#### **ANNEXURE-B4**

Tender Inviting Authority: Mrs. Anjana Mundu, Sr.Mgr.(Chem.), T&C Dept., Smelter Plant, NALCO, Angul.

Name of Work:- Providing & Laying of Roof top Permanent Life line system inside Smelter Plant (Phase-II).

Tender No. SMLT/T&C/GeM/OMC-5948/NIT/5266 Date: 08.03.2025

#### **BILL OF QUANTITIES**

#### Name of the bidder

#### APPLICABLE GST FOR THE TENDER IS 18%.

	7	LIOTIDEE O	,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,	IIIL ILINDLI	10 10 701	ľ	
SI. No.	Item Description	Unit	Quantity	Unit Rate Excluding GST in Rs	Amount Excluding GST in Rs	GST Amount in Rs @ 18%	Amount including 18% GST in Rs
1	2	3	4	5	6	7	8
1	Purlin connect end post	NO	402.00		0.00	0.00	0.0
2	Monitor connect end post	NO	110.00		0.00	0.00	0.0
3	Purlin connect intermediate roof post	NO	731.00		0.00	0.00	0.00
4	Monitor connect intermediate post	NO	1126.00		0.00	0.00	0.0
5	Intermediate bracket	NO	1857.00		0.00	0.00	0.0
6	Purline connect corner roof post	NO	8.00		0.00	0.00	0.00
7	Corner bracket	NO	8.00		0.00	0.00	0.00
8	Fabricated monitor extension arm.	NO	1236.00		0.00	0.00	0.00
9	Energy absorber	NO	273.00		0.00	0.00	0.00
10	Line Tensioner	NO	273.00		0.00	0.00	0.00
11	Wire rope	Meter	23471.00		0.00	0.00	0.00
12	Crest Mount fasteners with umbrella prot	NO	10254.00		0.00	0.00	0.00
13	Nut of SS-316	NO	9916.00		0.00	0.00	0.00
14	Stud bolt	NO	4958.00		0.00	0.00	0.00
15	Cable estremity	NO	546.00		0.00	0.00	0.00
16	Inspection Tag	NO	273.00		0.00	0.00	0.00
17	Intermediate runner	NO	206.00		0.00	0.00	0.0
18	Lanyard with Double scaffold hook	NO	10.00		0.00	0.00	0.00
19	Full body harness	NO	10.00		0.00	0.00	0.00
20	Work restraint Lanyard - 15 M	NO	10.00		0.00	0.00	0.0
21	Karabiner	NO	223.00		0.00	0.00	0.0
22	Extender bar	NO	17.00		0.00	0.00	0.0
23	Bottom bracket	NO	17.00		0.00	0.00	0.00
24	Wire guide intermediate bracket	NO	15.00		0.00	0.00	0.00
25	Fall arrestor	NO	17.00		0.00	0.00	0.0
SUM TOTAL AMOUNT (In Rs.) 0.00						0.00	0.00
TOT A	AL AMOUNT INCLUDING GST (THIS VALU	IF TO BE OUO	TED IN TH	E GEM PORTAL	)		0.00

Note: 1) The bidder has to quote the unit rates in the blue coloured cells upto two decimels only. Unit rate shall be excluding GST

<sup>2)</sup> After filing up the BOQ, the value obtained in the TOTAL AMOUNT INCLUDING GST Shall be quoted as the price for the contract in GeM portal

<sup>3)</sup> The bidder has convert this EXCEL sheet to PDF and upload the same in GeM portal at the Financial breakup location

<sup>4)</sup> Name of the bidder is to be entered in the Green Cell of the BOQ.



TENDER No.: SMLT/T&C/GeM/OMC-5948/NIT/5266

SUBJECT: PROVIDING & LAYING OF ROOF TOP PERMANENT LIFE LINE SYSTEM INSIDE SMELTER PLANT (PHASE-II).

Line Item No	Activity SINo.	Description
1		ITEM DESCRIPTION
_		
1	1	Purlin connect end post
commissioning	& water proofii	urlin connect end post, conforming to EN 795 class-A1 with material SS 316 & MBS 44 KN, including testing ng (if required) along with training of standard operation procedure as per drawings/technical specifications. All the lifter and (MS)scaffolding is the scope of vendor up-to 50 meter(Height). Complete as directed by manager-in-charge.
1	2	Monitor connect end post
commissioning	& water proofing	Monitor connect end post, conforming to EN 795 class-A1 with material SS 316 & MBS 44 KN, including testing ng (if required) along with training of standard operation procedure as per drawings/technical specifications. All the lifter and (MS)scaffolding is the scope of vendor up-to 50 meter(Height). Complete as directed by manager-in-charge.
1	3	Purlin connect intermediate roof post
testing, commis	sioning & wate e, machineries	in connect intermediate roof post (PCB), conforming to EN 795 class-A1 with material SS 316 & MBS 44 KN, including r proofing (if required) along with training of standard operation procedure as per drawings/technical specifications. Al , man-lifter and (MS)scaffolding is the scope of vendor up-to 50 meter(Height). Complete as directed by
1	4	Monitor connect intermediate post
commissioning tools-tackle, ma #	& water proofing chineries, man-	nitor connect Intermediate post, conforming to EN 795 class-A1 with material SS 316 & MBS 44 KN, including testing ng (if required) along with training of standard operation procedure as per drawings/technical specifications. All the lifter and (MS)scaffolding is the scope of vendor up-to 50 meter(Height). Complete as directed by manager-in-charge.
1	5	Intermediate bracket
finishing, includ	ing testing, cor All the tools-tack	ermediate Bracket, conforming to EN 795 class-A1 with material SS 316 & MBS 36 KN & for 8mm SS wire rope with mmissioning & water proofing (if required) along with training of standard operation procedure as per drawings/technicakle, machineries, man-lifter and (MS)scaffolding is the scope of vendor up-to 50 meter(Height). Complete as directed by
1	6	Purline connect corner roof post
commissioning	& water proofing	in connect corner roof post, conforming to EN 795 class-A1 with material SS 316 & MBS 44 KN, (PCB) including testing (if required) along with training of standard operation procedure as per drawings/technical specifications. All the lifter and (MS)scaffolding is the scope of vendor up-to 50 meter(Height). Complete as directed by manager-in-charge.
1	7	Corner bracket
including testi	ng, commission All the tools-tack	ner bracket, conforming to EN 795 class-A1 with material SS 316 & MBS 36 KN & for 8mm SS wire rope with finishing ning & water proofing (if required) along with training of standard operation procedure as per drawings/technica cle, machineries, man-lifter and (MS)scaffolding is the scope of vendor up-to 50 meter(Height). Complete as directed by
1	8	Fabricated monitor extension arm.
	tallation of fabr	icated monitor extention arm including testing & commissioning along with training of standard operation procedure as
	•	ations. All the tools-tackle, machineries, man-lifter and (MS)scaffolding is the scope of vendor up-to 50 meter(Height) ger-in-charge.
per drawings/te	•	

powder coating including testing & commissioning along with training of standard operation procedure as per drawings/technical specifications. All the



TENDER No.: SMLT/T&C/GeM/OMC-5948/NIT/5266 SUBJECT: PROVIDING & LAYING OF ROOF TOP PERMANENT LIFE LINE SYSTEM INSIDE SMELTER PLANT (PHASE-II).

Line Item No	Activity SINo.	Description
tools-tackle, ma	chineries, man-	lifter and (MS)scaffolding is the scope of vendor up-to 50 meter(Height). Complete as directed by manager-in-charge.
1	10	Line Tensioner
along with trai	ning of standa	e Tensioner, conforming to EN 795 class-A1 with material SS 316 & MBS 36 KN, including testing & commissioning rd operation procedure as per drawings/technical specifications. All the tools-tackle, machineries, man-lifter and vendor up-to 50 meter(Height). Complete as directed by manager-in-charge.
1	11	Wire rope
operation proce	dure as per dra	e rope SS316L & diameter 8mm, MBS 36 KN, including testing & commissioning along with training of standard awings/technical specifications. All the tools-tackle, machineries, man-lifter and (MS)scaffolding is the scope of vendor as directed by manager-in-charge.
1	12	Crest Mount fasteners with umbrella prot
including testir	g & commissio	est mount fasteners with umbrella protection cap, conforming to EN 795 class-A1 with aluminium alloy of dia 8mm ning along with training of standard operation procedure as per drawings/technical specifications. All the tools-tackle, s)scaffolding is the scope of vendor up-to 50 meter(Height). Complete as directed by manager-in-charge.
1	13	Nut of SS-316
	cal specification	
1	14	Stud bolt
	All the tools-tack	d bolt including testing & commissioning along with training of standard operation procedure as per drawings/technical tle, machineries, man-lifter and (MS)scaffolding is the scope of vendor up-to 50 meter(Height). Complete as directed by
1	15	Cable estremity
	technical spec	le Extremity of material SS 316 including testing & commissioning along with training of standard operation procedure fications. All the tools-tackle, machineries, man-lifter and (MS)scaffolding is the scope of vendor up-to 50 meter(Height). ger-in-charge.
1	16	Inspection Tag
with training of	standard operat	ection Tag of aluminium alloy and with electroplated finishing of thickness 3mm including testing & commissioning along ion procedure as per drawings/technical specifications. All the tools-tackle, machineries, man-lifter and (MS)scaffolding meter(Height). Complete as directed by manager-in-charge.
1	17	Intermediate runner
commissioning	along with traini	ermediate Runner conforming to EN 795 class A1 and of material SS 316 having dia of 8mm, including testing 8 ng of standard operation procedure as per drawings/technical specifications. All the tools-tackle, machineries, man-lifted e of vendor up-to 50 meter(Height). Complete as directed by manager-in-charge.
1	18	Lanyard with Double scaffold hook
Supplying & Instraining of stand	tallation of GI L lard operation p	anyard conforming to EN 362/EN 355/EN350 with double Scaffold hook including testing & commissioning along with rocedure as per drawings/technical specifications. All the tools-tackle, machineries, man-lifter and (MS)scaffolding is the (Height). Complete as directed by manager-in-charge.
<u> </u>	1	



TENDER No.: SMLT/T&C/GeM/OMC-5948/NIT/5266 SUBJECT: PROVIDING & LAYING OF ROOF TOP PERMANENT LIFE LINE SYSTEM INSIDE SMELTER PLANT (PHASE-II).

Line Item No	Activity SINo.	Description
including testin	g & commission	Body Harness conforming to EN 361/EN 358 /EN813 and of polyester material and weight 123 kg with MBS 15 KN ning along with training of standard operation procedure as per drawings/technical specifications. All the tools-tackle s)scaffolding is the scope of vendor up-to 50 meter(Height). Complete as directed by manager-in-charge.
1	20	Work restraint Lanyard - 15 M
along with train	ning of standar	Restraint Lanyard-15M of polyimide material of dia 14mm conforming to EN 355, including testing & commissioning doperation procedure as per drawings/technical specifications. All the tools-tackle, machineries, man-lifter and vendor up-to 50 meter(Height). Complete as directed by manager-in-charge.
1	21	Karabiner
operation proce	dure as per dra	biner conforming to EN 362/B, EN 12275/B of steel, including testing & commissioning along with training of standard wings/technical specifications. All the tools-tackle, machineries, man-lifter and (MS)scaffolding is the scope of vendo te as directed by manager-in-charge.
1	22	Extender bar
along with train	ning of standar	under Bar conforming to EN 353 class A1 of material SS 316 with powder coating, including testing & commissioning doperation procedure as per drawings/technical specifications. All the tools-tackle, machineries, man-lifter and vendor up-to 50 meter(Height). Complete as directed by manager-in-charge.
1	23	Bottom bracket
along with train	ning of standar	om Bracket conforming to EN 795 class A1 of material SS 316 with powder coating, including testing & commissioning doperation procedure as per drawings/technical specifications. All the tools-tackle, machineries, man-lifter and vendor up-to 50 meter(Height). Complete as directed by manager-in-charge.
1	24	Wire guide intermediate bracket
training of stand	lard operation p	e Guide Intermediate Bracket conforming to EN 795 of material SS 316, including testing & commissioning along with rocedure as per drawings/technical specifications. All the tools-tackle, machineries, man-lifter and (MS)scaffolding is the (Height). Complete as directed by manager-in-charge.
1	25	Fall arrestor
operation proce	dure as per dra	Arrestor conforming to EN 360 and material SS 316, including testing & commissioning along with training of standard wings/technical specifications. All the tools-tackle, machineries, man-lifter and (MS)scaffolding is the scope of vendo te as directed by manager-in-charge.



National Aluminium Company Limited

# TECHNICAL SPECIFICATION

### **INDEX**

SN NO	HEADING	PAGE NO
1	Roof Top Horizontal Lifeline System	3
2	Vertical Lifeline System	39

## I.Rooftop Horizontal Lifeline System

#### a. Background:

Horizontal Lifeline Systems, also known as HLL systems, are utilized in many of the fall arrest and fall restraint systems. Horizontal lifelines are common fall protection solutions in work areas that lack existing anchor points for personnel tie–off. In simplest form, the horizontal lifeline consists of a cable attached to two or more anchor points on a roof-top, crane runway, bridge or outdoor construction site, or anyother elevated work area that poses a fall risk to personnel. A horizontal lifeline can be positioned at the base of the structure (e.g., a roof), overhead (e.g., a gallows style system commonly used for railcar and truck load/unloading applications), or somewhere in-between these points (e.g., a crane rail application).

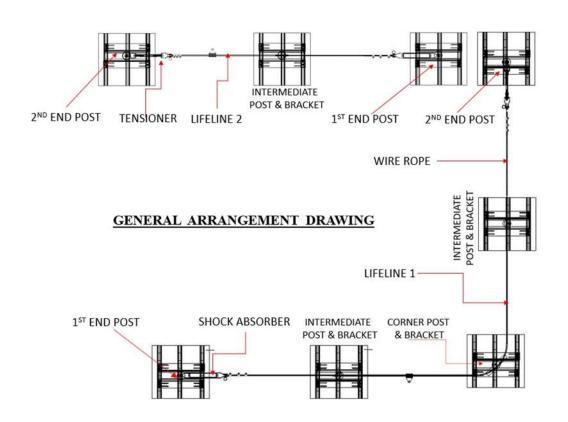
Lifeline systems include dedicated attachment brackets, safety lanyards and harnesses. When used in combination with personal protective equipment, a horizontal lifeline can arrest a fall, limiting the amount of force that is transferred both to the worker andthe fall arrest system. This same combination of horizontal lifeline, body harness, and lanyard can also serve as a fall restraint system, limiting the worker's ability to move close enough to fall over an unprotected leading edge. The fall restraint and fall arrest properties of horizontal lifelines make the HLL an integral part of many fall protectionsystems.

#### b. Definition:

A component consisting of a flexible line for connection to an anchorage at both ends to stretch horizontally (horizontal lifeline), and which serves as a means for connecting other components of a personal fall arrest system to the anchorage.

#### c. Types of Horizontal Lifeline System:

- (1) Trapezoidal Roof Lifeline
- (2) Monitor Roof Lifeline
- (3) Standing Seam Roof Lifeline
- (4) Fragile (AC/POLYCARBONATE) Roof Lifeline
- (5) Klip Lock and Kalzip Roof Lifeline



**Table-I.1 List of Components in roof top lifeline system per line** 

Sr No.	Components
1	Purlin/Monitor Connection End Post
2	Purlin/Monitor Connection Intermediate Post
3	Intermediate Bracket
4	Purlin /Monitor Connection Corner Post
5	Corner Bracket
6	Tensioner
7	Shock Absorber
8	Wire Rope
9	Runner
10	Lanyard with Double scaffold Hook
11	Full Body Harness
12	Adjustable Work RestraintLanyard(WRL=15m)
13	Karabiner(Connector)

#### d. Description of Rooftop Lifeline components

#### i. Purlin Connection End Post:-

Purlin Post is a post which is placed on ends and at intervals as intermediates of the system which form as an anchor point for wire rope running across the system. The purlin post is rivetted on the roof with help of blind rivets or nut bolting. Each post will have min 12 rivets. Metal Roof post is best suitable for flat metal sheet, trapezoidal sheets, Standing seam sheets etc.

Conformity: EN 795 Class A1

Material: SS 316

**MBS**: 44 kN

**LXBXH**= As per EN standard and should work as shock absorbing post.

Finishing: Powder Coating

Weight: As per Safety standard (EN 795/C)

**Fixing:** Drilling and CCF (Puncturing)

**Application:** On Trapezoidal/corrugated metal sheet

#### ii. Eye Bolt

An eye bolt is a bolt with a loop at one end. They are used to firmly attach a securing eye to the post, so that wire ropes can be tied to it.

**Conformity:** EN 795 Class A1 / CEN/TS 16415: 2013

Material: SS 316

Size: M12

Finishing: Plating

**Application:** For fixing shock absorber/tensioner

#### iii. Purlin Connection Intermediate Post: -

The Intermediate post is same as end post only eye bolt is replaced by intermediate bracket. It is installed at interval of 10 to 12 meter in line to avoid slag and to overcome self-weight of wire rope. Multiple holes are there to meet the center-to-center distance of the crest of the sheets.

The cylinder on the top of the post is designed in such a way that it absorbs most of the impact during a fall. Energy Absorbing Anchor Posts designed to limit load in theevent of a fall and absorb the energy integrally.

Conformity: EN 795 Class A1

Material: SS 316

**MBS**: 44 kN

**LXBXH**= As per EN standard and should work as shock absorbing post.

Finishing: Powder Coating

Weight: As per Safety standard (EN 795/C)

Fixing: Drilling and CCF (Puncturing)

**Application:** On Trapezoidal/corrugated metal sheet

#### iv. Intermediate Bracket

Designed to allow the Traveler to pass over the brackets without detaching from the system. Maximum span of 12m between Intermediate Brackets.

Conformity: EN 795 Class A1

Material: SS 316

MBS: 36kN

Range: for 8mm SS wire rope

Finishing: Plating

Weight: As per Safety standard (EN 795/C)

Fixing: by Bolt applying torque 12N.m

**Application:** used for intermediate support

**Quantity:** 1 nos. number for each intermediate post

#### v. Purlin Connection Corner Post: -

The corner post is used where line is turned in 90 degrees. Multiple holes are there to meet the center-to-center distance of the crest of the sheets. The cylinder on the top of the post is designed in such a way that it absorbs most of the impact during a fall. Energy Absorbing Anchor Posts designed to limit load in the event of a fall and absorb the energy integrally

Conformity: EN 795 Class A1

Material: SS 316

**MBS**: 44 kN

**LXBXH**= As per EN standard and should work as shock absorbing post.

Finishing: Powder Coating

Weight: As per Safety standard (EN 795/C)

Fixing: Drilling and CCF (Puncturing)

Application: On Trapezoidal/corrugated metal sheet

#### vi. Corner Bracket

Corner Brackets fit on post which are be provided on lifeline at every corner allowing the wire rope to turn 90 degrees as well as preventing slackness in the rope and ensures runner to pass through it.

Conformity: EN 795 Class A1

Material: SS 316

MBS: 36kN

Range: for 8mm SS wire rope

Finishing: Plating

Weight: As per Safety standard (EN 795/C)

Fixing: by M12 Bolt

**Application:** used for corner support (90 degree)

Quantity: 1 nos. number for each corner post

#### Vii ) Shock Absorber: -

To dissipate the energy generated during a fall. The Energy Absorber is designed to dissipate the energy generated throughout the system and reduce the ed loadings to below 6kN. This device decreases the impact on the user and on the system both. Installations require an absorber to be installed at one end of the system. The element is a disposable device which must be replaced after each fall.

Conformity: EN 795 Class A1

Material: SS 316

Activating force: minimum 3kN

Range: Limit the impact less than 6kN

Finishing: Powder Coating

**Weight:** As per Safety standard (EN 795/C)

**Stages:** Should be two stage shock absorbers

**Fixing:** One side with eye bolt and another with wire rope and thimble

#### vii. Tensioner:

A Tensioner is an approved device located between the two anchorage points and provides required tension to the safety line so that the sag in the system is mini-mum and within the acceptable limit. The Tensioner device is made of SS-316. The tensioner is equipped with a tension indicator signifying the appropriate tension in the line. The tensioner should have a internal stopper to prevent accidental opening of tensioner from the line.

Conformity: EN 795 Class A1

Material: SS 316

**MBS:** 36 kN

Finishing: Plating

Weight: As per Safety standard (EN 795/C)

Fixing: One side with eye bolt and another with wire rope and thimble

Quantity: 1 nos. number for each lifeline

**Purpose:** Tensioner is used to give tension in lifeline.

#### viii. Wire rope: -

wire rope of Dia 8mm, made of SS 316L, 7x 19 construction with breaking strength of 3600 Kgs. Available in different lengths cut as per lifeline running bay.

Conformity: EN 795 Class A1

Material: SS 316

Construction: 7x19

Dia.: 8mm

**MBS:** 36kN

Weight: As per Safety standard (EN 795/C)

#### ix. Horizontal Wire rope Runner: -

Wire rope runner slides through wire rope. It helps user to cover all area without disconnecting from lifeline. It can pass easily from intermediate bracket corner bracket without removing it.

Conformity: EN 795 Class A1

Material: SS 316

Dia.: 8mm

Weight: As per Safety standard (EN 795/C)

Finish – Electroplated

**MBS** – 25KN

#### x. Cable extremity:

End terminal forms the connecting part between two parts. Easy to install with high resistive force. End terminal is made of SS-316 with breaking strength greater than 25KN.

Material: SS 316

Range: for 8mm SS wire rope

Finishing: Plating

Weight: As per Safety standard (EN 795/C)

**Fixing:** by applying torque 11N.m

Application: used for fastening the wire rope at the end

Quantity: 2 sets for 1 lifeline (1 set=6 nos. of dog clamps and 2 thimble)

#### xi. Work restrain Lanyard: -

It is not possible to install lifeline on all roofs. To work away from lifeline work, restrain lanyard it used. WRL has inbuilt shock absorber. It also has inbuilt antilocking system which allows user to work freely by fixing his location.

Sizes: 5/10/15 m

Material: Polyimide

**Dia**.: 14mm

#### xii. Inspection Tag

Inspection tag is fixed on each line, it has information regarding number of users allowed to work, date of installation, date of AMC, conformity etc.

Material: Aluminum Alloy

Finishing: Electroplated

Thickness: 3mm

**Application:** shows installation and inspection due date

Quantity: 1 no. per lifeline

.

#### xiii. Full Body Harness

Designed for fall arrest, rope access, restraint, work positioning, controlled descent, and rescue purposes. Has 5 metal attachment points: 1 x Dorsal and 1 Sternal D - Ring for Fall Arrest. 1 x Ventral D - Ring at waist level for Rope Access work. 2 x Lateral D - Rings for Work Positioning. Suspension leg straps allows for increased comfort. Maximum comfort by breathing antibacterial and ergonomic waist, leg and shoulder pads.

Conformity: EN 361, EN 358, EN 813

Material: Polyester

Weight: 1 to 3Kg

**MBS** – 15KN

#### Xiv) Carabiner

Oval carabiner available in alu alloy and carbon steel versions with a circular rod. It is recommended for use with mobile devices (Pulley, Blockers, Fall arresters.) Equipped with a screw sleeve and suitable for professional application. The key lock system prevents any accidental entanglement in the rope or anchor point.

Conformity: E	N 362/B, EN 122/5/	В		
Material: Stee	j			
Weight: As per	Safety standard			
<b>MBS –</b> 22KN				
				16

#### e. Specification of Rooftop Lifeline components.

#### I. Purlin Connection End Post: -

Specification	Material / Finish	Warranty	Marking	Standard Conformi ty
<ol> <li>PCP end post (Purlin connects post) is the starting anchor post of the lifeline. It connects to the shock absorber/tensioner.</li> <li>Anchor post is the end post, present at both the ends.</li> <li>Anchor End post is made of Stainless-Steel SS316 material.</li> <li>The Anchor end post is equipped with an energy redirecting agent (absorbing).</li> <li>The energy redirecting agent inside the anchor post, redirect the energy to the base of the post. this allows the post to take maximum impact load.</li> <li>The energy redirecting agent also absorbs energy, which makes all post as energy absorbing and energy redirecting post.</li> <li>Anchor post base should be fixed to purlin by min 3 crest connection of trapezoidal sheet with min 2 connection fasteners on each crest.</li> <li>the base of anchor post shall be square, rectangular or circle with min side/diameter, min length of 350 mm.</li> <li>The energy redirecting agent should not be welded to the base plate of anchor post. the welded reduces strength plus cracks in the course of time. special housing provision is to be made.</li> <li>Min. breaking strength of anchor post shall be greater than 40KN.</li> <li>The device shall be powder quoted of electroplated additionally to protect from industrial metal dust, chemical or surface corrosion.</li> <li>The device should be laser marked with brand, model no., material, unique identification no. for complete traceability.</li> </ol>	Stainless Steel SS 316/ electropla ting or	5 years	unique ID no. with month or year of manufactur elng / brand or make/ model no. / breaking strength.	EN 795:2012 CEN/TS 16415:201 3

#### II. Purlin Connection Intermediate Post: -

Specification	Material/ Finish	Warranty	Marking	Standard Conformity
<ol> <li>PCP Intermediate post is the placed at regular interval which down not exceed post to post as 10 mtr.</li> <li>Anchor post is the end post, present at both the ends.</li> <li>Anchor End post is made of Stainless-Steel SS316 material.</li> <li>The Anchor end post is equipped with an energy redirecting agent (absorbing).</li> <li>The energy redirecting agent inside the anchor post, redirect the energy to the base of the post. this allows the post to take maximum impact load.</li> <li>The energy redirecting agent also absorbs energy, which makes all post as energy absorbing and energy redirecting post.</li> <li>Anchor post base should be fixed to purlin by min 3 crest connection of trapezoidal sheet with min 2 connection fasteners on each crest.</li> <li>the base of anchor post shall be square, rectangular or circle with min side/diameter, min length of 350 mm.</li> <li>The energy redirecting agent should not be welded to the base plate of anchor post. the welded reduces strength plus cracks in the course of time. special housing provision is to be made.</li> <li>Min. breaking strength of anchor post shall be greater than 40KN.</li> <li>The device shall be powder quoted of electroplated additionally to protect from industrial metal dust, chemical or surface corrosion.</li> <li>The device should be laser marked with brand, model no., material, unique identification no. for complete traceability.</li> </ol>	Stainless Steel SS 316/ electroplati ng or powder coating finish.	5 years	unique ID no. with month or year of manufacturi ng / brand or make/ model no. / breaking strength.	EN 795:2012 CEN/TS 16415:2013

#### III. Shock Absorber: -

Specification	Material / Finish	Warranty	Marking	Standard Conformit y
<ol> <li>Shock absorber is designed to absorb impact energy in the lifeline, limiting the shock transferred to the system min. below 10KN. Should be made of non- corrosive material, SS316.</li> <li>Shock absorber has two ends. one for connection to the end anchor post, other for connection to the cableextremity.</li> <li>Guider to the eye slot on both the sides of shockabsorber the maintain the integrity of device underload.</li> <li>Shock absorber should be 2 stage shock absorbers with different energy absorbing capability.</li> <li>The absorber should be covered with Polyolefin material which protects the device from heat, cold andindustrial dust.</li> <li>Stage 1 - is the spring side of absorber. the spring is important to absorb vibratory motion, mechanical oscillation, vibration due to usage of line.</li> <li>Spring should be heavy duty medium load, coated for protection from corrosion and identification.</li> <li>The spring should have minimum outer diameter of min.</li> <li>myth min. free length of 90mm.</li> <li>Deflection ranges from 23mm to 29mm.</li> <li>load at 1mm deflection should range between 5kgf. to 7 kg</li> <li>Stage 2 - is made of tension balls which absorbs energy under load by crushing or deforming.</li> <li>There should be min 3 such balls or energy absorbing crushing agents.</li> <li>The balls shall be replaceable in case of deformationafter inspection.</li> <li>Stage 2 of absorber is guided by min 3 slots which passes through a special tear slot for additional frictionin the motion of dynamic absorption of energy.</li> </ol>	Stainless Steel SS 316/ electropla ting or powder coating finish.	5 years	unique ID no. with month or year of manufactur ing / brand or make/ model no. / breaking strength.	L CENIZIS I

Specification	Material/ Finish	Warranty	Marking	Standard Conformity
16. The tear slot, guides the absorbing ball, plus allows uniform distribution of energy.  17. Length of shock absorber shall be greater than 400mm, minimum width of 35mm.  18. The breaking strength of absorber shall be greater than 36KN.  19. Weight of shock absorber shall be greater than 1300 gms.  20. The device should be laser marked with brand, model no., material, unique identification no. for complete traceability.				

#### IV. Tensioner: -

Specification	Material / Finish	Warranty	Marking	Standard Conformity
<ol> <li>Line tensioner is provided to provide adequate tension in the line.</li> <li>Tensioner shall be made of non-corrosive SS-316 material.</li> <li>Tensioner should have two ends with right- and left hand thread section of tensioning the system.</li> <li>It shall be closed body with both side eye or one side swaged.</li> <li>the tensioner shall have minimum closed length of 340mm and minimum open length of 540mm.</li> <li>this provides min working or tensioning length of 200mm for lifeline tensioning.</li> <li>should have min. breaking strength of 36KN.</li> <li>the thread diameter shall be minimum 15mm. all made of stainless steel.</li> <li>both the thread ends of tensioner shall be locked a both end via lock pin.</li> <li>tensioner is equipped with tension indicator. the indicator will move free of the line is tensioned.</li> <li>the petitioning is to be done spring washer to avoid loosening and durability.</li> <li>Length of tensioner shall be minimum 430mm.</li> <li>weight shall be minimum 1200gms.</li> <li>the device shall be powder quoted of electroplated additionally to protect from industrial metal dust chemical or surface corrosion.</li> <li>the device should be laser marked with brand, mode no., material, unique identification no. for complete traceability.</li> </ol>	StainlessSteel SS 316/ electroplating or powder coating finish.	5 years	unique ID no. with month or year of manufactur Ing / brand or make/ model no. / breaking strength.	EN 795:2012 CEN/TS 16415:201 3

#### V. Intermediate Bracket: -

Specification	Material / Finish	Warranty	Marking	Standard Conform ty
<ol> <li>intermediate bracket is fixed on the intermediate post.</li> <li>It is made of noncorrosive stainless steel SS316.</li> <li>bracket is of swivel type to adjust the pass-throughpipe aligning into the degree of Lifeline.</li> <li>Pass through Pipe allows wire rope to pass freely from inside and lifeline runner to pas freely from outside.</li> <li>the intermediate bracket should not obstruct the movement of runner.</li> <li>the device shall be powder quoted of electroplated additionally to protect from industrial metal dust chemical or surface corrosion.</li> <li>it should have minimum breaking strength of 12KN.</li> <li>the pass-through hollow pipe which holds the wireshal be of minimum 100mm length.</li> <li>the device shall be powder quoted of electroplated additionally to protect from industrial metal dust chemical or surface corrosion.</li> <li>the device should be laser marked with brand, mode no. , material, unique identification no. for complete traceability.</li> </ol>	Stainless Steel SS 316/ electropla ting or powder coating finish.	5 years	unique ID no. with month or year of manufactur ing / brand or make/ model no. / breaking strength.	(1-101/15 1

#### VI. Corner Bracket: -

Specification	Material / Finish	Warranty	Marking	Standard Conform ty
<ol> <li>Corner bracket is fixed on the corner post.</li> <li>It is made of non-corrosive stainless steel SS316.</li> <li>bracket is of fixed type to adjust the pass-through piperaligning into the degree of Lifeline.</li> <li>Pass through Pipe allows wire rope to pass freely from inside and lifeline runner to pas freely from outside.</li> <li>the corner bracket should not obstruct the movement or runner.</li> <li>the device shall be powder quoted of electroplated additionally to protect from industrial metal dust, chemical or surface corrosion.</li> <li>the device should be laser marked with brand, modelno, material, unique identification no. for complete traceability.</li> <li>it should have minimum breaking strength of 12KN.</li> <li>the pass-through hollow pipe which holds the wire shall be of minimum 350mm length including curvature.</li> <li>the pass-through pipe shall be connected or welded to base plate via minimum two points.</li> <li>the device shall be powder quoted of electroplated additionally to protect from industrial metal dust, chemical or surface corrosion.</li> <li>the device should be laser marked with brand, mode no., material, unique identification no. for complete traceability.</li> </ol>	StainlessSteel SS 316/ electroplating or powder coating finish.	5 years	unique ID no. with month or year of manufactur ing / brand or make/ model no. / breaking strength.	EN 795:2012 CEN/TS 16415:201 3

#### VII. Wire rope:-

Specification	Material / Finish	Warranty	Marking	Standard Conformi ty
<ol> <li>wire rope is made of Stainless steel SS316L material.</li> <li>The construction of wire rope should be 7 x 19.</li> <li>breaking strength of wire rope should be min 36KN.</li> <li>The mass of wire rope shall be greater than 0.2 Kg/m.</li> <li>the ends of wire rope must be swaged or crimpedwhich protects the rope from loosening.</li> </ol>	Stainless Steel SS 316	5 years.	wire rope with brand or make traceability thread.	EN 795:2012 CEN/TS 16415:201 3

#### VIII. Horizontal Wire rope Runner: -

Specification	Material / Finish	Warranty	Marking	Standard Conformi ty
<ol> <li>Runner is a device which connects the lifeline to the user.</li> <li>it is made of non-corrosion material SS316.</li> <li>runner allows the user to move on the installed lifelines passing through intermediates and corner bracket without any obstruction.</li> <li>it has rounded edges which does not damage wire rope or intermediates.</li> <li>runner shall be of detachable type. user can take the runner back after work.</li> <li>after connection with karabiner, the opening of runner shall be less than 6mm, which protects the runner to come out accidental while in locked condition.</li> <li>the length of runner shall be min 50mm.</li> <li>the device shall be powder quoted of electroplated additionally to protect from industrial metal dust, chemical or surface corrosion.</li> <li>the device should be laser marked with brand, model no., material, unique identification no. for complete traceability.</li> </ol>	StainlessSteel SS 316/	5 years	unique ID no. with month or year of manufactur ing / brand or make/ model no. / breaking strength.	EN 795:2012 CEN/TS 16415:201 3

#### IX. Cable Extremity: -

Specification	Material / Finish	Warranty	Marking	Standard Conformi ty
<ol> <li>Cable extremity can be of swaged or clamping type.</li> <li>it is made of Stainless steel SS316.</li> <li>for clamping type extremity min. 3 clamps should be installed on one side with a min gap of 24mm.</li> <li>the minimum length of crimping/clamping or swagingshal be 50mm.</li> <li>cable extremity shall have a separate or inbuilt thimble for the wire rope to pass and end with support.</li> <li>thimble guides the rope on bend, plus does not allow the bend wire rope to come directly in contact with devices.</li> <li>for swaging, min 3 swages are required with slip indicator.</li> <li>the device shall be powder quoted of electroplated additionally to protect from industrial metal dust, chemical or surface corrosion.</li> </ol>		5 years.	unique ID no. with month or year of manufactur ing / brand or make/ model no. / breaking strength.	(.FWI/16

#### X. Crest Clamping Fasteners (CCF):-

Specification	Material / Finish	Warranty	Marking	Standard Conformi ty
1. STEEL THICKNESS greater than 6mm Max 6mm Thick (For #12 gauge) 2. Hex Washer Head-8mm   Hex Washer Flange Ø14.7. 3. Trisula™ Drill Tip Point, 3.5 Drill Point 4. Reseal™ Ruspert Polymer Coating 5. Tested in Accordance with ASTM B117 & DIN 50018 6. Case Hardened Carbon Steel SAE 1022 7. Australian Standard AS3566 Class   Heat Treatment:To AS 3566.1 8. SEALING WASHERS - DEKS True-blue EPDM washer is a smooth, Washer made from a high quality Non- conductive EPDM rubber material. 9. Double thread Crest clamping screw. 10. Torsional is 11.3 NM. 11. Axial 16.7 KN. 12. Shear 9KN. 13. Bend is 12degree. 14. Pull over is 6.94 N. 15. Salt spray test - 1000 hours 16. Polymer coating - Class 3. 17. Toplock protection ribs is an additional locking features which acts as a locking mechanism to protect the fasteners getting loosed and coming out after fastening without any mechanical aid. 18. umbrella protection cap is double protection from water leakage.	high strength material with 1000 hours of salt spray test.	5years		Case Hardened Carbon Steel SAE 1022 Australian Standard AS3566 Class   Heat Treatment: To AS 3566.1

#### XI. Full Body Multi-purpose harness:-

Specification	Material / Finish	Warranty	Marking	Standard Conformi ty
1. Designed for fall arrest, restraint, work positioning, controlled descent and rescue purposes.  2. Has 5 metal attachment points: 1 x Dorsal and 1 Sternal D-Ring for Fall Arrest. 1x Ventral D-Ring at waist level for Rope Access work. 2 x 3. Lateral D Rings for Work Positioning,  4. Suspension leg straps allows for increased comfort.  5. Maximum comfort by breathing antibacterial and ergonomic waist, leg and shoulder pads.  6. Easy use aluminum automatic buckles for fast connection and release. Equipped with visual locking indicator.  7. Easy use and ergonomic steel buckles on shoulder  8. UV resistant high strength bonded type sewing yarns and contrastive color sewing in CNC machineries for quick eye control.  9. 4 gear loops on waist belt.  10. The protective case protects the information tag visually and enables users to log annual inspections,  11. Size: S/M, L/XL, XXL	polyamide material	5 years	unique ID no. with month or year of manufactur ing / brand or make/ model no. / breaking strength.	EN 361, EN 358, EN 813.

#### XII. Work restraint Lanyard: -

Specification	Material / Finish	Warranty	Marking	Standard Conformi ty
<ol> <li>Work restraint lanyard is a restraint lanyard with positioning device and shock absorber.</li> <li>it is made of polyamide material.</li> <li>this comes in lengths like 10/15 mtr.</li> <li>the diameter of rope shall be 14mm (braided or twisted)</li> <li>work positioning device in the restraint lanyard clamps the rope at any location. it is a manual operateddevice.</li> <li>is cannot be operated, or the rope cannot release from the device unless operated by a push of the clamplatch.</li> <li>the work positioning device is connected to a textile shock absorber which is certified shock absorber designed to limit the shock on the body of the person below 6KN.</li> <li>the restraint lanyard must have 2 karabiners, one for connecting the runner, other connecting to user harness.</li> <li>the end of the work restraint lanyard must be thimbleand heat shirked.</li> <li>the lanyard must be marked with model no, brand, year of manufacturing, certifying agency.</li> </ol>	polyamide material	5 years	unique ID no. with month or year of manufactur ing / brand or make/ model no. / breaking strength.	

#### XIII. Karabiner: -

Material / Finish	Warrant y	Marking	Standard Conformi ty
high grade steel.	5 years	unique ID no. with month or year of manufacturing / brand or make/ model no. / breaking strength.	EN 362.
	/ Finish	/ Finish y high grade steel.	/ Finish y high grade steel.  5 years unique ID no. with month or year of manufacturing / brand or make/ model no. / breaking

#### QUALITY ASSURANCE PLAN FOR HORIZONTAL ROOF TOP FIXED LIFELINE SYSTEM

FN 795: CLASS C. TS 16415

DO	C REF NO.		QAP/18-1	9/FLS-RTP/0	003-01	Date- 15				
SI No	Test Specimen	Qty	Test/Observ ation	Equipme nt for test	Type of test	Desired Results	Scope of Vendor	TPI		
1			Should be installed over the roof with minimum 12 rivets/self-tapping screws in proper condition					Draw Samples, witness test, review documents, approve test		
2			The inbuilt redirecting agent of roof post should not be bent more than 15deg in any case under yield limits					Draw Samples, witness test, review documents, approve test		
3	Purlin (ROOF END ANCHOR		No signs of rusting/corrosi on should be there					Draw Samples, witness test, review documents, approve test		
4	POST/ ROOF INTERMEDIATE POST)		Serial No. should be available				NA	Draw Samples, witness test, review documents, approve test		
			Standard distance between two posts should be 10 +/-1 mtr. (should not be more than 15mtr., in special /any case)				NA	Draw Samples, witness test, review documents, approve test		
5			The component should be fixed in the actual fixing orientation				NA	Draw Samples, witness test, review documents, approve test		
6	(5)-5			NA	Should be available at one end	Should Be OK	NA	Draw Samples, witness test, review documents, approve test		
7	(ENERGY ABSORBER)		VISUAL	NA	Energy absorber (2- phase) should be available in the line at one end	Should Be OK	NA	Draw Samples, witness test, review documents, approve test		

8		VISUAL	NA	Should not be deployed, (sleeve is not torn from the middle)	Should Be OK	NA	Draw Samples, witness test, review documents, approve test
9		VISUAL	NA	Locking pins at ends should be available	Should Be OK	NA	Draw Samples, witness test, review documents, approve test
10		VISUAL	NA	No signs of rusting/corrosion should be there	Should Be OK	NA	Draw Samples, witness test, review documents, approve test
		VISUAL	NA	Serial No. should be available	Should Be OK	NA	Draw Samples, witness test, review documents, approve test
11		PULL OUT TEST	STATIC PULL OUT MACHINE	The component should be fixed in the actual fixing orientation	Should sustain 36KN without failure	NA	Draw Samples, witness test, review documents, approve test
12		VISUAL	NA	Should be available at one end	Should Be OK	NA	Draw Samples, witness test, review documents, approve test
13		VISUAL/MEASU REMENT	Measuring Tape/verni er	Opening Length of LHS/RHS studs of tensioner should not be more than 50mm	Should Be OK	NA	Draw Samples, witness test, review documents, approve test
14	(LINE TENSIONER)	VISUAL	NA	Locking pins at ends should be available	Should Be OK	NA	Draw Samples, witness test, review documents, approve test
15	TENSIONERY	VISUAL	NA	No signs of rusting/corrosion should be there	Should Be OK	NA	Draw Samples, witness test, review documents, approve test
		VISUAL	NA	Serial No. should be available	Should Be OK	NA	Draw Samples, witness test, review documents, approve test
16		PULL OUT TEST	STATIC PULL OUT MACHINE	The component should be fixed in the actual fixing orientation	Should sustain 36KN without failure	NA	Draw Samples, witness test, review documents, approve test
17		VISUAL	NA	End cap at termination should be available.	Should Be OK	NA	Draw Samples, witness test, review documents, approve test
18	(WIRE ROPE)	VISUAL	NA	No kink/ damage in the whole length should be visible	Should Be OK	NA	Draw Samples, witness test, review documents, approve test
		VISUAL	NA	No signs of rusting/corrosion should be there	Should Be OK	NA	Draw Samples, witness test, review documents, approve test

19		PULL OUT TEST	STATIC PULL OUT MACHINE	The component should be fixed in the actual fixing orientation	Should sustain 36KN without failure	NA	Draw Samples, witness test, review documents, approve test
20		VISUAL	NA	3 U-bolts/dogg clamps should be available at each end	Should Be OK	NA	Draw Samples, witness test, review documents, approve test
21	(CABLE EXREMITY SET)	VISUAL	NA	No signs of rusting/corrosion should be there	Should Be OK	NA	Draw Samples, witness test, review documents, approve test
22		VISUAL	NA	bolts should be tightened properly	Should Be OK	NA	Draw Samples, witness test, review documents, approve test
23		VISUAL	NA	Runner should pass through intermediates freely	Should Be OK	NA	Draw Samples, witness test, review documents, approve test
24		VISUAL	NA	No signs of rusting/corrosion should be there	Should Be OK	NA	Draw Samples, witness test, review documents, approve test
	(INTERMEDIATE BRACKET)	VISUAL	NA	Serial No. should be available	Should Be OK	NA	Draw Samples, witness test, review documents, approve test
25		PULL OUT TEST	STATIC PULL OUT MACHINE	The component should be fixed in the actual fixing orientation	Should sustain 12KN without failure	NA	Draw Samples, witness test, review documents, approve test
26		VISUAL	NA	Runner should pass through intermediates freely	Should Be OK	NA	Draw Samples, witness test, review documents, approve test
27	(OODNED /	VISUAL	NA	No signs of rusting/corrosion should be there	Should Be OK	NA	Draw Samples, witness test, review documents, approve test
	(CORNER / TURN BRACKET)	VISUAL	NA	Serial No. should be available	Should Be OK	NA	Draw Samples, witness test, review documents, approve test
28		PULL OUT TEST	STATIC PULL OUT MACHINE	The component should be fixed in the actual fixing orientation	Should sustain 12KN without failure	NA	Draw Samples, witness test, review documents, approve test
29	(Inspection Tag)	VISUAL	NA	Should be available and marked	Should Be OK	NA	Draw Samples, witness test, review documents, approve test

#### i. TESTING (PROOF LOAD TESTING

#### **CRITERIA):-About**

After installation of the roof top lifeline system, it is necessary to issue a fitness certificate of the system so that it can give confidence to the user that the system is safe to use. The system should be checked for exact/nearby replication of actual behavior of the system with respect to load application. The method to check and verification of the proper functionality of the lifeline system a static tension force static is applied on the cable of lifeline and over all behavior of the system is observed. The design and testing parameter of horizontal lifeline should satisfy EN standard EN 795 class C, CEN/TS 16415 2013. Based on the observation results, the system is certified, and "Safe to Use Certificate" is issued.

The Load test method employed to check the functionality and behavior of the system with respect to increasing load is called Proof load test.

Though proof load tests the below points can be checked:

- Proof load testing is done to verify safe WLL (Working Load Limit) for Lifeline system.
- > Proof load test to check performance of system components under various load.
- Proof Load test verifying the functionality of the entire system.
- Verification of fixing accessories.

#### **Process**

- Testing of Installed roof top lifeline system follows the standard process of pull-out load test in which the lifeline relates to a digital scale and tested up to a safe working load depending on site situations, which can reach up to 320 kgs.
- For PROOF LOAD TESTING the average load of the person considered is for proof load testing is 80kg; so, considering the 4-person working on the system then total load becomes 320kgs.

#### Steps: -

- 1) The tension force on the lifeline system is created by pulling the wire rope internally between the two anchor posts. For this at one end the load indicating device (load cell) is fixed and another side the lifeline wire rope itself is connected horizontally in Z-RIG (configuration) with any pulling mechanism which do note hampers the actual configuration of the lifeline system and it simulates the actual loading condition in case of incident or emergency.
- 2) By applying tension force on the lifeline system exact/nearby replication of actual behavior of the system with respect to load application is observed.
- 3) The proof load applied is 320kg and hold it for 3 minutes then it is released gradually, and behavior of the components and the system as a whole is observed.
- 4) While applying load the force is transferred to all the system components such as wire rope, brackets and finally to roof posts.

#### **Test Records: -**

Serial No.	Line No.	Expected Result	Observation	Remark

#### **Post Test Measures: -**

- After releasing the tensile force system component should return to the aignal/Initial condition.
- For any installed Lifeline system, the deployment load of shock absorbingcomponent may vary as per manufacturer recommendation.
- Any sign of damaged/failure observed for component of the lifeline system and If any found then rectification need to be done before certification.
- Re-tensioning of the lifeline system should be done after proof load testing.
- Roof sheet to be checked in case of damage and rectified it in case of damage.
- The connections of anchor posts should sustain the load without breaking ordamage.
- Torque to be checked of all connections after test is conducted.
- All parameters as per the vendors QAP should be verified by client & TPI.

# QUALITY ASSURANCE PLAN FOR PROOF LOAD TEST ON FIXED HORIZONTAL LIFELINE (RTLS)

								STANDARD: EN 795 2012 TYPE C
DOC R	EF NO.	/QAP/20-21/R	TLS-PLT-R-00					DATE- 28.02.2020
Sr No	Test Specimen	Type of Test	Equipment for test	Part/Details to be Inspected	Test/Observation	Desired Results	Scope of Vendor	Scope of Client
1		VISUAL INSPECTION (PRE- TESTING INSPECTION)	NA	Whole Lifeline System	Installation and Fixing of all the components of the system	Installation of Whole lifeline system as per Layout and GA Drawing	The authorised personnel should carry out the test/observation	Refer the layout/sketch/drawing/design, witness test, review documents, approve test
2		TORQUE CHECK	TORQUE WRENCH	Rivet/Bolts	All the Riveted and Bolted fixtures used in System of the Equipment Should be Properly Secured	All the bolts should be fixed with 12 Nm. torque	The authorised personnel should ensure the fixing of bolts with required torque	Check the torque, witness test, review documents, approve test
3	Roof top fixed Lifleine System (LGR HL 7000)	STATIC PULL OUT TEST	LOAD CELL/CHAIN PULLEY BLOCK	LOAD CELL READING	Pull out load test in which the lifeline relates to a digital scale and tested up to a safe working load depending on site situations, which can vary from 160- 320 kgs.	The lifeline system components should sustain the load with slight deformation and bending but it should not break open.	The authorised personnel should carry out the test/observation	Observe the test set up as per scope of testing and test procedure, Witness the test being carried out and observe the load cell reading and its effects on the system, review documents, approve test
4		VISUAL INSPECTION (POST- TESTING INSPECTION)	NA	Whole Lifeline System	Any damage/failure of the component, any loose fixing/fastening accessories (certain degree of deformation is obvious with respect to the increased load)	No damage except certain degree of deformation	Deformed or damaged components if any should be rectified or replaced, respectively.	Witness the rectification, review documents, approve test

material and wo	warrants this Lifeline system to be free from defects rkmanship under normal use for a period of 5 years from the date
commissioning.	
	provides 5 years of warranty from date of commissioning.
•	anty period, in case of any defect, it is prudent to repair or replace the onent, and not the complete system.

# II. <u>VERTICAL LIFELINE</u> <u>SYSTEM</u>

#### a. Background:

The term "vertical lifeline" describes a fall arrest device for an access route and is used for climbing up and down. Typical fields of application include roof access points, masts, chimneys, facades, and wind energy turbines.

In most cases, a permanently installed vertical ladder is usually used to climb upwards. Vertical ladders either have two side rails (similar to common household ladders) or a central shaft which bears the load of the rungs attached to the right and left of this shaft. Both ladder models need to be suitably secured to prevent individuals from falling.

One typical way of securing a vertical ladder is to use a so-called continuous safety cage. This cage-like structure is firmly attached to the vertical ladder. However, this

restricts the user's freedom of movement. Using personal fall protection equipment (PPE), however, offers a much greater degree of protection. In such cases, an arresting system is used. Users can attach their safety harnesses to the anchorage device running down the middle so that this blocks their fall if they take a wrong step. This prevents fatalities, resp. considerably reduces the effects of a fall. A very short connector also limits a free fall.

These are systems comprised of a fixed line, either temporary or permanent, on whicha travelling device is attached. The user connects to this travelling device when climbing or descending. In the event of a fall, the travelling device should grip the line and stop the fall.

Vertical lifeline systems generally provide climbing protection and are often installed along the middle of a ladder. They are tested according to EN 353-1 "Personal protective equipment against falls from a height - Part 1: Guided type fall arresters including a rigid anchor line".

#### b. Definition:

A component consisting of a flexible line for connection to an anchorage at one end to hang vertically and which serves as a means for connecting other components of a personal fall arrest system to the anchorage.

#### c. Usage:

To arrest the fall of the personnel falling while ascending vertical ladders and thus saving life.

- d. Types:
- (1) Rigid Vertical Lifeline (Guided type fall arresters with a rigid anchor line)
- (2) Flexible Vertical Lifeline (Guided type fall arresters with a flexible anchor line)

# (1) Guided type fall arresters with a rigid anchor line (EN 353-1:2014 + A1:2017)

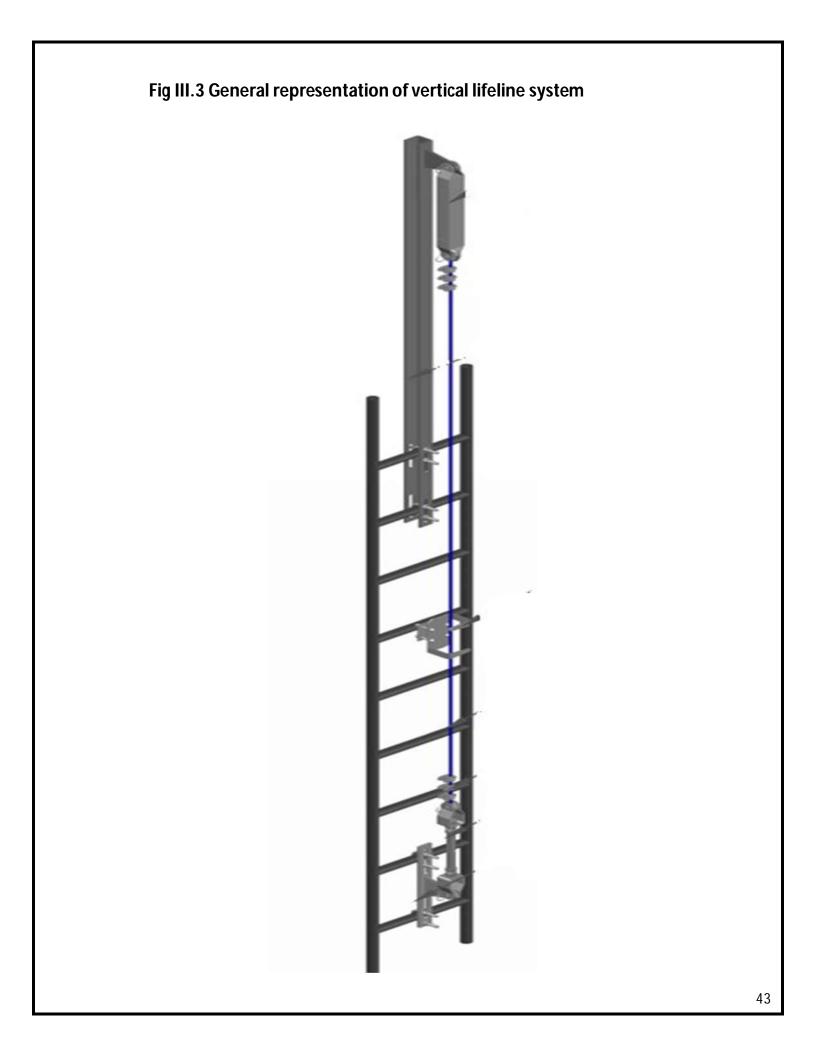
Systems made up of a line or rail intended to be fixed (either temporarily or permanently) to a structure at top and bottom, on which a travelling device is attached. The user connects to this travelling device when climbing or descending – in the case of a fall, the travelling device should grip the line and arrest the fall. A guided type of fall arrester with a rigid anchor line in accordance with EN 353-1 is a common type of vertical lifeline. This type of arresting device offers the user an anchorage eyelet which glides along a permanently installed rail, or a steel cable installed along the middle of the ladder, as the user moves along. In the case of a fall, the device blocks instantly, thus minimizing the fall distance so that the user - in a best-case scenario - can climb back onto the ladder. If a lanyard energy absorber is also used, this reduces the ensuing force.

# (2) Guided type fall arresters with a rigid anchor line (EN 353-2:2014 + A1:2017)

As an alternative to a vertical lifeline system with a rigid anchor line, a guided type of fall arrester with a flexible anchor line according to EN 353-2 can also be used to secure a vertical ladder. This solution, however, is not so common and, contrary to permanently installed safety systems, should only be used as a temporary safety measure. Accordingly, such PPE components are generally not to be found in a permanent vertical ladder system but are instead often included in a user's individual kit. Whenever possible, vertical lifelines with a rigid anchor line are to be given preference.

# Table III.1-List of components in vertical lifeline system

SR NO	COMPONENT	QUANTITY
1	Extension Arm	1
2	Top Bracket	1
4	Bottom Bracket	1
5	Intermediate Bracket	As per ladder length
6	Tensioner	1
7	Shock Absorber	1
8	Wire Rope(ø=8mm)	As per ladder length
9	Cable Extremity	2
10	Fall Arrestor (PRO-1)	1
11	Full Body Harness	As per number of users
12	Karabiner(connector)	As per number of users



#### e. Description of Vertical Lifeline components

#### i. Vertical top bracket

Vertical Top bracket is fixed on top two rungs of Monkey ladder using U-bolts. They act as anchor for fixing lifeline. Attop bracket shock absorber is fixed.

Conformity: EN 795 Class A1

Material: SS 316

**MBS**: 44 kN

Finishing: Powder Coating

Weight: As per safety standard (EN795)

Fixing: U-bolts

#### ii. Vertical bottom bracket: -

Vertical Bottom bracket is fixed on bottom two rungs of Monkey ladder using U-bolts. They act as anchor for fixing lifeline. At bottom bracket tensioner is fixed using Cable extremity.

Conformity: EN 795 Class A1

Material: SS 316

**MBS**: 44 kN

Finishing: Powder Coating

Weight: As per safety standard EN795

Fixing: U-bolts

iii. **Extension Arm: -**

It has been observed that user has to disengage from lifeline to reach Platform, which is

unsafe as he is not conned to lifeline at that point of time. To overcome this issue

extension arm is fixed instead of top bracket where platform is available.

Extension arm increases lifeline length 1 meter so, that user safely reaches platform.

Remember never disconnecting yourself from lifeline until reached platform safely.

Conformity: EN 353 Class A1

Material: SS 316

Finishing: Powder Coating

Weight: As per safety standard EN 795

**Shock Absorber:** iv.

To dissipate the energy generated during a fall. The Energy Absorber is designed to dissipate the energy generated throughout the system and reduce the end loadings to

below 6kN. This device decreases the impact on the user and on the system both.

Installations require an absorber to be installed at one end of the system. The element is a disposable device which must be replaced after each fall.

Material: SS 316

**MBS**: 44kN

Activating force: minimum 3kN

Range: Limit the impact less than 6kN

Finishing: Powder Coating

Weight: As per safety standard EN 795

#### Tensioner: -٧.

A Tensioner is an approved device located between the two anchorage points and provides required tension to the safety line so that the sag in the system is mini-mum and within the acceptable limit. The Tensioner device is made of SS-316. The tensioner is equipped with a tension indicator signifying the appropriate tension in the line. The tensioner should have a internal stopper to prevent accidental opening of tensioner from the line

Material: SS 316

**MBS**: 44kN

Finishing: Plating

Weight: As per safety Standard EN 795

Fixing: One side with eye bolt and another with wire rope and thimble

Quantity: 1 nos. number for each lifeline

**Description:** Tensioner is used to give tension in lifeline.

#### **Intermediate Bracket** vi.

Intermediates support the wire rope from slackness and deviation and maintain equi-distance from the ladder.

Material: SS 316

Range: for 8mm SS wire rope

Finishing: Plating

Weight: As per Standard EN 353

Interval Distance: 5-6 m

**Application:** used for intermediate support

#### vii. Fall Arrester

Fall arrester is intermediate connection between user and lifeline. It has anti-reversal mechanism which allows user to move freely on ladder. If at some point user slips or fall from ladder fall arrester gets lock within few inches of fall and allows user to come in comfortable position.

**Conformity: EN 353** 

Material: SS 316

Range: for 8mm SS wire rope

Finishing: Plating

Weight: As per Safety Standard EN 353

#### viii. Wire rope: -

Wire rope is fixed in Lifeline for providing connectivity. Total wire roperequired is equal to total length of lifeline

Material: SS 316

**Construction:** 7x19

Dia.: 8mm

**MBS:** 36kN

Weight: As per standard

#### ix. Cable extremity:

End terminal forms the connecting part between two parts. Easy to install with high resistive force. End terminal is made of SS-316 with breaking strength greater than 25KN.

Material: SS 316

Range: for 8mm SS wire rope

Finishing: Plating

Weight: 70 gms

**Fixing:** by applying torque 11N.m

Application: used for fastening the wire rope at the end

**Quantity:** 2 sets for 1 lifeline (1 set=6 nos. of dog clamps and 2 thimble)

# x. Inspection Tag

Inspection tag is fixed on each line, it has information regarding number of users allowed to work, date of installation, date of AMC, conformity etc.

Material: Aluminum Alloy

Finishing: Electroplated

Thickness: 3 mm

Weight: As per standard EN 353

**Application:** shows installation and inspection due date

Quantity: 1 no. per lifeline

#### **FULL BODY HARNESS**

Designed for fall arrest, rope access, restraint, work positioning, controlled descent, and rescue purposes. Has 5 metal attachment points: 1 x Dorsal and 1 Sternal D - Ring for Fall Arrest. 1 x Ventral D - Ring at waist level for Rope Access work. 2 x Lateral D - Rings for Work Positioning. Suspension leg straps allows for increased comfort. Maximum comfort by breathing antibacterial and ergonomic waist, leg and shoulder pads.

