



SCHEDULE - V

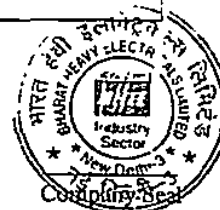
SEWAGE TREATMENT PLANT - OPERATING DETAILS

SL NO	ITEM	UNIT	VALUE
I.	Electrical Loads for Raw Sewage Pumping Station & STP for RDA, Raipur (— MLD)		
1	Total connected load	KVA	250
2	Maximum running load	KW	180
3	Average running load	KW	150
4	Average power factor		
5	Daily average power requirement	KWH/day	3500
6	Annual average power requirement	KWH/year	1277500

SL NO	ITEM	UNIT	VALUE
V.	Chemical Usage		
1	Average dose for Chlorine	kg/day	250
	Maximum dose for Chlorine	kg/day	300
2	Average dose for Dewatering Polyelectrolyte	kg/day	1
	Maximum dose for Dewatering Polyelectrolyte	kg/day	2

Note: This schedule provided for 4.33 MLD STP.

Signature of Bidder



Chief Engineer
Raipur Development Authority
Raipur (C.G.)



SCHEDULE – VI

FUNCTIONAL GUARANTEES

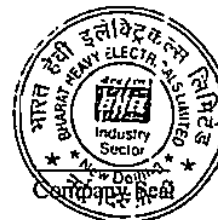
1. **General**
This schedule sets out the functional guarantees required for the calculation of Liquidated Damages for failing O&M performance guarantees.

The Bidder shall provide values of electrical energy and chemical usage for the quantity and quality of raw sewage given in the technical specifications
2. **Functional Guarantees**
The contractor's guarantee for the performance in the O&M period to be as follows:
 - 2.1 **Quality of Treated Effluent**
The quality of treated effluent shall be as follows:
As specified in "*Volume – I - Scope of Work*".
 - 2.2 **Guaranteed Electrical Energy Usage**

The power requirement of Raw Sewage Pumping Station & STP of 4.33MLD Capacity	Not more than Units 108500 per month.
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Note: This schedule provided for 4.33 MLD STP.

Signature of Bidder



Chief Engineer
Raipur Development Authority
Raipur (C.G.)



**SCHEDULE -VII
FORMAT FOR ELECTRICAL LOAD LIST & POWER CONSUMPTION**

Sr. No.	Description of Equipment	Motor Rating KW	W	S	T	BKW	Operating Hrs. Hrs./day	Power Consumption (Kw.Hrs./day)
1	Mechanical Coarse Screen	1.5	1	0	1	1.28	5	7.32
2	Raw Sewage Transfer Pumps	1.5	1	1	2	12.75	24	350.20
3	Mechanical Fine Screen	1.5	1	0	1	1.28	5	7.32
4	Detritus							
	a. Scraper Mechanism	1.5	1	0	1	1.28	24	35.16
	b. Classifier Mechanism	2.2	1	0	1	1.87	24	51.36
	c Organic Return Pumps	0.75	1	0	1	0.64	24	17.58
5	Decanters	0.55	2	0	2	0.47	6	6.45
6	SBR Air Blowers	37	1	1	2	31.45	24	863.83
7	RAS Pumps	1.5	2	0	2	1.28	12	35.16
8	SAS Pumps	2.2	2	0	2	1.87	2	8.56
9	Chlorination Tank							
	a. Water Booster Pumps	2.2	1	1	2	1.87	12	25.68
	b. NaOCl Recirculation Pump	2.2	1	1	2	1.87	12	25.68



Chief Engineer
Development Authority
Raipur (C.G.)

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c. Air Blower	1.5	1	0	1	1.28	12	17.58
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Signature of Bidder

Chief Engineer
Raipur Development Authority
Raipur (C.G.)

