walkthrough		Conduct an inventory of all hazardous waste on site. Prepare and enforce the safe disposal plan for hazardous waste	Project is in design validation phase. asset survey is in progress. Will be complied in construction phase.



	Electric safety	<p>Access control in transformers not provided.</p> <p>No proper identification of authorized persons responsible in accessing high hazard zones.</p> <p>No proper signages installed to limit access for authorized personnel only to the site</p>		<p>Provide access control measures to all high hazard areas such as control panel /metering area, DG area, etc.</p> <p>Provide and display proper identification for authorized personnel permitted to access high hazard zones.</p> <p>Provide proper signages.</p>	Project is in design validation phase. asset survey is in progress. Will be complied in construction phase.
	Electric safety	<p>The Insulating mats near electric panels were missing.</p> <p>There was no signage of accesses control was found</p>		<p>Contractor to ensure all electric panels to be provided with standard insulating rubber mats.</p> <p>All electric appliances should be provided with proper signages and access to these panels to be controlled by lock and key</p>	Project is in design validation phase. asset survey is in progress. Will be complied in construction phase.





Puttur- WTP built during the KUDCEMP	Chlorine cylinders	<p>Improper storage and handling of chlorine cylinders</p> <p>No SDS or instruction to handle provided near chlorine cylinders.</p> <p>No emergency response system for chlorine handling displayed near chlorine cylinders.</p>	 <p>Procure Safety data Sheet (SDS) to prove that chlorine is properly stored and handled</p> <p>Store chlorine cylinder per details provided in MSDS.</p> <p>Provide proper PPEs and Emergency response training to workers handling chlorine</p> <p>Provide hazardous signages and proper access control to chlorine storage area.</p> <p>Get cylinder tested periodically and mention the due date for next testing on cylinder</p>	Project is in design validation phase. asset survey is in progress. Will be complied in construction phase.
Puttur- Site for GLSR) at Tenkila		The slope of site was very steep and no protection for slope stabilization was made available for observation	 <p>Slope stabilization to be included in detailed design</p> <p>Consultations with the temple authorities to be conducted at the earliest.</p> <p>The temple opens only for one day in a year, the construction during the temple opening day to be avoided.</p>	Project is in design validation phase. asset survey is in progress. Will be complied in construction phase.





Kundapura - Jack well near Jambukeshwara Temple in Jambu village	Slip and trip Hazzard	The open 'space' and 'trench' did not have proper covering, caution warning, nor signages		<p>Limit or block access to sites that pose slip and trip hazards.</p> <p>Provide proper caution signages on the site</p>	Not Complied
	Fire safety	The fire extinguisher on site was found expired		<p>All fire extinguishers to be tested periodically and all workers to be provided with basic fire safety trainings including usages of fire extinguisher.</p>	Not Complied





	Material safety	No proper designation of construction material		Identify, designate, mark and barricade material stockpile	
Kundapura - OHT Site Halekote	Community safety	The site is situated right next to residential staff quarters with children. No proper delineation between area of construction site and residential site.		Isolate and barricade the construction area after providing proper access to residents to the nearby roads	Hard barricading Provided but supported with steel rod which is unsafe recommended contractor to use wood. 
		Material storage unorganized and stored haphazardly. No barricading nor markings were found onsite		Designated space for material stockpile should be properly barricaded and marked with caution signages	Designated space for material is provided soft barricading done recommended contractor to Provide with caution signages and follow proper storage system. 





	Wrong selection of PPE	<p>One worker was found painting without using hand gloves or nose mask.</p> <p>Paint SDS was not displayed near the working area.</p>		<p>Procure the MSDS of paint from the manufacturer and use precautions and PPEs according to MSDS provided.</p> <p>Identify areas that will be painted on given schedules to identify and use rubber mat to avoid contamination of soil or floor</p>	Not complied
		Labor camp not properly marked nor ventilated. 5 people stayed in one room		Improve labor camp conditions in accordance with IFC guidance	Not complied
		<p>No toilets provided for the workers.</p> <p>Tap for water not available in toilets.</p>		Provide toilets for workers in accordance with best practices	Not complied



	<p>General Safety and EHS manual</p>	<p>Health and Safety Manual and records of daily tool box not available on site for review during the visit</p> <p>Attendance register, and accident/ incident record and GRM register, was not maintained on site</p> <p>Unstable scaffolding being used onsite</p>		<ol style="list-style-type: none"> 1. Revise Safety Plan /EHS manual per site specific conditions 2. Toolbox meeting to be conducted on daily basis to convey the importance of safety to Labours 3. Keep onsite an accident/ incident record register 4. Provide proper scaffolding and lifeline for safety harness hooks 	<ol style="list-style-type: none"> 1. Not revised Safety Plan /EHS manual as per site specific conditions. 2. Safety measures and usage of PPE'S is displayed on the site (recommended to past on wooden plank) Tool box meeting conducted recommended contractor to do proper documentation of tool box meeting. 3. Not complied given time line to comply in 3 days 4. Not Complied 
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Kundapura- New overhead tank (OHT) Kodi	Community safety	No proper barricading, caution sign, access protection nor access protection were seen		Separate the construction site and excavation site with hard barricades Restrict public entry near deep excavation sites Put Danger signages onsite	Not complied
	Material safety	There was no designated area for storage of construction and waste material,		Separate area for storage of construction and waste material, store hazardous material with proper access control	Not complied
	Community safety	Steel bars/ iron rods openly laying on roads without any hard barricading or caution sign, which can cause vehicular accidents by passing traffic		Store steel bars away from community accessible area and roads. Put caution and danger signages near storage area.	Not complied 

					
	Fire safety	Acetylene cylinders found horizontally lying on the ground without any access control		Designate storage area for cylinders and properly store cylinders in slanting position with proper access control	Not complied
	Community Safety	Construction material stockpile located in community area blocking public access to roads		Provide a designated area for material stockpile away from access ways to maintain flow of pedestrian traffic and	Not complied 

