

## NATIONAL ALUMINIUM COMPANY LIMITED

(A Govt. of India Enterprise)

Captive Power Plant Division

ANGUL - 759145 , Odisha

Tel:-

Fax:-

Email:-

Order No : CPP/T&C/C20/MC-5371/5300008168/2024/

NALCO's GSTN :21AAACN7449M1Z9

Date : 19.10.2024

**TO:** KALINGA ENGINEERS,  
P.O-VIKRAMPUR  
MIG-10,F.C.I.HOUSING BOARD  
ANGUL 759128 Angul  
Odisha India  
Tel:06764-223495 Fax:  
Email:kal\_engg@rediffmail.com

[105174]

PAN NO : AFSPD3665B  
GST REG NO : 21AFSPD3665B1ZT  
EPF NO : OR/6496  
ESI NO : 44-6427-101

**Sub :**REPAIR AND MAINTENANCE OF CHP-2.(SAC No.998719)

**Ref.:**

- 1) Refer e-office file no.: 1300-063-13-17/0001/2023-063 (Computer No.67805 ) for details.
- 2) RFP No.: CPP/T&C/GeM-111/MC-5371/NIT/2024/232 Date:21.05.2024
- 3) Our Online Tender ID No.: GEM/2024/B/4987416 Date:28.05.2024
- 4) Your Online Technical Bid opened on Date:27.06.2024
- 5) Our request for shortfall sent through GeM on Date:03.08.2024
- 6) Letter No.: CPP/CNT/MC-5371/Letter/2024 through e-mail for Shortfall on Date:03.09.2024
- 7) Your Online Price bid opened on Date:04.10.2024
- 8) LOI No.:CPP/CNT/MC-5371/LOI/2024/366 Date:08.10.2024
- 9) GeM Contract No.:GEMC-511687721567711 Date:08-Oct-2024

Dear Sir/Madam,

With reference to your offer referred above for the subject tender, NALCO is pleased to confirm acceptance of your offer and award the subject work in your favour with the terms and conditions given hereunder and various annexures enclosed herewith.

(A)

Sl No.	Description	Refer Enclosure at
1	TERMS & CONDITION OF CONTRACT/ SCOPE OF WORK / TECHNICAL SPECIFICATION / LIST OF FIM / INSPECTION AND TESTING ETC.	ANNEXURE-IA
2	SPECIAL CONDITIONS OF CONTRACT	ANNEXURE-IB
3	BILL OF QUANTITY & SCHEDULE OF RATES	ANNEXURE-II

(B) CONTRACT VALUE : **Rs 2,55,50,562.42 (Excluding GST of Rs.45,99,101.24)**

(C) EFFECTIVE DATE OF CONTRACT: 08.10.2024

(D) CONTRACT PERIOD : TWO YEARS

(E) PAYMENT TERMS : As per special Instruction

(F) MANAGER-IN-CHARGE : GM(MECH), CHP

(G) EMERGENCY CONTRACT EXECUTION PERIOD : NOT APPLICABLE

All other terms and conditions not specifically mentioned in this order shall be as per tender stipulations and mutually agreed deviations, and shall remain unaltered. You are requested to acknowledge the receipt of the Work Order / SPO. If we don't receive the same within 7 (seven) days, it will be presumed that you have accepted the Work Order / SPO. You are requested to report to Manager-in-Charge for all matters related to the works, payments etc.

Thanking you

Yours faithfully,  
For and on behalf of  
National Aluminium Company Limited

Name:

Designation:

Address:

OTHER TERMS AND CONDITIONS OF CONTRACT:

ANNEXURE-IA

HRD Clearance :	APPLICABLE: REF CLAUSE 9.7,19,20 AND 21.6 OF ANNEXURE-A1
Special Safety /ENV /SA Requirement :	APPLICABLE: 1) GENERAL : REFER CLAUSE No.:21 AND 22 OF ANNEXURE-A1. 2) SPECIAL : REFER CLAUSE OF ANNEXURE-IA AND IB.
GST :	APPLICABLE @18%.
SECURITY DEPOSIT:	APPLICABLE: REF CLAUSE 13 OF ANNEXURE-A1
Execution Of Agreement :	APPLICABLE: REF CLAUSE 12 OF ANNEXURE-A1 AND ANNEXURE-C23 OF NIT
FIM with Material code & Qty:	NIL
Defect Liability Period(DLP) :	NIL
Labour Escalation :	APPLICABLE THROUGH ACTUAL REIMBURSEMENT, STANDARD FORMULA OF ESCALATION WILL NOT BE APPLICABLE.
Labour Component (%) :	--
Basic Labour Rate(L0) Rs.:	564.00
POL / Material Escalation :	NOT APPL
BG Against FIM :	NOT APPL
IB Against FIM :	NOT APPL
BG Against Equipment :	NOT APPL

**Special Instructions :**

1) STATUS OF FIRM-INDIVIDUAL.

2) Annexure-IA at page 13 to 33 of the Service Purchase Order may be referred for detailed "Scope of work".

3) All other terms and conditions not specifically mentioned in the Service Purchase Order document shall be as per NIT and GCC and shall remain unaltered.

4) Preference for engagement of labours under NALCO's contractors establishment may be given to Land Affected Persons.

5) You are requested to report to Manager-in-Charge for all matters related to the works, payments etc.in the following address.

Mr D.K. Nanda,  
General Manager (Mech.), CHP,  
CPP Division, National Aluminium Co. Ltd.,  
Angul (Dist), ODISHA-759 145  
E-mail: debendra.nanda@nalcoindia.co.in  
Mob. No: 9437033098

CC: 1. GM (F) - F.B. No.: 2024W25600/25, 2025W26600/2,  
2026W27600/2 Date: 05.10.2024 (Through e-mail)

2. GM (H&A), CPP (Through e-mail),3. GGM (E&S) (Through e-mail)

4. Manager-in-charge- GM (Mech.), CHP (Through e-mail)

5. AGM (IED) (Through e-mail),6. AGM (Vig) S&P (Through e-mail)

7. Office copy, 8.Master copy

9. Vendor: 02 (Two) copies (one hard copy & another soft copy through e-mail)

**BILL OF QUANTITY & SCHEDULE OF RATES:**

**ANNEXURE-II**

Line item No	Activity SINo.	Service Description	UOM	QUANTITY	RATE	AMOUNT
					Curr : INR	Curr : INR
( 1 )	( 2 )	( 3 )	( 4 )	( 5 )	( 6 )	( 7 = 5 x 6 )
1		REPAIR AND MAINTENANCE OF CHP-2				
1	1	Replacement of chute liner	Square meter	420.000	4,052.97	1,702,247.40
1	2	Replacement of polymer liner	Square meter	20.000	3,784.13	75,682.60
1	3	GTU lifting	NO	60.000	3,211.39	192,683.40
1	4	Belt pulling upto 10 mtrs	NO	85.000	3,288.26	279,502.10
1	5	Belt pulling beyond 10 mtrs	Meter	600.000	218.77	131,262.00
1	6	Belt dismantling	Tonne	56.000	7,804.89	437,073.84
1	7	Belt erection	Tonne	69.000	9,577.04	660,815.76
1	8	Rectification of belt folding	NO	8.000	1,447.89	11,583.12
1	9	Hot Belt vulcanising - 500 mm	NO	7.000	2,801.37	19,609.59
1	10	Hot Belt vulcanising - 1000 mm	NO	50.000	8,413.88	420,694.00
1	11	Hot Belt vulcanising - 1200 mm	NO	15.000	9,633.15	144,497.25
1	12	Cold vulcanising - 500 mm	NO	26.000	4,569.67	118,811.42
1	13	Cold vulcanising - 1000 mm	NO	5.000	4,936.90	24,684.50
1	14	Cold vulcanising - 1200 mm	NO	1.000	5,623.39	5,623.39
1	15	Spot vulcanising (hot)	Square centimeter	99,000.000	4.83	478,170.00
1	16	Pulley rubber lagging	Square meter	100.000	3,503.18	350,318.00
1	17	Pulley replacement	NO	20.000	5,471.01	109,420.20
1	18	Pulley bearing clearance measurement	SET	15.000	3,300.17	49,502.55
1	19	Pulley bearing replacement/ OH	SET	25.000	3,720.04	93,001.00
1	20	Gear coupling inspection	NO	40.000	2,700.84	108,033.60
1	21	Gear coupling replacement	NO	16.000	13,700.18	219,202.88
1	22	Overhauling of gear box	NO	8.000	9,554.52	76,436.16
1	23	Gear box replacement	NO	3.000	14,844.18	44,532.54
1	24	Gear box oil seal replacement	NO	1.000	4,193.43	4,193.43
1	25	FCU over-hauling	NO	2.000	5,834.65	11,669.30
1	26	FCU replacement	NO	2.000	2,899.46	5,798.92
1	27	Gear box & pulley alignment	NO	8.000	4,997.70	39,981.60
1	28	Gear box & motor alignment	NO	15.000	5,774.96	86,624.40
1	29	PM of conveyor system	NO	2,010.000	2,153.27	4,328,072.70
1	30	Skirt rubber replacement/ adjustment	Meter	400.000	197.28	78,912.00
1	31	Skirt plate liner replacement /adjustmen	Square meter	15.000	4,297.61	64,464.15
1	32	Idler replacement	NO	20.000	197.28	3,945.60
1	33	Belt trainer replacement/OH	NO	50.000	1,404.63	70,231.50
1	34	Return idler bracket replacement	NO	20.000	197.28	3,945.60
1	35	PM of Plough Feeder	NO	204.000	1,136.49	231,843.96
1	36	PF blade replacement	SET	1.000	3,226.16	3,226.16
1	37	PF blade liner replacement	SET	1.000	1,129.85	1,129.85
1	38	PF wheel axle replacement	NO	1.000	13,956.63	13,956.63
1	39	PM of CBMS	NO	193.000	532.40	102,753.20
1	40	PM of Screen & Crusher	NO	204.000	2,154.74	439,566.96

**BILL OF QUANTITY & SCHEDULE OF RATES:**

**ANNEXURE-II**

Line item No	Activity SINo.	Service Description	UOM	QUANTITY	RATE	AMOUNT
					Curr : INR	Curr : INR
( 1 )	( 2 )	( 3 )	( 4 )	( 5 )	( 6 )	( 7 = 5 x 6 )
1	41	Disassembly & assembly of Screen hood	NO	2.000	1,039.65	2,079.30
1	42	Replacement of Screen cloth	NO	60.000	2,840.50	170,430.00
1	43	Replacement of Screen brg	SET	2.000	8,666.18	17,332.36
1	44	Replacement of Screen drive shaft	NO	1.000	11,487.27	11,487.27
1	45	Replacement of Screen sieve V-belt	SET	4.000	591.86	2,367.44
1	46	Removal of Screen chocking	NO	50.000	1,203.28	60,164.00
1	47	Inspection of Crusher internals	NO	30.000	3,408.58	102,257.40
1	48	Replacement of Crusher hammer	SET	8.000	13,443.84	107,550.72
1	49	Replacement of Crusher broken hammer	NO	12.000	1,362.96	16,355.52
1	50	Replacement of Crusher breaker plate	NO	4.000	8,966.29	35,865.16
1	51	Replacement of Screen plate (top)	NO	4.000	9,802.68	39,210.72
1	52	Replacement of Screen plate (bottom)	NO	4.000	10,639.06	42,556.24
1	53	Replacement of Tramp Iron plate	NO	1.000	4,362.65	4,362.65
1	54	Replacement of Kick off plate	NO	2.000	4,102.50	8,205.00
1	55	Replacement of Crusher brg	SET	1.000	13,509.68	13,509.68
1	56	Replacement of Crusher rotor	NO	1.000	42,545.04	42,545.04
1	57	Rotor hard-facing	Kilogram	200.000	681.45	136,290.00
1	58	Removal of Crusher chocking	NO	60.000	1,966.23	117,973.80
1	59	OH of flap gate actuator	NO	1.000	3,189.25	3,189.25
1	60	PM of Travelling Tripper	NO	204.000	1,077.37	219,783.48
1	61	Replacement/OH of PCRD	NO	2.000	4,362.65	8,725.30
1	62	Replacement of PCRD chain	NO	2.000	442.48	884.96
1	63	Replacement of Tripper wheel axle	NO	1.000	13,995.47	13,995.47
1	64	PM of pumps	NO	96.000	227.15	21,806.40
1	65	OH of pumps	NO	6.000	4,812.65	28,875.90
1	66	PM of AHU	NO	82.000	753.27	61,768.14
1	67	Cleaning of AHU filter	NO	5.000	197.28	986.40
1	68	Erection of static/rotating equipment	Tonne	70.000	3,348.89	234,422.30
1	69	Material transportation	Tonne	65.000	2,797.44	181,833.60
1	70	Structural fabrication	Tonne	150.000	8,545.76	1,281,864.00
1	71	Structural erection	Tonne	140.000	4,153.64	581,509.60
1	72	Structural dismantling	Tonne	100.000	3,877.26	387,726.00
1	73	Dismantling of coal chute	Meter	2.000	2,323.22	4,646.44
1	74	Fabrication & erection of coal chutes	Meter	2.000	8,066.30	16,132.60
1	75	Fabrication & erection of ventilation du	Tonne	1.000	10,693.70	10,693.70
1	76	Erection of 100 NB pipe	Meter	400.000	322.61	129,044.00
1	77	Gas cutting	Meter	3,200.000	348.15	1,114,080.00
1	78	Welding	Meter	2,400.000	348.15	835,560.00
1	79	Lubrication of conveyor system	NO	575.000	974.61	560,400.75
1	80	Lubrication of Screen brg & Crusher brg	NO	48.000	1,901.93	91,292.64
1	81	Gear box oil replacement	NO	111.000	956.87	106,212.57
1	82	Gear box oil topping	NO	1.000	215.47	215.47

**BILL OF QUANTITY & SCHEDULE OF RATES:****ANNEXURE-II**

Line item No	Activity SNo.	Service Description	UOM	QUANTITY	RATE	AMOUNT
					Curr : INR	Curr : INR
( 1 )	( 2 )	( 3 )	( 4 )	( 5 )	( 6 )	( 7 = 5 x 6 )
1	83	FCU oil replacement	NO	23.000	974.61	22,416.03
1	84	FCU oil topping	NO	1.000	520.94	520.94
1	85	Stacker girth gear and slew pinion greas	NO	8.000	998.26	7,986.08
1	86	Stacker Reclaimer pin greasing	NO	2.000	1,901.93	3,803.86
1	87	Overhauling of hoists	NO	1.000	3,348.89	3,348.89
1	88	Overhauling of chain pulley blocks	NO	1.000	3,112.39	3,112.39
1	89	Asst. in hoists/ chain pulley - upto 5	NO	10.000	1,645.61	16,456.10
1	90	Asst. in hoists/ chain pulley ( 5 T-15T	NO	4.000	1,645.61	6,582.44
1	91	PM of stacker/reclaimer	NO	141.000	2,153.27	303,611.07
1	92	Shift maintenance	Shift	2,190.000	2,058.67	4,508,487.30
1	93	PM of compressed air system at TH	NO	24.000	1,459.35	35,024.40
1	94	O/H of compressor	NO	2.000	4,551.28	9,102.56
1	95	Hydraulic valve servicing	NO	100.000	1,471.18	147,118.00
1	96	Supply of hydra	NO	30.000	898.70	26,961.00
1	97	Supply of truck	NO	8.000	1,158.85	9,270.80
1	98	Repl.of s s/wear resist/ Hardox-500 line	Square meter	120.000	4,753.13	570,375.60
1	99	PM of DE system	NO	48.000	2,153.27	103,356.96
1	100	Structural Painting	Square meter	200.000	378.56	75,712.00
1	101	Replacement of S/R Laufing cylinder	NO	2.000	29,775.13	59,550.26
1	102	Servicing of S/R Lauffing cylinder	NO	2.000	7,960.04	15,920.08
1	103	Replacement of S/R Hydraulic Motor	NO	1.000	26,448.54	26,448.54
1	104	Shift assistance for Monsoon Period.	Shift	720.000	4,789.81	3,448,663.20
<b>TOTAL</b>						<b>27,473,723.03</b>
<b>Discount in % : 7.00</b>						<b>1,923,160.61</b>
<b>Total After Discount</b>						<b>25,550,562.42</b>
<b>Premium in % : 0.00</b>						<b>0.00</b>
<b>Total After Premium</b>						<b>25,550,562.42</b>

**Total Amount in Words: TWO CRORE FIFTY FIVE LAKH FIFTY THOUSAND FIVE HUNDRED SIXTY TWO RUPEES AND FORTY TWO PAISE (EXCLUDING GST)**

**Notes for BOQ and SOR:**

- (i) Rs.3,01,49,663.66 (Including GST @ 18%).( Ref. Payment Terms of Service Purchase Order).
- (ii) It is the responsibility of the contractor to satisfy the Statutory Authorities in case of any discrepancy arising on account of GST.
- (iii) Prior approval of Competent Authority is required for :
  - a) Execution of AHR items (Sl. No. NIL of BOQ) beyond original order quantity.
  - b) Quantity deviation (up ward ) in any single item, which has significant impact on the contract value (i.e. above 5% of work order value).
- (iv) ALR item: NIL
- (v) GATE PASS: H.S.W- 02/ S.W- 14 / S.S.W- 15 / U.S.W- 18, (Total = 49 [34 (HSW = 2, SW = 11, SSW = 09 & USW = 12) + 15 for monsoon period (SW = 03, SSW = 06 & USW = 06)]
- (vi) Approving authority for this order is ED(S&P).

