This amendment is issued for following:

AA) To amend AA: Technical specifications (Annexure – B) & Price schedules, Annexure G (i), (ii) & (iii) of tender as below in place of existing:

S1. No	Section, Clause, Sub Clause	Existing Tender Clause Description	Amended Description
		AA: Technical specifications (A	Annexure – B)
1	Part-A Annexure-B A.2.0 Equipment Detail: Tractor & Trailer combination  Clause No. 2.1.4 Page 7 of 69	Ground clearance for the Tractor unit shall be as per the Tractor manufacturer. Clearance for Trailer unit Chassis frame bottom from ground near centre shall be minimum 55 cm for operational convenience.	Ground clearance for the Tractor unit shall be as per the Tractor manufacturer. Clearance for Trailer unit Chassis frame bottom from ground near centre shall be minimum <b>52</b> cm for operational convenience.
2	Part-A Annexure-B A.2.0 Equipment Detail: Tractor & Trailer combination  Clause No. 2.1.5  Page 7 of 69	Total Weight of the complete unit with tank filled with cement slurry: Shall not exceed 55000 Kg (Approx.).  The total weight of the complete unit with all equipment, items, fittings & accessories i.e., total of weight of the Tractor with Driver's cabin etc.; weight of Trailer chassis & deck; weight of all onboard cementing equipment / machineries mounted on the Trailer including tanks filled with cement slurry; weight of other tools, accessories etc. being carried and kept on the unit.  All load bearing components of the unit like Chassis, Axles, Suspension, Landing Gears etc. shall be capable of taking the total weight of the complete unit with tank filled with cement slurry and	Total Weight of the complete unit with tanks filled with cement slurry: Shall not exceed 55000 Kg (Approx.).  The total weight of the complete unit with all equipment, items, fittings & accessories i.e., total of weight of the Tractor with Driver's cabin etc.; weight of Trailer chassis & deck; weight of all onboard cementing equipment / machineries mounted on the Trailer including tanks filled completely with cement slurry; weight of other tools, accessories etc. being carried and kept on the unit.  All load bearing components of the unit like Chassis, Axles, Suspension, Landing Gears etc. shall be capable of taking the total weight of the complete unit with

		& accessories.	and with all equipment, items,
		The total weight of the complete	fittings & accessories.
		unit with tanks empty (i.e without cement slurry) and in transport mode shall not exceed 55000 Kg.	In case the bidder offers cementing <u>Trailer with 03 Nos. of axles at rear of the Trailer</u> , the total weight of the complete unit
		Bidder shall mention the following information in the technical bid: i. Total weight of the complete unit with tanks empty (without cement slurry). ii. Total weight of the complete unit with tanks filled with cement slurry. iii. Estimated weight of individual major equipment / item to be mounted on the Trailer.	with tanks empty (i.e without cement slurry) and in transport mode shall not exceed 55000 Kg. In case the bidder offers cementing Trailer with 02 Nos. of axles at rear of the Trailer, the total weight of the complete unit with tanks empty (i.e without cement slurry) and in transport mode shall not exceed 49000 Kg.
			Bidder shall mention the following information in the technical bid: i. Total weight of the complete unit with tanks empty (without cement slurry).
			<ul><li>ii. Total weight of the complete unit with tanks filled with cement slurry.</li><li>iii. Estimated weight of individual major equipment / item to be</li></ul>
3	Part-A Annexure-B Specificatio	GROSS COMBINATION WEIGHT RATING (GCWR):	mounted on the Trailer GROSS COMBINATION WEIGHT RATING (GCWR):
	n of the Tractor:  3.3 GROSS COMBINATI ON WEIGHT RATING (GCWR):	Tractor manufacturer's declared Gross Combination Weight Rating (GCWR) not exceeding 55000 Kg, when coupled with the offered cementing Trailer unit.  Bidder shall mention the Gross Combination Weight Rating	For transport mode, Tractor manufacturer's declared Gross Combination Weight Rating (GCWR) not exceeding 55000 Kg when coupled with the offered cementing Trailer unit and the total weight of the complete unit must be within the Gross
	Page 8 of 69	(GCWR) of the offered Tractor in the technical bid.	Combination Weight Rating (GCWR).
			Bidder shall mention the Gross Combination Weight Rating (GCWR) of the offered Tractor in the technical bid.
	Part-A Annexure-B Specificatio n of the	Front Axle: One number non powered front steer axle as per design shall be provided. The maximum	Front Axle: One number non powered front steer axle as per design shall be provided. The axle loading on the
4	n of the Tractor:	permissible axle weight for single axle with two tyres in transport	provided. The axle loading on the front axle in transport mode (i.e vehicle in road movement mode