	Fire safety	<p>DG set and HSD drum stored openly without safety precautions</p> <p>No fire safety arrangement seen on site</p> <p>Local resident was seen roaming freely around the construction site</p>		<p>Store all liquid materials in covered, leak-proof and weatherproof containments to avoid accidents</p> <p>Provide fire safety precautions onsite</p> <p>Barricade the site. Limit access to authorized personnel only on site. Block access to outsiders.</p>	Not complied
Mangalore UGD	PPEs	The operator of construction excavator were not wearing PPEs		<p>Enforce good practice that limits/disallows entry of any person not wearing PPE and proper identification from the site</p>	Not complied
	Access blockage	Big open trenches blocked the access of houses from the roads.		<p>Work in phases. Excavate trenches in smaller pockets. Close off pockets of excavated trenches before leaving the work site in the evening.</p> <p>Provide proper danger signages to warn off pedestrians, assign traffic warden to control traffic flow near the trenches.</p> <p>As part of good practice,</p>	<p>Work completed and restoration done.</p> 

				<p>provide sturdy access ways for pedestrians (i.e., cemented pathways, not just planks) with a handrail to prevent people from falling into the trenches.</p>	 
	Community safety	<p>The excavation pits were very deep, which poses the chance of road collapse. Only tapes were put in place to barricade the pits from the pedestrians. No shoring found in the trenches.</p>		<p>Provide hard barricading within the perimeter of the excavation site to provide a good distance from pedestrian traffic. Provide proper signages to keep people away from the excavation site.</p> <p>Provide trench stabilizing during excavation and shoring in all trenches to prevent accidental trench collapses.</p>	<p>Contractor started Provide hard barricading and started providing Caution boards.</p> 

					 
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Karnataka Urban Infrastructure Development & Finance Corp. Ltd.,
Karnataka Integrated Urban Water Management and Investment
Programme "Jalasiri"-Tranche-2

Office of the Executive Engineer, Programme Implementation Unit,
3rd Floor, Mangaluru City Corporation, Lalbagh, Mangaluru 575003
Email Id : jalasuritranche2eeeng@gmail.com, Pin:0824 2984623

No: KIUWMIP/PIU-MNG/CR-02/2017-18/75

Date: 26-04-2019

Assistant Executive Engineer

MESCOM, Kavour

Mangsiuru

Sir,

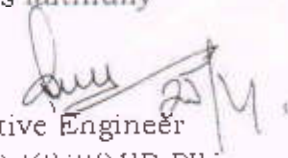
Sub: "Replacement of old sewerage pumping mains and Rehabilitation of sewerage system for Mangaluru city Package No:02MNG02"- Requesting for relocation of electrical pole at Ashoknagara - reg.

Ref: M/s. DRS Infratech Pvt. Ltd., letter no: DRS/TPI/KUIDFC/MNG/2019-20/01 , dated : 26.04.2019.

With reference to above, the above said work is taken up on tender basis and the said work is awarded to M/s. DRS Infratech Pvt. Ltd., Hyderabad and the laying of 1100mm dia UGD pipe from Ashoknagara to Urwastore is in progress. Along the alignment two electrical poles are obstructing for dismantling the culvert. Hence it is requested to kindly make arrangement for shifting of electrical poles by 2 mtrs. It is requested to entrust this job work to any of licensee electrical contractor for which the agency M/s. DRS Infratech Pvt. Ltd., Hyderabad pay the cost incurred.

This is for information and needful action.

Yours faithfully


Executive Engineer
KUIDFC-KIUWMIP-PIU
Mangaluru



30 BEEDI CO. LTD.

Kadla Road, Post Box No. : 730, Mangalore - 575 003.
Phone : Office : +91 - 824 - 4268330, 2441530
Fax : +91 - 824 - 2444530, 4252530

ANAND G. PAI
Executive Director

07/03/2019

ರಿಗೆ,
ಕಾರ್ಪೊರೇಟ್ ಅಭಿಯಂತರರು
KUIDFC-KIUWMIP-PIU
ಮಂಗಳೂರು



ಮಾನ್ಯರೇ,

ಆಧಾರ: ನಿಮ್ಮ ಪತ್ರ ಸಂಖ್ಯೆ : KIUWMIP/PIU-MNG/CR-02/2017-18/460 dtd 09/11/2018

ವಿಷಯ: ಮಂಗಳೂರು ಮಹಾನಗರಪಾಲಿಕೆ ವ್ಯಾಪ್ತಿಯ ಕುದ್ರೋಳಿಯ ನಮ್ಮ ಜಮೀನಿನಲ್ಲಿ ಕೈಗೊಂಡಿರುವ ಕೊಳಚೆ ನೀರಿನ ಏರುಕೊಳವೆ ಮಾರ್ಗ ಅಳವಡಿಸಲು ಅನುಮತಿ ನೀಡಿರುವ ಬಗ್ಗೆ.