**Conformity:** EN 353 **Material:** Polyamide

**Application:** personal protective equipment

Quantity: 1 no. per user

#### i. Karabiner: -

Oval carabiner available in alu alloy and carbon steel versions with a circular rod. It is recommended for use with mobile devices (Pulley, Blockers, Fall arresters.)

Equipped with a screw sleeve and suitable for professional application.

Material: High grade steel

Major axis strength: Minimum 22 kN

Minor axis strength: Minimum 7 kN

Open gate strength: Minimum 7 KN

Gate opening min: 16 mm.

**Application:** for connection

Quantity: 1 no. per user

# f. Specification of Vertical Lifeline components.

# I. Vertical Top Bracket: -

Specification	Material / Finish	Warranty	Marking	Standard Conformi ty
<ol> <li>Vertical Top bracket is a two rung connection bracket.it should take support from two rungs to ensure double safety.</li> <li>it is made of Stainless-Steel SS 316.</li> <li>Min. length of bracket shall be 350mm.</li> <li>the anchor point of cable on post should be min. 80mm of height, to maintain a minimum distance ofwire rope from rungs / ladder.</li> <li>Range of adjustment of top bracket should be 160 to 330mm.</li> <li>Minimum breaking strength of bracket shall be 36KN.</li> <li>it should have Min 2 U blot connection with two rungs.</li> <li>the device shall be powder quoted of electroplated additionally to protect from industrial metal dust, chemical or surface corrosion.</li> <li>the device should be laser marked with brand, model no., material, unique identification no. for complete traceability.</li> </ol>	Stainless Steel SS 316/ electropla ting or powder coating finish.	5 years	unique ID no. with month or year of manufactur ing / brand or make/ model no. / breaking strength.	EN 353- 1:2014 +A1:2017

# II. Vertical Bottom Bracket: -

Specification	Material / Finish	Warranty	Marking	Standard Conformi ty
<ol> <li>Vertical Bottom bracket is a two rung connection bracket. it should take support from two rungs to ensure double safety.</li> <li>it is made of Stainless-Steel SS 316.</li> <li>Min. length of bracket shall be 350mm.</li> <li>the anchor point of cable on post should be min.</li> <li>mm of height, to maintain a minimum distance of wire rope from rungs / ladder.</li> <li>Range of adjustment of top bracket should be 160 to 330mm.</li> <li>Minimum breaking strength of bracket shall be 36KN.</li> <li>it should have Min 2 U blot connection with two rungs.</li> <li>the device shall be powder quoted of electroplated additionally to protect from industrial metal dust, chemical or surface corrosion.</li> <li>the device should be laser marked with brand, model no., material, unique identification no. for complete traceability.</li> </ol>		5 years	unique ID no. with month or year of manufactur ing / brand or make/ model no. / breaking strength.	1.7017

# III. Vertical Intermediate Bracket: -

Specification	Material / Finish	Warranty	Marking	Standard Conformi ty
<ol> <li>Vertical Intermediate is wire guide which allows the wire and the runner to pass through.</li> <li>it is fixed type intermediate with min length of 170mm to allow easy pass of fall arrester.</li> <li>Opposite two or double C type rope guide, to protect rope to come out from intermediate easily.</li> <li>Min width of intermediate shall me 60mm to allow maximum grip.</li> <li>Min 4-hole connection to back plate, which prevents the rotational movement or dis-location of intermediate.</li> <li>Bend back plate to protect loosening or movement or dislocation.</li> <li>Area covered by back plate - min 65mm with 4-point connection.</li> <li>the device shall be powder quoted of electroplated additionally to protect from industrial metal dust, chemical or surface corrosion.</li> <li>the device should be laser marked with brand, model no. , material, unique identification no. for complete traceability.</li> </ol>	Stainless Steel SS 316/ electropla ting or powder coating finish.	5 years	unique ID no. with month or year of manufactur ing / brand or make/ model no. / breaking strength.	EN 353- 1:2014 +A1:2017

## IV. Shock Absorber: -

Specification	Material / Finish	Warranty	Marking	Standard Conformi ty
<ol> <li>Shock absorber is designed to absorb impact energyin the lifeline, limiting the shock transferred to the system min. below 10KN. Should be made of non- corrosive material, SS 316.</li> <li>Shock absorber has two ends. one for connection to the end anchor post, other for connection to the cable extremity.</li> <li>Guider to the eye slot on both the sides of shock absorber the maintain the integrity of device underload.</li> <li>Shock absorber should be 2 stage shock absorbers with different energy absorbing capability.</li> <li>The absorber should be covered with Polyolefin material which protects the device from heat, cold and industrial dust.</li> <li>Stage 1 - is the spring side of absorber, the spring is important to absorb vibratory motion, mechanical oscillation, vibration due to usage of line.</li> <li>Spring should be heavy duty medium load, coated for protection from corrosion and identification.</li> <li>The spring should have minimum outer diameter ofmin. 30mm with min. free length of 90mm.</li> <li>Deflection ranges from 23mm to 29mm.</li> <li>load at 1mm deflection should range between 5kgf to8 kg.</li> <li>Stage 2 - is made of tension balls which absorbs energy under load by crushing or deforming.</li> <li>The should be min 3 such balls or energy absorbing crushing agents.</li> <li>The balls shall be replaceable in case of deformation after inspection.</li> <li>Stage 2 of absorber is guided by min 3 slots which passes through a special tear slot for additional frictionin the motion of dynamic absorption of energy.</li> </ol>	Stainless Steel SS 316/ electropla ting or powder coating finish.	5 years	unique ID no. with month or year of manufactur ing / brand or make/ model no. / breaking strength.	EN 795:2012 CEN/TS 16415:201 3

Specification	Material/ Finish	Warranty	Marking	Standard Conformity
<ul> <li>16. The tear slot, guides the absorbing ball, plus allows uniform distribution of energy.</li> <li>17. Length of shock absorber shall be greater than 400mm, minimum width of 35mm.</li> <li>18. The breaking strength of absorber shall be greater than 36KN.</li> <li>19. Weight of shock absorber shall be greater than 1300 gms.</li> <li>20. The device should be laser marked with brand, model no. material, unique identification no. for complete traceability.</li> </ul>		5 years		

# V. Tensioner: -

Specification	Material / Finish	Warranty	Marking	Standard Conformi ty
<ol> <li>Line tensioner is provided to provide adequate tension in the line.</li> <li>Tensioner shall be made of noncorrosive SS 316 material.</li> <li>Tensioner should have two ends with right- and left-hand thread section of tensioning the system.</li> <li>It shall be closed body with both side eye or one side swaged.</li> <li>the tensioner shall have minimum closed length of 340mm and minimum open length of 540mm.</li> <li>this provides min working or tensioning length of 200mm for lifeline tensioning.</li> <li>Should have min. breaking strength of 36 KN.</li> <li>the thread diameter shall be minimum 15mm. all made of stainless steel.</li> <li>both the thread ends of tensioner shall be locked at both end via lock pin.</li> <li>tensioner is equipped with tension indicator. the indicator will move free of the line is tensioned.</li> <li>the indicator is pre-tensioned at min 25daN.</li> <li>the pretentioning is to be done spring washer to avoid loosening and durability.</li> <li>Length of tensioner shall be minimum 430mm.</li> <li>weight shall be minimum 1200gms.</li> <li>the device shall be powder quoted of electroplated additionally to protect from industrial metal dust, chemical or surface corrosion.</li> <li>the device should be laser marked with brand, model no., material, unique identification no. for complete traceability.</li> </ol>	Stainless Steel SS 316/ electropla ting or powder coating finish.	5 years	unique ID no. with month or year of manufactur ing / brand or make/ model no. / breaking strength.	EN 795:2012 CEN/TS 16415:201 3

# VI. Wire rope: -

Specification	Material / Finish	Warranty	Marking	Standard Conformi ty
<ol> <li>wire rope is made of Stainless steel SS316L material.</li> <li>The construction of wire rope should be 7 x 19.</li> <li>breaking strength of wire rope should be min 36KN.</li> <li>The mass of wire rope shall be greater than 0.2 Kg/m.</li> <li>the ends of wire rope must be swaged or crimped which protects the rope from loosening.</li> </ol>	Stainless Steel SS 316	5 years	wire rope with brand or make traceability thread.	EN 795:2012 CEN/TS 16415:201 3

# VII. Cable Extremity: -

Specification	Material / Finish	Warranty	Marking	Standard Conformi ty
<ol> <li>Cable extremity can be of swaged or clamping type.</li> <li>it is made of Stainless steel SS316.</li> <li>for clamping type extremity min. 3 clamps should be installed on one side with a min gap of 24mm.</li> <li>the minimum length of crimping/clamping or swaging shall be 50mm.</li> <li>cable extremity shall have a separate or inbuilt thimble for the wire rope to pass and end with support.</li> <li>thimble guides the rope on bend, plus does not allows the bend wire rope to come directly in contact with devices.</li> <li>for swaging, min 3 swages are required with slip indicator.</li> <li>the device shall be powder quoted of electroplated additionally to protect from industrial metal dust, chemical or surface corrosion.</li> </ol>	Stainless Steel SS 316/ electropla	5 years	unique ID no. with month or year of manufactur ing / brand or make/ model no. / breaking strength.	EN 795:2012 CEN/TS 16415:201 3

## VIII. Vertical Fall Arrester: -

Specification	Material / Finish	Warranty	Marking	Standard Conformi ty
<ol> <li>vertical fall arrester protects the person from falling.</li> <li>while climbing or descending on the system.</li> <li>in the event of fall, the arrester locks the persor arresting the fall within 30cm.</li> <li>the fall arrester should have a gravity pin, to protec wrong installation on the line.</li> <li>the device is made of non-corrosive SS316material.</li> <li>there device should grip the wire rope from minimun two clamps.</li> <li>the device shall be powder quoted of electroplated additionally to protect from industrial metal dust chemical or surface corrosion.</li> <li>the device should be laser marked with brand, modelno, material, unique identification no. for complete traceability.</li> </ol>	Stainless Steel SS 316/ electropla	5 years	unique ID no. with month or year of manufactur ing / brand or make/ model no. / breaking strength.	EN 353- 1:2014 +A1:2017

# X. Full Body Multipurpose harness: -

Specification	Material / Finish	Warranty	Marking	Standard Conformi ty
<ol> <li>Designed for fall arrest, restraint, work positioning, controlled descent and rescue purposes.</li> <li>Has 5 metal attachment points: 1 x Dorsal and 1 Sternal D-Ring for Fall Arrest. 1x Ventral D-Ring at waist level for Rope Access work. 2 x 3. Lateral D Rings for Work Positioning,</li> <li>Suspension leg straps allows for increased comfort.</li> <li>Maximum comfort by breathing antibacterial and ergonomic waist, leg, and shoulder pads.</li> <li>Easy use aluminum automatic buckles for fast connection and release. Equipped with visual locking indicator.</li> <li>Easy use and ergonomic steel buckles on shoulder</li> <li>UV resistant high strength bonded type sewing yarns and contrastive color sewing in CNC machineries for quick eye control.</li> <li>4 gear loops on waist belt.</li> <li>The protective case protects the information tag visually and enables users to log annual inspections,</li> <li>Size: S/M, L/XL, XXL</li> </ol>	polyamide material	5 years	unique ID no. with month or year of manufacturing / brand or make/ model no. /breaking strength.	EN 361, EN 358, EN 813.

## XI. Karabiner: -

Specification	Material / Finish	Warranty	Marking	Standard Conformi ty
1. Screw locking karabiner, for connecting lanyard to	high grade	5 years	unique ID	EN 362.
harness or runner.	steel.		no. with	
2. Major axis strength: Minimum 22 kN			month or	
3. Minor axis strength: Minimum 7 kN			year of	
4. Open gate strength: Minimum 7 kN			manufactur	
5. Gate opening min: 16 mm.			ing / brand	
6. made of high-grade steel, coated or zinc plated.			or make/	
			model no. /	
			breaking	
			strength.	

#### XII. Vertical Extension Bracket:-

Specification	Material / Finish	Warranty	Marking	Standard Conformi ty
1. vertical extension bracket allows the wire rope	high grad	e 5 years	unique ID	
line to extend above the last end rung.	steel.		no. with	
2. the extension is important for the user to			month or	
reach the top platform before disconnecting			year of	
from the line.			manufactur	
3. the bracket connects to min 2 rungs via 2 clamps.			ing / brand or make/	
4. the anchor point of cable on post should be			model no. /	
min. 80mm of height, to maintain a minimum			breaking	
distance of wire rope from rungs / ladder.			strength.	
6. Minimum breaking strength of bracket shall be 36KN.				
7. the length of extension arm should be				
minimum1400cm.				
8. weight shall not be less than 7500 gms.				

#### g. QUALITY ASSURANCE PLAN FOR FIXED VERTICAL LIFELINE(FLEXIBLE:CABLE BASED) SYSTEM

EN 353-2:2014 + A1:2017 DOC REF NO. DATE 02.04.2021 QAP/20-21/FLS-VLS/003-00 Equipment Sr No **Test Specimen** Qty Type of Tes Test/Observation **Desired Results** Scope of Vendor for test Scope Of TPI Should be installed taking support from at Draw Samples, witness test, review VISUAL NA least two Should Be OK NA documents, approve test rungs(preferably lasttwo rungs) Draw Samples, witness test, review No Bending of the VISUAL Should Be OK 2 NΑ NA documents, approve test Brackets (TOP/ BOTTOMBRACKET) No signs of rusting, cracks Draw Samples, witness test, review 3 VISUAL NA and abrasionshould be Should Be OK NA documents, approve test there Draw Samples, witness test, review Serial No. should be VISUAL 4 NA Should Be OK NA documents, approve test available should be installed attop Draw Samples, witness test, review 5 VISUAL NA and bottom of thelifeline Should Be OK NA documents, approve test system Should be installed taking support from at Draw Samples, witness test, review VISUAL NΑ Should Be OK NA least two documents, approve test rungs(preferably lasttwo rungs) Draw Samples, witness test, review No Bending of the Should Be OK VISUAL NA NA documents, approve test brackets No signs of rusting, crack Draw Samples, witness test, review VISUAL NA Should Be OK NA and abbrassionshould be documents, approve test there (EXTENDERBAR) Draw Samples, witness test, review Serial No. should be VISUAL NA Should Be OK NA documents, approve test available should be installed attop of lifeline system to Draw Samples, witness test, review VISUAL Should Be OK NA extend the system NA documents, approve test beyond the platform level) Energy absorber (2- phase) Draw Samples, witness test, review shall be fixed attop end of 7 VISUAL Should Be OK NA NA documents, approve test the lifeline system Should not be deployed, Draw Samples, witness test, review VISUAL 8 NA (sleeve is nottorn from the Should Be OK NA documents, approve test middle) (ENERGYABSORBER) Draw Samples, witness test, review Locking pins at ends 9 VISUAL Should Be OK NA NA documents, approve test should be available No signs of rusting, cracks Draw Samples, witness test, review VISUAL Should Be OK NA 10 NΑ and abbrassionshould be documents, approve test there Draw Samples, witness test, review Serial No. should be VISUAL 11 NA Should Be OK NA documents, approve test available

12		VISUAL	NA	Shall be fixed at the bottom end only	Should Be OK	NA	WITNESS TEST.	Draw Samples, witness test, review documents, approve test
13			Measuring Tape/vemier	Opening Length of LHS/RHS studs of tensioner should not be more than 50mm	Should Be OK	NA	WITNESS TEST.	Draw Samples, witness test,review documents, approve test
14	(LINE TENSIONER)	VISUAL	NA	Locking pins at ends should be available	Should Be OK	NA	WITNESS TEST.	Draw Samples, witness test,review documents, approve test
15		VISUAL	NA	No signs of rusting, cracks and abrasion should be there	Should Be OK	NA	WITNESS TEST.	Draw Samples, witness test,review documents, approve test
16		VISUAL	NA	Serial No. should be available	Should Be OK	NA	WITNESS TEST.	Draw Samples, witness test,review documents, approve test
17		VISUAL	NA	End cap at termination should be available.	Should Be OK	NA	WITNESS TEST.	Draw Samples, witness test,review documents, approve test
18	(WIRE ROPE)	VISUAL	NA	No kinking/ damage inthe whole length should be visible	Should Be OK	NA	WITNESS TEST.	Draw Samples, witness test,review documents, approve test
19		VISUAL	NA	No signs of rusting, cracks and abbrassion should be there	Should Be OK	NA	WITNESS TEST.	Draw Samples, witness test, review documents, approve test
20		VISUAL	NA	3 U-bolts/Dogg clampsshould be available ateach end	Should Be OK	NA	WITNESS TEST.	Draw Samples, witness test,review documents, approve test
21	(Cableexremity Set)	VISUAL	NA	No signs of rusting/corrosion should be there	Should Be OK	NA	WITNESS TEST.	Draw Samples, witness test, review documents, approve test
22		VISUAL	NA	bolts should be tightened properly	Should Be OK	NA	WITNESS TEST.	Draw Samples, witness test,review documents, approve test
23		VISUAL	NA	Runner should pass through intermediates freely	Should Be OK	NA	WITNESS TEST.	Draw Samples, witness test,review documents, approve test
24	(INTERMEDIATEBRACKET)	VISUAL	NA	No signs of rusting, cracks and abbrassion should be there	Should Be OK	NA	WITNESS TEST.	Draw Samples, witness test, review documents, approve test
25	Í	VISUAL	NA	Serial No. should be available	Should Be OK	NA	WITNESS TEST.	Draw Samples, witness test,review documents, approve test
28		VISUAL	NA	Serial No. should be Available	Should Be OK	NA	WITNESS TEST.	Draw Samples, witness test,review documents, approve test
29	(Inspection Tag)	VISUAL	NA	Should be fixed at bottom end and marked/filled and all the details	Should Be OK	NA	WITNESS TEST.	Draw Samples, witness test, review documents, approvetest

#### h. TESTING(PROOF LOAD TESTING CRITERIA):-

#### i. About

After installation of the Vertical lifeline system, it is necessary to issue a fitness certificate of the system so that it can give confidence to the user that the system is safe to use. The system should be checked for exact/nearby replication of actual behavior of the system with respect to load application. The method to check and verification of the proper functionality of the lifeline system a static tension force static is applied on the cable of lifeline and over all behavior of the system is observed.

Based on the observation results, the system is certified, and "Safe to Use Certificate" is issued.

The Load test method employed to check the functionality and behavior of the system with respect to increasing load is called Proof load test.

Though proof load tests the below points can be checked:

- Proof load testing is done to verify safe WLL(Working Load Limit) for Lifelinesystem.
- Proof load test to check performance of system components under various load.
- Proof Load test verifying the functionality of the entire system.
- Verification of fixing accessories.

#### ii. Process

- Testing of Installed Vertical lifeline system follows the standard process of pull-out load test in which the lifeline relates to a digital scale and tested up to a safe working load depending on site situations, which can reach up to 140 kgs.
- For PROOF LOAD TESTING the average load of the person considered is for proof load testing is 100kg; so, considering the 1-person working on the system including the max. weight of the tools carried along then total load becomes 140 kgs.

#### iii. Steps: -

- 1) The tension force on the lifeline system is created by pulling the wire rope internally between the two anchor posts. For this at one end the load indicating device (load cell) is fixed and another side the lifeline wire rope itself is connected vertically in Z-RIG (configuration) with any pulling mechanism which do note hampers the actual configuration of the lifeline system and it simulates the actual loading condition in case of incident or emergency.
- 2) By applying tension force on the lifeline system exact/nearby replication of actual behavior of the system with respect to load application is observed.
- 3) The proof load applied is 140kg and hold it for 3 minutes then it is released gradually, and behavior of the components and the system as a whole is observed.
- 4) While applying load the force is transferred to all the system components such as wire rope, brackets and finally to Vertical.

#### iv. Test Records:-

Serial No.	Line No.	Expected Result	Observation	Remark

#### v. Post Test Measures: -

- After releasing the tensile force system component should return back to the original/Initial condition.
- For any installed Lifeline system, the deployment load of shock absorbingcomponent may vary as per manufacturer recommendation.
- Any sign of damaged/failure observed for component of the lifeline system and If any found then rectification need to be done before certification.
- Re-tensioning of the lifeline system should be done after proof load testing.
- The connections of anchor posts should sustain the load without breaking ordamage.
- Torque to be checked of all connections after test is conducted.
- All parameters as per the vendors QAP should be verified by client & TPI.

#### i. QUALITY ASSURANCE PLAN FOR PROOF LOAD TEST ON FIXED VERTICAL LIFELINE SYTEM (VLS:FLEXIBLE-CABLE BASED)

EN 353-2:2014 + A1:2017

D	OC REF NO.	QA	AP/20-21/VLS-I	PLT-R-00				DATE	02.04.2021
Sr No	Test Specimen		Equipment for test	Part/ Details to be Inspected	Test/Observation	Desired Results	Scope of Vendor		Scope of Client
1		VISUAL INSPECTION (PRE-TESTING INSPECTION)	NA	Whol e Lifelin e Syste m	Installation and Fixing of all the components of thesystem	Installation of Whole lifeline system as per Layout and GA Drawing	The authorized personnel should carry out the test/observation	sign,	Refer the t/sketch/drawing/de witness test, review ments, approve test
2		TORQUE CHECK	TORQUE WRENCH	Rivet/Bolt S	All the Riveted andBolted fixtures used in System of the Equipment Should be ProperlySecured	All the bolts should be fixed with 12 Nm. torque	The authorized personnel should ensure the fixing of bolts with required torque	test,	the torque, witness review documents, approve test
3	VERTICAL FIXED LIFLEINE SYSTEM- FLEXIBLE- CABLE BASED)	PROOF LOAD TEST	LOAD CELL/CHAIN PULLEY BLOCK	LOAD CELL READING	Static proof load test in which the lifeline is connected with a digital scale and tested up to a safeworking load note more than 140kgs.	components should sustain the load with slight	The authorized personnel should carry out the test/observationn	per s test pro test b obs readii the	ve the test set up as cope of testing and ocedure, Witness the eing carried out and erve the load celling and its effects on e system, review ments, approve test
4		VISUAL INSPECTION (POST-TESTING INSPECTION)	NA	Whole Lifeline System	Any damage/failure of the component, any loose fixing/fastening accessories( certaindegree of deformation is quite obvious with respect to the increased load)	No damage except certain degree of deformation	Deformed or damaged components ifany should berectified or replaced, respectively.		ess the rectification, documents, approve test

material	and work		ants this Lifeline system to be free from defects in der normal use for a period of 5 years from the date of
commissi			dei normai use for a period of 5 years from the date of
		provides 5	years of warranty from date of commissioning.
During ————	the	warranty	period, in case of any defect is liable to repair or replace the product or
compone	nt and n	ot the comple	



SUBJECT: PROVIDING & LAYING OF ROOF TOP PERMANENT LIFE LINE SYSTEM INSIDE SMELTER PLANT (PHASE-II).

Page: 1 of 104

# **NOTICE INVITING TENDER (NIT)**

NIT No:

SMLT/T&C/GeM/OMC-5948/NIT/5266

DATE: 08.03.2025

#### Sub:

Providing & Laying of Roof top Permanent Life line system inside Smelter Plant (Phase-II).

Designation - Sr. Mgr. (Chemical)
Tender Inviting Authority
Tender & Contract Dept., Smelter Plant
Ph. No. 06764 -220129, Mob.9437078350
Email: anjana.mundu@nalcoindia.co.in



SUBJECT: PROVIDING & LAYING OF ROOF TOP PERMANENT LIFE LINE SYSTEM INSIDE SMELTER PLANT (PHASE-II).

Page: 2 of 104

### **INDEX**

SI.	Particulars Particulars	Annexure	Page
	PART-A		
	General Information		
1.	Company Information		6
2.	E-Procurement		6
3.	Purpose of this NIT		6
4.	Bidding Process		6-7
5.	Bid Evaluation		8
6.	Ordering		8
7.	General Conditions		8
	Instruction to Bidders	Annexure-A1	9-27
8.	Scope of work		9
9.	Pre-Qualification Criteria (PQC)		9
10.	Litigation History		10
11.	Earnest Money Deposit(EMD)		10
12.	Bank Guarantee		11
13.	Order of precedence of contract documents		11
14.	Mode, Submission, Receipt and Opening of Tender		12
15.	Evaluation of Bids		13
16.	Acceptance of Tender		14
17.	Contract Period		14
18.	Occupational Health & Safety Management System		14
19.	Environmental Requirements		15
20.	Energy Management System (ISO 50001)		15
21.	Secrecy Terms		15
22.	Execution of Contract Agreement		16
23.	Supervision		16
24.	Payment of Wages to Engaged Labour at Site		16
25.	Labour Laws		16-17
26.	Gate pass & Security		17
27.	Material, Tools & Tackles		18
28.	Energy/Water/Ground/Building Premises		18-19
29.	Quantity & Rate		20
30.	Quality of Work		21



SUBJECT: PROVIDING & LAYING OF ROOF TOP PERMANENT LIFE LINE SYSTEM INSIDE SMELTER PLANT (PHASE-II).

Page: 3 of 104

31.   Security Deposit   21.22	SI.	Particulars Particulars	Annexure	Page
33. Billing & Invoicing         22-23           34. Payment Terms         23           35. Price Variation for Labour         24           36. Price Variation for Fuel         24           37. Defect Liability Period (DLP)         24           38. Contractor's obligations and Penalty         24           39. Recovery towards Compensation for delay         25           40. Blacklisting/Banning/Suspension/Delisting/Holiday List         25-26           41. Termination of Contract         26           42. Arbitration         26           43. Contract Closure         27           44. Energy management system         27           45. Mandatory guideline for saving energy         27           46. Safety guidelines         Annexure-A2         28-29           47. PPE Matrix/Requirements         Annexure-A3         30-33           48. Environmental policy         Annexure-A4         34           49. OHS Policy & Quality Policy         Annexure-A5         35           50. Social Accountability (SA) / Energy policy         Annexure-A6         36           51. General Environment Requirement / Minimum safety equipment         Annexure-A9         36           52. General Guideline to bidder on Reverse Auction         Annexure-A9         40-42           5	31.	Security Deposit		21
34.   Payment Terms	32.	Taxes & Duties		21-22
35.         Price Variation for Labour         24           36.         Price Variation for Fuel         24           37.         Defect Liability Period (DLP)         24           38.         Contractor's obligations and Penalty         25           40.         Blacklisting/Banning/Suspension/Delisting/Holiday List         25-26           41.         Termination of Contract         26           42.         Arbitration         26           43.         Contract Closure         27           44.         Energy management system         27           45.         Mandatory guideline for saving energy         27           46.         Safety guidelines         Annexure-A2         28-29           47.         PPE Matrix/Requirements         Annexure-A3         30-33           48.         Environmental policy         Annexure-A4         34           49.         OHS Policy & Quality Policy         Annexure-A5         35           50.         Social Accountability (SA) / Energy policy         Annexure-A6         36           51.         General Environment Requirement / Minimum safety equipment         Annexure-A7         37           52.         General Guideline to bidder on Reverse Auction         Annexure-A8         38	33.	Billing & Invoicing		22-23
36. Price Variation for Fuel         24           37. Defect Liability Period (DLP)         24           38. Contractor's obligations and Penalty         24           39. Recovery towards Compensation for delay         25           40. Blacklisting/Banning/Suspension/Delisting/Holiday List         25-26           41. Termination of Contract         26           42. Arbitration         26           43. Contract Closure         27           44. Energy management system         27           45. Mandatory guideline for saving energy         27           46. Safety guidelines         Annexure-A2         28-29           47. PPE Matrix/Requirements         Annexure-A3         30-33           48. Environmental policy         Annexure-A4         34           49. OHS Policy & Quality Policy         Annexure-A5         35           50. Social Accountability (SA) / Energy policy         Annexure-A6         36           51. General Environment Requirement / Minimum safety equipment         Annexure-A7         37           52. General Guideline to bidder on Reverse Auction         Annexure-A8         38           53. Proposed site organization         39         39           54. Compliance to Integrity pact         39         40-42           56. Restrictions under Rule 1	34.	Payment Terms		23
37. Defect Liability Period (DLP)  38. Contractor's obligations and Penalty  39. Recovery towards Compensation for delay  40. Blacklisting/Banning/Suspension/Delisting/Holiday List  41. Termination of Contract  42. Arbitration  43. Contract Closure  44. Energy management system  45. Mandatory guideline for saving energy  46. Safety guidelines  47. PPE Matrix/Requirements  48. Environmental policy  49. OHS Policy & Quality Policy  40. Social Accountability (SA) / Energy policy  41. Environmental Environment Requirement / Minimum safety equipment  41. Compliance to Integrity pact  42. Annexure-A5  43. Annexure-A5  44. Environmental policy  44. Environmental policy  45. Annexure-A3  46. Safety guidelines  47. PPE Matrix/Requirements  48. Environmental policy  49. OHS Policy & Quality Policy  40. Annexure-A5  41. Annexure-A5  42. Environmental Requirement / Minimum safety equipment  40. Annexure-A6  41. Annexure-A7  42. Annexure-A7  43. Annexure-A7  44. Environmental Requirement / Minimum safety equipment  40. Annexure-A7  41. Annexure-A8  42. Environmental Requirement / Minimum safety equipment  43. Annexure-A7  44. Environmental Requirement / Minimum safety equipment  44. Environmental Requirement / Minimum safety equipment  45. Compliance to Integrity pact  46. Safety guideline to bidder on Reverse Auction  47. Compliance to Integrity pact  48. Environmental Requirement / Minimum safety equipment  48. Environmental Requirement / Minimum safety equipment  49. OHS Policy & Quality Policy  40. Annexure-A8  40. Annexure-A9  40. 42  40. 4	35.	Price Variation for Labour		24
38. Contractor's obligations and Penalty 39. Recovery towards Compensation for delay 40. Blacklisting/Banning/Suspension/Delisting/Holiday List 41. Termination of Contract 42. Arbitration 43. Contract Closure 44. Energy management system 45. Mandatory guideline for saving energy 46. Safety guidelines 47. PPE Matrix/Requirements 48. Environmental policy 49. OHS Policy & Quality Policy 49. OHS Policy & Quality Policy 40. Social Accountability (SA) / Energy policy 41. General Environment Requirement / Minimum safety equipment 42. Annexure-A5 43. Compliance to Integrity pact 44. Environmental policy 45. Compliance to Integrity pact 46. Safety guidelines 46. Safety guidelines 47. PPE Matrix/Requirements 48. Environmental policy 49. OHS Policy & Quality Policy 40. Annexure-A5 40. Social Accountability (SA) / Energy policy 40. Annexure-A5 41. General Environment Requirement / Minimum safety equipment 40. Annexure-A6 41. Annexure-A7 42. Annexure-A8 43. Social Accountability (SA) / Energy policy 40. Annexure-A7 41. Annexure-A8 42. Annexure-A8 43. Social Accountability (SA) / Energy policy 40. Annexure-A9 41. Annexure-A9 42. Annexure-A9 43. Annexure-A9 44. Annexure-A9 44. Annexure-A9 45. Compliance to PPP-MII Order 2017 (Amended on 16.09.2020) 46. Restrictions under Rule 144 (xi) of the General Financial Rules (GFRs), 2017 46. Safety guidelines 46. Contract Specific information 47. Contract details & POC (Technical / Financial) 47. Contract details & POC (Technical / Financial) 48. Annexure-B1 49. OHS POLICE Annexure-B2 40. Annexure-B1 41. Annexure-B2 41. Annexure-B2 42. Annexure-B2 43. Annexure-B2 44. Annexure-B2 45. Annexure-B2 46. Annexure-B3 47. Social Accountability & Rate Schedule) 47. Annexure-B4 48. Annexure-B5 48. Social Accountability & Rate Schedule) 48. Annexure-B4 49. Annexure-B5 40. Annexure-B5 40. Annexure-B5 41. Minimum Wages of Contract & List of PPE 41. Minimum Wages of Contract & List of PPE 42. Annexure-B5 43. Social Accountability & Annexure-B5 44. Annexure-B5 45. Social Accountability & Annexure-B5	36.	Price Variation for Fuel		24
39. Recovery towards Compensation for delay         25           40. Blacklisting/Banning/Suspension/Delisting/Hollday List         25-26           41. Termination of Contract         26           42. Arbitration         26           43. Contract Closure         27           44. Energy management system         27           45. Mandatory guideline for saving energy         27           46. Safety guidelines         Annexure-A2         28-29           47. PPE Matrix/Requirements         Annexure-A3         30-33           48. Environmental policy         Annexure-A4         34           49. OHS Policy & Quality Policy         Annexure-A5         35           50. Social Accountability (SA) / Energy policy         Annexure-A6         36           51. General Environment Requirement / Minimum safety equipment         Annexure-A7         37           52. General Guideline to bidder on Reverse Auction         Annexure-A8         38           53. Proposed site organization         39         39           54. Compliance to Integrity pact         39           55. Compliance to Integrity pact         39           56. Restrictions under Rule 144 (xi) of the General Financial Rules (GFRs), 2017         Annexure-A9         40-42           56. Restrictions under Rule 145 (xi) of the General Financial Rule	37.	Defect Liability Period (DLP)		24
40. Blacklisting/Banning/Suspension/Delisting/Holiday List 25-26 41. Termination of Contract 26 42. Arbitration 26 43. Contract Closure 27 44. Energy management system 27 45. Mandatory guideline for saving energy 27 46. Safety guidelines Annexure-A2 28-29 47. PPE Matrix/Requirements Annexure-A3 30-33 48. Environmental policy Annexure-A4 34 49. OHS Policy & Quality Policy Annexure-A5 50. Social Accountability (SA) / Energy policy Annexure-A6 51. General Environment Requirement / Minimum safety equipment Annexure-A7 52. General Guideline to bidder on Reverse Auction Annexure-A8 38 53. Proposed site organization 39 54. Compliance to Integrity pact 55. Compliance to Integrity pact 56. Restrictions under Rule 144 (xi) of the General Financial Rules (GFRs), 2017 PART-B Contract details & PQC (Technical / Financial) 57. Contract details & PQC (Technical / Financial) 58. Scope of Work (SOW) Annexure-B2 59. Special Conditions of Contract (SCC) Annexure-B3 50. Special Conditions of Contract & List of PPE Annexure-B4 Annexure-B5 Annexure-B6 Annexure-B7 Anne	38.	Contractor's obligations and Penalty		24
41. Termination of Contract 42. Arbitration 43. Contract Closure 44. Energy management system 45. Mandatory guideline for saving energy 46. Safety guidelines 47. PPE Matrix/Requirements 48. Environmental policy 49. OHS Policy & Quality Policy 50. Social Accountability (SA) / Energy policy 51. General Environment Requirement / Minimum safety equipment 52. General Guideline to bidder on Reverse Auction 53. Proposed site organization 54. Compliance to Integrity pact 55. Compliance to PPP-MII Order 2017 (Amended on 16.09.2020) 56. Restrictions under Rule 144 (xi) of the General Financial Rules (GFRs), 2017 57. Contract details & PQC (Technical / Financial) 58. Scope of Work (SOW) 59. Special Conditions of Contract (SCC) 59. Special Conditions of Contract & List of PPE 59. Annexure-B3 50. Social Accountability (SA) / Energy policy 59. Annexure-B1 59. Special Conditions of Contract (SCC) 59. Annexure-B3 59. Special Conditions of Contract & List of PPE 59. Annexure-B4 50. Annexure-B5 50. Social Accountability (SA) / Energy policy 59. Annexure-B4 50. Annexure-B5 50. Social Accountability (SA) / Energy policy 59. Annexure-B1 59. Special Conditions of Contract & List of PPE 59. Annexure-B5 50. Social Accountability (SA) / Energy policy 59. Annexure-B5 50. Social Accountability (SA) / Energy policy 59. Annexure-B1 59. Annexure-B3 59. Special Conditions of Contract & List of PPE 59. Annexure-B5 50. Annexure-B5 50. Social Annexure-B7 50. Social Annexure-B7 50. Social Annexure-B7 51. Annexure-B7 52. Contract & List of PPE 53. Annexure-B7 54. Annexure-B7 55. Social Annexure-B7 56. Annexure-B7 57. Contract & List of PPE 57. Annexure-B7 58. Social Accountability (SA) / Energy policy 59. Annexure-B1 59. Special Conditions of Contract & List of PPE 59. Annexure-B7 50. Social Annexure-B7 50. Social Accountability (SA) / Energy policy 50. Annexure-B1 50. Annexure-B1 50. Annexure-B1 50. Annexure-B1 50. Annexure-B1 50. A	39.	Recovery towards Compensation for delay		25
42. Arbitration 26 43. Contract Closure 27 44. Energy management system 27 45. Mandatory guideline for saving energy 27 46. Safety guidelines Annexure-A2 28-29 47. PPE Matrix/Requirements Annexure-A3 30-33 48. Environmental policy Annexure-A4 34 49. OHS Policy & Quality Policy Annexure-A5 35 50. Social Accountability (SA) / Energy policy Annexure-A6 36 51. General Environment Requirement / Minimum safety equipment Annexure-A7 37 52. General Guideline to bidder on Reverse Auction Annexure-A8 38 53. Proposed site organization 39 54. Compliance to Integrity pact 39 55. Compliance to PPP-MII Order 2017 (Amended on 16.09.2020) Annexure-A9 40-42 56. Restrictions under Rule 144 (xi) of the General Financial Rules (GFRs), 2017 57. Contract details & PQC (Technical / Financial) Annexure-B1 47-50 58. Scope of Work (SOW) Annexure-B2 51 59. Special Conditions of Contract (SCC) Annexure-B3 52-53 60. Price Bid (Quantity & Rate Schedule) Annexure-B4 54 61. Minimum Wages of Contract & List of PPE Annexure-B5 55-56	40.	Blacklisting/Banning/Suspension/Delisting/Holiday List		25-26
43. Contract Closure 44. Energy management system 45. Mandatory guideline for saving energy 46. Safety guidelines 47. PPE Matrix/Requirements 48. Environmental policy 49. OHS Policy & Quality Policy 49. OHS Policy & Quality Policy 40. Social Accountability (SA) / Energy policy 40. Social Accountability (SA) / Energy policy 40. Social Accountability (SA) / Energy policy 40. Annexure-A5 41. General Environment Requirement / Minimum safety equipment 40. Annexure-A6 41. General Guideline to bidder on Reverse Auction 41. General Guideline to bidder on Reverse Auction 42. Compliance to Integrity pact 43. Proposed site organization 43. Proposed site organization 43. Proposed site organization 43. Compliance to PPP-MII Order 2017(Amended on 16.09.2020) 40. Annexure-A9 40. Annexure-A9 40. Contract Specific information 40. Contract Specific information 40. Contract details & PQC (Technical / Financial) 40. Annexure-B1 41. Special Conditions of Contract (SCC) 41. Annexure-B2 42. Annexure-B3 43. Annexure-B4 44. Annexure-B4 45. Minimum Wages of Contract & List of PPE 45. Annexure-B5 46. Minimum Wages of Contract & List of PPE 46. Annexure-B5 47. Special Conditions 47. Contract Bates of PPE 47. Contract Bates of PPE 47. Annexure-B5 48. Scope of Work (SOW) 48. Safety guidelines 48. Annexure-B1 48. Annexure-B1 49. Contract Bates of PPE 49. Annexure-B1 40. Annexure-B1 41. Minimum Wages of Contract & List of PPE 40. Annexure-B5 40. Annexure-B5 41. Minimum Wages of Contract & List of PPE 41. Annexure-B5 42. Safety guidelines 43. Annexure-B6 44. Annexure-B6 45. Annexure-B7 46. Annexure-B7 47. Social Accountability (Sa) / Free Bid (Quantity & Rate Schedule) 47. Social Accountability (Sa) / Free Bid (Quantity & Rate Schedule) 47. Social Accountability (Sa) / Free Bid (Quantity & Rate Schedule) 47. Social Accountability (Sa) / Free Bid (Quantity & Rate Schedule) 47. Social Accountability (Sa) / Annexure-B1 48. Annexure-B1 49. Contract Specific information 49. Contract Specific information 40. Annexure-B1 40. Annexure-B1 40. Annexure-	41.	Termination of Contract		26
44. Energy management system  45. Mandatory guideline for saving energy  46. Safety guidelines  47. PPE Matrix/Requirements  48. Environmental policy  49. OHS Policy & Quality Policy  50. Social Accountability (SA) / Energy policy  51. General Environment Requirement / Minimum safety equipment  52. General Guideline to bidder on Reverse Auction  53. Proposed site organization  54. Compliance to Integrity pact  55. Compliance to Integrity pact  56. Restrictions under Rule 144 (xi) of the General Financial Rules (GFRs), 2017  PART-B  Contract Specific information  57. Contract details & PQC (Technical / Financial)  58. Scope of Work (SOW)  Annexure-B1  Annexure-B2  59. Special Conditions of Contract (SCC)  Annexure-B3  50. Price Bid (Quantity & Rate Schedule)  Annexure-B4  Annexure-B5  Annexure-B5  Annexure-B6  Annexure-B7  Ann	42.	Arbitration		26
45. Mandatory guideline for saving energy  46. Safety guidelines  47. PPE Matrix/Requirements  48. Environmental policy  49. OHS Policy & Quality Policy  50. Social Accountability (SA) / Energy policy  51. General Environment Requirement / Minimum safety equipment  52. General Guideline to bidder on Reverse Auction  53. Proposed site organization  54. Compliance to Integrity pact  55. Compliance to Integrity pact  56. Restrictions under Rule 144 (xi) of the General Financial Rules (GFRs), 2017  PART-B  Contract Specific information  57. Contract details & POC (Technical / Financial)  58. Scope of Work (SOW)  Annexure-B1  47-50  59. Special Conditions of Contract (SCC)  Annexure-B3  50. Annexure-B4  47-50  Annexure-B4  54. Annexure-B5  55-56  Annexure-B4  56. Manexure-B5  55-56  PART-C	43.	Contract Closure		27
46. Safety guidelines  47. PPE Matrix/Requirements  48. Environmental policy  49. OHS Policy & Quality Policy  50. Social Accountability (SA) / Energy policy  51. General Environment Requirement / Minimum safety equipment  52. General Guideline to bidder on Reverse Auction  53. Proposed site organization  54. Compliance to Integrity pact  55. Compliance to PPP-MII Order 2017(Amended on 16.09.2020)  56. Restrictions under Rule 144 (xi) of the General Financial Rules (GFRs), 2017  PART-B  Contract Specific information  57. Contract details & PQC (Technical / Financial)  58. Scope of Work (SOW)  Annexure-B1  47-50  59. Special Conditions of Contract (SCC)  Annexure-B4  Annexure-B4  59. PART-C  Annexure-B4  Annexure-B5  55-56  PART-C	44.	Energy management system		27
47. PPE Matrix/Requirements  48. Environmental policy  49. OHS Policy & Quality Policy  50. Social Accountability (SA) / Energy policy  51. General Environment Requirement / Minimum safety equipment  52. General Guideline to bidder on Reverse Auction  53. Proposed site organization  54. Compliance to Integrity pact  55. Compliance to Integrity pact  56. Restrictions under Rule 144 (xi) of the General Financial Rules (GFRs), 2017  PART-B  Contract Specific information  57. Contract details & PQC (Technical / Financial)  58. Scope of Work (SOW)  Annexure-B1  47-50  59. Special Conditions of Contract (SCC)  Annexure-B3  59. PART-C  Annexure-B4  Annexure-B4  Annexure-B5  55-56  PART-C	45.	Mandatory guideline for saving energy		27
48. Environmental policy  49. OHS Policy & Quality Policy  50. Social Accountability (SA) / Energy policy  51. General Environment Requirement / Minimum safety equipment  52. General Guideline to bidder on Reverse Auction  53. Proposed site organization  54. Compliance to Integrity pact  55. Compliance to Integrity pact  56. Restrictions under Rule 144 (xl) of the General Financial Rules (GFRs), 2017  PART-B  Contract Specific information  57. Contract details & PQC (Technical / Financial)  58. Scope of Work (SOW)  Annexure-B1  59. Special Conditions of Contract (SCC)  Annexure-B3  50. Annexure-B4  40. Annexure-B4  41. Minimum Wages of Contract & List of PPE  Annexure-B5  55. Annexure-B5  56. Annexure-B5  57. Annexure-B5  57. Special Conditions of Contract (SCC)  Annexure-B1  47.50  48. Special Conditions of Contract (SCC)  48. Annexure-B3  59. Special Conditions of Contract (SCC)  49. Annexure-B3  50. Special Conditions of Contract & List of PPE  40. Annexure-B5  50. Special Conditions of Contract & List of PPE  40. Annexure-B5  50. Special Conditions of Contract & List of PPE  40. Annexure-B5  50. Special Conditions of Contract & List of PPE  40. Annexure-B5  50. Special Conditions of Contract & List of PPE  40. Annexure-B5  50. Special Conditions of Contract & List of PPE  40. Annexure-B5  50. Special Conditions of Contract & List of PPE	46.	Safety guidelines	Annexure-A2	28-29
49. OHS Policy & Quality Policy  50. Social Accountability (SA) / Energy policy  51. General Environment Requirement / Minimum safety equipment  52. General Guideline to bidder on Reverse Auction  53. Proposed site organization  54. Compliance to Integrity pact  55. Compliance to PPP-MII Order 2017 (Amended on 16.09.2020)  56. Restrictions under Rule 144 (xi) of the General Financial Rules (GFRs), 2017  PART-B  Contract Specific information  57. Contract details & PQC (Technical / Financial)  58. Scope of Work (SOW)  Annexure-B1  59. Special Conditions of Contract (SCC)  Annexure-B3  50. Annexure-B4  Annexure-B4  Annexure-B5  51. Special Minimum Wages of Contract & List of PPE  Annexure-B5  Annexure-B5  Annexure-B5  Annexure-B5  55-56	47.	PPE Matrix/Requirements	Annexure-A3	30-33
50. Social Accountability (SA) / Energy policy  51. General Environment Requirement / Minimum safety equipment  52. General Guideline to bidder on Reverse Auction  53. Proposed site organization  54. Compliance to Integrity pact  55. Compliance to PPP-MII Order 2017 (Amended on 16.09.2020)  56. Restrictions under Rule 144 (xi) of the General Financial Rules (GFRs), 2017  PART-B  Contract Specific information  57. Contract details & PQC (Technical / Financial)  58. Scope of Work (SOW)  Annexure-B1  47-50  59. Special Conditions of Contract (SCC)  Annexure-B2  51. Minimum Wages of Contract & List of PPE  Annexure-B4  Annexure-B5  55-56	48.	Environmental policy	Annexure-A4	34
51. General Environment Requirement / Minimum safety equipment Annexure-A7 37  52. General Guideline to bidder on Reverse Auction Annexure-A8 38  53. Proposed site organization 39  54. Compliance to Integrity pact 39  55. Compliance to PPP-MII Order 2017 (Amended on 16.09.2020) Annexure-A9 40-42  56. Restrictions under Rule 144 (xi) of the General Financial Rules (GFRs), 2017 Annexure-A10 43-45  Contract Specific information 47-50  57. Contract details & PQC (Technical / Financial) Annexure-B1 47-50  Scope of Work (SOW) Annexure-B2 51  59. Special Conditions of Contract (SCC) Annexure-B3 52-53  60. Price Bid (Quantity & Rate Schedule) Annexure-B4 54  61. Minimum Wages of Contract & List of PPE Annexure-B5 55-56	49.	OHS Policy & Quality Policy	Annexure-A5	35
52. General Guideline to bidder on Reverse Auction  53. Proposed site organization  54. Compliance to Integrity pact  55. Compliance to PPP-MII Order 2017 (Amended on 16.09.2020)  56. Restrictions under Rule 144 (xi) of the General Financial Rules (GFRs), 2017  PART-B  Contract Specific information  57. Contract details & PQC (Technical / Financial)  58. Scope of Work (SOW)  Annexure-B1  47-50  59. Special Conditions of Contract (SCC)  Annexure-B2  51  59. Price Bid (Quantity & Rate Schedule)  Annexure-B4  54  Annexure-B5  55-56  PART-C  57	50.	Social Accountability (SA) / Energy policy	Annexure-A6	36
53. Proposed site organization  54. Compliance to Integrity pact  55. Compliance to PPP-MII Order 2017 (Amended on 16.09.2020)  56. Restrictions under Rule 144 (xi) of the General Financial Rules (GFRs), 2017  PART-B  Contract Specific information  57. Contract details & PQC (Technical / Financial)  Annexure-B1  47-50  58. Scope of Work (SOW)  Annexure-B2  51  59. Special Conditions of Contract (SCC)  Annexure-B3  52-53  60. Price Bid (Quantity & Rate Schedule)  Annexure-B4  54  Annexure-B5  55-56  PART-C  57	51.	General Environment Requirement / Minimum safety equipment	Annexure-A7	37
54. Compliance to Integrity pact  55. Compliance to PPP-MII Order 2017(Amended on 16.09.2020)  Annexure-A9  40-42  56. Restrictions under Rule 144 (xi) of the General Financial Rules (GFRs), 2017  PART-B  Contract Specific information  57. Contract details & PQC (Technical / Financial)  Annexure-B1  47-50  58. Scope of Work (SOW)  Annexure-B2  51  59. Special Conditions of Contract (SCC)  Annexure-B3  52-53  60. Price Bid (Quantity & Rate Schedule)  Annexure-B4  54  Annexure-B5  55-56  PART-C	52.	General Guideline to bidder on Reverse Auction	38	
55. Compliance to PPP-MII Order 2017(Amended on 16.09.2020)  Annexure-A9  Annexure-A10  Annexure-A10  PART-B  Contract Specific information  57. Contract details & PQC (Technical / Financial)  Scope of Work (SOW)  Annexure-B1  Annexure-B2  51  59. Special Conditions of Contract (SCC)  Annexure-B3  52-53  60. Price Bid (Quantity & Rate Schedule)  PART-C  PART-C  Annexure-B5  55-56  PART-C	53.	Proposed site organization		39
56. Restrictions under Rule 144 (xi) of the General Financial Rules (GFRs), 2017  PART-B  Contract Specific information  57. Contract details & PQC (Technical / Financial)  Scope of Work (SOW)  Annexure-B1  47-50  Annexure-B2  51  59. Special Conditions of Contract (SCC)  Annexure-B3  52-53  60. Price Bid (Quantity & Rate Schedule)  Annexure-B4  54  61. Minimum Wages of Contract & List of PPE  Annexure-B5  55-56	54.	Compliance to Integrity pact		39
PART-B  Contract Specific information  57. Contract details & PQC (Technical / Financial)  Annexure-B1 47-50  Scope of Work (SOW)  Annexure-B2 51  Special Conditions of Contract (SCC)  Annexure-B3 52-53  60. Price Bid (Quantity & Rate Schedule)  Annexure-B4 54  Minimum Wages of Contract & List of PPE  Annexure-B5 55-56  PART-C 57	55.	Compliance to PPP-MII Order 2017 (Amended on 16.09.2020)	Annexure-A9	40-42
Contract Specific information  57. Contract details & PQC (Technical / Financial)  58. Scope of Work (SOW)  Annexure-B2  51  59. Special Conditions of Contract (SCC)  Annexure-B3  52-53  60. Price Bid (Quantity & Rate Schedule)  Annexure-B4  54  61. Minimum Wages of Contract & List of PPE  Annexure-B5  55-56  PART-C  57	56.	···	Annexure-A10	43-45
57. Contract details & PQC (Technical / Financial)  58. Scope of Work (SOW)  59. Special Conditions of Contract (SCC)  60. Price Bid (Quantity & Rate Schedule)  61. Minimum Wages of Contract & List of PPE  PART-C  Annexure-B1  47-50  Annexure-B2  51  Annexure-B3  52-53  54  67  Annexure-B4  54  55-56		PART-B		46
58.Scope of Work (SOW)Annexure-B25159.Special Conditions of Contract (SCC)Annexure-B352-5360.Price Bid (Quantity & Rate Schedule)Annexure-B45461.Minimum Wages of Contract & List of PPEAnnexure-B555-56PART-C57		Contract Specific information		
59. Special Conditions of Contract (SCC)  60. Price Bid (Quantity & Rate Schedule)  61. Minimum Wages of Contract & List of PPE  PART-C  Annexure-B3  52-53  Annexure-B4  54  55-56  PART-C  57	57.	Contract details & PQC (Technical / Financial)	Annexure-B1	47-50
60. Price Bid (Quantity & Rate Schedule)  61. Minimum Wages of Contract & List of PPE  PART-C  Annexure-B4  54  55-56  PART-C  57	58.	Scope of Work (SOW)	Annexure-B2	51
61. Minimum Wages of Contract & List of PPE Annexure-B5 55-56  PART-C 57	59.	Special Conditions of Contract (SCC)	Annexure-B3	52-53
PART-C 57	60.	Price Bid (Quantity & Rate Schedule)	Annexure-B4	54
	61.	Minimum Wages of Contract & List of PPE	Annexure-B5	55-56
Formats for contract execution		PART-C		57
		Formats for contract execution		



# TENDER No.:

**SMLT/T&C/GeM/OMC-5948/NIT/5266** 

SUBJECT: PROVIDING & LAYING OF ROOF TOP PERMANENT LIFE LINE SYSTEM INSIDE SMELTER PLANT (PHASE-II).

Page: 4 of 104

SI.	Particulars Particulars	Annexure	Page
62.	Forwarding letter and Undertaking	Annexure-C1	58
63.	Mandatory information of the bidder	Annexure-C2	59
64.	Deviation statement	Annexure-C3	60
65.	Declaration by bidder	Annexure-C4	61
66.	Undertaking on downloaded tender	Annexure-C5	62
67.	Detailed work order execution statistics	Annexure-C6	63
68.	Financial details of Turnover/Net worth	Annexure-C7	64
69.	Details of present commitments	Annexure-C8	65
70.	Tax invoice	Annexure-C9	66
71.	Bank Mandate for e-Payment	Annexure-C10	67
72.	Indemnity Bond – FIM & equipment taken outside plant premises	Annexure-C11	68-69
73.	Bank Guarantee - EMD	Annexure-C12	70-71
74.	Bank Guarantee CPGB	Annexure-C13	72-73
75.	Bank Guarantee Security Deposit	Annexure-C14	74-75
76.	Bank Guarantee FIM & equipment taken outside plant premises	Annexure-C15	76-77
77.	Bank Guarantee Advance	Annexure-C16	78-79
78.	List of standardized banks	Annexure-C17	80
79.	SAC codes for Services & HSN codes for supply	Annexure-C18	81
80.	Relationship with BoD	Annexure-C19	82
81.	Relationship with other employees of NALCO	Annexure-C20	83
82.	Pre-contract Integrity pact	Annexure-C21	84-88
83.	Affidavit for Litigation History Claim	Annexure-C22	89
84.	Agreement	Annexure-C23	90-91
85.	Commercial questionnaire	Annexure-C24	92-93
86.	Checklist for bidder	Annexure-C25	94-95
87.	Checklist for submission of offer	Annexure-C26	96-98
88.	Appendix for documents to be submitted by bidder	Annexure-C27	99
89.	No Claim/No due certificate	Annexure-C28	100
90.	Work Completion certificate	Annexure-C29	101
91.	Anti-Profiteering Declaration Format (To be submitted with Bid)	Annexure-C30	102
92.	Anti-Profiteering Declaration Format (To be submitted at the time of release of Final Due)	Annexure-C31	103



SUBJECT: PROVIDING & LAYING OF ROOF TOP PERMANENT LIFE LINE SYSTEM INSIDE SMELTER PLANT (PHASE-II).

Page: 5 of 104

# PART -A

General information



SUBJECT: PROVIDING & LAYING OF ROOF TOP PERMANENT LIFE LINE SYSTEM INSIDE SMELTER PLANT (PHASE-II).

Page: 6 of 104

#### 1. Company Information

- 1.1. National Aluminum Company Limited (NALCO), incorporated in 1981, is a premier Navaratna Public Sector Enterprise under administrative control of Ministry of Mines of Govt. of India in the field of Alumina/Aluminium having integrated multi-locational facility of Bauxite Mining, Alumna Refining, Aluminum Smelter, Power Generation and Port. NALCO has one of the major Aluminum production facilities consisting of Bauxite Mines, Alumina Refinery, Aluminium Smelter and Captive Power Plant, all located in the state of Odisha.
- 1.2. More details on NALCO can be viewed on company's website www.nalcoindia.com

#### 2. Government e-Marketplace(GeM):

- 2.2 The bidder wishes to participate in the published tender should have his firm registered in the GeM government portal. Accordingly, bidder should do the registration in the tender site <a href="http://gem.gov.in">http://gem.gov.in</a> using the option available. Then the Digital Signature registration has to be done with the e-token, after logging into the site. The e-token may be obtained from one of the authorized Certifying Authorities of Govt. of India such as MTNL / SIFY / TCS / nCode/ eMudhra / NIC etc. After that, bidder will login to the site through using his user ID & Password chosen during registration. The e-token that is registered should be used by the bidder and should not be misused by others.
- 2.2 Reverse Auction:- In case of Reverse auction tendering, the Date, time and quantum of decremental value will be mentioned in the NIT. Hence bidder should take a note of it and see the details as per **Annexure-A8**.

#### 3. Purpose of this NIT

- 3.1. Smelter Plant NALCO invites digitally signed online bids under **OPEN**, **Two Part** GeM e-Tender system.
- 3.2. The Salient features of the Tender are as detailed F-02 Form (Annexure-B1).

#### 4. Bidding Process

- 4.1 The entire set of Tender document needs to be uploaded and digitally signed in GeM site of GeM Portal (www.gem.gov.in) before the scheduled time of bid submission.
- 4.2 Bids will be received up to last date and time specified or extended bid due date, as the case may be through e-tendering at <a href="https://www.gem.gov.in">www.gem.gov.in</a>.
- 4.3 NALCO shall not be responsible for any expenses incurred by bidders in connection with the preparation & submission of their bids, and other expenses incurred during bidding process.
- 4.4 The bidders are advised to submit the tender document online well in advance before the prescribed time to avoid any last-minute hitch / problem.
- 4.5 After the bid submission, the acknowledgement number generated by the e-tendering system should be printed by the bidder and kept as a record of evidence for online submission of bid for the tender.
- 4.6 Further, bid shall be evaluated based on documents furnished. So bidder must ensure that all relevant documents are furnished at the time of submission of offer.
- 4.7 This NIT is in three parts .The part -A is mainly General information and instructions to bidder, Part-B is about the contract details and Part-C consists of various forms ,agreement formats, declarations etc. The bidder should go through full NIT before filling.
- 4.8 The bidder should go through 'Annexure-A1' i.e. instructions to the bidders prior to bidding.



SUBJECT: PROVIDING & LAYING OF ROOF TOP PERMANENT LIFE LINE SYSTEM INSIDE SMELTER PLANT (PHASE-II).

Page: 7 of 104

- 4.9 Bidders are required to submit the hard copy of the followings in a sealed envelope and should reach General Manager (T&C) Tender & Contract Department, Smelter Plant, NALCO, Angul-759145 (Odisha) by Speed Post/By Hand before the due date & time of bid opening.
  - 4.9.1 Earnest Money Deposit(EMD) (Refer Clause no. 4.0 of Annexure-A1 & Format for BG-EMD is available at **Annexure-C12**)
    - NB:- Earnest Money Deposit(EMD) is a prerequisite, otherwise the Tender will be normally rejected. Earnest Money Deposit(EMD) may be submitted in the account details of respective Unit of NALCO as available at 4.0 of NIT. However, the bidder may submit attested copy of certificate such as NSIC / MSME / other category for Earnest Money Deposit(EMD) exemption.
  - 4.9.2 The signed & sealed copy of "The Integrity Pact (Annexure-C21).
  - 4.9.3 Affidavit in Original towards Litigation History (**Annexure-C22**) duly signed after the NIT publication date.
  - 4.9.4 Bid submission conformation page from GeM System Government of India
  - 4.9.5 Internet Bank Mandate along with Cancelled Cheque (all in original) as per Annexure-C10.
  - 4.9.6 The party, if registered with NSIC/MSME, then they should submit the documentary proof of the same mandatorily.

Copy of all these above documents are also required to be uploaded in GeM Portal along with Bid documents.