	3.7 AXLES: a) Front Axle  Page 9 of 69	mode is 7000 Kg as per Central Motor Vehicle Rules, 1989 of India.  Bidder is to mention the following information in the technical bid: i. Number of front axle. ii. Total front axle capacity.	and tanks without cement slurry) shall be within 7000 Kg to meet the Central Motor Vehicle Rules, 1989 norms of India. However, bidder/supplier can offer front axle with axle capacity more than 7000 Kg to meet the design requirement considering the total weight of the complete unit with tanks filled with cement slurry etc. Bidder shall ensure that the loading on the axle shall be within the axle capacity of the respective axle with tanks filled completely with cement slurry.  Bidder is to mention the following information in the technical bid: i. Number of front axle. ii. Total front axle capacity. iii. Total loading on the front axle with tanks filled completely with cement slurry. iv. Total loading on the front axle in transport mode (i.e vehicle in road movement mode and tanks without cement slurry).
5	Part-A Annexure-B Specificatio n of the Tractor: 3.7 AXLES: b) Rear Axles: Page 9, 10 of 69	Rear Axles: Two numbers of powered rear drive axles as per design shall be provided. The maximum permissible total axle weight for tandem axles in transport mode is 21000 Kg as per Central Motor Vehicle Rules, 1989 of India. Rear axles shall have differential lock facility with alarm/indicator. Bidder shall mention & submit the following information in the technical bid: i. Total number of rear axles. ii. Total rear axle capacity for both the axles. iii. Differential lock facility in rear axles with alarm /indicator (Yes/No). iv. Technical specification catalogue/brochure with technical details of the offered rear axles.	Rear Axles: Two numbers of powered rear drive axles as per design shall be provided. The total axle loading on the rear axles in transport mode (i.e vehicle in road movement mode and tanks without cement slurry) shall be within 21000 Kg to meet Central Motor Vehicle Rules, 1989 norms of India. However, bidder/supplier can offer rear axles with total axle capacity more than 21000 Kg to meet the design requirement considering the total weight of the complete unit with tanks filled with cement slurry etc. Bidder shall ensure that the loading on the axles shall be within the axle capacity of the axles with tanks filled completely with cement slurry.  Rear axles shall have differential lock facility with alarm/indicator.

		Bidder shall mention & submit the following information in the technical bid:  i. Total number of rear axles.  ii. Total rear axle capacity for both the axles.  iii. Total loading on both the axles with tanks filled completely with cement slurry.  iv. Total loading on both the axles in transport mode (i.e vehicle in road movement mode and tanks without cement slurry).  v. Differential lock facility in rear axles with alarm /indicator (Yes/No).  vi. Technical specification catalogue/brochure with technical details of the offered rear axles.
6 Part-A Annexure-B Specificatio n of the Cementing Trailer: 4.3  Page 14 of 69	The Trailer shall be provided with 03 (three) Nos. of axles at rear of the Trailer. The axles shall be compatible with the brake system. The maximum permissible total axle weight for triaxle in transport mode is 27000 Kg as per Central Motor Vehicle Rules, 1989 of India.  Bidder shall mention & submit the following information in the technical bid: i. Total number of Axles in the Trailer at rear. ii. Make & model of offered Trailer axles. iii. Total axle capacity of offered 03 Nos. of Trailer axles. iv. Technical specification catalogue/brochure with technical details of the offered Trailer axles.	The Trailer shall be provided with 03 (three) Nos. of axles at rear of the Trailer or 02 (two) Nos. of axles at rear of the Trailer depending upon the total weight of the complete unit (with tanks filled with cement slurry) based on their design. The axles shall be compatible with the brake system.  In case the bidder offers 03 Nos. of Trailer axles at the rear of the Trailer, the total axle loading on the trailer axles in transport mode (i.e vehicle in road movement mode and tanks without cement slurry) shall be within 27000 Kg to meet the Central Motor Vehicle Rules, 1989 norms of India. However, bidder/supplier can offer trailer axles with total axle capacity more than 27000 Kg to meet the design requirement considering the total weight of the complete unit with tanks filled with cement slurry etc.  In case the bidder offers 02 Nos. of Trailer axles at the rear of the Trailer, the total axle loading on the trailer axles in transport mode

(i.e vehicle in road movement mode and tanks without cement slurry) shall be within 21000 Kg to meet the Central Motor Vehicle Rules, 1989 norms of India. However, bidder/supplier can offer trailer axles with total axle capacity more than 21000 Kg to meet the design requirement considering the total weight of the complete unit with tanks filled with cement slurry etc.

Providing 02 Nos. of axles in the Trailer or 03 Nos. of axles in the Trailer shall be as per the selection of the bidder depending upon the total weight of the complete unit based on their design and shall not entitle for any preference in bid evaluation.

Bidder shall ensure that the loading on the axles shall be within the axle capacity of the axles with tanks filled completely with cement slurry.

Bidder shall mention & submit the following information in the technical bid:

- i. Total number of Axles in the Trailer at rear.
- ii. Make & model of offered Trailer axles.
- iii. Total axle capacity of offered 03 Nos. of Trailer axles.

or

Total axle capacity of offered 02 Nos. of Trailer axles.

(To be provided whichever is applicable for the bidder).

iv. Total axle loading on offered 03 Nos. of Trailer axles with tanks filled completely with cement slurry.

or

Total axle loading on offered 02 Nos. of Trailer axles with tanks filled completely with cement slurry.