ಈ ಮೇಲಿನ ಕಾಮಗಾರಿಯು ಮುಗಿದು 3-4 ತಿಂಗಳುಗಳು ಕಳೆದರೂ, ನಮ್ಮ ಜಮೀನಿನ ಯುತ್ಥಾಸ್ಥಿತಿಯನ್ನು ಸರಿಪಡಿಸಿಕೊಡುವಲ್ಲಿ ವಿಳಂಬವಾಗುತ್ತಿದೆ. ಈ ಬಗ್ಗೆ 10/01/2019 ರಂದು ಪತ್ರ ಮುಖೇನ ನಿಮ್ಮ ಗಮನಕ್ಕೆ ತಂದಿದ್ದು, ಅವಕ್ಕೆ ಸ್ಪಂದಿಸಿದ ನೀವು ಆ ಕೂಡಲೇ ಕೆಲವು ಕಾಮಗಾರಿಗಳನ್ನು ಕೈಗೊಂಡಿದ್ದು ಮೆಚ್ಚುವಂತಹದ್ದು. ಆದರೆ ಯಾವುದೇ ಕೆಲಸವನ್ನು ಪೂರ್ಣಗೊಳಿಸದೆ ನಂತರ ಆ ಕಡೆ ಗಮನ ಪರಿಸದೆ ಕಡೆಗಣಿಸಿರುತ್ತೀರಿ. ಮಾತ್ರವಲ್ಲ ದೂರವಾಣಿ ಮೂಲಕವೂ ನಿಮ್ಮನ್ನು ಸಂಪರ್ಕಿಸಲು ಪ್ರಯತ್ನಿಸಿವರೂ ನೀವು ಸಂಪರ್ಕಕ್ಕೆ ಸಿಗುತ್ತಿಲ್ಲ. ಕಸ / ಧೂಳಿನಿಂದ ಆವೃತವಾಗಿರುವ ನಮ್ಮ ಜಮೀನನ್ನು ಅದಷ್ಟು ಬೇಗ ಸರಿಪಡಿಸಿಕೊಡುವುದಾಗಿದ್ದು, ಮುಂದಿನ ಕ್ರಮ ಕೈಗೊಳ್ಳುವರೇ ಅಷ್ಟದ ನೀಡಬಾರದಾಗಿ ವಿನಂತಿಸಿಕೊಳ್ಳುತ್ತೇವೆ.



Website : www.30beedi.co.in

e-mail: anandpai@30beedi.co.in
anandpai@hotmail.com



BHARATH BEEDI WORKS PVT. LIMITED

Kadri Road, Post Box No. : 730, Mangalore - 575 003.

Phone : Office : ++91 - 824 - 4268330, 2441530

Fax : ++91 - 824 - 2444530, 4252530

ANAND G. PAI
Executive Director

ಹಾಗೂ ಈ ಕೆಳಗಿನ ಅಪೂರ್ಣ ಕಾಮಗಾರಿಯನ್ನು ನಿಮ್ಮ ಗಮನಕ್ಕೆ ತರುತ್ತಿದ್ದೇವೆ.

1. ನಮ್ಮ ಜಮೀನಿನ Gate ನ್ನು ಸರಿಪಡಿಸುವರೇ ನಿಮಲ್ಲಿ ವಿನಂತಿಸಿದ್ದರೂ ಸರಿಪಡಿಸಿಲ್ಲ.
2. Interlock ನ್ನು ಅಳವಡಿಸಿದ್ದರೂ, ಅದರ ಬದಿಯಲ್ಲಿ Curbstone edge ನ್ನು ಅಳವಡಿಸಿರುವುದಿಲ್ಲ.
3. ಅಗೆದು ತೆಗೆದ ಮಣ್ಣಿನ ರಾಶಿ Compound wall ನ ಕಡೆಗೆಯಿದ್ದು, ಅದರಿಂದಾಗಿ ಮಳೆಗಾಲದಲ್ಲಿ ನೀರು ಹರಿಯಲು ಸಾಧ್ಯವಿಲ್ಲ ಆದುದರಿಂದ ಜಮೀನಿನಲ್ಲಿ ನೀರು ನಿಲ್ಲದೆ ಸರಾಗವಾಗಿ ಕಾಲುವೆಗೆ ಹರಿಯುವರೇ ವ್ಯವಸ್ಥೆ ಮಾಡುವುದು.
4. ಕಾಮಗಾರಿಗಾಗಿ ತೆಗೆದ ನಮ್ಮ Compound wall ನ್ನು ಅತೀ ಶೀಘ್ರವಾಗಿ ಸರಿಪಡಿಸುವುದು.

ಈ ಮೇಲಿನ ಕಾಮಗಾರಿಗಳನ್ನು ಅತೀ ಶೀಘ್ರದಲ್ಲಿ ಮುಗಿಸುವುದಾಗಿರುತ್ತದೆ.

ವಂದನೆಗಳೊಂದಿಗೆ,

ತಮ್ಮ ವಿಶ್ವಾಸಿ

(ಆನಂದ ಜಿ. ಪೈ)



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anandpai@hotmail.com

Appendix -41a

ANAND G PAI
Executive Director

Bharath Beedi Works Pvt. Limited
Kadri Road, Post Box No.730, Mangalore - 575 003
Phone: Office: ++91 - 824 – 4268330, 2441530
Fax: ++91 - 824 - 2444530, 4252530

Date:07.03.2019

To,
Executive Engineer,
KUIDFC-KIUWMIP-PIU,
Mangalore.

Sir

Ref: Yours letter no: KIUWMIP/PIU-MNG/CR-02/2017-18/460 Dated: 09/11/2018

Sub: Under the Mangalore City Corporation limit Kudroli, Permission issued for the sewerage pipeline rising main laying in our land –Reg

The above mentioned, work completed from past 3-4 months but the excavated earth is not stacked properly and delaying for proper leveling. Regarding this we brought notice and sent a letter on date 10/01/2019, And immediately you taken decision and started the work is appreciated. but neglected after the completion of the work. And also we try to contact through phone but you are unable to connect. Our land is filled with debris/dust and request to sort the issues without the necessary action.

The following incomplete work has been brought to your notice

1. Our compound wall Gate work not done after requesting.
2. Interlock has fixed but side kerb stone not provided.
3. Excavated earth stacked at compound, so during the rainy season there will be no provision to flowing water, so make provision for flowing of rain water towards drain.
4. Dismantled compound wall must be reconstructed at earliest.

The above mentioned works should be completed at earliest.

Thank you

Yours Faith fully
Anand G Pai

Worker attendance register Kundapura

BHARATHI SANCHAR NIGAM LIMITED
Office of the Sub-Divisional Engineer Phones (External) Kundapura

To,
The Asst. Executive Engineer
KIUWMIP-PIU
Kundapura,

No.N-10/Damage-Cables/KND/2018-19/82 Dated @, Kundapur the 8-3-2019

Sir,

Sub: Regarding payment of copper cable damage charges.