**BILL OF QUANTITY & SCHEDULE OF RATES:****ANNEXURE-II**

Line Item No	Activity SNo.	Service Description
1		REPAIR AND MAINTENANCE OF CHP-2
1	1	Replacement of chute liner
1	2	Replacement of polymer liner
1	3	GTU lifting
1	4	Belt pulling upto 10 mtrs
1	5	Belt pulling beyond 10 mtrs
1	6	Belt dismantling
1	7	Belt erection
1	8	Rectification of belt folding
1	9	Hot Belt vulcanising - 500 mm
1	10	Hot Belt vulcanising - 1000 mm
1	11	Hot Belt vulcanising - 1200 mm
1	12	Cold vulcanising - 500 mm
1	13	Cold vulcanising - 1000 mm
1	14	Cold vulcanising - 1200 mm
1	15	Spot vulcanising (hot)
1	16	Pulley rubber lagging
1	17	Pulley replacement
1	18	Pulley bearing clearance measurement
1	19	Pulley bearing replacement/ OH
1	20	Gear coupling inspection
1	21	Gear coupling replacement
1	22	Overhauling of gear box

**BILL OF QUANTITY & SCHEDULE OF RATES:****ANNEXURE-II**

Line Item No	Activity SNo.	Service Description
1	23	Gear box replacement
1	24	Gear box oil seal replacement
1	25	FCU over-hauling
1	26	FCU replacement
1	27	Gear box & pulley alignment
1	28	Gear box & motor alignment
1	29	PM of conveyor system
1	30	Skirt rubber replacement/ adjustment
1	31	Skirt plate liner replacement /adjustmen
1	32	Idler replacement
1	33	Belt trainer replacement/OH
1	34	Return idler bracket replacement
1	35	PM of Plough Feeder
1	36	PF blade replacement
1	37	PF blade liner replacement
1	38	PF wheel axle replacement
1	39	PM of CBMS
1	40	PM of Screen & Crusher
1	41	Disassembly & assembly of Screen hood
1	42	Replacement of Screen cloth
1	43	Replacement of Screen brg
1	44	Replacement of Screen drive shaft

**BILL OF QUANTITY & SCHEDULE OF RATES:****ANNEXURE-II**

Line Item No	Activity SNo.	Service Description
1	45	Replacement of Screen sieve V-belt
1	46	Removal of Screen chocking
1	47	Inspection of Crusher internals
1	48	Replacement of Crusher hammer
1	49	Replacement of Crusher broken hammer
1	50	Replacement of Crusher breaker plate
1	51	Replacement of Screen plate (top)
1	52	Replacement of Screen plate (bottom)
1	53	Replacement of Tramp Iron plate
1	54	Replacement of Kick off plate
1	55	Replacement of Crusher brg
1	56	Replacement of Crusher rotor
1	57	Rotor hard-facing
1	58	Removal of Crusher chocking
1	59	OH of flap gate actuator
1	60	PM of Travelling Tripper
1	61	Replacement/OH of PCRD
1	62	Replacement of PCRD chain
1	63	Replacement of Tripper wheel axle
1	64	PM of pumps
1	65	OH of pumps
1	66	PM of AHU



**BILL OF QUANTITY & SCHEDULE OF RATES:****ANNEXURE-II**

Line Item No	Activity SNo.	Service Description
1	67	Cleaning of AHU filter
1	68	Erection of static/rotating equipment
1	69	Material transportation
1	70	Structural fabrication
1	71	Structural erection
1	72	Structural dismantling
1	73	Dismantling of coal chute
1	74	Fabrication & erection of coal chutes
1	75	Fabrication & erection of ventilation du
1	76	Erection of 100 NB pipe
1	77	Gas cutting
1	78	Welding
1	79	Lubrication of conveyor system
1	80	Lubrication of Screen brg & Crusher brg
1	81	Gear box oil replacement
1	82	Gear box oil topping
1	83	FCU oil replacement
1	84	FCU oil topping
1	85	Stacker girth gear and slew pinion greas
1	86	Stacker Reclaimer pin greasing
1	87	Overhauling of hoists
1	88	Overhauling of chain pulley blocks

**BILL OF QUANTITY & SCHEDULE OF RATES:****ANNEXURE-II**

Line Item No	Activity SNo.	Service Description
1	89	Asst. in hoists/ chain pulley - upto 5
1	90	Asst. in hoists/ chain pulley ( 5 T-15T
1	91	PM of stacker/reclaimer
1	92	Shift maintenance
1	93	PM of compressed air system at TH
1	94	O/H of compressor
1	95	Hydraulic valve servicing
1	96	Supply of hydra
1	97	Supply of truck
1	98	Repl.of s s/wear resist/ Hardox-500 line
1	99	PM of DE system
1	100	Structural Painting
1	101	Replacement of S/R Laufing cylinder
1	102	Servicing of S/R Lauffing cylinder
1	103	Replacement of S/R Hydraulic Motor
1	104	Shift assistance for Monsoon Period.

## SAP Service Purchase Order

### Contains

#### 1st Page

1. Bidder Details
2. NIT & BID Details
3. Contract Period & Values

#### 2<sup>nd</sup> Page

4. Other Terms & Conditions of Contract

#### 3<sup>rd</sup> Page

5. Bill of Quantity & Schedule of Rates

# PART –A

## Contract Specific Information

**SUB: REPAIR AND MAINTENANCE OF CHP-2.**

**SCOPE OF WORK:**

1. **Replacement of chute liner plate**

- Receipt of steel material from central stores/steel yard, transporting it to the site.
- cleaning of coal chute
- removal of the damaged manganese steel liner plate
- fabrication of equivalent/bigger/smaller size new manganese steel liner plate having lug & key arrangement (as decided by MIC)
- fixing of new chute liner plate in position by welding lugs & keys of adequate strength

**Note:**

- In case of fixing bigger/ smaller size liner plates, the old openings for lugs insertion have to be closed by welding plates & new suitable opening is to be made by gas cutting.
- Suitable sealing rubber pieces and steel plate pieces are to be put under keys to prevent dust leakage.

For the above jobs the consumables like gas, welding rods etc. are to be arranged by the contractor. The welding rods to be used should be of reputed make like L&T, Advani Orlikon, Essab, and D&H only. The welding rods should be suitable for welding manganese steel plates (Advani make Overcord(s) is suitable for joining these liner plates). Steel materials shall be provided to the contractor free of cost. Damaged liners are to be shifted to designated scrap yard.

2. **Replacement of polymer liner**

- receipt of materials from stores, shifting it to the work site
- cleaning of coal chute
- removal of the damaged polymer liner
- cutting of equivalent new liner by Saw
- fixing of the new liner in position

**Note:**

All tools, tackles and consumables required for the job is to be arranged by the contractor. NALCO will provide polymer liners, washer and polymer plugs free of cost. Scrap to be shifted to designated scrap yard.

3. **Lifting of gravity take-up unit (GTU)**

- making arrangement to lift the GTU
- pulling up the GTU to the required height by chain pulley block
- normalizing the GTU after completion of the required job  
(GTU alignment & its rope adjustment will also be a part of the job)

Note: It is required to lift the GTUs of various conveyors for pulley replacement, pulley bearing clearance measurement etc.

4. **Pulling the conveyor belt up to 10 mtrs**

(Applicable during belt vulcanizing, pulley lagging)

- Making arrangements to lift the GTU by chain pulley blocks.
- Pulling of GTU to the required height
- Clamping of the belt at one place.
- Pulling the belt up to 10 mtr length by the help of winch, max puller etc.
- Normalizing the GTU after completion of the required job.

N.B.: NALCO will provide electric winch free of cost for speedy execution of work subject to availability in working condition and if winch is not available, the contractor has to dismantle and erect the belt with his own arrangement at his cost.

5 **Pulling the conveyor belt over 10 mtrs**  
(Applicable during belt snapping)

- pulling of one end of the snapped belt to the required position without disturbing the other end
- Clamping of the already pulled end.
- Pulling of the other end of the conveyor belt by suitable puller / winch in such a way that both ends are brought together with an overlapping of 7 to 10 mtrs. to facilitate belt vulcanizing.
- The job will be carried out in continuation with the job described in Sl. No.10 or 11.

**N.B.:-** The rate is applicable for **1000 MM belt**. The rate for any other size will be taken proportionately.

6 **Belt dismantling**

- lifting of GTU to the required height
- clamping of the conveyor belt
- cutting & pulling down the damaged conveyor belt to the ground level in pieces
- making rolls of the damaged conveyor belt & shifting it to the scrap yard

Note: Weight of dismantled belts –

- 500 mm width,3 ply ---- 5 kg/mtr
- 1000 mm width,3 ply ---- 10 kg/mtr
- 1000 mm width,4 ply ---- 12 kg/mtr
- 1200 mm width,3 ply ---- 12 kg/mtr
- 1200 mm width,4 ply ---- 14 kg/mtr

- For this job, some idler frames with idlers, skirt board rubber etc. may have to be dismantled .At places, some minor fabrication and erection of structure may have to be done to facilitate pulling of the belt. Such jobs are part of the dismantling operation.

**N.B.** For track hopper sealing belt dismantling 1000mm width, 3 ply belt rate will be paid.

7 **Belt erection**

- Receipt of the belt from the main store/site store, transporting it to the work place as per special terms and condition.
- Making arrangement to erect the belt in position by dismantling skirt rubber, idler roller assembly, fabrication of additional structures etc.
- Erection of the new belt around the conveyor structure by pulling it with max-puller / winch in such a way that both ends meet at one point.

(During belt erection, some of the idlers may need dismantling & re-assembly. Some structural fabrication & erection, GTU alignment may also be required. The rate includes all such items.)

Note: Weight of erected belts –

- 500 mm width,3 ply ---- 6 kg/mtr
- 1000 mm width,3 ply ---- 12 kg/mtr
- 1000 mm width,4 ply ---- 14 kg/mtr
- 1200 mm width,3 ply ---- 14 kg/mtr
- 1200 mm width,4 ply ---- 17 kg/mtr

**N.B.:-**NALCO will provide electric winch free of cost for speedy execution of work subject to availability in working condition and if winch is not available, the contractor has to dismantle and erect the belt with his own arrangement at his cost.

**N.B.** For track hopper sealing belt erection 1000mm width, 3 ply belt rate will be paid

8. **Rectification of belt folding**

- inspection of the folded conveyor belt
- arrangement of proper tools/ tackles & deployment of adequate man-power

- Lifting of GTU to the required height.
- unfolding/ setting right the conveyor belt by applying point load pressure/ pulling the belt at the folded point
- Lowering the GTU.

9. **Belt vulcanising – (hot vulcanising) – up to 500mm**

(The belt will be in pulled condition)

- lifting of GTU to the required height
- Dismantling of required no. of idler frames for making space for belt vulcanising.
- Cutting of conveyor belt of required length
- Splicing of the conveyor belt for jointing as per standard procedure
- Preparation of the joining surfaces
- Application of conveyor solution & compounds on the joining surfaces
- Overlapping of the two ends of the belt
- Placement of the uncured joint between the vulcanising machine
- Required tightening /pressing of the heating plates for hot vulcanising.
- Vulcanising of the joints by electric heating as per the procedure.
- Disassembly of the vulcanising machine after vulcanising is over.
- Back assembly of the dismantled idler frames etc.in position.
- Lowering the GTU.

N.B. For belt vulcanizing, NALCO will provide hot vulcanizing solution of reputed make and vulcanizing machine including insulation compound and cover compound free of cost. Petrol etc. required during splicing is to be arranged by the contractor at his own cost.

All tools, tackles, wooden planks, grinder, hand lamps etc. shall be arranged by the contractor. Transportation of vulcanizing machine from site store to the work spot and returning the same after completion of the job shall be inclusive in the scope of work. The contractor shall take extraordinary care of the machine during his custody.

The joint thus made should be straight to prevent off-centre running of the conveyor & should be guaranteed for one year for workmanship,i.e. snapping should not take place within one year of making the joint. In case it fails during the guaranteed period, it is to be done free of cost.

10. **Belt vulcanising – (hot vulcanising) –more than 500 mm to 1000mm**

(The belt will be in pulled condition)

- lifting of GTU to the required height
- Dismantling of required no. of idler frames for making space for belt vulcanising.
- Cutting of conveyor belt of required length
- Splicing of the conveyor belt for jointing as per standard procedure
- Preparation of the joining surfaces
- Application of conveyor solution & compounds on the joining surfaces
- Overlapping of the two ends of the belt
- Placement of the uncured joint between the vulcanising machine
- Required tightening /pressing of the heating plates for hot vulcanising.
- Vulcanising of the joints by electric heating as per the procedure.
- Disassembly of the vulcanising machine after vulcanising is over.
- Back assembly of the dismantled idler frames etc.in position.
- Lowering the GTU.

N.B. For belt vulcanizing, NALCO will provide hot vulcanizing solution of reputed make and vulcanizing machine including insulation compound and cover compound free of cost. Petrol etc. required during splicing is to be arranged by the contractor at his own cost.

All tools, tackles, wooden planks, grinder, hand lamps etc. shall be arranged by the contractor. Transportation of vulcanizing machine from site store to the work spot and

returning the same after completion of the job shall be inclusive in the scope of work. The contractor shall take extraordinary care of the machine during his custody.

The joint thus made should be straight to prevent off-centre running of the conveyor & should be guaranteed for one year for workmanship,i.e. snapping should not take place within one year of making the joint. In case it fails during the guaranteed period, it is to be done free of cost.

11 **Belt vulcanising – (hot vulcanising) - more than 1000 mm to 1200mm**

(The belt will be in pulled condition)

- lifting of GTU to the required height
- Dismantling of required no. of idler frames for making space for belt vulcanising.
- Cutting of conveyor belt of required length
- Splicing of the conveyor belt for jointing as per standard procedure
- Preparation of the joining surfaces
- Application of conveyor solution & compounds on the joining surfaces
- Overlapping of the two ends of the belt
- Placement of the uncured joint between the vulcanising machine
- Required tightening /pressing of the heating plates for hot vulcanising.
- Vulcanising of the joints by electric heating as per the procedure.
- Disassembly of the vulcanising machine after vulcanising is over.
- Back assembly of the dismantled idler frames etc.in position.
- Lowering the GTU.

N.B. For belt vulcanizing, NALCO will provide hot vulcanizing solution of reputed make and vulcanizing machine including insulation compound and cover compound free of cost. Petrol etc. required during splicing is to be arranged by the contractor at his own cost.

All tools, tackles, wooden planks, grinder, hand lamps etc. shall be arranged by the contractor. Transportation of vulcanizing machine from site store to the work spot and returning the same after completion of the job shall be inclusive in the scope of work. The contractor shall take extraordinary care of the machine during his custody.

The joint thus made should be straight to prevent off-centre running of the conveyor & should be guaranteed for one year for workmanship,i.e. snapping should not take place within one year of making the joint. In case it fails during the guaranteed period, it is to be done free of cost.

12 **Belt vulcanising – (cold vulcanising) – up to 500mm**

(The belt will be in pulled condition)

- lifting of GTU to the required height
- Dismantling of required no. of idler frames for making adequate space for belt vulcanising.
- Splicing of the conveyor belt for jointing as per standard procedure.
- Preparation of the joining surfaces.
- Application of cold compounds over the joining surfaces
- Overlapping of the two ends of the belt & adequate hammering on the jointing surface for firm bonding
- Lowering the GTU.

N.B. NALCO will provide cold vulcanizing solution and hardener compound of required quantity, free of cost.

For bunker floor sealing belt clamping 50 % of 500mm belt cold vulcanizing rate will be paid. For track hopper sealing belt cold joint 500mm width, 3 ply belt rate will be paid



**Note:** (The joint thus made should be straight to prevent off-centre running of the conveyor & should be guaranteed for one year for workmanship,i.e. snapping should not take place within one year of making the joint. In case it fails during the guaranteed period, it is to be done free of cost.)

13 **Belt vulcanising – (cold vulcanising) –more than 500 mm to 1000mm**

(The belt will be in pulled condition)

- lifting of GTU to the required height
- Dismantling of required no. of idler frames for making adequate space for belt vulcanising.
- Splicing of the conveyor belt for jointing as per standard procedure.
- Preparation of the joining surfaces.
- Application of cold compounds over the joining surfaces
- Overlapping of the two ends of the belt & adequate hammering on the jointing surface for firm bonding
- Lowering the GTU.

N.B. NALCO will provide cold vulcanizing solution and hardener compound of required quantity, free of cost.

**Note:** (The joint thus made should be straight to prevent off-centre running of the conveyor & should be guaranteed for one year for workmanship,i.e. snapping should not take place within one year of making the joint. In case it fails during the guaranteed period, it is to be done free of cost.)

14 **Belt vulcanising – (cold vulcanising) - more than 1000 mm to 1200mm**

(The belt will be in pulled condition)

- lifting of GTU to the required height
- Dismantling of required no. of idler frames for making adequate space for belt vulcanising.
- Splicing of the conveyor belt for jointing as per standard procedure.
- Preparation of the joining surfaces.
- Application of cold compounds over the joining surfaces
- Overlapping of the two ends of the belt & adequate hammering on the jointing surface for firm bonding
- Lowering the GTU.

N.B. NALCO will provide cold vulcanizing solution and hardener compound of required quantity, free of cost.

**Note:** (The joint thus made should be straight to prevent off-centre running of the conveyor & should be guaranteed for one year for workmanship,i.e. snapping should not take place within one year of making the joint. In case it fails during the guaranteed period, it is to be done free of cost.)

15. **Spot vulcanising of conveyor belt (Hot)**

(Applicable in case of partially damaged belt)

- dismantling of required no.of idler frames to make adequate space for surface preparation & vulcanising machine placement
- preparation of the affected areas
- application of solution & compounds
- placement of the vulcanising machine & vulcanising of the affected area
- removal of the machine after curing
- Back assembly of the idler frames in position.

N.B. Vulcanizing solution and compound of reputed make will be provided by NALCO free of cost.