(To be provided whichever is applicable for the bidder).

			v. Total axle loading on offered 03 Nos. of Trailer axles in transport mode (i.e vehicle in road movement mode and tanks without cement slurry). or Total axle loading on offered 02 Nos. of Trailer axles in transport mode (i.e vehicle in road movement mode and tanks without cement slurry). (To be provided whichever is applicable for the bidder). vi. Technical specification catalogue/brochure with technical details of the offered Trailer axles.
7	Part-A Annexure-B	WHEELS, TYRES & MUDGUARDS:	WHEELS, TYRES & MUDGUARDS:
	Specification of the Cementing Trailer: 4.6	The Trailer shall be fitted with suitable wheels of adequate ply rating. 02 (two) Nos. of wheels in each side of each axle i.e total 04	The Trailer shall be fitted with suitable wheels of adequate ply rating.
	WHEELS, TYRES & MUDGUAR	(four) Nos. of wheels in each axle i.e total 12 (twelve) Nos. of wheels in 03 Nos. of axles shall be provided alongwith suitable mud guards/ flaps.	In case the bidder offers 03 Nos. of Trailer axles at the rear of the Trailer, 02 (two) Nos. of wheels in each side of each axle i.e total 04 (four) Nos. of wheels in each axle
	DS Page 15 of 69	If possible, Trailer wheels / tyres shall be interchangeable with the Tractor unit.	i.e total 12 (twelve) Nos. of wheels in 03 Nos. of axles shall be provided alongwith suitable mud guards/ flaps.
		Bidder/prospective supplier is to look into the tyres of Tractor Unit while selecting the Trailer tyres and vice-versa for compatibility of the Tractor and the Trailer unit with each other.	In case the bidder offers 02 Nos. of Trailer axles at the rear of the Trailer, 02 (two) Nos. of wheels in each side of each axle i.e total 04 (four) Nos. of wheels in each axle i.e total 08 (eight) Nos. of wheels in 02 Nos. of axles shall be
		Bidder shall mention the following information in the technical bid: i. Tyre Size in offered Trailer	provided alongwith suitable mud guards/ flaps.
		Wheels. ii. Total number of wheels in 03 Nos. of Trailer axles. iii. Mudguards (Yes/No).	If possible, Trailer wheels / tyres shall be interchangeable with the Tractor unit.
			Bidder/prospective supplier is to look into the tyres of Tractor Unit while selecting the Trailer tyres and vice-versa for compatibility of the Tractor and the Trailer unit

			with each other.
			with each other.
			Bidder shall mention the following information in the technical bid: i. Tyre Size in offered Trailer Wheels. ii. Total number of wheels in 03 Nos. of Trailer axles. or Total number of wheels in 02 Nos. of Trailer axles. (To be provided whichever is applicable for the bidder) iii. Mudguards (Yes/No).
8	Part-A	PAINTING:	PAINTING:
	Annexure-B Specificatio n of the Cementing Trailer:  4.12 PAINTING:	Surface preparation through shot blasting. Minimum two coats of Zinc rich metal primer shall be applied. Minimum two final coats of suitable paint shall be applied.  Note: Surface primer, paints shall be suitable for corrosive handling	Surface preparation through shot blasting. Minimum two coats of Zinc rich metal primer shall be applied. Minimum two final coats of suitable paint shall be applied. Or  As per the manufacturer's industry standard.
		fluids/cements etc. used in oil & gas industry.	Note: Surface primer, paints shall be suitable for corrosive handling fluids/cements etc. used in oil & gas industry.
9	3.1.1 DECK	SAFETY SYSTEM:	SAFETY SYSTEM:
	ENGINE: <b>n</b> Page 20 of 69	The engine safety system should be equipped with the followings at the central control panel and at the engine control panel separately:  a. Emergency shut off.  In no case engine should restart without manual resetting of all safety system.	The engine safety system should be equipped with the followings at the central control panel and at the engine control panel separately:  a. Emergency shut off.  In no case engine should restart without manual resetting of all safety system.
		b. Automatic tripping of the engine with alarm for the following conditions:  •Low Lube oil pressure switch to stop the engine at 8-12 psi (0.5 - 0.8 kg/cm2)  •Over speed engine shut off switch •High water temperature shut switch to stop the engine at high temperature	<ul> <li>b. Automatic alarm for the following conditions:</li> <li>Low Lube oil pressure alarm (as per OEM's design parameter).</li> <li>Engine Over speed alarm (as per OEM's design parameter).</li> <li>High water temperature alarm (as per OEM's design parameter).</li> <li>In no case the alarm shall re-set until the running parameters</li> </ul>