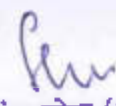
With reference to the above, it is requested to instruct your contractor M/s. Laxmi Civil Engineering Services PVT. LTD to pay the enclosed Demand Note towards damage charges of underground Telephone cable, Opp. Usha Hotel main road Kundapura on 06-03-2019 & 07-03-2019 while laying water pipe work by using JCB.

In the interest of public telephone service, the cable damage fault has been attended immediately and the telephone service restored.

Kindly instruct your contractor to pay the amount and payment particulars may please be intimated to this office

Thanking You,

Yours faithfully


उप मंडल अभिवंता क्रोस (बाहरी), कुंदापुर
Sub-Divisional Engineer
Phones (Extnl), Kundapur - 576 201.

Copy to,

1. M/s. Laxmi Civil Engineering Services PVT. LTD, through AEE KIUWMIP-PIU Kundapura.
2. AGM (NOW) B.S.N.L. Kundapura



ENG-53

BHARATH SANCHAR NIGAM LIMITED
D.K. TELECOM DIST., MANGALORE
Office of Sub-Divisional Engineer Phones (External) Kundapura

DEMAND NOTE

Demand Note No.: KND-025


Date: 08-03-2019

DETAILS OF CHARGE

Sl. No.	Type of Materials	Rate	Amount in Rs.
1	400 pair JF cable	Rs. 571 / m x 30 m	17130-00
2	200 pair JF cable	Rs. 372 / m x 10 m	3720-00
3	100 pair JF cable	Rs.299 / m x 20 m	5980-00
4	50 pair JF cable	Rs. 157 / m x 10 m	1570-00
5	Modular connector	Rs. 20 x 5 = 100 X 80	8000-00
6	U.Y Connector	Rs. 1.25 / unit x 2000 nos	2500-00
7	TSF - V Jointing Kit	Rs.1071 / 1 kit x 2	2142-00
8	TSF - IV Jointing Kit	Rs.978 / 1 kit x 2	1956-00
9	TSF - III Jointing Kit	Rs.649 / 1 kit x 8	5192-00
10	TSF - II Jointing Kit	Rs.330 / 1 kit x 2	660-00
11	Labour	6 Mazdoor @ Rs. 700 / day	4200-00
(Materials + Mazdoor) Total			Rs.53050-00
Overhead charges (35%)			Rs.18567-00
Grand Total			Rs.71617-00
Rupees: Seventy one thousand six hundred seventeen only)			

To

M/S LAXMI CIVIL ENGINEERING SERVICES PVT LTD
GURUKRUPA NILAYA OPP DASHAMI RESIDENCY
RAM MANDIR ROAD - 576201


उप मंडल अभियंता फ़ोन्स (बाहरी), कुंदापुर
Sub-Divisional Engineer
Phones (Extnl), Kundapur - 576 201.



Karnataka Urban Infrastructure Development & Finance
Corpn.Ltd.,
Karnataka Integrated Urban Water Management and Investment
Programme - "Jalesiri" Franchise
Office of the Asst. Executive Engineer Programme
Implementation Unit, Kundapura
Email Id : jalesiritranche2aekdp@gmail.com

Letter No: KIUWMIP/PIU/KDP/CR-03/2017-18 / 116

Date : 07-03-2019

To,

The Project Manager,
M/s Laxmi Civil Engineering Services Pvt Ltd,
Opp Dashami Apartments,
Kundapur

GENTLEMEN,

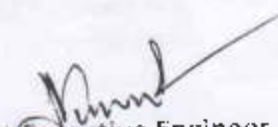
Subj: "Construction of works and Services for Operation & Management of 24x7
Water Supply System for Kundapura Town in Karnataka Package No.
02KDP01": **Damages of utilities at main road - Reg.**

Ref: 1. Agreement Dated: 19.12.2018

2. Notice to Proceed/WO Issued Dated: 22.12.2018

Adverting the above, it is advised & instructed to you while executing the work at main road, Mechanical Excavation may create damages to existing utilities. So it is safer to go the manual excavation of trenches to avoid damages of utilities. But you ignored the PIU instruction and promised to be executed the work at your own risk & cost. In this regard, connection the BSNL cables are damaged by your JCB, Hence the BSNL services get interrupted to that area because of your work. We have received the complaints on your damages since the cables of BSNL is concerned we are not aware of any damages. Hence it is directed as per contractual clause **GCC 12.1 & GCC 51.1** to you sort out the issue as early as possible.

If any legal issue may arise the said responsibilities has to be borw to clear at your own risk & cost. Penalty if may imposed from affected departments to be cleared from your end. Please note .


Asst Executive Engineer,
KIUWMIP - PIU,
Kundapura

Dispatched on 2/3/2019

Signature

Received for
3-19





Corpn.Ltd.,
Karnataka Integrated Urban Water Management and Investment
Programme - "Jawahar" Tranche 2
Office of the Asst. Executive Engineer Programme
Implementation Unit, Kundapura
Email: kiuwmip@kwaackdpz.punil.com

Date: 22-02-2019

Ltr No. KIUWMIP/PIU/KDP/CR-03/2017-18

To,
The Project Manager,
M/s Laxmi Civil Engineering Services Pvt Ltd,
Opp Dashami Apartments,
Kundapur

GENTLEMEN,

Sub:- "Construction of works and Services for Operation & Management of 24x7 Water Supply System for Kundapura Town in Karnataka Package No. 02KDP01":
Restricted Permission for Mechanical Excavation with JCB at main road from shastri circle to church road - Reg.