16) **Rubber lagging of conveyor pulley**

(Conveyor belt will be in pulled condition)

- lifting of GTU to the required height
- dismantling of required no.of transition idler frame
- dismantling of scrapper

- pulling the belt to make the pulley free
- scrapping out the damaged lagging rubber
- Preparation of the pulley surface by proper grinding.
- application of cold solution on the pulley surface
- cutting the lagged rubber to size
- Fixing the new lagging rubber over the pulley surface followed by tapping for firm bonding.
- Back assembly of the dismantled idler frames in position.
- Lowering the GTU.

N.B. Nalco will provide **12 mm/6mm** thick lagging rubber, cold vulcanizing solution and hardener compound, free of cost the pulley thus lagged should be guaranteed for one year trouble-free operation, as far as workmanship is concerned. In case the lagged rubber comes out within one year, it is to be re-done free of cost.

17) **Pulley replacement**

(GTU will be in lifted condition)

- shifting of new pulley to the site
- making the pulley free by pulling & clamping the belt
- removal of the pulley alongwith plummer blocks
- disassembly of the plummer blocks & bearings
- cleaning & inspection of bearings & plummer blocks
- mounting of bearings & plummer blocks on the new pulley
- mounting of assembled pulley in position
- Alignment, checking by water level.
- tightening of the PB foundation bolts
- de-clamping of the conveyor belt & normalizing

18) **Pulley bearing clearance measurement**

- GTU lifting where required
- opening of plummer block top half
- removal of grease
- measurement of bearing clearance
- greasing of bearings by new grease

(All the pulleys of a particular belt constitute a 'set' for measurement purpose)

50 % payment will be made if GTU lifting not required.

19) **Pulley bearing replacement/Over-hauling**

- GTU lifting, pulling the belt & clamping it to make the pulley free
- holding the pulley in position
- opening of PB top
- inspection of bearings
- removal of sleeves & bearings
- mounting of new bearing & sleeve
- assembly of PB
- application of fresh grease
- De-clamping of the belt.
- GTU downing
- Transportation of chain pulley blocks, bearing, grease, cotton waste, clamping angle etc. from store to work spot.

N.B. **U.O.M** – SET (02 nos. of bearings). 25% payment will be made for tension pulley and CBMS Pulley bearing over hauling where GTU lifting is not required. Part payment for one bearing replacement.

20) **Inspection of gear coupling**

- clamping of belt

- removal of gear coupling bolts
- shifting of shrouding cover
- removal of grease
- inspection of gear coupling teeth
- greasing of gear teeth by fresh grease
- back assembly of shrouding cover & coupling bolts
- de-clamping of belt

21) **Replacement of gear coupling**

- shifting of new gear coupling to the site
- clamping of belt
- removal of FCU & gear-box from position
- removal of gear coupling halves from the pulley & gear-box output shaft
- cleaning new coupling
- oil heating of the gear coupling halves
- mounting of heated gear coupling halves on the pulley & gear-box output shaft
- positioning of gear-box
- alignment of gear-box with pulley
- alignment of motor with gear-box
- mounting of FCU
- greasing of new coupling
- De-clamping of belt & normalization of conveyor system.

22) **Overhauling of gear-box**

- draining of oil
- disassembly of damaged gear-box cover
- Removal & inspection of damaged components like pinion, gear, bearings etc.
- thorough cleaning of new components
- mounting of new components like gear wheel, bearings etc. on the pinion shaft
- back assembly of the disassembled components
- measurement of back-lash
- final assembly for boxing up
- Back filling of oil.

23) **Replacement of Gear-box**

- shifting of gear-box to the site
- clamping of conveyor belt in one position
- de-coupling of FCU & removal
- de-coupling of gear coupling
- removal of damaged gear-box
- removal of gear-box input shaft coupling & output shaft gear coupling by gas heating & pulling
- mounting of disassembled input shaft coupling & output shaft gear coupling on the repaired gear-box by heating in oil bath
- mounting of new gear-box in position
- alignment of pulley with gear-box
- alignment of motor with gear-box
- back-assembly of FCU
- De-clamping of belt & system normalization.

24) **Replacement of gear-box oil seal**

- Removal of FCU
- removal of input shaft coupling half
- removal of gear-box cooling fan
- removal of damaged oil seal
- mounting of new oil seal

- back assembly of disassembled components
- re-positioning of FCU & normalization of system

25) **O/H of FCU**

- removal of oil
- removal of coupling half
- dismantling of FCU
- inspection of seals, bearings, turbine & runners
- replacement of damaged components
- back assembly of the disassembled components in reverse order
- back filling of oil

26) **Replacement of FCU**

- shifting of FCU to site
- removal of damaged FCU
- removal of FCU coupling half
- mounting of FCU coupling half on the new FCU
- Assembly of the new FCU in position & oil filling.
- system normalization followed by trial run
- shifting of the damaged FCU to maintenance bay

27) **Alignment of pulley & gear-box**

- clamping of belt
- removal of FCU
- disassembly of gear coupling bolts & shrouds
- cleaning of gear coupling
- alignment of gear-box with pulley
- back assembly of the disassembled components in reverse order
- greasing of gear coupling
- de-clamping of belt & normalization of belt

28) **Alignment of motor with gear-box**

- clamping of belt
- Removal of FCU
- alignment of motor with gear-box
- back assembly of FCU
- de-clamping & normalization of belt

Alignment of DE with motor / Tripper traverse motor with gearbox will be considered 0.5 units each for payment.

29) **PM of conveyor system**

- inspection of conveyor belt
- inspection of idlers/frames/brackets & replacement if any
- inspection of chute & chute liners
- inspection of deflector plate
- adjustment / replacement of skirt rubber
- adjustment of scrapper
- ensuring proper oil level of FCU & gearbox
- ensuring tightness of all hardware of FCU ,gearbox ,  
Gear coupling, plumber blocks etc.
- Inspection (removal) of coal deposits if any from pulley and idler roller surfaces.

30) **Skirt rubber replacement/ adjustment**

- disassembly of the damaged portion of the skirt rubber
- fixing of new skirt rubber in position

- adjustment of skirt rubber
- No payment if done as part of PM or shift activities.

31) **Skirt board liner replacement**

- disassembly of skirt rubber
- inspection of the skirt board plate/liner plate
- removal of worn out skirt board plate/liner plate
- fabrication & erection of new skirt board plate/liner plate
- fixing of skirt rubber

32) **Idler replacement**

- inspection of damaged idlers
- removal of damaged idlers
- fixing of new idlers in position

No payment if done as part of PM or shift activities.

33) **Belt trainer over-hauling/ replacement**

- thorough cleaning of the trainer
- removal of idler rollers
- removal of the idler frame
- thorough cleaning of the male & female portion of the frame to make it free
- back assembly of the disassembled components in the reverse order

34) **Return idler bracket replacement**

- thorough cleaning of the return idler roller
- removal of return idler roller & damaged bracket
- back assembly of the new bracket & idler in position

35) **PM of Plough Feeder**

- cleaning of PF platform & adjacent areas
- ensuring tightness of all fasteners
- check the PF blades wear & ensure the tightness of liner fixing bolts
- inspect & ensure the paddle hub fixing bolt tightness
- ensure the tightness of the motor flange bolts
- inspect the skirt board & skirt segments
- inspect the hydraulic fitting/ piping system & ensure no leakage of hydraulic oil
- check oil level & Float switch functioning
- check - clean / replace the oil filter, if clogged
- check & clean the oil breather
- check/ adjust the skirt sealing rubber

**Mode of payment:** - one no will be counted for PM of both Plough Feeders on a conveyor.  
50% payment shall be made for PM of one Plough Feeder

36) **Replacement of PF blade** (set of 6 nos.)

- shifting & positioning of the PF in the maintenance bay
- inspection of the PF blades
- disassembly of the worn out blades
- assembly of new set of blades

37) **Replacement of PF blade liner** (set of 6 nos.)

- Thorough cleaning of the blades
- removal of damaged liners by gas-cutting
- fixing of new liners in position

38) **PF wheel axle replacement**

- making arrangement to shift the Plough Feeder to the maintenance bay

- fabrication of fixtures to hold the Plough Feeder in position
- removal of the sheared off wheel axle
- removal of Plummer block, bearings & wheels from the sheared off axle
- mounting of wheels on a new wheel axle
- mounting of bearings & plummer blocks
- positioning of the new assembled wheel axle in position
- alignment of the new wheel axle with respect to the undisturbed wheel axle
- satisfactory trial run of the Plough Feeder

39) **PM of CBMS**

- ensuring CBMS belt tightness
- ensuring CBMS belt scrapper bar fasteners tightness
- inspection of CBMS drive system (motorized gear-box)
- Checking of oil level & topping, if required.

**Mode of payment:** one no will be counted for PM of 2 CBMS.

40) **PM of Screen & Crusher**

(A) **Vibrating Screen**

- inspection of screen cloth deck
- ensuring tightness of the screen cloth holding fasteners
- ensuring tightness of the screen bearing housing fasteners
- ensuring proper tension of the Screen driving V-belts
- inspection of chute liners
- greasing of Screen bearings

(B) **Coal Crusher**

- inspection of hammers
- ensuring tightness of breaker plate, screen plate & kick-off plate fasteners
- ensuring tightness of plummer block foundation bolts & FCU bolts,FCU spacers & driving plate
- greasing of crusher bearings
- FCU oil level checking & top up, if required

**Mode of payment:** - Both Crusher and screen will be one unit.

50% payment shall be made for PM of only screen or only crusher.

41) **Disassembly & assembly of screen hood**

- holding the hood by chain pulley block
- disassembly of screen hood holding bolts
- lifting of the hood by chain pulley block to the required height
- Back assembly of the hood after completion of job.

42) **Replacement of Screen cloth**

- inspection of screen cloth deck
- removal of the damaged screen cloth
- shifting of the new screen cloth to the screen floor
- assembly of new screen cloth in position
- tightening of all screen cloth holding bolts

43) **Replacement of Screen bearing set**

- disassembly of 'V' belt & sieve
- disassembly of counter weight & bearing housing
- removal of the damaged/old bearings
- assembly of new bearings in the housing
- back assembly of the disassembled components in reverse order

**Mode of payment:-**



The set of bearings (2 nos.) replaced will only be measured for the account of work done and payment. 50% payment for one bearing replacement.

44) **Replacement of Screen drive shaft**

- disassembly of 'V' belt & sieve
- disassembly of counter weight
- disassembly of bearing housing & bearing
- removal of screen shaft
- assembly of new screen shaft
- Back assembly of disassembled components in reverse order.

45) **Replacement of Screen sieve 'V' belt**

- loosening the spring loaded stud of motor pedestal
- removal of damaged 'V' belts
- assembly of new 'V' belts with proper alignment
- tightening the stud of motor pedestal to give proper belt tension

No payment if done as part of PM or shift activities

46) **Removal of Screen chocking**

- removal of moist coal deposit from screen hopper
- removal of moist coal deposit from the screen cloth
- thorough cleaning of the screen internals
- thorough cleaning of the screen outlet chutes

N.B. Tools/Tackles required for cleaning has to be provided by the contractor.

47. **Inspection of Crusher internals**

- Disassembly of Crusher frame top cover
- removal of coal deposit on crusher top
- unbolting & opening of the crusher frame top cover
- removal of coal deposits from tramp iron
- inspection of end disc, center disc & ring hammers
- inspection of cage frame, screen plates & breaker plate
- Inspection of tramp iron top, kick-off plate etc.
- ensuring tightness of all internals
- Back assembly of the crusher frame top cover after completion of the job.

48) **Replacement of Crusher hammer set** (set of 50 nos.)

- receipt of hammers from the main/sub stores
- shifting of hammer set to the crusher floor
- Individual weighment of each hammer.
- Arrangement of the hammer set in four individual sets (2 sets of 12 nos. each & 2 sets of 13 nos. each)
- Weight balancing of hammer sets (During balancing, opposite row hammer weight difference should be within 300 Gms.)
- Unbolting & opening of the frame top cover.
- Removal of the worn out hammer sets by pulling out the suspension bars
- Mounting of the new hammer set in order
- Back assembly of the crusher frame top cover.
- Trial run of the crusher rotor.
- The old hammers are to be shifted to the scrap disposal area after the job is over

49) **Replacement of Crusher broken hammer**

(Crusher frame top cover will be in opened condition for which payment will be made as per item no.47 and all points of item no. 47 are to be attended)

- inspection of crusher internals
- removal of broken hammers & debris

- Replacement of the broken hammer by a new hammer by pulling out the suspension bar.

50) **Replacement of Crusher Breaker plate**

- receipt of new breaker plates from the main/sub store, transporting it to work site
- unbolting & opening of frame top cover
- disassembly of feed chute
- loosening the cage frame by gap adjustment mechanism
- disassembly of the worn out breaker plate
- assembly of a new breaker plate in position
- tightening the cage frame to maintain proper gap
- Back assembly of the disassembled components in reverse order.
- The old breaker plate is to be transported to the designed scrap yard

51) **Replacement of Top Screen plate**

The scope of work is same as that of “replacement of breaker plate”. But here only “Screen plate – Top” is to be replaced.

52) **Replacement of bottom screen plate**

The scope of work is same as that of “replacement of breaker plate”. But here only “screen plate – bottom” is to be replaced.

53) **Replacement of Tramp Iron plate**

(Crusher frame top cover will be in opened condition for which payment will be made as per item no.47 and all points of item no. 47 are to be attended)

- receipt of the tramp iron plate from the main/sub store, transporting it to the work site
- removal of the damaged Tramp Iron plate
- assembly of new Tramp Iron plate
- transporting the old plate to designated scrap yard

54) **Replacement of Kick-off plate**

(Crusher frame top cover will be in opened condition for which payment will be made as per item no.47 and all points of item no. 47 are to be attended)

- receipt of the kick off plate from the main/sub store, transporting it to the work site
- disassembly of the Kick-off plate
- Assembly of the new Kick-off plate in position.
- transporting the old plate to designated scrap yard

55) **Replacement of Crusher bearing set**

- disassembly of inlet chute
- removal of FCU
- unbolting & opening of Crusher frame top cover
- removal of Kick-off plate
- removal of bearing hold-down bolts & spring pins
- removal of bearing housing cap nuts
- lifting of rotor for sufficient bearing clearance
- removal of the damaged bearing
- thorough cleaning of the new bearing
- mounting of new sleeve in new bearing
- mounting of new bearing assembly on the rotor shaft
- positioning of the assembled bearing on the PB
- bearing clearance checking
- back assembly of the PB
- greasing of the newly fitted bearing
- back assembly of the FCU & trial run
- assembly of inlet chute



Payment: 100% for both bearing replacement, 60% for drive side only and 40% for non drive side only.

56) **Replacement of Crusher rotor**

- Receipt of the new rotor from the main/sub stores (assembled with center disc, end discs, and spacers) and transporting it to the work spot
- removal of FCU
- unbolting & opening of Crusher frame top cover
- disassembly of inlet chute
- removal of Crusher housing back cover
- removal of Kick-off plate
- removal of hammers
- removal of PB foundation bolts
- Removal of the Crusher rotor & shifting it to the ground floor.
- Mounting of new set of bearings & PB on the new rotor
- Positioning of the new rotor in position
- Mounting of hammer set
- Back assembly of the disassembled components in reverse order followed by trial run.

57) **Crusher rotor hard-facing**

(Crusher frame top cover will be in opened condition for which payment will be made as per item no.47 and all points of item no. 47 are to be attended)

- cleaning of the affected / worn out areas of the end discs & center discs
- uniform metal deposit to build up the buffer layer
- hard-facing of the metal deposited areas

NOTE:

- Suitable hard facing/buffer layer electrodes will be supplied by NALCO
- Hard facing on any other equipment will also be paid at this rate.

58) **Removal of Crusher chocking**

- inspection of the crusher internals
- removal of Crusher housing back cover
- cleaning of coal deposit causing Crusher chocking from the top & bottom Screen plate areas
- thorough cleaning of hopper & Crusher outlet chutes
- Back assembly of the dismantled components.

NOTE:-

- Cleaning duration – 3 Hours
- If the party is kept for cleaning in shift and no chocking occurred during that period, idle hour payment will be made @ one crusher chocking per shift.

59) **O/H of flap gate actuator**

- removal of actuator
- disassembly of actuator assembly
- thorough cleaning & re-assembly of the disassembled parts  
(The worn out parts are to be replaced)
- mounting of actuator in position
- trial run of the actuator

60) **PM of Travelling Tripper**

- cleaning of coal deposits
- gear-box oil level checking/topping up
- tightening of gear-box foundation bolts
- Inspection/adjustment of brake.
- ensuring freeness of center gate movement
- inspection of wheel axle

**Mode of payment:** - one no will be counted for PM of both trippers on a conveyor.

50% payment shall be made for PM of one Traveling Tripper.

61) **Replacement/OH of PCRD**

- positioning of the Tripper in the working bay
- disassembly of chain
- disassembly of the PCRD
- disassembly of the bearing housing
- thorough cleaning & inspection of the shaft & bearings
- replacement of the damaged components
- back assembly of the PCRD in the reverse order
- greasing of the PCRD bearing housing

(Applicable for PF, Tripper, Stacker/Reclaimer PCRD. This will also be applicable for CCRD of Stacker/Reclaimer.)

62) **Replacement of PCRD chain**

- removal of the broken chain
- inspection & alignment checking of the PCRD
- replacement of the damaged PCRD chain

(Applicable for PF, Tripper, Stacker/Reclaimer PCRD. This will also be applicable for CCRD of Stacker/Reclaimer)

63) **Replacement of Tripper wheel axle**

- Receipt of new wheel axle from the main/sub store and transport to the work site
- positioning of the Tripper
- Lifting the Tripper in position & supporting it on fixture.
- Removal of the sheared off wheel axle
- Removal of the PB, bearings & wheel from its axle
- Thorough cleaning of the new axle
- Mounting of wheels on the new axle
- Mounting of plummer blocks & bearings
- Back assembly of the newly assembled wheel axle in position & trial run.
- Shifting the damaged wheel axle to designated scrap yard.