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Sr. No.	Description of Equipment	Motor Rating KW	W	S	T	BKW	Operating Hrs. Hrs./day	Power Consumption (Kw.Hrs./day)
10	Sludge Sump Mixers	2.2	1	1	2	4.07	18	83.84
11	Centrifuge Feed Pumps	1.1	1	1	2	0.94	18	19.36
12	Centrifuge	11	1	0	2	9.35	2	192.61
13	Agitators for DWPE Dosing Tanks	0.75	1	1	2	0.64	18	1.46
14	Dewatering Polymer Dosing Pumps	0.37	1	1	2	0.31	4	6.39
15	Service Water Pumps	2.2	1	1	2	1.87	18	8.56
16	Bio Filter Blowers	7.5	1	1	2	6.38	18	131.43
17	Treated Sewage Effluent Pumps	22	1	1	2	18.7	0.4	385.22
18	Auto Valves/Sluice Gates	0.75	1	0	1	0.64	8	0.29
19	Plant Area Lighting	13	1	0	1	11	18	100.71
	TOTAL							2381.76
	ADD LINE LOSSES & 5% OF ABOVE							119
	GRAND TOTAL							2500



Chief Engineer
Raipur Development Authority
Raipur (C.G.)

Sewage Treatment Plants at
Kamal Vihar & Indraprastha

Raipur Development Authority,
Raipur, (C.G.)


Signature of Bidder



Chief Engineer
Raipur Development Authority
Raipur (C.G.)

Volume I - Instruction to Bidders, Scope of Work & Technical Specifications

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SCHEDULE - V

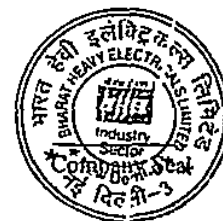
SEWAGE TREATMENT PLANT - OPERATING DETAILS

SL NO	ITEM	UNIT	VALUE
1.	Electrical Loads for Raw Sewage Pumping Station & STP for RDA, Raipur (7.4 MLD)		
1	Total connected load	KVA	450
2	Maximum running load	KW	225
3	Average running load	KW	200
4	Average power factor		
5	Daily average power requirement	KWH/day	4200
6	Annual average power requirement	KWH/year	1533000

SL NO	ITEM	UNIT	VALUE
V.	Chemical Usage		
1	Average dose for Chlorine @50mg/l	Kg/day	385
	Maximum dose for Chlorine @50mg/l	Kg/day	500
2	Average dose for Dewatering Polyelectrolyte	Kg/day	2
	Maximum dose for Dewatering Polyelectrolyte	Kg/day	3

Note: This schedule provided for 7.4 MLD STP.


Signature of Bidder



Chief Engineer
Raipur Development Authority
Raipur (C.G.)



SCHEDULE - VI

FUNCTIONAL GUARANTEES

1 General

This schedule sets out the functional guarantees required for the calculation of Liquidated Damages for failing O&M performance guarantees.

The Bidder shall provide values of electrical energy and chemical usage for the quantity and quality of raw sewage given in the technical specifications

2. Functional Guarantees

The contractor's guarantee for the performance in the O&M period to be as follows:

2.1 Quality of Treated Effluent

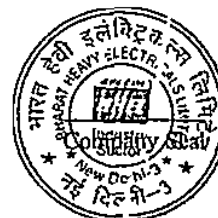
The quality of treated effluent shall be as follows:
As specified in "*Volume - I - Scope of Work*"

2.2 Guaranteed Electrical Energy Usage

The power requirement of Raw Sewage Pumping Station & STP of -7.40 MLD Capacity	Not more than month	130200 Units per
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Note: This schedule shall be provided for each STPs separately.

Signature of Bidder



Chief Engineer
Raipur Development Authority
Raipur (C.G.)

SCHEDULE -VII
FORMAT FOR ELECTRICAL LOAD LIST & POWER CONSUMPTION

Sr. No.	Description of Equipment	Motor Rating KW	W	S	T	BKW	Operating Hrs./day	Power Consumption (Kw.Hrs./day)
1	Mechanical Coarse Screen	1.5	1	0	1	1.46	5	7.32
2	Raw Sewage Transfer Pumps	22	1	1	2	21.40	24	513.63
3	Mechanical Fine Screen	1.5	1	0	1	1.46	5	7.32
4	Detritus							
	a. Scraper Mechanism	1.5	1	0	1	1.46	24	35.16
	b. Classifier Mechanism	2.2	1	0	1	2.14	24	51.36
	c. Organic Return Pumps	0.75	1	0	1	0.73	24	17.58
5	Decanters	0.55	2	0	2	0.54	6	6.45
6	SBR Air Blowers	55	1	1	2	53.50	24	1284.07
7	RAS Pumps	2.2	2	0	2	2.14	12	51.36
8	SAS Pumps	3.7	2	0	2	3.61	2	14.42
9	Chlorination Tank							0
	a. Water Booster Pumps	2.2	1	1	2	2.14	12	25.68

Raipur

Chief Engineer
Development Authority
Raipur (C.G.)