- Ref: 1. Agreement Dated: 19.12.2018
2. Notice to Proceed/WO Issued Dated: 27.12.2018
3. Site Order Book instruction Dated: 22.02.2019

Adverting the above, It is instructed to you in site order book dated 22.02.2019 while executing the work at main road Mechanical Excavation with JCB is created damages to existing running line 110dia at main road near shastri circle. In this regard, local public representatives & chief officer is complained on you and strictly urged on you to proceed with manual excavation for 200dia DI pipe laying from Shastri Circle to Church Road. Hence it is restricted your work executing with JCB & proceed with manual excavation for avoiding damages for existing utilities & better safe executing work. Further any issue may arise you will be responsible for damages as per contractual clause GCC 12.1 & GCC 51.1. You are responsible for any legal complaints & penalties if may arise in future. Please note.



Asst Executive Engineer,
KIUWMIP - PIU,
Kundapura

QC Approved by Executive Engineer


Dispatched on 22-02-2019
Signature 

Received for
22/2

Attn:
P.P. Nair

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<h2 style="text-align: center;">Suez Projects Private Limited</h2> <h3 style="text-align: center;">Health and Safety Plan</h3>					
<p style="text-align: center;">Project :- Construction Of Works and Services for Operation and Management of 24X7 Water Supply System for Puttur Town Contract Package NO 02PTR 01</p>					
		Amruth Yedugani	Vishal Pattanshetti	Pramod Kumar B.K	For Approval
Rev.	Date	Prepared By	Checked By	Validated By	
00					Submission Purpose


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I. HEALTH, SAFETY AND ENVIRONMENT POLICY



HEALTH, SAFETY, ENVIRONMENT & INDUSTRIAL RISK POLICY

Excellence in safety, health and environment contributes directly to the performance of SUEZ and creates value for our clients. This is an ongoing and critical objective.

Everyone has an obligation to work safely and the duty to contribute on this by behaving responsibly.

All accidents can be avoided by implementing appropriate methods, equipment, training, controls and behaviors.

IN ORDER TO ACHIEVE THIS LEVEL OF SAFETY, HEALTH AND ENVIRONMENT, WE ASK THAT:

- All employees behave in an exemplary manner and comply with all applicable regulations, rules and commitments, including in disruptive situations. Our internal rules prevail when they offer greater protection than local regulation.
- We follow all applicable requirements including Life Saving Rules developed by company.
- Activities are organized so that they reduce risks to an acceptable level.
- Employees contribute to routine and incident feedback, and formalization of working instructions.
- Sustaining and improving health and wellbeing of our employees and temporary workmen.
- To develop fair culture approach where good behavior is recognized, error is seen as a source of progress and violation of the rules is not tolerated and sanctions are imposed as disciplinary action.
- Our clients get facilities that can be run in complete safety for people and for the environment.
- Partners and contractors contribute to continuous improvement actions and that they are selected on the basis of their commitment to do so.

MISSION AND DUTIES


Within their area of responsibility, each manager has the duty to ensure the health and safety of all personnel and the protection of property and the environment. Each manager is responsible for the communication and application of the rules and commitments and ensuring that messages and practices are consistent.

Each employee is aware of his / her personal role in protecting the environment and in preventing accidents. Employees are expected to display responsible behavior to their benefit and their co-worker.

The Sustainable Development and Risk Prevention Department establishes and ensures the deployment and continuous improvement of all Safety, Health and Environment related processes in our Omega Management system. It oversees its implementation and its effectiveness.

WHILE REINFORCING OUR COMMITMENT TO ABOVE WE SHALL FURTHER EMPHASIZE:


- Compliance with SUEZ Health, Safety, Environment and Industrial Risk management rules and procedures to minimize Health & Safety risks, environmental impacts, machinery breakdown and damage to property.
- Prevention of pollution, continual improvement, ongoing detection/rectification of deficiencies and implementing changes wherever necessary.
- Conservation of key resources like chemicals, water and energy.
- Environmentally safe handling of chemicals and safe disposal of inevitable wastes.
- Elimination, minimization and/or control of occupational hazards and associated risks having potential for ill health and diseases.
- Sustaining and improving health and well-being of our employees and temporary workmen.



Mr. Shyam J Dhan
(CEO - SUEZ Operations Area India)

Date & Rev: 27th Jan, 2017



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II. INTRODUCTION

Suez ranks among the world's leaders in water and waste management services. It's objective: to meet the challenge of conserving natural resources. A human adventure spanning more than 120 years that continues to unfold day after day.

We believe we can reconcile economic performance, environmental performance and corporate responsibility. We are committed to helping our customers achieve their objectives and find the ideal solution tailored to their specific concerns.


SPPL, as SUEZ PROJECTS PRIVATE LIMITED follows highest standards of Health, Safety and Environment in lined with guidelines of SUEZ.

This standard defines mandatory requirements for ensuring safe working environment for employees and all stake holders working with us. Overall goal of implementing HSE standard, procedure and practices is to minimize loss, damage and/or workplace injury incidents and "Zero Loss Time Accidents" in our activities and services.

In this context all employees / workmen are required to strictly follow procedures / rules stated in this HSE standard.

To ensure effective implementation of HSE rules in our activities, HSE department in coordination with concern manager or alone will carry out routine and non-routine, planned and surprise inspection of workplaces.



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III. Health, Safety and Environment Standard:

LIFE SAVING RULES:

"In all our businesses, in all countries where the Group is present, fighting against serious accidents has always been our priority. To achieve this, we are committed to implement 11 "Life saving rules" in all our worksites. Each one of our employee and subcontractors including temporary workmen will play role to save his life and also that of others".

Here are these rules to be committed by each employee and follow as basic rules in all our sites.



Do not walk or stand under a load.



Do not perform hot work unless the fire or explosion risks have been eliminated



Stay out of the path of moving vehicles, plant and equipment.



Verify that there is no energy (mechanical, chemical, electrical, fluid under pressure etc.) before starting work



Clip your harness when working at height.



Do not handle phone or any other communication devices when driving.



Only enter a trench if appropriate wall support are in place.




Do not drive under the influence of alcohol or drugs.



The atmosphere must be tested safe before entering a confined space and monitored as you work



Signal, reduce speed and check mirrors before turning or reversing.