64) **PM of pumps**

- inspection of the coupling, coupling bushes & coupling bolts
- Replacement of the damaged components if any.
- Checking the freeness of the suction strainer
- Trial run of the pump.

**Mode of payment:** - one no will be counted for one pit.

65) **O/H of pumps**

- removal of the motor
- disassembly of the pump discharge pipe
- lifting the pump from the sump
- shifting the pump to maintenance bay
- disassembly of the pump
- Thorough cleaning & inspection of the disassembled components & replacement if any.
- Back assembly of the pump in reverse order
- Installation of the pump in pit
- Mounting of motor & assembly of the discharge pipe
- Trial run to ensure free operation.

66) **PM of AHU**

- Disassembly & cleaning of suction side filters.
- Replacement of damaged filters (if any)

- inspection of bearings & PB
- greasing of PB & bearings
- inspection & tensioning of 'V' belts
- inspection of impeller

67) **Cleaning of AHU filter**

- removal & inspection of all filters of one unit
- cleaning & water-washing of filters
- back assembly of the disassembled components

68) **Erection of static/ rotary equipments**

(Viz. erection of GTU counter weights, pumps, hoists, fans etc.)

- receipt of the equipment, complete or part of it from the main store/site store
- shifting the material to the work site
- Making arrangement to erect the equipment in position.
- Shifting the removed materials to the earmarked place

69) **Material Transportation**

- issue of materials from central stores , steel yard & other stores
  - making arrangement to shift it to the work spot/site store
- (Materials to be issued – Gear box, shaft, pulley, idlers, bearings, couplings, oil drum, pump, structural steel etc.)

70) **Structural Fabrication**

- receipt of the structural steel required for fabrication from the main store/site store,
- shifting the structural material to the work site
- fabrication of the structural as per drawing/sketch
- painting of the fabricated structures by red oxide followed by synthetic enamel paint (grey)
- At times the structural may have to be done from scrap materials also.

71) **Structural erection**

- shifting of the fabricated structure to the site
- Erection of the structure at site by welding.

72) **Structural dismantling**

- dismantling of the required structure by gas cutting
- Shifting the dismantled structure to the designated scrap yard.

73) **Dismantling of coal chutes**

- inspection of the coal chute to be dismantled
- removal of the chute liners
- removal of the chute by gas cutting of the chute-holding fasteners

74) **Fabrication & erection of coal chutes**

- fabrication of coal chute as per drawing (To be made out of 10 mm thick MS plate)
  - fabrication of chute liners (10 mm thick) as per drawing
  - fixing of chute liners inside the chute with lug & key arrangement
  - assembly of the newly fabricated chute in position
- (During erection, care should be taken so that the incoming & outgoing chutes are in one line)

75) **Fabrication & erection of air ventilation ducts**

- Receipt of materials like MS/GI from central stores
- dismantling of the damaged ducts
- fabrication of new ducts from GI sheet
- Erection of the duct in position.

76) **Erection of piping (up to 100 NB)**

- receipt of pipes from the main/sub stores & transportation to site
- cutting of MS/GI pipe to the required size
- Laying of the pipe in the required place & welding there of.
- After erection of the one coat of red oxide and two coat of grey paint of reputed make like, Asian paint, Berger paint, Johnson Nicholson etc.

N.B.: There shall be one rate for 100 NB piping erection. The rate for any other pipe size shall be proportional to the pipe size of 100 NB pipe.

77) **Gas cutting**

- gas cutting of the structural steel
- Edge preparation of the mating surfaces.

N.B: There shall be only one rate for 10mm thick steel plate. For any other plate thickness the measured quantity will be proportional to the 10 mm thick plate only.

78) **Welding (upto 10mm thick plate)**

- edge preparation of the mating surfaces (MS)
- welding of the mating surfaces by required size electrode. The welding electrodes are to be arranged by the contractors and these should be E-6013 (AWS coding) of reputed make like S Standard/ Modi, Over cord/ Advani, Norma/ D & H, Ferro speed Plus/Essab.

N.B: There shall be only one rate for 10mm thick steel plate. For any other plate thickness the measured quantity will be proportional to the 10 mm thick plate only.

79) **Lubrication of belt conveyor system**

- checking of oil level in gear-box & FCU
- oil topping in gear-box & FCU
- greasing of gear coupling
- greasing of pulley plummer blocks
- Lubrication of the running equipments over the conveyor, like PF, Tripper, CBMS etc.

80) **Lubrication of Vibrating Screen & Coal Crusher**

- Disassembly of bearing housing.
- removal of old grease from bearing housing/ PB
- lubrication of Screen bearings by grease pump
- lubrication of Crusher bearings
- Collection of the used grease & shifting it to an earmarked place.

Payment: Both bearings of one crusher and both bearings of one screen will constitute one no of lubrication. Part payment for part lubrication.

81) **Gear-box oil replacement**

- shifting of oil to the work site
- thorough surface cleaning of gear-box
- draining contaminated oil from the gear-box
- filling of fresh oil in the gear-box

(N.B. Oil replacement in hydraulic power packs will be paid at double the rate of this item)

82) **Gear-box oil topping**

- inspection of gear-box oil level
- cleaning of breather & gear-box
- topping of required quantity oil

(N.B. Oil top up in hydraulic power packs will also be paid at this rate)

No payment if done as part of PM or shift activities.

83) **FCU Oil replacement**

- removal of FCU cover
- draining of contaminated oil from the FCU
- filling of required quantity oil in the FCU
- back assembly of FCU cover

N.B. three times of this rate will be applicable for hydraulic power pack oil replacement in stacker reclaimer, plough feeder etc.

84) **Oil topping in FCU**

- removal of FCU cover
  - inspection of oil level
  - topping of required quantity oil in FCU
  - back assembly of FCU cover
- No payment if done as part of PM or shift activities.

85) **Stacker girth gear and slew pinion greasing /cadmium compounding:-**

- Cleaning of area of lubrication
- Greasing girth gear bearing with grease gun till grease comes out from teeth and pinion.
- Removal of old used grease and storing in the designated place.

NB: - For hoist rope cadmium compounding same rate of stacker girth gear and Slew pinion cadmium compounding will be paid.

86) **Stacker Reclaimer pin greasing:**

- Cleaning of pin with diesel/roofline
- Opening of pin cover and cleaning.
- Greasing of pin with grease pump.
- Putting of pin cover.

87) **O/H of hoists**

- grounding of the hoist assembly from the mono rail
- opening & inspection of Traverse/ rope drum gear-box
- replacement of the damaged components
- greasing of Traverse/ rope drum gear-box
- putting back the hoist on the mono rail
- replacement of worn out brake liner & adjustment of brake
- cadmium compounding of hoist rope

88) **O/H of chain pulley blocks**

- dismantling of chain pulley blocks
- thorough inspection & servicing of the internals
- replacement of the worn out components

89) **Asst.in Load testing of hoist/ chain pulley blocks (up to 5 T)**

- Arrangement for load test of the hoist/ chain pulley block capacity up to 5 T.
- Assistance in shifting and positioning of Test loads near the hoist/ chain pulley.
- making arrangement of load test at the rate of 1.25 times the hoist/ chain pulley block capacity
- Operation of hoists with all safety measures for load test.
- Assistance in shifting back of the Test load to the required place after load test is over.

90) **Asst.inLoad testing of hoist –5- 15T**

For 15 T the scope of work is same as that of “load testing of hoist/ chain pulley block – 5T”. Variation in test load will be ensured...

91) **PM of stacker/reclaimer**

- inspection of boom conveyor belt
- inspection of idlers & replacement if any
- inspection of chute & chute liners
- inspection of deflector plate
- adjustment / replacement of skirt rubber
- adjustment of scrapper
- ensuring proper oil level of FCU & gearboxes
- Ensuring tightness of all hardware of FCU, gearbox, gear coupling, plumber blocks etc.
- Removal of coal deposits if any from pulley and idler roller surfaces.
- Check brake adjustment (thruster stroke) & condition of brake linings.
- Cleaning of hydraulic power pack & its components
- Examine all system components for signs of leakage & check conditions of flexible hoses for signs of chaffing, cracking etc.
- Check-clean/replace the oil filter, if clogged.
- Check oil level of hydraulic power pack.
- Ensure tightness of all fasteners.
- Check the condition of bucket teeth and replace if damaged.

92) **SHIFT MAINTENANCE**

Deployment of adequate no. of mechanical technician & unskilled labor to attend the minor system defects arising during the shift. Jobs to be executed by shift technician (one item at a time) are as follows:-

- To top up oil if the level is low in gearboxes, fluid couplings, hydraulic power packs and compressors.
- To arrest oil leakage in gearboxes, fluid couplings, hydraulic power packs and compressors by tightening loose nut, bolt/damaged o ring replacement/putting suitable sealant, gasket etc.
- To replace blown out fusible plug after oil replacement in fluid couplings.
- To clear jamming due to big size coal/stone/foreign materials when entering inside equipment is required.
- Crusher internal inspection at the shift beginning by opening inspection doors to check freeness of rotor, condition of hammers, breaker plate, top screen plate, bottom screen plate and to remove any foreign material accumulated near kick off plate.
- To replace damaged v-belts of vibrating screens and ventilation fans.
- To replace damaged idlers of conveyor belts, which does not require GTU lifting.
- To adjust worn out skirt rubber to prevent coal leakage.
- To clean jammed sprinkler nozzles and filters of dust suppression system working in CHP-2.
- To train offcentred running belt to avoid coal spillage and to ensure the belt not going inside skirt board.
- To rectify any belt folding which does not require GTU lifting.
- To assist C&I staff during belt weigher calibration in handling the test load (chain).
- To assist operation in priming pumps for dewatering activities.

93) **PM OF COMPRESSED AIR SYSTEM AT TRACK HOPPER**

- cleaning of both compressors and coolers externally
- ensure tightness of all fasteners
- inspect compressed air pipe line and ensure no leakage of air
- Check oil level, top up or replace if required.
- Remove the air filter element and inspect. If necessary,
- clean using an air jet. Replace damaged or heavily contaminated elements.
- check the oil separator element and replace if required.
- Drain any condensate deposit.



94) **OH OF COMPRESSOR**

- disassembly of compressor
- thorough cleaning & reassembly of disassembled parts
- replace any worn out parts
- renew the oil in the crankcase
- trial run of compressor

95) **Hydraulic valve servicing/ oil leakage arresting of Stacker Reclaimer/Plough feeder.**

- The removal of hydraulic valve.
- Dismantling and cleaning of valve.
- Assembly of valve after replacing damaged components if any
- And shifting to site.
- Fitting of hydraulic valve.

**N.B:-** Same payment will be done for hydraulic hose leakage arresting/hose replacement. Twice this rate will be applicable for hydraulic pump replacement. Care should be taken to prevent any dust/foreign material ingress during work on hydraulic system. Markin cloth should be used in place of cotton waste for this type of job. Supply of markin cloth is in contractor's scope.

96) **Supply of hydra for shifting of belt rolls etc.**

- To provide hydra as and when required.
- Hydra with driver, helper, fuel and all tools tackles is to be provided.
- Hydra and driver should have all valid documents as per statutory requirements of motor vehicle act.
- Hydra will be deployed for minimum period of two hours for each call.

Mode of Payment: Lump sum per occasion.

97) **Supply of Truck.**

- To provide truck as and when required.
- Truck with driver, helper, fuel and all tools tackles is to be provided.
- Truck and driver should have all valid documents as per statutory requirements of motor vehicle act.
- Truck will be deployed for minimum period of two hours for each call.

Mode of Payment: Lump sum per occasion.

98) **Replacement of S S liner / Wear resist plate/ Hardox-500 liner.**

The job involves receipt of material from central stores, transporting it to the site, removal of damaged liner plates, fabrication of the new liner plates exactly as per the dimensions of the old ones and fixing arrangements like lugs, keys etc. as per instructions of the M-I-C. The plate thickness will be either 10 mm or 12 mm. Some time the parent plates of the chute may get damaged and in such cases the complete chute or its damaged side may have to be fabricated after cutting the damaged portion. Some time some patch may have to be welded over any punctured whole etc.

For the above jobs the plasma cutting machine, welding rods etc. are to be arranged by the contractor at his cost. The welding rods to be used should be of reputed make like L&T, Advani, Orlikon, Essab, and D&H only. The welding rods should be suitable for welding S.S. plate/ carbon steel base of weir plate. Liner materials shall be provided to the contractor free of cost. Damaged liners are to be shifted to designated scrap yard.

**MODE OF PAYMENT:**

The area of the liner plates/newly fabricated plate/patch plate in sq. mtr. Shall be measured for the account of work done and payment.

**99) PM of DE system.**

- Cleaning of DE ducts.
- Checking / cleaning of impeller.
- Ensuring tightness of all bolts including coupling.
- Replacement of V belts if required...
- Lubrication of bearings.

Mode of Payment

Both DE system will be considered as one unit and payment will be made accordingly. Payment will be 50% in case of one system.

**100) Structural Painting.**

- Cleaning of surface with wire brush for painting.
- Applying one coat of red oxide followed by two coats of enamel paint (gray or any other colour) as per Requirement or as per instruction of MIC.
- Consumables required like wire brush, paint brush, paint etc are under contractor scope.

Mode of Payment

**Area of painting in Square meters will be measured for the accounting and payment.**

**101) Replacement of Stacker/ Reclaimer Luffing cylinder.**

- Shifting and positioning the support structural to coal yard maintenance bay site. Placement/anchoring/ leveling of boom conveyor over support structural. Shifting and fixing of counter weights for weight balancing. Cleaning and opening of all hydraulic parts.
- Opening of bottom pin and top pin and lowering of the cylinder.
- Shifting of new cylinder from central store / site store. Lifting the cylinder to the position and fixing the pins at the top and bottom.
- Fitting the hydraulic pipes and valves, any oil leakage checking and arresting and trial run.
- Dismantling/Shifting of structural and damaged cylinder to the designated place.
- Any cutting/welding required for the job is included & to be done at no extra cost.
- Fabrications / erection of any jigs, fixtures, safety platforms/ scaffoldings required for the job and dismantling shifting of the same after completion of the job are included in the scope.
- NALCO will provide hydra crane for the above work free of cost if available otherwise the same is to be arranged by the party.
- Required tools tackles, consumables are to be arranged by the party.

**NOTE: 25% payment will be made for replacement of Master / Slave hydraulic cylinder.**

**102) Servicing of Stacker/ Reclaimer luffing cylinder.**

- Shifting the damaged cylinder to site workshop.
- Dismantling of the damaged cylinder.
- Inspection/cleaning of parts.
- Assembling of the cylinder with seal kit etc. oil filling.
- Shifting the repaired cylinder to site store.
- NALCO will provide hydra crane for the above work free of cost if available otherwise the same is to be arranged by the party.
- Required tools tackles, consumables are to be arranged by the party.

**NB: 25% payment will be made for replacement of S/R Master / Slave hydraulic cylinder.**

**103) Replacement of Stacker/Reclaimer Hydraulic Motor.**

- Placement of stacker/reclaimer at maintenance bay and anchoring
- Isolation of inlet/outlet valves Draining of oil from the motor.
- Cleaning and opening of all hydraulic pipes and valves.
- Dismantling of shrink disc, torque arm bracket and Arctic connector by loosening the screws.
- Removal of damaged hydraulic motor from digging wheel shaft.



- Thorough cleaning of digging wheel shaft. Mounting of shrink disc, torque arm bracket and new motor on the shaft. Fixing of fasteners with required torque by torque wrench.
- Fitting of Arctic connector in required position, hydraulic pipes flanges and valves.
- Return of damaged Hydraulic motor and scraps to the store/designated area,
- Trial run, checking and arresting of any oil leakage.
- Any cutting/welding required for the job is included & to be done at no extra cost.
- Fabrications / erection of any jigs, fixtures, safety platforms/scaffolding required for the job and dismantling shifting of the same after completion of the job are included in the scope
- All the tools tackles, consumables required for the job shall be arranged by the contractor.
- Hydra crane required for the job shall be provided by NALCO if available free of cost.

Otherwise the vendor has to arrange the crane to carry out the job.

**MODE OF PAYMENT:**

100% payment will be made for S/R digging wheel shaft motor.

50% payment will be made for other hydraulic motors of S/R.

25% payment will be made for P/F hydraulic motors.

**104) Shift assistance for Monsoon Period:**

The scope of work includes deployment of a mechanical maintenance group in three shifts (A,B & C) during monsoon period (1<sup>st</sup> July to 30<sup>th</sup> November) to take up additional work load arises due to wet coal. The group in each shift will consist of 02 Semiskilled (Fitter & Welder) and 02 un-skilled and 01 skilled workers.

A group consist of 02 no of unskilled, 02 no of semi-skilled & 1 no skilled workers to be deputed in each shift (i.e. A, B & C Shifts) and deployment of workers will be as per requirement decided by MIC. Workers will report to the concerned shift in charge of CHP-1 & CHP-2 in starting of each shift. The time to time requirement of manpower will be informed to the party by the Manager in charge.

Following jobs are likely to be executed by the group-

Oil top-up, arresting oil leakage, replacement of FCU fusible plug, To clear jamming due to big size coal/ stone/ foreign material (entering inside chute /equipment is required), area cleaning, idler/v-belt replacement, skirt board/trainer/ scrapper adjustment. Checking/replacement of spray line nozzles, belt training, to assist operation in priming of pumps for de-watering, to assist in equipment chocking cleaning of crushers/vibrating screens etc. Besides the above any other minor jobs not specially mentioned above but assigned by the shift-in-charge/ Manager-in-charge for smooth running of the plant shall be carried out by the groups.

**Unit of measurements:** Lump sum for one group in a shift consisting of 02 unskilled, 02 semiskilled (fitter & welder/ cutter) and 01 skilled worker cum shift co-coordinator.