	T	T	1
10	C.4.0	a) The pump shall be horizontal,	come to normal operating range.  a) The pump shall be horizontal,
	PUMPING	triplex, single acting, reciprocating	triplex, single acting, reciprocating
	SYSTEM,	type plunger pump as per API	type plunger pump general
	Clause 4.1	Standard 674 with replaceable	conforming to API Standard 674
	(a) Pg 22 of	plungers, valves and stuffing box	with replaceable plungers, valves
	69	packing.	and stuffing box packing.
11		b) Make & Model of Pump:	b) Make & Model of Pump:
	C.4.0	The pump shall be anyone-of the	The pump shall be anyone-of the
	PUMPING SYSTEM,	following make or their latest model of pumps meeting the	following make or their latest model of pumps meeting the
	Clause 4.1	technical specification of the	technical specification of the
	(b) Pg 22 of	tender:	tender:
	69	1) Halliburton HT – 400	1) Halliburton HT – 400
		2) BJ Pacemeaker	2) BJ Pacemeaker
		3) WEIR SPM	3) WEIR SPM
		4) MSI	4) MSI
		5) SERVA	5) SERVA
		Two numbers of single acting	The second secon
		triplex pumps, having a maximum	Two numbers of single acting
		BHP input of 600 HP each. Pumps should have interchangeable fluid	triplex pumps, having a <b>minimum</b> BHP input of 600 HP each.
		end sizes ranging from 3-3/8in. to	Bill input of ooo in each.
		6in. plunger sizes to vary the	Pump Pressure vs flow rate
		maximum rate and pressure	requirement-
		output. Piping system on the	1. Maximum 10000 psi for
		cementing pump unit to allow for:.	2- 4 us bbl/min
			2. Minimum 2000 psi for 8-
			11.5 us bbl/min
			One pump should have
			One pump should have interchangeable fluid end with
			plunger of size to achieve
			requirement of Maximum 10000
			psi for 2- 4 us bbl/min & other
			pump should have
			interchangeable fluid end with
			plunger of size to achieve
			requirement of Minimum 2000
			psi for 8-11.5 us bbl/min.
			Some other typical properties
			are as follows:
			1. Maximum slurry Rate: 3
			bbl/min @ 22 ppg and
			10 bbl/min @13 ppg
			2. Density control: ±0.1 ppg
			2. Denotey control. 10.1 ppg
12	C.4.0	b. Direct gravity feed to one or	b. Direct gravity feed to both
	PUMPING	both pumps from the	pumps from the displacement
	SYSTEM,	displacement tanks or	tanks with additional
	Clause 4.1	c. Pressurized feed via centrifugal	arrangement for Pressurized

	(b. b &c) Pg 22 of 69	pressuring pump to one or both pumps. d. Suction feed from the cement mixing system to one or both the pumps, pressurized. i. Maximum rated discharge: 10.0 BPM	feed via centrifugal pressuring pump to both pumps. Same is required for taking input slurry from external source like batch mixer or cement slurry agitator tank.  c. Pressurized feed via centrifugal pressuring pump to both pumps. d. Suction feed from the cement mixing system to both the pumps, pressurized. i. Maximum rated discharge: 12 BPM
13	C.4.0 PUMPING SYSTEM, Clause 4.1 (b.k) Pg 23 of 69	k. Hybrid Model Triplex pumps for Low pressure and High pressure applications is preferable, otherwise 01 set of High pressure Fluid End module with all accessories to be supplied as per technical specs.	Deleted
14	C.4.0 PUMPING SYSTEM, Clause 4.1(b.p)- Pg 23 of 69	Butterfly valves: All butterfly valve to be of standard make with flange design and extremely rugged for oil field cementing and other pumping operation. Suction valves should be pneumatically operated [as well as manual control] Make: FMC / Weco / SPM / Weir	Butterfly valves: All butterfly valve to be of standard make with flange design and extremely rugged for oil field cementing and other pumping operation. Suction valves should be pneumatically operated [as well as manual control] Make: FMC / Weco / SPM / Weir/PARVEEN
15	4.1.FLUID HANDLING SYSTEM, SLURRY MIXING TANK(S), Clause 4.1.1 Pg 23 of 69	Slurry mixing system should be recirculating type of RCM IIIR / PSM / SLURRY chief MARK III or their latest versions with minimum 8 BBL mixing/recirculating tub and agitator Should be able to mix slurry densities ranging from 8.3 to 22.0 PPG and rates at 12 to 3 BPM with suitably rated mixing pump and recirculating pump of HALLIBURTON / GOULDS / GD / MISSION make driven by PTO / HYDRAULIC. It should have an automatic density control system with manual option to bypass	Slurry mixing system should be recirculating type of preferably RCM IIIR / PSM / SLURRY chief MARK III or their/other latest versions with minimum 8 BBL mixing/recirculating tub and agitator Should be able to mix slurry densities ranging from 8.3 to 22.0 PPG and rates at 12 to 3 BPM with suitably rated mixing pump and recirculating pump of HALLIBURTON /GOULDS /GD /MISSION/SERVA make driven by PTO / HYDRAULIC. It should have an automatic density control system with manual option to bypass
16	Clause no. 4.1.2 DISPLACEM ENT TANKS	Twin tank each of min 12 BBL capacity with metric & BBL markings. It should be constructed of stainless steel (min Grade 304 or equivalent) and are sufficiently reinforced to allow each compartment to be filled with	Twin tank each of min 10 BBL capacity with metric & BBL markings. It should be constructed of stainless steel (min Grade 304 or equivalent) and are sufficiently reinforced to allow each compartment to be filled with