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1. PERSONAL PROTECTIVE EQUIPMENT (PPE):

Prior to commencement of any work, concern manager/ engineer/ subcontractor shall ensure that all the workers are having necessary protective equipment to perform his work safely. All PPE's must meet IS/EN/CE / equivalent standards and sound physical condition.

Helmets, safety boots, reflective vest shall be considered as **mandatory PPE** and shall be worn by all employees / workmen / visitors etc. on worksites. Sandals or sneakers must never be worn on the job.

In addition to mandatory PPE's, specific job-related PPE's must be worn by all employees e.g.

- Workmen working in dusty operations shall use suitable dust mask, goggles and hand gloves.
- While working in noisy operation, suitable ear plug, ear muff shall be used.
- Workmen engaged in welding, cutting and grinding suitable face shield, goggles and screens shall be used.
- Electrical hand gloves (rubber), shoe & goggles to be used while working with electrical panels (hazards)
- Workmen working at height more than 1.0 meter should wear full body safety belt / harness and it should be tied / anchored properly to a firm support or lifeline with a guy rope.

Responsibility of employee:


It is the responsibility of every employee/workmen to:

- To wear mandatory PPE while on the site
- To wear specific job-related PPE as per the requirement
- To maintain his PPE's in clean & sound condition

Any will full violation of rules will be viewed seriously, and strict action will be taken in such case.


To define and maintain minimum stock of PPE is responsibility of facility manager / subcontractor under whom respective staff is working.

Mandatory PPE's:

No	DESCRIPTION	SPECIFICATION	PICTURE
1	HELMET	IS- 2925 The Helmet needs to have adjustable suspension and complete chin strap	

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2	SAFETY BOOTS	EN-345 or IS-15298 Safety boots with toe guard Suggestion to wear the socks for better protection and comfort	
3	HIGH VISIBILITY VEST	EN- 471 "Silver" Stabillo (Scot light).	
4	GOGGLES (Clear / tinted for indoor / outdoor works)	EN 166 FT CE Make:- Karam ES 006	

2. FIRST-AID:

First aid kit to be provided in all offices and worksites accessible to teams. This kit must contain sufficient items for 11 to 50 persons or as per the employee strength. Responsibility of providing this facility lies with each subcontractor and SPPL facility manager.

This first aid kit shall be kept in charge of either subcontractor's authorized person who will be on the site during all working hours to ensure that the first aid kit is available without delay.

The SPPL / subcontractor shall ensure that adequate numbers of first aid kits and trained personnel are available strategically at the site during working hours.

The SPPL / subcontractor will ensure availability of the emergency vehicle at the site during working hours and shall have his own arrangements / tie-ups with nearby hospitals for shifting and treatment of sick and injured.


3. SIGNALIZATION/ SAFETY SIGNAGE, BARRICADE FOR WORKS:

Working in public utilities / near busy roads involves risk to general public in addition to workmen performing their duties. Therefore, proper planning of diversion of traffic, putting signage / caution boards, installing barricade and deputing signaling man / watch man to be identified well before start of work.

Implementation of traffic plan with identified control measures is responsibility of each person in-charge of activity.

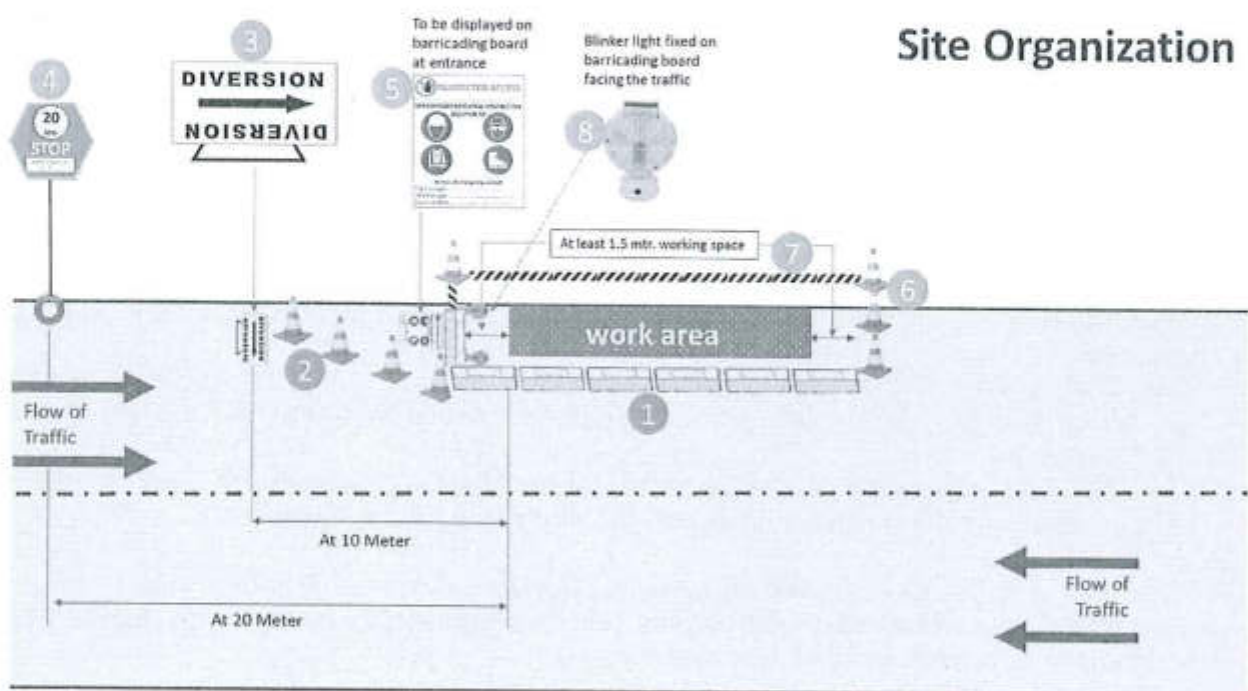
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• **Following is the standard for organizing a work site**

1. Barricading boards
2. Traffic cones
3. Diversion sign board @ 10 Meter from work site
4. Stop Sign @ 20 Meter from work site
5. Mandatory PPE sign board
6. Traffic cones
7. Soft Barricading by caution tape
8. Blinker lights on barricading boards facing the traffic




Following major risks are being identified and rules are being set-up for such works:

1. Narrowing of roads or walkways may have potential risk of injuries and inconvenience to pedestrians:

- Ensure that pedestrian pathways are maintained free from obstacles.
- Display signage to caution pedestrians.