- **4.10** Clarifications, if any, regarding this tender can be obtained from the undersigned **through mail or phone no. at Pg-8 of 104** before the TSD.
- 4.11 After downloading / getting the tender schedules, the bidder should go through them carefully and then submit the documents as asked. If there are any clarifications, this may refer online through the tender site, or through the contact details. Bidder should consider the corrigendum published before submitting the bids online. Bidders in their own interest should get ready in advance to submit the bid documents as indicated in the tender schedule. These documents should be in PDF / XLS / RAR / DWF formats. If there is more than one document, they can be clubbed together.
- 4.12 Bidder should clearly fill up the PQC Technical (Detailed work order and execution statistics) (Annexure-C6) and Details of present commitments of the tenderer (Annexure-C8) for his offer evaluation. Suppression of credential / facts may lead to penal action as per procedure.
- 4.13 It is mandatory for the bidder to fill up the <u>Annexure-C19</u> and <u>Annexure-C20</u> (regarding declaration of the relatives in Nalco) and <u>Annexure-C3</u> (Deviation statement to the tender terms and conditions) and <u>Annexure-C4</u> (Declaration by the bidder) while submitting the offer.
- 4.14 Bidder should check his mail and GeM Portal for any information regarding tender from time to time.
- 4.15 In case any specific adverse report is found against any bidder during enquiry about the statement made / credential submitted along with the offer documents in respect of capabilities, spare capacities, performance, completion certificates and criminal background of the bidder, the offer submitted by such bidder shall be rejected and penal action as deemed fit may be initiated.
- 4.16 If the bidder submits the bid in manual form (if permitted categorically in the tender), he should have already registered in the tender site and he shall have to mention the registration ID in the bid submitted otherwise his tender will not be considered.
- 4.17 Nalco reserve the right to seek any document / information at later stage in respect of evaluation of bid which the bidder must submit failing which the bid may be rejected.



SUBJECT: PROVIDING & LAYING OF ROOF TOP PERMANENT LIFE LINE SYSTEM INSIDE SMELTER PLANT (PHASE-II).

Page: 8 of 104

#### 5 Bid Evaluation

- 5.1 Evaluation will be done strictly in line with the facilities available under government website www.gem.gov.in i.e. based on documents uploaded by the bidder as per PQC. In case of non-compliance to the PQC requirement, i.e. any shortfall documents arise out of submitted technical as well as commercial credential submitted within tender submission date, bidders will be given normally one chance under GeM Portal to upload shortfall documents within a stipulated date. No new documents would be called up as part of PQC experience documents.
- 5.2 The technical acceptability will be strictly as per matching of PQC with submitted work credential by the bidder
- 5.3 In case any specific adverse report is received against any bidder and proved to be correct after enquiry about the statement made / credential submitted along with the offer documents in respect of capabilities, spare capacities, performance, completion certificates and criminal background of the bidder, the offer submitted by such bidder shall be rejected and penal action as deemed fit may be initiated.
- 5.4 Concurrent commitment: The concurrent commitments of bidder on various jobs under execution by the bidder will be considered to assess the spare capacity available with the bidder. The bidder must confirm that they have disclosed all the works being executed by them in the offer. If the annualized concurrent commitments of the bidder plus annualized estimated value of the work (for single agency)/ annualized estimated maximum percentage of work in split case under consideration (for multiple agency) exceeds four times the average annual turnover of the bidder during the last three Financial Years, then the price bid of such a bidder shall not be recommended for opening as the bidder may not have adequate resources to execute the tendered work. Suppression of fact /data regard to jobs under execution will be considered as gross violation and rejection of bid including penal action such as banning/ blacklisting, as deemed fit. NOT APPLICABLE FOR THIS CONTRACT.
- 5.5 In-house information for assessment of capability of bidder and their performance on jobs completed / in progress at NALCO shall be considered for evaluation purpose. In case of poor performance, the offer from such bidders shall not be evaluated.
- 5.6 Nalco reserve the right to seek any document information at later stage in respect of evaluation of bid which the bidder has to submit failing which the bid may be rejected.
- 5.7 In case the Bidder submits the work experience as a sub-contractor (of the Main Contractor), approval from the Principal agency/Client, against application submitted by Main Contractor during the course of execution for the engagement as Sub-Contractor of the Main Contractor, needs to be submitted along with the Bid.

#### 6 Ordering

- 6.1 On selection of Vendor for award of work, necessary internal approval processes will be completed, and during the said process, the Vendor Master data will be cross checked with documents like PAN Registration Certificate, GST Registration Certificate, Signed & Cancelled Cheque (with Name, Account No and IFSC Code printed on the Cheque) duly authenticated by the Vendor and attached to ANNEXURE- C10.
- 6.2 In normal circumstances the party in whose favor the work is awarded shall be issued with LOI. The party shall have to enter into an agreement in writing on non-judicial stamp paper of appropriate value as laid down in the GCC. The agreement normally consists of LOI, BOQ at the accepted rate, complete bid document, Schedule of Agreed Variation (if any) etc. The documents such as, correspondences, minutes of meeting, (if held with the party) etc. shall also form part of the contract agreement if required. On execution of Agreement a Detailed Order will be issued.
- 7 **General Conditions of Contract** (GCC) will be a part of the NIT.

Designation - Sr.Mgr.(Chemical)

Tender Inviting Authority
Tender & Contract Dept., Smelter Plant
Ph. No. 06764 -220129, Mob.9437078350
Email: anjana.mundu@nalcoindia.co.in



SUBJECT: PROVIDING & LAYING OF ROOF TOP PERMANENT LIFE LINE SYSTEM INSIDE SMELTER PLANT (PHASE-II).

Page: 9 of 104

ANNEXURE-A1

#### **INSTRUCTIONS TO BIDDERS**

SMELTER / CPP of National Aluminium Company Ltd (NALCO) is situated on NH-55 at approximately 6 KM away from ANGUL (District head quarter) and 5 KM away from Banarpal in Angul district of state of Odisha, connecting between Cuttack and Sambalpur.

#### 1.0 SCOPE OF WORK:

The scope of work shall be as detailed is enclosed at <u>Annexure-B2</u>. The work shall be carried out as per direction of Engineer-in-charge/Manager-in-charge subject to special condition of contract given in **Annexure-B3**.

#### 2.0 PRE-QUALIFICATION CRITERIA (PQC)

- 2.1 Single part Tender will be evaluated on the basis of price bids only. Hence, bidder should not take any technical/commercial deviations, otherwise their offer will be liable for rejection. For other type of tenders, wherever techno-commercial evaluation is to be done first, the bidders are required to submit documentary evidences for technical experience and financial capabilities as part of Pre-Qualification Criteria (PQC).
- 2.2 It may be noted that the details of documents submitted in support of the PQC for Technical & Financial capabilities are to be specified in following formats. If no references are found in the stated Annexures and the bidder gets disqualified, non-cognizance of such documents by NALCO, even if attached somewhere else as part of bid documents, will not be seen as a deficiency in proper evaluation of such documents. Hence, bidders may ensure that such documents are invariably referred in the below-mentioned Annexures.
  - **2.2.1** Technical/Experience Criteria: **Annexure-C6**
  - **2.2.2** Financial Criteria : **Annexure-C7**
  - 2.2.3 The bidder should possess independent EPF, ESI, PAN & PAN based GST registration certificates respectively from the concerned Regional Provident Fund Commissioner for PF, Independent Account Code from concerned Regional Director ESIC for ESI, Direct Tax Authorities for PAN and Indirect Tax Authorities for GST, as applicable.
  - 2.2.4 Litigation history for criminal background: Annexure-C22
  - 2.2.5 The concurrent commitments of bidder on various jobs under execution by the bidder will be taken into account to access the spare capacity available with the bidder. Bidders are required to fill Annexure-C8 for calculation at our end. Suppression of fact and figures will liable to cancellation of bid and penal action as per rule. Not applicable for this contract.

#### 3.0 LITIGATION HISTORY:

- 3.1 The bidder is required to give the names of other firms / agencies / partnership firm / wholly owned or partly owned subsidiary etc. where they are having financial / professional stakes and also give a certificate if any such firm / agency is participating in the subject tender.
- 3.2 Bidder may note that any pending criminal case involving moral turpitude, fraud, theft & unlawful activities or conviction by court of law or indictment/ adverse order by regulatory authority against the person, company, Directors of the Company or sister concern of the Company, partner of the firm etc. would constitute disqualification for participating for tender.
- 3.3 The bidder or its proprietor /partner(s)/director(s) of the firm should not have been convicted by court of law for an offence involving moral turpitude in relation to the business dealing during past seven years for acceptance of the offer.
- 3.4 Litigation history for criminal background is to be provided by the bidder. The bidder shall give an affidavit to this effect as per the format at <u>Annexure-C22</u>. The affidavit must be affirmed before the competent judiciary authority or duly notarized by Notary.



SUBJECT: PROVIDING & LAYING OF ROOF TOP PERMANENT LIFE LINE SYSTEM INSIDE SMELTER PLANT (PHASE-II).

Page: 10 of 104

#### **4.0 EARNEST MONEY DEPOSIT (EMD):**

**Earnest money** may be deposited through any one of the two procedures noted below. (refer sl no:4.3 of F-02 form of contract details, **Annexure-B1**.

- **4.1** In shape of account payee Demand draft/ Banker's cheque/ Pay order, from any Nationalized or Scheduled Bank in favour of National Aluminium Company Ltd., payable to our bank as per the details below.
- 4.2 Through online bank transfer. The transaction confirmation document generated through online transaction, giving details of transaction is required to be provided as a separate document. The credit of EMD in our Bank account would be confirmed before acceptance of bid. If the transaction is not reflected or reflected with wrong reference as on TOD or credited subsequently, then the bid shall be considered to be unaccompanied by any EMD and the bid will be liable for rejection.

Our bank details for online transfer of EMD

Sl.	Description	Smelter Plant	<b>Captive Power Plant (CPP)</b>
a)	Account Holder's Name	Nalco Smelter Plant	Nalco Captive Power Plant
b)	Bank Name	State Bank of India	State Bank Of India
c)	Branch Name	Kandsar	Kandsar
d)	Branch Place	Nalconagar	Nalconagar
e)	Branch City	Angul	Angul
f)	IFS Code	SBIN0008279	SBIN0008279
g)	Account Number	10657908114	10657908589

Bank transfer details of EMD to be provided.

- a) Amount transferred: Rs. \_\_\_\_\_
- b) Unique Transaction Reference (UTR) No.:
- c) Bank details from which the transaction was made:
- d) Date of transaction:
- e) Tender details (Number & Name of work):

Note: While making the online payment, the Tender Number (OMC-\_\_\_\_) may be mentioned in the text field of the transaction.—

Incase EMD amount is Rs.1.25 lakhs or more, EMD in the form of Bank Guarantee in prescribed format from NALCO approved Bankers (<u>Annexure-C12</u>) shall also be accepted. The original BG is to be submitted along with bid as indicated in the NIT.

- 4.3 Bids without EMD will be rejected. However, the Public Sectors, Government agencies and the Firms registered with NSIC/MSME, and others such as Ancillary Industries etc. for which specific exemption has been granted by NALCO may be considered for exemption from EMD subject to submission of attested documentary evidence in support of the same in sealed envelope as stipulated in NIT.MSEs having UAM no shall also submit supporting documents such as UAM certificate, CA Certificate (certifying that the unit is a MSE having valid MSE certificate).
- **4.4** EMD of unsuccessful bidders will be refunded within 15 days of finalization of contract for single part bid tender and within 15 days of acceptance of techno-commercial offers by the Competent Authority in case of two-part bid tender.
- **4.5** The EMD shall be forfeited without any notice on any of the following situations.
  - **4.5.1** On withdrawal of offer after expiry of submission date & time of bid offered.
  - **4.5.2** If the bidder does not submit the agreement prior to effective date mentioned in the Service Purchase Order/LOA/LOI considering the criteria of Clause No. 15.0 of this **Annexure-A1**.
  - **4.5.3** If the work is not commenced from the effective date of Service Purchase Order, after award of the work.
  - **4.5.4** At any point of time if it is found that the party has submitted any false declaration in his offer
  - **4.5.5** If the bidder modifies its bid after the opening of the bids without written instruction from NALCO.



SUBJECT: PROVIDING & LAYING OF ROOF TOP PERMANENT LIFE LINE SYSTEM INSIDE SMELTER PLANT (PHASE-II).

Page: 11 of 104

#### **5.0 BANK GUARANTEES: -**

- 5.1 The vendor may submit Bank Guarantee against Earnest Money Deposit (EMDBG), 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.
- 5.2 The BG in prescribed format (<u>Annexure-C11</u> to <u>Annexure-C16</u>) should be issued by approved Banks listed at <u>Annexure-C17</u> having its branch at Angul/Bhubaneswar and the BG should be registered in Structured Financial Messaging System (SFMS) for BG Conformation and Lodging of claim. Place of Encashment may be limited to Angul/Bhubaneswar only.
- 5.3 The original EMD-BG should be sent by the Bank directly in the address of Tender Inviting Authority (TIA) and for other BGs to 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).
- 5.4 Each BG contains a start date, expiry date and claim date. The validity of BG (Start date to expiry date) should cover the Tender/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 Tender/Contract requirement.
- 5.5 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 Tender/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.

#### 6.0 ORDER OF PRECEDENCE OF CONTRACT DOCUMENTS:

- 6.1 The documents as stated below shall constitute the integral part of Contract Documents. In the event of any ambiguity or conflict between the Contracts documents as given below, the order of precedence shall be the order in which they are listed. All documents forming part of this tender are intended to be correlative, complimentary and mutually explanatory. The tender documents should be read by the bidder as a whole before bidding the tender.
  - **6.1.1** Conditions of Integrity Pact.
  - **6.1.2** Bill of Quantity.
  - **6.1.3** Scope of Work/Technical Specifications.
  - **6.1.4** Drawings if any.
  - **6.1.5** Special Conditions of Contract.
  - **6.1.6** Instruction to bidders/NIT.
  - **6.1.7** General Conditions of Contract (GCC).
  - **6.1.8** Relevant Indian Standards.
- 6.2 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.



SUBJECT: PROVIDING & LAYING OF ROOF TOP PERMANENT LIFE LINE SYSTEM INSIDE SMELTER PLANT (PHASE-II).

Page: 12 of 104

#### 7.0 MODE, SUBMISSION, RECEIPT AND OPENING OF TENDER:

- 7.1 Corrigendum and/or Clarification, if any issued for the NIT shall form part of the Tender Documents. Corrigendum and/or Clarifications will be hosted on the web-site <a href="www.gem.gov.in">www.gem.gov.in</a> and no separate intimation will be given to the bidders or released in the press. Bidders are requested to visit the web-sites from time to time to note the Corrigendum and/or Clarifications before submission of their bid. NALCO shall not be responsible if any bidder omits to notice any Corrigendum and/or Clarifications and make necessary change if required in their submitted final bid.
- 7.2 Telex/ Telegraphic/ Fax/ E-mail bids shall not be accepted.
- 7.3 Before submission of the bid, the bidders are requested to read the bid document carefully to make themselves fully conversant with the GCC, Special Conditions of Contract and Conditions of bidding, Specific conditions, technical Specifications and bid drawings if any. The bidder should visit site and get familiarized with the site conditions so that, no ambiguity may arise in these respects, subsequent to submission of the bids.
- 7.4 Nalco's General Conditions of Contract (GCC) & Special Conditions of Contract (SCC) if any shall form part of this contract. The tenderer is advised to go through the same either in the office of the Tender Inviting Authority during office hours to seek clarification if any, or may refer to NALCO web site and get them-selves satisfied before quoting the rates. It will be taken for granted by NALCO that tenderer has seen and gone through the terms and conditions and shall abide by same.
- 7.5 The forwarding letter / covering letters & information is to be included in the offer. The instruction given in the checklist of single part / two-part bids must be strictly complied.
- 7.6 Tenders are to be uploaded in the GeM web site (<a href="www.gem.gov.in">www.gem.gov.in</a>) on or before time & date specified at Sl. No. 5.0 of F-02 form of Contract Details, <a href="Annexure-B1">Annexure-B1</a>. The PART-I bids in case of two-part tendering and Single part bid in case of LTE shall be opened at the time & date specified at Sl. No. 6.0 of F-02 form of Contract Details, <a href="Annexure-B1">Annexure-B1</a>.
- 7.7 The price bids of technically qualified bidders shall only be opened on a later date. The date & time of opening of price bid shall be intimated to the qualified bidders through <a href="www.gem.gov.in">www.gem.gov.in</a> website.
- **7.8** Bidders are advised to submit complete set of Tender documents along with ANNEXURE-B4 & ANNEXURE-C3 etc. under GeM Portal in the Online Mode. Price Bid shall also be uploaded online only.
- 7.9 All the supporting documents to meet the PQC need to be uploaded with the offer after attesting them by a gazette officer or notary public and are required to sign each page by the bidder or by their authorized representative. The hard copy of these PQC compliant documents should reach the office of the Tender Inviting Authority before the due date & time of bid opening.
- 7.10 As per Manual for Procurement of Works 2019 Ministry of Finance Department of Expenditure 5.4.5 Normally no post bid clarification at the initiative of bidder shall be entertained. The shortfall information /documents if any may be sought only in case of historical documents which pre- existed at the time of tender opening and which have not undergone change since then. So far as the submission of documents is concerned after submission of the tender, Nalco may ask and consider, only related shortfall documents. For example, if the bidder has submitted a contract without its completion / performance certificate / annual turnover, the certificate can be asked for and considered. However, no new contract will be asked further so as to qualify the bidder. No post-bid clarification at the initiative of the bidder shall be entertained. Hence bidders are required to take due care to upload all relevant work credentials available with them in order to avoid rejection.
- 7.11 Deviations of any form are not acceptable in case deviation is unavoidable, bidders are instructed to give all deviations in the enclosed deviation statement sheet (<u>Annexure-C3</u>) only, along with the tender document. Please be informed that only deviation statement will be considered for further evaluation. Deviations at any other place will not be considered. Deviations in LTE single part will not be considered in any case and the bids will be rejected.



SUBJECT: PROVIDING & LAYING OF ROOF TOP PERMANENT LIFE LINE SYSTEM INSIDE SMELTER PLANT (PHASE-II).

Page: 13 of 104

7.12 Deviation(s) listed at any other place of the tender shall not be considered at all and shall not be binding on NALCO. The tender shall be evaluated based on the deviation statement and no claim whatsoever shall be entertained irrespective of bidder has accepted this particular clause or not.

- 7.13 Financial implications of the agreed deviation as per assessment of NALCO will be loaded on the price quoted by the bidder. Deviation not accepted by NALCO will have to be withdrawn by the bidder otherwise such bids may be disqualified/rejected. In case of withdrawal of deviations to NIT specification, if any bidder insists for revision in price before opening of price bid and Nalco agrees for the same, the submission of price implication shall be in offline mode from the bidder in a sealed envelope by hand/password protected file through e-mail within a stipulated time.
- **7.14** NALCO reserves the right to defer the date of tender opening in case the response is considered inadequate or due to any other reasons. In such event, the bidders shall be intimated the next date of opening subsequently.
- 7.15 The bidder shall ensure submission of complete information / documents in the first instant itself. NALCO reserves the right to evaluate the offer based on the details furnished by the bidders on the scheduled date of tender submission without seeking any subsequent additional information.
- **7.16** All the pages of GCC duly signed & stamped by authorized signatory should be submitted along with the agreement / offer. In case of online offers, the copy of GCC is to be uploaded with the offer after digitally signed by the bidder.
- 7.17 Declaration regarding Relationship with Board of Directors and Employees of Nalco: The contractors must furnish certificate as mentioned in <a href="Manuexure-C19">Annexure-C19</a> & <a href="Annexure-C20">Annexure-C20</a> enclosed, disclosing in detail about their relatives in Nalco. Suppression of this information in any form if detected at any stage will lead to disqualification and lead to rejection of the offer or termination of the contract as the case may be. The concerned party may also be banned from participation in future tenders.
- **7.18** Owner's Right to Accept or Reject a Bid: A bidder may seek clarification regarding the bidding document provisions, bidding process and / or rejection of his bid. NALCO/Consultant shall respond to such queries within a reasonable time.

#### **8.0 EVALUATION OF BIDS:**

- 8.1 The price bids of the techno-commercially qualified bids in case of two-part bid system & bids in case of single part bidding shall be evaluated as per the note of "Quantity & Rate Schedule" (Annexure-B4) in the excel format available in the GeM site.
- 8.2 In case there is a tie in L-1 position, the concerned bidders may be called to offer maximum possible discount on their quoted rates/revised rate in sealed envelope in order to decide the L-1 bidder among the considered bids.
- 8.3 In case "tie" of price bids, even after application of clause 8.2 above, the following criteria shall prevail in the given order.
  - **8.3.1** Bidder having highest average turnover during last three years shall be preferred. Average Annual Turnover shall be decided based on audited profit and loss account submitted by the bidder for the last three financial years.
  - **8.3.2** The contractor executing the same contract satisfactorily will be preferred.
  - **8.3.3** The contractor of the previous contract, who has executed the same work satisfactorily, will be preferred.
- 8.4 In case of tie for L2 or other positions and L1 price matching is to be made for splitting of the job as per NIT condition, then L2, L3 etc positions shall be determined by applying criteria at sl no. 8.3 above.
- 8.5 Where the tender is being finalized through GeM Portal as per GTC applicable for GeM procurement, if multiple L-1 bidders have quoted the lowest allowed price for the tendered service (i.e. TIE cases), NALCO shall place the contract by selection of resultant bidder amongst the L-1 bidders through a random algorithm executed by GeM system. This will supersede Clause No. 8.2 to 8.4 as above.



SUBJECT: PROVIDING & LAYING OF ROOF TOP PERMANENT LIFE LINE SYSTEM INSIDE SMELTER PLANT (PHASE-II).

Page: 14 of 104

#### 9.0 ACCEPTANCE OF TENDER:

- 9.1 NALCO reserves the right to reject or accept any or all the offers in full or part, split the work, reduce or increase the quantity, without assigning any reason thereof.
- 9.2 NALCO reserves the right to award the work in parts between two or more agencies if considered expedient. The quoted rates shall hold good for such an eventuality. Reference is also invited to clause No: 9 of General conditions of contract.
- 9.3 Validity of Offer: The validity of the offers submitted by the bidders shall be as per F-02 Form i.e. Contract Details in <a href="Annexure-B1">Annexure-B1</a>. In case the validity of offers expires during the processing of the case, all the bidders / techno-commercially accepted bidders shall be requested to extend the offer validity with same price and terms & condition of the tender. The offers of such bidders shall be rejected if they do not extend the validity unconditionally.
- 9.4 Bidders may note that, Brief Order / Letter of Intent / Fax of Intent / Service Purchase Order placed, is in acceptance of their offer by NALCO and shall be binding on them. However, the bidder has to return a copy of LOI / FOI / Service Purchase Order duly signed by them or their authorized representative as a token of receipt of the same within seven days of issue of the same for our records. In case of no communication of the same is received within the stipulated time from their end, it will be presumed that the party has received the Brief Order / Letter of Indent / Fax of Intent / Service Purchase Order.
- 9.5 Any communication such as Letter, BO, LOI, FOI, SPO etc. shall be communicated to the Bidder through Registered post/ Speed post/ Fax/ Hand delivery/ By mail registered with Nalco. Any communication through any one or more of above modes shall be valid and binding on the Bidder.

#### 10.0 CONTRACT PERIOD:

10.1 Timely completion is the essence of the Contract. The contract period for this work shall be as mentioned in Sl no:3 of F-02 form (<u>Annexure-B1</u>) of contract details and shall be applicable from the effective date as mentioned in the service purchase order/LOI. Time period of completion" of individual items/activities may be decided jointly by Manager-In-Charge and contractor, which shall be adhered to by the contractor.

#### 11.0 OCCUPATIONAL HEALTH & SAFETY MANAGEMENT SYSTEM:

- **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.
- 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.
- 11.3 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).
- 11.4 The contractor, before starting the work, shall collect a copy of the <u>safety manual</u> from Safety Department and shall abide by all instructions mentioned therein.
- 11.5 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.
- 11.6 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.



SUBJECT: PROVIDING & LAYING OF ROOF TOP PERMANENT LIFE LINE SYSTEM INSIDE SMELTER PLANT (PHASE-II).

Page: 15 of 104

#### 12.0 ENVIRONMENTAL REQUIREMENTS:

- 12.1 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.
- 12.2 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.

#### 13.0 ENERGY MANAGEMENT SYSTEM (ISO 50001):

- **13.1** The Energy Policy of NALCO is attached (<u>Annexure-A6</u>). The Service Provider needs to comply all the requirements of the Policy in consultation with the Manager-in-Charge of the contract.
- 13.2 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.

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

#### 14.0 SECRECY TERMS: -

- 14.1 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.
- **14.2 Breach of Secrecy:** In case of breach of secrecy by the Contractor, Nalco will have right to terminate contract, Security Deposit and claim damages from the party.



SUBJECT: PROVIDING & LAYING OF ROOF TOP PERMANENT LIFE LINE SYSTEM INSIDE SMELTER PLANT (PHASE-II).

Page: 16 of 104

#### 15.0 EXECUTION OF CONTRACT AGREEMENT:

- 15.1 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 Orissa High Court, in the specific format (<u>Annexure-C23</u>). 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/-.
- 15.2 The agreement should be submitted to T&C Department, within 10 days of issuance of LOA/LOI/SPO or before the effective date mentioned in the Service Purchase Order whichever is later.
- 15.3 Contract Agreement is mandatory before starting of work. EIC/MIC will ensure before Gate Pass is issued.
- 15.4 No bill shall be payable unless the agreement is signed, if signing of agreement is applicable

#### **16.0 SUPERVISION:**

- 16.1 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.
- 16.2 Under prevailing statute, the supervision should be carried out by a capable competent person.

#### 17.0 PAYMENT OF WAGES TO ENGAGED LABOUR AT SITE:

- 17.1 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. Therefore, the contractor must quote their rates considering the labour rates indicated at Annexure-B5.
- 17.2 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.
- 17.3 As per statutory provisions, contractors will have to pay the monthly wages of contract labourers latest by 10<sup>th</sup> 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 10<sup>th</sup> of subsequent month without any further intimation.
- 17.4 If the date of payment is beyond 10<sup>th</sup> 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.
- 17.5 The contractor failing to make payment of labour wages as per applicable Law, may be debarred / banned for conducting future business with NALCO.

#### 18.0 LABOUR LAWS:

18.1 The successful bidder 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.



SUBJECT: PROVIDING & LAYING OF ROOF TOP PERMANENT LIFE LINE SYSTEM INSIDE SMELTER PLANT (PHASE-II).

Page: 17 of 104

- **18.1.1** Building & other Construction Workers (RE & CS) Act 1996
- **18.1.2** Child Labor (Prohibition & Regulation) Act 1986,
- **18.1.3** Employees' Provident Fund and Miscellaneous Provisions Act, 1952.
- **18.1.4** Employees' State Insurance Act, 1948.
- **18.1.5** Factories Act, 1948
- **18.1.6** Industrial Dispute Act 1947,
- **18.1.7** The Inter-state Migrant Workmen (Regulation of Employment and Conditions of Service) Act, 1976
- **18.1.8** The Maternity Benefit Act 1961
- **18.1.9** Minimum wages Act 1948.
- **18.1.10** Payment of Wages Act 1936,
- **18.1.11** Payment of Bonus Act 1965,
- **18.1.12** Payment of Gratuity Act, 1972
- **18.1.13** Employees' Compensation Act 1923.
- **18.1.14** Contract Labour (R&A Act, 1970)

#### 19.0 GATE PASS & SECURITY:

- 19.1 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. (Refer Form No: F-02 of Sl. No- 15 at **Annexure-B1**).
- 19.2 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.
- 19.3 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.

#### 19.4 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.

#### 19.5 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)



SUBJECT: PROVIDING & LAYING OF ROOF TOP PERMANENT LIFE LINE SYSTEM INSIDE SMELTER PLANT (PHASE-II).

Page: 18 of 104

#### **20.0 MATERIAL TOOLS & TACKLES:**

20.1 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.

#### **20.2** 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:

- **20.2.1** 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.
- **20.2.2** 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.(Ref Sl no. 8.1 & 8.2 of Form F-02 (**Annexure-B1**) of Contact Details)
- **20.2.3** 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.
- **20.2.4** 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 enclosed (Refer Annexure-C10 & Annexure-C15).
- **20.2.5** 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.

#### 21.0 ENERGY/WATER/GROUND/BUILDING PREMISES:

- **21.1** Provision of Power/Water/Land/Building to Contractor's Works.
  - 21.1.1 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.
  - **21.1.2** 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.
  - **21.1.3** 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.



SUBJECT: PROVIDING & LAYING OF ROOF TOP PERMANENT LIFE LINE SYSTEM INSIDE SMELTER PLANT (PHASE-II).

Page: 19 of 104

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

- 21.2.1 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.
- 21.2.2 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.
- **21.2.3** At the time of charging of power supply, initial meter reading will be jointly noted by representatives of contractor, Estate Department and Electrical Department.
- **21.2.4** 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.
- **21.2.5** 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.
- **21.2.6** 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.
- **21.2.7** 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.
- **21.2.8** The final bill will not be processed without compliance of the above. (Supporting document to be attached)
- 21.3 The contractor must dismantle the structure constructed by him for the purpose of office-cumstore 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.
- **21.4** Following penal actions shall be initiated against the unauthorized occupant;
  - **21.4.1** Disconnection of power and water supply lines to be made,
  - **21.4.2** 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,
  - **21.4.3** Initiation of eviction proceedings in the Estate Court for outside Plant establishments



SUBJECT: PROVIDING & LAYING OF ROOF TOP PERMANENT LIFE LINE SYSTEM INSIDE SMELTER PLANT (PHASE-II).

Page: 20 of 104

#### 22.0 QUANTITY & RATE:

- **22.1** The quantity & rate schedule format is enclosed at <u>Annexure-B4</u>. Bidders are required to quote their rates in figures as well as words in the enclosed <u>Annexure-B4</u> only. In case of any discrepancy between rate in figures, words and amount quoted by the bidder, the relevant provision of GCC will apply to resolve the matter.
- 22.2 The tenderers must quote their most reasonable and workable rate. Overall total evaluated price for all items of schedule of quantities shall be the basis for determining the reasonableness of price and gradations of the tenders. In case the offered price of the tenderer(s) is found to be abnormally low (un-workable), based on the rate approved by NALCO, the tenderer(s) may be asked to justify their quoted rates within ten days of issuance of letter to that effect through email. The bidder must provide written clarification including detail price analysis of its bid price in relation to Scope, Scheduled, allocation of risks and responsibility, and any other requirement of the bid documents. However, if after evaluating the price analysis, NALCO determines that, the bidder has substantially failed to demonstrate its capability to delivered the contracts at the offered price, then NALCO may reject the bid / proposal. NALCO also reserved the right to award the job without seeking clarification or receiving clarification from the bidder about the price reasonability. EMD of such tenderer, who refuses to justify their quoted rate shall be forfeited.
- 22.3 Bidder shall quote in figures and in words for the rates tendered by him in the "Quantity & Rate Schedule" (Annexure-B4) forming part of the documents, in such a way that misinterpretation is not possible. The amount for each item shall be worked out and entered in the requisite column for all items.
- 22.4 Price bids must not contain any conditions stipulated by the bidders. Conditional price bids are liable for rejection.
  - 22.4.1 No discount over quoted rate / total amount should be mentioned separately in the offer.
  - 22.4.2 No additional rate over quoted rate / total amount should be mentioned separately in the offer.
  - **22.4.3** Bidders shall submit the details about engagement of Agents/ Middlemen/ Intermediary/ Consultants / Service Providers and payments proposed to them by the bidder and it should be a part of the present bid.
  - 22.4.4 All corrections and alterations in the entries of tender document if any shall be signed in full by the bidder with date. No erasures and over writings are permissible.
  - 22.4.5 Bidders are required to quote for all items of the "quantity and rate schedule" (Annexure-B4) otherwise the offer will be dealt as per rules of NALCO & may be rejected as an incomplete offer
  - 22.4.6 Bidders are required to quote their best prices considering the fact that price negotiation, if required, may be held with the lowest bidder only.
  - 22.4.7 Bidders are required to quote their rates up to two decimal places only. Decimal digits beyond two will be rounded off to two decimals for evaluation/placement of order.

#### **22.5** Quantity Variation:

- **22.5.1 Item rate contracts:** The Quantities mentioned in the schedule are approximate in nature and may vary by a wide margin within the contract value for which the contractor shall have no option but to execute the works, as per direction of the Manager-in-charge at the same rates, terms & conditions of the order. NALCO may negotiate the rate of items whose execution quantities is considered for increase during their execution, which will be agreed mutually. Payment shall be released to the contractor for the actual executed quantity only.
- **22.5.2 Lump sum/ Turnkey Contracts**: In case of Lump sum/ Turn key (LSTK). Adjustment to the contract value due to such change in scope of work shall be governed by the provisions of GCC.

#### 22.6 REVISED PRICE IMPLICATION:

- **22.6.1** In case of necessity due to post tender changes in specifications / scope of work / terms & conditions of NIT etc. before price bid opening, corrigendum shall be issued regarding the changes to all concerned techno-commercially qualified bidders and they shall be permitted to submit the corresponding price implication if any in offline mode in sealed envelope by hand / password protected file through e-mail within a stipulated time.
- **22.6.2** The price implication submitted in offline mode by the bidders (Refer Clause 7.13 & 22.6.1) shall be opened and uploaded in GeM Portal before opening of original price bids. The evaluation will be done taking into account the original on-line price bid along with offline price implications.
- **22.6.3** In no case, bidder shall be allowed to submit revised price bid post bid submission date.



SUBJECT: PROVIDING & LAYING OF ROOF TOP PERMANENT LIFE LINE SYSTEM INSIDE SMELTER PLANT (PHASE-II).

Page: 21 of 104

#### 23.0 QUALITY OF WORK:

- 23.1 The contractor shall execute the job under 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.
- 23.2 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.
- **23.3** Contractor shall use instruments calibrated in a Laboratory, accredited to NABL / Laboratory approved by the manufacturer for measurements/tests/inspection.

#### 24.0 SECURITY DEPOSIT:

- 24.1 On receipt of the order, the successful bidder shall deposit with NALCO an amount, equivalent to 10% of the order value as Security Deposit within 20 days from the Effective Date, mentioned in the Service Purchase Order/LOA/LOI.
- 24.2 Alternatively, successful bidder can deposit Initial Security Deposit amounting to 2.5% of the contract value, within 20 days from the Effective date, mentioned in the Service Purchase Order /LOA/LOI. In this case, the balance amount of the security deposit shall be recovered through deductions from RA bills in installments through deduction @ 10% from gross RA bill of contract value till total SD is collected.
- 24.3 In case the successful bidder fails to submit the ISD /SD, within scheduled date, the ISD amount along with a simple interest @ 12% per annum plus GST on interest amount, applicable from the schedule date till the date of submission of ISD or full recovery of ISD amount, shall be made starting from 1st RA bill.
- 24.4 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 (Annexure-C14)
- 24.5 The Earnest Money Deposited, except in the form of BG along with the tender, if any shall be adjusted towards security deposit / as per clause no 19.4 of GCC.
- 24.6 The security deposit 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.

#### 25.0 TAXES & DUTIES:

#### 25.1 GOODS & SERVICES TAX (GST)

- **25.1.1** The Rates indicated in **Annexure-B4** are inclusive of all but exclusive of GST.
- **25.1.2** The contractor must provide GST No including copy of Registration Certificate.
- **25.1.3** 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.
- **25.1.4** The contactor should submit the GST Invoice as per the format Annexure-C9 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.
- **25.1.5** 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.
- **25.1.6** As per Rule-47 of GST Act, time limit for issuing Tax Invoice is 30 days from the date of Supply of Service.
- **25.1.7** Payment of GST is subject to compliance as stated in Payment Terms.
- **25.1.8** 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.
- **25.1.9** 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.



SUBJECT: PROVIDING & LAYING OF ROOF TOP PERMANENT LIFE LINE SYSTEM INSIDE SMELTER PLANT (PHASE-II).

Page: 22 of 104

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

- 25.2.1 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.
- 25.2.2 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.
- **25.2.3** 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.

#### 25.3 INCOME TAX:

- **25.3.1** The contractor must provide PAN including copy of Registration Certificate.
- **25.3.2** Income Tax TDS, as applicable at the prevailing rate on the gross amount billed shall be deducted from the contractor's bills.
- **25.3.3** 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.
- **25.3.4** 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.

#### 25.4 CESS UNDER RE&CS ACT

Cess will be deducted as per Workers' (RE&CS) Act 1996 and as stated under payment terms.

#### 25.5 ROYALTY CLEARANCE.

As per Mines and Minerals Act of Govt. of Orissa 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.

#### 26.0 BILLING & INVOICING:

- 26.1 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 n<sup>th</sup> RA & Final Bill.
- **26.2** Period of raising RA Bill and GST Invoice will normally be 1 month unless otherwise specified in Special Condition of Contract (**Annexure-B3**). GST Invoice amount should always match to RA Bill / Final Bill amount.
- 26.3 Vendor/Party categorised/designated as "specified person" under Section 206AB of Income Tax Act, 1961, shall be liable for TDS at higher rate as provide 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.
- **26.4** The RA Bill (in duplicate) will be accompanied by
  - **26.4.1** Joint Measurement Sheet signed by Contractor & EIC/MIC.
  - **26.4.2** R.A. Bill Form signed by Contractor & EIC/MIC.
  - **26.4.3** Human Resource Dept. (HRD) Clearance (if applicable)
  - **26.4.4** Safety Certificate in 1<sup>st</sup> RA Bill issued by Safety Dept
  - **26.4.5** Any other document required by EIC/MIC or as per directive from statutory authorities.
  - **26.4.6** Deviation statement once the executed value reaches 80% of the Order value.



SUBJECT: PROVIDING & LAYING OF ROOF TOP PERMANENT LIFE LINE SYSTEM INSIDE SMELTER PLANT (PHASE-II).

Page: 23 of 104

- 26.5 Similarly, in addition to above the Final Bill (in quadruplicate) will be accompanied by
  - **26.5.1** Material Reconciliation Statement for Free Issue Material, (if applicable)
  - **26.5.2** Stores Issue Voucher, Stores Return Voucher, Material Transfer Voucher if any.
  - **26.5.3** No claim certificate duly signed by the contractor.(Annexure-C28)
  - 26.5.4 No due certificate from suggested by MIC. (Annexure-C28)
  - **26.5.5** Work Completion certificate from EIC/MIC. (Annexure-C29)
  - **26.5.6** Deviation Statement
  - **26.5.7** Handing over / taking over certificate (wherever applicable)
  - **26.5.8** Satisfactory commissioning protocol (wherever applicable)
  - **26.5.9** Royalty clearance certificate (wherever applicable)
  - **26.5.10** Electrical License (if required)
  - **26.5.11** Dismantling of Temp Structure, Disconnection of Water/Elect. & Clearance of Charges. Note: Certificates not applicable to a particular work will be certified by the MIC.
  - **26.5.12** Anti-Profiteering Declaration Format.
  - **26.5.13** 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.

#### **27.0 PAYMENT TERMS:**

- 27.1 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.
- 27.2 If the contract value is Rs.20,000/- or less, full and final bill will be admitted.
- 27.3 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 not 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.
- 27.4 On award of the contract to the successful bidder, it becomes mandatory by the bidder to enclose a deviation statement with RA bill once the executed value of the work has reached 80% of the awarded value.
- 27.5 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.
- 27.6 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.
- **27.7** GST TDS as applicable at the prevailing rate on the gross amount billed shall be deducted from the contractor's bill.



SUBJECT: PROVIDING & LAYING OF ROOF TOP PERMANENT LIFE LINE SYSTEM INSIDE SMELTER PLANT (PHASE-II).

Page: 24 of 104

- 27.8 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.)
- **27.9** Payment against Final Bill will not be released if royalty clearance certificate as stated under Royalty Clearance is not submitted by the vendor.
- 27.10 Mobilisation Advance: Not applicable for this contract.
  - **27.10.1** The Rate of Interest applicable on Mobilisation Advance shall be made variable instead of fixed for entire tenure of contract, as prevailing at present.
  - 27.10.2 The Rate of Interest applicable on balance amount of Mobilisation Advance, applicable for the financial year shall be fixed to MCLR (1-year-tenor) or SBI declared in the month of April of that financial year plus 1%.

#### 28.0 PRICE VARIATION FOR LABOUR:

**28.1 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.

#### 29.0 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 (**Annexure-B3**).

#### 30.0 DEFECT LIABILITY PERIOD (DLP):

**30.1** 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 Sl. No. 9 of F-02 form of contract details, **Annexure-B1**.

#### 30.2 DLP for SPECIALISED WORKS:

- **30.2.1** Water proofing (Below or above ground) and Roof treatment works -10 YEARS
- **30.2.2** Post construction Anti-termite treatment

- 5 YEARS

**30.2.3** Weather proof Paint works

- 4 YEARS

- 30.3 In some cases appropriate DLP can be considered depending upon the nature of the job.
- **31.0 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.
  - **31.1** If found suitable, Preference for engagement of labourers under NALCO's contractors establishment may be given to the land affected persons.
  - 31.2 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.
  - 31.3 The contractor has to ensure that no contract labour should enter the plant/work premises without valid photo pass.
  - 31.4 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.
  - 31.5 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.
  - 31.6 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.
  - 31.7 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.



SUBJECT: PROVIDING & LAYING OF ROOF TOP PERMANENT LIFE LINE SYSTEM INSIDE SMELTER PLANT (PHASE-II).

Page: 25 of 104

#### 32.0 RECOVERY TOWARDS COMPENSATION FOR DELAY:

- **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-B3).
- **32.2 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-B3**). GST as applicable shall also be recovered.

#### 33.0 BLACKLISTING/BANNING/SUSPENSION/DELISTING OF BUSINESS/HOLIDAY LIST

- **33.1 Blacklisting:** Blacklisting of any agency/ firm/ contractor working with the Company may be resorted to in following cases:
  - **33.1.1** 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;
  - **33.1.2** If security considerations including the question of loyalty to the State warrant as per recommendations of Ministry of Home Affairs.
  - 33.1.3 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.
  - **33.1.4** If the Firm refuses/fails to return the Company's dues without adequate cause;
  - **33.1.5** If the Firm is blacklisted by any Department of the Central Government/ State Government.
  - **33.1.6** 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.
  - **33.1.7** Misbehavior/ threatening of departmental supervisory staff during work execution.
  - **33.1.8** Constant non-achievement of milestones on insufficient and imaginary grounds and non-adherence to quality specifications despite being pointed out.
  - **33.1.9** Persistent & intentional violation of important conditions of contract.
  - **33.1.10** Submission of false/ fabricated/ forged documents for consideration of a bid.
  - **33.1.11** If declared bankrupt or insolvent.
- **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.
  - **33.2.1** Any failure to execute the contract satisfactorily.
  - **33.2.2** 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.
  - **33.2.3** Defaults such as failing in disbursements of wages of the workmen/contract labourers in time at least twice in a contract period.
  - **33.2.4** Submission of false declaration / documents in the offer.
  - 33.2.5 Misconduct / misbehavior of the contractor or any of the workers engaged by them.
  - **33.2.6** Non-compliance of environment, safety and health requirements including use of proper PPEs.



SUBJECT: PROVIDING & LAYING OF ROOF TOP PERMANENT LIFE LINE SYSTEM INSIDE SMELTER PLANT (PHASE-II).

Page: 26 of 104

**33.3 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.

#### 33.4 Delisting from Vendor List against all Contracts:

- **33.4.1** Party's performance is being evaluated half yearly through online assessment system by the respective Managers-in-Charges for the works being executed at site / at party's premises.
- **33.4.2** Half-yearly assessment ratings are reviewed and the contractors are reminded for improvement in next assessment period if their performance rating is poor.
- **33.4.3** If two consecutive Six-monthly 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.
- **33.4.4** 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.
- **33.4.5** If any vendor is Black-listed / Banned by any units of NALCO, the Vendor will also be delisted.
- **33.4.6** In case the performance of the vendor is found to be unsatisfactory by the Manager-incharge, the vendor may not be considered in future tender for similar jobs.
- 33.5 Holiday List: In case the bidder does not participate in three consecutive bids, the bidder will be put under holiday list for a period of one year.
- 33.6 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.
- 33.7 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.

#### 34.0 TERMINATION OF CONTRACT:

- 34.1 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 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**.
- 34.2 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.
- 34.3 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.

#### **35.0 ARBITRATION:**

The clause No.87 of General Conditions of contract shall be applicable incase 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.



SUBJECT: PROVIDING & LAYING OF ROOF TOP PERMANENT LIFE LINE SYSTEM INSIDE SMELTER PLANT (PHASE-II).

Page: 27 of 104

#### **36.0 CONTRACT CLOSURE:**

- 36.1 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 1<sup>st</sup> stage of closure. Successful completion of Defect Liability Period and Performance Guarantee Period is the 2<sup>nd</sup> Stage of closure. Settlement of all outstanding payables and receivables is the 3<sup>rd</sup> stage of closure.
- **36.2** It will be the responsibility of the Contractor in all three stages to lodge necessary claims with EIC/MIC and settle it as follows.
  - **36.2.1** 1<sup>st</sup> stage Submission of Final Bill, and Performance Guarantee Bond (PGB) maximum within 3 months from the end date of contract period.
  - **36.2.2** 2<sup>nd</sup> stage Submission of Claim letter for release of SD/PBG maximum within 15 days from the date of closure of Guarantee/DLP.
  - **36.2.3** 3<sup>rd</sup> stage Settlement of all outstanding relating to the Contract, before release of Contract Completion Certificate (**Annexure-C29**) by EIC/MIC with concurrence of Finance regarding Contract Execution Value.

#### 37.0 Energy Management System (ISO 50,001) Requirement:

#### 38.0 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.

	WHAT TO DO?	WHAT NOT TO DO?
1.	Use compressed air for instrument cleaning if advised by NALCO	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 .

- **39.0** 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.
- **40.0** Owner's Right to Accept or Reject a Bid: A bidder may seek clarification regarding the bidding document provisions, bidding process and / or rejection of his bid. NALCO/Consultant shall respond to such queries within a reasonable time.



SUBJECT: PROVIDING & LAYING OF ROOF TOP PERMANENT LIFE LINE SYSTEM INSIDE SMELTER PLANT (PHASE-II).

Page: 28 of 104

**ANNEXURE-A2** 

#### **SAFETY GUIDELINES**

#### Special Terms and Conditions of the Contract against Electrical Safety

- 1- The Contractor shall ensure proper safety of all the workmen, materials, and equipments belonging to him or to NALCO or to others, working at the site. The Contractor shall also be responsible for provision of all safety notices and safety equipment required both by the relevant legislations and the Engineer as he may deem necessary.
- 2- All equipments used by Contractor shall meet Indian/ International Standards and where such standards do not exist, the Contractor shall ensure these to be absolutely safe. All equipments shall be strictly operated and maintained by the Contractor in accordance with manufacturer's operation Manual and safety instructions and as per Guidelines / Rules of NALCO in this regard.
- 3- Periodical Examinations and all tests for all lifting/hosting equipment & tackles used by the contractor shall be carried out in accordance with the relevant provisions of Factories Act 1948, Indian Electricity Act 1910 and associated Laws/Rules in force from time to time. A register of such examinations and tests shall be properly maintained by the contractor and will be promptly produced as and when desired by Engineer or by the person authorized by him.
- 4- The Contractor shall provide suitable safety equipment of prescribed standard to all employees and workman according to the need, as may be directed by Engineer who will also have right to examine these safety equipments to determine their suitability, reliability, acceptability and adaptability. The Contractor shall provide safe working conditions to all workmen and employees at the Site including safe means of access, railings, ladders, scaffoldings etc. The scaffoldings shall be erected under the control and Supervision of an experienced and competent person. For erection, good and standard quality of material only shall be used by the Contactor.
- 5- The Contactor shall not interfere or disturb electric fuses, wiring and other electrical equipment belonging to the Owner or other contractors under any circumstances, whatsoever, unless expressly, permitted in writing by NALCO to handle such fuses, wiring or electrical equipment.
- 6- Before the Contractor connects any electrical appliances to any plug or socket belonging to the other Contractor or Owner, he shall:
- a) Satisfy the Engineer that the appliances are in good working condition.
- b) Inform the Engineer of the maximum current rating, voltage and phases of the appliances.
- c) Obtain permission of the Engineer detailing the sockets to which the appliances may be connected.
- 7- No work shall be carried out on any live equipment unless otherwise the equipment is declared safe by the Engineer and a permit to work shall be issued by the Engineer. The Contractor before any repair work is carried out on electric lines/equipments whether live or dead shall provide suitable type and sufficient quantity of tools to electricians/ workman etc.
- 8- In case of any accident during the activities undertaken by the Contractor thereby causing any minor or major or fatal injury to his employees due to any reason, whatsoever, it shall be the responsibility of the Contractor to promptly inform the same to NALCO's Engineer and also to all the authorities envisaged under the applicable laws.
- 9- The Contractor shall follow and comply with all NALCO Safety Rules, relevant provisions of applicable laws pertaining to the safety of workmen, employees, plant and equipment as may be prescribed from time to time without any demur, protest or contest or reservation. In case of any unconformity between statutory requirement and NALCO Safety Rules referred above, the later shall be binding on the contractor unless the statutory provisions are more stringent.



SUBJECT: PROVIDING & LAYING OF ROOF TOP PERMANENT LIFE LINE SYSTEM INSIDE SMELTER PLANT (PHASE-II).

Page: 29 of 104

- 10- The Contractors shall provide suitable latest Personal Protective Equipments of prescribed standard to all their employees and workmen according to the need. The Engineer I/c shall have the right to examine these safety equipments to determine their suitability, reliability, acceptability and adaptability. The contractor should also ensure these before their use at worksite.
- 11- Wherever the workers are exposed to the hazards of falling from height, the contractor shall provide full harness safety belts fitted with fall arresting systems to all the employees working at higher elevations and life line wire rope with turn buckles for anchoring the safety belts while working or moving at higher elevations. Safety nets shall also be provided for saving them from fall from heights and such equipment should be in accordance with BIS standards. The contractor must get a permit to work at height from the Engineer-in-Charge before starting the job.
- 12- The contractor should ensure that all electrical installations at the site comply with the requirements of latest electricity acts / rules.
- 13- The contractor shall take all adequate measures to prevent any worker from coming into physical contact with any electrical equipment or apparatus, machines or live electrical circuits which may cause electrical hazards during the work. The contractor shall provide the sufficient ELCBs / RCCBs for all the portable equipments, electrical switchboards, distribution panels etc. to be used by him to prevent electrical shocks to the workmen.
- 14- In case of fire in electrical installations, all electrical supplies are to be disconnected first to the affected system. Fire-fighting at the initial stage may be initiated with the CO2, Dry Powder etc. Water will never be sprinkled onto live electrical system.
- 15- Before starting any job the Contractor will be responsible for the following
  - a. Ensuring safe components/equipments are used.
  - b. Providing earth leakage circuit breakers on all electrically operated power tools/equipments.
  - c. Inspecting power tools before use and ensuring defective tools are discarded.
  - d. Using 3 core cable and 3 pin plugs for all portable tools and ensuring its earthing.
  - e. Authorized electrician is only attending all electrical job as per latest Electrical Rules & CEA guide lines.
  - f. Ensuring double earthing to all equipments.
  - g. Ensuring all the electrical system is as per Indian Electricity Rules.
  - h. Disconnecting and removing all unwanted cables and wires from electrical system.
  - i. Identification Marks and Numbers are clearly being marked on all electrical distribution boards, switchboards etc. used by the Contractor.
  - j. All electrical system components being protected against damage.
  - k. All electrical joints are being tested to meet the standards.
  - 1. Hand lamps are providing with suitable guards.
  - m. Providing personal protective equipments including electrical safety shoes, rubber gloves etc. as per the enclosed PPE matrix.
  - n. Ensuring unauthorized person shall not have access to electrical system.
  - o. Protecting all live parts.
  - p. Ensuring all fuses are replaced with actual current rating.



SUBJECT: PROVIDING & LAYING OF ROOF TOP PERMANENT LIFE LINE SYSTEM INSIDE SMELTER PLANT (PHASE-II).

Page: 30 of 104

#### **ANNEXURE-A3**

# LIST OF PPES TO BE ISSUED TO ALL THE CONTRACTUAL EMPLOYEES BY THE CONTRACTOR FOR USE DURING THE EXECUTION OF JOB AT SITE. (PPE MATRIX)

PARTS TO BE PROTECTED	PERSONAL PROTECTIVE EQUIPMENT	PROTECTION AGAINST	REMARKS
HEAD	INDUSTRIAL SAFETY HELMET (IS:2925-1975) & subsequent revision thereof, if any.	FALLING OBJECTS	
EYE	ZERO POWER GOGGLES WITH SIDE FILTER PROTECTION	EYE INJURY DUE TO FLYING OBJECTS. INJURY DUE TO SPARKS AND FLAMES.	
EAR	A) EAR PLUG (FOAM) B) EAR MUFF	HEARING LOSS IN HIGH NOISE AREAS	
RESPIRATORY SYSTEM	DUST RESPIRATOR WITH FILTER/ NOSE MASK FILTER	INHALATION OF HARMFUL DUST.	
BODY	SAFETY BELT,  ARC FLASH SUIT	FALL FROM HEIGHT, ELECTRICAL FLASH OVER.	
HAND	ELECTRICALLY TESTED ELECTRICAL RESISTANT HAND GLOVES WITH CERTIFICATE (IS: 4770-1968) & subsequent revision thereof, if any.	ELECTRIC SHOCK	
FOOT	A) INDUSTRIAL SAFETY SHOE WITHOUT STEEL TOE. B) GUM BOOT	A)ELECTRICAL SHOCK B)CABLE GALLERIES, MUDDY AREAS ETC.	



SUBJECT: PROVIDING & LAYING OF ROOF TOP PERMANENT LIFE LINE SYSTEM INSIDE SMELTER PLANT (PHASE-II).

Page: 31 of 104

## PPE MATRIX (CPP/SMELTER PLANT)

Major activity	Safety Shoe	Safety Helmet	Safety Goggles	Hand Gloves	Face Shields	Safety Belt	Dust control mask	plugs/		Crawl board	
Working at height	Y	Y	Y	Y	NR	Y	Y	Υ	NR	NR	NR
Excavation/earth work	Y	Υ	Y	Y	NR	NR	Y	Y	NR	NR	NR
Working in noisy area	Y	Υ	Y	Y	NR	NR	Υ	Y	NR	NR	NR
Working in dusty area	Y	Υ	Y	Y	NR	NR	Υ	Υ	NR	NR	NR
Coal compaction /handling	Y	Υ	Y	Y	NR	NR	Υ	Υ	NR	NR	NR
Sand blasting	Υ	Υ	Υ	Υ	NR	NR	Υ	Υ	NR	NR	NR
Riveting	Υ	Υ	Υ	Υ	NR	NR	Υ	Υ	NR	NR	NR
Chlorine gas leakage attending	Y	Y	Υ	Y	Y	NR	NR	NR	NR	NR	Υ
Working on fragile roof	Y	Υ	Y	Y	NR	Y	Υ	Y	NR	Υ	NR
Electrical panel checking	Y	Y	Υ	Y TESTED RUBBER HANDGLOVES	NR	NR	Y	Y	NR	NR	NR
Gas Storage shed checking	Y	Y	Y	Y	Y	NR	Y	Y	NR	NR	NR
Confined space checking	Y	Y	Y	Y	NR	Y	Y	Υ	Y	NR	Y

Note: Y - yes, NR: not required, SCBA: self-contained breathing apparatus, PPE: personal protective equipment.

PPEs shall be selected depending on combination of job and site conditions.



SUBJECT: PROVIDING & LAYING OF ROOF TOP PERMANENT LIFE LINE SYSTEM INSIDE SMELTER PLANT (PHASE-II).

Page: 32 of 104

#### AREA WISE / JOB WISE PPE REQUIREMENTS SMELTER PLANT

#### CARBON AREA

- Industrial Safety Shoes with 4" ankle height as per IS 15298 Part 2-2002 OR its equivalent.
- For Bake Oven area Industrial Safety Shoes with 4" ankle height having Nitrile sole as per IS 15298 Part-II -2002 or its equivalent.
- Ladies Industrial Safety Shoes low ankle as per IS 15298:2011 or its equivalent.
- 4. Safety Helmet as per IS 2925:1984, material-HDPE.
- 5. Full body harness as per IS 3521 or its equivalent.
- 6. Cotton / Leather Hand Gloves as per latest IS mark or its equivalent
- 7. Dust / Mist Respirator shall be FFP2 SL Class as per IS: 9473-2002 or its equivalent.
- 8. Apron (Pin repair Shop)
- 9. Head Cover & Apron (Coke & Pitch handling area)
- 10. Pitch / Fume respirator as per IS 14166:1994 or its equivalent.
- 11. Safety Helmet with visor as per latest IS or its equivalent {for induction furnace & ladle cleaning of RS (O)}.
- 12. Safety goggle with blue glass as per latest IS or its equivalent {for induction furnace & ladle cleaning of RS (O)}
- 13. Special nose mask against fumes & odour as per latest IS or its equivalent for Baking Furnace.

#### 5 POT LINE (Mechanical & Operation) 1 Industrial Safety Shoes with 4" ankle

- 1. Industrial Safety Shoes with 4" ankle height as per IS 15298 Part 2-2002 or its equivalent.
- Ladies Industrial Safety Shoes low ankle as per IS 15298:2011 or its equivalent.
- 3. Safety Helmet as per IS 2925:1984, material HDPE.
- 4. Safety Goggles as per IS 5983 or its equivalent.
- HF Nose Mask shall be FFP2 SL as per IS 9473-2001 or its equivalent.
- Cotton / Leather Hand Gloves as per latest IS mark or its equivalent.
- 7. Safety helmet with visor as per latest IS or its equivalent.
- 8. Ear Plug / Muff as per latest IS or its equivalent.
- 9. Apron, Leg Guard as per latest IS or its equivalent. 10. Full body harness as per IS 3521 or its equivalent

#### CIVIL WORK

- Protective Footwear as per latest IS mark or its equivalent (Ladies & Gents).
- 2. Safety Helmet as per IS 2925:1984, material HDPE.
- Dust / Mist Respirator shall be FFP2 SL class as per IS: 9473-2002 or its equivalent.
- 4. Hand Gloves
- 5. Full body harness as per IS 3521 or its equivalent
- 6. Safety Net as per latest IS mark.

#### 6 HORTICULTURE WORK

- Protective Footwear as per latest IS mark or its equivalent (Ladies & Gents).
- 2. Safety Helmet as per IS 2925:1984,material HDPE
- 3. Safety Goggles as per IS 5983.
- Dust / Mist Respirator shall be FFP2 SL class as per IS:9473-2002
- Cotton Hand Gloves & Rubber Hand Gloves as per latest IS mark.
- 6. Organic vapor nose mask as per latest IS mark or its equivalent.
- 7. Full body harness as per IS 3521 or its equivalent

#### CAST HOUSE (Mechanical & Operation) & Rolling Plant

- **02**) Industrial Safety Shoes with 4" ankle height as per IS 15298 Part 2-2002 or its equivalent.
- (03) Ladies Industrial Safety Shoes low ankle as per IS 15298:2011 or its equivalent
- 04) Safety Helmet as per IS 2925:1984, material HDPE
- 05) Safety Goggles as per IS 5983 or its equivalent.
- 06) Cotton / Leather Hand Gloves
- 07) Dust / Mist Respirator
- 08) Leather Leg Guard
- 09) Helmet with Visor (Skimming Area)
- 10) Apron (Direct Sow Casting Area & Ingot Skimming Station)
- 11) Ear Plug / Muff (Billet Casting Area) of latest IS mark.
- 12) Full body harness as per IS 3521 or its equivalent
- 13) Safety helmet with visor as per latest IS or its equivalent

# MISCELLANEOUS WORK MES, CRS, CENTRAL STORES, LAB, UTILITY & DESPATCH, FINANCE, PLANT HRD & ADMINISTRATION.

Safety Helmet as per IS 2925:1984,material HDPE

- 1. Industrial Safety Shoes as per IS 15298 Part 2-2002/ or its equivalent/Protective Footwear as per latest IS mark or its equivalent (Ladies & Gents).
- 2. Safety Goggles as per IS 5983.
- 3. Cotton / Leather Hand Gloves
- 4. Ear muff/Ear plug (Utility) of latest IS mark or its equivalent.
- Dust / Mist Respirator shall be FFP2 SL class as per IS: 9473-2002.
- 6. Rubber / Surgical hand gloves (for acid / alkali use and at the time of chemical analysis) Lab.
- 7. Full body harness as per IS 3521 or its equivalent
- 8. Safety helmet with visor as per latest IS or its equivalent

#### 4 ELECTRICAL WORKS

- 1. Industrial Safety Shoes with 4" ankle height as per IS 15298 or its equivalent.
- 2. Ladies Industrial Safety Shoes low ankle as per IS 15298:2011 or its equivalent.
- 3. Safety Helmet as per IS 2925:1984, material HDPE or its equivalent
- 4. Safety Goggles of latest IS mark or its equivalent.
- Rubber Hand Gloves (for 6.6 / 11 KV test) as per latest IS or its equivalent.
- 6. Dust / Mist Respirator of latest IS mark or its equivalent.
- 7. Full body harness as per IS 3521 or its equivalent.