		heavy weighted drilling fluid (up to 17ppg).	heavy weighted drilling fluid (up to 17ppg).
17	Clause No 4.1.4 b CONTROL PANEL	b. The gauges installed in the control panel shall be liquid filled type to dampen vibration when the unit is in operation. The control panel shall be installed with suitable anti vibration pads. The gauges to be provided shall be dual scale, English / Metric wherever possible ad oil field units.	b. The gauges installed in the control panel shall be liquid filled type or electronic type to dampen vibration when the unit is in operation. The control panel shall be installed with suitable anti vibration pads. The gauges to be provided shall be dual scale, English / Metric wherever possible ad oil field units.
18	Clause No 4.1.4 c CONTROL PANEL	c. All-important parameters of the unit shall be indicated in the control panel. The following minimum parameters/controls that are required to be installed in this local control panel cabinet will be as follows:  XVI Pneumatic Transmission shifter  XVII Pneumatic Throttle control	c. All-important parameters of the unit shall be indicated in the control panel. The following minimum parameters/controls that are required to be installed in this local control panel cabinet will be as follows:  XVI Electronic Transmission shifter  XVII Pneumatic or electronic throttle control
19	Clause 6.0 TREATING IRON, Pg 26 of 69	The following items are to be supplied with the unit along with easily accessible and convenient iron racks mounted on the unit body:  DESCRIPTION a. 2" x 3m long straight joint with union ends b. 2" x 1.5m long straight joint with union ends c. 2" style 10 type swivels with union ends d. 2" style 50 type swivels with union ends e. 2" dart style check valve with union ends f. 2" plug valve with union ends f. 2" plug valve with union ends f. 2" plug valve with union ends The above treating irons shall be 6,000 psi (or higher) rated working pressure. All high-pressure iron shall be of make FMC or SPM.	Minimum 150 m of high pressure treating iron of either 4 feet or 8 feet should be supplied along with the cementing unit and at-least 70 m of iron racks should be mounted easily, accessibly and conveniently on the unit body.  The above treating irons shall be 10,000 psi (or higher) rated working pressure. All high-pressure iron shall be of make FMC / SPM/WECO/HALLIBURTON/PAR VEEN
20	Clause 8.0 ACCESSORI	Following accessories to be provided along with unit	Following accessories to be provided along with unit
	ES, Pg 26 of 69	WECO/FMC/HALLIBURTON/SPM make.	WECO/FMC/HALLIBURTON/SPM /PARVEEN make. Total length of

			flow irons should be 492 ft. (approx.) not limited to the below mentioned counts.
		g. CHECK VALVE ASSY, 15000PSI WP , WITH INTEGRAL UNION ENDS-1 NO  h. PLUG VALVES ,2" WITH FIG 1502 INTEGRAL UNION ENDS ,15000PSI WP ( WECO/FMC/SPM/ Halliburton MAKE) -2 NOS  i PLUG VALVES ,1 X 2" WITH FIG 1502 INTEGRAL UNION ENDS ,15000PSI WP, WECO/FMC/SPM / Halliburton MAKE -2 NOS  j. BLENDER SUCTION HOSE ASSEMBLY: 4", 25 FEET LONG 150 PSI WP WITH 4" FIG 206	g. clapper type CHECK VALVE ASSY, 15000PSI WP, WITH INTEGRAL UNION ENDS 10 NOS
		k. MUD AND WATER HOSE ASSEMBLY:2", 25 FEET LONG 1000 PSI WP WITH 2" FIG1502 UNION ENDS M X F-4 NOS.  1. TEE ASSY: 2 " FIG 1502 - 2 NOS	ASSEMBLY: 4", 25 FEET LONG 150 PSI WP WITH 4" FIG 206 UNION ENDS M XF -8 NOS.  k. MUD AND WATER HOSE ASSEMBLY:2", 25 FEET LONG 1000 PSI WP WITH 2" FIG1502 UNION ENDS M X F— 8 NOS.  l. TEE 2" FIG 1502 with M X F X
		m. WING NUT -FIG 1502 -4 NOS. n. UNION 2" FIG 1502- 4 NOS. o. ADAPTER ASSY 2" FIG 1502 M XM - 2 NOS p. ADAPTER ASSY 2" FIG 1502 F X F - 2 NOS	F - 3 nos  TEE 2" FIG 1502 with F X M X  M - 3 nos  m. WING NUT -FIG 1502 - 12  NOS. n. UNION 2" FIG 1502- 12 NOS. o. ADAPTER ASSY 2" FIG 1502 M  XM - 12 NOS p. ADAPTER ASSY 2" FIG 1502 F  X F - 12 NOS
21	MANDATOR Y SPARES Clause 10.3, Pg 28 of 69	The following spares are to be supplied with the offered Pump Model: Triplex pump repair kit containing the following:  i. Bearing oil seal 1 no. each for DE & NDE  ii. Suction valve cover gasket-6 nos.  iii. Discharge valve cover gasket-6 nos.  iv. Packing, oil stop head -6 sets	The following spares are to be supplied with the offered Pump Model: Triplex pump repair kit containing the following:  i. Bearing oil seal 3 no. each for DE & NDE  ii. Suction valve cover gasket- 72 nos.  iii. Discharge valve cover gasket- 72 nos.  iv. Packing, oil stop head -12 sets