**Penalty on absenteeism in each shift per group:**

1. One USW absent: 25% will be deducted from the lumpsum per shift rate.
2. Two USW absent: 50% will be deducted from the lump sum per shift rate
3. One SSW absent: 30% will be deducted from the lump sum per shift rate
4. Two SSW absent: 60% will be deducted from the lumpsum per shift rate.

However in case of absent of skilled worker, a lump sum of Rs.1500.00 will be deducted from the per shift rate.

**SUB: REPAIR AND MAINTENANCE OF CHP-2**

**SPECIAL CONDITIONS OF CONTRACT**

**A) TIME SCHEDULE**

Coal handling plant is very critical areas in CPP. Its maintenance jobs are also very critical in nature. For feeding coal to the power house round the clock, equipment availability plays an important role. In case of any break-down or any disorder in the coal feeding system, the defects are to be rectified immediately. For rectification of such defects, the contractor has to deploy men & materials immediately. The workmen, thus engaged, for the rectification jobs have to work under harsh conditions over a wide area.

Taking all these points into consideration, the optimum time required for each major & critical activity, the following completion times have been worked out as shown against each activity.

**Optimum time schedule for execution of critical works:-**

<b><u>Conveyor system</u></b>	<b><u>UOM</u></b>	<b><u>Time allowed</u></b>
Chute liner	1 Sq.mtr.	8 hrs
Rubber lagging of pulleys	1 sq.mtr.	4 hrs
Lifting of GTU	1 no.	4 hrs
Replacement of pulley brgs.	1 Set	8 hrs.
Belt dismantling	200 mtr.	8 hrs.
Belt erection	200 mtr.	8 hrs.
Pulling the belt up to 10 mtrs.	1 no.	5 hrs.
Pulling the belt beyond 10 mtrs.	100 mtrs.	6 hrs.
Alignment of Gear box	1 no.	8 hrs.

**Belt vulcanizing (Hot & Cold):-**

500 mm width belt	1 no.	6 hrs.
1000 mm width belt	1 no.	10 hrs.
1200 mm width belt	1 no.	12 hrs.

**Screen & Crusher**

Replacement of Screen cloth	1 no.	6 hrs.
Replacement of drive shaft of Screen	1 no.	30 hrs.
Replacement of brg.set of Screen	1 set	16 hrs.
Removal of screen chocking	1 no.	4 hrs.
Replacement of Crusher rotor	1 no.	148 hrs.
Replacement of Top and bottom plates	1 no	20 hrs.
Replacement of breaker Plate	1 no.	10 hrs.
Replacement of Crusher Bearings	1 no.	20 hrs.
Replacement of tramp iron roof	1 no.	6 hrs.
Replacement of Hammers	1 set	14 hrs.
Replacement of broken hammers	1 no.	4 hrs.
Removal of chocking of Crusher	1 no.	4 hrs.

**PLOUGH FEEDERS:-**

Replacement of PF blades	1 set	16 hrs.
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**TRIPPERS:-**

Replacement of wheel axle of Tripper	1 no.	24 hrs.
Replacement of cable reeling drum	1 no.	24 hrs.

**Stacker/Reclaimers.**

Replacement of luffing cylinder.	1 no	36hrs.
Replacement of Hydraulic Motor.	1 no	72 hrs

**N.B.:-** In case, this timing is exceeded, the contract is subject to penalty at the rate of 10% of the job value.

**B) RESOURCE MOBILISATION:-**

CHP maintenance job is critical in nature. In order to cope with the type of maintenance problem, the contractor should have sufficient resources (man power as well as T & P's) to handle the unforeseen situations.

From our past experiences, it is envisaged that the contractor should have the following minimum resources at his disposal round the clock.

I.	<u>Man power</u>	<u>Minimum nos.to be kept on the roll</u>
	High skilled worker	2
	Vulcanizer	2
	Fitter (including one Millwright fitter)	, Rigger 10+3 (For monsoon period)
	Gas cutte, and welder	8+6 (For monsoon period)
	Helper	12+6 (For monsoon period)

Besides contractor should have a person on its payroll declared as the safety officer for the contract with all the responsibility of safety of the job and manpower deployed. The person should be a Diploma pass or having experience of minimum 5 years.

II.	<u>Tools &amp; Tackles</u>	<u>Quantity</u>
	Plasma cutting Machin	1 no
	Welding machine	5 nos.
	Gas cutting set	3 sets
	Chain pulley blocks - 1 Ton	2 nos.
	- 2 ton	3 nos
	- 3 Ton	1 no.
	- 7.5 Ton	3 nos.
	Lifting & pulling Equipments:	1T - 2 No. , 5T - 1 No
	Angle grinder	2 nos. (4" -1 no & 7"- 1 no)
	Spanners	10 sets
	Torque wrench (100-600)	01 Set
	With socket	
	Chain wrench	01 No
	Platform trolley	5 nos
	Polymer liner cutting machine	1 no.
	Hot air blower for vulcanizing	1 no.
	Air blower for cleaning purpose	1 no.

The contractor should present all these tools & tackles to the Manager-in-charge on the day of starting the job. If he fails, the contractor will not be allowed to start the job. In case, the lifting tools & tackles fail at the time of working & the contractor cannot arrange another set of lifting equipment, then NALCO will provide those lifting equipments at the written request of the contractor on chargeable basis (subject to availability) to expedite the on-going job. The hiring charges for such items will be as follows:-

Chain pulley block

1 Ton	2 Ton	3 Ton	7.5 Ton
Rs 300.00 Per Day	Rs 400.00 Per Day	Rs 500.00 Per Day	Rs 700.00 Per Day

**III. Truck & Hydra:**

Truck & hydra shall be provided by NALCO free of hire charges subject to availability for shifting of winch machine, heavy materials viz. belt rolls, its stand to work site and to shift heavy materials viz. belt rolls, ,heavy spares etc.(which can not be transported by hand trolley) from central stores to work site/sub store. All other arrangements for shifting & lifting of materials shall be made by the contractor at no extra cost to NALCO. In case of non availability, the contractor has to provide as per item no 96 & 97.

**Free issue materials:** - Liners (steel & polymer)

- Conveyor belt
- Vulcanizing solution (hot & cold)
- Vulcanizing machine
- Power winch at work site (in case of availability)
- Truck & Hydra if available for material viz. conveyor belt roll, its stand/winch shifting, test loads, heavy spares which can not be shifted by hand trolley
- Lubricants
- Equipment spares
- Special electrodes
- Cotton waste

All other consumables like electrodes, gas, paints etc. are to be arranged by the contractor. Receipt of materials from Stores & shifting of scraps to the designated place is the responsibility of the contractor.

**PRE-MEDICAL CHECK UP:** The contractor should arrange the pre-medical check up for the employees to be engaged for this job, before the commencement of work, at our Occupational Health Centre(OHC), CPP.

**S A F E T Y:** Before starting the job, the contractor has to obtain the Safety clearance from the Safety Department for the safe working of their tools and tackles. **“Paying money in lieu of safety appliances is not at all acceptable.”** The contractor has to supply safety appliances & welding accessories for welding purpose like helmets, gloves, proper insulated cables, shoes etc. First R/A Bill of the contractor will not be processed, if the contractor fails to fulfill the above statutory requirements. The value of safety appliances will be deducted from the contractor’s bills along with over head charges @ 25% of the cost of material, if provided by NALCO.

**ENVIRONMENT PROTECTION:** The contractor shall adhere to safe environment practices and shall perform in line with the company’s available environment policy. The contractor shall also guard against any hazardous and unsafe working conditions. Scrap and waste generated during different activities including its disposal should be in a manner to minimize their harmful concentration effects on the environment. The various activities of contractor at site should not create any adverse effect on ambient air and water quality at work site and adjacent areas.



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TENDER No.:  
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ANNEXURE-C21

PRE-CONTRACT INTEGRITY PACT

General

This pre-bid pre-contract Agreement (hereinafter called the Integrity Pact) is made on 27<sup>th</sup> day of the month of JUNE 2024, between, on one hand, the National Aluminium Company Limited (NALCO), a company registered under the Companies Act 1956 and a Government of India Enterprise, having its Registered Office at NALCO Bhawan, P/1, Nayapalli, Bhubaneswar- 751013, Odisha, India (referred to as NALCO) acting through Ms L.Maria, SM (Mech.), Tender & Contract, CPP (hereinafter called the "BUYER", which expression shall mean and include, unless the context otherwise requires, his successors in office and assigns of the First Part and M/s Kalinga Engineers represented by Smt. Manorama Dash Chief Executive Officer (hereinafter called the "BIDDER / Seller", which expression shall mean and include, unless the context otherwise requires, his successors and permitted assigns) of the Second Part.

WHEREAS the BUYER proposes to procure "REPAIR AND MAINTENANCE OF CHP-2" and the BIDDER/Seller is willing to offer/has offered the stores and

WHEREAS the BIDDER is a private company / public company / Government undertaking/ partnership /registered export agency, constituted in accordance with the relevant law in the matter and the BUYER is a Company under the administrative control of the Ministry of Mines, Govt. of India.

NOW THEREFORE

To avoid all forms of corruption by following a system that is fair, transparent and free from any influence / prejudiced dealings prior to during and subsequent to the currency of the contract to be entered into with a view to :-

Enabling the BUYER to obtain the desired said stores/equipment at a competitive price in conformity with the defined specifications by avoiding the high cost and the distortionary impact of corruption on public procurement, and

Enabling BIDDERS to abstain from bribing or indulging in any corrupt practice in order to secure the contract by providing assurance to them that their competitors will also abstain from bribing and other corrupt practices and the BUYER will commit to prevent corruption, in any form, by its officials by following transparent procedures.

The parties hereto hereby agree to enter into this Integrity Pact and agree as follows:


Commitments of the BUYER

- 1.1 The BUYER undertakes that no official of the BUYER, connected directly or indirectly with the contract, will demand, take a promise for or accept, directly or through intermediaries, any bribe, consideration, gift, reward, favour or any material or immaterial benefit or any other advantage from the BIDDER, either for themselves or for any person or organisation or third party related to

*Manu*



For M/s Kalinga Engineers  
Balaram Prasad, Angui

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Subject: REPAIR AND MAINTENANCE OF CHP-2.

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the contract in exchange for an advantage in the bidding process, bid evaluation, contracting or implementation process related to the contract

- 1.2 The BUYER will, during the pre-contract stage, treat all BIDDERS alike and will provide to all BIDDERS the same information and will not provide any such information to any particular BIDDER which could afford an advantage to that particular BIDDER in comparison to other BIDDERS.
- 1.3 All the officials of the BUYER will report to the appropriate Government office any attempted or completed breaches of the above commitments as well as any substantial suspicion of such a breach.
- 1.4 In case any such preceding misconduct on the part of such official(s) is reported by the BIDDER to the BUYER with full and verifiable facts and the same is prima facie found to be correct by the BUYER, necessary disciplinary proceedings, or any other action as deemed fit, including criminal proceedings may be initiated by the BUYER and such a person shall be debarred from further dealings related to the contract process. In such a case while an enquiry is being conducted by the BUYER the proceedings under the contract would not be stalled.

#### Commitments of BIDDERS

3. The BIDDER commits itself to take all measures necessary to prevent corrupt practices, unfair means and illegal activities during any stage of its bid or during any pre-contract or post-contract stage in order to secure the contract or in furtherance to secure it and in particular commit itself to the following :-
  - 3.1 The BIDDER will not offer, directly or through intermediaries, any bribe, gift, consideration, reward, favour, any material or immaterial benefit or other advantage, commission, fees, brokerage or inducement to any official of the BUYER, connected directly or indirectly with the bidding process, or to any person, organisation or third party related to the contract in exchange for any advantage in the bidding, evaluation, contracting and implementation of the contract.
  - 3.2 The BIDDER further undertakes that it has not given, offered or promised to give, directly or indirectly any bribe, gift, consideration, reward, favour, any material or immaterial benefit or other advantage, commission, fees, brokerage or inducement to any official of the BUYER or otherwise in procuring the Contract or forbearing to do or having done any act in relation to the obtaining or execution of the contract or any other contract with the Government for showing or forbearing to show favour or disfavour to any person in relation to the contract, or any other contract with the Government.
  - 3.3 BIDDERS shall disclose the name and address of agents and representatives and Indian BIDDERS shall disclose their foreign principals or associates.
  - 3.4 BIDDERS shall disclose the payment to be made by them to agents / brokers or any other Intermediary, in connection with this bid / contract.

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Balaram Prasad, Angul



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- 3.5 The BIDDER, either while presenting the bid or during pre contract negotiations or before signing the contract, shall disclose any payments he has made, is committed to or intends to make to officials of the BUYER or their family members, agents, brokers or any other intermediaries in connection with the contract and the details of services agreed upon for such payments.
- 3.6 The BIDDER will not collude with other parties interested in the contract to impair the transparency, fairness and progress of the bidding process, bid evaluation, contracting and implementation of the contract.
- 3.7 The BIDDER will not accept any advantage in exchange for any corrupt practice, unfair means and illegal activities.
- 3.8 The BIDDER shall not use improperly, for purposes of competition or personal gain, or pass on to others, any information provided by the BUYER as part of the business relationship, regarding plans, technical proposals and business details, including information contained in any electronic data carrier. The BIDDER also undertakes to exercise due and adequate care lest any such information is divulged.
- 3.9 The BIDDER commits to refrain from giving any complaint directly or through any other manner without supporting it with full and verifiable fact.
- 3.10 The BIDDER shall not instigate or cause to instigate any third person to commit any of the actions mentioned above.
- 3.11 If the Bidder or any employee of the Bidder or any person acting on the behalf of the Bidder, either directly or indirectly, is a relative of any of the officers of the Buyer, or alternatively, if any relative of an officer of the Buyer has financial interest/stake in the Bidder's firm, the same shall be disclosed by the Bidder at the time of filing of tender.  
The term "relative" for this purpose would be as defined in Section 6 of the Companies Act 1956.
- 3.12 The Bidder shall not lend to or borrow any money from or enter into monetary dealings or transactions, directly or indirectly, with any employee of the Buyer
- 3.13 Bidders(s)/ Contractor(s) who have signed the integrity pact shall not approach the courts while representing the matter to IEMs and shall wait for their decision in the matter
4. **Previous Transgression**
- 4.1 The Bidder declares that no previous transgression occurred in the last three years immediately before signing of this integrity Pact, with any other company in any country in respect of any corrupt practices envisaged hereunder or with any Public Sector Enterprise in India or any Government Department in India that could Justify Bidder's exclusion from the tender process.
- 4.2 The Bidder agrees that if it makes incorrect statement on this subject, Bidder can be disqualified from the tender process or the contract, if already awarded, can be terminated for such reason.
5. **Sanctions for Violations :**

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- 5.1. Any breach of the aforesaid provisions by the BIDDER or any one employed by it or acting on its behalf (whether with or without the knowledge of the BIDDER) shall entitle of the BUYER to take all or any one of the following actions wherever required:
- To immediately call off the pre contract negotiations without assigning any reason or giving any compensation to the BIDDER. However, the proceedings with the other BIDDER(s) would continue.
  - The Earnest Money Deposit (or pre contract stage) and/or Security Deposit / Performance Bond (after the contract is signed) shall stand forfeited either fully or partially, as decided by the BUYER and the BUYER shall not be required to assign any reason therefore.
  - To immediately cancel the contract, if already signed, without giving any compensation to the BIDDER.
  - To recover all sums already paid by the BUYER, and in case of an Indian BIDDER with interest thereon at 2% higher than the prevailing Prime Lending Rate of State Bank of India, while in case of a BIDDER from a country other than India with interest thereon at 2% higher than the LIBOR. If any outstanding payment is due to the BIDDER from the BUYER in connection with any other contract for any other stores, such outstanding payment could also be utilized to recover the aforesaid sum and interest.
  - To encash the advance bank guarantee and performance bond / warranty bond, if furnished by the BIDDER, in order to recover the payments already made by the BUYER, along with interest.
  - To cancel all or any other Contracts with the BIDDER. The BIDDER shall be liable to pay compensation for any loss or damage to the BUYER resulting from such cancellation / rescission and the BUYER shall be entitled to deduct the amount so payable from the money(s) due to the BIDDER.
  - To debar the BIDDER from participating in future bidding processes of NALCO for a minimum period of five years, which may be further extended at the discretion of the BUYER.
  - To recover all sums paid in violation of this Pact by BIDDER(s) to any middleman or agent or broker with a view to securing the contract.
  - In cases where irrevocable Letters of Credit have been received in respect of any contract signed by the BUYER with the BIDDER, the same shall not be opened.
  - Forfeiture of Performance Bond in case of a decision by the BUYER to forfeit the same without assigning any reason for imposing sanction for violation of this Pact.
- 5.2. The BUYER will be entitled to take all or any of the actions mentioned at para 5.1(i) to (x) of this Pact also on the Commission by the BIDDER or any one employed by it or acting on its behalf (whether with or without the knowledge of the BIDDER) of an offence as defined in Chapter IX of

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Balaram Prasad, Angul

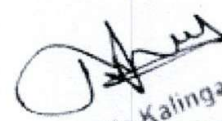


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the Indian Penal Code 1860 or Prevention of Corruption Act, 1988 or any other statute enacted for prevention of corruption.