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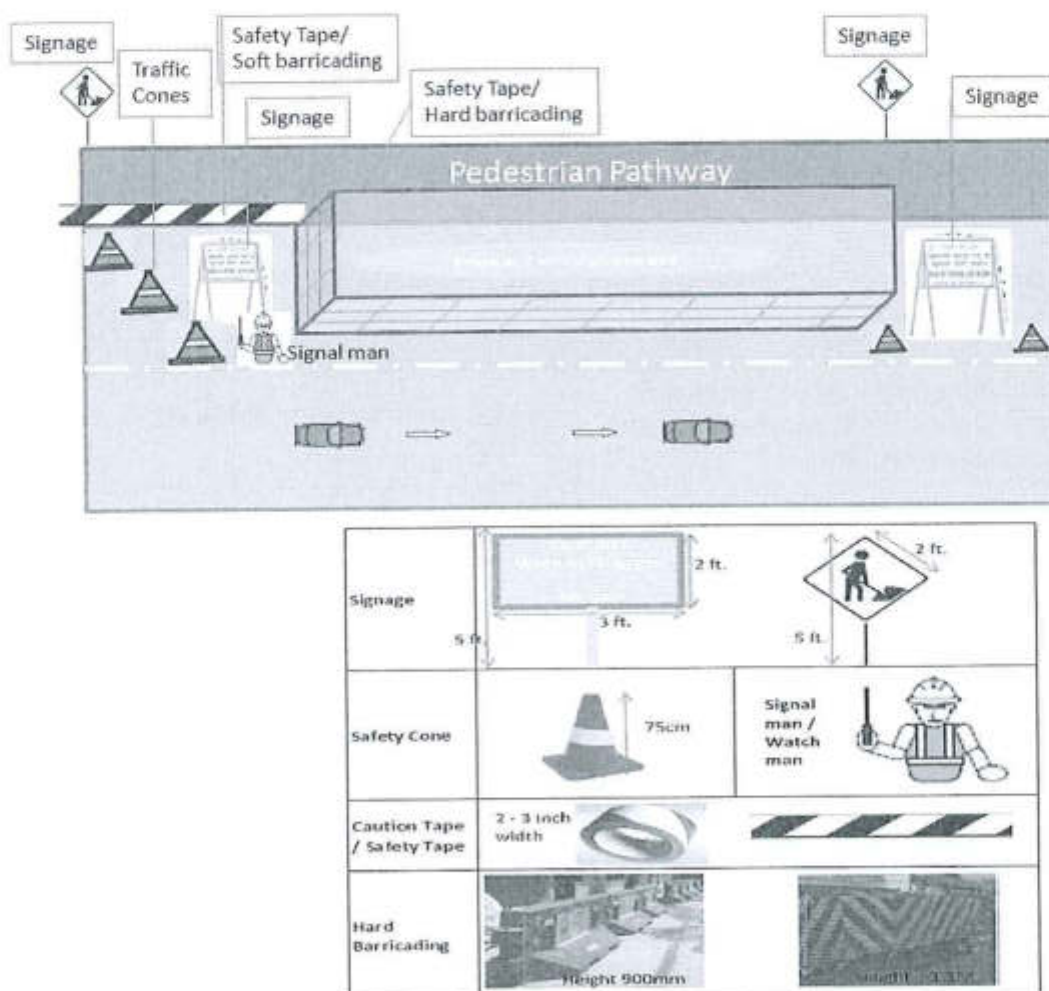
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- Barricade the excavated or work in progress areas prior to start of work.
- Keep watch on the area to maintain safe conditions all the time.

The SPPL / subcontractor has **obligation to signalize & barricade every single work** in order to prevent any incident to pedestrians or surrounding communities.


In general, if the walking space is less than 1 mtr. in Width (depending on pedestrian flow), or there is insufficient space left for fixing the barricading board, pedestrian movement can be blocked / diverted after obtain permission from concern authority.

Storage of loose materials or construction materials / machines should not be done on walkways. This may require continuous clearing of waste / unwanted materials from work areas.



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2. Partial blocking of a traffic lane of road may cause potential risk of collision of vehicles resulting to serious injuries and inconvenience to commuters:

Blocking of a traffic lane to be planned and controls to defined and implemented prior to start of job. This may require permission from authorities and:

- Diversion of traffic to minimize bottle neck and impact on traffic load
- Placing hard barricades & safety cones to contain risks arising out of work in progress area
- Placing signage, caution notices & signals (lighting lamps / rotary lamps) for public and vehicles keeping day and night in mind
- Deputing a dedicated man as watch man / signaling man to guide traffic

The supervisor of works shall ensure that the signalization / safety signage, barricade of works are in place prior the start and during works.

All workmen including watch man / security guard to be inducted for hazards and associated risks and Do's & Don'ts instructions to be followed by each one of them.


Additional soft barricading to be provided for visual impact and better controls.

Continuous vigil to be kept to rectify and improve the controls as and when required.

Do's and Don'ts for an employee working beside busy roads.