		v. Seal, suction to fluid cylinder- 6 sets	v. Seal, suction to fluid cylinder- 12 sets
		vi. Plunger-3 nos. vii. Stuffing Box Seal- 12 nos.	vi. Plunger for each size 36 nos.
		Complete Fluid Valve assy. including valve seat, spring etc. i. Suction valve assy 3 nos. ii. Discharge valve assy -3	vii. Stuffing Box Seal- 12 nos. Complete Fluid Valve assy. including valve seat, spring etc.
		nos. iii. Fluid Valve with inserts as	i. Suction valve assy 6 nos.
		applicable, iv. Suction valve - 3 nos. v. Discharge valve- 3 nos.	ii. Discharge valve assy <b>6</b> nos. iii. Fluid Valve with inserts as
		vi. Complete packing assembly- 6 nos. vii. Complete Packing rings set	applicable – <b>72 nos.</b> iv. Suction valve <b>for each plunger size</b> – <b>12</b> nos.
		- 6 set viii. Valve spring, suction and discharge- 3 nos.	v. Discharge valve- <b>24</b> nos. vi. Complete packing assembly <b>for each</b>
		each ix. Packing Nut- 4 Nos. Header Ring- 3 Nos.	plunger size- 36 nos. vii. Complete Packing rings set for each plunger size - 36 set
			viii. Valve spring, suction and discharge- <b>144</b> nos. each
			ix. Packing Nut <b>for each plunger size</b> — <b>36</b> Nos.  x. Header Ring <b>for each</b>
			plunger size - 36 Nos.
22	MANDATOR Y SPARES Clause 10.2 , Pg 27&28	The following spares are to be supplied with the offered transmission: i. Transmission Filter Element- 04	The following spares are to be supplied with the offered transmission:
	of 69	Nos. ii. Transmission Mounting- 02 Nos.	i. Transmission Filter Element- 10 Nos.
		iii. Gear Shifter- 01 No.s iv. Gear Shifter Repair Kit- 01 No.s v. Gear Shifter Hoses- 02 Nos.	ii. Transmission Mounting- 02 Nos.
			iii. Gear Shifter- 02 Nos
			iv. Gear Shifter Repair Kit- 05 Nos
23	Clause 12.0 (a)(b) &(c) OPERATION AL SPARES,Pg 30 of 69	a)The supplier shall provide the list of operational spares for Tractor & Trailer, Deck mounted engine, pumps & Control and Instrumentation System necessary for one (01) year trouble free operation and maintenance. The	a) The supplier shall provide the list of operational spares for Tractor & Trailer, Deck mounted engine, pumps & Control and Instrumentation System necessary for one (02) years trouble free operation and maintenance. The
		description, unit price & total	description, Part Nos. unit price &

		price of each spares shall be mentioned in the Price Bid only. The quoted prices shall be considered for bid evaluation. Part Nos. etc. of the spares shall be provided along with the supply in the event of order.	total price of each spares shall be mentioned in the Price Bid only.  The quoted prices shall not be considered for bid evaluation.
		b) All operational spares shall be supplied along with the unit.	b) Deleted
		c). In case any of the spares does not come as per bidder's design and the bidder has not quoted for such spares, the bidder shall clearly indicate the same. However, in case such spares are provided in the unit in future, the same shall be supplied by the bidder / supplier along with the supply without any extra cost to Oil India Limited	c) Deleted
24	Clause 12.0 (d)OPERATI ONAL SPARES,Pg 30 of 69	d. The bidder should also submit confirmation from OEM that the prices for spares quoted by them are not more than what the OEM charges to other customers for the items of same specifications.	OEM part number with price are to be provided with the price bid.
25	Clause no.20.0 Pg.36-37	INSTALLATION & COMMISSIONING:  Bidder to confirm compliance to the following:	INSTALLATION & COMMISSIONING:  Bidder to confirm compliance to the following:
		f. OIL shall call the Supplier for commissioning within 30 days of receipt of the items at Duliajan. The Supplier shall complete installation & commissioning within 60 days of receipt of OIL's intimation.	f. OIL shall call the Supplier for installation & commissioning within 30 days of receipt of the items at Duliajan. The Supplier shall complete installation & commissioning and 03 nos. of Cementing jobs within 60 days of receipt of OIL's intimation. In the event OIL delays in providing 03 nos. of Cementing jobs within 180 days from date of receipt of Cementing unit at Duliajan and delay is attributable to OIL, then installation & commissioning will be deemed complete after 180 days from the date of receipt of the Cementing unit at Duliajan.

26	Clause 21c,Page 37 of 69	To keep the unit fully operational, in case of failure of any item during the warranty period, it shall be the supplier's responsibility to arrange replacement / repairing at site at their cost including customs, freight, etc. within a period of maximum three (03) weeks from the date of notification of such failure and warranty for such items shall be extended accordingly.	To keep the unit fully operational, in case of failure of any item during the warranty period, it shall be the supplier's responsibility to arrange replacement / repairing at site at their cost including customs, freight, etc. within a period of maximum three (03) weeks from the date of notification of such failure and warranty for such items shall be extended accordingly. In case failure of any item is not rectified within 3 weeks of notification then penalty at the rate of 0.5% of PO value per week subject to a maximum of 7.5 % of PO value shall be levied and warranty for such items shall be extended accordingly. This penalty amount shall be recovered from Performance security amount submitted by the successful bidder.
27	Clause 17.0 L (iv)	(iv) The Third-Party Inspection shall be carried out strictly as per the QAP approved by OIL INDIA.	(iv) The Third-Party Inspection shall be carried out strictly as per the QAP approved by OIL INDIA. A tentative QAP is provided in <b>Annexure H</b> .  However Final QAP for TPI to be submitted by successful bidder to OIL for approval after placement of PO.
28	Part-A Annexure-B Clause No.25.0 Page 40 of 69	25.0 HIGH SECURITY REGISTRATION PLATE (HSRP): On receipt of the vehicle(s) and documents required for permanent registration, Oil India Limited (OIL) shall apply for permanent registration of the vehicle(s) at the office of the local Government Tender No.: SDG2933P23/07 dated 09.03.2023 PART - A Page 41 of 69 District Transport Office (DTO). On receipt of the government Registration Number, Oil India Limited shall inform the Registration Number to the supplier. The supplier shall supply	On receipt of the vehicle(s) and documents required for permanent registration, Oil India Limited (OIL) shall apply for permanent registration of the vehicle(s) at the office of the local Government District Transport Office (DTO). On receipt of the government Registration Number, Oil India Limited shall inform the Registration Number to the supplier. The supplier shall supply the High Security Registration Plate (HSRP) through the Original Equipment Manufacturers of motor vehicle/ dealer/any one of the agencies authorised by the