Note: 1. The PPEs issued must confirm to latest IS / DGMS approved or its equivalent standard.

2. In case of damage of any PPE of workmen the same shall be replaced by the contractor irrespective of the time of use.

#### 3. Frequency of issue

SI	Item	Frequency of issue
1	Industrial Safety Shoe	1 pair per year.
2	Safety Helmet	1 No per 2 yrs.
3	Safety Goggles	1 No per year
4	Nose mask	4 Nos per month
5	Cotton hand gloves	3 pairs per month



SUBJECT: PROVIDING & LAYING OF ROOF TOP PERMANENT LIFE LINE SYSTEM INSIDE SMELTER PLANT (PHASE-II).

Page: 33 of 104

#### PPE REQUIREMENTS IN VARIOUS AREAS OF CPP

1.	MECHANICAL AREA	6.	POV	VER HOUSE OPERATION:			
1	(i) Industrial Safety Shoes as per IS 15298 Part-II-2002	0.	(i)	Industrial Safety Shoes as per IS 15298 Part-II-2002 or			
	or its equivalent.		(1)	its equivalent.			
	(ii) Safety Helmet as per IS 2925:1984, material-HDPE		(ii)	Safety Helmet as per IS 2925:1984, material-HDPE or			
	or ABS.		(")	its equivalent.			
	(iii) Full body harness as per IS 3521 or its equivalent.		(iii)	Safety Goggles as per IS 5983 or its equivalent.			
	(iv) Cotton/Leather Hand Gloves as per latest IS mark or		(iv)	HF Nose Mask shall be FFP2 SL as per IS 9473-2001			
	its equivalent.		(10)	or its equivalent			
	(v) Dust/Mist Respirator shall be FFP2 SL Class as per		(v)	Cotton Leather Hand Gloves as per latest IS mark or			
	IS:9473-2002 or its equivalent.		(*)	its equivalent.			
	(vi) Safety goggles as pr latest IS or its equivalent.		(vi)	Ear Plug/Muff as per latest IS or its equivalent.			
	(vii) Boiler Suit/Apron.		(vii)	Gum boot			
	(VII) Boiler Gally (Profit.		` '	Boiler suit / apron			
2.	CIVIL WORK	7		TICULTURE WORK			
۷.		′		Industrial Safety Shoes as per 15298			
	<ul><li>(i) Industrial Safety Shoes as per IS 15298 mark.</li><li>(ii) Safety Helmet as per IS 2925:1984, material –HDPE</li></ul>		(i) (ii)	Safety Helmet as per IS 2925:1984, material HDPE			
	or ABS.		`				
			(iii) (iv)	Safety Goggles as per IS 5983.			
	(iii) Dust/Mist Respirator shall be FFP2 SL Class as per		(iv)	Dust/Mist Respirator shall be FFP2 SL Class as per			
	IS:9473-2002 or its equivalent.		(,)	IS:9473-2002.			
	(iv) Hand Gloves		(v)	Cotton Hand Gloves & Rubber Hand Gloves as per			
	(v) Full body harness as per IS 3521 or its equivalent.		() di)	latest IS mark.			
	(vi) Safety Net as per latest IS mark.		(vi)	Full body harness as per IS 3521 or its equivalent.			
	(vii) Gum Boot depending on job requirement						
	(viii) Safety Goggles	0	MIC	OFFI ANEQUO MODIZADE AO			
3.	CHP WORK	8		CELLANEOUS WORK AREAS:			
	(i) Industrial Safety Shoes with as per IS 15298 Part-II-		(i)	Industrial Safety Shoes as per 15298			
	2002 or its equivalent.		(ii)	Safety Helmet as per IS 2925:1984, material HDPE			
	(ii) Safety Helmet as per IS 2925:1984, material-HDPE.		(iii)	Safety Goggles as per IS 5983.			
	(iii) Safety Goggles as per IS 5983 or its equivalent.		(iv)	Cotton/Leather Hand Gloves			
	(iv) Cotton/Leather Hand Gloves.		(v)	Ear Muff/Ear Plug (Utility) of latest IS mark or its			
	(v) Dust/Mist Respirator		(, ;;)	equivalent.			
	(vi) Ear Plug/Muff of latest IS mark.		(vi)	Dust/Mist Respirator shall be FFP2 SL class as per IS:			
	(vii) Full body harness as per IS 3521 or its equivalent.		(:·)	9473-2002.			
	(viii) Special nose mask for coal dust.		(vii)	Rubber/Surgical Hand Gloves (for acid/alkali use and			
	(ix) Gum Boot depending on job requirement.		(::·\	at the time of chemical analysis) Lab.			
_	(x) Full body Apron.		(VIII)	Full body harness as per IS 3521 or its equivalent.			
4.	ELECTRICAL WORKS:	. itc -	احتشت	ont			
	(i) Industrial Safety Shoes as per IS 15298 Part-II-2002 or						
	(ii) Safety Helmet as per IS 2925:1984, material-HDPE or	ııs ec	lnivaie	III.			
	(iii) Rubber Hand Gloves as per latest IS or its equivalent.						
	(iv) Dust/ Mist Respirator of latest IS mark or its equivalent	ί.					
	(v) Full body harness as per IS 3521 or its equivalent.						
	(vi) Arc flash suit / apron / jacket.						
_	(vii) Safety Goggles						
5	DM Plant & Water Treatment Plant:	.,					
	(i) Industrial Safety Shoes as per IS 15298 Part-II-2002 or		quival	ent.			
	(ii) Safety Helmet as per IS 2925:1984aterial-HDPE or AQ			,			
	(iii) Hand Gloves for chemical handling as per latest IS or it		uıvaler	nt.			
	(iv) Dust/ Mist Respirator of latest IS mark or its equivalent.						
	(v) Full body harness as per IS 3521 or its equivalent.						
	(vi) Acid / Alkali suit / apron / jacket.						
	(vii) Safety Goggles						
** D	** For scaffolding / Temporary platform preparation, only MS Pipes / angles are allowed.						

#### \*\* For scaffolding / Temporary platform preparation, only MS Pipes / angles are allowed.

#### Note:

- 1. The PPEs issued must confirm to latest IS/DGMS approved or its equivalent standard.
- 2. In case of damage of any PPE of any PPE of workmen the same shall be replaced by the contractor irrespective of the time of use.

3. Frequency of issue:

SI. No.	Item	Frequency of issue
1	Industrial Safety Shoe	1/Year
2	Safety Helmet	½ Year
3	Safety Goggles	½ Year
4	Nose Mask	4/Month
5	Cotton Gloves	3/Month



SUBJECT: PROVIDING & LAYING OF ROOF TOP PERMANENT LIFE LINE SYSTEM INSIDE SMELTER PLANT (PHASE-II).

Page: 34 of 104

#### **ANNEXURE-A4**

#### **ENVIRONMENTAL POLICY (CAPTIVE POWER PLANT)**

The Captive Power Plant, NALCO located at Angul, Orissa, generating coal based thermal power, being committed to the Corporate Environmental Policy of the Company, further resolves to minimize the pollution and protect the environment in the impact zone of its operation.

#### **OBJECTIVES SPECIFIC TO CAPTIVE POWER PLANT:**

- To achieve continual improvement in use of natural resources.
- To reduce, contain and treat all effluents and emissions of the plant harmful to the environment.
- To take special care in minimizing emission of fly ash and its safe disposal including continual effort for agricultural use of fly ash.
- To reduce dust level in the coal and ash handling areas.
- To create and conserve green belt in and around the plant.
- To create awareness and concern for the environment among the employees and persons working on behalf of the organization.

#### **COMMITMENT:**

We, the employees of Captive Power Plant of NALCO commit ourselves for prevention of pollution, continual improvement of the environment. We also resolve to comply with all legal & other requirements on environment applicable to our organization.

S/d Executive Director (S&P), NALCO

#### **ENVIRONMENTAL POLICY (SMELTER PLANT)**

In recognition of interests of the society in securing sustainable industrial growth, compatible with a wholesome environment, NALCO affirms that it assigns high importance to promotion and maintenance of a pollution-free environment in all its activities.

#### **OBJECTIVES:**

- To use non-polluting and environment friendly technology.
- To monitor regularly air, water, land, noise and other environmental parameters.
- To constantly improve upon the standards of pollution control and provide a leadership in environment management.
- To develop employees awareness on environmental responsibilities and encourage adherence to sound environmental practices.
- To work closely with Government & local authorities to prevent or minimise adverse consequences of the industrial activities on the environment.
- To comply with all applicable laws governing environmental protection through appropriate mechanisms.
- To actively participate in social welfare and environmental development activities of the locality around its Units.

#### **COMMITMENT:**

We dedicate ourselves to ensure a green and wholesome environment in all areas of our operations for sustainable industrial growth and to set standards in environmental management.

S/d Executive Director (S&P), NALCO



SUBJECT: PROVIDING & LAYING OF ROOF TOP PERMANENT LIFE LINE SYSTEM INSIDE SMELTER PLANT (PHASE-II).

Page: 35 of 104

#### **ANNEXURE-A5**

#### **OCCUPATION HEALTH & SAFETY POLICY**

Nalco is committed to maintain a Safe, Healthy and Sustainable work environment in all its operations. This shall be achieved by:

- Focusing on prevention of Accidents and Occupational Health issues.
- Complying with all legal requirements & other requirements related to Safety and Occupational Health of persons and establishing clearly defined goals & procedures to achieve the same.
- ♣ Ensuring Safety & Health of all employees and contract workers in its premises, including those involved in transportation, cleaning and other such activities.
- Conducting Periodic Safety Audits, Environment Audits, Health Check-ups and Risk Assessment by both internal and external qualified persons.
- Considering aspects related to Safety and Health of personnel as well as environmental issues at the time of procurement of equipment and selection of technologies.
- Ensuring health of persons in the peripheral locations, likely to be affected by our operations.
- Periodically monitoring and reviewing safety & occupational health issues at relevant levels, including the highest levels.
- Communicating Safety Hazards and health related issues to all concerned through suitable means, including training.
- ♣ Involving the workmen in Policy implementation as well as identification of potential issues.
- Considering Health & Safety performance of individuals at different levels during their career advancement as per Nalco's policy.
- Establishing and maintaining suitable set-up with competent persons to monitor and bring to the notice of the management any issues related to unsafe conditions & practices.
- Striving for continual improvements, exceeding statutory compliance levels, wherever feasible.

22.10.2015 Bhubaneswar Sd/Chairman-cum-Managing Director

#### **QUALITY POLICY**

Quality will form the core of our business philosophy. Meeting the needs and expectations of the customer and consistently improving our systems and work ethos will be our chosen path in achieving excellence in business and fulfilling our social obligations.

#### **Guiding Principles**

- To ensure a Healthy Return on investment by maximizing Operational Efficiency, Capacity Utilization and Productivity.
- To continually improve and redesign systems, Processes and Practices in order to ensure Error Prevention and improve Response Time.
- **↓** To adopt Internal Customer Focus as a means to External Customer Satisfaction.
- ♣ To treat Human Resource as the key to Quality Excellence and ensure Development, Involvement and Satisfaction of Employees.
- **♣** To ensure High Quality of Inputs through Proactive Interaction with Suppliers.
- ♣ To meet obligations towards the society as a Responsible Corporate Citizen.
- ♣ To Provide value for money to all stakeholders.
- ♣ To follow Ethical Business Philosophy at all times.

#### Commitment

We dedicate ourselves to the Quality Policy and Objectives of the Company in letter and spirit and commit to continuously strive for their fulfilment.

22/10/2015

Bhubaneswar Chairman-cum-Managing Director



SUBJECT: PROVIDING & LAYING OF ROOF TOP PERMANENT LIFE LINE SYSTEM INSIDE SMELTER PLANT (PHASE-II).

Page: 36 of 104

#### **ANNEXURE-A6**

#### SOCIAL ACCOUNTABILITY POLICY

We at NALCO are committed to provide a socially accountable work environment to all employees and uphold ethical business practices by respecting employees' rights to ensure a decent Workplace.

We shall achieve these by adopting a companywide culture, which will help to promote:

- Involvement of all employees in sustenance of SA 8000:2014 Standard;
- Conforming to all requirements of SA 8000:2014 Standard;
- Complying with National laws, other applicable laws and other requirements to which the organization subscribes;
- Respecting the International instrument as describes in the SA 8000:2014 Standard.
- Continual improvement initiatives in all social aspects;
- Learning and training opportunities to all employees;

This policy is communicated and understood within the organization.

Sd/Date: 23.02.2017 Chairman-cum-Managing Director

#### **ENERGY POLICY**

Enhancing Energy Performance, comprehensively optimizing energy use, Energy consumption and energy efficiency, is a major imperative for an energy intensive industry like ours. In recognition of this, we focus on improvement of Energy Performance in all areas of operations with thrust on planning Energy Objectives based on the enshrined Guiding Principles.

#### **Guiding Principles**

- To Endeavour for reduction in specific consumption of energy in all forms and in all areas of operations.
- To ensure availability of information and necessary resources for achieving objectives and targets.
- To comply with all applicable legal, regulatory and other requirements related to energy use, consumption and efficiency.
- To espouse energy efficient technology encompassing procurement of energy efficient products & services and design for Energy Performance improvement.
- To carry out energy audits and energy reviews, at planned intervals, to improve energy performance.

#### Commitment

We affirm our commitment to continually improve our energy performance and strive for achieving the objectives and targets.

Sd/-

**Chairman-cum-Managing Director** 



SUBJECT: PROVIDING & LAYING OF ROOF TOP PERMANENT LIFE LINE SYSTEM INSIDE SMELTER PLANT (PHASE-II).

Page: 37 of 104

## **ANNEXURE-A7**

## GENERAL ENVIRONMENTAL REQUIREMENT (SMELTER / CAPTIVE POWER PLANT)

- 1. The contractor should adhere to safe environmental practices and shall perform in line with the environment policy of the company. The contractor has to ensure efficient use of natural resources like water, fuel oil and lubricants.
- 2. It will be the responsibility of the contractor to safely dispose off the waste generated in the processes of any job to the allotted location as assigned by Manager-in-charge in a manner so as to minimize their harmful concentration effects in the environment.
- 3. The contractor should ensure that oil/grease; chemicals and toxic substances are stored/ handled properly so that they do not find their way into the industrial drain and the atmosphere.
- 4. The contractor should make use of equipments having permissible noise limits and not polluting the atmosphere by any means. The contractor shall also guard against any hazardous & unsafe working conditions.
- 5. The various activities of the contractor should not create any adverse effect on ambient air & water quality at work site and adjoining area. It will be the responsibility of the contractor not to cause damage to the afforestation/green belt created inside/ outside the plant.
- 6. Contract should ensure proper awareness among workers to maintain a clean environment inside/outside the plant.
- 7. The emission level of the vehicles, construction equipments etc deployed by the contractor should comply with the norms specified by statutory authorities/ acceptable standards.
- 8. The contractor should avoid use of toxic and hazardous chemicals. If use of toxic and hazardous chemicals becomes unavoidable, their presence should be within the limits specified by the acceptable standards. The contractor should declare before use of chemicals, the nature of the chemicals i.e. Toxic/ non-toxic, hazardous/ non-hazardous to the Manager-in-charge and obtain his clearance before using such chemicals.
- **9.** The contractor should ensure that disposal of used chemicals are disposed off to the drains only after neutralization of the chemicals and after clearance of the Manager-in-charge.

## MINIMUM SAFETY EQUIPMENTS TO BE PROVIDED BY THE CONTRACTOR TO THE WORKMEN.

- 1. The contractor shall provide safety shoes, safety helmets to their workmen while executing the job.
- 2. Dust respirators must be used by the contractor workers working in dust area.
- 3. Face shield must be used by the welders.
- 4. While working on a height, Safety belt must be used by the workers.
- 5. Suitable face mask must be used the contract workers while working out painting jobs.

\*\*\*\*\*



SUBJECT: PROVIDING & LAYING OF ROOF TOP PERMANENT LIFE LINE SYSTEM INSIDE SMELTER PLANT (PHASE-II).

Page: 38 of 104

**ANNEXURE-A8** 

## GENERAL GUIDELINE TO BIDDER ON REVERSE AUCTION

- 1. If a bidder does not participate in the Reverse Auction, the price quoted by him in the price bid shall be considered as the valid price of that bidder. The inter-se position of the said bidder shall be considered based on their position on completion of reverse auction.
- 2. <u>Price bid shall be opened at NOT APPLICABLE Hrs. on DD/MM/YYYY and Reverse Auction shall commence at NOT APPLICABLE PM and shall remain open for minimum NOT APPLICABLE hour.</u>
- 3. Starting bid price shall be the L-1 offer price received against the tender.
- 4. <u>Bid Decremental Value shall be `NOT APPLICABLE (which is @ NOT APPLICABLE of the declared estimated value).</u>
- 5. Auto Extension Time shall be fixed at 10 Minutes
- 6. Other relevant parameters shall be displayed in the GeM Portal reverse auction window.
- 7. GeM Portal Server time shall be the basis of Start time & Closing time for bidding and shall be binding for all.
- 8. Auction flow is started and is closed after completion of the process. Once the Auction process is initiated the system takes over for auto auction activity. Then, comparison chart is generated.
- 9. The bidders to participate in tender-cum-auction process in GeM Portal, has to log into GeM Portal (i.e. <a href="https://gem.gov.in">https://gem.gov.in</a>) with DSC to access the application and quote from their own offices/place of their choice. Once logged in, the software gives them a platform to place bids.
- 10. All electronic bids submitted during the reverse auction process shall be legally binding on the bidder. The bid values submitted by the bidder are digitally signed by the bidders before submitting. The bidder, after initial submission of a bid, cannot subsequently increase the bid. They can only reduce their bid by the minimum permissible decrement or its multiples. The last bid submitted by the bidder in the Reverse Auction will be considered as the valid price bid offered by that bidder and will be the basis for evaluation / acceptance by Nalco.
- 11. System displays L1 landed price in auction creation form and allows TIA to edit the value as 'start bid' price. Normally, TIAs will enter the L-1 Price as the start bid price.
- 12. **Elapsed time:** Shall be fixed at ten minutes. There will be auto extensions of time, every time, (by ten minutes) in case of any reduction recorded in the last auto-extension-time-duration. The reverse auction will come to a close only when there is no further reduction recorded in the last ten minutes slot.
- 13. **Maximum Seal Percentage:** It is the maximum reduction that can be allowed in the bidding process in a single go. Higher reduction will not be allowed by the system. This protects any possible mistakes by bidders. For any higher discount, the bidder has to repeat the action and the system allows it.
- 14. Only the chronologically last bid submitted by the bidder till the end of the auction shall be considered as the valid price bid of that bidder. Any bid submitted earlier by the bidder prior to submission of his last bid will not be considered as valid price bid.



SUBJECT: PROVIDING & LAYING OF ROOF TOP PERMANENT LIFE LINE SYSTEM INSIDE SMELTER PLANT (PHASE-II).

Page: 39 of 104

## PROPOSED SITE ORGANISATION

## NAME OF TENDERER:

Tenderer is to indicate here the site organization, he proposes to set up for execution of the work.

It is understood that this will be augmented from time to time depending on the requirements for timely completion of the work as directed by the Engineer-in-Charge.

Tenderer is also to furnish the bio-data of the Resident Engineer & key personnel to be deployed at site.

## **COMPLIANCE TO INTEGRITY PACT:**

Bidders are required to unconditionally accept the "Integrity Pact (IP)" (to be executed on plain paper), as per format attached at Annexure-C21 of NIT, which may be considered as pre-signed by the Employer, and submit the same duly signed on all pages by the Bidder's Authorized Signatory in a separate sealed envelope before stipulated NIT / submission time at the address specified in the NIT. Bidder and its Subsidiary(ies) and/or Holding Company and/or Subsidiary(ies) of its Holding Company / Consortium members shall individually sign Integrity Pact (IP) and shall submit in a separate sealed envelope before stipulated NIT submission time at the address specified NIT. Bidder's failure to comply with the aforesaid requirement regarding submission of Integrity Pact (IP)' shall lead to outright rejection of offer Proposal as being non-responsive and shall not be opened.

In case of selected bidder being a Consortium, in addition to above, after incorporation of Joint Venture Company, Integrity Pact shall be signed by the Joint Venture Company along with Project Agreement.

## 1. Independent External Monitors (IEMs):

At present there is a panel of Independent External Monitors (IEMs) in NALCO. The panel of IEMs consists of the following.

A	) Ms. Archana Ranjan, IRS (Retd.)	B)	Smt. Deepa Krishan, IRS (Retd.)	C)	Dr. Meeran C Borwankar, IPS (Retd.)
	A 4/1, Vasant Vihar,		C 2603, Sushant Lok-1,		C 10/5, Vasant Vihar,
	New Delhi- 110057,		Gurgaon, Haryana, PIN-122002,		New Delhi-110052
	e-mail: <u>ranjan.archana@gmail.com</u>		e-mail: <u>deepakrishan@gmail.com</u>		e-mail: <u>mcborwankar@gmail.com</u>

1. In respect of this Tender, the panel of Independent External Monitors (IEMs) would be monitoring the Bidding Process and execution of Agreement to oversee implementation and effectiveness of the Integrity Pact Program.

The details of the Independent External Monitors (IEM) are given above who will oversee the compliance to the terms of The Integrity Pact (IP) which forms a part of this Tender.

IEMs are authorized to examine /consider all references made to it under this tender. The bidder(s), in case of any dispute(s) / complaint(s) pertaining to this package may raise the issue either with the designated 'Nodal Officer' in NALCO or directly with the IEM.

Bidder may write to the IEM through E-mail (Provided in the tender) for their grievances, if any, giving details of the tender reference, name of the tender issuing officer and Nalco's Unit for quick identification of the tender by the IEM.

- 2. The Independent External Monitors (IEMs) have the right to access without restriction to all Project documentations of the NALCO. The Monitor is under contractual obligation to treat the information and documents of the Bidder / Subsidiary (ies) and/or Holding Company and/or Subsidiary (ies) of its Holding Company / Consortium members/Sub Contractors with confidentiality.
- 3. If the Employer has terminated the Contract pursuant to Section-3 of the Integrity Pact (IP), NALCO shall act in accordance with **Section 6 of The Integrity Pact**.



SUBJECT: PROVIDING & LAYING OF ROOF TOP PERMANENT LIFE LINE SYSTEM INSIDE SMELTER PLANT (PHASE-II).

Page: 40 of 104

## **ANNEXURE A9**

## PREFERENCE TO MAKE IN INDIA ORDER NO. P-45021/2/2017-PP(BE-II),DTD: 16.09.2020

- 1.0 The bidders are requested to go through the GoI Order No: P-45021/2/2017-PP(BE-II), DTD: 16.09.2020 for the purpose of Purchase Preference on the basis of Local Content and submit the Declaration by the Bidder accordingly.
- 2.0 For the purpose of this order dtd.16.09.2020:-
- 2.1 Local content means the **amount of value added in India** which shall, unless otherwise prescribed by the nodal ministry, **be the total value of the item procured** (excluding net domestic indirect taxes) **minus the value of imported content in the item** (including all customs duties) **as a proportion of the total value, in percent**.
- 2.2 Class I local supplier means a supplier or service provider whose goods, services or works offered for procurement has local content equal to or more than 50%, as defined at cl. 2.1above.
- 2.3 Class II local supplier means a supplier or service provider whose goods, services or works offered for procurement has local content equal to or more than 20% but less than 50%, as defined at cl. 2.1above.
- 2.4 Non-local supplier means a supplier or service provider whose goods, services or works offered for procurement has local content less than 20%, as defined at cl. 2.1above.
- 2.5 'Margin of purchase preference' means the maximum extent to which the price quoted by a "Class-I Local supplier" may be above the L1 for the purpose of purchase preference. The margin of purchase preference shall be 20% against the tender.
- 3.0 Subject to the provisions of the above order and to any specific instructions issued by the Nodal Ministry or in pursuance of this order, purchase preference shall be given to 'Class-I Local supplier' in procurement undertaken by procurement entities in the manner specified here under:-
  - <u>CASE-I (FOR DIVISIBLE QUANTITY</u>): All the provisions of the order No.P-45021/2/2017-PP(BE-II) dtd. 16.09.2020 shall be applicable for this tender towards purchase preference.
  - However, in case of participation by MSE & ancillary units, the tender quantity reserved for MSE & ancillary units as per purchase preference policy of NALCO for MSEs as mentioned in the tender document shall take precedence over the purchase preference against the above mentioned order (to be mentioned, if applicable).
- 4.1 In the procurement of goods or works which are divisible in nature, the 'Class-I Local Supplier' shall get purchase preference over 'Class-II local supplier' as per the following procedure:
  - a) Among all qualified bids, the lowest bid will be termed as L1. If L1 is 'Class-I local supplier', the contract of full quantity will be awarded to L1.
  - b) If L1 bid is not a 'Class I local supplier', 50% of the order quantity shall be awarded to L1. Thereafter. the lowest bidder among the 'Class I Local supplier' will be invited to match the L1 price for the remaining 50% quantity subject to Class-I local supplier's quoted price falling within the margin of purchase preference and contract for that quantity shall be awarded to such 'Class-I Local supplier' subject to matching the L1 price. In case such lowest eligible 'Class-I Local supplier' fails to match the L1 price or accepts less than the offered quantity, the next higher 'Class-I Local supplier', within the margin of purchase preference shall be invited to match the L1 price for the remaining quantity and so on and the contract shall be awarded accordingly. In case some quantity is still left uncovered on 'Class-I Local supplier, then such balance quantity may also be ordered on the L1bidder.



SUBJECT: PROVIDING & LAYING OF ROOF TOP PERMANENT LIFE LINE SYSTEM INSIDE SMELTER PLANT (PHASE-II).

Page: 41 of 104

4.2 'Class-II local supplier' will not get purchase preference in any procurement undertaken by procuring entities.

**CASE-11(FOR NON-DIVISIBLE QUANTITY):** All the provisions of the order No. P-45021/2/2017-PP(BE-II) dtd.16.09.2020 shall be applicable for this tender towards purchase preference.

- 4.3 In the procurement of goods or works which are not divisible in nature, the 'Class-I Local Supplier' shall get purchase preference over 'Class-II local supplier' as per the following procedure:
  - a) Among all qualified bids, the lowest bid will be termed as L1. If L1 is 'Class-I local supplier', the contract will be awarded to L1.
  - b) If L1 bid is not a 'Class I local supplier', the lowest bidder among the 'Class I Local supplier' will be invited to match the L1 price subject to Class-I local supplier's quoted price falling within the margin of purchase preference and contract shall be awarded to such 'Class-I Local supplier' subject to matching the L1price.
  - c) In case such lowest eligible 'Class-I Local supplier' fails to match the L1 price, 'Class-I Local supplier' with the next higher bid within the margin of purchase preference shall be invited to match the L1 price and so on and contract shall be awarded accordingly. In case none of the 'Class-I Local supplier' within the margin of purchase preference matches the L1 price, the contract may be awarded to the L1bidder.
- 4.4 'Class-II local supplier' will not get purchase preference in any procurement undertaken by procuring entities.
- 5.0 Verification of local content.
  - 5.1 The 'Class-I local supplier'/ 'Class II-local supplier' at the time of tender, bidding or solicitation shall be required to indicate percentage of local content and provide self-certification that the item offered meets the local content requirement for 'Class-I local supplier'/ 'Class II-local supplier', as the case may be. They shall also give details of the location(s) at which the local value addition is made. Declaration to be given in the format attached/enclosed below.
  - 5.2 In case of procurement for a value in excess of Rs.10 crores, the 'Class-I local supplier' 'Class II-local supplier' shall be required to provide a certificate from the statutory auditor or cost auditor of the company (in the case of the companies) or from a practicing cost accountant or practicing chartered accountant (in respect of suppliers other than companies) giving the percentage of local content.
  - **5.3** Decisions on complaints relating to implementation of this order shall be taken by the competent authority which is empowered to look into procurement-related complaints relating to the procuring entity.
- 6.0 Only "Class-I local suppliers and Class-II local suppliers", as defined under the order, shall be eligible for participation against this tender. The offers of 'Non-Local Suppliers' shall not be considered for evaluation against this tender.





SUBJECT: PROVIDING & LAYING OF ROOF TOP PERMANENT LIFE LINE SYSTEM INSIDE SMELTER PLANT (PHASE-II).

Page: 42 of 104

## (Declaration by the bidder on their letter head)

To, GGM(T&C),		
M/s. National Aluminium Company Limited, Smelter Plant, Nalconagar, DistAngul, Odisha-759145		
Sub: Declaration of % of Local content along with the place of valu Gol order No: P-45021/2017-PP (BE-II), Dated: 16.09.2020)	e addition. (I	Ref. No:
Tender Ref. No.:		
Dear Sir,		
We, M/s	_ having its	office
at	_(address)	hereby
confirm that the offered product as% of the local content.		
Following is/are the location(s) at which local value addition is made:		
Yours sincerely,		
Signature		
Name :		
Designation:		
Contact No. :		



SUBJECT: PROVIDING & LAYING OF ROOF TOP PERMANENT LIFE LINE SYSTEM INSIDE SMELTER PLANT (PHASE-II).

Page: 43 of 104

**ANNEXURE-A10** 

Compliance of Public order on Restrictions under Rule 144 (xi) of the General Financial Rules (GFRs), 2017 and ORDER NO:F.No.6/18/2019-PPD DATED 23/07/2020 & 24/07/2020

### **DEFINITIONS**

- 1. GOI vide Order (Public Procurement No.1, 2 & 3) dated 23 Jul 2020 & 24 Jul 2020 has imposed Restrictions under Rule 144 (xi) of the General Financial Rules (GFRs), 2017 on bidders from a country which shares a land border with India.
- 2. "Bidder" for the purpose of this Order (Public Procurement No.1, 2 & 3) (including the term 'tenderer', 'consultant' 'vendor' or 'service provider' in certain contexts) means any person or firm or company, including any member of a consortium or joint venture (that is an association of several persons, or firms or companies), every artificial juridical person not falling in any of the descriptions of bidders stated hereinbefore, including any agency, branch or office controlled by such person, participating in a procurement process
- 3. "Bidder from a country which shares a land border with India" for the purpose of this Order (Public Procurement No.1, 2 & 3) means
  - a. An entity incorporated, established or registered in such a country; or
  - b. A subsidiary of an entity incorporated, established or registered in such a country; or
  - c. An entity substantially controlled through entities incorporated, established or registered in such a country; or
  - d. An entity whose beneficial owner is situated in such a country; or
  - e. An Indian (or other) agent of such an entity; or
  - f. A natural person who is a citizen of such a country; or
  - g. A consortium or joint venture where any member of the consortium or joint venture falls under any of the above

**Note:** "Beneficial owner" for the purpose of above paragraph (3) will be as under:

i. In case of a company or Limited Liability Partnership, the beneficial owner is the natural person(s), who, whether acting alone or together, or through one or more juridical person(s), has a controlling ownership interest or who exercises control through other means.

## **Explanation**

- a) "Controlling ownership interest" means ownership of, or entitlement to, more than twenty-five per cent of shares or capital or profits of the company;
- b) "Control" shall include the right to appoint the majority of the directors or to control the management or policy decisions, including by virtue of their shareholding or management rights or shareholder's agreements or voting agreements;
- ii. In case of a partnership firm, the beneficial owner is the natural person(s) who, whether acting alone or together, or through one or more juridical person, has ownership of entitlement to more than fifteen percent of capital or profits of the partnership;
- iii. In case of an unincorporated association or body of individuals, the beneficial owner is the natural person(s), who, whether acting alone or together, or through one or more juridical person, has ownership of or entitlement to more than fifteen percent of the property or capital or profits of such association or body of individuals;



SUBJECT: PROVIDING & LAYING OF ROOF TOP PERMANENT LIFE LINE SYSTEM INSIDE SMELTER PLANT (PHASE-II).

Page: 44 of 104

- iv. Where no natural person is identified under (i) or (ii) or (iii) above, the beneficial owner is the relevant natural person who holds the position of senior managing official;
- v. In case of a trust, the identification of beneficial owner(s) shall include identification of the author of the trust, the trustee, the beneficiaries with fifteen percent or more interest in the trust and any other natural person exercising ultimate effective control over the trust through a chain of control or ownership.
- vi. "Agent" for the purpose of this Order (Public Procurement No.1, 2 & 3) dtd 23 Jul 2020 & 24 Jul 2020 is a person employed to do any act for another, or to represent another in dealings with third persons.

## Rule: Following shall be complied by the Bidders of the said countries while submitting bids.

- A) Any bidder from a country who shares a land border with India will be eligible to bid in this tender only if the bidder is registered with the <u>Competent Authority</u>. The Competent Authority for the purpose of registration under this Order shall be the Registration Committee constituted by the Department for Promotion of Industry and Internal Trade (DPIIT). However, Order will not apply to bidders from those countries (even if sharing a land border with India) to which the Government of India has extended lines of credit or in which the Government of India is engaged in development projects. Lists of countries to which lines of credit have been extended or in which development projects are undertaken are given in the website of the Ministry of External Affairs. This order shall also not apply to procurement by Indian missions and by offices of government agencies / undertakings located outside India.
- B) The Bidder shall have to submit declaration / certificate as per the attached Format towards compliance of Public Order on Restrictions under Rule 144 (xi) of the General Financial Rules (GFRs), 2017. B)
- C) For works contracts, including Turnkey contracts, the successful bidder shall not be allowed to sub-contract works to any contractor from a country which shares a land border with India unless such contractor is registered with the Competent Authority. The definition of "Contractor from a country which shares a land border with India" shall be as in paragraph (3) above.



SUBJECT: PROVIDING & LAYING OF ROOF TOP PERMANENT LIFE LINE SYSTEM INSIDE SMELTER PLANT (PHASE-II).

Page: 45 of 104

Format for Declaration towards Compliance of Order (Public Procurement No.1, 2 & 3) dtd 23 Jul 2020 & 24 Jul 2020 on Restrictions under Rule 144 (xi) of the General Financial Rules (GFRs), 2017.

This declaration must form part of all tenders & it contains general information and serves as a declaration form for all bidders. (Before completing this declaration, bidders must study the General Conditions, Definitions, Govt Directives applicable in respect of Public Procurement No.1, 2 & 3) dtd 23 Jul 2020 & 24 Jul 2020 on Restrictions under Rule 144 (xi) of the General Financial Rules (GFRs), 2017& prescribed tender conditions).

DECLARATION BY AUTHORISED SIGNATORY OF THE FIRM	
I, the undersigned,	
do hereby declare, in my capacity as	
01 W/s	(name of bidder entity), that.
1) The facts contained herein are within my own personal knowledge.	
2) I have read the Order (Public Procurement No.1, 2 & 3) dtd 23 Jul	2020 & 24 Jul 2020 on the subject of
Restrictions under Rule 144 (xi) of the General Financial Rules (C	GFRs), 2017 regarding restrictions on
procurement from a bidder of a country which shares a land bore	der with India and comply to all the
provisions of the Order.	
3) I certify that M/s	(name of bidder
entity) is not from such a country or, is from such a country (strike	out whichever is not applicable), has
been registered with the Competent Authority. I hereby certify that the	nis SUPPLIER fulfills all requirements
in this regard and is eligible to be considered. [Where applicable,	evidence of valid registration by the
Competent Authority is attached].	
4) I understand that the submission of incorrect data and / or if co	ertificate / declaration given by M/s
	(name of bidder entity) is found to be
false, this would be a ground for immediate termination and further	legal action in accordance with law as
per Clause 12 of the Public Order on Restrictions under Rule 14-	4 (xi) of the General Financial Rules
(GFRs), 2017	
AUTHORISED SIGNATURE:	DATE:
Seal / Stamp of Ridder	



SUBJECT: PROVIDING & LAYING OF ROOF TOP PERMANENT LIFE LINE SYSTEM INSIDE SMELTER PLANT (PHASE-II).

Page: 46 of 104

# PART -B

# **Contract specific information**



SUBJECT: PROVIDING & LAYING OF ROOF TOP PERMANENT LIFE LINE SYSTEM INSIDE

SMELTER PLANT (PHASE-II).

**ANNEXURE-B1** 

Page: 47 of 104

## **SMELTER T&C DEPARTMENT** Web site: www.nalcoindia.com **CONTRACT DETAILS**

Form no: F-02/CNT/IDPM/02 Page 1 of 2

		_
1.0	Name of the Work	Providing & Laying of Roof top Permanent Life line system inside Smelter Plant (Phase-II).
1.1	Nature of the Work	CAPITAL (ONETIME CONTRACT)
1.1(i)	Details of "Items Critical to quality" in case of "Specialized Jobs".	NOT APPLICABLE
1.1(ii)	Minimum Workable offer if applicable	Clause No.22.2 of Annexure-A1 may be referred for detail.
1.2	Location of the work	INSIDE PLANT PREMISES
2.0	NIT reference	SMLT/T&C/GeM/OMC-5948/NIT/5266
3.0	Contract Period	24 (TWENTY-FOUR) MONTHS
4.0	No.of Agency required and %distribution of work(subject to availability of bidders)	<ul><li>a) Number of Agency: <b>01 (ONE)</b></li><li>b) Distribution of Work: <b>100%</b></li></ul>
4.1	Mode of tendering	OPEN (GeM e-Tendering)
4.2	Type of bidding	Two Part
4.3	Earnest Money Deposit(EMD)	Rs.3,50,000/- (Rupees Three Lakh Fifty Thousand only) (Ref. Clause 4.0 of Annexure-A1).
4.4	Tender fee	NOT APPLICABLE
5.0	Tender e-Submission Start Date/Time.	As per GeM Portal
5.1	Tender e-Submission Last Date/Time.	As per GeM Portal
6.0	e-Tender Opening Date/Time	As per GeM Portal
7.0	Validity of Offer	<b>04 (FOUR) MONTHS</b> from the Date of Tender Opening
8.1	Bank Guarantee / Indemnity Bond value against Free Issue Materials.	(i) B.G: NOT APPLICABLE (ii) I.B: NOT APPLICABLE (Ref clause no:20.2 of Annexure-A1)
8.2	Bank Guarantee against spare materials / equipments taken outside the Plant.	(i) B.G: NOT APPLICABLE (Ref clause no:20.2 of Annexure-A1)
9.0	Defect Liability Period	60 (SIXTY) MONTHS (Ref clause 30 of Annexure-A1)



SUBJECT: PROVIDING & LAYING OF ROOF TOP PERMANENT LIFE LINE SYSTEM INSIDE SMELTER PLANT (PHASE-II).

Page: 48 of 104

10.1	Current minimum daily wages of all	Refer Annexure-B5
	categories of labour	
10.2.1	The values of L <sub>0</sub> and Y applicable	L <sub>0</sub> = ` 611/- & Y = 8.68%
	( $L_0$ =Minimum labour rate)	(Ref Annexure-B5)
	(Y = Labour component)	,
10.2.2	The values of D <sub>0</sub> and Y applicable	NOT APPLICABLE
	( $D_0$ = Diesel rate at Angul at the time of tendering)	
	(Y = Fuel cost component)	
10.3.1	Labor hike reimbursement against	NOT APPLICABLE (FIRM PRICE BASIS)
	change in minimum wages.	(Ref clause-28.0 of Annexure-A1)
10.3.2	Fuel escalation against change in Fuel	NOT APPLICABLE
	Price	(Ref clause-29.0 of Annexure-A1)
10.4	HRD clearance	APPLICABLE
		(Ref clause 17,18, 19 of Annexure-A1)
10.5	PF & ESI	APPLICABLE
		(Ref clause 2.2.3,31.7 of Annexure-A1)
11	Type of Contract under <b>GST</b> &	Applicable as per CGST/ SGST/ UTGST & IGST
	Applicability of GST & ITC on GST	(Ref Clause No.25 of Annexure-A1)
12	Service Accounting Code (SAC) of the	APPLICABLE.
	contract/Harmonized system of	(Ref Annexure-C18)
	nomenclature (HSN) code	
13	Recovery towards compensation for delay	Refer Clause no: 32 of Annexure-A1.
1.4	December of Duilding and Other Court	TOTAL STAGES FIG. 62 OF FIFTHONES OF FIFT
14	Recovery of Building and Other Const.	Refer Clause no: 27.8 of Annexure-A1.
4.5	workers' BOCW (RE& CS ) Cess.	
15	Gate pass details	H.S.W-NIL/ S.W- NIL/ S.S.W- NIL/ U.S.W- NIL.
		Temporary- Gate pass will be on temporary basis.

## IMPORTANT POINTS TO BE NOTED FOR SUBMISSION OF BID

16.	The tender document should be digitally signed, before online submission.		
17.	Correction & over writings are not permissible. Any corrections should be signed with date by the		
	person, signing the tender document.		
18.	If any tenderer is having any unauthorized structure / occupation inside Nalco Township / Plant,		
	their offer will not be considered for evaluation and shall be liable for rejection.		
19.	All the supporting documents submitted with the offer should be attested by a gazetted officer or		
	Notary Public.		
20.	The bidder has to submit the 'Necessary Forms' which are to be downloaded, filled up and signed		
	before uploading.		
21.	Pre Contract Integrity Pact at Annexure-C21 must be filled up and signed by the tenderer.		
22.	You are requested to go through "Check list for bidder" and Clause No- 07 of Annexure-A1 of NIT		
	details regarding Mode, Submission, Receipt & Opening of Tender.		

Mrs. Anjana Mundu

Tender Inviting Authority
Tender & Contract Dept., Smelter Plant



SUBJECT: PROVIDING & LAYING OF ROOF TOP PERMANENT LIFE LINE SYSTEM INSIDE SMELTER PLANT (PHASE-II).

Page: 49 of 104

Sub: PROVIDING & LAYING OF ROOF TOP PERMANENT LIFE LINE SYSTEM INSIDE SMELTER PLANT (PHASE-II).

AGENCIES INTENDING TO PARTICIPATE SHALL FULFILL THE FOLLOWING MINIMUM PRE-QUALIFICATION CRTIERIA (WITH SUPPORTING DOCUMENTS & THEY NEED TO FILL UP ANNEXURE-C25 TO ANNEXURE-C27 OF THE NIT TO ENSURE SUBMISSION OF ALL DOCUMENTS AS PER REQUIREMENT OF NALCO)

## PRE QUALIFYING CRITERIA.

## A) TECHNICAL

## Experience criteria

The bidder should have experience of having successfully completed "*Similar Work*" during the last seven years ending on last day of the month previous to the one in which NITs are invited, should be either of the followings;

 Three similar completed/partially completed works each (with above criteria) having executed value not less than Rs.74.19 Lakhs (Rupees Seventy Four Lakhs Nineteen Thousand only).

#### OR

ii. Two similar completed/partially completed works each (with above criteria) having executed value not less than Rs.92.73 Lakhs (Rupees Ninety Two Lakhs Seventy Three Thousand only).

### **OR**

iii. One similar completed/partially completed work (with above criteria) having executed value not less than Rs.148.37 Lakhs (Rupees One Crore Forty Eight Lakhs Thirty Seven Thousand only).

The work experience should be of "Working directly" and possess relevant experience as per the details given under experience criteria. "Working directly" implies, working as a Contractor or Sub Contractor under above authorities who is the Principal Owner of the work.

<u>Evaluation criteria</u>: Cost of the completed works by the bidder shall be escalated @ 10% per annum (simple rate) to bring them at the current price level.

(The cost of work completed within one year prior to original date of bid opening shall not be considered for any weightage. The weightage shall only be considered for work completed prior to one year of original date of bid opening on annual basis and no weightage shall be given for part of the year)

"Similar Work" means "Installation of Roof top permanent fall protection system including horizontal life line system / vertical life line system".

Partially completed work in progress (not abandoned) shall be considered.

## Documentary proof

### **Documentary Proof**:

- The bidder should submit copy of following documents duly attested by a notary public or Gazetted officer.
  - a) Work Order with value along with Amendment, if any, Scope of Work & Bill of quantity for assessment of Experience Criteria.
  - b) Satisfactory Completion Certificate indicating the value of work executed & period of contract obtained from Principal Owner of the work for whom the work has been executed.
- 2. In case the bidder submits the credentials as a sub-contractor the following copies are to be submitted duly attested by a notary public or gazette officer:
  - a) Detailed work order / PO / Agreement from the main agency.
  - b) Completion certificate issued by main agency indicating the value of work executed & period of contract.
  - c) Completion certificate issued by the Principal / project authorities in favour of the main agency showing due completion of the package.
- 3. In case of partially completed works the party has to submit the part completion certificate indicating the value of work completed and the performance/progress of the bidder should be satisfactory.

NB:- The Experience / Completion Certificates shall be considered only when it bears the Name and Designation of Issuing Authority. This is only applicable for Experience /Completion Certificates issued after 30/06/2022.

Mrs. Anjana Mundu

Tender Inviting Authority
Tender & Contract Dept., Smelter Plant



SUBJECT: PROVIDING & LAYING OF ROOF TOP PERMANENT LIFE LINE SYSTEM INSIDE SMELTER PLANT (PHASE-II).

Page: 50 of 104

## **B) FINANCIAL**

#### Eligibility criteria **Documentary proof** The average annual turnover of the vendor for last three financial The bidders have to submit the years should be minimum Rs.55.64 Lakhs (Rupees Fifty Five Lakhs copies of audited financial Sixty Four Thousand only). statements and profit & loss accounts of the relevant years duly (Turn over shall be escalated @10% per annum (simple rate) to bring attested by a notary public or them at the current price level. The turnover of the latest previous gazette officer in support of both year shall not be considered for any weightage) the qualifying criteria of turnover The bidder should have minimum positive working capital of and net worth along with the bid. Rs.46.37 Lakh. Alternatively the bidder should make exclusive credit limit available from one or more scheduled commercial Banks for the proposed work and submit a line of confirmation from the bank / banks as documentary evidence. 3) The bidder should have minimum positive net worth of Rs.92.74 Note: (For bids received prior to 30th June of any year, the financial figure for the previous to previous year may also be considered for evaluation. Whereas for bids submitted after 30th June, the bidder may also submit financial statement for the previous year certified by Chartered Accountant/Auditor for consideration of their bid.)

## C) CRIMINAL BACKGROUND:

The bidder or its Proprietor/Partner(s)/Director(s) of the firm should not have been convicted by a court of Law for an offence involving moral turpitude in relation to business dealings during the past seven years for acceptance of the offer. The bidder shall give an **affidavit** to this effect. The affidavit must be affirmed before the competent judicial authority or duly notarized by the Notary only after date of said tender floating. Besides, bidder should furnish litigation history of their firm or group firm (if claiming fulfillment of PQC on group entity terms). The litigation history shall be as per the Format at Annexure-C22 for the purpose of affidavit:

- D) The bidder should possess independent EPF, ESI, & PAN based GST registration certificates of their firm (as applicable). The party should also possess PAN in the name of the firm or sole proprietor The bidders are required to upload copy of EPF & ESI certificates and PAN along with the proof of ownership of their firm (in case of PAN is in the name of sole proprietor) along with the offer.
- E) The bidder needs to submit (upload) the photocopies of all brief orders presently under execution by them as a part of their concurrent commitment (Ref. Cl. No. 5.4 of General Information of NIT, Part-A). NOT APPLICABLE FOR THIS CONTRACT.

**Note:** Agencies intending to participate shall fulfill minimum Pre-Qualification Criteria (With supporting documents & they need to fill up <u>Annexure-C6</u> to <u>Annexure-C7</u> of the NIT. All the supporting documents submitted should be attested by a Notary Public or a Gazetted Officer.

Mrs. Anjana Mundu

Tender Inviting Authority
Tender & Contract Dept., Smelter Plant



SUBJECT: PROVIDING & LAYING OF ROOF TOP PERMANENT LIFE LINE SYSTEM INSIDE SMELTER PLANT (PHASE-II).

Page: 51 of 104

**ANNEXURE-B2** 

## **SCOPE OF WORK**

Sub: PROVIDING & LAYING OF ROOF TOP PERMANENT LIFE LINE SYSTEM INSIDE SMELTER PLANT (PHASE-II).

## LIFELINE

- The contractor shall be responsible to NALCO for supplying the fall protection lifeline system, installing, commissioning the system & certification of end to end installed full system.
- Contractor will be responsible for renewing annual certification by third party approved by NALCO for total span of minimum 5 years after the commissioning of the system.
- 3. Third party for inspection after commissioning shall be arranged by the contractor. Only one certifying agency shall be engaged by contractor and same agency will continue recertifying for subsequent years. No change of certifying agency is allowed unless approved by NALCO with reasons. The contractor shall be required to liaise with third party for inspections and certifications.
- 4. Installed system should be capable of accommodating at least 2 people at any point of time.
- 5. All the materials/components/accessories of the system should be of only one approved make, approved by Engineer-in-charge/Civil Department.
- 6. All the stainless-steel components used will be of SS 316 grade only.
- 7. Stainless steel rope will of 316 grade and 8mm dia of 7 X 7 or 7 X 19 wire strands.
- 8. All the roof post will be of Stainless Steel (SS) 316 which will be fixed to truss/Roof wherever possible via possible fixing with minimum 4-point connection Should have 3Rivets & 1SDS (Preferred Maximum Connection).
- 9. Spacing between any two consecutive roof post is in between 10/12m.
- 10. Leak proofing at the roof top (with asbestos/aluminium/GS sheet) after fixing roof post will be under scope of contractor and will be done by FRP coating or as approved by NALCO.



SUBJECT: PROVIDING & LAYING OF ROOF TOP PERMANENT LIFE LINE SYSTEM INSIDE SMELTER PLANT (PHASE-II).

Page: 52 of 104

**ANNEXURE-B3** 

## SPECIAL CONDITIONS OF CONTRACT

Sub: PROVIDING & LAYING OF ROOF TOP PERMANENT LIFE LINE SYSTEM INSIDE SMELTER PLANT (PHASE-II).

- 1. Deployment of all the required experts / skilled man power required for undertaking the work, arrangement of logistics required for working at height for the duration of work shall be the responsibility of the vendor.
- 2. Site transportation, accommodation of staff for the duration of work / site visit etc will be arranged by the executing agency. So, charges towards the same is deemed to be included within the scope of the proposed assignment.
- 3. During work, while the experts / technicians deployed by the agency shall undertake works at height, all necessary safety precautions required for safe working at height need to be taken for ensuring safety and security of the workers/personnel. They have to adhere to the stipulations Safety deptt of NALCO in this regard as well as the best safe practices applicable in this type of industrial environment.
- 4. NALCO shall not provide any assistance in arranging & providing the required scaffolding systems, fall protection system, temporary approaches etc to facilitate working at height. So, all required arrangements like scaffolding systems, life line arrangement, fall protection systems etc need to be arranged / provided by the agency at their own cost.
- 5. The contractor should give undertakings for warranty of different material used by him for a minimum period of 05 years from the date of completion of work. Warranty to be given in the prescribed format enclosed in the technical specification.
- 6. For all the brought out materials, the contractor has to submit the Invoices, gate entry challans and the respective test certificates before the EIC, prior to the commencement of work.
- 7. Before using the materials for work, the contractor has to get those checked by the EIC.
- 8. The contractor shall arrange their own custody to store the materials at safer place inside the plant. Any mishandling and theft of the material will not be accountable to Nalco.
- 9. The components of wages which are paid annually (Leave Wages and Bonus) or at the end of the contract (Retrenchment Benefit and Gratuity) as applicable, is to be retained from the monthly RA Bills of the contractor based on recommendation / certification of HRD in respective HR Clearance as these components are not paid on monthly basis. The amount so retained will be released to the contractor based in recommendation / certification of HRD on production of documentary evidence against payment of these wage related components to the bank accounts of the workers.
- 10. The contractor shall have to pay Bonus / Ex-gratia to all his workmen as per the provisions of the payment of Bonus Act 1965 before "Durga Puja" every year or at the time of full and final settlement, if the contract is completed before "Durga Puja"



SUBJECT: PROVIDING & LAYING OF ROOF TOP PERMANENT LIFE LINE SYSTEM INSIDE SMELTER PLANT (PHASE-II).

Page: 53 of 104

## 11. Technical specification:

Work shall be carried out in accordance with Indian standard specifications.

If the Indian standard specification do not cover the same, the work should be carried out as per standard engineering practice such as central public works department or any other standard in order of preference subject to the approval of Engineer-incharge.

NB:- Details Technical Specification for "Roof Top Horizontal Lifeline System" and "Vertical Lifeline System" attached separately with this tender document.

## 12. <u>List of free issue materials:- NIL</u>

## 13. List of tools and tackles to be arranged by bidder:-

Any tools and tackles required, is to be arranged by the contractor.

## 14. <u>SPECIFIC SAFETY AND ENVIRONMENTAL REQUIREMENT</u>

- i) Safety Helmet
- ii) Dust mash
- iii) Safety Shoes
- iv) Safety Goggles
- v) Cotton gloves
- vi) Safety belt with full body harness
- vii) Safety Net
- viii) Roof top Lifeline



TENDER No.:

SMLT/T&C/GeM/OMC-5948/NIT/5266

SUBJECT: PROVIDING & LAYING OF ROOF TOP PERMANENT LIFE LINE SYSTEM INSIDE SMELTER PLANT (PHASE-II).

Page: 54 of 104

**ANNEXURE-B4** 

## **QUANTITY & RATE SCHEDULE**

Sub: PROVIDING & LAYING OF ROOF TOP PERMANENT LIFE LINE SYSTEM INSIDE SMELTER PLANT (PHASE-II).

(Quantity & Rate Schedule/Online Item Rate BOQ, Annexure-B4 is enclosed separately with this tender)



SUBJECT: PROVIDING & LAYING OF ROOF TOP PERMANENT LIFE LINE SYSTEM INSIDE SMELTER PLANT (PHASE-II).

Page: 55 of 104

## **ANNEXURE-B5**

# Minimum Wages of Contract Labours W.E.F. 01/Oct/24

SL NO	CATEGORY	MINIMUM RATES OF WAGES PAYABLE INCLUSIVE OF WAGES FOR WEEKLY OFF, VDA & CANTEEN SUBSIDY			
		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	526.00	55.00	30.00	611.00
2	SEMI SKILLED WORKER	655.00	55.00	30.00	740.00
3	SKILLED WORKER	783.00	55.00	30.00	868.00
4	HIGHLY SKILLED WORKER	912.00	55.00	30.00	997.00



SUBJECT: PROVIDING & LAYING OF ROOF TOP PERMANENT LIFE LINE SYSTEM INSIDE SMELTER PLANT (PHASE-II).

Page: 56 of 104

## ADDITIONAL PPE/SAFETY REQUIRMENT SPECIFIC FOR THE JOB OTHER THAN PPE MATRIX AND SAFETY REQUIRMENT SPECIFIED at Page 31,32,33

## Write List of PPEs Here.

## **Declaration by the Bidder (Contractor)**

I do hereby agree to provide the ISI/CE marked PPEs as required to ensure safe working conditions in consultation with NALCO's Safety Dept. to the workers to be engaged by me while working inside the plant. I also agree to follow the "Safety Code for Contractors" issued by Safety dept, Smelter Plant, NALCO.

(Signature of bidder)



SUBJECT: PROVIDING & LAYING OF ROOF TOP PERMANENT LIFE LINE SYSTEM INSIDE SMELTER PLANT (PHASE-II).

Page: 57 of 104

# PART -C

Formats for contract execution



From: \_\_\_\_\_

SUBJECT: PROVIDING & LAYING OF ROOF TOP PERMANENT LIFE LINE SYSTEM INSIDE SMELTER PLANT (PHASE-II).

Page: 58 of 104

## **ANNEXURE-C 1**

## **FORWARDING LETTER AND UNDERTAKING**

	ler Inviting Authority onal Aluminium Company Ltd.	
Sub:	Letter of Undertaking.	
1.	Having carefully examined all the Tender Documer <b>Date:</b> we offer to complete the works detailed in the Tender Documents.	its under reference no
2.	enclosures hosted in www.gem.gov.in website. We	complete set of tender documents along with the set of confirm that the bid document has not been edited or hat the bid document has been edited or modified, we
3.	We undertake, if our tender is accepted, to comme carry out work as stipulated in the contract	nce the work from the effective date of contract and to
4.	We have submitted the Earnest Money Deposit am	ount through DD/BC/PO/BG as instructed by you.
5.		od as mentioned at point -7 of F-02 form as validity of all remain binding on us and may be accepted at any
6.		act which is part of this tender and has signed the duly filled up for further necessary action at your
7.	Tender Document as accepted by us and in defaumoney as stipulated in conditions contained in Te	e to abide by and fulfill all Terms and Conditions of ilt thereof, to forfeit and pay to NALCO such sums of nder Documents. We understand that NALCO is not ed and NALCO reserves the right to reject any or all
8.	This Tender together with written "Acceptance" the NALCO and us, till a formal contract is executed.	ereof, shall constitute a binding CONTRACT between
	Dateday of	Signature
		(NAME IN BLOCK LETTERS)
		(To be signed by authorized person.)
		Fax:, Mob:
		Email:
		(Seal of the Company)



SUBJECT: PROVIDING & LAYING OF ROOF TOP PERMANENT LIFE LINE SYSTEM INSIDE SMELTER PLANT (PHASE-II).

Page: 59 of 104

## **ANNEXURE-C2**

## **MANDATORY INFORMATION OF THE BIDDER**

All Fields are Mandatory. Enclose Certificate/documentary evidence for fields marked with *.			
Authorized Signatory *			
Legal Name of Firm as per PAN *			
Trade Name of Firm as per GST *			
Postal address of the firm:			
House No. / Plot No :			
Street Name :			
City: District	::		
State: Pin Code: Country:			
* GeM Portal Login ID:			
Phone No.:	Mobile No. :		
Valid Email ID. :			
Gender : Male / Female / Other			
Category : General / SC / ST			
Type * Micro / Small/ Medium / Ancilary	Micro/Small/MediumAncilaryYes/No		
EPF No. :	ESI No. :		
PAN No. :	GSTN No. :		
Bank Name *Br.Nar	meBr.Place		
Bank A/c No (enclose cancelled cheque)*	IFS Code		

Date:	(Signature and official seal	of the Proprietor	Authorized Person
-------	------------------------------	-------------------	-------------------



SUBJECT: PROVIDING & LAYING OF ROOF TOP PERMANENT LIFE LINE SYSTEM INSIDE SMELTER PLANT (PHASE-II).

Page: 60 of 104

# ANNEXURE-C3 EXCEPTION / DEVIATION STATEMENT TO THE TENDER TERMS & CONDITIONS In case of no deviation please write 'No Deviation' in the space below:

SI.	Reference of Tender Document		Subject	Deviation / Exception	
No	Page No.	Clause No.	Para No.		



SUBJECT: PROVIDING & LAYING OF ROOF TOP PERMANENT LIFE LINE SYSTEM INSIDE SMELTER PLANT (PHASE-II).

Page: 61 of 104

**ANNEXURE-C4** 

## -: DECLARATION BY THE BIDDER :-

I \_\_\_\_\_\_ representing the bidder, do declare on behalf of the firm as hereunder :

as hereunder:

\* That, I am the PROPRIETOR of the bidder's firm. I undertake to submit proof of ownership as and when demanded by NALCO.

OR

\* That I am the authorized signatory to the tender documents holding valid Power of attorney. Certified copy of the valid power of Attorney is enclosed with the offer.