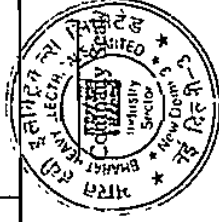
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Sewage Treatment Plants at
Kamal Vihar & Indraprastha

Raipur Development Authority,
Raipur, (C G)

b. NaOH Recirculation Pump	2.2	1	1	2	2.14	12	25.68
c Air Blower	1.5	1	0	1	1.46	12	17.58



Chief Engineer
Raipur Development Authority
Raipur (C G)

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Sr. No.	Description of Equipment	Motor Rating KW	W	S	T	BKW	Operating Hrs. Hrs./day	Power Consumption (Kw.Hrs./day)
10	Sludge Sump Mixers	3.7	1	1	2	3.61	18	64.89
11	Centrifuge Feed Pumps	1.5	1	1	2	2.14	18	38.52
12	Centrifuge	18.5	1	0	1	18.00	18	324.04
13	Aglators for DWPE Dosing Tanks	0.75	1	0	1	0.73	2	1.46
14	Devaltering Polymer Dosing Pumps	0.37	1	1	2	0.35	18	6.39
15	Service Water Pumps	1.5	1	1	2	2.14	4	8.56
16	Bio Filter Blowers	5.5	1	1	2	5.36	18	96.41
17	Treated Sewage Effluent Pumps	30	1	1	2	29.18	18	525.30
18	Auto Valves/Sluice Gates	0.75	8	0	8	0.73	0.4	0.29
19	Plant Area Lighting	21	1	0	1	21.17	8	169.38
	TOTAL							3292.85
	ADD LINE LOSSES & 5% OF ABOVE							164
	GRAND TOTAL							3457

Chief Engineer
Raipur Development Authority
Raipur (C.G.)

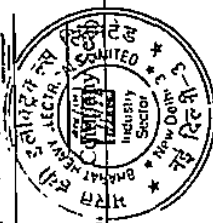


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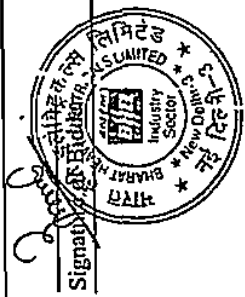
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Raipur Development Authority,
Raipur (C.G.)



Sewage Treatment Plants at
Kamal Vihar & Indraprastha



Chief Engineer
Raipur Development
Raipur (C.G.) Authority



SCHEDULE - V

SEWAGE TREATMENT PLANT - OPERATING DETAILS

SL NO	ITEM	UNIT	VALUE
I.	Electrical Loads for Raw Sewage Pumping Station & STP for RDA, Raipur (7.05 MLD)		
1	Total connected load	KVA	450
2	Maximum running load	KW	225
3	Average running load	KW	200
4	Average power factor		
5	Daily average power requirement	KWH/day	4200
6	Annual average power requirement	KWH/year	1533000

SL NO	ITEM	UNIT	VALUE
V.	Chemical Usage		
1	Average dose for Chlorine @50mg/l	Kg/day	385
	Maximum dose for Chlorine @50mg/l	Kg/day	500
2	Average dose for Dewatering Polyelectrolyte	Kg/day	2
	Maximum dose for Dewatering Polyelectrolyte	Kg/day	3

Note: This schedule provided for 7.05 MLD STP


Signature of Bidder




Chief Engineer
Raipur Development Authority
Raipur (C.G.)



SCHEDULE - VI

FUNCTIONAL GUARANTEES

1. General

This schedule sets out the functional guarantees required for the calculation of Liquidated Damages for failing O&M performance guarantees

The Bidder shall provide values of electrical energy and chemical usage for the quantity and quality of raw sewage given in the technical specifications

2. Functional Guarantees

The contractor's guarantee for the performance in the O&M period to be as follows:

2.1 Quality of Treated Effluent

The quality of treated effluent shall be as follows:
As specified in "Volume - I - Scope of Work".

2.2 Guaranteed Electrical Energy Usage

The power requirement of Raw Sewage Pumping Station & STP of - 7.05 MLD Capacity	Not more than month	130200 Units per
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Note: This schedule provided for 7.05 MLD STP

Signature of Bidder



Chief Engineer
Raipur Development Authority
Raipur (C.G.)