the High Security Registration Plate (HSRP) through the Original Equipment Manufacturers of motor vehicle/ dealer/any one of the agencies authorised by the Government of India/Assam to issue the High Security Registration Plate (HSRP) enabling the DTO to issue permanent Registration Certificate for the vehicle(s) as required for road drive of the vehicle. Bidder/supplier shall also ensure adherence to any subsequent revisions to the referred requirements that may be issued in future by Ministry of Road Transport & Highways (MoRTH), Government of India

Government of India/Assam to issue the High Security Registration Plate (HSRP) enabling the DTO to issue permanent Registration Certificate for the vehicle(s) as required for road drive of the vehicle.

Bidder/supplier shall also ensure adherence to any subsequent revisions to the referred requirements that may be issued by Ministry of Road Transport & Highways (MoRTH), Government of India till supply of the High Security Registration Plate (HSRP).

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(Annexure H)

### Tentative Quality assurance Plan (QAP) for Third Party Inspection

- 1.0 Inspection of Trailer and Tractor unit as per specifications given in the purchase order (PO).
- 2.0 Inspection of GA (General Arrangement) drawing of the complete unit including the Trailer manufacturer's initial design approvals of the cementing unit Trailer.
- 3.0 Inspection of the dimensions, make & model, date of manufacture, drive, GCWR, engine, emission norms, transmission, axles, suspension, steering, brake, wheels, tyres, electric system, driver's cabin, driver's cabin instrumentation, fifth wheel coupling for coupling the trailer, pneumatic system, electrical system, spark arrestor, vertical exhaust, speedometer, lightings etc. and all other requirements as per purchase order (PO) of the Tractor.
- 4.0 Inspection of the dimensions, make & model of different components, date of manufacture, chassis frame, axles, pneumatic system, brake, suspension, wheels, tyres, mudguards, kingpin for coupling with Tractor unit, landing gears, electric equipment/system, attachment, platform, painting, Side under run Protection Device (SUPD), Rear under run Protection Device (RUPD, information plate etc. and all other requirements as per purchase order (PO) of the Trailer.
- 5.0 Dimensions & weights of the Tractor, Trailer and Tractor & Cementing Unit Trailer combination as per purchase order (PO).
- 6.0 Inspection of various manuals, catalogue and drawings as detailed in the purchase order (PO).
- 7.0 Inspection of availability, dimensions, make & model, date of manufacture of items as per terms of tender documents: SDG2933P23/07 dated 09.03.2023, Annexure B, Technical Specification, C.4.0 (relevant amendment to be considered)

Clause no.	Items/description	
C.4.0, 4.1 b	Make & Model of Pump	
C.4.0, 4.1.1	SLURRY MIXING TANK(S)	
C.4.0, 4.1.2	DISPLACEMENT TANKS	
C.4.0, 5.0	ILLUMINATIONS:	
C.4.0, 6.0	TREATING IRON:	
C.4.0, 7.0	Tools	
C.4.0, 8.0	Accessories	
C.4.0, 9.0	General Requirement	
C.4.0, 10.3	The following spares are to be supplied with the	
	offered Pump Model	
C.4.0, 11.0	COMMISSIONING SPARES	
C.4.0, 16.0	Technical Manual and catalogues for Operation and	
	Maintenance of the Unit	

8.0 Inspection of Deck Engine as per specifications given in the purchase order (PO).

- 9.0 Inspection of Load test of Deck Engine by OEM and Declared load Certificate by OEM
- 10.0 Inspection of the dimensions, make & model, date of manufacture, engine, emission norms, transmission, fuel tank and all other requirements as per purchase order (PO) of the Deck engine.
- 11.0 Inspection of the dimensions, make & model of different components, date of manufacture of engine, transmissions, charging alternator, engine starter, starter battery, information plate etc. and all other requirements as per purchase order (PO) of the deck engine.
- 12.0 Inspection of mandatory spares parts as per purchase order (P.O).
- 13.0 Inspection of accessories & other fittings etc. in the Tractor-Trailer as per purchase order (PO).
- 14.0 Proper coupling and testing of the Tractor with the Cementing Unit Trailer shall be inspected and ensured.
- 14.1 Inspection of accessories & other fittings etc. mounted on the Deck Engine as per purchase order (PO).
- **15.0** List of items covered under TPI for instrumentation as per P.O
  - 1. CONTROL SYSTEM AND INSTRUMENTATION
  - 2. CONTROL PANEL
  - 3. DATA ACQUISITION SYSTEM
  - 4. SHUT DOWN SYSTEM
- **16**.0 Equipment certifications and calibration certifications shall be provided by the manufacturer to TPICA for review.
- **17**.0 Third Party Inspection & Certification Authority (TPICA) to ensure that all drawings, manuals are in English language.
- Inspection of draft copies of documents to be submitted along with the supply as mentioned in the purchase order (P.O) like Invoices, Sale Letter (certificate), Road-Worthiness Certificate for Compliance to Emission and Noise Standards (in similar format of Form 21, 22 & 22A of Motor Vehicle Act, 1988 & Central Motor Vehicle Rules, 1989 of India), Emission Norms Certificate, Temporary Registration (if applicable), Motor Vehicle Insurance (if applicable), Certificate for the Tractor Unit as mentioned in the purchase order (PO), Type Approval Certificate of the complete vehicle (i.e Tractor & Trailer) as mentioned in the purchase order (PO), certification/documentation from appropriate authority regarding the speed limitation function or SLD (Speed Limiting Device), Certificate of origin of the Tractor & Trailer, etc.