## NOTE: Strike out whichever is not applicable.

- (a) That, we do not have any FINANCIAL/PROFESSIONAL stake in any of the other bidders participating in this tender;
- (b) That, this firm has not been blacklisted/debarred/banned in any unit of NALCO/Other PSUs / GOVT of India/ State Govts/ Quasi Govt. organizations.
- (c) That, we are not in any arbitration/legal cases with NALCO and no cases are pending in court of law.
- (d) That, the proprietor/partners/directors/ employees of the firm have never been a part of any blacklisted/debarred/banned firms or company in any unit of NALCO/Other PSUs / GOVT of India/ State Govts/ Quasi Govt. organizations.
- (e) That, we have never been prosecuted by any statutory authority
- (f) That, any change in the constitution of the firm shall be made with prior clearance from NALCO.
- (g) That, we have studied all the clauses/sub-clauses terms and conditions of the tender documents including GCC and our offer fully comply with the requirements spelt out in the tender documents.
- (h) We undertake to abide by and comply with all the safety and environmental regulations in force in NALCO during the execution of work.
- (i) We undertake to abide by and comply with all the applicable provisions of laws governing contract workers engaged by you for this work.
- (j) We undertake to receive payment through E-payment mode.
- (k) The <u>Annexure-C19</u> and <u>Annexure-C20</u> regarding relatives working in NALCO are filled up and enclosed.
- (I) The **Annexure-C8** regarding present commitment of the tenderer are also properly filled up and enclosed.
- (m) That we have quoted the rates in figures as well as words.
- (n) We undertake that we do not have any unauthorized structure / construction inside Nalco-nagar Township or Plant. We also undertake to remove any / all such structures, if detected by Nalco later on in compliance of GCC terms and conditions.
- (o) We declare that all supporting documents of the offer submitted are attested by a Gazetted officer / Notary public.
- (p) I/we declare that the document down loaded by me/my company is/are not tampered in any form.
- (q) We undertake that my workers shall use electronic Punch cards at the Plant gates at the time of entry and exit if introduced by NALCO. Failing which he shall not be allowed into the Plant.

I further declare that all above statements are true. If at any time during pre-ordering/post ordering stage of the contract, it is found otherwise, action as deemed fit by NALCO including 'rejection of my offer"/ 'banning/blacklisting' me/my firm / my company etc. may be taken. The same will be binding on me / firm / company represented by me. I also hear by authorize and request any bank, person, firm, corporation, Govt. Officers etc. to furnish pertinent information as deemed necessary and as requested by Nalco to verify this statement or regarding my/our competency and general reputation.

Date:	Signature Authorized Person With seal



SUBJECT: PROVIDING & LAYING OF ROOF TOP PERMANENT LIFE LINE SYSTEM INSIDE SMELTER PLANT (PHASE-II).

Page: 62 of 104

**ANNEXURE-C5** 

## **Undertaking on Downloaded tender documents**

We here by confirm that, we have downloaded the complete set of tender documents along with the set of enclosures hosted in Government E-Market Place Portal website, <a href="www.gem.gov.in">www.gem.gov.in</a>. We confirm that the bid document has not been edited or modified by us and all pages have been submitted. It is confirmed that we have quoted as per the original NIT unless otherwise specifically mentioned as deviation in the deviation sheet.

Suppression of this information in any form if detected at any stage will be disqualification and will lead to rejection of the offer or termination of the contract as the case may be.

Date:	Signature Authorized Person With seal
Date	Signature Authorized Ferson With Sear



SUBJECT: PROVIDING & LAYING OF ROOF TOP PERMANENT LIFE LINE SYSTEM INSIDE SMELTER PLANT (PHASE-II).

Page: 63 of 104

**ANNEXURE-C6** 

PQC – Technical

## **Detailed Work Order and Execution Statistics**

SI. No.	W.O no	Work description	W.O Period. (From Dt To dt)	W.O value (In Rs.)	Final Executed Value (in Rs.)	Completion date.	Page Ref. for attachmen t.
1	2	3	4	5	6	7	8

<sup>\*</sup>Period for 6 months or more will be treated as One Year and less than 6 months will be ignored.

Signature of the Bidder



SUBJECT: PROVIDING & LAYING OF ROOF TOP PERMANENT LIFE LINE SYSTEM INSIDE SMELTER PLANT (PHASE-II).

Page: 64 of 104

**ANNEXURE-C7** 

## PQC – Financial Details of Turnover / Net worth

NAME OF TENDERER: M/s. .....

(A) - TURNOVER (Profit & Loss Account)								
SI No	Financial Year	Turnover in Rs Lakh	Document placed at Page No & File No					
1	Last year							
2	1st Previous Year to Last Year							
3	2nd Previous Year to Last Year							
4	Working Capital							
5	Positive Net Worth							

## (B) - NETWORTH (Balance sheet)

SI No	Financial Year	Mention whether Networth is Positive/Negative	Document placed at Page No & File No
1	Last year	Positive/Negative	

Signature & Seal of bidder.



SUBJECT: PROVIDING & LAYING OF ROOF TOP PERMANENT LIFE LINE SYSTEM INSIDE SMELTER PLANT (PHASE-II).

Page: 65 of 104

## **ANNEXURE-C8**

# DETAILS OF PRESENT COMMITMENTS OF THE TENDERER AS ON Dt. / / (\*)

(Last day of Month Previous to Bid Due Date)

<u>Na</u>	me of Work: (*	<b>)</b> :						<u>.</u>	
<u>Ter</u>	nder Reference	No. (*):						<u>.</u>	
I/W	e		, age	years	, son of			do hereby	solemnly
affi	rm and declare	as follows	for on behalf o	f Firm			·		
SI. No.	Full postal Address of client & Name of Officer-in-Charge with telex / Telephone No.	Descriptio n of work	Value of contract	Date of commence ment of work	Scheduled Completio n period	Compl etion in % as on date	Expected date of completion	Amount of Balance work during the period of Next 12 Months from the date of declaration	Remarks
1	2	3	4	5	6	7	8	9	10
								/	
					10				
fou	s certified that nd to be misled vision of the co	ading at a	later date NA	LCO will h	nave the a	uthority	to take n		
				Signa	ature of th	e bidde	r		]
				Name	e of the Bi	dder			
				Com	oany Seal				

<sup>\*</sup> This format is not applicable this contract.



SUBJECT: PROVIDING & LAYING OF ROOF TOP PERMANENT LIFE LINE SYSTEM

SMELTER PLANT (PHASE-II).

Page: 66 of 104

### **ANNEXURE-C9**

#### **TAX INVOICE**

[See Rule 46 of the Central Goods and Services Tax Rules, 2017]

**Details of Supplier** ORIGINAL FOR RECIPIENT

Name DUPLICATE FOR SUPPLIER OF SERVICE

Address Date

Inv Serial No.:

GSTIN/Unique ID Service PO Ref.:

**Details of Recipient** 

Details of Consignee (Shipped to)

(Billed to)

Name Name

Address Address of delivery

State State

State Code State Code

GSTIN/Unique ID GSTIN/Unique ID

Place of supply: Name of State:

Sr.	Descriptio n of Goods	HSN Code /			Rate		Discou	Taxa ble	CGST		SGST /UTGST		IGST		CESS	
No.	/ Services	SAC	Qty.	Unit	(per item)	Total	nt	Value	Rate	Amt	Rate	Amt	Rate	Amt	Rate	Amt
	Freight															
	Insurance Packing and	d Forwarding	g Charge	S												
					1											
		e Value (In f e Value (In V														
		Fax subject to		e Char	ges											

E.&.O.E

Electronic Reference Number

Name of the Signatory Designation / Status

Signature

- 1. Payment of GST is subject to reflection of the party's invoice in GSTR 2A/Anx-2 (GST new return) of NALCO.
- 2. In case of Supply of service, the tax invoice shall be as follows: "ORIGINAL FOR RECIPIENT", "DUPLICATE FOR SUPPLIER".
- 3. The tax invoice can be signed with digital signature also.
- 4. In case of unregistered recipient where the value of the taxable supply is less than INR 50,000/-, name and address of the recipient and the address of delivery, along with the name of the State and its code shall be recorded in the invoice if he requests for the same.
- 5. Where an invoice is required to be issued under section 31(3)(f) of the CGST Act, a registered person may issue a consolidated invoice at the end of a month for supplies covered under section 9(4), the aggregate value of such supplies exceeds rupees five thousand in a day from any or all the suppliers.



SUBJECT: PROVIDING & LAYING OF ROOF TOP PERMANENT LIFE LINE SYSTEM INSIDE SMELTER PLANT (PHASE-II).

IELTER PLANT (PHASE-II).
Page: 67 of 104

**ANNEXURE-C10** 

## Bank MANDATE FORM for e-payment (To be submitted in Duplicate)

To National Aluminium Company Limited Nalco Nagar – 759145, DistAngul, Orissa.													
	uthorizati		ase of payme FT/Internet			CO			.throu	ıgh			
			ter No										
(Please fi	ill in the i	nformatior	n in CAPITA	L LETTE	R PLEAS	SE tick w	herev	er it i	s app	licable	∍)		
	ddress of	the party :											
E P	City: -mail ID ermanen	:t Account N	Pin Co	de									
		of Bank :											
Bank Na					Branch								
Branch P Pin Code					Branch		I						
MICR. No.					Branch	Code							
Account 1	type	Savings:		Current	:		Cas	h Cred	dit:				
Account I	No.(as ap	pearing in	the Cheque	Book).									
	erox copy	of a chequ	earing on th le of your ba						_				
IFSC Cod	de.												
I i delayed ( Aluminiu	nereby de or not eff ım Compa	clare that ected for r any Limite	nandate sho the particul reasons of ir d responsib ation of reco	ars given ncomplete le. I also	above ar or incor undertak	rect info	rmati se an	on, I y cha	shall nge ir	not h	nold part	Nati icula	ional rs of
Place: Date:	Sigr	nature of th	ne Party / Au	uthorized	Signatory	y							
Bank's St Date:	tamp:		nished abov		·		rd.						

2) One cancelled cheque of the concerned bank with signature & stamp of the bidder is to be attached with

1) RTGS / NEFT charges if any, is to borne by the party.

the bank mandate form.



SUBJECT: PROVIDING & LAYING OF ROOF TOP PERMANENT LIFE LINE SYSTEM INSIDE SMELTER PLANT (PHASE-II).

Page: 68 of 104

## **ANNEXURE-C11**

## **INDEMINTY BOND AGAINST FREE ISSUE MATERIAL TO SELLER/CONTRACTORS**

WHERAS National Aluminium Company Limited (here in after referred to as "THE OWNER")
which expression shall unless repugnant to the context includes their legal representatives, successors
and assigns having their registered office at "NALCO BHAWAN, P/1, NAYAPALLI, BHUBANESWAR-13
Orissa" has entered into a Contract with M/s placed a Telex or
intent (here in after referred to as the "Contractor their legal representatives
successors and assigns")
On the terms and conditions as set out interalia, in the owner's Contract No
/WO/ Date:and various documents forming part thereof
herein after collectively referred to as the "Said Contract" which expression shall include all amendments
modification and/or verification thereto.
AND WHERAS:
i) The owner subject to availability has agreed to supply to the contractor raw materials for the purpose of execution of the said contract by the "Contractor" (the raw materials to be supplied by the owner to the contractor herein after for the sake of brevity referred to as the "said materials") and pending execution by the "Contractor" of the said contract incorporating the said materials. The said materials shall be under the custody and charge of the contractor and shall be kept, stored, altered, worked upon and/or fabricated at the sole risk and expense of the contract.
ii) As a pre-condition to the supply of the said materials by the owner to the "contractor", the owner has required the contractor to furnish to the owner an Indemnity Bond in the manner and upon terms and conditions herein after indicated.
NOW, THEREOF, in consideration of the promises aforesaid the contractor hereby irrevocably and unconditionally undertakes to indemnity and kept indemnified the owner from and against all loss damage and destruction (inclusive but not limited to any or all lose of damage or destruction to or of the said materials or any item or part thereof by theft, pilferage, fire flood, storm, tempest, lightening explosion, storage, chemical or physical action or reaction, bending, warping, exposure, resting, faulty workmanship, faulty fabrication or faulty method or technique of fabrication, strike, riot, civil commotion or other act or omission or commission whatsoever within or beyond the control of the contractor, misuse an misappropriation (inclusive but not limited to misuse or misappropriation by the contractor and the contractor's servants and/or agents).
Whatsoever to or of in the said , materials or any part of item thereof from the date that the same or
relative part of the item thereof or complete fabricated work(s) incorporating the said materials and
undertake to pay to the owner forthwith on demand in writing with protest or demure the value AS
SPECIFIED BY THE OWNER of the said materials or item or part thereof, lost damage, destroyed
misused and /or misappropriated, as the case may be, TOGETHER WITH the owner's cost and expense (inclusive of but not limited to handling transportation costs as freight position and increasing
(inclusive of but not limited to handling, transportation, cartage, freight, packing and inspection
cost/expenses) upto and aggregate limited or ` (Rupees
only ) or ay penal recovery in respect of the same in the terms of the contract
and the contractor hereby agree with the owner that:-



SUBJECT: PROVIDING & LAYING OF ROOF TOP PERMANENT LIFE LINE SYSTEM INSIDE SMELTER PLANT (PHASE-II).

Page: 69 of 104

i)	The indemnity/undertaking shall be continuing Indemnity/undertaking shall remain valid and
	irrevocable for all claims, of the owner arising hereunder up to and until the midnight of
	HOWEVER, if the contract for which this indemnity/undertaking is given is not
	completed by this date, the *contractor hereby agree to extend the Indemnity/undertaking till time as
	required to fulfill the contract.

- ii) This Indemnity/undertaking shall not be determined or change of constitution or insolvency of the \* contractor but shall be in all respects and for all purpose be binding and operative until payment of all money payable the owner in terms thereof.
- iii) The mere statement of allegation made by or on behalf of the owner in any notice or demand or other writing addressed to the \* contractor as to any of the said materials or item or part thereof having been lost, damaged, destroyed, misused, or misappropriate while in the custody of the contractor and/or prior to the completion of the completion of the completed fabricated work(s) and delivery to job site thereof incorporating the said materials shall be conclusive of the fact of the said materials or item or part thereof having being supplied to the contractor and/or the loss, damaged, destruction, misused, or misappropriate thereof as the case may be, while in the custody of the contractor and/or prior to the completion of the completed fabricated work(s) and delivery to job site thereof incorporating the said materials without necessary of the part of the owner to produce any documentary proof or other evidence whatsoever in contract in support of this.
- iv) The amount sated in any notice of the demand addressed by the owner to the contractor as to the value of such said materials lost, damaged destroyed, misused or misappropriated, inclusive relative to the cost and expenses incurred by the owner in connection therewith shall be conclusive of the value of such said materials and the said cost and expense as also of the amount liable to be paid to be paid to the owner.

This Indemnity Bond is supplemental and not in super session of the contractual conditions.						
The undersigned as full power to execute this Indemnity Bond on behalf of the contractor	under	the	power			
delegated by the Board of directors of	vide	its	Board			
resolution dated copy of which placed at Annexure-"A'						

SIGNED BY COMPETENT AUTHORITY

Place:- SMELTER / CPP, NALCO, ANGUL

DATE:-



(Rupees.....only).

SUBJECT: PROVIDING & LAYING OF ROOF TOP PERMANENT LIFE LINE SYSTEM INSIDE SMELTER PLANT (PHASE-II).

Page: 70 of 104

## **ANNEXURE-C12**

## PROFORMA FOR BANK GUARANTEE FOR EARNEST MONEY DEPOSIT (To be executed on non-judicial stamped paper of appropriate value)

	, , , , , , , , , , , , , , , , , , , ,
B. (	G. No Date:
1.	WHEREAS M/s National Aluminium Company Limited (A Government of India Enterprise), having
	its Unit/Office at(UNIT/OFFICE ADDRESS ISSUING THE TENDER)
	(hereinafter called "The Company" which expression shall unless repugnant to the subject or context
	includes its legal representatives, successors and assigns) has issued Tender paper vide its Tender
	No(hereinafter called "the said tender"
	to M/s(hereinafter called the said Tenderer(s)" which expression shall unless
	repugnant to the subject or context includes their legal representatives, successors and assigns and
	as per terms and conditions of the said tender, the tenderer shall submit a Bank Guarantee for
	(Rupeesonly) towards earnest money in lieu of cash.
2.	WE
	Codedo hereby undertake to
	pay the amount due and payable under this guarantee without any demur, merely on a demand from
	the Company stating that in the opinion of the company which is final and binding, the amount
	claimed is due because of any withdrawal of the tender or any material alteration to the tender after
	the opening of the tender by way of any loss or damage caused to or would be caused or suffered by
	the Company by reason of any breach by the said tenderers(s) of any of the terms and conditions
	contained in the said tender or failure to accept the Letter of Intent Agreement or that the amoun-
	covered under this Guarantee is forfeited. Any such demand made on the Bank by the Company shall
	be conclusive as regards the amount due and payable by the Bank under this guarantee. However
	our liability under this guarantee shall be restricted to an amount not exceeding `

- 3. We undertake to pay to the Company any money so demanded not withstanding any dispute or disputes raised by the tenderer(s) in any suit or proceeding pending before any office, court or tribunal relating thereto our liability under this present guarantee being absolute and unequivocal. The payment so made by us under this bond shall be a valid discharge of our liability for payment there under. Our liability to pay is not dependent or conditional on the Company proceeding against the tenderer.
- 4. The guarantee herein contained shall not be determined or affected or suspended by the liquidation or winding up, dissolution or change of constitution or insolvency of the said tenderer(s) but shall in all respect and for all purposes be binding and operative until payment of all money due or liabilities under the said contract(s)/ Order(s) are fulfilled.
- 5. WE ......Bank Ltd. further agree that the guarantee herein contained shall remain in full force and effect during the period that would be taken for the finalization of the said tender and that it shall continue to be enforceable till the said tender is finally decided and order placed on the successful tenderer(s) and or till all the dues of the company under or by virtue of the said tender have been fully paid and its claims satisfied or discharged or till a duly authorised officer of the company certifies that the terms and conditions of the said tender have been fully and properly carried out by the said tenderer(s) and accordingly discharges the guarantee.



**Branch** 

A/C No

IFSC Code

Address of Bank:

:

Mail id : sbi.08279@sbi.co.in

Kandsar(Nalco Nagar)

SBIN0008279

SUBJECT: PROVIDING & LAYING OF ROOF TOP LIFE PERMANENT LINE SYSTEM INSIDE

SMELTER PLANT (PHASE-II).

Page: 71 of 104

to pos	That the Company will have full liberty without reference to us and without affecting this guarantee to postpone for any time or from time to time. The exercise of any of the power of the Company under the tender.							
(Rupe under	Notwithstanding anything contained herein before, our liability shall not exceed Rs							
the p	WeBank, lastly undertake not to revoke this guarantee during its currency except with the previous consent of the Company in writing. We further undertake to keep this Guarantee renewed from time to time on the request of Tenderer(s).							
9. We	Bank further agree that this Guarantee shall be invocable at Angul							
	baneswar, (Bank), Branch office at, IFS							
Code.	with Address, PIN 75, having							
Branc	h Mail Id							
Date								
Corporate	Seal of the Bank  By its constitutional Attorney  Signature of duly Authorized pages							
	Signature of duly Authorised person On behalf of the Bank With seal & signature code							
Details of	Persons Issuing the BG:							
Address for	r Correspondence: Telephone & Fax No.							
E-mail:								
Note: 1	: BGs to be furnished from any of the approved banks of NALCO.							
Note 2:	BG confirmation must be sent to our Banker through SFMS with the followings details :							
Beneficiar	y : NATIONAL ALUMINIUM CO LTD.							
Banker	State Bank of India							
	. DIAW DAIN W HIMA							

00000010657908589(CPP)/ 00000010657908114(Smelter)

AT/P.O - Kandsar, P.S - Nalco Nagar, Dist - Angul, ODISHA,, Pin - 759145



SUBJECT: PROVIDING & LAYING OF ROOF TOP PERMANENT LIFE LINE **SYSTEM INSIDE** SMELTER PLANT (PHASE-II).

Page: 72 of 104

## **ANNEXURE-C13** CONTRACT CUM PERFORMANCE BANK GUARANTEE BY SELLER/ CONTRACTOR.

(To be executed on non-judicial stamped paper of appropriate value)

В.	G. No	· • •
1.	WHEREAS National Aluminium Company Limited (A Government of India Enterprise) having Unit/Office at	ct or with after ct or for inter ming ents, due
	AND WHEREAS one of the conditions of the "said contract" is that "contractor(s)/seller(s) shall furnish to the Company a Bank Guarantee from a bank for% (percent) of the total value the "said contract" against due and faithful performance of the "said contract" including defect liab obligations and the performance guarantee obligations of the contractor(s)/seller(s) for execution/ supplies made under the "said contract."	
2.	WE	y the the ed is ance by by the the the
3.	guarantee shall be restricted to `(Rupees	court ocal. ment
4.	The guarantee herein contained shall not be determined or affected or suspended by the liquidation	on or

winding up, dissolution or change of constitution or insolvency of the said Contractor(s)/Seller(s) but shall in all respect and for all purposes be binding and operative until payment of all money due or

liabilities under the said contract(s)/Order(s) are fulfilled.



SUBJECT: PROVIDING & LAYING OF ROOF TOP PERMANENT LIFE LINE SYSTEM

SMELTER PLANT (PHASE-II).

Page: 73 of 104

5.	WeBank further agree that the guarantee herein contained shall remain in full force and
	effect during the period that would be taken for the performance of the said Contract(s)/Order(s) and
	that it shall continue to be enforceable till all the dues of the company under or by virtue of the said
	Contract(s)/Order(s) have been fully paid and its claims satisfied or discharged or till a duly
	authorised officer of the Company certifies that the terms and conditions of the said
	Contract(s)/Order(s) have been fully and properly carried out by the said contractor(s) and accordingly
	discharges the guarantee.

- 6. We ......Bank further agree with the Company that the company shall have the fullest liberty without our consent and without affecting in any manner our obligations hereunder to vary any of the terms and conditions of the said Contract(s)/Order(s) or to extend the time of performance by the said Contractor(s)/Seller(s) from time to time or to postpone for any time or from time to time any of the powers exercisable by the Company against the said Contractor(s)/Seller(s) and to forbear or enforce any of the terms and conditions relating to the said Contract(s)/Order(s) and we shall not be relieved from our liability by reason of any such variation, or extension being granted to the said Contractor(s)/Seller(s) or for any forbearance, act or omission on the part of the Company or any indulgence by the Company to the said Contractor(s)/Seller(s) or by any such matter or thing whatsoever which under the law relating to sureties would, but for this provision, have affect of so relieving us.
- herein 7. Notwithstanding anything contained before, our liability shall Rs......Unless a demand or claim under this Guarantee is made on us within three months from the date of expiry, we shall be discharged from all the liabilities under this guarantee.
- 8. We......Bank, lastly undertake not to revoke this guarantee during its currency except with the previous consent of the Company in writing. We further undertake to keep this Guarantee renewed from time to time at the request of Contractor(s)/Sellers(s).

9.	We	Bank	further agree	that this	Guarantee	shall b	e invocable	a
	Angul / Bhubaneswar,		(Bank).	Branch of	office at			
	IFS Code		, , , , ,					
	having Branch Mail Id				,			
	8							

Date..... .....Bank Corporate Seal of the Bank By its constitutional Attorney Signature of duly Authorised person On behalf of the Bank With seal & signature code

Details of Persons Issuing the BG:

Name-----

Address for Correspondence: -----Telephone & Fax No.

E-mail:

Note: 1 : BGs to be furnished from any of the approved banks of NALCO.

: BG confirmation must be sent to our Banker through SFMS with the followings details : Note: 2

Beneficiary : NATIONAL ALUMINIUM CO LTD.

Banker : State Bank of India : Kandsar(Nalco Nagar) Branch

: 00000010657908589(CPP)/ 00000010657908114(Smelter) A/C No

IFSC Code : SBIN0008279

Address of Bank: AT/P.O - Kandsar, P.S - Nalco Nagar, Dist - Angul, ODISHA,, Pin - 759145

Mail id: sbi.08279@sbi.co.in



B C No

SUBJECT: PROVIDING & LAYING OF ROOF TOP PERMANENT LIFE LINE SYSTEM INSIDE SMELTER PLANT (PHASE-II).

Page: 74 of 104

#### **ANNEXURE-C14**

#### **BANK GUARANTEE FOR SECURITY DEPOSIT**

(To be executed on non-judicial stamped paper of appropriate value)

<b>D</b> .	G. No
1.	In consideration of National Aluminium Company Limited (A Government of India Enterprise), having its UNIT/Office at (UNIT/OFFICE ADDRESS WHERE THE WORK IS EXECUTED) (hereinafter called "The Company" which expression shall unless repugnant to the subject or context includes its legal representatives, successors and assigns) having agreed to exempt M/s(Hereinafter called "the said Contractor(s)/ Seller(s)"), which expression shall unless repugnant to the subject or context includes their legal representatives, successors and assigns) from the demand under the terms and conditions of Contract(s)/ Order(s) No
2.	WE
3.	(Rupeesonly). We undertake to pay to the Company any money so demanded notwithstanding any dispute or

- 3. We undertake to pay to the Company any money so demanded notwithstanding any dispute or disputes raised by the contractor(s)/Seller(s) in any suit or proceeding pending before any office, court or tribunal relating thereto our liability under this present guarantee being absolute and unequivocal. The payment so made by us under this bond shall be valid discharge of our liability for payment there under. Our liability to pay is not dependent or conditional on the Company proceeding against the Contractor(s)/Seller(s).
- 4. The guarantee herein contained shall not be determined or affected or suspended by the liquidation or winding up, dissolution or change of constitution or insolvency of the said Contractor(s)/Seller(s) but shall in all respect and for all purposes be binding and operative until payment of all money due or liabilities under the said contract(s)/ Order(s) are fulfilled.
- 5. We .......Bank further agree that the guarantee herein contained shall remain in full force and effect during the period that would be taken for the performance of the said Contract(s)/ Order(s) and that it shall continue to be enforceable till all the dues of the company under or by virtue of the said Contract(s)/Order(s) have been fully paid and its claims satisfied or discharged or till a duly Authorised officer of the company certifies that the terms and conditions of the said Contract(s)/Order(s) have been fully and properly carried out by the said contractor(s) and accordingly discharges the guarantee.



SUBJECT: PROVIDING & LAYING OF ROOF TOP PERMANENT LIFE LINE SYSTEM INSIDE SMELTER PLANT (PHASE-II).

Page: 75 of 104

6.	WeBank further agree with the Company that the company shall have the fullest liberty
	without our consent and without affecting in any manner our obligations hereunder to vary any of the
	terms and conditions of the said Contract(s)/Order(s) or to extend the time of performance by the said
	Contractor(s)/Seller(s) from time to time or to postpone for any time or from time to time any of the
	powers exercisable by the Company against the said Contractor(s)/Seller(s) and to forbear or enforce
	any of the terms and conditions relating to the said Contract(s)/Order(s) and we shall not be relieved
	from our liability by reason of any such variations, or extension being granted to the said Contractor
	(s)/ Seller(s) or for any forbearance, act or omissions on the part of the Company or any indulgence by
	the Company to the said Contractor(s)/Seller(s) or by any such matter or thing whatsoever which
	under the law relating to sureties would, but for this provision, have affect of so relieving us.
7.	Notwithstanding anything contained herein before, our liability shall not exceed

7.	Notwithstanding	anything	contained	herein	before,	our	liability	shall	not	exceed
	Rs	(Rupees		only)	and shall	rema	in in force	till		Unless
	a demand or claim	n under this	Guarantee is	s made on	us withir	n three	months fr	om the	date of	expiry
	we shall be discha	rged from al	l the liabilitie	es under tl	nis guarar	itee.				

8.	WeBank, lastly undertake not to revoke this guarantee during its currency except with
	the previous consent of the Company in writing. We further undertake to keep this Guarantee
	renewed from time to time at the request of Contractor(s)/ Sellers(s).

9.	WeBa	nk further agree that this Guarantee shall be invocable	a <sup>r</sup>
	Angul / Bhubaneswar,	(Bank), Branch office at	
	IFS Code with Address	, PIN 75, havi	inç
	Branch Mail Id		

Date.......Bank

Corporate Seal of the Bank

By its constitutional Attorney

Signature of duly Authorised person

On behalf of the Bank With seal & signature code

Details of Persons Issuing the BG:

Name-----

Address for Correspondence: ----- Telephone & Fax No.

E-mail:

Note: 1 : BGs to be furnished from any of the approved banks of NALCO.

Note:2 : BG confirmation must be sent to our Banker through SFMS with the followings details :

Beneficiary: NATIONAL ALUMINIUM CO LTD.

Banker : State Bank of India
Branch : Kandsar(Nalco Nagar)

A/C No : 00000010657908589(CPP)/ 00000010657908114(Smelter)

IFSC Code : SBIN0008279

Address of Bank: AT/P.O - Kandsar, P.S - Nalco Nagar, Dist - Angul, ODISHA, Pin - 759145

Mail id : sbi.08279@sbi.co.in



SUBJECT: PROVIDING & LAYING OF ROOF TOP PERMANENT LIFE LINE SYSTEM INSIDE SMELTER PLANT (PHASE-II).

Page: 76 of 104

**ANNEXURE-C15** 

## BANK GUARANTEE AGAINST FREE ISSUE OF MATERIALS (To be executed on Non indicial stamp paper or engrapsiate value)

(To be executed on Non-judicial stamp paper or appropriate value)

HEREAS National Aluminium Company Limited (hereinafter referred to as "the Company")
hich expression shall unless repugnant to the context includes their legal representatives, accessors and assigns having their registered office at NALCO BHAWAN, P/1, NAYAPALLI, HUBANESWAR-751 061, Odisha, and their Branch Unit/office at(UNIT/OFFICE ADDRESS), has entered into a Contract with M/s(hereinafter referred to as the Contractor which expression shall
nless repugnant to the context include their legal representatives, successors and assigns for the ork of on the terms and conditions as set ut, inter-alias, in the Company's Contract No dated: and arious documents forming part thereof hereinafter collectively referred to as the "said contract" hich expression shall include all amendments, modifications and/or variations thereto.
ND WHEREAS one of the conditions of the said contract is that the Company has agreed to upply to the contractor raw-materials (hereinafter referred to as the "said materials") for the ourpose of execution by the contractor of the said contract and pending execution by the ontractor of the said contract incorporating the said materials, the said materials shall be under he custody and charge of the contractor and shall be kept, stored, altered, worked upon and/or abricated at the sole risk and expense of the Contractor.
ND WHEREAS the Company has asked the contractor for adequate security for the said aterials to be supplied to the contractor under the contract.
ND WHEREAS at the request of the contractor the Company has agreed to accept a bank uarantee from with Registered Office atereinafter referred to as "the surety").
OW THIS GUARANTEE WITNESSETH that in consideration of the Company having at the equest of contractor agreed to accept a Bank Guarantee of the Surety amounting to
ALL TOURNEY NO NO NO TO LOST THE TOUR OF THE TOUR OF THE TOURNEY T



A/C No

Mail id : sbi.08279@sbi.co.in

SUBJECT: PROVIDING & LAYING OF ROOF TOP PERMANENT LIFE LINE SYSTEM INSIDE SMELTER PLANT (PHASE-II).

Page: 77 of 104

5.	THIS GUARANTEE is irrevocable and will remain in force and effect upto and until the said materials have been returned to the Company as per terms of the said contract and intimation thereof being given by the Company to the surety on the aggregate amount payable hereunder has been paid by the surety to the Company, whichever is earlier.
6.	Notwithstanding anything stated above, the liability of the surety under the guarantee is restricted to ` (Rupees only) and this guarantee will remain in force upto in the first instance. However, if the contractor's obligations under this guarantee is not completed or fully performed within this period, the surety hereby agrees to further extend the guarantee till such time as is required to fulfill such obligations.
7.	We have the power to issue this guarantee in your favour under memorandum and Articles of Association and the undersigned has full power to do so under the power of Attorney dated granted to him by the Bank.
8.	Unless a claim made on us within three months from the date of expiry, i.e.,, all our rights under the said guarantee shall be forfeited and we shall be relieved, and discharged from all liabilities there under.
9.	We
10.	We Bank further agree that this Guarantee shall be invocable at Angul / Bhubaneswar, (Bank), Branch office at, IFS Code with Address PIN 75. having Branch Mail Id.
Date	Bank
	Code: By its constitutional Attorney orate Seal of the Bank
	Signature of duly Authorised person
	On behalf of the Bank With seal & signature code
	s of Persons Issuing the BG:
	ss for Correspondence: Telephone & Fax No.
E-mai Note: Note: Benefi Banke Branc	: BGs to be furnished from any of the approved banks of NALCO. : BG confirmation must be sent to our Banker through SFMS with the followings details: : NATIONAL ALUMINIUM CO LTD. : State Bank of India

: 00000010657908589(CPP)/ 00000010657908114(Smelter) IFSC Code: SBIN0008279

Address of Bank: AT/P.O - Kandsar, P.S - Nalco Nagar, Dist - Angul, ODISHA, Pin - 759145



B. G. No.\_\_\_

SUBJECT: PROVIDING & LAYING OF ROOF TOP PERMANENT LIFE LINE SYSTEM INSIDE SMELTER PLANT (PHASE-II).

Page: 78 of 104

#### **ANNEXURE-C16**

#### **BANK GUARANTEE FOR ADVANCE PAYMENT**

(To be executed on non-judicial stamped paper of appropriate value)

1.	In consideration of National Aluminium Company Limited (A Government of India Enterprise), having its Unit/Office at (UNIT/OFFICE ADDRESS WHERE THE WORK IS EXECUTED) (hereinafter called "The Company" which expression shall unless repugnant to the subject or context includes its legal representatives, successors and assigns) having agreed to make an advance payment of Rs(Rupees
2.	WE
3.	We undertake to pay to the Company any money so demanded not withstanding any claim dispute or disputes raised by the contractor(s)/Seller(s) in any suit or proceeding pending before any office, court or tribunal relating thereto our liability under this present guarantee being absolute and unequivocal.

- disputes raised by the contractor(s)/Seller(s) in any suit or proceeding pending before any office, court or tribunal relating thereto our liability under this present guarantee being absolute and unequivocal. The payment so made by us under this bond shall be a valid discharge of our liability for payment there under. Our liability to pay is not dependable or conditional on the Company proceeding against the Contractor(s)/Seller(s).
- 4. The guarantee herein contained shall not be determined or affected or suspended by the liquidation or winding up, dissolution or change of constitution or insolvency of the said tenderer(s) but shall in all respect and for all purposes be binding and operative until payment of all money due or liabilities under the said contract(s)/order(s) are fulfilled.
- 5. We .......Bank further agree that the guarantee herein contained shall remain in full force and effect during the period that would be taken for the performance of the said Contract(s)/Order(s) and that it shall continue to be enforceable till all the dues of the Company under or by virtue of the said Contract(s)/Order(s) have been fully paid and its claims satisfied or discharged or till a duly authorized officer of the Company certifies that the terms and conditions of the said Contract(s)/Order(s) have been fully and properly carried out by the said Contractor(s)/Seller(s) and accordingly discharges this guarantee.
- 6. That the Company will have fully liberty without reference to us and without affecting this guarantee to postpone for any time or from time to time the exercise of any of the power of the Company under the Contract(s)/Order(s).



SUBJECT: PROVIDING & LAYING OF ROOF TOP PERMANENT LIFE LINE SYSTEM INSIDE SMELTER PLANT (PHASE-II).

Page: 79 of 104

<i>/</i> .	(Rupeesunder this Gua	only) ar	nd shall remair us within thr	e, our hability shall not exceed Rs n in force till	or claim
8.	at Angul/Bhuba			arantee shall be invocable at our place of b(Branch name and	
9.	Angul / Bhuba IFS Code	neswar,	SS	agree that this Guarantee shall be invoc (Bank), Branch office at , PIN 75	,
Со	nte prporate Seal of the S Code:	ne Bank		Bank By its constitutional Attorney	
			On behalf of	Signature of duly Authorised person the Bank With seal & signature code	
Na Ad Te	etails of Persons in tame	 oondence:			
	ote: - BGs to be furnis	shed from any of the a	approved banks	s of NALCO and processed through SFMS.	
•		•	• •	h SFMS with the followings details :	
,		: NATIONAL ALUN	ŭ	·	
	Banker	: State Bank of Indi	a		

: 00000010657908589(CPP)/ 00000010657908114(Smelter)

Address of Bank: AT/P.O - Kandsar, P.S - Nalco Nagar, Dist - Angul, ODISHA,, Pin - 759145

: Kandsar(Nalco Nagar)

: SBIN0008279

Branch A/C No

IFSC Code

Mail id : sbi.08279@sbi.co.in



SUBJECT: PROVIDING & LAYING OF ROOF TOP PERMANENT LIFE LINE SYSTEM INSIDE SMELTER PLANT (PHASE-II).

Page: 80 of 104

#### **ANNEXURE-C17**

### **LIST OF STANDARDISED BANKS**

I. List o	I. <u>List of PSU Banks</u>					
SI.	Name of the Bank	SI.	Name of the Bank			
No.		No.				
1.	Allahabad Bank	11.	Indian Bank			
2.	Andhra bank	12.	Oriental Bank of Commerce			
3.	Bank of Boroda	13.	Punjab and Sind Bank			
4.	Bank of India	14.	Punjab National Bank			
5.	Bank of Maharashtra	15.	State Bank of India			
6	Canara bank	16	Syndicate Bank			
7.	Central bank of India	17.	UCO Bank			
8.	Corporation Bank	18.	Union Bank of India			
9.	Dena Bank	19.	Vijaya Bank			
10.	IDBI Bank					

II. List	II. List of Private Banks				
SI.	Name of the Bank	SI.	Name of the Bank		
No.		No.			
1	HDFC Bank	9	The South Indian Bank Ltd.		
2	ICICI Bank	10	The Karur Vysya Bank Ltd.		
3	Axis Bank	11	The Karnataka Bank Ltd.		
4	Kotak Mahindra Bank Ltd.	12	IDFC Bank		
5	YES Bank	13	RBL Bank		
6	IndusInd Bank	14	The Lakshmi Vilas Bank Ltd.		
7	The Federal Bank Ltd.	15	Tamilnadu Mercantile Bank Ltd.		
8	The Jammu & Kasmir Bank Ltd.	16	City Union Bank Ltd.		

III. <u>L</u> i	III. List of Foreign Banks				
SI. No.	Name of the Bank	BIC	SI. No.	Name of the Bank	BIC
1	Abu Dhabi Commercial Bank Ltd.	ADCB AE AA	19	KEB Hana Bank	KOEX KR SE
2	Australia & New Zealand Banking Group Limited	ANZB AU 3M	20	Krung Thai Bank Public Company Ltd.	KRTH TH BK
3	Bank Of America NA	BOFA US 3N	21	Mashreqbank PSC	BOML AE AD
4	Bank of Bahrain and Kuwait B.S.C.	BBKU BH BM	22	Mizuho Bank Ltd.	MHCB JP JT
5	Bank of Ceylon	BCEY LK LX	23	National Australia Bank Ltd.	NATA AU 33
6	Barclays Bank PLC	BARC BG 22	24	Sberbank	SABR RU MM
7	BNP Paribas	BNPA FR PP	25	Shinhan Bank	SHBK KR SE
8	Citibank N.A.	CITI US 33	26	Societe Generale	SOGE FR PP
9	Commonwealth Bank of Australia	CTBA AU 2S	27	Sonali Bank Ltd.	BSON BD DH
10	Credit Agricole Corporate & Investment Bank	BSUI FR PP	28	Standard Chartered Bank	SCBL GB 2L
11	Credit Suisse AG	CRES CH ZZ	29	Sumitomo Mitsui Banking Corporation	SMBC JP JT
12	DBS Bank Ltd.	DBSS SG SG	30	The Bank of Nova Scotia	NOSC CATT
13	Deutsche Bank AG	DEUT DE FF	31	The Bank of Tokyo-Mitsubishi UFJ, Ltd.	BOTK JP JT
14	Doha Bank	DOHB QA QA	32	The Hongkong & Shanghai Banking Corp. Ltd.	HSBC HK HH
15	FirstRand Bank Ltd.	FIRN ZA JJ	33	The Royal Bank of Scotland PLC	RBOS GB 2L
16	Industrial Bank of Korea	IBKO KR SE	34	United Overseas Bank Ltd.	UOVB SG SG
17	Industrial & Commercial Bank of China Limited	ICBK CN BJ	35	Westpac Banking Corporation	WPAC AU 2F
18	JP Morgan Chase Bank	CHAS US 33	36	Woori Bank	HVBK KR SE



SUBJECT: PROVIDING & LAYING OF ROOF TOP PERMANENT LIFE LINE SYSTEM INSIDE SMELTER PLANT (PHASE-II).

Page: 81 of 104

#### **ANNEXURE-C18**

#### SAC CODES for Services & HSN code for supply

SI. No	vendor code	Service PO No. &Supply	Supply/Service Description	Service Accounting Code (SAC) (6 DIGIT) & HSN code (6 digit)
				SAC: 998344



SUBJECT: PROVIDING & LAYING OF ROOF TOP PERMANENT LIFE LINE SYSTEM INSIDE SMELTER PLANT (PHASE-II).

Page: 82 of 104

**ANNEXURE-C19** 

## NATIONAL ALUMINIUM COMPANY LIMITED SMELTER PLANT / CAPTIVE POWER PLANT DIVISION

## INSTRUCTION FOR BIDDERS: FILLING UP OF FOLLWING ANNEXURES ARE MUST, WITHOUT WHICH THE OFFER IS LIABLE FOR REJECTION.

The tenderer shall carefully study the list of directors of NALCO from the website written below

https://nalcoindia.com/company/nalco-leadership/board-of-directors/

and state "Yes" or "No" to questions given below:

SI.No.	Description	Write "Yes" or "No"
1.	Whether the tenderer is a relative of any of the directors of	
	NALCO?	
2.	If the tenderer is a firm, any of NALCO Directors or any of	
	their relatives is a partner in the tender's firm?	
3.	If the tenderer is a Company Registered under Company's Act	
	1956, whether any of NALCO's Directors is a member of	
	Director of the Company?	

**Note:** If Yes to any of the above questions, please give the name of NALCO's Director and relationship of the tender / partner / member / Director as the case may be.

SI. No.	Name	Relationship

**SIGNATURE OF THE TENDERER** 



SUBJECT: PROVIDING & LAYING OF ROOF TOP PERMANENT LIFE LINE SYSTEM INSIDE SMELTER PLANT (PHASE-II).

Page: 83 of 104

#### **ANNEXURE-C20**

**Important**: Suppression of information shall be viewed seriously and action deemed fit would be taken including termination of the contract.

(Strike out which is not applicable)

- 1. I/We hereby declare that none of my/our relative is an employee of NALCO.
- 2. I/We hereby declare the following are the employee/s of NALCO is/are my/our relative/s.

SI.No.	Name of the employee/ P.No. / Designation/Place of Posting.	Relationship with the employee.
1		
2		
3		

(PLEASE ATTACH EXTRA SHEET, IF REQUIRED)

**SIGNATURE OF THE TENDERER** 



SUBJECT: PROVIDING & LAYING OF ROOF TOP PERMANENT LIFE LINE SYSTEM INSIDE SMELTER PLANT (PHASE-II).

Page: 84 of 104

**ANNEXURE-C21** 

#### PRE CONTRACT INTEGRITY PACT

General		
This pre-bid pre-contract Agreement (her	reinafter called the Integrity Pact) is made on	day of the
month of 20,	, between, on one hand, the National Aluminium	Company Limited
(NALCO), a company registered under th	ne Companies Act 1956 and a Government of India Er	nterprise, having its
Registered Office at NALCO Bhawan, P/	1, Nayapalli, Bhubaneswar-751013, Odisha, India (refe	rred to as NALCO)
acting through <mark>Shri P.K. Panda, GM(T&amp;</mark> C	C) Smelter Plant (with designation of the Officer) (he	reinafter called the
"BUYER", which expression shall mean a	and include, unless the context otherwise requires, his	successors in office
and assigns) of the First Part and M/s. $\_$		represented by
Shri	, Chief Executive Officer (hereinafter ca	Iled the "BIDDER /
Seller" which expression shall mean and i	nclude, unless the context otherwise requires, his succe	ssors and permitted
assigns ) of the Second Part.		
WHEREAS the BUYER proposes to procui	re <b>"</b>	and the
BIDDER/Seller is willing to offer/has offer	ed 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 comment 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 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.
- 2. 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 my 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.



SUBJECT: PROVIDING & LAYING OF ROOF TOP PERMANENT LIFE LINE SYSTEM INSIDE SMELTER PLANT (PHASE-II).

Page: 85 of 104

#### **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-contractor 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.
- 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, oralternatively, 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 dealingsor transactions, directly or indirectly, with any employee of the Buyer.
- 3.13. Bidder(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.



SUBJECT: PROVIDING & LAYING OF ROOF TOP PERMANENT LIFE LINE SYSTEM INSIDE SMELTER PLANT (PHASE-II).

Page: 86 of 104

#### 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:

- 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: -
  - (i) 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
  - (ii) The Earnest Money Deposit (in 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.
  - (iii) To immediately cancel the contract, if already signed, without giving any compensation to the
  - (iv) 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.
  - (v) To en-cash 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.
  - (vi) 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.
  - (vii) 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.
  - (viii) 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.
  - (ix) 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.
  - (x) Forfeiture of Performance Bond in case of a decision by the BUYER to forfeitthe 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 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.



SUBJECT: PROVIDING & LAYING OF ROOF TOP PERMANENT LIFE LINE SYSTEM INSIDE SMELTER PLANT (PHASE-II).

Page: 87 of 104

#### 6. <u>Independent External Monitors (IEMs):</u>

- 6.1. The BUYER has a panel of Independent External Monitor (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).
- The task of the IEMs shall be to review independently and objectively, whether and towhat 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.
- Both the parties accept that the IEMs have the right to access all the documents relating to the project / procurement including minutes of meetings.
- 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.
- 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.
- 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 his by the BUYER / BIDDER and should be occasion arise, submit proposals for correcting problematic situations.

#### 7. <u>Facilitation of Investigation:</u>

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. <u>Law and Place of Jurisdiction:</u>

This Pact is subject to Indian Law. The place of performance and jurisdiction is the seat of the BUYER.

#### 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/lodged 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.



SUBJECT: PROVIDING & LAYING OF ROOF TOP PERMANENT LIFE LINE SYSTEM INSIDE SMELTER PLANT (PHASE-II).

Page: 88 of 104

11.	If the bidder/ Contractor is a partnership or a consc consortium members	ortium, this agreement must be signed by all partners or
12.	The parties hereby sign this Integrity Pact at	on
For &	on behalf of	For & on behalf of
BUYEI	R	BIDDER
Name	of the Officer: Mr. P.K. Panda	
Design	nation: GM (T&C) Smelter Plant	
Compa	any: <b>NALCO</b>	
Officia	Il Seal	
Witne	<u>ss</u>	Witness
1.		1



SUBJECT: PROVIDING & LAYING OF ROOF TOP PERMANENT LIFE LINE SYSTEM INSIDE SMELTER PLANT (PHASE-II).

Page: 89 of 104

#### **ANNEXURE-C22**

## BEFORE THE NOTARY PUBLIC A F F I D A V I T

I ...... aged about ...... years, S/O: ..... At-..... PO-

moral turpitude in relation to business dealings during the past seven years for acceptance of the offer. I do hereby solemnly affirm and state as follows:			
	INFO	DRMATION REGARDING CURRENT LITIGATION, DEBARRING EXPELLING OF BIDE ABANDONMENT OF WORK BY THE BIDDER	D OR
1.	(a)	Is the bidder currently involved in any litigation relating to the works.	Yes/No
	(b)	If yes,: give details:	
2.	(a)	Has the bidder or any of its constituent partners been debarred/ expelled by any agency in India during the last 5 years.	Yes/No
	(b)	If yes, give details:	
3.	(a)	Has the bidder or any of its constituent partners failed to perform on any contract work in India during the last 5 years.	Yes/No
	(b)	If yes, give details:	
4.	(a)	Arbitration cases pending.	Yes/No
	(b)	If yes, give details:	
5.	(a)	Disputed incomplete works.	Yes/No
	(b)	If yes, give details:	
6.	(a)	Pending civil cases against the firm or its Proprietor/Partner(s)/Director(s) involving moral turpitude in relation to business dealings.	Yes/No
	(b)	If yes, give details:	
7.	(a)	Pending criminal cases against the firm or its Proprietor/Partner(s)/Director(s)	Yes/No
		involving moral turpitude in relation to business dealings.	
	(b)	If yes, give details:	
8.	(a)	Punishments awarded under civil cases or criminal cases involving moral	Yes/No
		turpitude in relation to business dealings	

#### Note:

(b) If yes, give details:

If any information in this schedule is found to be incorrect or concealed, qualification application will be summarily be rejected.

Signature	of the	bidder
Date :		



SUBJECT: PROVIDING & LAYING OF ROOF TOP PERMANENT LIFE LINE SYSTEM INSIDE SMELTER PLANT (PHASE-II).

Page: 90 of 104

#### **ANNEXURE-C23**

#### AGREEMENT

CONTRACT AGREEM	ENT FOR THE WORK O	F	
Service Purchase			
on theth day of th	e month ofof	the year two thou	sand between
M/s	in the town of	AT/PO	DIST-
STATE,	PIN here in after	called the "Contractor"	(which terms shall
unless excluded by or repugnar	t to the subject or context in	clude its successors and	permitted assignees)
of the one part and the NATION	IAL ALUMINIUM COMPAN	Y LIMITED hereinafter	called the "OWNER"
(Which term shall, unless exclu	ided by or repugnant to the	subject or context includ	le its successors and
permitted assignees) of the other			

#### Whereas:

- (A) The owner being desirous of having provided and executed certain works mentioned enumerated or referred to in the tender documents including Notice Inviting Tender/Letter Inviting Tender, General Conditions, Drawings, Plans, Time schedule of Completion of jobs, and other documents has called for Tender.
- (B) The Contractor has inspected the site and surroundings of the works specified in the tender documents and has satisfied himself by careful examination before submitting his tender as to the nature of the surface strata, soil, subsoil and ground, the form and nature of site and local conditions, the quantities, nature and magnitude of the work, the availability of labour and materials necessary for the execution of work, the means of access to site, the supply of power and water thereto and the accommodation he may require and has made local and independent enquiries and obtained complete information as to the matters and things referred to or implied in the tender documents or having any connection therewith, and has considered the nature and extent of all probable and possible situations, delays, hindrances or interferences to or with the executions and completion of the work to be carried out under the contract, and has examined and considered all other matters, conditions and things and probable and possible contingencies, and generally all matters incidental thereto and ancillary thereof affecting the execution and completion of the work and which might have influenced him in making his tender.
- (C The Notice Inviting Tender/ Letter Inviting Tender, General conditions of Contract, Special Conditions of Contract, General Obligations, Specifications, Drawings, Plans, Time Schedule of Completion of jobs, Letter of Acceptance of Tender and any statement of agreed variations with its enclosures, copies for which are hereto annexed form part of this contract though separately set out herein and are included in the expression ``CONTRACT'' wherever herein used.

01)	Service Purchase Order No.:	
-----	-----------------------------	--

#### **AND WHEREAS:**

The owner accepted the Tender of the Contractor for the provision and the execution of the said work at the rates stated in the schedule of quantities of works and finally approved by owner (Hereinafter called the `Schedule of Rates') upon the terms and subject to the conditions of contract. Now this agreement witnesses and it is hereby agreed and declared as follows:-

01. In consideration of the payment to be made to the contractor for the work to be executed by him, the contractor hereby covenants with the owner that the contractor shall and will duly provide, execute and complete the said works and shall do and perform all other acts and things in the contract mentioned or described or which are to be implied there from or may be reasonably necessary, for the completion of the said works and at the said times and in the manner subject to the terms and conditions or stipulations mentioned in the contract.



Signed & delivered for &

TENDER No.: SMLT/T&C/GeM/OMC-5948/NIT/5266

SUBJECT: PROVIDING & LAYING OF ROOF TOP PERMANENT LIFE LINE SYSTEM

SMELTER PLANT (PHASE-II).

Page: 91 of 104

02. In consideration of the due provision execution and completion of the said work, the owner does hereby agree with the contractor that the owner will pay to the contractor the respective amounts for the work actually done by him and approved by the owner at the scheduled rates and such other sum payable to the contractor under provision of the such contract, payment to be made at such time and in such manner as provided for in the contract.

#### AND

03. In consideration of the due provisions execution and completion of the said work the contractor does hereby agree to pay such sums as may be due to the owner for the services rendered by the owner to the contractor such as power supply, water supply and others as set for in the said contract and such other sums as may become payable to the owner towards the controlled items of consumables materials or towards loss, damage to the owner's equipment, materials, construction plant and machinery, such payments to be made at such time and in such manner as is provided in the contract. It is specially and distinctly understood and agreed between the owner and the contractor that the contractor shall have no right, title or interest in the site made available by the owner for execution of the works or in the building, structure or works executed on the said site by the contractor or in the goods, articles, materials etc. brought on the said site (Unless the same specifically belongs to the contractor) and the contractor shall not have or deemed to have any lien whatsoever charge for unpaid bills nor will be entitled to assume or retain possession or control of the site or structures and the owner shall have an absolute and unfettered right to take full possession of the site and to remove the contractor, his servants, agents and materials belonging to the contractor and lying on the site.

The contractor shall be allowed to enter upon the site for execution of the works only as a licencee simplicitor and shall not have any claim, right, title or interest in the site or the structure erected thereon and the owner shall be entitled to terminate such license at any time without assigning any reason. The materials including sand, gravel, stone, loose earth rock etc. dug up or excavated from the said site shall unless otherwise expressly agreed under this contract, exclusively belong to the owner and the contractor shall have no right to claim over the same and such excavations and materials should be disposed off on account of the owner according to the instructions in writing issued from time to time by the Engineer-in-Charge.

In witness whereof the parties have executed these presents in the day and the year first above written.

on behalf of Owner	on behalf of Contractor.	
(NATIONAL ALLIMINIUM COLTD.)	(M/S	

PLACE: NALCO SMELTER / CPP DIVISION ANGUL. PLACE:.

#### IN THE PRESENCE OF TWO WITNESSES.

Signed & delivered for &

NALCO'S WITNESS.		CONTRACTOR'S WITNESS.
01)	_01)	
02)	_02)	

PLACE: NALCO, SMELTER / CPP



SUBJECT: PROVIDING & LAYING OF ROOF TOP PERMANENT LIFE LINE SYSTEM INSIDE SMELTER PLANT (PHASE-II).

Page: 92 of 104 **ANNEXURE-C24** 

### **COMMERCIAL QUESTIONNAIRE**

Bidder's reply/ confirmation as furnished in the Commercial Questionnaire (CQ) shall supersede the stipulations mentioned elsewhere in their offer.

SL. NO.	NALCO'S QUERY	BIDDER'S REPLY/ CONFIRMATION
1.0	Confirm that your offer is valid for 04 (Four) months from the actual date of tender opening at online portal.	
2.0	Confirm that Earnest Money Deposit (EMD) as per tender stipulations have been furnished along with bid.	
3.0	Confirm that the following documents are submitted with Part-I:	
a)	All documents as per CHECK LIST.	
b)	Master Index as enclosed with Bidding Document is submitted in unpriced part duly signed and stamped on each page.	
c)	Compliance letter for Addendum/ Amendments as a token of acceptance (Applicable, if issued).	
4.0	Confirm that Price bid has been uploaded in the CPP/GeM portal separately.	
5.0	Schedule of Price	
a)	Price must be filled in the soft copy of the SOR furnished along with the tender document. Please note that the format of the Excel file including columns of Item No., Description, Unit, Quantity, name of file or worksheet etc. are not to be edited by the tenderer.	
b)	Confirm that rate/ price has been quoted for all items of SOR.	
c)	Confirm that deviation/terms & conditions are not mentioned in the price part. In case any terms and condition is mentioned in the price part, the same shall be treated as null and void.	
6.0	Confirm your compliance to critical stipulations of bidding document as mentioned in ITB.	
7.0	Confirm that you have studied complete tender document including technical and commercial part and your offer is in accordance with the requirements of the tender document.	
8.0	Confirm your compliance to total Scope of Work mentioned in the Bidding Document.	
9.0	Confirm your acceptance for `Scope of Supply' mentioned in the tender document and confirm that all materials shall be supplied as per Standards and Specification.	
10.0	Confirm your acceptance for Time Schedule as mentioned in tender document.	
11.0	Confirm that your quoted price includes all taxes, duties as applicable for this WORK in accordance with the provision of General Conditions of Contract and Special Conditions of Contract.	
12.0	Confirm that your quoted price includes all types of insurance as per the provisions of General Conditions of Contract and Special Conditions of Contract.	
13.0	Confirm that all costs resulting from safe execution of WORK, such as safety induction, use of protective clothing, safety glasses and helmet, safety precaution taken during monsoon, or any other safety measures to be undertaken by the Contractor for execution of work are included in the quoted rates.	



## TENDER No.:

SMLT/T&C/GeM/OMC-5948/NIT/5266

SUBJECT: PROVIDING & LAYING OF ROOF TOP PERMANENT LIFE LINE SYSTEM INSIDE SMELTER PLANT (PHASE-II).

Page: 93 of 104

SL.	NALCO'S QUERY	BIDDER'S REPLY/
<b>NO.</b> 14.0	Confirm that adequate numbers of construction equipments, tools, tackles etc. have been proposed which will be sufficient to complete the work as per the time schedule.	CONFIRMATION
15.0	Confirm that you have proposed adequate project/site organization with qualified supervisory personnel having requisite experience including personnel responsible for safety, planning, stores, QA/QC etc.	
16.0	Confirm that while submitting your price, you have taken consideration of scope of supplies, scope of work and technical requirement mentioned in Bidding Document.	
17.0	Confirm that only exception and deviation indicated in the specific format shall be considered and evaluated. Deviations listed at any other places of the tender documents shall not be considered.	
18.0	Confirm that you have your own QA/QC programme for executing this work.	
19.0	Confirm that Bidder is not involved in any Litigation/ Arbitration/debarring/expelling, otherwise, if involved, please furnish information about the same.	
20.0	Confirm that the Bidder is not under liquidation, court receivership or similar proceedings.	
21.0	Confirm the following:	
a)	The planning schedule, S-curves etc., submitted by the bidder with his Bid, are indicative and shall not be basis for extra compensation in case actual needs are higher.	
b)	Detailed planning schedule developed by CONTRACTOR after contract award may be subject to fluctuations depending upon actual progress of the project and available work front.	
c)	Co-ordination and making available by Contractor of all staff, manpower, construction equipment, tools, cranes, etc. and materials as required for a timely completion of all WORK as per Owner's construction and priority schedule and in accordance with the available work front are included in the quoted rates.	
22.0	Please confirm whether you need Mobilization Advance or not.	
23.0	Please confirm that you have submitted Tender Fee in the Unpriced Part of your Bid in case Bidding Document downloaded from website. In case of non-submission of tender fee as specified, tender shall not be considered for evaluation.	

SIGNATURE OF BIDDER	•
NAME OF BIDDER	<u>:</u>
COMPANY SEAL	÷



SUBJECT: PROVIDING & LAYING OF ROOF TOP PERMANENT LIFE LINE SYSTEM

SMELTER PLANT (PHASE-II).

Page: 94 of 104



#### NATIONAL ALUMINIUM COMPANY LIMITED

(A Government of India Enterprise)

### TENDER & CONTRACT DEPT., SMELTER PLANT / CAPTIVE POWER PLANT Web site: www.nalcoindia.com

#### **ANNEXURE-C25**

#### **CHECKLIST FOR BIDDER.**

Following information along with the attested copy/copies of all the supporting documents as applicable, are to be submitted in the envelope of Single part/ two-part bid (Ref cl. No-25.1 of Annexure-A1).