**SCHEDULE -VII
FORMAT FOR ELECTRICAL LOAD LIST & POWER CONSUMPTION**

Sr. No.	Description of Equipment	Motor Rating KW	W	S	T	BKW	Operating Hrs. Hrs./day	Power Consumption (Kw.Hrs./day)
1	Mechanical Coarse Screen	1.5	1	0	1	1.46	5	7.32
2	Raw Sewage Transfer Pumps	22	1	1	2	21.40	24	513.63
3	Mechanical Fine Screen	1.5	1	0	1	1.46	5	7.32
4	Detritus							
	a. Scraper Mechanism	1.5	1	0	1	1.46	24	35.16
	b. Classifier Mechanism	2.2	1	0	1	2.14	24	51.36
	c. Organic Return Pumps	0.75	1	0	1	0.73	24	17.58
5	Decanters	0.55	2	0	2	0.54	6	6.45
6	SBR Air Blowers	55	1	1	2	53.50	24	1284.07
7	RAS Pumps	2.2	2	0	2	2.14	12	51.36
8	SAS Pumps	3.7	2	0	2	3.61	2	14.42
9	Chlorination Tank							0
	a. Water Booster Pumps	2.2	1	1	2	2.14	12	25.68

Chief Engineer
Raipur Development Authority
Raipur (C.G.)



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Sewage Treatment Plants at
Kamal Vihar & Indraprastha

Raipur Development Authority,
Raipur. (C.G.)

b. NaOH Recirculation Pump	2.2	1	1	2	2.14	12	25.68
c. Air Blower	1.5	1	0	1	1.46	12	17.58

Signature of Bidder



Chief Engineer
Raipur Development Authority
Raipur (C.G.)



Sr. No.	Description of Equipment	Motor Rating KW	W	S	T	BKW	Operating Hrs. Hrs./day	Power Consumption (Kw.Hrs./day)
10	Sludge Sump Mixers	3.7	1	1	2	3.61	18	64.89
11	Centrifuge Feed Pumps	1.5	1	1	2	2.14	18	38.52
12	Centrifuge	18.5	1	0	1	18.00	18	324.04
13	Agitators for DWPE Dosing Tanks	0.75	1	0	1	0.73	2	1.46
14	Deaerating Polymer Dosing Pumps	0.37	1	1	2	0.35	18	6.39
15	Service Water Pumps	1.5	1	1	2	2.14	4	8.56
16	Bio Filter Blowers	5.5	1	1	2	5.36	18	96.41
17	Treated Sewage Effluent Pumps	30	1	1	2	29.18	18	525.30
18	Auto Valves/Sluice Gates	0.75	8	0	8	0.73	0.4	0.29
19	Plant Area Lighting	21	1	0	1	21.17	8	169.38
	TOTAL							3292.85
	ADD LINE LOSSES & 5% OF ABOVE							164
	GRAND TOTAL							3457

Chief Engineer
Raipur Development Authority
Raipur (C.G.)

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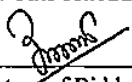
SCHEDULE - V

SEWAGE TREATMENT PLANT - OPERATING DETAILS

SL NO	ITEM	UNIT	VALUE
1.	Electrical Loads for Raw Sewage Pumping Station & STP for RDA, Raipur (-0.872- MLD)		
1	Total connected load	KVA	150
2	Maximum running load	KW	100
3	Average running load	KW	90
4	Average power factor		
5	Daily average power requirement	KWH/day	2200
6	Annual average power requirement	KWH/year	80300

SL NO	ITEM	UNIT	VALUE
V.	Chemical Usage		
1	Average dose for Chlorine	Kg/day	200
	Maximum dose for Chlorine	Kg/day	225
2	Average dose for Dewatering Polyelectrolyte	Kg/day	0.9
	Maximum dose for Dewatering Polyelectrolyte	Kg/day	1.03

Note: This schedule provided for 0.872 MLD STP.


Signature of Bidder




Chief Engineer
Raipur Development Authority
Raipur (C.G.)

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SCHEDULE - VI

FUNCTIONAL GUARANTEES

- 1 **General**
This schedule sets out the functional guarantees required for the calculation of Liquidated Damages for failing O&M performance guarantees.