- 5.3 The decision of the BUYER to the effect that a breach of the provisions of this Pact has been committed by the BIDDER shall be final and conclusive on the BIDDER. However, the BIDDER can approach the independent Monitor(s) appointed for the purposes of this Pact.
6. Independent External Monitors (IEMs):
- 6.1 The BUYER has a panel of Independent External Monitors (hereinafter referred to as IEMs) for this Pact in consultation with the Central Vigilance Commission as mentioned in NALCO's NIT/NALCO's website ([www.nalcoindia.com](http://www.nalcoindia.com))
- 6.2 The task of the IEMs shall be to review independently and objectively, whether and to what extent the parties comply with the obligations under this Pact.
- 6.3 The IEMs shall not be subject to instructions by representatives of the parties and perform their functions neutrally and independently.
- 6.4 Both the parties accept that the IEMs have the right to access all the documents relating to the project / procurement including minutes of meetings.
- 6.5 As soon as the IEM notices, or has reason to believe, a violation of this Pact, he will so inform the Authority designated by the BUYER.
- 6.6 The BIDDER(s) accepts that the IEM has the right to access without restriction to all Project documentation of the BUYER including that provided by the BIDDER. The BIDDER will also grant the IEM, upon his request and demonstration of a valid interest, unrestricted and unconditional access to his project documentation. The same is applicable to Subcontractors. The IEM shall be under contractual obligation to treat the information and documents of the BIDDER / Subcontractor(s) with confidentiality.
- 6.7 The BUYER will provide to the IEM sufficient information about all meetings among the parties related to the Project provided such meetings could have an impact on the contractual relations between the parties. The parties will offer to the IEM the option to participate in such meetings.
- 6.8 The IEM will submit a written report to the designated Authority of BUYER / Secretary in the Department / within 8 to 10 weeks from the date of reference or intimation to him by the BUYER / BIDDER and should be occasion arise, submit proposals for correcting problematic situations.
7. Facilitation of Investigation:
- In case of any allegation of violation of any provisions of this Pact or payment of commission, the IEMs shall be entitled to examine all the documents including the Books of Accounts of the BIDDER and the BIDDER shall provide necessary information and documents in English and shall extend all possible help for the purpose of such examination.
8. Law and Place of Jurisdiction:
- This Pact is subject to Indian Law. The place of performance and jurisdiction is the seat of the BUYER.

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For M/s. Kalinga Engineers  
Balaram Prasad, Angul

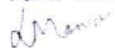
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9. Other Legal Actions:  
The actions stipulated in this Integrity Pact are without prejudice to any other legal action that may follow in accordance with the provisions of the extant law in force relating to any civil or criminal proceedings.
10. Validity:  
10.1 This Pact begins when both parties have legally signed it. It expires for the Contractor 12 months after the last payment under the contract, and for all other Bidders 6 months after the contract has been awarded. If any claim is made/dedged during this time, the same shall be binding and continue to be valid despite the lapse of this pact as specified above, unless it is discharged/determined by CMD, NALCO.  
10.2 Should one or several provisions of this Pact turn out to be invalid, the remainder of this Pact shall remain valid. In this case, the parties will strive to come to an agreement to their original intentions.
11. If the bidder/ Contractor is a partnership or a consortium, this agreement must be signed by all partners or consortium members.
12. The parties hereby sign this Integrity Pact at Balaram Prasad on 27/06/2024

For & on behalf of



BUYER

Name of the Officer: Ms L. Maria

Designation: SM (Mech.), Tender & Contract CPP

Company: NALCO

Official Seal

For & on behalf of



BIDDER

For M/s Kalinga Engineers  
Balaram Prasad, Angu

Witness

1. Rajesh Sunkar  
P.NO 7722
2. S.B. Sasmitha Behera  
P.NO - 09018

Witness

1. Bryan Baroud
2. Anidhar Prasadhar

# PART –B

## General Instructions to Contractors

**ANNEXURE-A1**

1. **SCOPE OF WORK:** The Scope of Work shall be as detailed in enclosed at Annexure-IA. The work shall be carried out as per direction of Engineer-in-charge/Manager-in-charge subject to Special Conditions of Contract given in Annexure-IB.
  - 1.1. The Engineer-in-Charge for subject work is as mentioned in Page-1. Sl. No. F. You are requested to report to him for all matter relating works, payment etc.
2. **SPECIAL CONDITIONS OF CONTRACT: As per Annexure-IB**
3. **QUANTITY & RATE:** The quantity & rate schedule is enclosed at Annexure-II.
4. **QUANTITY VARIATION:** The Quantities mentioned in the schedule are approximate in nature and may vary by a wide margin for which the contractor shall have no option but to execute the works, as per direction of the Engineer-in-charge at the same rates, terms & conditions.
5. **GENERAL INFORMATION:**
  - 5.1. Wherever transport of material is applicable, the contractor has to ensure that goods carried during transportation do not exceed permitted laden weight as certified by registering authority for the respective vehicles.
  - 5.2. Wherever applicable Bank Guarantee are to be submitted in Nalco's revised prescribed format only from NALCO's approved Banker.
  - 5.3. Letter / Fax of Intent is an acceptance of offer and the tenderer should communicate the acceptance of the same within 7 days of issue of Letter / Fax of Intent, failing which it will deemed to have been accepted by the tenderer.
6. **CONTRACT DOCUMENT:**
  - 6.1. The contract shall comprise NIT documents, contractor's offer, pre-award negotiation documents, minutes of meetings, letter of acceptance, concerned drawings if any, work order and its subsequent amendments / addendums / corrigendum.
  - 6.2. All other terms and condition shall be as General Condition of contract, special condition of contract and the NIT documents subject to the deviations mutually agreed between NALCO and the contractor. In case of any contradiction between the provision of Annexure- A1 and special conditions of contract/ scope of work / technical specification, the provisions in the later will prevail
  - 6.3. **The documents as stated below shall constitute the integral part of the Contract:**
    - 6.3.1. Conditions of Integrity Pact.
    - 6.3.2. SAP Service Purchase Order with Bill of Quantity.
    - 6.3.3. Scope of Work/Technical Specifications.
    - 6.3.4. Drawings if any.
    - 6.3.5. Special Conditions of Contract.
    - 6.3.6. General instructions to contractors
    - 6.3.7. General Conditions of Contract (GCC)
    - 6.3.8. Relevant Indian Standards.
  - 6.4. If any varying of conflicting situation arises in any of the document forming part of the Contract, NALCO's decision with regard to intention/interpretation of the document and the decision shall be final and binding on the parties.
7. **NO COMPENSATION FOR ALTERATION IN OR RESTRICTION OF WORK:** At any time from the commencement of the work if the Owner decides for whatsoever reason, not to carry out the whole work or part thereof as specified in the tender, then owner shall give notice in writing of the fact to the contractor, who shall have no claim to any payment or compensation on whatsoever account (profit or advantage which he might have derived by executing the work in full) neither shall he have any claim for compensation by reason of any alterations having been made from the original specifications, drawings, designs and instructions which may involve any curtailment of the work as originally contemplated.



## 8. ENERGY/WATER/GROUND/BUILDING PREMISES:

### 8.1. Provision of Power/Water/Land/Building to Contractor's Works.

- 8.1.1. Lump Sum Turn Key (LSTK) Contracts- Electricity charges shall be billed @ Rs.4.30 /KWH on meter reading. Water charges will be billed on monthly basis by Estate department, @ Rs. 150.00 per month or part thereof. Ground/Building Premises inside plant will be provided without any rent. However, Building premises provided inside Township will be on chargeable basis as per Rent Circular.
- 8.1.2. Other than LSTK Contracts: If Electricity and Water is required for the work to be executed, it will be supplied by Nalco free of cost from any suitable point. The contractor shall have to make arrangements, at his own cost, for tapping and using the power/water so required as per advice EIC/MIC. Ground/Building Premises will be provided without any rent.
- 8.1.3. For availing Electrical energy, the contractor shall have to provide, at his own cost, a MCB (Miniature Circuit Breaker) at the point of power supply by Nalco. The MCB shall have to be of a suitable capacity as decided by Nalco's electrical authorities for the concerned area and shall have to be replaced, as and when warranted, on the grounds of changed power requirements or the MCB having been defective and/or damaged.

### 8.2. **Power and Water Supply to Contractor's Establishment:** The following points shall be complied in addition to Nalco GCC Clause No. 2.3 for giving power supply to Contractors' Establishments:

- 8.2.1. Power and Water supply will be provided to the contractor to whom the permission has been granted by Estate Department to have establishment in the township/plant as per requirement. Ground/Building Premises inside plant will be provided without any rent. However, building premises provided inside Township will be on chargeable basis as per Rent Circular.
- 8.2.2. Contractor have to make all arrangements to receive power from designated panels by laying necessary cables and installing suitable distribution board. They have to apply to Estate department through the Engineer-in-Charge. The application will be made in prescribed format and a completion certificate by licensed electrical contractor will be enclosed. The representative of DGM (Elect) will inspect the installation and after getting their clearance, power supply will be charged. The individual establishments are to be maintained and managed by contractors as per IE rules.
- 8.2.3. At the time of charging of power supply, initial meter reading will be jointly noted by representatives of contractor, Estate Department and Electrical Department.
- 8.2.4. Every month, energy meter reading will be jointly taken by representatives of Estate Department and Electrical Department. Electricity Bill will be raised by Estate Department @ Rs.4.30 per KWH basing on the meter reading as per the prevailing rate. However, the rate is subject to revision time to time.
- 8.2.5. Water charges will be billed on monthly basis by Estate department, @ Rs. 150.00 per month or part thereof. However, the rate is subject to revision from time to time.
- 8.2.6. The contractor has to deposit Water & Electrical Charges on monthly basis. While processing any Final Bill relating to any work, the contractor has to submit clearance certificate from Estate Department covering period under Final Bill.
- 8.2.7. While processing final bill of the contractor they must enclose Disconnection Certificate from Estate Department for power/water supply connection or Certificate regarding Continuation of connection due to other valid contract with proper reference through concerned EIC & Estate Department.
- 8.2.8. The final bill will not be processed without compliance of the above. (Supporting document to be attached).

8.3. The contractor must dismantle the structure constructed by him for the purpose of office-cum-store on completion of the contract as per the provision of GCC clause no.2.4.2. If the same is not dismantled within two months of completion of contract, he will not be issued any tender paper or will not be allowed to participate in any tender. Besides with-holding of final bill, other penal action as per contract / Law as deemed fit may be initiated against the contractor.

8.4. Following penal actions shall be initiated against the unauthorized occupant;

8.4.1. Disconnection of power and water supply lines to be made,

8.4.2. Penal rent @ Rs.10,000/- per month Plus GST as applicable or part thereof towards the ground rent and 20 (twenty) times penal rent towards electricity and water charges shall be recovered,

8.4.3. Initiation of eviction proceedings in the Estate Court for outside Plant establishments

**9. CONTRACTOR'S OBLIGATIONS AND PENALTY FOR NON-COMPLIANCE: The contractor shall abide by the following obligations during execution of contract against deployment of contract labours.**

9.1. If found suitable, Preference for engagement of labourers under NALCO's contractors establishment may be given to the land affected persons.

9.2. The Contractor shall not engage any contract labour having unsound mind, criminal record, and poor health or having record not suitable from security point of view to NALCO.

9.3. The contractor has to ensure that no contract labour should enter the plant/work premises without valid photo pass.

9.4. The contractor shall ensure that no contract labour should leave the work place/plant before time without authorization/gate pass/ permission of the representative of contractor, to check frequent entry/exit, which may also cause security/administrative inconvenience.

9.5. The disputes of the Contractor's labourers are to be settled by individual contractor. In no case NALCO, as the Principal Employer will enter into the matter except witnessing the proceedings, if required by the Statutory Authorities.

9.6. The contractor shall have valid labour license during the execution of the contract, wherever applicable. The contractor shall not engage child labourers, in compliance to statutory requirement.

9.7. PF & ESI A/c Codes: The contractor must possess independent Account Codes from the concerned Regional Provident Fund Commissioner for PF and also independent Account Code from the concerned Regional Director, ESIC for ESI, as applicable.

**10. RECOVERY TOWARDS COMPENSATION FOR DELAY:**

10.1. Repetitive O&M Contracts – Recovery towards compensation for delay shall not be applicable for this type of contract, unless otherwise mentioned separately in Special Conditions of Contract (Annexure-IB).

10.2. Other Contracts- Recovery towards compensation for delay shall be applicable for this type of contract. In case the contractor fails to complete the work within the stipulated period, the contractor shall be liable for a penalty @ 1% (one) of the contract value per week of delay subject to a maximum of 10% (Ten) of the value of the contract, unless otherwise mentioned separately in the Special conditions of contract. (Annexure-IB). GST as applicable shall also be recovered.

11. **CONTRACT PERIOD:** Time of completion is the essence of the Contract. The contract period for this work is as mentioned in Page-1 from the Effective date of contract.

## 12. EXECUTION OF CONTRACT AGREEMENT:

- 12.1. The contractor shall have to execute an agreement on Rs.50/- non-judicial stamp paper to be purchased from any stamp vendor under the jurisdiction of the Odisha High Court, in the specific format (Annexure-C23 of NIT). Issuing authority of work order shall sign the agreement on behalf of NALCO. The agreement shall not be required to be executed for work orders of value less than or equal to Rs.1,00,000/-.
- 12.2. The agreement should be submitted to T&C Department, within 10 days of issuance of LOA/LOI or at least 10 days prior to effective date mentioned in the Service Purchase Order.
- 12.3. Contract Agreement is mandatory before starting of work. EIC/MIC will ensure before Gate Pass is issued.
- 12.4. No bill shall be payable unless the agreement is signed, if signing of agreement is applicable

## 13. SECURITY DEPOSIT:

- 13.1. On receipt of the order, the successful bidder shall deposit with NALCO an amount, equivalent to 10% of the order value for value of contracts not exceeding Rs. 1.0 crore, 7.5% for the value of contracts over Rs. 1.0 crore up to Rs. 5.0 crores, and 5% of the value of contracts over Rs. 5.0 crores by the person(s), here in after called as contractor as Security Deposit within 21 days from the date of issue of Service Purchase Order/LOA/LOI. This amount will have to be suitably enhanced to the tune of above percentage of the executed value.

Alternatively, Initial Security Deposit amounting to 2.5% of the contract value shall have to be deposited, within 21 days of receipt of Service Purchase Order /LOA/LOI by him. In this case, the balance amount of the security deposit shall be recovered through deductions from bills as indicated under Payment term .

In case the successful bidder fails to submit the ISD /SD, with in a period of 21 days from the date of issue of Service Purchase Order / LOI, the ISD amount along with a simple interest @12% per annum as penalty, applicable from the date of Service Purchase Order till the date of submission of ISD or submission of 1st RA bill, shall be recovered starting from 1st RA bill .

- 13.2. The contractor can submit the initial SD or total SD in the form of either bank draft or bank guarantee from any NALCO approved bank in the prescribed format {ref Annexure-C14}
- 13.3. The Earnest Money Deposited along with the tender, by the successful bidder, if any shall be adjusted towards security deposit / initial security deposit.
- 13.4. The performance security /SD will be released along with release of final bill if there is no DLP or on successful completion of the DLP, with certification of Manager-in charge / Engineer-in charge. The vendor has to claim such refund along with Final Bill or within 15 days from the closure of DLP as the case may be.

## 14. BANK GUARANTEES: -

- 14.1. The Party/Contractor has to submit Bank Guarantee against Performance Guarantee Bond (PGB), Security deposit (SDBG), Free Issue Material (FIMBG), Advance BG (ADVBG), Performance Bank Guarantee (PBG), and Contract Cum Performance Guarantee (CPBG) where ever applicable.
- 14.2. The BG in prescribed format (Annexure-C11 to Annexure-C16 of NIT) should be issued by approved Banks listed at Annexure-C17 of NIT having its branch at Angul/Bhubaneswar and the BG should be registered in Structured Financial Messaging System (SFMS) for BG Confirmation and Lodging of claim. Place of Encashment may be limited to Angul/Bhubaneswar only.
- 14.3. The original BGs should be sent by the Bank directly in the address of EIC/MIC mentioned in the Work Order through Registered/Speed Post with AD. It may be noted that the BG Format requires mentioning of the address, Phone, Fax no. and email ID of the issuing Bank. On receipt of Original BG, it will be forwarded to Finance by EIC/MIC through Inter Office Memo (IOM).

- 14.4.** Each BG contains a start date, expiry date and claim date. The validity of BG (Start date to expiry date) should cover the Contractual execution period. A further claim period of 3 months is required to lodge a claim for extension/encashment of BG if necessary. Therefore, the claim date should be 3 months beyond the expiry date. If a consolidated BG is provided including claim period, 3 months will be considered as claim period and accordingly BG extension should be provided to cover Contract requirement.
- 14.5.** BG extension whenever required should ideally be provided 15 days prior to Expiry date from the same Banker against the Original BG with reference to the Contract. However, in specific cases if a new BG from a different bank is provided against the Original BG the subsequent BG should also cover the obligations under original BG period. The subsequent banker has to give an undertaking in this regard in their BG forwarding letter in letter head.