SI	Documents description			For Single
No.			Part	Part
1.	(a) EMD Amount as per NIT specification.			Yes / No
	b) Cost of tender document, if downloaded from Internet.			NA
2.	E.P.F. A/c CODE	Yes / No	Yes / No	
3.	E.S.I. A/c CODE		Yes / No	Yes / No
4.	PAN No.		Yes / No	Yes / No
5	E MAIL ID (Annexure-C4)		Yes / No	Yes / No
6	Phone no/ Mobile no (Annexur	e-C4)	Yes / No	Yes / No
7	PAN based GST registration N	lo	Yes / No	Yes / No
8.	GST No		Yes / No	Yes / No
9	Solvency Certificate from a Ba	ınk	Yes / No	NA
10.	Power of Attorney of the signa	tory / Authorized signatory nominated	Yes / No	) / / NI
	by the company for the tender		Yes / No	
11	Proof of ownership/partnership	o of the firm/company attached.	Yes / No	NA
12.	Offer is submitted in the	(a) Obtained from T&C Department,	Yes / No	NA
	original NIT documents	(b) Downloaded from Internet	Yes / No	NA
13.	Deviation from the NIT terms	& conditions in deviation sheet only.	Yes / No	N. A
	(Ref :-Annexure-C3)		NA	
14	Signed declaration form by authorized signatory as per <b>Annexure-C4</b>			Yes / No
15	Undertaking of downloaded tender documents as per Annexure-C5			NA
16	Bank mandate for e-payment	form as per <b>Annexure-C10</b>	Yes / No	Yes / No



TENDER No.:

SMLT/T&C/GeM/OMC-5948/NIT/5266

SUBJECT: PROVIDING & LAYING OF ROOF TOP PERMANENT LINE **INSIDE** LIFE SYSTEM

SMELTER PLANT (PHASE-II).

Page: 95 of 104

SI	Documents description	For Two	For Single
No.		Part	Part
17.	Annexure-C19 & C20 regarding relatives in NALCO	Yes / No	Yes / No
18.	Annexure-C8 regarding details of commitments and information of the tenderer	Yes / No	NA
19.	Documentary evidence in support of pre-qualifying criteria of the	Yes / No	
	NIT	Yes / No	NA
	Work Orders listing as per (Annexure-C6)		IVA
	Work Orders listing as per (Annexure-C7)		
20.	Copies of audited Balance Sheet / Profit & Loss account for the last	Yes / No	Yes / No
	three Financial Years		
21.	Copy of statutory license, if applicable	Yes / No	Yes / No
22.	List of tools & tackles	Yes / No	NA
23.	All the pages of the offer including GCC are signed by the bidder	Yes / No	Yes / No
24.	Supporting documents are attested by Gazetted Officer / Notary Public	Yes / No	Yes / No
25.	Price Bid contains no conditions in any form	Yes / No	Yes / No
26.	Pre Contract Integrity Pact (Annexure-C21)	Yes/No	NA

NB:- If any of the information is not furnished, the offer of the party shall be liable for rejection and the consideration of the offer is at the discretion of NALCO.

SIGNATURE OF TENDERER WITH SEAL



Submitted.

SUBJECT: PROVIDING & LAYING OF ROOF TOP PERMANENT LIFE LINE SYSTEM INSIDE SMELTER PLANT (PHASE-II).

Page: 96 of 104

#### **ANNEXURE-C26**

#### **CHECK LIST FOR SUBMISSION OF OFFER**

Bidder is requested to fill this check list and ensure that all details/ documents have been furnished as called for in the tender document along with duly filled in, signed and stamped **checklist with Part-I bid**.

Pleas	e tick the box and ensu	are compliance:		
1.0	<b>Bid submission Lette</b> Submitted.	er as per proforma	attached in bidding do	cument.
2.0	Information about Bidder as per proforma attached in bidding document. Submitted.			
3.0	•			BG/BC from any scheduled bank as arked "Earnest Money Deposit".
	Submitted in the form of DD/ BG	n	EMD value:	Rs
	BG No	Dated	Valid up to	Claim period upto
	DD No	Dated	Drawn on	Valid up to
BC	No	Dated	Drawn on	Valid up to
4.0	Validity of Offer is up	o to Months	from the date of submi	ssion of offer.
	Yes	Val	id Up to	<u>_</u> .
5.0	Annual Turnover De Account Statement fo			Balance Sheets including Profit and Loss
	Submitted.		omitted for the years:	
		2	· ————————	
		3	·	
6.0		e of opening of Tech	nkers (Date of issue of the hno-commercial Part). tificate dated m (Name of Bank)	
7.0	Details of Past Exper	r <b>ience</b> in the profo	rma enclosed in the Bio	lding Document.
	Submitted.			
8.0	Details of Present Co Document.	mmitments in the	e proforma enclosed in t	he proforma enclosed in the Bidding
	Submitted.			
9.0	List of minimum equ Bidding Document.	ipment proposed	to be deployed for the	work in the proforma enclosed in the

Ref.: \_\_\_\_\_



SUBJECT: PROVIDING & LAYING OF ROOF TOP PERMANENT LIFE LINE SYSTEM INSIDE SMELTER PLANT (PHASE-II).

Page: 97 of 104

10.0	Deployment Schedul Document.	e of equipment pro	posed for the work in the proforma enclosed in the Bidding
	Submitted.		Ref
11.0	Proposed Site Organ	isation (as per prof	forma enclosed in the Bidding Document)
	i) Submitted		Ref
	•	Experience of Resin	dent Engineer/ Site-in-Charge and other key personnel nization chart.
	Yes		Ref
	iii) Number of Key F Chart.	ersonnel under dif	ferent heads have been mentioned in the Site Organisation
	Yes		Ref
	iv)Site Organization Engineer and Safe		alified and experienced Quality Control Engineer, Planning
12.0	Yes Deployment Schedul the Bidding Docume		Refersonnel proposed for the work in the proforma enclosed in
	Submitted		Ref
13.0	Power of Attorney in	favour of person w	ho has signed the offer in stamp paper of appropriate value.
	Submitted.		Ref
14.0	Partnership Deed in	case of partnership	o firm and Articles of Association in case of limited company.
	Submitted.		
15.0	Declaration regardin	g relationship with	n client's Director
	Submitted.		
16.0	Copy of P.F & ESI co	de, Service Tax reç	gistration certificate:
	Submitted.		
17.0	An Overall Schedule	, clearly indicating	all important milestone of the construction activities.
	Submitted.		Ref
18.0	Bid Compliance Stat enclosed.	ement (confirmatio	on for no deviation stipulated in Bid) in the proforma
	Submitted		Ref



SUBJECT: PROVIDING & LAYING OF ROOF TOP PERMANENT LIFE LINE SYSTEM INSIDE SMELTER PLANT (PHASE-II).

Page: 98 of 104

19.0	Exception and Deviation Statement in the proforma enclosed.
	Submitted.
20.0	All the documents submitted in requisite number of copies as mentioned in the Bidding Document and are readable/legible.
	Submitted. No. of copies submitted:
21.0	Original Biding Document along with blank (un-priced) copy of Price Bid/ Schedule of Rates corrigendum and addendum (if any).
	Submitted.
22.0	All pages/ documents are stamped and signed by the authorised signatory of the bidder.
	Yes.
	SIGNATURE OF BIDDER:
	NAME OF BIDDER:
	COMPANY SEAL:



SUBJECT: PROVIDING & LAYING OF ROOF TOP PERMANENT LIFE LINE SYSTEM INSIDE SMELTER PLANT (PHASE-II).

Page: 99 of 104

## ANNEXURE-C27 APPENDIX FOR DOCUMENTS TO BE SUBMITTED BY BIDDER

SI. No.		Contents	File Name	Page Nos.
			(To be saved as)	
1	DD /	/ Banker's Cheque /MSME / NSIC / UAM	EMD.pdf	to
2	i)	Work Order Copy with scope of work and BOQ	Tech	to
	ii)	Completion Certificate	PQC.pdf	to
	iii)	Amendment Copy, if applicable		to
3	i)	Balance Sheet and Profit & Loss statements of last 3 financial years (Audited by C.A)	Fin PQC.pdf	to
	ii)	Bank Solvency of last financial year		to
4	i)	PF	Comm	to
	ii)	ESI	PQC.pdf	to
	iii)	PAN		to
	iv)	PAN based GSTIN		to
	v)	Power of Attorney /ownership/Certificate of Incorporation		to
	vi)	Affidavit of No Litigation (Original)		to
5	i)	Declaration of Relatives (Appendix – C19 & C20 of NIT	Forms.pdf	to
	ii)	Details of Present Commitments of the tenderer (ANNEXURE-C8 of NIT)		to
	iii)	Exception / Deviation statement to the tender terms & conditions (ANNEXURE-C3 of NIT)		to
	iv)	Declaration by the bidder (ANNEXURE-C4 of NIT)		to
	v)	Bank Mandate Form for e-payment (Annexure-C10 of NIT)		to
	vi)	SAC Code (Annexure-C18 of NIT)		to
	vii)	Undertaking of downloading of tender document (Annexure-C5 of NIT)		to
6	Pre-	Contract Integrity Pact (Annexure-C21 of NIT)	PC1.pdf	to

#### NOTE -

- 1. The above details must be filled up and submitted, along with the bid document.
- 2. All the above mentioned documents needs to be submitted along with the offers.
- 3. The bid submitted must have 6 files as mentioned above and must contain the contents specified against each file.

Page nos. (Ex:- pages --- to ---) must be mentioned against each file.



SUBJECT: PROVIDING & LAYING OF ROOF TOP PERMANENT LIFE LINE SYSTEM **INSIDE** SMELTER PLANT (PHASE-II).

Name:

Seal:

Page: 100 of 104

#### **ANNEXURE-C28**

		<u>NO I</u>	<u>DUE CERTIFICA</u>	<u>TE</u>	
1. Vendor C	Code:	Vendor Name:			
2. Work Or	der Ref wi	ith Date:			
3. Descripti	ion of Wor	rk as per Order :			
4. Referenc	e of User l	Dept:			
Consumable damages if a	s, Rent, E ny.	lectricity, Water Cha	arges, Ground Rent	, Hiring Charges, etc.	ial, Tools, Equipment, and Compensation for
		-	_	the above certificate/	shall continue for the agreement.
				for National	Aluminium Co. Ltd.
Date:				Name: Designation: Department:	Signature.
•••••		NO CI	LAIM CERTIFIC		•••••••
1 - 1717	O- 4				
<ol> <li>Vendor O</li> <li>Work Or</li> </ol>		Vendor Name:			
		rk as per Order:			
<ul><li>4. Reference</li></ul>		-			
<ol> <li>Final Bil</li> </ol>		•			
against the a	above cont		lready claimed in t	he Final Bill subject	nium Company Limited to processing/passing in
for National	Aluminiu	m Co. Ltd.		for Contractor	
Date:	Si	gnature		Signature	

Name:

Designation:

Department:



Name Of the Work:

1.

SUBJECT: PROVIDING & LAYING OF ROOF TOP PERMANENT LIFE LINE SYSTEM INSIDE SMELTER PLANT (PHASE-II).

Page: 101 of 104

## ANNEXURE-C29

## **WORK COMPLETION CERTIFICATE**

2.	Work Order Reference No.	& Date:	
3.	SAP Purchase Order No.		
4.	Name of the Contractor &	SAP Vendor Code:	
5.	Contract Period:	From	То
6.	Amended Contract Period:	From	То
7.	Contract Value (Excluding	GST) (Rs.):	
8.	Final Amended Contract V	Talue (Excluding GST)	(Rs.):
9.	Actual Value of Completed	l Work (Excluding GS	T) (Rs.):
10.	Date of Actual Commence	ment of Work:	
11.	Date of Completion of Wo	rk:	
	ified that the above work hat the performance is satisfactory		all respects as per terms & conditions of the contract
(Sig	gnature of EIC/MIC)		(Signature of HOD)
Naı	me:		Name:
Des	signation:		Designation:
Dej	pt.:		Dept.:
Dat	te:		Date:



SUBJECT: PROVIDING & LAYING OF ROOF TOP PERMANENT LIFE LINE SYSTEM INSIDE SMELTER PLANT (PHASE-II).

Page: 102 of 104

#### **ANNEXURE-C30**

Format:- (To be submitted with BID)

#### **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 giving this quotation to 'Na	alco' against Tender No.	
Dt, me/my fim/my co	mpany has abided by al	I Tax Laws and Rules including but not
limited to Section 171 of the Central	Goods and Services Tax	Act, 2017.
I, hereby solemnly and sincerely fur	ther declare that me/my	firm/my company will continue to abide
by the said laws, including but not lin	mited to Section 171 of the	he Central Goods and Services Tax Act
2017, as applicable from time to time	e during the life of the te	ender and during execution of any order
placed with reference to the said ten	der.	
I further declare that, me/my firm/my	y company, in furtheranc	e and in compliance to the said section,
will make commensurate reduction i	in the basic prices w.r.t.	Input Tax benefits and reduction in Tax
charged to 'Nalco' w.r.t. Output Tax b	penefits in connection wit	h goods and/or services provided.
I further declare that the foregoing is	true and correct and the	e same is a legal obligation and failure to
fulfil if could result in penalties under	the law.	
Date:		
Place:	Γο be signed by the autho	orized person under the firm's seal.



SUBJECT: PROVIDING & LAYING OF ROOF TOP PERMANENT LIFE LINE SYSTEM INSIDE SMELTER PLANT (PHASE-II).

Page: 103 of 104

**ANNEXURE-C31** 

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

#### ANTI-PROFITEERING DECLARATION FORMAT

To whomsoever it may concern.

l, Mr	, Proprietor/	(other authorized
signatories) of M/s	, hereby solemr	nly 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 S	ection 171 of the Central
Goods and Services Tax Act, 2017.		
I further declare that, me/my firm/my com	npany, in furtherance and in complia	ance to the said section,
have not made profit out of reduction in	Input Tax benefits where ever appl	licable and reduced Tax
charged to 'Nalco' w.r.t. Output Tax benef	fits in connection with goods and/or	services provided.
I further declare that the foregoing is true	and correct and the same is a legal	obligation and failure to
fulfil if could result in penalties under the la	aw.	
Date:		
Place: To be si	igned by the authorized person unde	er the firm's seal



SUBJECT: PROVIDING & LAYING OF ROOF TOP PERMANENT LIFE LINE SYSTEM INSIDE SMELTER PLANT (PHASE-II).

Page: 104 of 104

## **GENERAL CONDITIONS OF CONTRACT (GCC)**

(Enclosed separately with this Tender)

&

## The bidder has to fill up PRICE BID at GeM Portal.

(Enclosed separately with this Tender)

\*\*\*\*\*



# GENERAL CONDITIONS OF CONTRACT

NATIONAL ALUMINIUM COMPANY LIMITED NALCO BHAWAN, P-1 NAYAPALLI, BHUBANESWAR – 751 013

Web site: www.nalcoindia.com

## **INDEX**

Sl.No	Title	Page No.
1.	Definitions and Interpretation (Section-1)	
1.1	Definitions	
2.	Facilities to Contractor (Section-II)	
2.1	Location of Site climatic conditions and Access by	
	Road	
2.1.1	Location of Site	
2.1.2	Access by Road	
2.2	Water Supply	
2.3	Power Supply	
2.4	Land for Contractor's field office, godown and workshop	
2.5	Land and Residential Accommodation	
	General Instructions to Tenderers (Section-III)	
3.	Submission of Tender:	
4.	Documents:	
4.1.2	Details to be submitted alongwith the tender	
4.2	All pages to be initiated	
4.3	Rates to be in figures and words	
4.4	Corrections and Erasures	
4.5	Signature of Tenderer	
4.6	Witness	
5	Transfer of Tender Documents	
6	Earnest Money	
7	Validity	
8	Addends/ Corrigenda	
9	Right of Owner to accept or reject Tender	
10	Time Schedule	
11	Collection of data Tenderer's responsibility	
12	Retired Government or Company Officers	
13	Signing of the Contract	
14	Field Management and Controlling Authority	
15	Note to schedule of Rates	
	General Obligations (Section-IV)	
16	Interpretation of contract documents	
17	Special Conditions of Contract	
18	Tenderer to obtain his own information	
19	Security Deposit	
20	Forfeiture of Security Deposit	

21.	Time of Performance	
22.	Extension of Time	
23.		
	Force Majeure	
24.	Compensation for delay.	
25.	Failure by the contractor	
26.	Contractor remains liable to pay compensation	
27.	No Compensation for alteration in /or restriction of work.	
20		
28.	Change in Constitution  Tamping tion of Contract for death	
29.	Termination of Contract for death	
30.	Members of the Owner not individually liable	
31.	Owner not bound by personal representations	
32.	Contractor's Office at Site	
33.	Contractor's subordinate staff and their conduct	
34.	Sub-letting of work	
34.1	General	
34.2	Sub-Contracting of works	
34.3	List of sub-contracted works to be supplied	
34.4	Contractor's liability not limited by sub-contractors	
34.5	Owner may terminate sub-contracts	
34.6	No remedy for action taken under this clause	
35.	Power of Entry	
36.	Contractor's responsibility with other agencies	
37.	Other agencies at site	
38.	Serving of Notices	
38.1	To the Contractor	
38.2	To the Owner	
39	Rights of various interests	
40	Patents, Royalties, Rent and excavated material	
41.	Liens	
41.1	General	
41.2	Nothing extra for adverse sub-soil conditions	
41.3	Slip and Falls in excavation	
41.4	No compensation in case of change in location of site	
	Performance of Work (Section V)	
42.	Execution of Works	
43.	Coordination and inspection of works	
44.	Work on monsoon and dewatering	
45.	Work on Sundays and Holidays	
46.	General Conditions of Construction and Erection	
	Work	
	•	

17	Drawing to be supplied by the Owner	
47.	Drawing to be supplied by the Owner	
48.	Drawings to be supplied by the Contractor	
49.	Setting out works	
50.	Responsibility for Level and Alignment	
50.1	General Violation Words	
50.2.	Lighting, Watch and Ward	
51.	Materials to be supplied by Contractor	
52.	Stores supplied by the Owner	
53	Conditions for issue of materials	
54.	Return of Surplus	
55.	Materials obtained from dismantling	
56.	Articles of value found	
<i>5</i> 7.	Inspection of works	
58.	Assistance to the Engineer	
59.	Discrepancies between Instructions	
60.	Alterations in specifications & designs and extra works	
61.	Action where no specification is issued	
62.	Abnormal Rates	
63.	Test for quality of Works	
64.	Samples	
65.	Liabilities for defect imperfections etc and	
	rectification's thereof	
66.	Suspension of works	
67.	Possession prior to completion	
68.	Twelve months period of liability form the date of	
	issue of completio n certificate	
68.1	Guarantee	
68.2	Suggestions to fulfill the guarantees	
68.3	Care of works	
68.4	Defects prior to taking over	
68.5	Defects after taking over	
68.6	Guarantee/ Transfer of Guarantee	
	Certificate and Payments (Section-VI)	
69.	Schedule of Rates and Payments.	
69.1	Contractor's Remuneration.	
69.2	Schedule of Rates to be inclusive.	
69.3	Schedule of Rates to cover constructional plant,	
	materials, labour etc.	
69.4	Schedule of Rates to cover royalties, rents and	
	claims	
69.5	Schedule of Rates to cover taxes and duties.	

69.6	Schodule of Dates to cover risks of delays	
69.7	Schedule of Rates to cover risks of delays. Schedule of Rates can not be altered.	
70.	Procedure for measurement/ billing of work in	
70.1	progress. Measurements.	
70.2	Billing.	
70.3	Secured Advance on materials.	
70.4	Dispute in mode of measurement.	
70.5	Rounding of Amounts	
71.	Lump sum in Tender	
72.	Running Account payment to be regarded as	
70	advances	
73.	Notice of claims for additional payment	
74.	Payment of Contractor's Bill	
75.	Receipt for payment.	
76.	Completion Certificate.	
76.1	Application for completion certificate.	
76.2	Completion Certificate.	
76.3	Completion Documents.	
77.	Final Decision and final Certificate.	
78.	Certificate and payments no evidence of	
	completio n.	
	Taxes and Insurance (Section-VII)	
79.	Taxes, duties, octroi etc.	
80.	Insurance	
80.1	Employees State Insurance act.	
80.2	Workmen compensation and employer's liability	
	Insurance.	
80.3	Any other insurance required under law or	
	regulations or by Owner.	
80.4	Accident or Injury to workmen.	
80.5	Transit Insurance.	
81.	Damage to property or to any person or any third party	
82.	Demurrage dues.	
	Labour Laws and Arbitration (Section – VIII)	
83.	Labour laws.	
84.	Implementation of Apprentices Act 1961.	
85.	Contractor to Indemnify the Owner	
86.	Health and sanitary arrangements for workers	
87.	Arbitration	
88	Jurisdiction/ Governing Laws	

	Safety Code (Section-IX).	
89.	General	
90.	Safety Regulations	
91.	First Aid and Industrial Injuries	
92.	General Rules.	
93.	Contractor's Barricades.	
94.	Scaffolding.	
95.	Excavation and Trenching.	
96.	General Safety	
97.	Care in handling Inflammable gas.	
98.	Temporary combustible Structures.	
99.	Precautions against fire.	
100.	Explosives.	
101.	Mines Act.	
102.	Preservation of peace.	
103.	Out Break of infectious diseases.	
104.	Treatment of Contractor's Staff in Owner's Hospital	
105.	Use of intoxicants.	
	Proforma (Section-X)	
A.	Formats for Bank Guarantees.	
B.	List of standardized Banks	
	Proposal forms - (Appendices)	
IA.	Details of works of similar nature and magnitude	
	carried out during the last 5 years.	
IB.	Concurrent commitment of the bidder	
II	Details of equipment, tools tackle.	
III.	Details of Minimum manpower proposed to be	
	deployed on this work.	
IV.	Organisation Chart showing no. of qualified	
	engineers and supervision)	
V.	List of proposed sub-contractors.	
VI.	Progress Billings.	
VII.	Information about Tenderers (Form H)	
VIII	List of enclosures (Form-I)	
IX	Exceptions and Deviations (Form –J)	



# **SECTION - 1**

# **DEFINITIONS AND INTERPRETATION**

### 1. **DEFINITION & INTERPRETATION:**

#### 1.1 **Definition:**

In the contract (as hereinafter defined) the following words and expressions shall have the meanings hereby assigned to them except where the context otherwise requires.

1.1.1 The 'Owner' shall mean the National Aluminium Company Limited (NALCO), a Company incorporated under the Companies Act, 1956 having its registered office at IDCO Tower, 8<sup>th</sup> Floor, Janapath, Bhubaneswar –751007 or any other place as modified subsequently and shall include its Chairman-cum-Managing Director or other Administrative Officers authorised to deal with these presents are concerned on his behalf posted in the any of the Offices of NALCO and shall also include Owner's successors and assignees.

The Chairman-cum-Managing Director has nominated the following persons as the representative of the 'Owner' for the purpose of all contractual matters.

Smelter - General Manager (Smelter)
CPP - General Manager (CPP)
Mines - General Manager (Mines)
Alumina - General Manager (Alumina)

- 1.1.2 The 'Tender' shall mean the tender submitted by the tenderer for acceptance by the Owner.
- 1.1.3. The 'Chairman-cum-Managing Director' shall mean the Chairman-cum-Managing Director of National Aluminium Co. Ltd., or his successors in office as designated by the Owner.
- 1.1.4. The 'Project Head' shall mean General Manager/ Deputy General Manager of the Project of National Aluminium Company Ltd., or his successor in office or his authorised representative.
- 1.1.5. The 'Contractor' shall mean the person or persons, firm or company whose tender has been accepted by owner and includes the contractor's legal representatives, his successors and permitted assigns.
- 1.1.6. The 'Sub-contractor' shall mean any person or firm or company (other than the contractor to whom any part of the work has been entrusted by the contractor, with the written consent of the owner or his representative and the legal representatives, successors and permitted assignee of such person, firm or company.

# GENERAL CONDITIONS OF CONTRACT



- 1.1.7. The 'Engineer-in-Charge' shall mean the person nominated by the Owner from time to time and shall include those who are expressly authorised by the Owner to act for and on his behalf for all function pertaining to operation of this contract. All functions pertaining to the operation of contract means all acts necessary for execution of the contract coordinating between the different agencies and final closing of the contract.
- 1.1.8. The 'Works' shall mean and include all works to be executed in accordance with the contract or part thereof as the case may and shall include all extras, addition, altered or substituted works as required for the purpose of the contract or as may be required to be executed by the owner/ engineer-incharge.
- 1.1.9. The 'Contract' shall mean the agreement between the Owner and the contractor for the execution of the works including therein all documents such as the invitation to tender, instructions to Tenders, General Conditions of Contract, Special Conditions of Contract, Job Specifications, General Requirements, Time Schedule of Completion of Job, Drawings, Letter of Intent awarding the work, Agreed variations, if any etc.
- 1.1.10. The 'Contract Document' shall mean collectively the tender documents, designs, drawings specifications, agreed variations, if any and other documents constituting the tender and acceptance thereof.
- 1.1.11. 'Constitutional Plant' shall mean all appliances or things of whatsoever nature required in or about the execution, completion or maintenance of the works or temporary works (as hereinafter defined) but does not include materials or other things intended to form of forming part of the permanent work.
- 1.1.12. 'Temporary Works' shall mean all temporary works of every kind required in or about the execution, completion or maintenance of the works.
- 1.1.13. 'Specifications' shall mean all directions, various technical specification, provisions, and requirements, attached to the contract, which pertain to the method and manner of performing the work or works to the quantities and qualities of the work or works and the materials to be furnished under the contract for the work or works as may be amplified or modified by the Owner or the Engineer-in-charge during the performance of Contract in order to provide the unforeseen conditions or in the best interests of the work or works. It shall also include the latest edition including all addenda/ corrigenda or relevant Indian Standard Specifications and other relevant codes.
- 1.1.14. 'Plans' shall mean all maps, sketches, and layouts as are incorporated in the contract in order to define broadly the scope and specifications of the work or works, and all reproductions thereof.

### GENERAL CONDITIONS OF CONTRACT



- 1.1.15. 'Drawings' shall include maps, plans and tracings or prints thereof with any modifications approved in writing by the Engineer-in-Charge and such other drawings as may, from time to time, be furnished or approved in writing by the Engineer-in-charge.
- 1.1.16. 'Foreign consultant' shall mean a person, agency or firm including their successors and assigns, who are nonresidents of India and are responsible for supply of process Technology for expansion plant based on review of existing plant including material flow, energy balance, additional facilities and improvement on the basis of the recent experience.
- 1.1.17. 'Indian Consultant' shall mean a person, agency or firm including their successors and assign who are responsible for detailed engineering and construction management of the project.
- 1.1.18. 'Project manager' shall mean the authorised representative of the consultant posted at site. He shall be responsible for supervision of the work by the contractors as well as coordinate with different agencies within the organisation or otherwise.
- 1.1.19. 'Site' shall mean the lands and other places on, under in or through which the permanent works are to be carried out and any other lands or places provided by the owner for the purpose of the contract.
- 1.1.20. 'Notice in writing or written Notice' shall mean a notice in written, typed or printed characters sent (unless delivered personally or other wise proved to have been received) by registered post to the last known private or business address or registered office of the addressee and shall be deemed to have been received in the ordinary course of post it would have been delivered.
- 1.1.21. The 'Completion Certificate' shall mean the certificate to be issued by the owner or his representative when the works have been completed to his satisfaction.
- 1.1.22. The 'Final Certificate' in relation to the work shall mean the certificate regarding the satisfactory compliance of the various provisions of the contract to be issued by the owner or his representative after the period of liability is over.
- 1.1.23. 'Approved' shall mean approved in writing including subsequent written conformation of previous verbal approval and 'Approval' means approved in writing including as aforesaid.
- 1.1.24. The 'Period of Liability' in relation to a work means the specified period from the date of issue of completion certificate up to the date of issue of final certificate which the contractor stands responsible for rectifying all defects that may appear in the works.





- 1.1.25. The 'Appointing Authority' for the purpose of arbitration shall be the Chairman and managing Director or any other person so designated by him.
- 1.1.26. The 'Alteration Variation Order' means an order given in writing by the Engineer-in-Charge/ owner to effect additions to or deletions from or alteration in the works.
- 1.1.27. 'Letter of Intent' shall mean an intimation by a letter to tenderer that the tender has been accepted in accordance with the provisions contained in the letter.
- 1.1.28. 'Days' means a day of 24 hours from mid night irrespective of the number of hours worked in that day.
- 1.1.29. 'Working Day' mean any day which is not declared to be holiday or rest day by the Owner.
- 1.1.30. 'Week' means a period of any consecutive seven days.
- 1.1.31. 'Metric System': All technical documents regarding the construction of works are given in the metric system and all work in the project should be carried out accordingly to the metric system. All documents concerning the work shall also be maintained in the metric system.
- 1.1.32. 'Value of Contract' shall mean the sum accepted or the sum calculated in accordance with the prices accepted in tender and / or the contract rates as payable to the contractor for the entire execution and full completion of the work.
- 1.1.33. 'Headings and Marginal Notes' in these contract documents are given solely for facility of reference and are not part of the contract documents and are not to be taken into account in the interpretation of the provisions of the contract.
- 1.1.34. 'Language for Drawings & Instruction': All the drawings, titles, notes, instruction, dimensions etc. shall be in English Language.
- 1.1.35. 'Singular and Plural': The singular shall include the plural and vice versa wherever the context so requires.



# **SECTION - II**

### 2. FACILITIES TO CONTRACTOR

# 2.1 Location of Sites and Access by Road:

### 2.1.1 Locations of Sites:

The general information about Mines Alumina, Aluminium Smelter and Captive power Plants furnished below is of indicative nature only and shall not be considered as binding in any way on the Owner and shall not govern either the scope of work or the nature of the respective rights and the obligations of the parties to such contract.

# (a) Alumina Plant and Mines:

Alumina plant is on south-western side of the Panchpatmali hill near Damanjodi village in Koraput District, Orissa State. The site is situated at 12 Km from the national highway No. 43 off Semiliguda village. The Alumina Plant Site has the form of saddle between groups of low hills. The location of Red Mud Pond is in the natural basis of hills situated at a distance of 2 Km from the western side of the plant. The Bauxite mine is located at 14 Km away from the Alumina Plant Site.

### (b) Smelter Plant:

Aluminium Smelter is on the Southern side of National Highway No. 42, with its approximate latitude and longitude as 20°51'N and 85°10'E respectively. The area, at a higher elevation in comparison with adjacent land, is not subjected to either normal or flash foods. The prevalent directions of wind are from North-West and West.

### (c) Captive Power Plant:

Captive Power Plant is located at Angul, District Angul, Orissa on the south of Talcher Thermal Power Station of Orissa State Electricity Board the main plant site is about 3 Km on the north of the junction of the National Highway Nos. 42 and 23, between the villages Balaram Prasad Patna and Gotamara. The access roads to the main plant site may be taken from either of the highways.

# 2.1.2. Access by Road:

Contractor, if necessary, shall build other temporary access roads to the actual site of construction for his own work at his own cost. The Contractor shall be required to permit the use of the roads so constructed by him for vehicles of any other parties who may be engaged on the project site. The Contractor shall also facilitate the construction of the permanent roads should the construction thereof start while he is engaged on this work. He shall make due allowance in his tender for any inconvenience he anticipates on such account.

Non-availability of access roads, railway siding and railway wagons for the use of contractor shall in no case condone any delay in the execution of works not be the cause for any claim for compensation against the Owner.



# 2.2 Water Supply:

- 2.2.1. Unless other wise provided in the Contract, the Contractor shall be responsible for the arrangements to obtain supply of water necessary for the works, his labour colony, his workshops, his offices etc. All pumping installations, pipe network and distribution system will have to be carried out by the Contractor at his own cost.
- 2.2.2. The Owner may agree to supply water to the Contractor for use in the Owner's works on specified terms and conditions as shall be determined by the Owner, which shall be binding on the Contractors. The tenderer is however required to exercise his option to receive such water supply from Owner's main at the time of submission of his tender.
- 2.2.3. When the water is supplied by the Owner, the Owner's main will be within 500 metres form the site of work. The Contractor shall provide at his own cost, all necessary ferrules, pipes, fitting, couplings and tanks and temporary works required and he shall maintain all such works in satisfactory condition. The Contractor shall remove all such works and shall re-instate and make good any work disturbed, to the satisfaction of the Engineer-in-Charge.
- 2.2.4. In the event of the Contractor's drawing water from the Owner's main/source, he shall not claim any compensation for interruption or failure of Owner's water supply caused due to any reasons beyond the control of the owner.
- 2.2.5. The water so supplied by the Owner shall be free of cost for the Constructional work only.

# 2.3. Power Supply:

2.3.1 Subject to availability. Owner will supply power at 400/440 V at only one point at the nearest substation, from where the contractor will make his own arrangement for temporary distribution. The point of supply will not be more than 500 Metres away from the Contractor's premises. All the works will be done as per IEA regulations and passed by the Engineer-in-The temporary line will be removed forthwith after the completion of work or if there is any hindrance caused to the other works due to the alignment of these lines, the contractor will re-route or remove the temporary lines at his own cost. The Contractor at his cost will also provide suitable electric metres, fuses, switches, etc. for purposes of payment to the Owner which should be in the custody and control of the Owner. The cost of power supply shall be payable to the owner every month. Rs. 1/- per kWh for power, which will be deducted from the running bills. The owner shall not, however, guarantee the supply of electricity and no compensation for any failure or short supply of electricity will be entertained and this does not relieve the contractor of his





responsibility for timely completion of this works as stipulated in the contract.

- 2.3.2 It shall be the responsibility of the contractor to provide and maintain the complete installation of the load side of the supply with due regard to safety requirement at site. All cabling, equipment, installations etc. shall comply in all respects with the latest statutory requirements and safety provisions i.e. as per and the Central/ State Electricity Acts and Rules etc. The Contractor will ensure that his equipment and Electrical wiring etc. are installed modified, maintained by a licensed Electrician/ Supervisor. A rest certificate is to be produced to the Engineer-in-Charge for his approval, before power is made available.
- At all times, IEA regulations shall be followed failing which the Owner has a right to disconnect the power supply without any reference to the contractor. No claim shall be entertained for such disconnection by the Engineer-in-Charge. Power supply will be reconnected only after production of fresh certificate from authorised electrical supervisors.
- 2.3.4 The Owner is not liable for any loss or damage to the Contractor's equipment as a result of variation in voltage or frequency or interruption in power supply or other loss to the Contractor arising there from.
- 2.3.5 The Contractor shall ensure that the Electrical equipment installed by him are such that average power factor does not fall below 0.90 at his premises. In case power factor falls below 0.90 in any month, he will reimburse to the Owner at the penal rate determined by the Owner for all units consumed during the month.
- 2.3.6 The Power supply required for Contractor's colony near the plant site will be determined by the Owner and shall as per state Electricity Board's Rules and other Statutory provisions applicable for such installations from time to time. In case of power supply to Contractor's colony, the power will be made available at a single point and the Contractor shall make his own arrangement at his own cost for distribution to the occupants of the colony as per Electricity Rules & Acts. The site area and colony shall be sufficiently illuminated to avoid accidents.
- 2.3.7 The Contractor will have to provide and install his own light and power meters, which will be governed as per Central/ State Government Electricity Rules. The meters shall be sealed by the Owner.
- 2.3.8 In case of damage to any of the Owner's equipment on account of fault, intentional or unintentional on the part of the Contractor the Owner reserves the right to recover the cost of such damage from the contractor's bill. Cost of HRC Fuses replaced at the Owner's terminals due to any fault





in the Contractor's installation shall be to contractor's account at the rates decided by the Engineer-in-Charge.

- 2.3.9 Only motors upto 3 HP will be allowed to be started direct on line. For motors above 3 HP and up to 100 HP a suitable starting devices approved by the Engineer-in-Charge shall be provided by the Contractor For Motor s above 100 HP slipping induction motors will suitable starting devices as approved by the Engineer-in-Charge shall be provided by the Contractor.
- 2.3.10 The Contractor shall ensure at his cost that all electric lines and equipment and all installations are approved by the State Electricity Inspector before power can be supplied by the Owner.
- 2.3.11 The total requirement of power shall be indicated by the tenderer along with his tender.

# 2.4. Land for Contractor's Filed Office, Godown and Workshop:

2.4.1. The Owner will at his discretion and convenience and for the duration of the execution of the work may provide the land for construction of Contractor's field office, godown, workshops and assembly yard required for the execution of the contract nearer to the site.

The Contractor shall at his cost construct all these temporary buildings structures and provide suitable water supply and sanitary arrangement as approved by the Engineer-in-Charge and other inspectorates.

2.4.2. On completion of the works undertaken by the Contractor, he shall remove all temporary works erected by him and have the site cleared as directed by Engineer-in-Charge. If the Contractor fails to comply with these requirements, the Engineer-in-Charge has the right to remove any structure, such surplus, rubbish materials and depose off the same as he deems fit and get the site cleared and the contractor shall forthwith pay the amount of all expenses so incurred and shall have no claim in respect of any such surplus materials disposed as aforesaid. The Owner reserves the right to ask the Contractor at any time during the pendancy of the contract, to vacate the land by giving 7 (seven) days notice on security reasons or on national interest or otherwise. A token rent of Rs. 100/- (Rupees One hundred only) per hectare or part thereof per annum or part thereof shall be charged for the land so made available.

Land provided shall be solely on licence basis which is terminable by at any time without notice or without assigning any reasons. In the event of any such termination or the termination of the contract/completion thereof, the contractor shall forthwith vacate the premises.





# 2.5. Land for Residential Accommodation:

Land for residential accommodation for staff and labour may be made available at the discretion of the Engineer-in-Charge and rent for the same will be as decided by the Engineer-in-Charge according to location and the area occupied by the Contractor.



# SECTION - III GENERAL INSTRUCTIONS TO TENDERERS

### 3. SUBMISSION OF TENDER:

- 3.1. The documents issued to the tenderers shall be as follows:
- (i) One complete set of tender documents as per index sheet and drawings marked 'ORIGINAL' (To be submitted along-with the quotation).
- (ii) One complete set of tender documents as per index sheet marked 'TENDERER'S COPY' (To be retained by the tenderer for reference).
- 3.1.1. The tender documents shall be in 2 parts viz. Technical Bid and Price Bid. Technical and Price Bid should be put in separate sealed cover and marked with the tender reference and name of the work. In addition, a note on the Price Bid "Quotation do not open" is to be superscribed. Both the sealed covers are to be put in a single sealed cover. The name of the work the tender reference and date of opening are to be superscribed on this sealed envelope also.

The technical Bid shall be opened in the first instance. Clarifications, confirmations, if any, shall be obtained with regard to technical specifications. After technical specifications are firmed up, if a tenderer revises his price bid, he is required to submit justification in support of the revision made. The price bid shall be opened thereafter.

- 3.2. If Addenda/ Corrigenda are issued to this tender document, they must be signed, submitted along-with the tender documents. The tenderer should write clearly the revised quantities in schedule of Rates of Tender Document and should price the work based on revised quantities when amendments on quantities are issued in addenda.
- 3.3. Tenderers are advised to submit quotations based strictly on the terms and conditions and specifications contained in the tender documents and not stipulate any deviations. Should it however become unavoidable, deviations should be stipulated in the prescribed proforma only, contained in the proposal form. Owner reserves the right to evaluate the quotations containing deviations having financial implications, by adding the cost for such deviations are determined by Owner.
- 3.4. Tenders should be submitted in double sealed envelope with the name of work superscribed thereon and with the note "QUOTATION DO NOT OPEN" written prominently. The full name, postal address and telegraphic address of the tenderer shall be written on the bottom left hand corner of the sealed cover.

### 4.0. **DOCUMENTS**:



- 4.1.1 Bidders shall submit with his bids the particular/ documents as envisaged from Appendix (i) to (x) along with tentative construction net work/ Bar chart for completion of work taking into account various intermediate completion milestones/ component milestones and the overall completion of work under the contract.
- 4.1.2. Details to be submitted along with tender:

The tenders, as submitted will consist of the following:

The technical Bid and Price Bid shall be submitted as stated in para 3.1.1 Documents to be attached with price bid.

(i) Complete set of the tender document (marked ORIGINAL) as issued duly filled in by the tenderer as prescribed in different clauses of the tender document, signed and date affixed.

Documents to be attached with Technical Bid.

- (ii) Earnest money in the manner specified in Clause 6 hereof.
- (iii) The following proposal forms in FIVE copies
  - (a) Details of works of similar nature and magnitude carried out during last 5 years as per the Appendix -1(A)
  - (b) Concurrent commitments of the tenderer as per the Appendix -1(B).
  - (c) Details of equipments, tools and tackles proposed to be deployed for this work as per the Appendix (II).
  - (d) Details of manpower proposed to be deployed for this work as per the Appendix (III), indicating the qualification.
  - (e) Site organisation chart showing number of qualified engineers and supervisors etc. indicating their bio-data as per the Appendix (IV), indicating the qualification.
  - (f) List of proposed sub-contractors to be deployed as per the Appendix -(V).
  - (g) Progress Billing as per the Appendix (VI).
  - (h) Information about tenderers as per the Appendix (VII).
  - (i) List of enclosures as per the Appendix (VIII).
    - a) Power of attorney
    - b) Income tax & Sales tax clearance certificate.
    - c) Solvency certificate from nationalised Bank
    - d) Documents showing annual turnover.
  - (j) Exception and deviation which tenderer may desire to stipulate as per Appendix (IX).

# 4.2 All pages to be initialled:





All signatures in tender documents shall be dated, as well as the pages of all sections of tender documents shall be initialled at the lower right hand corner or signed wherever required in the tender papers by the tenderer or by a person holding power of attorney authorising him to sign on behalf of the tenderer before submission of tender.

### 4.3. Rates to be in Figures and Words:

The tenderer shall quote in English, in figures and in words for the rates and amount tendered by him in the Schedule of Rates forming part of the documents, in such a way that interpolation is not possible. The amount of each item shall be worked out and entered and requisite total given of all items. The tendered amount for the work shall be entered in the tender and duly signed by the tenderer.

If some discrepancies are found between the rates given in works and figures or the amount shown in the tender, the following procedure shall be followed:-

- a) When there is difference between the rates in figures and words, the rate which corresponds to the amount worked out by the tenderer shall be taken as correct.
- b) When the rate quoted by the tenderer in figures and words tally but the amount is incorrect, the rate quoted by the tenderer shall be taken as correct.
- c) When it is not possible to ascertain the correct rate by either of above methods the rate quoted in words shall be taken as correct.

### 4.4. Corrections and Erasures:

All corrections and alterations in the entries of tender papers shall be signed in full by the tenderer with date. No erasures or over writings are permissible.

### 4.5. Signature of Tenderer:

- 4.5.1. The tender shall contain the name, residence and place of business of person or persons making the tender and shall be signed by the tenderer with his usual signature. Partnership firms shall furnish the full names of the partners in the tender. It should be signed in the partnership's name by all the partners or by duly authorised representative followed by the name and designation of the person signing. Tender by a corporation shall be signed by an authorised representative and a power of attorney on the behalf shall accompany the tender. A copy of constitution of the firm with names of all partners shall be furnished.
- 4.5.2. When the tenderer signs a tender in a language other than English, the total amount tendered should in addition be written in the same language. The signature should be attested by at least one witness.





**4.6 Witness:** Witness and sureties shall be persons of status and property. Their name occupation and address shall be stated below their signature.

### 5. TRANSFER OF TENDER DOCUMENTS:

Transfer of tender document purchased by one intending tenderer to another is no permissible.

### **6. EARNEST MONEY:**

- 6.1. The tenderer must pay earnest money as given in the Letter/ Notice Inviting Tenders. Tenders not accompanied with earnest money deposit will be rejected. The earnest money can be paid in cash or by crossed demand draft or fixed deposit or Bank Guarantee from any Nationalised/ Scheduled Bank or Insurance Guarantee in the prescribed proforma as indicated in the tender document in favour of National Aluminium Company Ltd.
- 6.2. The Bank Guarantee so furnished by the tenderer shall be only in the proforma prescribed by the Owner and valid for six months from the date of opening of the tender. No interest shall be paid by the Owner on the Earnest Money deposited by the tenderer.
- 7. **VALIDITY:** Tender submitted by tenderers shall remain valid for acceptance for a period of four months from the date of opening of the tender. The tenderers shall not be entitled during the said period of four months, without the consent in writing of the Owner, to revoke or cancel his tender or to vary the tender given or any term thereof. In case of tenderer revoking or canceling his tender or varying any terms in regard thereof without the consent a Owner in writing, the earnest money paid by him along-with the tender shall be forfeited.

### 8. ADDENDA/ CORRIGENDA:

- 8.1. Addenda/ Corrigenda to the tender documents may be issued prior to the date of opening of the tenders to clarify documents or to reflect modification in the design or contract terms.
- 8.2. The Addenda/ Corrigenda will be issued in duplicate to each person or organisation to whom a set of tender documents has been issued. Each recipient should acknowledge the receipt of the same and attach one copy of the addenda/ corrigenda along-with his offer. All addenda/ corrigenda issued shall become part of Tender Documents.

# 9. RIGHT OF OWNER TO ACCEPT OR REJECT TENDER:

9.1. The right to accept the tender will rest with the Owner. The Owner further does not bind himself to accept the lowest tender and reserves the authority to reject any or all the tenders received without assigning any reason whatsoever. The whole work may be split up between two or more contractors or accepted in part (not entirely) if considered expedient. The quoted rates would hold good for such eventualities. Tenders in which any of the particulars and prescribed information are missing or incomplete in any respect and / or the prescribed conditions are not



fulfilled are liable to be rejected. The decision for the owner in respect of the above shall be final and binding on the contractor.

9.2. Canvassing in connection with tenders is strictly prohibited. The submitted tenders of the tenderers who resort to canvassing are liable to rejection. Tenders containing uncalled remarks or any additional conditions are liable to be rejected.

### 10. THE SCHEDULE:

- 10.1. The work shall be executed strictly as per the Time Schedule given in Appendix –1. The period of construction given in time Schedule includes the time required for mobilisation as well as testing, rectification if any, re-testing and completion in all respects to entire satisfaction of the Engineer-in-Charge.
- 10.2. A joint programme of execution of the work will be prepared by the Engineer-in-Charge and contractor based on priority requirement of this project. This programme will take into account the time of completion mentioned in 19.1 above and the time allowed for the priority works by the Engineer-in-Charge.
- 10.3. Monthly/ weekly construction programme will be drawn up by the Engineer-in-Charge jointly with the Contractor, based on availability of work fronts and the joint construction programme as per 10.2 above. The contractor shall scrupulously adhere to these targets/ programs by deploying adequate personnel construction tools and tackles and he shall also supply himself materials of his scope of supply in good time to achieve the targets/ programmes. In all matters concerning the extents of targets set out in the weekly and monthly programmes and the degree of achievement, the decision of the Engineer-in-Charge will be final and binding on the contractor.

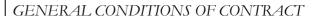
### 10.4. CONSTRUCTION SCHEDULE AND PRESENTATION:

The construction schedule shall be in the form of network of PERT CHART/CPM or other suitable presentation for the programme of the work indicating therein the different components item of works and time required for completion of each components item wise/ month wise season wise so as to complete the work in all respects within the stipulated period. Before award of the work the contractor is also required to make the presentation to satisfy owner of their proposal for construction schedule in the form of BAR CHART and organizational resources, equipments, machinaries, manpower to be deployed for timely completion of the project.

### 11. TENDERER'S RESPONSIBILITY:

The intending tenderers shall be deemed to have visited the site and familiarised themselves thoroughly with the site conditions before submitting the tender. Non-familiarity with the site conditions will not be considered a reason either for extra claims or for not carrying out the works in strict conformity with the drawings and specifications.

### 12. RETIRED GOVERNMENT OR COMPANY OFFICERS:





No Engineer of Gazetted rank or other Gazetted Officer employed in Engineering or Administrative duties in an Engineering department of the State/ Central Government or of the owner is allowed to work as a contractor for a period of two years after his retirement from Government service or from the employment of the Owner without the previous permission of the Owner. The contract if awarded, is liable to be cancelled if either the contractor or any of his employees is found at any time to be such a person, who had not obtained permission of the owner as aforesaid before submission of tender or engagement in the contractor's service as the case may be.

### 13. SIGNING OF THE CONTRACT:

The successful tenderer shall be required to execute an agreement with the Owner in the proforma attached with tender document within 10 days of the receipt by him of the notification of acceptance of the tender. In the event of failure on the part of the successful tenderer to sign the agreement within the above stipulated period, the earnest money or his initial security deposit will be forfeited and the acceptance of the tender shall be considered as cancelled. No bills shall be payable unless the agreement is executed.

### 14. FIELD MANAGEMENTS AND CONTROLLING AUTHORITY:

- 14.1 The field management will be responsibility of the Project Manager posted at site by the consultant and nominated by the owner. The Project manager shall work in accordance with the directions given to him from time to time by the project head.
- 14.2. The Engineer-in-Charge shall only co-ordinate with the other agencies engaged to work at site, to ensure minimum disruption of work carried out by different agencies. It shall be the responsibility of the contractor to plan and execute the works strictly in accordance with site instructions and avoid hindrance to the works being executed by other agencies. The instructions of the Engineer-in-Charge shall be binding on the contractor.

### 15. NOTE TO SCHEDULE OF RATES:

- 15.1. The schedule of rates should be read in conjunction with all the other sections of the tender.
- 15.2. The tenderer shall be deemed to have studied the drawings, specifications and details of work to be done within time schedule and to have acquainted himself of the conditions prevailing at site.
- 15.3. Rates must be filled in the original tender document. If quoted in separate typed sheets, no variation in time description or specification shall be accepted. Any exceptions taken by the tenderer to the schedule of rates shall be brought out in the terms and conditions of offer.
- 15.4. The quantities shown against the various items are only approximate. Any increase or decrease in the quantities shall not form the basis of alternation of the rates quoted and accepted.
- 15.5. The owner reserves the right to interpolate the rates for such items of work falling between similar items of lower and higher magnitude.



# SECTION - IV GENERAL OBLIGATIONS

### 16. INTERPRETATION OF CONTRACT DOCUMENTS:

- 16.1. Complete documents forming the contract are to be taken as mutually explanatory. Should there by any discrepancy, inconsistency, error or omission in the contracts or any of them the matter may be referred to Engineer-in-Charge who shall give decisions and Issue to the contractor instructions directing in what manner the work is to be carried out. The decision of Engineer-in-Charge shall be final and conclusive and the contractor shall carry out work in accordance with this decision.
- 16.2. Works shown in the drawing but not mentioned in the specification or described in specification but not shown in the drawings shall nevertheless be deemed to be included in the same manner as if they had been specifically shown upon the drawings as well as described in the specifications.
- 16.3. Unless otherwise stated specifically, the 'singular' shall also mean 'plural' and vice versa wherever the context so requires words implying 'persons' shall include relevant 'corporate companies or registered association' or 'body of individuals' or 'firm of partnership' as case may be.

# 17. SPECIAL CONDITIONS OF CONTRACT:

- 17.1. Special Conditions of Contract shall be read in conjunction with the General Condition of Contract Specifications of work, drawing and any other documents forming part of this contract wherever the context so requires.
- 17.2. Notwithstanding the sub-divisions of the documents into the separate sections and volumes each part shall be deemed to be supplementary to complementary of every other part and shall be read with and into the contract so far as it may be practicable to do so.
- 17.3. In case of any discrepancy between various sections of the contract, the following order of preference shall be observed.
  - (1) Schedule of quantities
  - (2) Technical specifications
  - (3) Special Conditions of Contract
  - (4) General Conditions of Contract
- 17.4. Wherever it is mentioned in the specifications that the Contractor shall perform certain work or provide certain facilities it is understood that the Contractor shall do so at his cost.
- 17.5. The materials, design and workmanship shall satisfy the relevant Indian Standard, the job specifications contained herein and codes referred to.





Where the job specifications stipulate the requirements in addition to those contained in the standard codes and specification, these additional requirements hall also be satisfied.

### 18. Tenderer to Obtain his Own Information:

- 18.1. The tenderer shall for all purposes and whatsoever reason may be, deemed to have himself independently obtained all necessary information for the purpose of preparing his tender. The correctness of the details given in the Tender Document as guideline information to help the tenderer but to make-up the tender is not guaranteed.
- 18.2. The tenderer shall be deemed to have examined the tender documents, to have obtained his own information in all matters whatsoever that might influence carrying out of the works at the scheduled rates and satisfied himself to the sufficiency of his tender. Any error in description or quantity or omission therefrom shall not vitiate the contract or release the contractor from executing the work comprised in the contract according to drawings and specifications at the scheduled rates. He is deemed to know the scope, nature and magnitude of the works, the requirements of materials and labour involved etc. and as what works he has to complete in accordance with the contract document whatever be the defects, omissions or errors that may be found in the Contract Document. The contractor shall be deemed to have visited site and surroundings areas, to have satisfied himself to the nature of all existing structures, and also as to the nature and the conditions of available facilities like Railways, roadways, bridges culverts, means of transport and communications like by land, water or air and possible interruptions thereto the access to and egress from site and to have made enquiries, examined satisfied himself of the sites for obtaining sand, stones, bricks and other materials, the sites for disposal of surplus materials, the available accommodation like depots, buildings as may be necessary for executing and completing the works, to have made local independent enquiries as to the sub-soil water and variations thereof, storms, prevailing winds and climatic conditions and all other similar matters affecting the works. He is deemed to have acquainted himself his liability for payment of Government Taxes, Customs Duties and other charges.
- 18.3. Any neglect or failure on the part of the tenderer in obtaining necessary and reliable information or issues stated at 18.2 or any other matters affecting the contract shall not relieve him from any risks or liabilities or the entire responsibility for completion of the works at the scheduled rates and time in strict accordance with the contract documents.
- 18.4. Any change in layout due to site conditions or technological requirement shall be binding on the contractor and no extra claim on this account shall be entertained.





18.5. No verbal agreement or inference from conversation with any officer or employee of the Owner either before, during or after the execution of the contract agreement shall in any way affect or modify and of the terms or obligations herein contained.

# 19. Security Deposit:

- 19.1. A sum of 10% of the accepted value of the tender or actual value of the work done whichever is higher for contracts not exceeding Rs. 1 Crore, 71/2 % for the value of contracts over Rs. 1 up to Rs. 5 crores and 5% for the value of contracts over Rs. 5 crores shall have to be deposited by the person/ persons (hereinafter called as contractor) as security deposit with the owner until the expiry of defect liability period.
- 19.2. This may be deposited initially at 2 ½% of the value of the contract (referred as initial Security deposit) within 20 days of receipt by him of the notification of acceptance of tender and the balance will be recovered in installments through the deduction @ 10% of the gross value of the each running account bill for the contract upto Rs. 1 crore, 71/2 % for contract between Rs. 1 to Rs.5 crores and 5% for contract over Rs. 5 crores, till total security deposit is collected. No further deduction from the bills will be made on this account subject to clause 19.6 below.
- 19.3. Alternatively the contractor may at his option to deposit the full amount percentage as mentioned 19.1 above towards deposit within 10 days of issue of notification accepting his tender. This amount will have to be suitably enhanced to the tune of above percentage of the executed value.
- 19.4. The earnest money deposited with the tender shall be adjusted towards security deposit.
- 19.5. Contractor can furnish the initial or total security deposit amount (a) in Demand Draft or (b) through a Bank Guarantee from any Scheduled bank in the prescribed proforma.
- 19.6. If contractor /sub-contractor or their employees damages, breaks, deface or destroy the property belonging to the owner or other during the execution of the contract, the same shall be made good by the contractor at his own expense and in default thereof; the Engineer-in-Charge may cause the same to be made good by other agencies and recover expenses form the contractor (for which the certificate of Engineer-in-Charge shall be final).
- 19.7. All compensation or other sums of money payable by the contractor to the Owner or recoveries to be made under terms of this contract may be deducted from or paid by the sale of a sufficient part of his security deposit or from any sums which may be due or may become due to the contractor by the Owner on any account whatsoever. In the event of his security being reduced by reasons of any such deduction or sale, the contractor shall within ten days





thereafter make good in cash, bank drafts, any sum or sums which may have fallen short or Security deposit amount or any part thereof. No interest shall be payable by the Owner for sum deposited as security deposit.

19.8. The security deposit will be refunded after the expiry of the period of liability as stipulated in the contract.

# **20.** Forfeiture of Security Deposit:

Whenever any claim against the Contractor for the payment of a sum of money arises out of or under the contract, the Owner shall be entitled to recover such sum by appropriating in part or whole the security deposit of the contractor, and to sell any Government securities, etc. forming whole or part of such security deposit. In the event of security being insufficient or if no security has been taken from the contractor, then the balance or the total sum recoverable as the case may be, shall be deducted from any sum then due or which at any time thereafter may become due to the contractor. The contractor shall pay to the Owner on demand any balance remaining due.

In the event of any breach by the contractor or any loss or damage occasioned to the owner which in the opinion of the owner has arises, the decision where of shall be final and binding on the contractor or in the event of the termination of the contract for any such breach, the security deposit is liable to be forfeited. The decision of forfeiture by the Owner shall be final and binding on the contractor.

### 21. Time of performance:

The work covered by this contract shall be commenced within twenty one days after the issue of the letter of acceptance of tender and be completed in stages on or before the dates as mentioned in the time schedule of completion of works. The contractor should bear in mind that time is the essence of the contract, unless such time be extended pursuant to the provision of clause No.22 Request for Revision of Construction time after tenders are opened will not receive consideration. The above period of twenty one days is included within the overall completion schedule, not over and above the completion time.

### 22. Extension of Time.

22.0. The application for extension of time is to be given to project head through the engineer –in-charge and the project head may authorise extension of time after considering the due merits.

Whenever extension of time is granted by the project head, the same shall be on the existing terms and conditions of the contract and without any additional financial liability to the Owner. The contractor in any case shall have no claim whatsoever for any type of compensation on account of any delay attributable to any one.



# 23. Force Majeure:

- 23.1 Any delays in or failure of the performance of either parties thereto shall not constitute default hereunder or give rise to any claims for damages, if any, to the extent such delays or failure of performance caused by occurrences such as acts of God or the public enemy, expropriation or confiscation of facilities by Government authority, compliance with any order or request of any Governmental authorities, acts or war rebellion, sabotage, fire, floods, explosions riots or illegal strikes, provided always that such occurrences result in impossibility of performances of the contract.
- Only events of Force Majeure which impedes the execution of the contract at the time of its occurrence shall be taken into cognizance.

### 24. Compensation For Delay:

- 24.1. Time is essence of the contract. In case the contractor fails to complete the work within the stipulated period, he shall be liable to pay to the Owner as compensation, an amount equal to 1% of the value of contract per week of the delay subject to a maximum of 10% of the value of the contract. This is a genuine pre-estimate of the loss/ damage which will be suffered on account of delay /breach on the part of the contractor and he agrees to pay the said amount on demand without going in for any proof of the actual loss or damages caused by such delay/ breach.
- 24.2. To ensure good progress during execution of work, the contractor shall be bound in all case in which the time allowed for any work exceeds by one month to complete one-fifth of the work before one-fourth of the time allowed under the contractor has elapsed, three-eighth of the work before the half of such time has elapsed and three-fourth of the work before three-fourth of such time has elapsed. In the event of the contractor failing to comply with this condition, he shall be liable to pay as compensation for delay an amount as stipulated above. The compensation for delay so paid shall not relieve the contractor from his obligations to complete the work or from any other obligations and liabilities under this contract.

# 25. Failure by the Contractor to Comply with the Provisions of the Contract:

- 25.1. If the contractor refuses or fails to execute the work or any separate part thereof with such diligence as will ensure its completion within the time specified in the contract or extension thereof or fails to perform any of his obligation under the Contract or in any manner commits a breach of any of the provisions of the contract it shall be open to the Owner at its option by written notice to the Contractor to: -
- (a) Determine the Contract: In which event the Contract shall stand terminated and shall cease to be in force and effect on and from the date appointed by the Owner on that behalf, whereupon the contractor shall stop forth with any of the contractor's work then in progress, except such work as the Owner may, in writing, requires to be done to safeguard any property or work, or





installations from damage, and the owner, for its part, may take over the work remaining unfinished by the Contractor and complete the same through fresh contractor or by other means, at the risk and cost of the Contractor, and any of his sureties if any, shall be liable to the owner for any excess cost occasioned by such work having to be so taken over and completed by the Owner over and above the cost at the rates specified in the schedule of quantities and rates.