Sl.	Do's	Don't
1	Wear reflective vest, helmet and safety shoes for high visibility and protection from injuries.	Do not remove your PPE's while working on site
2	Stay out of path of moving vehicles, plant or equipment	Do not approach to traffic / roads or un-barricaded areas without permission
3	Follow traffic signals of police and watch man deputed on site	Do not take shortcuts or do not avoid dedicated paths
4	Ensure all machines & materials are placed safely.	Do not keep machines or materials etc. on pathways or outside the barricaded areas
5	Enter trenches only when appropriate wall support is in place	Do not enter deep trenches unless you are authorized by your supervisor
6	Be vigilant to your surroundings. In case you notice any abnormal conditions,	Do not ignore instructions given to you or danger noticed by you
	<ul style="list-style-type: none"> - Inform your supervisor - Alert your co-workers 	<ul style="list-style-type: none"> - Do not put yourself or your co-workers in danger



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3. Complete Closure of a road may cause potential risk of traffic congestion, and inconvenience to commuters and trespassing of vehicles resulting to serious injuries:

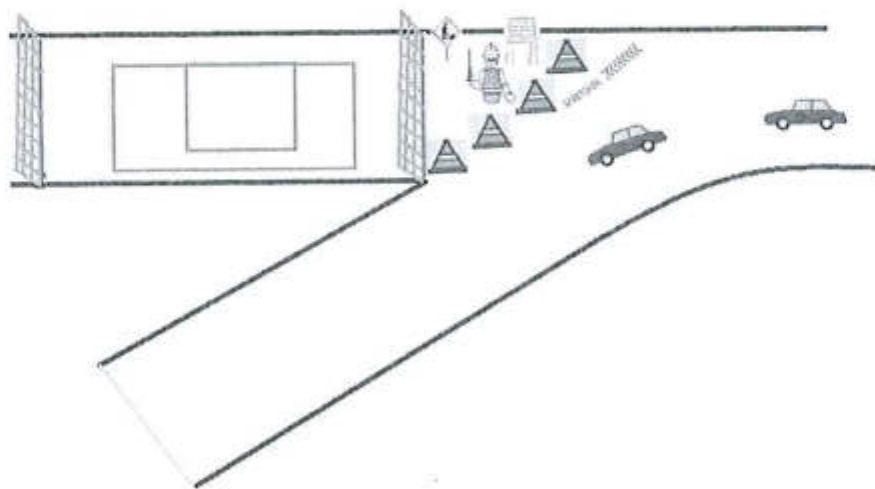
There may be situations where work plan requires complete closure of a road. In such cases good traffic planning and organization of work is desired even if it is planned in lean traffic timings.

- Diversion of traffic to minimize bottle neck and traffic congestion
- Complete closure of road / pathways using hard barricading & safety cones to contain risks arising out of work in progress area
- Placing direction signage, red light, caution notices & signals (lighting lamps / rotary lamps) for public and vehicles keeping day and night in mind
- Deputing a dedicated watch man / signaling man to guide traffic

Manager of works along with subcontractor & Safety officer to inspect prior to start of works and review the situation periodically.


Supervisor of works to inspect the area every day before starting and at end of day's work or during recess to ensure no unsafe condition is left behind. There may be chance that barricading boards are temporarily removed or any materials / machines are left unattended in public places posing risk of trespassing or injury to general public.

Watchman to be dedicatedly deputed to guide traffic and keep control on unauthorized entries.






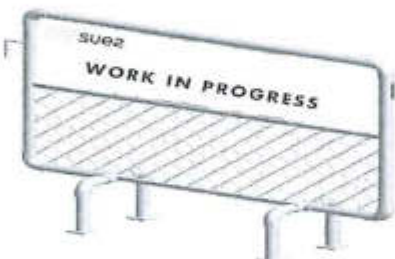

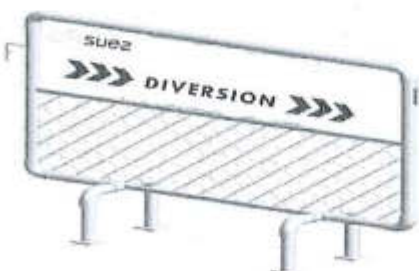
Road Diversion for complete closure







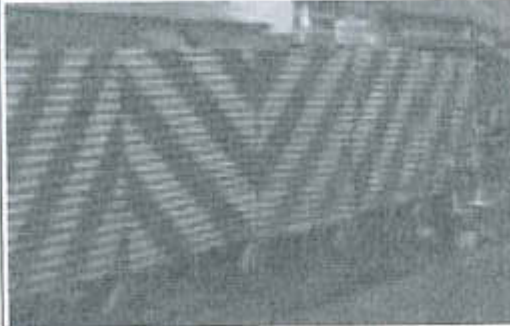

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Description of Signalization/ safety signage, barricade:

Specification must be in accordance to EN / IS standards especially for standard color & high visibility. Ensure robust make and reputed manufactures for the same.

NO	DESCRIPTION	SPECIFICATION	PICTURE
1	MEN AT WORK, GO SLOW 	Material: MS Pipe, MS sheet, Height: 1150 MM Width : 1500 MM The signalization shall respect color, be visible from distance and robust. However, design of boards & logo may vary.	
2	WORK IN PROGRESS 	Material: MS Pipe, MS sheet, Height: 1150 MM Width : 1500 MM The signalization shall respect color, be visible from distance and robust. However, design of boards & logo may vary.	
3	DIVERSION 	Material: MS Pipe, MS sheet, Height: 1150 MM Width : 1500 MM The signalization shall respect color, be visible from distance and robust. However, design of boards & logo may vary.	

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4	CAUTION SAFETY TAPE	Material: Plastic Color: Red and white stripes	
5	TRAFFIC CONES	Height: 75cm Material: Rubber Base With reflection bar	
6	BARRIERS	<p>Barricading block Interlocking wall effect, 90 degree turning radius</p> <p>For wide road > 2000mm Length- 2000mm Width- 600 mm Height- 900mm</p> <p>For narrow street < 2000mm Length- 1000mm Width- 300 mm Height- 800mm (low width barricades are acceptable for narrow spaces)</p> <p>GI sheet barricading as per requirement (min. two sheet width)</p>	 

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