**15. SECRECY TERMS: -**

- 15.1.** The contractor shall use all the documents, drawings, data & information of proprietary in nature, received from NALCO, solely for the purpose of performing and carrying out the obligations on their part under this contract. He shall not disclose the same to any other person except to the extent required in the performance of the work and shall maintain the utmost secrecy. Contractor and NALCO shall bind their employees, who are involved in engineering of the project by a suitable secrecy contract. The documents, drawings, data and information received from NALCO shall not be used by contractor for any other purpose and will also keep them confidential. All data, documents and information provided by Contractor during the course of execution of the work will be treated as confidential by NALCO and will not be released to any third party, without specific written permission of Contractor.
- 15.2.** Breach of Secrecy: In case of breach of secrecy by the Contractor, Nalco will have right to terminate contract, forfeit security deposit **and claim damages from the party.**

**16. GATE PASS & SECURITY:**

- 16.1.** Normally before starting of work, EIC/MIC will ensure that Contract Agreement is signed otherwise, Gate Pass should not be allowed. Therefore, the contractor shall have to produce the Contract Agreement and arrange valid gate pass for the labour/ workers engaged by him in order to enter into the factory premises if the work is to be executed inside the plant.
- 16.2.** Issue & Use of Electronic ID Card: All the contract workers will be provided with electronic entry/exit pass by CISF before mobilization of site/commencement of work by the contractor. All contract workers shall use this ID/Punch cards for making entry into /exit from the plant. After expiry of the contract, ID/Punch card will be surrendered by the workers at the time of closure of contract through the contractor. In case of loss /missing of ID/Punch card, contractor has to deposit Rs. 200/- per card in the cash counter of NALCO for issue of fresh identity card. Incase of discontinuation of job by the workers, the cards will be surrendered to the CISF under intimation to unit HRD.
- 16.3.** Attendance of contractor's workers will be regulated through biometric punching systems. In case of discrepancy, decision of EIC/MIC will be Final & Binding on the contractor.
- 16.4. Use of Online Contract Labour Management System (CLMS):**

An online Contract Labour Management System (CLMS) has been launched across NALCO w.e.f. 01.07.2017. As per the portal architecture, every contractor employing contract labour in NALCO shall have to use this online portal for various activities like safety clearance, issue of gate pass, application for license in Form II, issue of certificate from Principal Employer (NALCO) in Form III for obtaining license from the Central Labour Department, preparation of monthly wage sheets, issue of wage slips, employment cards, preparation and filing of returns, maintenance of statutory registers etc. The contractors have to use the CLMS for entering relevant data about themselves and the labour engaged by them for getting the benefits of the system. Since the package has been developed as per the mandate given by the Management and is being closely monitored by the Ministry of Mines as an item on the DASHBOARD, use of the system is mandatory for the contractor.



**16.5. TIME OF WORK: The factory timings are as follows:**

`A' shift-6.00 AM to 2.00 PM, `B' shift-2.00 PM to 10.00 PM, `C' shift-10.00 PM to 6.00 AM,  
`G' shift-8.00 AM to 5.00 PM (with 1.00 Hr lunch break from 1PM to 2PM)

**17. SUPERVISION:**

**17.1.** The contractor shall have to work as per direction of the Manager-in-charge and shall report to him daily regarding day-to-day progress. The contractor shall give full access to the Manager-in-charge / authorized representative of NALCO to inspect day-to-day work executed by the contractor. Besides, the Contractor will take full responsibility to ensure proper workmanship, good quality of work and supervision during the contract period without any additional cost.

**17.2.** Under prevailing statute, the supervision should be carried out by a capable competent person.

**18. MATERIAL TOOLS & TACKLES:**

**18.1.** The contractor shall have to make his own arrangement for supply and storage of his materials / consumables and general tools, tackles, welding sets, electrodes, chain pulley blocks, slings, gas welding/cutting sets, in connection with execution of work. No extra payment shall be applicable for such provisions. Wherever required consumables of approved quality like general purpose welding electrodes, cleaning agents, Oxygen gas, D.A. gas, etc to execute the contract shall be in Contractor's scope and contractor must arrange these materials at their own cost unless mentioned otherwise in the tender documents attached herewith. Apart from the above any job /tender specific requirement of materials is indicated in special condition of contract.

**18.2. FREE ISSUE MATERIALS / CONSUMABLES:**

Unless mentioned otherwise in the attached tender documents, Argon Gas & Co<sub>2</sub> gas will be supplied by Nalco as Free Issue Item if required for the work executed inside plant. The contractor will do transportation from issue point to work site.

**Issue of cement and steel** as Free Issue shall be governed by clauses 52 to 54 of GCC unless mentioned otherwise in scope of work / special conditions / BOQ or elsewhere in this tender document subject to the followings:

- 18.2.1. For issue of materials within plant boundary wall limit, the contractor shall submit only indemnity bond for the entire value of materials issued to them free of cost as per clause 53 (ix) of GCC.
- 18.2.2. For the materials which are issued for outside plant boundary such as Ash Pond area, Intake Pump House, Lean Slurry area, Bidyut Nagar Colony, township, CISF Barrack etc, the contractor shall furnish Bank Guarantee equivalent to 20% of the value of material and indemnity bond equivalent to 80% value of materials being issued to the contractor.
- 18.2.3. For materials taken out side plant to the vendor's shop, Bank Guarantee equivalent 100% of the value of the materials will be submitted by the vendor before taking out the materials.
- 18.2.4. The Indemnity bond and the Bank Guarantee shall remain valid till the material account is totally settled. The BG and Indemnity Bond shall be submitted in the prescribed format available in the Pact-C of NIT document.
- 18.2.5. The materials drawn if any by the party as "free issue materials" from NALCO should be reconciled. The reconciliation statement of free issue items / materials should be submitted to the EIC/MIC for certification to be submitted along with RA Bill. The final reconciliation statement should be submitted along with final bill for release of final payment.

**19. PAYMENT OF WAGES TO ENGAGED LABOUR AT SITE:**

**19.1.** Payment of wages to the labour employed by the contractor shall be as per the Central Government notification fixing minimum wages for different categories of labour in Central Public Enterprises from time to time plus an additional element as indicated below (as a part of wages). The contractor shall have to make labour payment accordingly, along with applicable statutory benefits. The contractor shall have to make labour payment accordingly, along with applicable statutory benefits.

SL. NO.	CATEGORY	MINIMUM RATES OF WAGES PAYABLE INCLUSIVE OF WAGES FOR WEEKLY OFF, VDA & CANTEEN SUBSIDY W.E.F. 01.10.2024			
		Minimum Wage Rates (Inclusive of Wages for Weekly Off & VDA) (In Rs.)	Additional Element (In Rs.)	Canteen Subsidy (In Rs.)	Total (In Rs.)
1	Unskilled Worker (USW)	526.00	55.00	30.00	611.00
2	Semi-Skilled Worker (SSW)	655.00	55.00	30.00	740.00
3	Skilled Worker (SW)	783.00	55.00	30.00	868.00
4	Highly Skilled Worker (HSW)	912.00	55.00	30.00	997.00

- 19.2.** The contractor has to ensure payment of minimum bonus @ 8.33% on the notified minimum wages for each category including the additional elements but excluding canteen subsidy (Considering minimum salary as Rs.7000/- per month) to all his workmen engaged in the contract annually.
- 19.3.** As per statutory provisions, contractors will have to pay the monthly wages of contract labourers latest by 10th of subsequent month as well as deposit the statutory contributions within due date. In case of failure to do so, NALCO as principal employer will pay wages/release the payments to the concerned labourers at any time after the 10th of subsequent month without any further intimation.
- 19.4.** If the date of payment is beyond 10th of subsequent month or there is direct payment, Nalco reserves the right to recover up to 25% as administrative charge on the amount of labor payment plus GST on administrative charges in the RA/Final Bill.
- 19.5.** The contractor failing to make payment of labour wages as per applicable Law, may be debarred / banned for conducting future business with NALCO.
- 19.6.** Wage & other payments to the workmen engaged by the contractor should be made through Bank and the amount should be deposited in the respective account of the individual workmen within the stipulated period as per statute. The copy of the payment sheet along with the copy of bank statement is to be submitted to executing dept. & HRD dept. for necessary verification and record. One-time contract up to 89 Days and emergency contract may be excluded from this purview.
- 19.7. PRICE VARIATION FOR LABOUR:** Price variation for Labor (Wherever applicable): On subsequent revision of applicable minimum wages to be notified by NALCO from time to time the differential wage and associated components will be reimbursed based on actual payment to workmen, excluding OT amount and Administrative Charges on production of documentary proof to HR Dept regarding payment through bank.
- 19.8. PRICE VARIATION FOR FUEL:** Price variation on Fuel is normally not allowed. If price variation on Fuel is applicable it will be regulated as per the Special Conditions of Contract.

## 20. LABOUR LAWS:

**20.1.** The contractor shall abide by all applicable statutory provisions in respect of workmen deployed by him to the satisfaction of Central & State Government Authority. The contractor shall comply with the provisions of all statutes and amendments thereof at their cost for different legislations as under. The contractor shall have to abide by and comply with any Modification/ Change/ Amendment to the existing laws or introduction of any new law relating to the work and rules framed there under from time to time. The list is indicative and not exhaustive.

- 20.1.1. Building & other Construction Workers (RE & CS) Act 1996
- 20.1.2. Child Labor (Prohibition & Regulation) Act 1986,
- 20.1.3. Employees' Provident Fund and Miscellaneous Provisions Act, 1952.
- 20.1.4. Employees' State Insurance Act, 1948.
- 20.1.5. Factories Act, 1948
- 20.1.6. Industrial Dispute Act 1947,
- 20.1.7. The Inter-state Migrant Workmen (Regulation of Employment and Conditions of Service) Act, 1976
- 20.1.8. The Maternity Benefit Act 1961
- 20.1.9. Minimum wages Act 1948.
- 20.1.10. Payment of Wages Act 1936,
- 20.1.11. Payment of Bonus Act 1965,
- 20.1.12. Payment of Gratuity Act, 1972
- 20.1.13. Employees' Compensation Act 1923.
- 20.1.14. Contract Labour (R&A Act, 1970)

## 21. OCCUPATIONAL HEALTH & SAFETY MANAGEMENT SYSTEM:

- 21.1. Safety:** The contractor shall have to take necessary safety arrangements/ precautions for the workmen engaged by him and shall be responsible for any First Aid / Emergency treatment for his labours / workmen. In addition, the contractor shall have to abide by all fire & safety regulations of the owner. The contractor has to execute the works after taking necessary instruction & safety clearance from the safety officer.
- 21.2.** All lifting/handling tools & tackles deployed by the contractor should have been load-tested as per the prevailing rules & regulations. Mobile equipments such as Truck, Tractors, Tippers, Dumpers etc. shall have valid fitness certificate with due insurance required as per the prevailing rules & regulations. Wherever transport of material is applicable, the contractor has to ensure that goods carried during transportation do not exceed the permitted laden weight as certified by registering authority for the respective vehicles.
- 21.3. Personal Protective Equipment (PPE):** The contractor shall have to provide all the necessary PPE to the workmen engaged by them as per the requirement, area wise as mentioned in the PPE format. In case the contractor fails to provide PPEs as per requirement, at the time of starting the job, they will not be allowed to carry out the assigned job. PPEs can be got issued from NALCO on request with recovery of purchase cost, plus administrative charge @25% of Procurement cost as penalty plus GST on administrative charges as applicable. (Annexure-A3 of NIT).
- 21.4.** The contractor, before starting the work, shall collect a copy of the safety manual from Safety Department and shall abide by all instructions mentioned therein.

- 21.5. The contractor shall be responsible to promote awareness on the OSHAS requirements among the workmen engaged by them for the subject job and ensure adherence to sound OSHAS related practices as detailed in the "Occupation Health & Safety Policy" enclosed herewith. The contractor shall be responsible for abiding by all the applicable provisions of safety code of contractors which is available in the NALCO web site. The contractor shall contact Safety Dept. for getting necessary advice/compliances as required.
- 21.6. **Medical Checkup of Workmen:** Contractors will have to submit medical certificate from a Govt. Hospital or registered medical practitioner in the prescribed format for the workmen engaged by him along with application for gate pass and for annual renewal. No gate pass will be issued/ renewed unless the medical certificate is enclosed along with the application.
- 21.7. The contractor shall be fully responsible for accidents caused due to him or his agents workmen's negligence or carelessness in regard to the observance of the safety requirements and shall be liable to pay compensations for injuries.
- 21.8. Without prejudice to the right conferred by the Clause 16.7 above for stoppage of work for violating of safety requirements, the contractor shall be liable for penalty up to ` 3,000/- for the first violation and up to ` 5,000/- for the second violation. For the third violation, he shall be liable to be debarred from further contracts up to a period of one year minimum from the date of completion of jobs in hand.
- 21.9. The Engineer in-charge executing the contract will assess the penalty amount having regarded to all the circumstances, in particular the nature and the gravity of the violation & will issue a show-cause notice specifying therein the proposed penalty. Considering the cause shown by the Contractor, if any the Engineer in-charge executing the contract shall pass final orders which shall then be final and binding on the contractor. The penalty amount shall be recoverable from any bill and / or EMD / SD or the Contractor without any further reference to him.
- 21.10. Whenever work at height is involved, contractor must obtain working at height permit form concerned Dept. for these persons required to do work at height as per Appendix-C mentioned in safety code for contractors.

## 22. ENVIRONMENTAL REQUIREMENTS:

- 22.1. The contractor shall be responsible to promote awareness on the Environmental requirements among the workmen engaged by them for the subject job and ensure adherence to sound environmental practices as detailed in the "General Environmental Requirement & Environmental Policy" enclosed at Annexure-A7 of NIT.
- 22.2. The contractor shall remove all the waste/debris generated during the work on each occasion & dispose off to a place identified by Manager-in-charge. The thorough up-keeping of the work spot before the contractor leaves the work spot is essential. In case the contractor fails to comply with the above, the owner may get the up-keeping done & recover expenses incurred plus administrative charge @25% of the expenses incurred as penalty plus GST on administrative charges as applicable from the contractor.

## 23. ENERGY MANAGEMENT SYSTEM (ISO 50001):

- 23.1. The Energy Policy of NALCO is attached (Annexure-A6 of NIT). The Service Provider needs to comply all the requirements of the Policy in consultation with the Manager-in-Charge of the contract.
- 23.2. Mandatory guidelines for saving any form of energy: Energy is lifeline of an Organization and SMELTER / CPP, NALCO is implementing Energy Management Systems (EnMS) – ISO 50001 in all activities. The contractual service providers are advised to train his workmen for practicing the following "Dos & Don'ts" while executing the assigned work at site.
- 23.3. The Energy Policy of NALCO is attached. The Service Provider needs to comply all the requirements of the Policy in consultation with the Manager-in-Charge of the contract.

WHAT TO DO?	WHAT NOT TO DO?
1. Use compressed air for instrument cleaning if advised by NALCO	1. Never open any compressed air for body / dress/ vehicle cleaning.
2. Close water line valves if they are in open condition	2. Never allow any water line in open condition.
3. Use water for instrument equipment cleaning if advised by NALCO	3. Never use any water line of the plant for cleaning of bicycles / vehicles.
4. Use LPG for cooking if at all required	4. Never use any electrical heater for cooking or room heating.
5. Switch off lights/ fans in day time when not required	5. Never waste electricity in any way.
6. Touch only that part of equipment for which you are authorized by the Engr. I/C	6. Never touch any isolators / switches of any equipment.
7. Handle coke, pitch, oil (FO, HSD, LDO) & LPG with due care as they are costly.	7. Never waste any quantity coke, pitch, oil (FO, HSD, LDO) & LPG a drop of any types of oil.

## 24. QUALITY OF WORK:

- 24.1.** The contractor shall execute the job under their adequate supervision of experienced and qualified personnel in accordance with the best engineering practices and the specification laid down in the enclosed Annexures. NALCO may inspect the work any time without notice to the contractor and may order re-execution of sub-standard work reserving the right to recover compensation in terms of GCC.
- 24.2.** Inspection and test procedure given in the relevant clauses of the contract or BIS codes or other codes in practices as specified in the Scope of work / Special Conditions of Contract should be strictly followed.
- 24.3.** Contractor shall use instruments calibrated in a Laboratory, accredited to NABL / Laboratory approved by the manufacturer for measurements/tests/inspection.

## 25. DEFECT LIABILITY PERIOD (DLP):

- 25.1.** The DLP shall be governed by the detailed terms and conditions stipulated in clause 65 and 68 of GCC. The defect liability period shall be reckoned from the date of completion of the contract period for supply and workmanship unless mentioned otherwise in Scope of Work / Special Condition of Contract. Duration of DLP is mentioned at Page.2.
- 25.2.** DLP for SPECIALISED WORKS:
- 25.2.1. Water proofing (Below or above ground) and Roof treatment works -10 YEARS
  - 25.2.2. Post construction Anti-termite treatment - 5 YEARS
  - 25.2.3. Weather proof Paint works - 4 YEARS
- 25.3.** In some cases appropriate DLP can be considered depending upon the nature of the job.

## 26. PAYMENT TERMS:

- 26.1.** The contractor will complete the measurement of work done for the billing period in consultation with EIC/MIC. They will process the RA Bill along with necessary documents as defined under "Billing & Invoicing" for release of payment. It will be processed for release of payment after deductions in compliance to different statutes and retentions as recommended by EIC/MIC. Amount payable will be subjected to further adjustments against outstanding receivables against the vendor if any. The net amount will be paid online through RTGS/NEFT/IMPS/Internet Banking or any other online facility provided by our banker. Charges if any levied by respective banks, is to be borne by respective parties.



- 26.2. If the contract value is Rs.20,000/- or less, full and final bill will be admitted.
- 26.3. Payment against RA Bill will be considered only when the remaining period of the contract is not less than Billing Period defined in the contract or the remaining value of contract is not less than average periodic value executed up to previous RA Bill. In case the remaining period of contract is less than the billing period or the remaining value of contract is less than average periodic value executed up to previous RA Bill, specific declarations that "Final Bill will be submitted in time" will be sought from the contractor with certification by EIC/MIC before processing of RA Bill.
- 26.4. On award of the contract to the party, it becomes mandatory by the contractor to enclose a deviation statement with RA bill once the executed value of the work has reached 80% of the awarded value.
- 26.5. In case of Lump sum / Turnkey contract, the payment shall be released according to approved Billing schedule and Payment Terms specified in special conditions of contract.
- 26.6. Payment of GST is subject to reflection of the party's invoice in GSTR 2A/Anx-2 (GST new return) of NALCO. If the vendor fails to comply for two consecutive periods against one order, no further payment will be released till compliance is made by 'FILLING' up to last period. If a vendor submits proof of filing GSTR1 duly authenticated by Vendor on the Main page containing Nalco's GSTIN with 'FILLED' status and detail list of invoices generated from their GST login, for Invoices already paid by Nalco, then basic amount of subsequent Invoices may be released. However GST withheld will be released after checking of GSTR2A.
- 26.7. GST TDS as applicable at the prevailing rate on the gross amount billed shall be deducted from the contractor's bill.
- 26.8. Cess will be deducted from Gross bill value as per Building and Other Construction Workers' (RE&CS) Act 1996 for Township construction contracts. (construction, alteration, repairs, maintenance, demolition in relation to buildings, streets, roads, drainage, electrification, distribution of power, water works, communication works etc.)
- 26.9. Payment against Final Bill will not be released if royalty clearance certificate as stated under Royalty Clearance is not submitted by the vendor.