The Bidder shall provide values of electrical energy and chemical usage for the quantity and quality of raw sewage given in the technical specifications.
- 2 **Functional Guarantees**
The contractor's guarantee for the performance in the O&M period to be as follows:
 - 2.1 **Quality of Treated Effluent**
The quality of treated effluent shall be as follows:
As specified in "*Volume - I - Scope of Work*".
 - 2.2 **Guaranteed Electrical Energy Usage**

The power requirement of Raw Sewage Pumping Station & STP of 0.872 MLD Capacity	Not more than 68200 Units per month.
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Note: This schedule provided for 0.872 MLD STP.


Signature of Bidder




Chief Engineer
Raipur Development Authority
Raipur (C.G.)

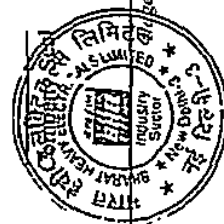


**SCHEDULE -VII
FORMAT FOR ELECTRICAL LOAD LIST & POWER CONSUMPTION**

Sr. No.	Description of Equipment	Motor Rating KW	W	S	T	BKW	Operating Hrs. Hrs./day	Power Consumption (Kw.Hrs./day)
1	Mechanical Coarse Screen	0	0	0	0	0	0	0
2	Raw Sewage Transfer Pumps	5.5	1	1	2	5.36	24	
3	Mechanical Fine Screen	0	0	0	0	0	0	0
4	Detritus							
	a. Scraper Mechanism	0	0	0	0	0	0	0
	b. Classifier Mechanism	0	0	0	0	0	0	0
	c. Organic Return Pumps	0	0	0	0	0	0	0
5	Decanters	0.55	2	0	2	0.54	6	
6	SBR Air Blowers	22	1	1	2	21.4	24	
7	RAS Pumps	0.75	2	0	2	0.73	12	
8	SAS Pumps	1.1	2	0	2	1.08	2	
9	Chlorination Tank							
	a. Chlorine dosing pump	0.19						
	b. NaOH Recirculation Pump	0	0	0	0	0	0	0
	c. Air Blower	0	0	0	0	0	0	0

Signature of Bidder

Chief Engineer
Raipur Development Authority
Raipur (C.G.)



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Sr. No.	Description of Equipment	Motor Rating KW	W	S	T	BKW	Operating Hrs. Hrs./day	Power Consumption (Kw.Hrs./day)
10	Sludge Sump Mixers	0.75	1	0	1	0.64	18	13.18
11	Centrifuge Feed Pumps	0.75	1	1	2	0.64	18	13.18
12	Centrifuge	7.5	1	0	1	6.38	18	131.43
13	Agitators for DWPE Dosing Tanks	0.37	2	0	2	0.31	2	1.42
14	Dewatering Polymer Dosing Pumps	0.37	1	1	2	0.31	18	6.39
15	Service Water Pumps	2.2	1	1	2	1.87	4	8.56
16	Bio Filter Blowers	2.2	1	1	2	1.87	18	38.52
17	Treated Sewage Effluent Pumps	11	1	1	2	9.35	18	192.61
18	Auto Valves/Sluice Gates	0.75	1	0	1	0.64	0.4	0.29
19	Plant Area Lighting	7.5	1	0	1	7.5	8.58	68.67
	TOTAL							1146.95
	ADD LINE LOSSES & 5% OF ABOVE							57.34
	GRAND TOTAL							1204.30

Signature of Bidder



Chief Engineer
Raipur Development Authority
Raipur (C.G.)

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SCHEDULE - V

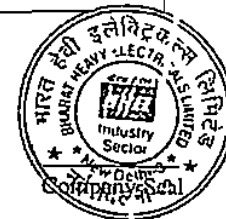
SEWAGE TREATMENT PLANT - OPERATING DETAILS

SL NO	ITEM	UNIT	VALUE
I.	Electrical Loads for Raw Sewage Pumping Station & STP for RDA, Raipur (1.79- MLD)		
1	Total connected load	KVA	150
2	Maximum running load	KW	100
3	Average running load	KW	90
4	Average power factor		
5	Daily average power requirement	KWH/day	2200
6	Annual average power requirement	KWH/year	80300

SL NO	ITEM	UNIT	VALUE
V.	Chemical Usage		
1	Average dose for Chlorine	Kg/day	200
	Maximum dose for Chlorine	Kg/day	225
2	Average dose for Dewatering Polyelectrolyte	Kg/day	0.9
	Maximum dose for Dewatering Polyelectrolyte	Kg/day	1.03

Note: This schedule provided for 1.79 MLD STP.