- (b) Without determining the Contract: To take over the work of the contractor or any part thereof and complete the same through a fresh contractor or by other means at the risk and cost of the Contractor. The contractor and any of his sureties are liable to the Owner for any excess cost over and above the cost at the rates specified in the schedule of quantities/ rates, occasioned by such works having been taken over and completed by the Owner. Besides, the contractor shall also be liable for any compensation accruing under clause 24.
- (c) In other cases, the decision of the Owner is binding on the contractor.
- 25.2. In such events of clause 25.1 (a) or (b) above
- (a) The whole or part of the security deposit furnished by the Contractor is liable to be forfeited without prejudice to the right of the Owner to recover from the contractor the excess cost referred to in the sub-clause aforesaid, the Owner shall also have the right of taking possession and utilizing in completing the works or any part thereof, such of materials, equipment and plants available at work site belonging to the contractor as may be necessary and the Contractor shall not be entitled for any compensation for use or damage to such materials, equipment and plant.
- (b) The amount that may have become due to the Contractor on account of work already executed by him shall not be payable to him until after the expiry of six (6) calendar months reckoned from the date of termination of contract or from the taking over of the work or part thereof by the Owner as the case may be, during which period the responsibility for faulty materials or workmanship in respect of such work shall under the contract, rest exclusively with the contractor. This amount shall be subject to deduction of any amounts due from the Contractor to the Owner under the terms of the contract authorised or required to be reserved or retained by the Owner.
- 25.3. Before determining the contract as per clause 25.1 (a) or (b) provided in the judgement of the Owner, the default or defaults committed by the Contractor is/are curable and can be cured by the Contract if an opportunity given to him, then the Owner may issue notice in writing calling the Contractor to cure the default within such time specified in the notice.
- 25.4. The Owner shall also have the right to proceed or take action as per 25.1 (a) or Clause 25.1(b) above, in the event that the contractor becomes bankrupt, insolvent, compounds with his creditors, assigns the contract in favour of his





creditors or any other person or persons or being a company or a corporation goes into liquidation, provided that in the said events it shall not be necessary for the Owner to give any prior notice to the contractor.

25.5. Termination of the Contract as provided for in sub-Clause 25.1 (a) above shall not prejudice or affect their rights of the Owner which may have accrued upto the date of such termination.

# 26. Contractor Remains Liable to Pay Compensation if Action Not Taken Under Clause 25.

In any case in which any of the powers conferred upon the owner by clause 25 hereof shall have become exercisable and the same had not been exercised, the non-exercise thereof shall not constitute a waiver of any of the conditions hereof and such powers shall not withstanding be exercisable in the event of any further case of default by the contractor for which by any clause or clauses hereof he is declared liable to pay compensation amount to the whole of his security deposit and the liability of the contractor for past and future compensation shall remain unaffected. In the event of the Owner putting in force the powers vested in him under the proceeding clause no. 25 he may if he do so desires, take possession of all or any tools and plants. materials and stores in or upon the works of the site thereof belonging to the contractor or procured by him and intended to be used for the execution of the work or any part thereof paying or allowing for the same in account at the contract rates or in case of these not being applicable at current market rates to be certified by the Engineer-in-Charge whose certificate thereof shall be final, otherwise the Engineer-in-Charge may give notice in writing to the contractor or his clerk of the works, foremen or other authorised agent, requiring him to remove such tools, plant, materials or stores form the premises (within a time to be specified in such notice), and in the event of the contractor failing to comply with any such requisition, the Engineer-in-Charge may remove them at the contractor's expenses or sell them by auction or private sale on account of the contract and at his risk in all respects without any further notice as to the date, time or place of sale and the certificate of the Engineer-in-Charge as to the expense of any such removal and the amount of the proceeds and expenses of any such sale shall be final and conclusive against the contractor.

### 27. 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 carryout 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.



# 28. Change in Constitution:

When the contractor is a partnership firm the prior approval in writing from the Owner shall be obtained before any changes are made in the constitution of the firm, where the contractor is an individual or a Hindu undivided family business concern. Such approval as aforesaid shall, like wise be obtained before such contractor enters into any agreement with other parties, where under the reconstituted firm would have the right to carry out the work hereby undertaken by the contractor. In either case if prior approval is not obtained. The contractor shall be deemed to have been allotted in contravention of Clause - 34 hereof and the action and consequence shall ensure as provided in that clause.

### 29. Termination of Contract For Death:

If the Contractor is an individual or a proprietary concern and the individual or the proprietor dies or if the contractor is a partnership concern and one of the partners dies then, unless the Owner is satisfied that the legal representative of the individual or the proprietary concern or the surviving partners are capable of carrying out and completing contract, he (the Owner) is entitled to cancel the contract for the uncompleted part without being in any way liable for any compensation payment to the estate of the diseased contractor and/or to the surviving partners of the contractor's firm on account of the cancellation of contract. The decision of the Owner in such assessment shall be final and binding on the parties. In the event of such cancellation, the Owner shall not hold the estate of the diseased contractor and / or the surviving partners of the contractor's firm liable for any damages for noncompletion of contract.

### **30.** Members of the Owner Not individually Liable:

No Director or official or employee of the Owner shall in any way be personally bound or liable for the acts or obligations of the Owner under the contract or answerable for any default or omission in the observance or performance of the acts, matters or things which are herein contained.

# 31. Owner Not Bound by Personal Representation:

The Contractor shall not be entitled to any increase on the scheduled rates or any other rights or claims whatsoever by reason of any representation, explanation, statement or alleged understanding promise or guarantees given or to have been given to him by any person.

### 32. Contractors Office at Site:

The Contractor shall provide and maintain an office at the site for the accommodation of his agent and staff and such office shall be open at all reasonable hours to receive instructions, notices or other communications. The contractor at all time shall maintain a site instruction book and compliance of these shall be communicated to the Engineer –in-Charge from time to time and the whole document to be preserved and handed over after completion of works.





### 33. Contractor's Sub-ordinate Staff and their conduct:

- 33.1. The contractor on award of the work shall name and depute a qualified engineer having sufficient experience in carrying out work of similar nature to whom the equipment, materials if any, shall be issued and instruction for works given. The contractor shall also provide to the satisfaction of the Engineer-in-charge sufficient and qualified staff to supervise the execution of the works, competent sub-agents, foremen and leading hands including those specially qualified by previous experience to supervise the types works comprised in the contract in such manner as will ensure the best quality and expeditious working. At any time of in the opinion of the Engineer-in-Charge any additional, qualified experienced staff is considered necessary, they shall be employed by the contractor without additional charge. The contractor shall ensure to the satisfaction of the Engineer-in-Charge that sub-contractors, if any, shall provide competent and efficient supervision over the work entrusted to them.
- 33.2. If any of the contractor's sub-contractor's, agents, sub-agents, assistants, foremen or any employee in the opinion of Engineer-in-Charge be guilty of any misconduct or be incompetent or insufficiently qualified or negligent in the performance of their duties or that in the opinion of the Owner Engineer-in-Charge, undesirable for administrative or any other reasons, for such or person (s) to be employed on the works, then at the directions of Engineer-in-Charge the Contractor shall at once remove such person (s) from employment with the works without the written permission of the Engineer –in-Charge. Vacancy so created shall be immediately filled at the expenses of the contractor by a qualified and competent substitute. Should the contractor be requested to repatriate any person removed from the works he shall do so and shall bear all costs in connection therewith.
- 33.3. The contractor shall be responsible for the proper behaviour of all the staff, foremen, workmen and others, shall exercise proper degree of control over them and in particular without prejudice to the said generality the contractor shall be bound to prohibit/ prevent any employees from trespassing or acting in any way detrimental or prejudicial to the interest of the community or the properties or the occupiers of land or properties in the neighborhood. In the event of such trespassing, the contractor shall be responsible for all consequent claims or actions for damages or injury or any other grounds whatsoever. The decision of the Engineer-in-Charge upon any matter arising under this clause shall be final.
- 33.4. If and when required by the Owner, all contractor's personnel entering upon the owner's premises shall be properly identified by badges of a type acceptable to the owner which must be worn at all times on Owner's premises.



33.5. It is made clear that no relationship of employer and employee is created between the owner and the contractor labourer and no claim for employment of any such labourer shall be tenable or entertained.

# 34. Sub-Letting Work:

34.1. No part of the contract nor any share or interest there in shall in any manner or degree be transferred, assigned or sublet by the contractor directly or indirectly to any person, firm or corporation whatsoever except as provided for in the succeeding sub-clauses without the consent in writing of the Owner.

# 34.2. Sub – Contracting of Works:

The Engineer-in-Charge may give written consent to sub-contract for the execution of any part of the works at the site, provided the contractor submits each individual sub-contract to the Engineer-in-Charge for approval of mode of operation and agency for the work. The contractor is advised not to enter into contract before the consent of Engineer-in-Charge.

### 34.3. List of sub-contracted works to be furnished:

At the commencement of each month, the contractor shall furnish to the Engineer-in-charge, a list of sub-contractors, persons or firms engaged by the contractor and worked at the site during the previous month with particulars like general nature of the sub-contract or works done by them.

### 34.4. Contractor's liability not Limited by Sub-Contractors:

Notwithstanding any sub-letting with such approval as aforesaid and notwithstanding that the Engineer-in-Charge shall have received copies of any sub-contracts, the contractors shall be and shall remain solely responsible for the quality and proper and expeditious execution of the works and the performance of all the conditions of the contract in all respects as if such sub-contract or sub-letting had not taken place, and as if such work had been done directly by the contractor.

### 34.5. Owner may terminate sub-contracts:

If any sub-contractor engaged upon the works at the site executes any work which in the opinion of the Engineer-in-Charge is not in accordance with the contract documents, the owner may by written notice to the contractor request him to terminate such sub-contract. The contractor upon the receipt of such notice shall terminate and dismiss the sub-contract and the sub-contractor. The owner shall have the right to remove such sub-contractor from the site if contractor fails to vacate the sub-contractor immediately.

# 34.6. No remedy for action taken under this clause:

For action taken by the owner under the clause shall not relieve the contractor of any of his liabilities under the contract or give rise to any right or compensation, extension of time or otherwise.

# 35. Power of Entry:





If the contractor shall not commence the work in the manner described in the contract documents or if he at any time in the opinion of the Engineer-in-Charge.

- (i) fail to carry on the works in conformity with the contract documents or
- (ii) fail to carry on the works in accordance with the contract schedule or
- (iii) substantially suspend work or the works for a period of fourteen days without authority from the Engineer-in-Charge or
- (iv) fail to carry on and execute the works to the satisfaction of Engineer-in-Charge or
- (v) fail to supply sufficient or suitable constructional plant, temporary works, labour materials or other things or
- (vi) Commit, suffer or permit any other breach of any of the provisions of the contract on his part to be performed or observed or persist in any of the above mentioned breaches of the contract for fourteen days, after notice in writing shall have been given to the contractor by the Engineer-in-Charge requiring such breach to be remedied or
- (vii) If the contractor abandons the works or
- If the contractor during the continuance of the contract shall become (viii) bankrupt, make any arrangement or composition with his creditors, or permit any execution to be levied or go into liquidation whether compulsory or voluntary not being merely a voluntary liquidation for the purpose of amalgamation or reconstruction then in any such case, the owner shall have the power to enter upon the works and take possession thereof and of the materials, temporary works, constructional plant, and stock thereon, and to revoke the contractor's licence to use the same, and to complete the works by his agents, other contractors, or workmen, or to relate the same upon any terms and to such other person, firm or corporation as the Owner in his absolute discretion may think proper to employ and for the purpose aforesaid to use or authorize the use of any materials, temporary works, constructional plant, and stock as aforesaid, without making payment or allowance to the contractor for the said materials other than such as may be certified in writing by the Engineer-in-Charge to be reasonable, and without making any payment or allowance to the contractor for the use of temporary said works, constructional plant and stock or being liable for any loss or damage thereto and if the Owner shall by reason or his taking possession of the work or of the works being completed by other contractor (due account being taken of any such extra work or works which may be omitted) than the amount of such excess as certified by the Engineer-in-Charge shall be deducted form any money which may be due for work done by the contractor under the contract and not paid for any deficiency shall forthwith be made good and paid to the Owner by the contractor and the Owner shall have power to sell in such manner and for such price as he may think fit all or any of the constructional plan, materials etc. constructed by or belonging to and



to recoup and retain the said deficiency or any part thereof out of the proceeds or the sale.

### **36.** Contractor's Responsibility with other Agencies:

- 36.1 Without repugnance to any other condition, it shall be the responsibility of the contractor executing the work of civil construction to work in close cooperation and to coordinate in the works with the mechanical, electrical, air-conditioning and intercommunication contractors and other agencies or their authorised representatives, in providing the necessary grooves, recesses, cuts and opening etc. in wall, slabs beams and column etc. and making good the same to the desired finish as per specification, for the placement of electrical and intercommunication cables, conduits, air-conditioning inlets and outlets, grills and other equipment in the false ceiling and other partitions, the contractor before starting up the work shall in consultation, with the electrical, mechanical, inter-communication, air-conditioning contractors and other agencies prepare and put up a joint scheme, showing the necessary opening, grooves, recesses, cuts, the methods of fixing required for the works of the aforesaid, and the finishes therein, to the Engineer-in-Charge and get the approval. The contractor before finally submitting the scheme to the Engineer-in-Charge, shall have the written agreement of the other agencies. The Engineer-in-Charge, before communicating his approval to the scheme, with any required modifications shall get the final agreements of all the agencies, which shall be binding. No claim shall be entertained on account of the above
- 36.2 The contractor shall conform in all respect with the provisions any statutory regulation, ordinance or bye-laws of any local or duly constituted authorities or public bodies which may be applicable from time to time to the works or any temporary works. The contractor shall keep the Owner indemnified against all penalties and liabilities of every kind, arising out of non-adherence to such statues, ordinances, laws, rules, regulations, etc.

### 37. Other Agencies at Site:

The contractor shall have to execute the work in such place and condition where other agencies will also be engaged for other works such as site grading, filling and leveling, electrical and mechanical engineering works etc. No claim shall be entertained due to work being executed in the above circumstances.

### **38.** Serving of Notices:

### **38.1.** To the Contractor:

Any notice may be served on the contractor or his duly authorised representatives at the job site or by registered mail directly to the address furnished by the contractor. Proof of issue of such notice should be conclusive of the contractor having been duly informed of the contents.

### 38.2. To the Owner:





Any notice to be given to the Owner under the terms of the contract shall be served by sending the same by Registered mail to or delivering the same at the respective site offices of M/s. National Aluminium Co. Ltd. addressed to the head/ site in-charge.

### 38.3. Rights of various Interests:

- (i) The Owner reserves the right to distribute the work between more than one contractor. The contractor shall cooperate and afford the other contractors all reasonable opportunity for access to the works for the carriage and storage of materials and execution of their works.
- (ii) Wherever the work being done by any department of the Owner or by the contractor employed by the Owner as per the contingent upon work covered by this contract, the respective rights and various interests involved shall be determined by the Engineer-in-Charge to secure the completion of the various portions of the work in general harmony.

### 40. Patents, Royalties, Rent and Excavated Material:

- 40.1. The contractor, if licensed under any patent covering equipment, machinery, materials or compositions of matter to be used or supplied or methods and process to be practiced or employed in the performance of this contract, agrees to pay all royalties and licence fees which may be due with respect thereto. If any equipment, machinery, materials composition matters, to be used or supplied or methods and processes to be practiced or employed the performance of this contract, is covered by a patent under which the contractor is not licensed then the contractor before supplying or using the equipment, machinery, materials, composition, method or processes shall obtain such licenses and pay such royalties and license fees as may be necessary for performance of this contract. In the event the contractor fails to pay any royalty or obtain any such license, any suit for infringement of such patents which is brought against the contractor or the Owner as a result of such failure will be defended by the contractor at his Own expense and the contractor will pay damages and costs awarded in such suit. The contractor shall promptly notify the Owner if the contractor has acquired knowledge of any plant under which a suit for infringement could be reasonably brought because of the use by the owner of any equipment, machinery, materials, process, methods, to be supplied hereunder. The contractor agrees to and does hereby grant to Owner, together with the right to extent the same to any of the subsidiaries of the Owner as irrevocable, royalty-free licence to use in country, any invention made by the contractor or his employee in or as a result of the performance of the work under the contract.
- 40.2. All charges on account of royalty, tollage, rent octroi terminal or sales tax and/ or other duties or any other levy on materials obtained for the work or temporary work or part thereof (excluding materials provided by the Owner) shall be borne by the contractor.





40.3. The contractor shall not set or otherwise dispose of or remove except for the purpose of this contract, the sand stone, clay, ballast, earth, rock or other substances, or materials obtained from any excavation made for the purpose of the works or any building or produce upon the sited at the time of delivery of the possession thereof, but all such substances, materials buildings and produce shall be the property of the Owner provided that contractor may with the permission of the Engineer-in-Charge, use the same for the purpose of the works by payment of cost of the same at such a rate as may be determined by the Engineer-in-Charge.

The Owner shall indemnify and save harmless the contractor from any loss on account of claims against contractor for the contributory infringement of patent rights arising out and based upon the claim that the use by the Owner of the process included in the design prepared by the Owner and used in the operation of the plant infringes on patent right. With respect of any subcontract entered into by the contractor pursuant to the provisions on the respect to any sub-contract entered into by the contractor pursuant to the provisions of the relevant clause thereof, the contractor shall obtain from the sub contractor an undertaking to provide the Owner with the same patent protection that contractor is required to provide under the provisions of this clause.

### 41. Liens:

41.1. If at any time there should be evidence or any lien, claim for which the Owner might have become liable, which is chargeable to the contractor, then the Owner may pay and discharge the same and deduct the amount so paid from any amount which may be or may become due and payable to the contractor, if any lien or claim remain unsettled after all payments are made, the contractor shall refund or pay to the Owner the cost such lien or claim including all payment and reasonable expenses. Owner reserves the right to the same.

# 41.2. Nothing Extra for Adverse Sub-Soil Conditions:

The nature of sub-soil of the work site varies widely horizontally and vertically. The KI and KII values also vary widely from place to place. In addition the water bearing seems are also conspicuous with the water table at a depth of 0.75 to 3.0 metres from ground level. A number of cohesive and non-cohesive strata are available particularly everywhere. The contractor shall have to make cuts and resort to pumping with due care to avoid collapsing of sides and occurrence of 'Piping'. The Contractor shall also be careful to avoid occurrence of excessive 'heaving' by avoiding keeping the excavation proposed to atmosphere for a longer period.

41.3. Slips and falls in excavation shall be cleared by the contractor at his own cost.



### GENERAL CONDITIONS OF CONTRACT

Excessive heaving shall have to cut and refill with lean concrete by the contractor at his own cost. The contractor shall have to adopt under-water work in case of occurrence of piping/ quick condition without any additional cost to the Owner.

The contractor will be paid for the earthwork as per the drawing. The slopes etc. as required for the safety of the work has to be provided as per the decision of the Engineer-in-Charge at his own cost. All types of dewatering including seepage, rain water entering. The earthwork in excavation or from any other source is to be done by the contractor at his own cost till the completion of foundation upto ground level including back filling.

# 41.3. No Compensation in case of change of Location of site:

Change of location of site do not invalidate the contract and tenderer have no claim for any compensation for such changes.



# SECTION – V PERFORMANCE OF WORK

### 42. Execution of Works:

All the work shall be executed in strict conformity with the provisions of the contract documents explanatory detailed drawings, specifications and instructions by the Engineer-in-Charge whether mentioned in the contract or not. The contractor shall be responsible for ensuring that works are executed in the most substantial, proper and workman like manner using the quality materials and labour, through out the job Completion in strict accordance with the specifications and to the entire satisfaction of the Engineer-in-Charge.

# 43. Coordination and inspection of Works:

The coordination and inspection of the day-to-day work under the contract shall be the responsibility of the Engineer-in-Charge or his authorised representative. A work order book will be maintained by the contractor for each sector in which the aforesaid written instructions will be entered. These will be signed by the contractor or his authorised representative by way of acknowledgement within 12 hours.

# 44. Works in Monsoon and Dewatering:

- 44.1 The execution of work may entail working in the monsoon also. The contractor must maintain a minimum labour force as may be required for the job. And plan execute the construction and erection according to the prescribed schedule. No extra will be considered for such work in monsoon.
- 44.2 During monsoon and other period, it shall be the responsibility of the contractor to keep the construction work site free from water at his own cost.

### 45. Work on Sundays and Holidays:

For carrying out works on Sundays and holidays, the contractor will to keep Engineer-in-Charge or his representative at least two days in advance and obtain permission in writing. The contractor shall observe all labour laws and other statutory rules and regulations in force. In case of any violation of such laws, rules and regulations, consequence if any, including the cost thereto shall be exclusively borne by the contractor and the Owner shall have no liability whatsoever on his account.

### 46. General Conditions of Construction and Erection Work:

46.1 The working time at the time of work is 48 hours per week. Overtime work is permitted in case of need and the owner will not compensate the same. Shiftworking at 2 or 3 shifts per day will become necessary and the contractor should take this aspect into consideration for formulating his rates for quotation. No extra claims will be entertained by the Owner on this account.





- The contractor must arrange for the placement of workers in such a way that the delayed completion of the work or any part thereof or for any reason whatsoever will not affect their proper employment. The Owner will not entertain any claim for old time payment whatsoever.
- 46.3 The contractor shall submit to the Engineer-in-Charge reports at regular intervals regarding the state and progress of work. The contract shall provide display boards showing progress and labour strength at work site, as directed by the Engineer-in-Charge.
- 46.4 The site of work will be released progressively in stages and no claim for any compensation or damages will be tenable for non-release of the entire site at a time.

### 47. Drawings to be supplied by Owner:

- 47.1 The drawings attached with tender are only for the general guidance to the contractor to enable him to visualise the type of work contemplated. The contractor will be deemed to have studied the drawings and formed an idea about the total work involved.
- 47.2 In the Course the progress of work detailed working drawings on the basis of which actual execution of the work has to proceed, shall be furnished in stages. The contractor shall be deemed to have gone through the drawings supplied to him thoroughly and carefully, in conjunction will all other connected drawings and discrepancies if any, shall be brought to the notice of the Engineer-in-Charge, before actually carrying out the works.
- 47.3 Copies of all detailed working drawings relating to the works shall be kept at the contractor's office on the site and shall be made available to the Engineer-in-Charge at any time during the contract period. The drawings and other documents issued shall be returned to the Owner on completion of the works.

### 48. **Drawings to be supplied by the Contractor**:

- 48.1 The drawings/data which are to be furnished by the contractor are enumerated in the special conditions of contract and shall be furnished within the specified time.
- Where approval of drawings for manufacture/construction/fabrication has been specified it shall be contractor's resposibility to have these drawings prepared as pe r the directions of Engineer-in-Charge and get them approved before proceeding with manufacture/construction/fabriction works as the case may be. Any changes that may have become necessary in these drawings during the execution of the work shall have to be carried out by the contractor to the satisfaction of Engineer-in-Charge at no extra cost. All final approved drawings shall bear the certification stamp duly signed by both the contractor and the Engineer-in-Charge as indicated below.



### GENERAL CONDITIONS OF CONTRACT

"Certified true for(Name of work	)
Agreement No	
Signed (Contractor) (Eng	ineer-in-Charge)

- 48.3 A period of 3 weeks from the date of receipt shall be required for approval of drawings by the Engineer-in-Charge.
- 48.4 As built drawing showing all Corrections, adjustments etc. shall be furnished by the Contractor in five copies and one transparent to record purposes to the owner

# 49 Setting Out Works:

- 49.1 The Engineer-in-Charge shall furnish to the contractor with only the four corners of the work site that is plant boundary limits, and a level bench mark only. The contractor shall set out the works, provide an efficient staff for the purpose and shall be solely responsible for the accuracy of such setting out.
- 49.2 The contractor shall provide, fix and be responsible for the maintenance of all stacks, templates, level marks, profiles and other similar things and shall take all necessary precautions to prevent their removal or disturbance. He shall be responsible for their consequences arising of such removals, disturbances corrections thereon and for their efficient and timely reinstatement. The contractor shall also be responsible for the maintenance of all existing survey marks, boundary marks, distance marks and centre line marks, either existing or supplied and fixed by the contractor. The work shall be set out to the satisfation of the Engineer-in-Charge. The approval thereon or jointing with the contractor by the Engineer-in-Charge in setting out the work, shall not relive the contractor of any of his responsibilities.
- 49.3 Before beginning the work the contractor shall at his own cost, provide all necessary reference and level posts-pegs, bamboos, flags, ranging rods, strings, and other materials for proper layout of the work in accordance with the scheme for bearing marks acceptable to the Engineer-in-Charge. The centre, longitudinal, face and cross lines shall be marked by means of small masonry pillars. Each pillar shall have distinct mark at the centre to eable the theodolite to be set over it. No work shall be started until all these points arechecked and approved by Engineer-in-Charge in writing, but such approval shall not relieve the contractor of any of his responsibilities. The contractor shall also provide all labour, materials and other facilities as necessary, for the proper checking or layout and inspection of the points during construction.
- 49.4 Pillars bearing geodetic marks located at the sites of units of works under construction should be protected and faced by the contractor.



49.5 On completion of work, the contractor must submit the geodetic documents according to which the work was carried out.

# **50.** Responsibility for Level and Alignment:

50.1 The contractor shall be entirely and exclusively responsible for the horizontal and vertical alignment, the level and correctness of every part of the work shall rectify effectually any errors or imperfections therein. Such rectification shall be carried out by the contractor at his own cost, when instructions are issued to that effect by the Engineer-in-Charge.

### 50.2 Lighting, Watch & Ward:

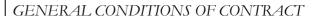
The contractor shall in connection with works provide and maintain at his own cost all lightings, guards, fencing and watch and ward and the security of the entire work in progress in cluding all the machineries, materials shall be the responsibility of the contractor till taken over by the owner by way of the written taking over certificate.

# 51. Materials to be Supplied by Contractor:

- 51.1 The contractor shall procure and provide the whole of the materials required for the construction including M.S. Rods, Cement and other building materials, tools, tackles, construction plant and equipment for the completion and maintenance of the work except the materials which will be issued by the Owner and shall make his own arrangement for procuring such materials and for the transport thereof. The owner may give necessary recommendation to the respective authorities, if so desired by the contractor, but assumes no further responsibility of any nature. The owner will insist on the procurement of materials which has the approval of Indian Standards Institution having ISI stamp and/or which are supplied by reputed suppliers borne on DGS & D list.
- 51.2 The contractor shall properly store all materials either issued to him or brought by him to the worksite to prevent damages due to rain, wind, direct exposure to sun etc. as also from theft, pilferage, etc. for proper and speedy execution of his works. The contractor shall maintain sufficient stocks of all meterials required by him.
- No material shall be despatched from the contractor's stores before obtaining the approval in writing of the Engineer-in-Charge.
- All plants, tools and other materials brought by the contractor to the site must be declared at the time of bringing the same to the site.

### **52.** Stores Supplied by the Owner:

52.1 If the specification of the work provides for the use of any material other than Steel & Cement of special description to be supplied from the Owner's stores or it is required that the contractor shall use certain stores to be provided by





the Engineer-in-Charge, such materials and stores, and price to be charged therefore as hereinafter mentioned being so far as practicable for the convinience of the contractor, but no so as in way to control the meaning or effect of the contract, the contract shall be bound to purchase and shall be supplied much materials and stores as are from time to time required to be used by him for the purpose of the contract only. The sums due from the contractor for the value of materials supplied by the Owner will be recovered from the Running Account Bill on the basis of actual consumption of materials (after taking into account any wastage allowance as may be provided for in the contract). The contractor should raise requisite copies of indents in a proforma as prescribed by the Engineer-in-Charge and no claim whatsoever will be entertained by the Engineer-in-Charge on this account. After completion of the works, the contractor is required to account as per relevant clauses in this document, for the full quantity of materials supplied to him.

52.2The value of the stores/materials as may be supplied to the contractor by the Owner will be debited to the contractor's account at the rates shown in the schedule of materials and if they are not entered in the schedule, they will be debited at cost price, which for the purpose of thecontract shall include the cost of carriage and all other expenses whatsoever such as normal storage supervision charges which shall have been incurred in obtaining the same at the Owner's stores. All materials so supplied to the contractor shall remain the obsolute property of the Owner and shall not be removed on any account from the site of the work and shall be at all times open for inspection to the Engineer-in-Charge. Any such materials remaining unused at the time of the completion or termination of the contract shall be returned to the Owner's stores or at a place as directed by the Engineer-in-Charge in perfectly good condition at contractor's cost.

### 52.3 Steel & Cement:

- 52.3.1 If the specification of the work provides for the use of steel or cement such items of steel and cement to the extent required as per the specification of the works, shall be supplied at Owner's stores by the Owner for utilisation in the work on non-chargable basis from time to time depending upon the progress of the work. The tender rates shall be exclusive of the cost of steel and cement to be supplied as per the specification of the work, However, in case of flats and chequeuered plates the same have to be procured by the contractor at his own cost.
- 52.3.2 Such materials of steel and cement shall be issued only for permanent works and not for making other temporary works etc. Contractor shall bear all cost including lifting and loading carting from issue points to work site/contractor stores, custody and handling etc. and return of surplus serviceable/unserviceable materials to owner's store or other places to be designed by owner and no separate payment for such expenditure shall be made.



- 52.3.3 Items of steel as per specification of the work as mentioned above shall be supplied in the available length only. No claim on account of supply of non-standard length shall be entertained. Steel materials shall be issued on actual weight basis.
- 52.3.4 Cement as mentioned above will be supplied to the contractor a receive from the manufacturer/stockist. The theoretical weight of each bag of cement supplied will be considered as 50 Kg.

# 52.3.5 Scraps & Surplus Material:

The Contractor shall return all the surplus/unutilised as well as the scraps and wastages out of the materials supplied to him to the Owner's stores in a perfectly good condition at the contractor's cost. However, the following scraps allowances are permissible.

_	Unac	countable	<b>Accountable</b>
(i)	Cement	3%	Nil
(ii)	Reinforcement Steel	$\frac{1}{2}\frac{0}{0}$	2.5%
(iii)	Steel structural (Plates & Sect	ions) ½%	4.5%
(iv)	M.S. Plates for fabrication of l	Pipes ½%	As per cutting diagrams
			approved by Engineer-in-
			Charge before cutting and
			fabrication.

# 52.3.6 Return of unutilised/surplus materials and scrap/wastage:

In respect of any utilised/surplus quantities of cement and steel supplied by not accounted for and or returned by the contractor shall pay to the Owner amounts at the penal rate of twice the SAIL, Bhubaneswar Stock-yard rate of that particular section of steel and cement as the case may be as on the date of accountability. If the Contractor fails to return the scraps/wastage generated as per the above percentage, recovery of such scrap/wastage shall be made at the rate of Rs. 7000/- per tonne.

The charging of penal rate shall be without the prejudice to the other remedies or action available to the owner against the contractor including any criminal action.

# **52.3.7.** Accounting for Materials:

Every month the Contractor shall submit a statement for all the materials supplied to him by the owner in the proforma prescribed by the Engineer-in-Charge.

- 52.3.8 On completion of the work, the Contractor shall submit material appropriation statement for the materials supplied to him by the Owner.
- **52.3.9** All materials supplied to the contractor shall remain the absolute property of the all times and title therein shall not pass to the contractor at any time. The possession of the materials in the hands of the contractor is only for the

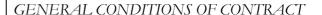




purpose of incorporating the same in the Owner's work. The material supplied shall not be removed by the contractor on any account from the site of work and shall be at all times open for inspection by the Engineer-in-Charge or owners reprsentative. The contractor shall not use the materials supplied to him for any purpose or work other than the work, which the said materials are supplied.

# 53. Conditions for issue of Materials:

- (i) Materials specified as to be issued by the Owner will be supplied to the contractor by the Owner from his stores. It shall be the responsibility of the contractor to take delivery of the materials and arrange for its loading, transport and unloading at the site work at his own cost. The material shall be issued during the working hours of his Stores and as pe the rules of the Owner framed from time to time.
- (ii) The contractor shall bear all incidental charges for the storage and safe custody of materials at site after these have been issued to him.
- (iii) The contractor shall construct suitable godown at the site of work for storing the materials safe against damage by rain, dampness, fire, theft, etc. He shall also employ necessary watch and ward establishment for the purpose.
- (iv) Materials specified as to be issued by the Owner shall be issued in standard sizes as obtained from the manufacturers.
- (v) It shall be duty of the contractor to inspect the materials supplied to his at the time of taking delivery and satisfy himself that they are in good condition. After the materials have been delivered by the Owner, it shall be the responsility of the contractor to keep them in good condition and if the materials are damaged or lost, at any time, they shall be repaired and or replaced by him at his own cost according to the directions of the Engineer-in-Charge.
- (vi) The Owner shall not be liable for delay in supply or non-supply of any materials, which the Owner has unertaken to supply where such failure or delay is due to natural calamities, act of enemies, transport and procurement difficulties and any circumstances beyond the control of the Owner. In no case, the contractor shall be entitled to claim any compensation or loss suffered by him on his account.
- (vii) It shall be the responsibility of the contractor to arrange in time all materials required for the works other than those to be supplied by the Owner. If however in the opinion of the Engineer-in-Charge the execution of the work. Is likely to be delayed due to the contractor's inability's to make arrangements for supply of materials which normally he has to arrange for, the Engineer-in-Charge shall have the right at his own discretion to issue such materials if available with the Owner or procure the materials from the market or elswhere. The contractor will be bound to take such materials at the rates decided by the Engineer-in-Charge. This however, does not in anyway absolve the contractor from responsibility of making arrangement for the supply of such materials in part or in full, should such a situation occur nor shall this constitute a reason for the delay in the execution of the work.





- (viii) Non of the materials supplied to the contractor will be utilised by the contractor for manufacturing item which can be obtained as supplied from standard manufacturer in finished form unless approved by Engineer-in-Charge in writing.
- (ix) The contractor shall, if desired by the Engineer-in-Charge, be required to execute an indemnity bond in the prescribed form for safe custody, usage and accounting of all materials issued by the Owner.
- (x) The contractor shall furnish to Engineer-in-Charge sufficiently in advance a statement showing his requirements of the quantities of the materials to be supplied by the Owner and the time when the same will be required by him for the works, so as to enable the Engineer-in-Charge to make necessary arrangement for procurement and supply of material.
- (xi) Account of the materials to be issued by the Owner shall be maintained by the contractor indicating the daily receipt, consumption and balance in hand in a manner prescribed by the Enginner-in-Charge. All connected papers requisitions, issues returns etc. shall be always available for inspection in the contractor's office at site.
- (xii) The contractor should see that only the required quantities of materials are got issued. The contractor shall not be entitled to cartage and incidential charges for returning the surplus materials, if any, to the stores, place of issue or to the place as directed by the Engineer-in-Charge.
- (xiii) Materials/equipment supplied by Owner shall not be utilised for any other purpose (s) than issued for.
- (xiv) The owner may issue the material in phases at his discretion keeping in view the programmes of the work.
- (xv) In case of free issue of materials, the contractor shall submit an indemnity bond in the prescribed format for 80% (eighty) value of the materials and a bank guarantee for 20% (twenty) of the value of the materials. The indemnity bond and bank guarantee shall be valid till the material acount is totally settled.

# 54. **Return of Surplus:**

Notwithstanding anything contained to the contrary in any or all the clauses of this contract where any materials for the execution of the contract are procured with the assistance of the Owner either by issue from Owner's stock or purchases made under orders, or permits or licences issued by government the contractor shall hold the said materials as trustee for the owner and use such materials economically and solely for the purpose of the contract and not dispose them off without the permission of the Owner and return, if required by the project head all surplus or unserviceable materials that may be left with him after the completion of the contract or at its termination for any reason whatsoever on his being paid or credited such price as the Project head shall determine having due regard so the condition of the materials. The price allowed to the contractor however, shall not exceed the amount charged to him excluding the storage charges, if any. The decision of the project head shall be final and conclusive in such matter. In the event of breach of the aforesaid conditions, the contractor shall, in the terms of the licences, or permits and/ or





for criminal breach of trust, be liable to compensate the Owner at double rate or any higher, in the event of those materials at the time having higher rate or not being available in the market, then any other rate to be determined by the project head and his decision shall be final and conclusive.

# 55. Materials Obtained From Dismantling:

If the contractor in the course of execution of the work is called upon to dismantle any part for reasons other than those stipulated in clauses 57 and 65 hereunder, the materials obtained in the work of dismantling etc. will be considered as the Owner's property and will be disposed off to the best advantage of the Owner.

### 56. Articles of Value Found:

All gold silver and other materials of any descriptions, precious stones, coins, treasures, relics, antiques and other similar things which shall be found, in, under or upon the site, shall be property of the Owner and the contractor shall duly preserve the same to the satisfaction of the Engineer-in-Charge and shall from time to time delivery the same to such person or persons indicated by the Owner.

### 57. **Inspection of Works:**

- 57.1 The Engineer-in-Charge will have full power and authority to inspect the works in progress at any time wherever the premises/ workshops situated, of the Contractor, person, firm or corporation where works in connection with the contract may be or where materials are being or intended to be supplied. The contractor shall afford or procure every facility and assistance to Engineer-in-Charge carry out such inspection. The contractor shall, at all time during the usual working hours and at all other times at which reasonable notice of the intention of the Engineer-in-Charge or his representative to visit the works shall have been given to the contractor, either himself be present to receive orders and instructions or have a responsible agent duly accredited in writing be present for the purpose. Orders given to the contractor's agent shall be considered to have the same force as if they had been given to the contractor himself.
- 57.2The contractor shall give not less than seven days notice in writing to the Engineer-in-Charge before covering up or otherwise placing beyond reach of inspection and measurement any work in order that the same may be inspected and measured. In the event of failure of above the same shall be uncovered and all facilities made available again at contractor's expense for carrying out such measurement or inspection.
- 57.3The contractor is to provide at all times during the progress of the work and maintenance period proper means at access with ladders gangways etc. and the necessary attendance to move and adopt as directed for inspection or measurement of the works by the Engineer-in-Charge.

# 58. Assistance to the Engineer:

The Contractor shall make available to the Engineer-in-Charge free of cost all necessary instructions and assistance in checking of settling out of works and





in the checking of any works made by the contractor for the purpose 0f setting out and taking measurements of work.

# 59. Discrepancies between instructions:

Should any discrepancy arise between the various instructions furnished to the contractor or his agents or staff or if any doubt arises on the meaning or implementation of any such instructions or should there be any difference of opinion on the issues, the contractor shall refer the matter immediately in writing to the Engineer-in-Charge whose decisions thereon shall be final and conclusive. No claim on losses alleged to have been caused by such discrepancies between instructions, doubts or misunderstanding shall in any event be admissible.

# 60. Alterations in Specifications and Designs and Extra Works:

- (a) The Project Head shall have power to make any alterations, in omission from additions to or substitutions, for the schedule of rates, the original specifications, drawings and instructions that may appear to him to be necessary or advisable during the progress of the work, and the contractor shall be bound to carry out such altered/ extra/ new items of work in accordance with any instructions which may be given to him in writing signed by the Project Head and such alterations, omissions, additions or substitutions shall not invalidate the contract and any altered, additional or substituted work which the contractor may be directed to do in the manner above specified as part of the work shall be carried out by the contractor on the same conditions in all respects on which he agreed to do the main work. The time of completion of work may be extended for the part of the particular job at the discretion of the Project Head for any such alterations, additions, or substitutions of the work, as he may consider as just and The rates for such additional, altered or substituted work under the clause shall be worked out in accordance with the following provisions:-
- (b) If the rates for the additional, altered or substituted work are specified in the contract for the work, the contractor is bound to carry out the additional, altered or substituted work at the same rates as are specified in the contract.
- (c) If the rates for the additional, altered or substituted work are not specifically provided in the contract for the work, the rates will be derived from rates for similar class of work as are specified in the contract for the work. The opinion of the Project head as to whether or not the rates can be reasonably so derived from the items in this contract will be final and binding on the contractor.
- (d) If the rates for the additional, altered or substituted work can not be determined in the manner specified in sub-clause (a) & (b) above, then the contractor shall within 7 days of the date of receipt of order to carry out





the work, inform the Project Head of the rate which it is his intention to charge for such class of work, supported by analysis of the rate or rates claimed, and the project Head shall determine the rate or rates on the basis of the prevailing market rates of materials plus labour cost including equipment hire charge at schedule of hourly/ daily rates plus 15% to cover contractor's supervisions overhead and profit and pay to the contractor accordingly. The opinion of the Project Head to current market rates of the materials and the quantum of labour and equipment involved per unit of measurement will be final and binding on the contractor. The schedule of hourly/ daily rates shall be as enclosed.

# 61. Action Where no Specification is issued:

In case of any class of work for which there is no such specification supplied by the Owner as is mentioned in the tender document such work shall be carried out in accordance with the Indian Standard Specifications. If the Indian Standard Specifications do not cover the same, the work should carried out as per standard Engineer in Practice subject to the approval of the Engineer-in-Charge.

# **Abnormal Rates:**

The contractor is expected to quote the rate for each item after careful analysis of cost involved for the satisfactory performance and completion of item work considering all specifications and conditions of contract. This will avoid loss of profit or gain in case of curtailment or change in specification for any other item. In case the rate quoted by the tenderer for any item are usually high or unusually low it will be sufficient cause of the rejection of the tender unless the Owner is convinced about the reasonableness of the analysis for such rate furnished by the tenderer (on demand) after scrutiny.

# 63. Tests For Quality Works:

- 63.1 All materials and workmanship shall be of the respective kinds described in the contract documents and in accordance with the instructions of the Engineer-in-Charge and shall be subjected from time to time to such tests at contractor's cost as the Engineer-in-Charge may direct at the place of manufacture or fabrication or at the site or at all or any such places. The contractor shall provide assistance, instruments, machines, labour and materials as are required for examining, measuring and testing any workmanship as may be selected and required by the Engineer-in-Charge.
- 63.2 All the tests that will be necessary in connection with the execution of the work as decided by Engineer-in-Charge shall be carried out at the field testing laboratory of this Owner if available by paying the charges as decided by the Owner from time to time. In case of non-availability of testing facilities with the Owner, the required laboratory as directed by Engineer-in-Charge.
- 63.3 If any tests are required to be carried out in connection with the work or materials or workmanship not supplied by the contractor, such tests shall be





carried out by the contractor as per the instructions of Engineer-in-Charge and cost of such tests shall be reimbursed by the Owner.

# 64. Samples:

The contractor shall furnish to the Engineer-in-Charge for approval when request or if required by the specifications, adequate samples of all materials and finished to be used in the work. Such samples shall be submitted before the work is commenced and in sample time to permit tests and examinations thereof. All materials furnished and finishes applied in actual work shall be fully equal to the approved samples.

# 65 Liabilities for Defect, Imperfections etc. and Rectifications Thereof:

If it shall appear to the Engineer-in-Charge that any work has been executed with unsound, imperfect or unskilled workmanship, or with materials of any inferior description, or that any matrials or articles provided by the contractor for the execution of work are unsound or of quality inferior to that contracted for, or otherwise not in accordance with the contract, the contractor shall on demand in writing from the Engineer-in-Charge or his authorised representative specifying the work, materials or articles complained of, notwithstanding that the same may have been inadvertently passed, certified and paid for, forthwith rectify or remove and reconstruct that work so specified and provide other proper and suitable materials or articles at his own charge and cost, and in the event of failure to do so within a period to be specified by the Engineer-in-Charge in his demand aforesaid, the Engineer-incharge may on expiry of notice period rectify or remove, and re-execute the work or remove and replace with others, the materials or articles complained of as the case may be at the risk and expense in all respects of the contract. The decision of the Engineer-in-Charge as to any question arising under this clause shall be final and conclusive.

# 66. Suspension of Works:

- (i) Subject to the provision of sub para (ii) of this clause, the contractor shall if orderded in writing by the Engineer-in-Charge., or his representative, temporarily suspend the works or any part thereof such period and such time as so orderded and shall not, after receiving such written orders, proceeds with the work therein, orderded to be suspended until he shall have received a written order to proceed therewith. The contractor shall not be entitled to claim compesation for any loss or damage sustained by him by reason of temporary suspension of the works aforesaid. An extension of time for completion, corresponding with the delay caused by any such suspension of the works as aforesaid will be granted to the contractor should be apply for the same provided that the suspension was not consequent to any default or failure on the part of the contractor.
- (ii) In case of suspension of entire work, orderded in writing by the Enginner-in-Charge, for a period of more than two months, the contractor shall have the option to terminate contract.



# **67.** Possession Prior to Completion:

The Engineer-in-Charge shall have the right to take possession of or any completed or partially completed work or part of the work. Such possession or use shall not be deemed to be an acceptance of any work completed in accordance with the contract. If such prior possession or use by the Engineer-in-Charge delay the progress of work, equitable adjustment in the time of completion will be made and the contract agreement shall be deemed to be modified accordingly.

# Twelve months Period of Liability from the Date of Issue of Completion Certificate:

- 68.1 The contractor shall gurantee the installation/work for a period of 12 months from the date of completion of work as certified by the Engineer-in-Charge which is indicated in the completion certificate. Any damage or defect that may arise though remained undeiscovered at the time of issue of completion certificate, connected in any way with the equipment or materials supplied by him or in the workmanship shall be rectified or replaced by the contractor at his own expenses as deemed necessary by the Engineer-in-Charge or in default the Engineer-in-Charge may cause the same to be made good by other agency and deduct expenses (of which the certificate or Engineer-in-Charge shall be final) from any sums that may be then or at any time thereafter become due to the contractor or from his security deposit, or the proceeds of sale thereof or of a sufficient portion thereof.
- 68.2 If the contractor feels that any variation in work or in quality of materials or proportions would be beneficial or necessary to fulfil the guarantees called for, he shall bring this in writing to the notice of the Engineer-in-Charge.

### 68.3 Care of works:

From the commencement of completion of the work, the contractor shall take full responsibility for the care of all works including all temporary works and in case any damage, loss or injury shall happen to the work or to any part thereof or to any temporary works from any cause whatsoever, shall at his own cost repair and make good the same so that on completion the work shall be in good order and in conformity in every respects with the requirements of the contract and the Engineer-in-Charge's Instructions.

# **68.4** Defects Prior to Taking Over:

If at any time before the work is taken over, the Engineer-in-Charge shall:

(a) Decide that any work done or materials used by the contractor or any subcontractor is defective or not in accordance with the contract, or that the works or any portion therof are defective, or do not fulfil the requirements of contract (allsuch matter, being hereinafter, called 'Defects' in this clause) and (b) as soon as reasonably practicable gives to the contractor notice in writing of the said decision specifying particulars of the defects claimed to exist or to have occurred then the contractor shall at his own expenses and with all speed make good the defects so specified.





In case contractor shall fail to do so, the Owner may take, at the cost of contractor, such steps as may in all circumstances be reasonable to make good such defects. The expenditure so incurred by the owner be recovered from the amount due to the contractor. The decision of the Engineer-in-Charge with regard to the amount to be recovered from the contractor will be final and binding on the contractor. As soon as the works have been completed in accordance with the contract (except minor respects that do not affect their use for the purpose for which they are intended and except for maintenance thereof provided in clause 68.1 of General Conditions of Contract) and have passed the tests on completion, the Engineer-in-Charge shall issue a certificate (hereinafter called completion certificate) in which he shall certify the date on which the works have been so completed and have passed the said tests and the Owner shall be deemed to have taken over the works on the date so certified. If the works have been divided into various groups in the contract, the Owner shall be entitled to take over any group or groups before the other or others.

### 68.5 Defect After Taking Over:

In order that the contractor could obtain a completion certificate he shall make good with all possible speed, any defect arising from the defective materials supplied by the contractor or that may have been notices or developed, after the works or group of the works has been taken over, the period allowed, for carrying our such work will be normally one month. If any defect be not remedied within a reasonable time, the owner may proceed to do the work at contractor's Risk and expenses and deduct from the final bill such amount as may be decided by the Owner.

If by reason of any default on the part of the contractor a completion certificate has not been issued in respect of every portion of the works within one month after date fixed by the contract for the completion of the works, the Owner shall be a liberty to use the work or any portion therof in respect of which a completion certificate has not been issued, provided that the works or the portion thereof so used as aforesaid shall be afforded reasonable opportunity for completion of these works for the issue of completion certificate.

# 68.6 Guarantee/Transfer of Guarantee:

For works like water-proofing, acid & alkali resisting materials, preconstruction soil treatment against termite or any other specialized works etc. the contractor shall invariable engage sub-contractors who are specialists in the field and firms or repute and such a sub-conractor shall furnish guarantees for their workmanship to the Owner, through the contractor. In case such a sub-contractor/firm is not prepared to furnish a guarantee to the owner, the contractor shall give that guarantee to the Owner directly.



# SECTION – VI CERTIFICATE AND PAYMENT

### **69. SCHEDULE OF RATE AND PAYMENTS:**

### 69.1 **Contractor's Remuneration:**

The price to be paid by the Owner to the contractor for the whole of the work done and for the performance of all the obligations undertaken by the contractor under the contract document shall be ascertained by the application of the respective schedule of rates (the inclusive nature of which is more particularly defined by way of application but not of limitation, with clause No. 69.2) and payment to be made accordingly to the work actually executed and approved by the Engineer-in-Charge. The sum so ascertained shall(exception only as and to the extent expressly provided here in ) constitute the sole and inclusive of remunaeration of the contractor under the contract and no further or other payment whatsoever shall be or become due or payable to the contractor under the contract.

### 69.2 Schedule of Rates to the Inclusive:

The prices/rates quoted by the contractor shall remain firm till the issue of final certificate and shall not be subject to escalation. Schedule of rates shall be deemed to include and cover all costs, expenses and liabilities of every description and all risks of every kind to be taken in executing, completion and handing over the work to the Owner by the contractor. The contractor shall be deemed to have known the nature, scope, magnitude and the extent of the works and materials required though the contract document may not fully and precisely furnish them. Hr shall make such provision in the schedule of rates as he may consider necessary to cover the cost of such items of work and materials as may be reasonable and necessary to completer the work. The opinion of the Engineer-in-Charge as to the items of work which are necessary and reasonable for completion of work shall be final and binding on the contract documents.

Generality of this present provision shall not be deemed to cut down or limited in any way because in certain cases it may and in other cases it may not expressly stated that the contractor shall do or perform a work or supply articles or perform with services at his own cost or without addition of payment or without extra charge or works to the same effect or that it may be stated or not stated that the same are included in and covered by the schedule of rates.

# 69.3 Schedule of rates to cover Cconstructional Plant, Materials. Labours etc.:

Without in any way limiting the provision of other subclauses the schedule of rates shall be deemed to include the cover the cost of all constructional plant, temporary works (except as provided for herein), pumps, materials, labour, insurance, fuel, stores, and appliances to be supplied by the contractor and all other matters in connection with each items in the schedule of quantities and





the execution of the works or any portion thereof finished complete in every respect and maintained as shown or described in the contract documents or as may be ordered in writing during the continuance of the contract.

### 69.4 Schedule of Rates to cover Royalties, Rents and Claims:

The schedule of rates shall be deemed to include and cover the cost of all royalties and fees for the articles, processes, protected by letters, patent or otherwise incorporated in or used in connection with the works, also all royalties, rents, and other payments in. connection with obtaining materials of whatsoever kind for the works and shall include an indemnity to the owner which the contractor hereby gives against all actions, proceedings, claims, damages, costs and expenses arising from the incorporation in or use on the works of any such articles, processes or charges if levied on materials, equipment or machinery to be brought to site for use on work, shll be borne by the contractor.

#### 69.5 Schedule of Rates to cover taxes and duties:

No exemption or reduction of custom duties, excise duties, sales tax, quay or any port duties, transport charges, stamp duties or Central or State Government or Local Body (or from any other body) or Municipal Taxes or duties, taxes or charges whatsoever will be granted or obtained and all expenses of which shall be deemed to be included in and covered by the schedule of rates. The contractor shall be obtain and pay for all permits or other privileges necessary to complete the work.

# 69.6 Schedule of Rates to cover Risk of Delay:

The schedule of rates shall be deemed to include and cover the risk of all responsibilities of delay and interference with the contractor's conduct of work which occur from any cause including orders of the owner in the exercise of his powers and on account of extension of time granted due to various and for all other possible or probable causes of delay.

# 69.7 Schedule of Rates cannot be altered:

For work under unit rate basis no alteration will be allowed in the schedule of rates by reasons of works or any part of them being modified, altered, extended, diminished or omitted. The schedule of rates is of fully inclusive rates which have been fixed by the contractor and agreed to by the Owner and cannot be altered.

69.7.1 The schedule of rates to cover for working in operating plant. Contractor's rates shall be deemed to include taking into account that he has to work in operating plant and shall take sufficient care in moving the plants, equipments and materials from one place to another, so that they do not cause any damage to any person or to the property of the owner or to thirty party including over head and underground cable/pipe lines. In the event of such damages including eventual loss of production and operation of the plant or services in any plant or establishment as estimated by the owner or ascertained or by the





third party shall be borne by the contractor. Since the work is to be executed for the expansion of the plant, the rate of the contractor shall also deem to include all interference/obstruction/interruption for which no compensation shall be paid to be contractor.

# 70. Procedure For Measurement/ Billing of Work in Progress:

70.1 All measurements shall be in metric system. All the works in progress will be jointly measured by the representative of the Engineer-in-Charge and the contractor's authorised agent progressively. Such measurements will be got recorded in the measurement book by the Engineer-in-Charge or his authorised representative and signed in token of acceptance by the contractor or his authorised representative.

For the purpose of taking joint measurement the contractor's representative shall be bound to be present whenever required by the Engineer-in-Charge. If, however, he absents for any reason whatsoever the measurements will be taken by the Engineer-in-Charge or his representative and this will be deemed to be correct and binding on the contractor.

# 70.2 Billing:

The contractor will submit a bill in approved proforma in accordance with the contract terms and the agreed billing schedules in quintuplicate to the Engineer-in-Charge giving abstract and detailed measurement for the various items executed during a month, before the expiry of the first week of the succeeding month. The Engineer-in-Charge shall take or cause to be taken the requisite measurements for the purpose of having the same verified and the claim as far as admissible, adjusted, if possible, before the expiry of 10 days form presentation of the bill.

- 70.2.1 The bill shall be submitted by the contractor in computerised formats approved by the owner. The bills along-with floppies containing measurement of work, particulars of materials, recoveries etc. have to be submitted to the owner.
- 70.2.2 For lump-sum contracts, the payment will be according to agreed billing schedule. No adjustment shall be allowed in lump-sum prices for any variations in the quantities, specifications etc. shall take or a cause to be taken the requisite measurement for the purposes of having the same verified and the claim as far as admissible, adjusted, if possible, before the expiry of 10 days from presentation of the bill.

### **70.3** Secured Advance on Materials:

In case of tenders for completed items of works, contractor may be allowed "Secured Advance" on the security of materials brought to site for execution of the contracted items of work to the extent of 75% of the value of materials which go into the completed works as assessed by the Engineer-in-Charge provided that the materials are of an imperishable nature and that formal





agreement is drawn up with the contractor under which the Owner secures a lien on the materials and is safe guarded against losses due to the contractor postponing the execution of the work or to the improper storage &/or misuse of the materials and against the expenses entitled for their proper watch and safe custody. Recoveries of advances so made would not be postponed until the whole of the work entrusted to the contractor is completed. They should be adjusted from his running account bills for work done as the materials are used, the necessary deductions being made whenever the items of work in which they are used and billed for.

### 70.4 **Dispute in Mode of Measurement:**

In case of any dispute as to the made of measurement not covered by the contract to be adopted for any item of work, mode of measurement as per latest Indian Standard Specifications shall be followed.

# **70.5** Rounding of Amounts:

In calculating the amount of each item due to the contractor in every certificate prepared for payment, sum of less than 50 paisa shall be omitted and the total amount on each certificates shall be rounded off to the nearest, i.e. sum of less than 0.50.p shall be omitted and sums of 0.50p and more upto one rupee shall be reckoned as one rupee.

### 71. LUMPSUMS IN TENDER:

For the item in tender where it includes lumpsum in respect of parts of work, the contractor shall be entitled to payment in respect of the items at the same as are payable under this contract for such items, or if the part of the work in question is not, in the opinion of the Engineer-in-Charge capable of measurement, or determination, the Owner may at his discretion pay the lumpsum amount entered in the tender or a percentage thereof and the certificate in writing of the Engineer-in-Charge shall be final and conclusive against the contractor with regards to any sum payable to him, under the provisions of this clause.

# 72. RUNNING ACCOUNT PAYMENTS TO BE REGARDED AS ADVANCE:

All Running Account Payment shall be regarded as Payments by way of advance against the final payment only and not as payment for work actually done and completed, and shall not preclude the requiring of bad, unsound and imperfect or unskilled work to be removed and taken away and reconstructed or re-erected or be considered as an admission of the due Performance of the contract, or any part thereof, in this respect, or of the accruing of any claim by the contractor, nor shall it, conclude, determine or affect in any way the powers of the Owner under these conditions or any of them as to the final settlement and adjustments of the accounts or otherwise, or in any other way vary or affect the contract. The final bill shall be submitted by the contractor within one month from the sate of physical completion of the work, otherwise,



the Engineer-in-Charge's certificate of the measurement and of total amount payable for the work accordingly shall be final and binding on all parties.

#### 73. NOTICE OF CLAIMS FOR ADDITIONAL PAYMENT:

Should the contractor consider that he is entitled to any extra payment or compensation or to make any claims whatsoever in respect of the works arising under the terms of this contract he shall forthwith give notice in writing to the Engineer-in-Charge that he claims extra payment within ten days from the ordering of any work or happening of any event upon which the contractor bases such claims and such notice shall contain full particulars of the nature of such claims with necessary particulars as above within the time above specified shall be an absolute waiver thereof. No omission by the Owner to reject any such claim and no delay in dealing therewith shall be waiver by the Owner of any right in respect thereof.

### 74. PAYMENT OF CONTRACTOR'S BILL:

No payment shall be made for works estimated to cost less that Rs. 10,000/-till the whole of the work shall have been completed and a certificate of completion given. But in case of works estimated to cost more that Rs. 10,000/- the contractor, on submitting the bill thereof be entitled to receive a monthly payment proportionate to the part thereof approved and passed by the Engineer-in-Charge, whose certificate of such approval and passing of the sum so payable be final and conclusive against the contractor. This payment will be made after making necessary deductions as stipulated elsewhere in the contract document for materials, security deposit etc. or any statutory recoveries.

Payment due to the contractor shall be made by the Owner, by Crossed Account Payee Cheque forwarding the same to registered office or the notified office of the contractor. In no case will owner be responsible if the Cheque is mislaid or misappropriated by un-authorised person/ persons. In all cases, the contractor shall present his bill duly pre-receipted on proper revenue stamp.

All payment shall be made in Indian Currency.

# 75. Receipt For Payment:

Receipt for payment made on account of work when executed by a firm, must be signed by a person holding due power of attorney in this respect on behalf of the contractor, except when the contractors are described in their tender as limited company in which case the receipts must be signed in the name of the company by one of its principal officers or by some other persons having authority to give effectual receipt for the company.

# **76.** Completion Certificate:

# **76.1.** Application for completion certificate:





When the contractor fulfils his obligation under clause 69.4 he shall be eligible to apply for completion certificate in respect of the work by submitting the completion documents along with such application for completion certificate.

The Owner or his representative shall normally issue to the contractor the completion certificate within one month after receiving an application therefor from the contractors after verifying from the completion documents and satisfying himself that the work has been completed in accordance with and as set out in the construction and erection drawings, and the contract documents.

The contractor, after obtaining the completion certificate, is eligible to present the final bill for the work executed by him under the terms of contract.

# **76.2.** Completion Certificate:

Within one month of the completion of work in all respects, the contractor, shall be furnished with a certificate by the owner or his representative of such completion but no completion certificate shall be given not shall the work be deemed to have executed until all, scaffolding, surplus materials and rubbish is cleared off the site completely not until the work shall have been measured by the Engineer-in-Charge, whole measurement shall be binding and conclusive. The work will not be considered as complete and taken over by the owner, until all the temporary work, labour and staff colonies etc. constructed are removed and work site cleared to the satisfaction of the Engineer-in-Charge.

If the contractor shall fail to comply with the requirements of this clause on or before the date fixed for the completion of the work, the Engineer-in-Charge may at the expenses of contractor remove such scaffolding, surplus materials and rubbish and dispose off the same as he thinks fit and clean off such dirt as aforesaid, and the contractor shall forthwith pay the amount for all expenses so incurred and shall have no claim in respect of any such scaffolding or surplus materials as aforesaid except for any sum actually realized by the sale thereof.

# Completion Certificate shall be in 3 parts as follows:

- (1) Physical/ Mechanical Completion work.
- (2) Satisfactory completion of commissioning of equipment with load.
- (3) Satisfactory completion of guarantee.

The contractor shall clearly indicate the 3 dates separately.