## 27. BILLING & INVOICING:

- 27.1. Measurement of the work done, during a period, against a Contract is very much essential for correct accounting. This is more so necessary at the end of each financial year. Therefore the contractors are expected to stick to the periodic billing schedule as per the Order. The billing system followed in Nalco is called Running Account Bills (RA Bills) to be generated in prescribed format through ERP system based on measurement of work done during a period with certification by Contractor and approval by EIC/MIC. RA Bills will be sequentially numbered and the last RA Bill will be called nth RA & Final Bill.
- 27.2. Period of raising RA Bill and GST Invoice will normally be 1 month unless otherwise specified in Special Condition of Contract. GST Invoice amount should always match to RA Bill / Final Bill amount.
- 27.3. The RA Bill (in duplicate) will be accompanied by
  - 27.3.1. Joint Measurement Sheet signed by Contractor & EIC/MIC.
  - 27.3.2. R.A. Bill Form signed by Contractor & EIC/MIC.
  - 27.3.3. Human Resource Dept. (HRD) Clearance (if applicable)
  - 27.3.4. Safety Certificate in 1st RA Bill issued by Safety Dept
  - 27.3.5. Any other document required by EIC/MIC or as per directive from statutory authorities.
  - 27.3.6. Deviation statement once the executed value reaches 80% of the Order value.



**27.4. Similarly, in addition to above the Final Bill (in quadruplicate) will be accompanied by**

- 27.4.1. Material Reconciliation Statement for Free Issue Material, (if applicable)
- 27.4.2. Stores Issue Voucher, Stores Return Voucher, Material Transfer Voucher if any.
- 27.4.3. No claim certificate duly signed by the contractor. (Annexure-C28 of NIT)
- 27.4.4. No due certificate from suggested by MIC. (Annexure-C28 of NIT)
- 27.4.5. Work Completion certificate from EIC/MIC. (Annexure-C29 of NIT)
- 27.4.6. Deviation Statement
- 27.4.7. Handing over / taking over certificate (wherever applicable)
- 27.4.8. Satisfactory commissioning protocol (wherever applicable)
- 27.4.9. Royalty clearance certificate (wherever applicable)
- 27.4.10. Electrical License (if required)
- 27.4.11. Dismantling of Temp Structure, Disconnection of Water/Elect. & Clearance of Charges.
- 27.4.12. Note: - Certificates not applicable to a particular work will be certified by the MIC.
- 27.4.13. Anti-Profiteering Declaration Format
- 27.4.14. As per Rule-47 of GST Act, time limit for issuing Tax Invoice is 30 days from the date of Supply of Service. Therefore RA/Final Bill must be submitted within 15 days from the end of the billing period. Any delay more than 30 days from Completion of Work will be considered as a failure in contractual terms and the contract may be closed ex-parte on the basis of certification of measurement and amount payable/recoverable considering all recoveries into account by the EIC/MIC. Decision of EIC/MIC shall be final & binding on the contractor. Besides above, the contractor may be treated as dormant or non-responsive and may affect assignment of further business to the vendor.

**27.5.** Party has to provide the copy of the Income Tax Return for each of the two previous Financial Years for which due date of filling of Income Tax Return has expired with self-certification is mandatory along with each GST Tax Invoice else suitable provisions of Act will be applicable.

**27.6.** Vendor / Party categorised / designated as "specified person" under Section 206AB of Income Tax Act, 1961 shall be liable for TDS at higher rate as provided under the said section, by NALCO. So, Vendors / Contractors are advised to submit self-certified copies of Income Tax return (ITR) for each of the Two Previous Years for which due date for filling of ITR has expired, along with the Invoice / Bill so as to facilitate NALCO, verify the applicability of Section 206AB.

**28. TAXES & DUTIES:**

**28.1. GOODS & SERVICES TAX (GST)**

- 28.1.1. The Rates indicated in Annexure-II are inclusive of all but exclusive of GST.
- 28.1.2. The contractor must provide GST No including copy of Registration Certificate.
- 28.1.3. The Trade Name in GST Certificate should match to the name in vendor code and name in the Cheque. The Legal name in the GST Certificate should match to Legal Name in the PAN. In case of a Company or a Firm all the names should be same. But in case of Sole Proprietorship, the Legal Name and Trade Name may be different.
- 28.1.4. The contractor should submit the GST Invoice as per the format Annexure-C9 of NIT providing HSN / SAC Code (first 6 digits) and GSTIN of both Vendor and Nalco in the form of Business to Business (B to B) transaction.
- 28.1.5. As per Rule-46 of GST Act, the Serial Number of Tax Invoice should be maximum up to 16 digits, and should be unique for a Financial Year.
- 28.1.6. As per Rule-47 of GST Act, time limit for issuing Tax Invoice is 30 days from the date of Supply of Service.
- 28.1.7. Payment of GST is subject to compliance as stated in Payment Terms.

28.1.8. The contractor shall be fully & solely responsible to the statutory authorities for compliance of all the provisions of GST and other statutory provisions applicable to this work as a service provider either already enacted or to be enacted from time to time during contractual period.

28.1.9. NALCO reserves the right to recover any penalty and Interest imposed on NALCO by the concerned statutory authorities due to non-fulfillment of GST compliance by the service provider.

## **28.2. Anti-Profiteering Clause (Sec 171 of CGST Act) Applicable for Indian Bidders)**

28.2.1. If any new Tax/Taxes is introduced on sale of goods/service. Either in lieu of existing tax/taxes or as separate tax/taxes, then the overall incidence of tax/taxes on the Vendor on account of its inputs and outputs wherever less than the incidence of existing taxes, then the Vendor shall pass on to Owner, the benefits thereof by way of commensurate reduction in the basic price w.r.t. Input Tax benefit and reduction in Tax chargeable to Nalco w.r.t. Output Tax benefits in connection with goods and/or services provided.

28.2.2. If on the other hand, the incidence of tax/taxes is in excess of the incidence of existing tax/taxes, the Owner on submission of satisfactory proof, shall reimburse the Vendor the additional incidence of tax provided they are within the contractual completion date.

28.2.3. The Vendor has to provide a declaration along with the Tender that they will abide by the requirements under CI 171 of CGST Act, 2017.

## **29. INCOME TAX:**

29.1. The contractor must provide PAN including copy of Registration Certificate.

29.2. Income Tax TDS as applicable at the prevailing rate on the gross amount billed shall be deducted from the contractor's bills.

29.3. The contractor shall be fully & solely responsible to the statutory authorities for compliance of all provisions applicable to this work as a service provider under Income Tax Act, already enacted or to be enacted from time to time during contractual period.

29.4. NALCO reserves the right to recover any penalty and interest imposed on NALCO by the concerned statutory authorities due to non-fulfillment of all provisions applicable to this work as a service provider under Income Tax Act, already enacted or to be enacted from time to time during contractual period.

29.5. Party has to provide the Copy of Income Tax Return for each of the Two previous Financial Years for which due date for filling of Income Tax Return has expired with self-certification is a mandatory requirement else suitable provisions of Act will be applicable.

30. **CESS UNDER RE&CS ACT:** Cess will be deducted as per Workers' (RE&CS) Act 1996 and as stated under payment terms.

31. **ROYALTY CLEARANCE:** As per Mines and Minerals Act of Govt. of Odisha the contractor is required to pay royalty for various types of construction materials (minor minerals) used in the work. The royalty charges shall have to be deposited in the office of Tahsildar from whose jurisdiction the minerals have been lifted and submitted along with Final Bill.

32. **Other Terms & Conditions:** The conditions mentioned in this work order are some of the important salient points. All the detailed terms, conditions & guidelines available in the NIT will be binding/applicable for this work order.

## **33. CONTRACT CLOSURE:**

33.1. Completion of work assigned through the contract within contractual period is both a contractual obligation and legal obligation on both the parties to the contract i.e. Contractor and Nalco. Closure of contract is achieved in stages through contractual terms or through mutual agreement/settlement. Submission of Final Bill is the 1st stage of closure. Successful completion of Defect Liability Period and Performance Guarantee Period is the 2nd Stage of closure. Settlement of all outstanding payables and receivables is the 3rd stage of closure.

33.1.1. It will be the responsibility of the Contractor in all three stages to lodge necessary claims with EIC/MIC and settle it as follows.

- 33.1.2. 1st stage - Submission of Final Bill, and Performance Guarantee Bond (PGB) maximum within 3 months from the end date of contract period.
- 33.1.3. 2nd stage - Submission of Claim letter for release of SD/PBG maximum within 15 days from the date of closure of Guarantee/DLP.
- 33.1.4. 3rd stage - Settlement of all outstanding relating to the Contract, before release of Contract Completion Certificate (Annexure-C29 of NIT) by EIC/MIC with concurrence of Finance regarding Contract Execution Value.
- 33.1.5. NALCO reserves the right to short close the contract by serving 15 days' notice to the contractor, when either the contract value or the assigned BOQ quantity has already been executed. The decision of NALCO in this regard shall be final & binding on the contractor.

#### 34. BLACKLISTING/BANNING/SUSPENSION/DELISTING OF BUSINESS/HOLIDAY LIST

**34.1. Blacklisting:** Blacklisting of any agency/ firm/ contractor working with the Company may be resorted to in following cases:

- 34.1.1. If the Proprietor or Partner or Director of the Firm is convicted by a Court of Law, following prosecution under the normal process of Law for an offence involving moral turpitude in relations to business dealings;
- 34.1.2. If security considerations including the question of loyalty to the State warrant as per recommendations of Ministry of Home Affairs.
- 34.1.3. If there is justification for believing that the Proprietor or Partner or Director (or Employee) of the Firm has been guilty of malpractices such as bribery, corruption, cheating, fraud, substitution of bid or theft or any other illegal activities while carrying out the work etc.
- 34.1.4. If the Firm refuses/fails to return the Company's dues without adequate cause;
- 34.1.5. If the Firm is blacklisted by any Department of the Central Government/ State Government.
- 34.1.6. If the Firm is a confirmed evader of Central / State taxes/duties for which NALCO has received notice from the concerned department of Central / State Govt.
- 34.1.7. Misbehavior/ threatening of departmental supervisory staff during work execution.
- 34.1.8. Constant non-achievement of milestones on insufficient and imaginary grounds and non-adherence to quality specifications despite being pointed out.
- 34.1.9. Persistent & intentional violation of important conditions of contract.
- 34.1.10. Submission of false/ fabricated/ forged documents for consideration of a bid.
- 34.1.11. If declared bankrupt or insolvent.

**34.2. Banning:** In case where the conduct of the firm is not serious enough to merit blacklisting but removing the name from the registered vendors of NALCO is justified in the interest of the company, the firm/company shall be banned from doing business with NALCO for a period up to 3 years but not less than one year. The reasons for banning are listed below. This list is illustrative only and not exhaustive.

- 34.2.1. Any failure to execute the contract satisfactorily.
- 34.2.2. Offence except criminal, such as moral turpitude, fraud, theft, unlawful activities within the premises of the company (Plant or Township) by the contractor or their workmen.
- 34.2.3. Defaults such as failing in disbursements of wages of the workmen/contract labourers in time at least twice in a contract period.
- 34.2.4. Submission of false declaration / documents in the offer.
- 34.2.5. Misconduct / misbehavior of the contractor or any of the workers engaged by them.

34.2.6. Non-compliance of environment, safety and health requirements including use of proper PPEs.

**34.3. Suspension of Business:** Temporary Suspension of business may be ordered without any notice, where full enquiry into the allegation is pending and may entail the blacklisting of the firm/ party/ contractor, if the allegation is proved. The list of the suspended party will be circulated to all Units and the reasons of suspensions shall not be communicated to the firm confirmed. Suspension of business may also be considered if the firm resorts to any legal dispute by filing suite in a court of law.

**34.4. Delisting from Vendor List against all Contracts:**

34.4.1. Party's performance is being evaluated through online assessment system by the respective Managers-in-Charges for the works being executed at site / at party's premises.

34.4.2. The assessment ratings are reviewed and the contractors are reminded for improvement in next assessment period if their performance rating is poor.

34.4.3. If two consecutive assessments of a contract are Very poor in a single evaluation / Safety & Environmental requirements compliance is not O.K. / SA 8000:2008 Compliance is not OK, then the concerned Vendor will be delisted for one year for that particular job subject to approval by Competent Authority of NALCO and the vendor will be intimated through a letter.

34.4.4. The delisted Vendor may be re-enlisted upon the request of the Vendor on completion of the de-listment period and subsequent approval by Competent Authority of NALCO.

34.4.5. If any vendor is Black-listed / Banned by any units of NALCO, the Vendor will also be delisted.

34.4.6. In case the performance of the vendor is found to be unsatisfactory by the Manager-in-charge, the vendor may not be considered in future tender for similar jobs.

**34.5.** NALCO will issue show-cause notice giving 15 days' time to the contractor to respond the same in cases of debarring/ blacklisting/ banning/ suspension of business with the party.

**34.6. If any varying of conflicting situation arises in any of the document forming part of the Contract, NALCO's decision with regard to intention/interpretation of the document and the decision shall be final and binding on the parties.**

**35. TERMINATION OF CONTRACT:**

**35.1.** If the performance is found unsatisfactory during the period of contract, the contract will be terminated with short notice of 15 days and the same shall be carried out by any other agency at the risk & cost of the contractor. Other penal actions such as forfeiture of EMD and Security Deposit and debarring the contractor for participating in future tenders of NALCO may also be taken as per clause no. given in this Annexure-A1 of NIT.

**35.2.** If the Government of India or any Statutory Authority/empowered to do so, decides/directs to terminate the Contract, the contract shall be terminated without any notice and for that contractor shall not be entitled to any claim such as extra claim, loss, loss of profit etc. against NALCO. The settlement of the dues of contractor shall be done on the basis of execution of actual work in accordance with the terms & conditions of contract.

**35.3.** Short Closure of Contract: NALCO reserves the right to short close the contract by serving 15 days' notice to the contractor, when either of the contract value is executed or the assigned BOQ quantity is exhausted. The decision of NALCO in this regard shall be final & binding on the contractor.

**36. ARBITRATION:**

The clause No.87 of General Conditions of contract shall be applicable in case of any dispute or difference whatsoever, which may arise at any point of time. Subject to all other provisions contained in clause 87 of GCC, the provisions of the Arbitration and Conciliation Act, 1996 or any statutory

modification or re-enactment thereof and the rule made there under, and for the time being in force shall apply to the arbitration proceeding under this clause.

37. **JURISDICTION:** For all disputes arising out of this contract, jurisdiction of honourable courts in Angul, Odisha shall apply. The contract is constructed according to and governed by laws in force in India.

**Annexure-C32**

**Format:- (To be submitted at the time of release of Final Due)**

**ANTI-PROFITEERING DECLARATION FORMAT**

To whomsoever it may concern.

I, Mr. \_\_\_\_\_, Proprietor/\_\_\_\_\_ (other authorized signatories) of M/s. \_\_\_\_\_, hereby solemnly and sincerely declare that, while executing the Order No. \_\_\_\_\_ Dt.\_\_\_\_\_, me/my firm/my company has abided by all Tax Laws and Rules including but not limited to Section 171 of the Central Goods and Services Tax Act, 2017.

I further declare that, me/my firm/my company, in furtherance and in compliance to the said section, have not made profit out of reduction in Input Tax benefits wherever applicable and reduced Tax charged to 'Nalco' w.r.t. Output Tax benefits in connection with goods and/or services provided.

I also declare that "Commensurate benefit of reduction in rate of tax or benefit of input tax credit in the Purchase Order / Work Order / Contract No..... Dt..... has been passed on to NALCO."

I further declare that the foregoing is true and correct and the same is a legal obligation and failure to fulfil it could result in penalties under the law.

Date: \_\_\_\_\_

Place: \_\_\_\_\_

To be signed by the authorized person under the firm's seal.



PART –C

Formats for Contract Execution

Sl. No.	Description	Annexure
1.	Safety guidelines	Annexure-A2
2.	PPE Matrix/Requirements	Annexure-A3
3.	Environmental policy	Annexure-A4
4.	OHS Policy & Quality Policy	Annexure-A5
5.	Social Accountability (SA) / Energy policy	Annexure-A6
6.	General Environment Requirement / Minimum safety equipment	Annexure-A7
7.	Tax invoice	Annexure-C9
8.	Bank Mandate for e-Payment	Annexure-C10
9.	Indemnity Bond – FIM	Annexure-C11
10.	Bank Guarantee CPGB	Annexure-C13
11.	Bank Guarantee Performance Security	Annexure-C14
12.	Bank Guarantee FIM	Annexure-C15
13.	Bank Guarantee Advance	Annexure-C16
14.	List of standardized banks	Annexure-C17
15.	SAC codes for Services & HSN codes for supply	Annexure-C18
16.	Pre-contract Integrity pact	Annexure-C21
17.	Agreement	Annexure-C23
18.	No Claim/No due certificate	Annexure-C28
19.	Completion certificate	Annexure-C29
20.	Completion certificate (For work orders issued after 1st August 2020)	Annexure-C29 A
21.	Anti-Profiteering Declaration Format (To be submitted at the time of release of Final Due)	Annexure-C32
22.	General Conditions of Contract (GCC)	

The above formats are available in the NIT document in the online portal vide Tender id no. **GEM/2024/B/4987416**.