Signature of Bidder




Chief Engineer
Raipur Development Authority
Raipur (C.G.)

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SCHEDULE - VI

FUNCTIONAL GUARANTEES

1 General

This schedule sets out the functional guarantees required for the calculation of Liquidated Damages for failing O&M performance guarantees.

The Bidder shall provide values of electrical energy and chemical usage for the quantity and quality of raw sewage given in the technical specifications

2. Functional Guarantees

The contractor's guarantee for the performance in the O&M period to be as follows:

2.1 Quality of Treated Effluent

The quality of treated effluent shall be as follows:
As specified in "Volume - I - Scope of Work".

2.2 Guaranteed Electrical Energy Usage

The power requirement of Raw Sewage
Pumping Station & STP of 1.79MLD
Capacity

Not more than 68200 Units per month.

This schedule has been provided for 1.79 MLD STP.
Note: This schedule shall be provided for each STPs separately.

Signature of Bidder



Chief Engineer
Raipur Development Author.
Raipur (C.G.)



SCHEDULE - VII
FORMAT FOR ELECTRICAL LOAD LIST & POWER CONSUMPTION

Sr. No.	Description of Equipment	Motor Rating KW	W	S	T	BKW	Operating Hrs. Hrs./day	Power Consumption (Kw.Hrs./day)
1	Mechanical Coarse Screen	0	0	0	0	0	0	0
2	Raw Sewage Transfer Pumps	5.5	1	1	2	536	24	
3	Mechanical Fine Screen	0	0	0	0	0	0	0
4	Detritus							
	a. Scraper Mechanism	0	0	0	0	0	0	0
	b. Classifier Mechanism	0	0	0	0	0	0	0
	c. Organic Return Pumps	0	0	0	0	0	0	0
5	Decanters	0.55	2	0	2	0.54	6	
6	SBR Air Blowers	22	1	1	2	21.4	24	
7	RAS Pumps	0.75	2	0	2	0.73	12	
8	SAS Pumps	1.1	2	0	2	1.08	2	
9	Chlorination Tank							
	a. Chlorine dosing pump	0.19						
	b. NaOH Recirculation Pump	0	0	0	0	0	0	0
	c. Air Blower	0	0	0	0	0	0	0

Signature of Bidder
Chief Engineer
Raipur Development Authority
(C.G.)





Sr. No.	Description of Equipment	Motor Rating KW	W	S	T	BKW	Operating Hrs./day	Power Consumption (Kw.Hrs./day)
10	Sludge Sump Mixers	0.75	1	0	1	0.64	18	13.18
11	Centrifuge Feed Pumps	0.75	1	1	2	0.64	18	13.18
12	Centrifuge	7.5	1	0	1	6.38	18	131.43
13	Agitators for DWPE Dosing Tanks	0.37	2	0	2	0.31	2	1.42
14	Dewatering Polymer Dosing Pumps	0.37	1	1	2	0.31	18	6.39
15	Service Water Pumps	2.2	1	1	2	1.87	4	8.56
16	Bio Filter Blowers	2.2	1	1	2	1.87	18	38.52
17	Treated Sewage Effluent Pumps	11	1	1	2	9.35	18	192.61
18	Auto Valves/Sluice Gates	0.75	1	0	1	0.64	0.4	0.29
19	Plant Area Lighting	7.5	1	0	1	7.5	8.58	68.67
	TOTAL							1146.95
	ADD LINE LOSSES & 5% OF ABOVE							57.34
	GRAND TOTAL							1204.30

[Signature]
Signature of Bidder



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Chief Engineer
Raipur Development Authority
Raipur, (C.G.)



SCHEDULE - V

SEWAGE TREATMENT PLANT - OPERATING DETAILS

SL NO	ITEM	UNIT	VALUE
I.	Electrical Loads for Raw Sewage Pumping Station & STP for RDA, Raipur (~3.98- MLD)		
1	Total connected load	KVA	250
2	Maximum running load	KW	180
3	Average running load	KW	150
4	Average power factor		
5	Daily average power requirement	KWH/day	3500
6	Annual average power requirement	KWH/year	1277500

SL NO	ITEM	UNIT	VALUE
V.	Chemical Usage		
1	Average dose for Chlorine	kg/day	250
	Maximum dose for Chlorine	kg/day	300
2	Average dose for Dewatering Polyelectrolyte	kg/day	1
	Maximum dose for Dewatering Polyelectrolyte	kg/day	2

Note: This schedule provided for 3.98 MLD STP.