# **76.3.** Completion Documents:

For the purpose of Clause 76 the following documents will be deemed to form the completion documents:

(i) The technical documents according to which the work was carried out.





- (ii) Three sets of construction drawings showing therein the modification and corrections made during the course of execution and signed by the Engineer-in-Charge.
- (iii) Completion Certificate for embedded and covered –up works.
- (iv) Certificate of final levels as set out for various works.
- (v) Certificate of tests performed for various works.
- (vi) Material appropriation statement to the materials issued by the owner for the works and list of surplus materials returned to the owner's store duly supported by necessary documents.
- (vii) Physical/ Mechanical Completion work.
- (viii) Satisfactory completion of commissioning of equipment with load.
- (ix) Satisfactory completion of guarantee.

The Contractor shall clearly indicate the 3 dates separately.

### 77. Final Decision And Final Certificate:

Upon the expiration of the period of liability and subject to the Engineer-in-Charge being satisfied that the works have been duly maintained by the contractor during monsoon or such period as herein provided in clause 68.1 and that the contractor has in all respect duly made up all subsidence and performed all his obligations under the contract, the Engineer-in-Charge shall (without prejudice to the right of the Owner to retain the provisions of relevant clause hereof) otherwise give a certificate, herein referred to as the final certificate, to the effect and the contractor shall not be considered to have fulfilled the whole of his obligations under the contract until Final Certificate shall have been given by the Engineer-in-Charge notwithstanding any previous entry upon the work and taking possession, working or using of the same or any part thereof by the Owner.

# 78. Certificate And Payments No Evidence of Completion:

Except the final certificate no other certificate or payment against a certificate or on general account shall be taken to be an admission by the Owner of the due performance of the contract of any part thereof or of occupancy or validity of any claim by the Contractor.

# **SECTION – VII**



# TAXES AND INSURANCE

# 79. TAXES, DUTIES, OCTROI ETC.

79.1. The Contractor shall defray all charges, such as rent, toll local taxes excise duty, other payments and compensations, if any, in connection with the procurement and handling of materials, fabrication and execution of works or any method or process connected with the works or Temporary works.

Sales Tax or any other tax on materials required for the works as also Tax on works contract shall be payable by the Contractor and the Owner will not entertain any claim whatsoever in this regard.

79.2. Notwithstanding anything contained elsewhere in the contract, the owner shall deduct at source from the payments due to the contractor, the taxes as required under Section -13—AA of the Orissa Sales Tax Act or as amended from time to time or under any other statue. The amounts so deducted shall be deposited by the Owner with the Sales Tax authorities as per Law. It is for the contractor to deal with the Sales Tax authorities directly in respect of any claim or refund relating to the above deductions and the owner shall not be liable or responsible for any claims or payments or reimbursement in this regard.

### **80.** INSURANCE:

Contractor shall at his own expense carry and maintain insurance with reputed insurance companies to the satisfaction of the Owner as follows:

# **80.1** Employees State Insurance Act:

The contractor agrees to and does hereby accept full and exclusive liability for compliance with all obligations imposed by the Employees State Insurance Act., 1948, and the contractor further agrees to defend, indemnify and hold Owner harmless form any liability of penalty which may be imposed by the Central, State or Local authority by the reason of any asserted violation by contractor or Sub-contractor of the Employee's State Insurance Act, 1948 and also from all claims, suits or proceeding that may be brought against the Owner arising under, growing out of or by reasons of the work provided for by this contract whether brought by employees of the contractor, by third parties or by Central or State Government authority or any political sub-division thereof.

The contractor agrees to fill in with the Employees State Insurance Corporation, the Declaration Forms and all forms which may be required in respect of the contractor's or sub-contractor's employees, whose aggregate remuneration is Rs. 560.00 per month or less and who are employed in the work provided for or those covered by ESI from time to time under the Agreement. The contractor shall deduct and secure the agreement of the sub-contractor to deduct the employee's contribution as per the first schedule of the Employee's State Insurance Act from wages and affix the employee's





contribution cards at wages payments intervals. The contractor shall remit and secure the agreement of the sub-contractor to remit to the State Bank of India, Employees State Insurance Corporation Account, the employee's contribution as required by the Act. The contractor agrees to maintain all cards and records as required under the Act in respect of employees and payments and the contractor shall secure the agreement of the sub-contractor to maintain such records. Any expenses incurred for the contributions, making contributions or maintaining records shall be to the contractor's or sub-contractor's account.

The Owner shall retain such sum as may be necessary from the total contract value until the contractor shall furnish satisfactory proof that all contribution as required by the Employees State Insurance Act, 1984, have been paid. This will be pending on the contractor when the Employees State Insurance Act is extended to the place of work.

# **80.2** Workmen Compensation and Employees Liability Insurance:

Insurance shall be affected for all the contractor's employees engaged in the performance of this contract. If any of the work is subject, the contractor shall require the sub-contractor to provide workmen's compensation and employer's liability insurance for the latter's employees if such employees are not covered under the contractor insurance.

# 80.3 Any other insurance required under Law or Regulations or by Owner:

Contractor shall also carry and maintain any and all other insurance, which he may be required under any law or regulation from time to time. He shall also carry and maintain any other insurance, which may be required by the Owner.

### **80.4** Accident or Injury to workmen:

The owner shall not be liable for or in respect of any damages or compensation payable at law in respect or in consequence of any accident or injury to any workman or other person in the Employment of the contractor or any sub-contractor save and except and accident or injury resulting from any act or default of the Owner, his agents or servants and the contractor shall indemnify and keep indemnified the Owner against all such damages and compensation (save and except as aforesaid) and against all claims, demands, proceeding, costs, charges and expenses, whatsoever in respect or in relation thereto.

### **80.5** Transit Insurance:

In respect of all items to be transported by the Contractor to the site of work, the cost of transit insurance should be borne by the contractor and the quoted price shall be inclusive of this cost.

# 81 DAMAGE TO PROPERTY OR TO ANY PERSON OR ANY THIRD PARTY:

81.1 Contractor's rate shall deem to include taking into account that he has to work in operating plant and shall take sufficient care in moving the plants, equipment and materials from one place to another so that they do not cause



### GENERAL CONDITIONS OF CONTRACT

any damage to any person or to the property of the Owner or to a third party including over head and underground cables, pipelines. In the event of such damages including eventual loss of production and operation of the plants or services in any plant or establishment as estimated by the Owner or ascertained or by the third party shall be borne by the Contractor.

- 81.2 Contractor shall also be responsible for making good to the satisfaction of the Owner any loss or any damage to all structures and properties belonging to the Owner or being executed or procured or being procured by owner or by other agency within the premises of all the work or Owner. If such loss or damages is due to fault and or the negligence or willful acts or omission of the contractors, his employees, agents, representatives or sub-contractors.
- 81.3 The contractor shall indemnify and keep the owner harmless of all claims for damages to property other than owner's property arising under or by reason of this contract if such claims result from the fault and/ or negligence or willful acts or omission of the contractor, agents, representative or sub-contractor.

### **DEMURRAGE DUES:**

The contractor shall pay demurrage charges incurred by the Owner because of the contractor's failure to load or unload any goods or materials within the time allowed by the Railway and/ or Transport Agency for such loading or unloading as charges incurred by the contractor within the permissible time as also charges due on consignments booked by or to him. In case the contractor fails to pay these charges, these charges shall be deducted from any sums, which may be due or become due to the contractor in terms of this contract and/ or any other contract.



# SECTION – VIII LABOUR LAWS AND ARBITRATION

### 83 LABOURER LAWS:

Contractor shall comply with any and all laws, ordinances, regulations and decision of courts (which shall be deemed to be a part of this Agreement) concerning the health, sanitary arrangements, wages, welfare, safety and employment of any and all of his workers upon the Project or any portion thereof and shall exclusively bear the consequences of failure to comply therewith Contractor shall Indemnify and hold Engineer and Owner harmless from any claims, fines or penalties which may be made against Engineer or Owner as result of Contractor's failure to fulfil these obligations.

Without limiting the generality of the foregoing, Contractor shall fully comply with.

The contractor shall obtain clearance from the Labour Department regarding the compliance of the labour laws on 6 monthly basis and submit to the owner for record.

- (i) No labour below the age of 18 (eighteen) years shall be employed on the work.
- (ii) The contractor shall not pay less than what is provided under law to labourers engaged by him on the work.
- (iii) The contractor shall at his expense comply with all labour laws and keep the Owner indemnified in respect thereof.
- (iv) The contractor shall pay equal wages for men and women in accordance with applicable labour laws.
- (v) If the contractor is covered under the contractor labour (Regulation and Abolition) Act, he shall obtain a licence from licensing authority (i.e. office of the labour commissioner) by payment of necessary prescribed fee and the deposit, if any, before starting the work under the contract.
- (vi) The Contractor shall employ labour in sufficient numbers either directly or through sub-contractors to maintain the required rate of progress and of quality to ensure workmanship of the degree specified in the Contract and to satisfaction of the Engineer-in-Charge. The contractor shall not employ in connection with the works any person who has not completed his 18 (eighteen) years of age.
- (vii) The Contractor shall furnish to the Engineer-in-Charge the distribution return of the number and description, by trades of the work people





employed on the works. The Contractor shall also submit on the 4<sup>th</sup> and 19<sup>th</sup> of every month to the Engineer-in-Charge a true statement showing in respect of the second half of the preceding month and the first half of the current month (1) the accidents that occurred during the said fortnight showing the circumstance-under which they happened and the extent of damage and injury caused by them and (2) the number of female workers who have been allowed Maternity benefit as provided in the Maternity Benefit Act 1961 or Rules made thereunder and the amount paid to them.

- (viii) The contractor shall comply with the provisions of the payment of Wages Act 1936, Minimum Wages Act 1938, Employees Liability Act 1928. Workmen's Compensation Act, 1923, Industrial Dispute Act 1947, the Maternity Benefit Act 1961, Employees Provident Fund Act, 1952 and Contract Labour regulation and abolition Act 1937, Employment of Children Act 1938 or any modifications thereof or any other law relating thereto and rules made thereunder from time to time.
- (ix) The Engineer-in-Charge shall on a report having been made by an Inspecting Officer as defined in Contract Labour (Regulation and Abolition) Act 1970 have the power to deduct from the moneys due to the Contractor any sum required or estimated to be required for making good the loss suffered by a worker or Workers by reason of nonfulfillment of the Conditions of the Contractor for the benefit of workers, non-payment of wages or of deductions made from his or their wages which are not justified by the terms of the Contract or non-observance of the said regulations.
- (x) The Contractor shall indemnify the Owner against any payments to be made under and for the observance of the provisions of the aforesaid Acts without prejudice to his right to obtain indemnity from his subcontractors. In the event of the contractor committing a default or breach of any of the provisions of the aforesaid Acts as amended from time to time, of furnishing any information or submitting or filling any Form/Register/Slip under the provisions of these Acts which is materially incorrect then on the report of the inspecting Officers the Contractor shall without prejudice to any other liability pay to the owner a sum not exceeding Rs. 50.00 as liquidated damages for every default, breach of furnishing, making submitting, filling materially incorrect statement as may be fixed by the Engineer-in-Charge and in the event of the contractor's default continuing in this respect the liquidated damages may be enhanced to Rs. 50.00 per day of default subject to a maximum of one percent of the estimated cost of the works put to tender. The Engineer-in-Charge shall deduct such amount from bills or security deposit of the Contractor and credit the same to the welfare fund constituted under these acts. The decision of the Engineer-in-Charge in this respect shall be final and binding.



# 84 Implementation Of Apprentices Act 1961:

The contractor shall comply with the provisions of the Apprentices Act 1961 and the Rules and orders issued thereunder from time to time. If he fails to do so, his failure will be a breach of the contract and the Engineer-in-Charge may, at his discretion, cancel the contract. The contractor shall also be liable for any pecuniary liability arising of any violation by him of the provisions of the Act.

# 85 Contractor to Indemnify the Owner:

85.1 The contractor shall indemnify the Owner and every member, Officer and employee of the owner, also the Engineer-in-Charge and his staff against all actions, proceedings, claims, demands costs and expenses whatsoever arising out of or in connection with the matter referred to in clause 81 and elsewhere and all actions, proceedings, claims demands costs and expenses which may be made against the Owner for or in respect of or arising out of any failure by the contractor in the performance of his obligations under the contract. The Owner shall not be liable for or in respect of any demand or compensation payable by law in respect or in consequence of any accident or injury to any workman or other person in the employment of the contractor or his subcontractor and contractor shall indemnify and keep indemnified the Owner against all such damage and compensation and against all claims, damages, proceedings, costs, charges and expenses whatsoever thereof or in relation thereto.

# 85.2 Payment of Claims and Damages:

Should the Owner have to pay any money in respect of such claims or demands as aforesaid the amount so paid and the cost incurred by the Owner shall be charged to and paid by the Contractor and the contractor shall not be at liberty to dispute or question the right of the Owner to make such payments notwithstanding the same may have been made without his consent or authority or in law or otherwise to the contrary.

85.3 In every case in which by virtue of the provisions of section 12, sub-section (i) of workmen's compensation Act, 1923 or other applicable provision of Workman Compensation act or any other act, the Owner is obliged to pay compensation to workman employed by the contractor in execution of the works, the Owner will recover from the contractor the amount of the compensation so paid, and without prejudice to the rights of Owner under section 12, sub-section (2) of the said act. Owner shall be at liberty to recover such amount or any part thereof by deducting it from the security deposit or from any sum due to the contractor whether under this contract or otherwise. The Owner shall not be bound to contest any claim made under section 12 sub-section (I) of the said Act except on the written request of the contractor and upon his giving to the Owner full security for all costs for which the Owner might become liable in consequence of contesting such claims.



# 86. Health and Sanitary Arrangements For Workers:

- 86.1 In respect of all labour directly or indirectly employed in the works for the performance the contractor's part of this agreement, the contractor shall comply with or cause to be complied with all the rules and regulations of the local sanitary and other authorities or as framed by the Owner from time to time for the protection of health and sanitary arrangements for all workers.
- 86.2 The contractor shall provide in the labour colony all amenities such as Electricity, water and other sanitary and health arrangements. The Contractor shall also provide necessary surface transportation to the place of work and back to the colony for their personnel accommodated in the labour colony.

### 87. Arbitration:

All disputes or differences whatsoever which shall at any time arise between the parties hereto touching or concerning the works or the execution or maintenance thereof of the contract or the rights touching or concerning the works or the execution or maintenance thereof of this contract or the construction meaning operation or effect thereof or to the rights or liabilities of the parties or arising out of or in relation thereto whether during or after completion of the contract or whether before or after determination, fore closure or breach of the contract (other than those in respect of which the decision of any person is by the contract expressed to be final and binding shall after written notice by either party to the contract to the other of them and to the Appointing Authority hereinafter mentioned be referred for adjudication to a sole Arbitrator to be appointed as hereinafter provided.

For the purpose of appointing the sole Arbitrator referred to above, the Appointing Authority will send within thirty days of receipt of the notice, to the contractor a panel of three names of persons.

The contractor shall on receipt of the names as referred selected any one of the person names to be appointed as a sole Arbitrator and communicate his name to the Appointing Authority within thirty days of receipt of the names. The appointing Authority shall there upon without any delay appoint the said person as the sole Arbitrator. If the contractor fails to communicate such selection as provided above within the period specified, the Appointing Authority shall make the selection and appoint the selected person as the sole Arbitrator.

If the Arbitrator so appointed is unable or unwilling to act or resigns his appointment or vacate his office due to any reason whatsoever sole Arbitrators shall be appointed as aforesaid. The work under the contract shall, however continue during the arbitration proceedings.

The Arbitrator shall be deemed to have entered on the reference on the date he issues notices to both the parties fixing the date of the first hearing.



### GENERAL CONDITIONS OF CONTRACT

The Arbitrator may, from time to time, with the consent of the parties, enlarge the time for making and publishing the award.

The Arbitrator shall give a separate award in respect of each dispute or difference and shall give a reasoned and speaking award/ awards.

The venue of arbitration shall be at Bhubaneswar. However, if the situation so warrants, it may, as and when required, be held at the place where the site of work is situated.

The fees, if any, of the Arbitrator shall, if required to be paid before the award is made and published be paid half and half by each of the parties. The costs of the reference and of the award including the fees, if any of the Arbitrator shall be in the discretion of the Arbitrator who may direct to and by whom and in what manner, such costs or any part thereof shall be paid may fix or settle the amount of costs to be so paid.

The award of the arbitrator shall be final and binding on both the parties.

Subject to aforesaid, the provisions of the Arbitration Act 1940 or any statutory modification or re-enactment thereof and the rules made thereunder, and for the time being in force shall apply to the arbitration proceeding under this clause.

For Public Sector Enterprises guidelines as per the circular of BPE No. 15/9/86-BPE (FIN) dated 30.03.89 as amended time to time will be followed.

### 88. Jurisdiction/ Governing Laws:

### (a) Jurisdiction:

For all disputes arising of this contract, the jurisdiction shall be lie under the jurisdiction of direct courts in the respective areas in the State of ORISSA (India) only.

### (b) Governing Laws:

The contract shall be governed by and constructed according to the laws in force in INDIA



# SECTION – IX SAFETY CODE

### 89. GENERAL:

Contractor shall adhere to safe construction practice and guard against hazardous and unsafe working conditions and shall comply with Owner's safety rules as set forth herein. Prior to start of construction, contractor will be furnished copies of Owner's 'Safety Code' for information and guidance, if it has been prepared.

### 90. SAFETY REGULATIONS:

- 90.1. In respect of all labour, directly or indirectly employed in the work for the performance of contractor's part of this agreement, the contractor shall at his own expense arrange for all the safety provisions as per (i) Safety codes of CPWD & Indian Standards Instructions (ii) The electricity Act, (iii) The Mines Act, and (iv) Regulations. Rules and orders made thereunder and such other acts as applicable.
- 90.2. The contractor shall observe and abide by all fire and safety regulations of the Owner. Before starting construction work, contractor shall consult Owner's Safety Engineer or Engineer-in-Charge and must make good to the satisfaction of the Owner any loss or damage due to fire to any portion of the work done under this contract or to any of the Owner's existing property.

# 91. First Aid and Industrial Injuries:

- (i) Contractor shall maintain first aid facilities for his employees and those of his subcontractors.
- (ii)Contractors shall make outside arrangements for ambulance service and for treatment of industrial injuries. Name of those providing these services shall be furnished to Owner prior to start of constructions and their telephone numbers shall be prominently posted in Contractor's field office.
- (iii)All critical industrial injuries shall be reported promptly to owner, and a copy of Contractor's report covering each personal injury requiring the attention of a physical shall be furnished to the Owner.

#### 92. General Rules:

Smoking within the Battery Areas, rank farm, or dock limits in strictly prohibited. Violators of the "No Smoking" rules shall be discharged immediately".

### 93. Contractor's Barricades:

(i) Contractor shall erect and maintain barricades required in connection with his operation to guard or protect.





- (a) Excavations.
- (b) Hosting Areas.
- (c) Areas adjudged hazardous by Contractor's or Owner's Inspectors.
- (d) Owner's existing property subject to damage by Contractor's operation.
- (e) Rail road unloading spots.
- (ii) Contractor's employees and those of his sub-contractors shall become acquainted with Owner's barricading practice and shall respect the provisions thereof.
- (iii) Barricades and hazardous areas adjacent to but not located in normal routes of travel shall be marked by red flasher lanterns at nights.

# 94. Scaffolding:

- (i) Suitable scaffoldings should be provided for workmen for all works that cannot safety be done from the ground or from solid construction except such short period works as can be done safely from ladders. When a ladder is used a Mazdoor shall be engaged for holding the ladder and if the ladder is used for carrying materials as well, suitable footholds and handholds shall be provided on the ladder and the ladder shall be given an inclination not steeper than 1 in 4 (1 horizontal and 4 vertical).
- (ii) Scaffolding or staging more than 4 metres above the ground or floor swing on suspended from an overhead support or erected with stationary support shall have a guard rail properly attached, bolted, braced and otherwise retarded at least one metre high above the floor or platform of such scaffolding or staging and extending along with entire length of the outside and ends thereof with only such openings as may be necessary for the delivery of materials. Such scaffolding or staging shall be so fastened as to prevent it from swaying from the building or structure.
- (iii) Working platform, gangways and stairways should be so constructed that they should not sag unduly or unequally and if the height of the platform of gangway or the stairway is more than 4 metres above ground level or floor level, they should closely boarded, should have adequate width and should be suitable fastened as described in (ii) above.
- (iv) Every opening in the floor of a building or in a working platform be provided with suitable means to prevent the fall of persons or materials by providing suitable fencing or railing whose minimum height shall be 1 metre.
- (v) Safe means of access shall be provided to all working platforms and other working places. Every ladder shall be security fixed. No portable single ladder shall be over 9 metres in length. The width between the side rails in run ladder shall in no case be less than 30 cm. For ladder upto and including 3 metres in length; for longer ladders this width should be





increase at least 15 mm for each additional metre of length. Uniform step spacing shall not exceed 30 cms. Adequate precautions shall be taken to prevent danger from electrical equipment. No materials on any of the sites of work shall be so stacked or placed as to cause danger or inconvenience to any person or public. The contractor shall also provide all necessary fencing and lights to protect the workers and staff from accidents, and shall be bound to bear the expenses of defence of every suit, action or other proceedings of law that may be brought by any person for injury sustained owing to neglect of the above precautions and to pay any damages and cost which may be awarded in any such suit or action or proceedings to any such person or which may with the consent of the contractor be paid to compromise any claim by any such person.

# 95. Excavation and Trenching:

All trenches 1.2 metres or more in depth, shall at all times be supplied with at least one ladder for each 50 M length or fraction thereof.

Ladder shall be extended from bottom of the trench to at least 1 metre above the surface of the ground. The sides of the trenches which are 1.5 metres in depth shall be stepped back to give suitable slope, or securely held by timber bracing, so as to avoid the danger of sides to collapse. The excavated materials shall not be placed within 1.5 metres of the edge of the trench or half of the trench width whichever is more. Cutting shall be done from top to bottom. Under no circumstances undermining or under-cutting shall be done.

# 96. General Safety:

- (i) Before any demolition work is commenced and also during the process of the demolition work.
- (a) All roads and open areas adjacent to the work site shall either be closed or suitably protected.
- (b) No electric cable or apparatus which is liable to be a source of danger shall remain electrically charged.
- (c) All practical steps shall be taken to prevent danger to persons employed from risk of fire or explosion or flooding. No floor, roof or other part of the building shall be so overloaded with debris or materials as to render it unsafe.
- (ii) All necessary personal safety equipment as considered adequate by the Engineer-in-Charge, should be kept available for the use of the persons employed at the site and maintained condition suitable for immediate use and the contractor should take adequate steps to ensure proper use of equipment by persons concerned as outlined below:





- (a) Workers employed on mixing asphalt materials, cement and lime mortars shall be provided with protective footwear and protective gloves.
- (b) Those engaged in white washing and mixing or stacking of cements bags or any materials which are injurious to the eyes shall be provided with protective goggles.
- (c) Those engaged in welding and cutting works, shall be provided with protective face and eye –shields, hand gloves etc.
- (d) Stonebreakers shall be provided with protective goggle and protective clothing and seated at sufficiently safe intervals.
- (e) When workers are employed in sewers and manholes which are in use, the contractor shall ensure that the manhole cover are opened and are ventilated at least for an hour before the workers are allowed to get into the manholes, and the manholes so opened shall be cordoned off with suitable railing and provided with warning signals or board to prevent accident to the public.
- (f) The contractor shall not employ men below the age of 18 years and women on the work of painting with products containing lead in any form. Wherever men above the age of 18 years are employed on the work of lead painting, the following precautions should be taken:
  - (1) No paint containing lead or lead products shall be used except in the form paste or readymade paint.
  - (2) Suitable facemasks should be supplied for use by the workers when paint is applied in the form of spray or a surface having lead paint dry rubbed and scrapped.
  - (3) Overalls shall be supplied by the Contractor to the workmen and adequate facilities shall be provided to enable the working painters to wash them on cessation of work.
- (iii) When the work is done near any place where there is a risk of drowning all necessary safety equipment shall be provided and kept ready for use and all necessary steps taken for prompt rescue of any person in danger and adequate provision should be made for prompt first aid treatment of all injuries likely to be sustained during the course of the work.
- (iv) Use of hoisting machines and tackles including their attachments anchorage and supports shall conform to the following standard or conditions:
  - (a) These shall be of good mechanical construction, sound materials and adequate strength and free from patent defect and shall be kept in good working order.
  - (b) Every rope used in hoisting or lowering materials or as means of suspension shall be of durable quality and adequate strength and free from patent defects.





- (c) Every crane driver or hoisting appliance operator shall be properly qualified and no person under the age of 21 years should be in charge of any hoisting machine including any scaffolding which or give signals to the operator.
- (d) In case of every hoisting machine and of every chain ring hook, shackle swivel and pulley block used in hoisting or lowering or as means of suspension, the safe working load shall be ascertained by adequate means. Every hoisting machine and all gear referred to above shall be marked with the safe working load and the conditions under which it is applicable shall be clearly indicated. No part of any machine or any gear referred to above in this paragraph shall be loaded beyond the safe working load except for the purpose of testing.
- (e) In case of department machines, the safe working load shall be notified by the Engineer-in-Charge. As regards contractor's machines, the contractor shall notify the safe working load of the machine to the Engineer-in-Charge, whenever he brings any machinery to site of work and get it verified by the Engineer-in-Charge.
- (v) Motors, gears, transmission lines, electric wiring and other dangerous parts of hoisting appliances should be provided with efficient safe-guards. Hoisting appliances should be provided with such means as to reduce to the minimum the accidental descent of the load, adequate precaution should be taken to reduce to the minimum the risk of any part or parts of a suspended load becoming accidentally displaced. When workers are employed on electrical installations, which are already energized, insulating mats, wearing apparel such as gloves sleeves and boots as may be necessary should be provided. The workers shall not wear any rings, watches and carry keys or other materials, which are good conductors or electricity.
- (vi) All scaffolding, ladders and other safety devices mentioned or described herein shall be maintained in safe conditions and no scaffoldings, ladder or equipment shall be altered or removed while it is in use. Adequate washing facilities should be provided at or near places of works.
- (vii) These safety provisions should be brought to the notice of all concerned by displaying on a notice board at a prominent place at the work spot. The person responsible for compliance of the safety code shall be named therein by the contractor.
- (viii) The ensure effective enforcement of the rules and regulations relating to safety precautions, the arrangements made by the contractor shall be open to inspection by the welfare officer Engineer-in-Charge or safety Engineer of the Administration or their representatives.
- (ix) Notwithstanding the above clauses there is nothing in these to exempt the contractor from the operations of any other Act or rules in force in the Republic of India. The works throughout, including any temporary works, shall be carried out in such a manner as n9ot to interfere in any way whatsoever with the traffic on any roads or footpaths at the site or in vicinity thereto or any existing works whether the property of the Administrations or of a third party.





# 97. Care in handling Inflammable gas:

The Contractor has to ensure all precautionary measures and exercise utmost care in handling the inflammable gas cylinder/ inflammable liquids/ paints etc. as required under the law and/ or as advised by the fire authorities of the Owner.

# 98. Temporary Combustible Structures:

Temporary combustible structures will not be built near or around work site.

# 99. Precautions Against Fire:

The Contractor will have to provide Fire Extinguisher/ Fire Buckets and drums at work site as recommended by Engineer-in-Charge. They will have to ensure all precautionary measures and exercise utmost care in handling the inflammable gas cylinders/ inflammable liquid/ paints etc. as advised by Engineer-in-Charge. Temporary combustible structures will not be build near or around the work-site.

### 100. Explosives:

Explosives shall not be stored or used on the works or on the site by the contractor without the permission of the Engineer-in-Charge in writing and then only in the manner and to the extent to which such permission is given. When explosives are required for the works they shall be stored in a special magazine to be provided at the cost of the contractor in accordance with the Explosive Rules. The contractor shall obtain the necessary licence for the storage and the use of explosives and all operations in which or for which explosives are employed shall be at sole risk and responsibility of the contractor and the contractor shall indemnify the owner against any loss or damage resulting directly or indirectly therefrom.

### 101. Mines Act:

- 101.1 Safety Code: The contractor shall at his own expense arrange for the safety provisions as required by the Engineer-in-Charge in respect of all labour directly employed for performance of the works and shall provide all facilities in connection therewith. In case the Contractor fails to make arrangements and provides necessary facilities as aforesaid. The Engineer-in-Charge shall be entitled to do so and recover the costs thereof from the Contractor.
- 101.2 Failure to comply with Safety code or the provisions relating to report on accidents and to grant of maternity benefits to female worker shall make the Contractor liable to pay Company liquidated damages an amount not exceeding Rs. 50/- for each default or materially incorrect statement. The decision of the Engineer-in-Charge in such matters based on reports from the Inspecting Officer or from representatives of Engineer-in-Charge shall be final and binding and deductions for recovery of such liquidated damages may be made from any amount payable to the Contractor from all the provisions of the Mines Act 1952 or any statutory modification's or re-enactment thereof the time being in force and any Rules and Regulations made thereunder in respect of all the





persons employed by him under this contractor and shall indemnify the Owner from and against any claim under the Mines Act or the rules and regulations framed thereunder by or on behalf of and persons employed by him or otherwise.

### 102. Preservation of Peace:

The Contractor shall taken requisite precautions and use his best endeavors to prevent any riotous or unlawful behaviour by or amongst his workmen and other employed on the works and for the preservation of peace and protection of the inhabitants and Security of property in the neighborhood of the work. In the event of the Owner requiring the maintenance of a special Police force at or in the vicinity of the site during the tenure of works, the expenses thereof shall be borne by the Contractor and if paid by the Owner shall be recoverable from the Contractor

### 103. Outbreak of Infectious Diseases:

The Contractor shall remove from his camp such labour and their families as refuse protective inoculation and vaccination when called upon to do so by the Engineer-in-Charge's Representative. Should Cholera, Plague or other infectious diseases break out the Contractor shall burn the huts, bedding clothes and other belonging of or used by the infected parties and promptly erect new huts on healthy sites as required by the Engineer-in-Charge failing which within the time specified in the Engineer's requisition, the work may be done by the Owner and the cost thereof recovered from the Contractor.

# 104. Treatment of Contractor's Staff in Company's Hospital:

The Contractor and his staff, other than labourers and their families requiring medical aid from the Owner's hospitals and dispensaries will be treated as private patients and charged accordingly. The contractor's labourers and their families will be granted from treatment in the Owner's hospitals and dispensaries where no other hospitals or dispensaries are available provided the contractor pays the cost of medicines dressing and money accordingly to the normal scale as also additional charges if any for special examination e.g. X- Ray etc.

#### 105. Use of Intoxicants:

The sale of dent spirits or other intoxicating beverages upon the work in any of the buildings, encampments or tenements owned, occupied by or within the control of Contractor or any of his employee is forbidden and the contractor shall exercise his influence and authority to the utmost extent to secure strict compliance with this condition.

In addition to the above, the contractor shall abide by the safety code provision as per CPWD safety code and Indian Standard Code framed from time to time.

# PROFORMA FOR BANK GUARANTEE FOR EARNEST MONEY DEPOSIT (To be executed on non-judicial stamped paper of appropriate value)

B. G.	No
1.	WHEREAS M/s National Aluminium Company Limited (A Government of India Enterprise), having its Corporate Office at NALCO BHAWAN, P-1 Nayapalli, Bhubaneswar (hereinafter called "The Company Owner" which expression shall unless repugnant to the subject or context includes its legal representatives, successors and assigns) has issued tender paper vide its Tender No
2.	WE
3.	We undertake to pay to the Company any money so demanded not withstanding any dispute or disputes raised by the tenderer (s) in any suit or proceeding pending before any office, court or tribunal relating thereto our liability under this present guarantee being absolute and unequivocal. The payment so made by us under this bond shall be a valid discharge of our liability for payment thereunder. Our liability to pay is not dependent or conditional on the owner proceeding against the tenderer.
4.	The guarantee herein contained shall not be determined or affected or suspended by the liquidation or winding up, dissolution or change of constitution or insolvency of the said tenderer(s) but shall in all respect and for all purposes be binding and operative until payment of all money due or liabilities under the said contract(s)/ Order(s) are fulfilled.
5.	WEBank Ltd. further agree that the guarantee herein contained shall remain in full force and effect during the period that would be taken for the finalisation of the said tender and that it shall continue to be enforceable till the said tender is

finally decided and order placed on the successful tenderer(s) and or till all the dues of the company under or by virtue of the said tender have been fully paid and its claims satisfied or discharged or till a duly authorised officer of the company certifies that the terms and conditions of the said tender have been fully and properly carried out by the said tenderer (s) and accordingly discharges the guarantee.

6.	That the Owner Company will have full liberty without reference to	us and without
	affecting this guarantee to postpone for any time or from time to time.	The exercise of
	any of the power of the owner under the tender.	

7.	Notwithstanding	anything	contained	herein	before,	our	liability	shall	not	exceed
	Rs	(Rupe	es		о	nly)	and shal	l rema	in in	force
	till	Jnless a d	emand or	claim ui	nder this	Gua	rantee is	made o	on us	within
	three months fro	m the dat	e of expiry	we sh	all be d	ischa	rged forn	n all tl	ne lia	bilities
	under this guaran	itee.								

8.	WeBank, lastly undertake not to revoke this guarantee during its
	currency except with the previous consent of the Company in writing. We further
	undertake to keep this Guarantee renewed from time to time on the request of Tendere
	(s).

Date	Bank
Corporate Seal of the Bank	By its constitutional Attorney

Signature of duly Authorised person On behalf of the Bank With seal & signature code

Note: BGs to be furnished from any of the banks listed earlier.

# BANK GUARANTEE FOR SECURITY DEPOSIT

	(To be executed on non-judicial stamped paper of appropriate value)  B. G. No  Date:
1.	In consideration of National Aluminium Company Limited (A Government of India Enterprise), having its office at
2.	We
3.	We undertake to pay to the Company any money so demanded notwithstanding any dispute or disputes raised by the contractor (s)/ Seller(s) in any suit or proceeding pending before any office, court or tribunal relating thereto our liability under present guarantee being absolute and unequivocal. The payment so made by us under this bond shall be valid discharge of our liability for payment there under. Our liability to pay is not dependent or conditional on the owner proceeding against the Contractor(s)/ Seller(s).
4.	The guarantee herein contained shall not be determined or affected or suspended by the liquidation or winding up, dissolution or change of constitution or insolvency of the said Contractor(s)/ Seller(s) but shall in all respect and for all purposes be binding and operative until payment of all money due or liabilities under the said contract(s)/ Order(s) are fulfilled.
5.	WeBank further agree that the guarantee herein contained shall remain in full force and effect during the period that would be taken for the performance of the said Contract(s)/Order(s) and that it shall continue to be enforceable till all the dues of the company under or by virtue of the said Contract(s)/Order(s) have been fully paid and its claims satisfied or discharged or till a duly Authorised officer of the company certifies that the terms and conditions of the said Contract(s)/Order(s) have been fully

and properly carried out by the said contractor(s) and accordingly discharges the guarantee.

6.	WeBank further agree with the Company that the company shall have the
	fullest liberty without our consent and without affecting in any manner our obligations
	hereunder to vary any of the terms and conditions of the said Contract(s)/ Order(s) or
	to extend the time of performance by the said Contractor(s) Seller(s) form time to time
	or to postpone for any time or from time to time any of the powers exercisable by the
	Company against the said Contractor(s)/ Seller(s) and to forbear or enforce any of the
	terms and conditions relating to the said Contract(s)/ Order(s) and we shall not be
	relieved from our liability by reason of any such variations, or extension being granted
	to the said Contractor (s)/ Seller(s) or for any forbearance, act or omissions on the part
	of the Company or any indulgence by the Company to the said Contractor(s)/ Seller(s)
	or by any such matter or thing whatsoever which under the law relating to sureties
	would, but for this provision, have affect of so relieving us.

7.	Notwithstanding	anything	contained	herein	before,	our	liability	shall	not e	exc eed
	Rs	(Rupe	es		o	only)	and shal	l rem	ain in	force
	tillU	Jnless a de	emand or	claim u	nder this	Guai	rantee is	made	on us	within
	three months fro under this guaran		e of expiry	y we sh	all be d	ischaı	rged form	n all t	he lia	bilities

8.	We	Bank, last	y undertake	not to revol	ke this gu	ıarantee	during its	S
	currency except	with the previ	ous consent of	of the Comp	any in w	riting. V	Ve further	r
	undertake to ke	ep this Guara	ntee renewed	from time	to time	at the	request o	f
	Contractor(s)/ Se	llers(s).						

Date	Bank			
Corporate Seal of the Bank	By its constitutional Attorney			
	Signature of duly			
	Authorised person			
	On behalf of the Bank			
	With seal & signature code			

BGs to be furnished from any of the banks listed as per Annexure.

# $\frac{PROFORMA\ FOR\ CONTRACT\ CUM\ PERFORMANCE\ GUARANTEE\ BY\ SELLER/}{CONTRACTOR}.$

	(To be executed on non-judicial stamped paper of ap B. G. No	propriate value) Date
1.	WHEREAS National Aluminium Company Limited Enterprise) having its office at	nafter referred to as "The pant to the subject or context of has entered into a contracted a purchase order or as "Contractor(s)/ Seller(s)' or context includes their legalon the terms y's contract No./ P.O. No ing part thereof hereinafte in include all amendments be Contractor(s)/ Seller(s) has tees its performance including
	AND WHEREAS one of the conditions of the "contractor(s)/seller(s) shall furnish to the owner a Bank" (percent) of the total value of the "said contract" including defect liperformance guarantee obligations of the contractor(s)/se made under the "said contract."	c Guarantee from a bank for cract" against due and faithful fability obligations" and the
2.	We	payable under this guarantee ny stating that in the opinion claimed is due by reason of rming any of the terms & obligations, in fulfilling the ed to or would be caused to of said Contractor (s)/ Seller(s) ch demand made on the Bank due and payable by the Bank
3.	We undertake to pay to the Company any money so der dispute or disputes raised by the contractor(s)/ Seller(s pending before any office, court or tribunal relating the present guarantee being absolute and unequivocal. The pthis bond shall be a valid discharge of our liability fo liability to pay is not dependent or conditional on the contractor(s)/ Seller(s).	) in any suit or proceeding ereto our liability under this payment so made by us under r payment there under. Our

- 4. The guarantee herein contained shall not be determined or affected or suspended by the liquidation or winding up, dissolution or change of constitution or insolvency of the said Contractor(s)/ Seller(s) but shall in all respect and for all purposes be binding and operative until payment of all money due or liabilities under the said contract(s)/ Order(s) are fulfilled.

- 7. Notwithstanding anything contained herein before, our liability shall not exceed Rs.....(Rupees.....only) and shall remain in force till......Unless a demand or claim under this Guarantee is made on us within three months from the date of expiry we shall be discharged form all the liabilities under this guarantee.
- 8. We......Bank, lastly undertake not to revoke this guarantee during its currency except with the previous consent of the Company in writing. We further undertake to keep this Guarantee renewed from time to time at the request of Contractor(s)/ Sellers(s).

Date	Bank
Corporate Seal of the Bank	By its constitutional Attorney

Signature of duly Authorised person On behalf of the Bank With seal & signature code

BGs to be furnished from any of the banks listed as per Annexure.

## BANK GUARANTEE FOR ADVANCE PAYMENT

	(To be executed on non-judicial stamped paper of appropriate value) B. G. No Date:
1.	In consideration of National Aluminium Company Limited (A Government of India Enterprise), having its office at
2.	We
3.	We undertake to pay to the Company any money so demanded not withstanding any claim dispute or disputes raised by the contractor (s)/ Seller(s) in any suit or proceeding pending before any office, court or tribunal relating thereto our liability under this present guarantee being absolute and unequivocal. The payment so made by us under this bond shall be valid discharge of our liability for payment thereunder. Our liability to pay is not dependable or conditional on the owner proceeding against the Contractor(s)/ Seller(s).
4.	The guarantee herein contained shall not be determined or affected or suspended by the liquidation or winding up, dissolution or change of constitution or insolvency of the said tenderer(s) but shall in all respect and for all purposes be binding and operative until payment of all money due or liabilities under the said tenderer(s) are fulfilled.
5.	WeBank further agree that the guarantee herein contained shall remain in full force and effect during the period that would be taken for the finalisation of the said tenderer(s) and that it shall continue to be enforceable till the said tender is finally decided and order placed on the successful tender and/or till all the dues of the company under or by virtue of the said tender have been fully paid and its claims satisfied or discharged or till a duly authorised officer of the Company certifies that the terms and conditions of the said Contractor(s)/ Order(s)have been fully and properly carried out by the said tenderer(s)and accordingly discharges the guarantee.

6.	That the owner/Company will have fully liberty w affecting this guarantee to postpone for any time or fro the power of the owner under the tender.	
7.	Notwithstanding anything contained herein before Rs(Rupees	nly) and shall remain in force Guarantee is made on us within three
8.	WeBank, lastly undertake not to revolexcept with the previous consent of the Company in withis Guarantee renewed from time to time on the reque	riting. We further undertake to keep
Da	te	Bank
Co	rporate Seal of the Bank	By its constitutional Attorney
		Signature of duly Authorised person On behalf of the Bank With seal & signature code

ii) Address of Corporate Office should be referred in case of Foreign BG.

### **LIST OF STANDARDISED BANKS**

## SCHEDULED PUBLIC SECTOR BANKS (INDIAN)

- 1. State Bank of India.
- 2. State Bank of Bikaner and Jaipur
- 3. State Bank of Hyderabad
- 4. State Bank of Indore.
- 5. State Bank of Mysore.
- 6. State Bank of Patialia.
- 7. State Bank of Saurashtra
- 8. State Bank of Travancore.
- 9. Allahabad Bank
- 10. Andhra Bank
- 11. Bank of Baroda.
- 12. Bank of India
- 13. Bank of Maharashtra
- 14. Canara Bank
- 15. Central Bank of India
- 16. Corporation Bank
- 17. Dena Bank
- 18. Indian Bank
- 19. Indian Oversea Bank
- 20. Oriental Bank of Commerce
- 21. Punjab National Bank
- 22. Punjab and Sid Bank
- 23. Syndicate Bank
- 24. Union Bank of India
- 25. United Bank of India (Deleted)
- 26. UCO Bank
- 27. Vijaya Bank.

\_\_\_\_\_

Page 81 of 96

## **LIST OF STANDARDIED BANKS**

#### SCHEDULED PRIVATE SECTOR BANKS (INDIAN)

- 1. Vyasa Bank
- 2. UTI Bank Ltd.
- 3. SBI Commercial & International Bank Ltd.
- 4. ICICI Banking Corporation Bank Ltd.
- 5. HDFC Bank Ltd.
- 6. IDBI Bank Ltd.

\_\_\_\_\_

#### **SCHEDULED FOREIGN BANKS**

- 1. American Express Bank Ltd.
- 2. ANZ Grindlays Bank Plc
- 3. Bank of American NT & SA
- 4. Bank of Tokyo Ltd.
- 5. Banque Nationale de Paris
- 6. Barclays Bank Plc
- 7. Citi Bank N.A.
- 8. Deutsche Bank A.G.
- 9. Hongkong & Shanghai Banking Corporation.
- 10. Standard Chartered Bank
- 11. The Chase Manhattan Bank Ltd.
- 12. Dresdner Bank AG.

-----

#### DETAILS OF WORKS OF SIMILAR NATURE & MAGNITUDE CARRIED OT **DURING THE LAST 5 YEARS**

Sl. No.	Name of work done	Estimated cost	When started	When completed	Date of Completion As per contract.	Remarks
	-		-		Completion	ICI

**Note:** 1. In the remarks column, please state whether the works stated above are carried out by you in the name of the Firm in which the present Bid is submitted or

any other names, if later, state relationship of the firm and also a copy of the

Partnership Deed.

2. Please enclose the true copy of the certificate issued by the authorities, if any.

An	pendix	_	T-	B
$\mathbf{A} \mathbf{A} \mathbf{P}$	pendia		_	$\boldsymbol{\mathcal{L}}$

Name	ΟĬ	work:	

Name of Tenderer:

## CONCURRENT COMMITMENTS OF THE TENDERER

Full Postal Address of	Description of the	Value	Date of	Scheduled	Percentage	Expected date	Remarks if any
Client & Name of	work	of	commenceme	Completion	Completion as	of completion	
Officer-in-Charge		contract	nt of work	period	on date		

SIGNATURE OF BIDDER

NAME OF WORK:

NAME OF TENDERER:

#### DETAILS OF EQUIPMETNS, TOOLS TACKLES

Tenderer shall submit herein details of equipment, tools, tackles, etc required to perform the work and shall note in each case whether the same is (a) already owned by tenderer and available for use on this contract (b) anticipated to be hired by Contractor or (c) anticipated to be purchased by Contractor, in case of (a) anticipated (b) and (c) Location of hirer or supplier shall be stated.

Sl. No.	Description, Make Mode & Capacity	Year of Manufacture	Category (a) or (b) or (c) below	Location	Remarks
(1)	(2)	(3)	(4)	(5)	(6)

- 1. Contractor agrees to augment the above chart with additional number/ categories of equipment, if required to complete the work within the agreed time schedule of completion and directed by the Engineer-in-charge.
- 2. In case of hiring of equipment form other agencies, copies of the arrangements made with the hirer/ supplier shall have to be furnished.

## DETAILS OF MINIMUM MANPOWER PROPOSED TO BE DEPLOYED ON THIS WORK

Sl. No.	Details of Manpower	No.	Remarks

\_\_\_\_\_

Note:

Please furnish the above details in two categories – To be deployed by (I) Contractor and (ii) Sub- contractors.

Minimum manpower deployment shall be based broadly as above and will be modified as mutually agreed to suit the detailed construction programme jointly worked out; further if any additional man power is required for completion of work in time, the same shall be provided by you as directed by Engineer without any extra cost.

The manpower proposed to be deployed in the work needs to be given quarter wise separately for direct personnel of the contractor and the manpower proposed to be deployed through the sub-contractors.

## ORGANISATION CHART SHOWING NO. OF QUALIFIED ENGINEERS & SUPERVISORY PERSONNEL ETC.

Sl.	Details of personnel to be	No.
No.	deployed on this work	

\_\_\_\_\_

**Note:** Names and short resume of their experiences may also be given for key personnel.

The tentative chart of your site organisation as above furnished by you shall be subject to variation to suit the construction programme/ requirement and as directed by Owner/ Engineer.

#### LIST OF PROPOSED SUB CONTRACTORS

Sl. No.	Name of sub-contractor	Description of work or trade	Amount (Rs.)

- 1) Types of work executed by the sub-contractors.
- 2) The particulars of clients where the sub-contractors did the works.
- 3) Approximate value of the work carried by the sub-contractors in the last 3 years.

#### PPROGRESS BILLINGS

(	(Bidder's anticipated	l progress billing	month by	month to	be inserted 1	here)
٠,	(Bladel 5 difficipated	, progress criming	, moment o ,	IIIOIIIII CO	oc mocreous	,

Tentative construction schedule indicating the expected dates of start of activity is to be given by the contractor. This schedule shall be updated within specified milestones from time to time depending upon the availability of fronts equipment and priorities fixed by Engineer. Contractor shall submit within 15 days of the date of letter of intent programme/ schedule for supply of items covering all phases of work including design, procurement, manufacture, assembly, fabrication, testing, transportation, erection, testing at site and commissioning matching the overall completion schedule.

The billing as well as all the connected documents shall be computerized.

#### NAME OF WORK

#### NAME OF TENDERER:

#### INFORMATION ABOUT TENDERERS (FORM – H)

- 1.0. In case of Individual:
- 1.1. Name of Business:
- 1.2. Whether his business is registered:
- 1.3. Date of Commencement of Business:
- 1.4. Whether he pays Income Tax over Rs. 10,000/- per year:
- 2.0. In case of Partnership:
- 2.1. Name of Partnership with qualification:
- 2.2. Whether the Partnership is Registered:
- 2.3. Date of Establishment of firm:
- 2.4. If each of the partners of the firm pays Income Tax over Rs. 10,000/- a year and if not, who of them pays the same.
- 3.0. In case of Limited Liability Company or Company Limited by Guarantees:
- 3.1. Amount of paid of capital:
- 3.2. Name of Directors:
- 3.3. Date of Registration of Company:
- 3.4. Copies of the Balance Sheet of the Company of the last two years:

Copies of audited Profit & Loss Account and the Balance sheet shall be enclosed in case of Individuals, partnerships as well as limited companies for the last 3 years.

(Signature of Bidder)
Name & Address of the Bidder

#### NAME OF WORK:

#### NAME OF TENDERER:

#### LIST OF ENCLOSURES (FORM-I)

The tenderer is required to enclose the following documents as part of his tenderer.

- 1. Power of attorne y of the signatory to the tender.
- 2. Income Tax/ Sales Tax Clearance Certificate in the proforma prescribed by the Govt. of India.
- 3. Documents showing annual turnover for similar works for the past two eyars such as annual report, profit and loss account etc.
- 4. Solvency Certificate by Nationalized Schedule Bank.

<sup>\*\*</sup> In absence of Income Tax Clearance Certificate tenderer may not be awarded the work tendered for as per Central Govt. Directives.

N	ΔN	ЛF	OF	W	$\cap$	R۱	Κ.
1 1	<b>∕</b> Ω Γ'	VI L	<b>\</b> / I \		. ,		<b>\</b> .

NAME OF TENDERER:

### **EXCEPTION AND DEVIATION (FORM-J)**

As pointed out in the NIT/ LIT, tenderer may stipulate here exceptions and deviations to the tender conditions, if considered un-avoidable.

Sl.	Page No. of	Sl. No. of	Subject	Deviation
No.	tenderer document	tender document	-	

\_\_\_\_\_

## AMENDMENT TO GCC

S1 No	Clause No	Brief Description of Clause	Modification
01	2.3	Power Supply	i) Clause No. 2.3.1 of General Condition of Contract stands modified to the following extent:
			The cost of construction power appearing in the 12 <sup>th</sup> & 13 <sup>th</sup> line as Rs 1.00 per kwh shall be read as Rs. 4.30 (Rupees four and thirty paise only) per kwh.
			ii) Clause No. 2.3.10 of General Condition of Contract stands modified to the following extent:
			The state Electricity Inspector appearing in the second line shall be read as 'Central Electricity Authority at Chennai'.
02	2.4	Land for contractor's Field office, Godown and Workshop	Clause No. 2.4 of General Condition of Contract modified to the following extent: "The owner shall provide land to the Contractor for their offices, godown and workshop."
03	2.5	Land for Residential Accommodation	Clause No. 2.5 of General Condition of Contract modified to the following extent: "The land for residential accommodation for staff and labour may be made available to Contractor outside plant boundary limit."
04	22	Extension of time	The word "any one" appearing in the end of the second para of Clause N0. 22.0 shall be read as "OWNER".
05	52.3.6	Return of unutilized/ surplus materials and scrap/ wastage	i) The words "SAIL, Bhubaneswar stockyard rate" appearing in 3 <sup>d</sup> line of first para shall be replaced by "Landed cost." ii) The words "Rs. 7000.00 per tonne" appearing in last line of first para shall be replaced by "twice the landed cost of materials."
06	53 (xv)	Conditions for issue of materials	The contents of the sub-clause No. 53 (xv) shall stand deleted and replaced with the following:
			"For the free issue materials, the following norms shall be adopted:
			i) For issue of materials within plant boundary wall limit, the Contractor shall submit only indemnity bond for the entire value of the materials issued to them free of cost as Clause 53 (ix) of GCC.

Sl	Clause	Brief	Modification
No	No	Description of Clause	ii) For the materials which are issued to out side plant boundary like township etc., the contractor shall furnish Bank Guarantee equivalent to 20% of value of materials and indemnity bond for the 80% value of the materials.
			iii) For materials taken out side Damanjodi/ Angul to the vendor's shop, 100% Bank Guarantee against value of the materials will be submitted by the vendor before taking of the materials.
			iv) The Indemnity Bond and the Bank Guarantee shall remain valid till the material account is totally settled. "
07	60 (d)	Alterations in Specifications and Design and Extra Works	The words "including equipment hire charges at Schedule hourly/ daily rates" appearing in 7 <sup>th</sup> and 8 <sup>th</sup> line shall be replaced by the words "including equipment hire charges prevalent at site at the time of execution."
08	60	Alterations in Specifications and Design and Extra Works	Add new sub-clause 60 (e) as follows:  "the quoted prices/ rates indicated in Schedule of Rates shall remain firm for all variations in contract value within range of (+) 50% and (-) 25% for the entire duration of the contract. In case the actual contract value varies from the awarded contract value beyond the above mentioned limit then adjustment to contract value shall be made in accordance with procedure specified in proforma for adjustment for increase/ decrease in contract value enclosed as per Annexure."
09	76.3 (ii)	Completion documents	Clause No. 76 (ii) of General Condition of Contract shall be replaced by:  "Six sets of construction drawings showing therein the modifications and corrections made during the course of
			execution of the work ( <b>As built drawing</b> ) duly approved by Engineer-in-charge and one set of reproducible on polyster film/ in Soft copy in CD."
10	80.1	Employees State Insurance Act	Delete the word "whose aggregate remuneration is Rs.560.00 per month or less and" appearing in the 3 <sup>d</sup> & 4 <sup>th</sup> line of the 2 <sup>nd</sup> para of this sub clause.

SI	Clause	Brief Description of Clause	Modification
11 12	No New sub- clause	Labour Laws	Add a new clause designated as Sub-clause 80.6 - Statutory Provisions after existing clause No. 80.5: "80.6- Statutory Provisions: The contractor shall comply with all relevant and applicable statutory provisions in respect of the workers engaged by him at his cost and above stipulations are only indicative and are not exhaustive."  Clause 83 (vii) of GCC shall be modified to following extent:
	83 (viii)	Labour Laws	extent: Add the words "all relevant statutes at their own costs including" between the words "provisions of" and "the payment of Wages Act 1936" appearing in the first line of this sub-clause.  Provided further that: a) The payment of minimum wages to contract labour shall be as per the rates notified by the Central Govt. as per Minimum Wage Act, 1948 and as adopted by the NALCO Management from time to time plus any additional element and statutory dues thereon. b) The minimum wage as notified by the Chief Labour Commissioner (Central) has a variable component as Special Allowance which is linked to average AICPI for Industrial workers, which keeps on changing every six months. The contractor has to absorb all such variations due to increase in Minimum wage in their quoted price, and no claim whatsoever on this account shall be entertained. c) Where the minimum wages notified by the concerned State Government are higher than the rates notified by Central Government, the State Government rates should apply in concerned scheduled employment as long as the same remains higher than the Central Government rates. d) The classification on workers in different categories will be as per the notification issued by the Central
			Government fixing the minimum wages for the above scheduled appointment.

Sl	Clause	Brief	Modification
No	No	<b>Description of Clause</b>	
13	New Clause	Jurisdiction/ Governing Law	Add a new clause designated as sub-clause 88 (c) after existing clause No. 88 (b).  All the works that will be carried out inside the factory premises shall attract the provisions of factory act for the contract labourers engaged therein.  The contractor, before commencement of work will arrange medical examination at his cost and shall submit the certificate of fitness in respect of the workers in the prescribed form from the nearby District HQ hospital or any Govt. hospitals for his workers, who will be handling or working with hazardous substance.  In respect of contracts having more than one year, the medical check up of such workers shall have to be repeated by the contractor on completion of every one
14	79	Taxes & Duties, Octroi etc.	Add a new clause designated as sub-clause 79.3 after existing sub-clause No. 79.2 as follows:  The rates quoted by the tender will cover all the taxes, duties and levies as applicable on the date of bid/revised bid (if any).  - In case of any imposition of new taxes by Govt. notification at a later date, same shall be reimbursed to the contractor against submission of authentic document towards payment of such taxes by them.  - In case of revision of rate of Works Contract Tax by Govt. notification, same shall be reimbursed to the contractor against submission of documentary evidence towards payment of such extra amount by them.
15	74	Payment of Contractor's Bill	Insert the following after the last para: "However, owner prefers to release the payment due to the contractor electronically. The e-payment facility is available under INTERNET mode through company banker as well as in EFT/RTGS mode through Reserve Bank of India, which is available only at designated centers. The contractor shall submit duly filled Bank Mandate form in duplicate with due authentication from their banker to avail e-payment facility. The prescribed mandate form is appended as Appendix to GCC."

## MANDATE FORM FOR ELECTRONIC PAYMENT THROUGH INTERNET & RBI

To Nationa	al Aluminium Co	mpany Limited,																	
		-																	
		-																	
Dear Si	ir,																		
	Authorization for nic fund transfer(R)	BI-EFT)/Internet	t / RTGS														thro	ugh	
(Please	fill in the informat	ion in CAPITAL	LETTER	RS. Pl	eas	e TI	CK v	where	ever i	it is a	pplic	able	e)						
1.	Name of the Part	v	:																
2.	Address of the pa		:																
	•																		
			City : E-mail																
		Dern	E-maii nanent Ac																
3.	Particulars of Bar		nanent Ac	Coun	LINU	amov	CI	••••				• • • •							
Bank N						E	Branc	h Na	ıme										
Branch						_		h Ci											
Pin Coc	le					E	3ranc	h Co	de										
MICR 1	No											1		<u>i</u> _					
(9 Digit	ts code number ap	pearing on the N	MICR Ba	nd of	the	e che	eque	supp	olied	by tl	ne Ba	ank.	Ple	ase a	attacl	ı Xei	rox c	ору	of
	of your bank for e		of the ba	nk na	ıme	, bra	inch	name	e and	code									
Accoun	t Type	Savings	ڤ		C	urre	nt	ڤ				Cas	sh Cr	edit	ڤ				
Aggain	t Number(es en	uncering in the	Chagua	1 1	1														Т
Book)	t Number(as ap	pearing in the	Cheque																
	IFSC Code																		+-
	te from which the i	mandate should h	e effectiv	e:															
effected respons	I hereby declare I for reasons of i ible. I also underta of credit of amoun	that the particula ncomplete or ind ake to advise any	rs given a correct in change i	above forma in the	tioi par	n, I ticu	shall	not	hold	Nati	onal	Αlι	ımin	ium	Com	pany	Lim	ited	
Date:									~.		_			, .					
									_			-	-			ed Sig	-	ory	
	d that particulars f																		
Bank's Date:	Stamp:																		
							(0;,	motiv	ıra of	Etha	Λ 11th	oriz	od O	ıffici	al fra	m the	Dor	rke)	
N.B. :	RBI EFT / RTGS New Delhi, Chand Trivandrum, Kolk	digarh,Kanpur,Ja	ipur,Ahm														Dal	iks)	

N.B.: RTGS charges if any, is to be borne by the party.

(Signature of the Authorized Official from the Banks)

## MANDATE FORM FOR ELECTRONIC PAYMENT THROUGH INTERNET

To National Aluminium Cor	mpany Limited,														
	-														
Dear Sir,															
Electronic fund transfer by Refer Order No	dtand/	or Tender	/Enqı	uiry/Le	etter N	No		dt	t				_thro	ugh	
(Please fill in the informati	ion in CAPITAL LET	TTERS. Ple	ease '	TICK <sup>,</sup>	where	ever i	t is app	licabl	le)						
<ol> <li>Name of the Party</li> <li>Address of the pa</li> </ol>															
2. Address of the pa															
	Cit E-1	ty: mail Id:		.Pin C	ode:										
<ol> <li>Particulars of Bar</li> </ol>		nt Account	Nun	nber	:				••••	• • • • • •		••••			
Bank Name				Bran	ch Na	ıme									
Branch Place				Bran											
Pin Code				Bran		ode									
Account Type	ڭ Savings		Cui	rrent	ڤ			Cas	sh C	redit	ڡٞ				
Book)	pearing in the Che														
Please attach Xerox copy			surir	ng accu	ıracy	of th	e bank i	name	, bra	nch r	name	and c	ode	numl	ber .
effected for reasons of i responsible. I also underta purpose of credit of amour Place:	that the particulars gir ncomplete or incorre ke to advise any char	ven above ct informa	tion,	I shal	l not	hold	Nation	al Alı	umin	ium	Com	pany	Lim	ited	
Date:						Sign	ature o	f the 1	party	/Aut	horiz	ed Si	gnato	ory	
Certified that particulars for	ırnished above are co	rrect as pe	r our	record	ls.										
Bank's Stamp: Date:															