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Chief Engineer
Raipur Development Authority,
Raipur (C.G.)



SCHEDULE - VI

FUNCTIONAL GUARANTEES

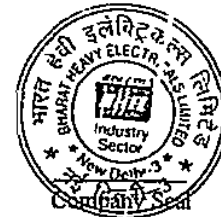
- 1 **General**
This schedule sets out the functional guarantees required for the calculation of Liquidated Damages for failing O&M performance guarantees.

The Bidder shall provide values of electrical energy and chemical usage for the quantity and quality of raw sewage given in the technical specifications.
2. **Functional Guarantees**
The contractor's guarantee for the performance in the O&M period to be as follows:
 - 2.1 **Quality of Treated Effluent**
The quality of treated effluent shall be as follows:
As specified in "*Volume - I - Scope of Work*".
 - 2.2 **Guaranteed Electrical Energy Usage**

The power requirement of Raw Sewage Pumping Station & STP of 3.98 MLD Capacity	Not more than Units 108500 per month
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Note: This schedule provided for 3.98 MLD STP.


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Raipur Development Authority
Raipur (C.G.)

SCHEDULE -VII
FORMAT FOR ELECTRICAL LOAD LIST & POWER CONSUMPTION

Sr. No.	Description of Equipment	Motor Rating KW	W	S	T	BKW	Operating hrs. Hrs./day	Power Consumption (Kw Hrs./day)
1	Mechanical Coarse Screen	1.5	1	0	1	1.28	5	7.32
2	Raw Sewage Transfer Pumps	1.5	1	1	2	12.75	24	350.20
3	Mechanical Fine Screen	1.5	1	0	1	1.28	5	7.32
4	Deiftus							
	a. Scraper Mechanism	1.5	1	0	1	1.28	24	35.16
	b Classifier Mechanism	2.2	1	0	1	1.87	24	51.36
	c Organic Return Pumps	0.75	1	0	1	0.64	24	17.58
5	Dewaterers	0.55	2	0	2	0.47	6	6.45
6	SBR Air Blowers	37	1	1	2	31.45	24	863.83
7	RAS Pumps	1.5	2	0	2	1.28	12	35.16
8	SAS Pumps	2.2	2	0	2	1.87	2	8.56
9	Chlorination Tank							
	a. Water Booster Pumps	2.2	1	1	2	1.87	12	25.68
	b NaOH Recirculation Pump	2.2	1	1	2	1.87	12	25.68
	c Air Blower	1.5	1	0	1	1.28	12	17.58

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Raipur Development Authority,
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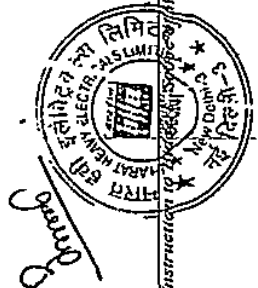


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Sr. No.	Description of Equipment	Motor Rating KW	W	S	T	BKW	Operating Hrs. Hrs./day	Power Consumption (Kw.Hrs./day)
10	Sludge Sump Mixers	2.2	1	1	2	4.07	18	83.84
11	Centrifuge Feed Pumps	1.1	1	1	2	0.94	18	19.36
12	Centrifuge	11	1	0	2	9.35	2	192.61
13	Agitators for DWPE Dosing Tanks	0.75	1	1	2	0.64	18	1.46
14	Dewatering Polymer Dosing Pumps	0.37	1	1	2	0.31	4	6.39
15	Service Water Pumps	2.2	1	1	2	1.87	18	8.56
16	Bio Filter Blowers	7.5	1	1	2	6.38	18	131.43
17	Treated Sewage Effluent Pumps	22	1	1	2	18.7	0.4	385.22
18	Auto Valves/Sluice Gates	0.75	1	0	1	0.64	8	0.29
19	Plant Area Lighting	13	1	0	1	11	18	100.71
	TOTAL							2381.76
	ADD LINE LOSSES & 5% OF ABOVE							119
	GRAND TOTAL							2500

Chief Engineer
Raipur Development Authority
Raipur (C.G.)



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