19.0 Functioning test and test results as per PO requirements for below mentioned points. (Witness/Pressure test/Review Document)

Clause	Items/description	Minimum requirement		
no.				
C.4.0,	Make & Model of	Slurry flow rate test, maximum		
4.1 b	Pump	pressure vs flow test, density control		
		test, maximum pump discharge test,		
		c-pump function test		
C.4.0,	SLURRY MIXING	volumetric test, hydraulic system		
4.1.1	TANK(S)-	function test, slurry mixing test		
C.4.0,	DISPLACEMENT	DISPLACEMENT Volumetric test, load bearing test with		
4.1.2	TANKS-	17ppg		

20.0 Inspection of pressure test reports and certifications from OEM (if applicable) to all below mentioned items.(Witness/ Pressure test Required/Review Documents)

Clause no.	Items/description
C.4.0, 6.0	TREATING IRON:
C.4.0, 8.0	Accessories

21.0 The nominated third-party inspection agency shall carry out the inspection and submit summarized reports with remarks as "meets purchase order (PO) specifications / does not meet purchase order (PO) specifications" as the case may be including detailed reports in each stage. The nominated third-party inspection agency shall clearly indicate the items which does not does not meet purchase order (PO) specifications in their summarized reports.

### General:

- 1. Depute the Inspector to visit the Packager's facility and carry out inspection at the following stages:
  - a. On arrival of materials)
  - b. During Assembling
  - c. Pre-Shipment
- 2. Review & check Material Test Certificates and manufacturing procedures during the visit.
- 3. Check the status of Packages according to Packager's manufacturing schedule, QC plan & highlight any ambiguities & delays in Packager's manufacturing schedule.
- 4. Dimensional Inspection before shipment packing.
- 5. Review the available inspection and testing reports.
- 6. Verification of name plate sizing rating model numbers, part numbers, and tag numbers etc.
- 7. Physical check for any damages before dispatch.
- 8. Check that all manuals, instructions, guidelines and procedures are included.
- 9. TPIA shall verify any requirement of special jigs, fixtures, tools, gauges for inspection mentioned in the applicable documents for inspection and ensure use of same.
- 10. Ensure Material Test Certificate, their make & traceability records to ensure use of correct material. Carry out inspection activities such as material identification, stamp transfers, In-Process inspection including fit-ups, Witness while Non-destructive examination as applicable, final inspection and documentation as specified in quality documents. Witness pressure and leak tests, functional tests or any other tests

- specifications. Carry out final visual & overall dimensional examination, as per relevant standards
- 11. TPIA may perform or seek any relevant documentation/certification as deemed required not limited to particulars mentioned above.
- 22.0 The items to be inspected in the different stages of third-party inspection may arranged by the nominated third party inspection agency in consultation with successful bidder covering all the specifications/requirements of the purchase order (PO).

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### **Revised ANNEXURE - G (i)**

### PRICE SCHEDULE – DOMESTIC BIDDERS (Revised)

(Bidders should fill up, sign and upload this price schedule [Annexure G(i)] under "Notes & Attachments" > "Attachments" only. The filled up price breakup should not be uploaded in Technical RFx Response folder)

TENDER NO.	

		Item 10
1 A	Basic Material Value including cost of all accessories (but excluding	
	TPI), if any.	
1 B	Cost of Commissioning Spares	
1 C	Cost of Mandatory Spares	
1 D	Pre-despatch Inspection Charges, if any	
1 E	Packing & Forwarding charges	
2	Ex-Works Value (1A+1B+1C+1D+1E)	
3	Quantity	1 Nos.
4	Total Ex-Works Value (2 X 3)	
5	GST on Ex-Works Value (4)	
6	Compensatory Cess, if any	
7	Total FOR Despatching Station Value (4+5+6)	
8	Inland Freight Charges upto Duliajan, Assam	
9	GST on Inland Freight (8)	
10	Transit Insurance Charges, if any including GST	
11	Training Charges, if any	
12	GST on Training Charges (11)	
13	Installation & Commissioning Charges, if any	
14	GST on Installation & Commissioning Charges (13)	
15	Total (7+8+9+10+11+12+13+14)	
	HSN Code	
	Total weight of consignment	
	Total volume of consignment	
	Total Local Content	
	Total Import content	

#### Notes

(iii) Loading & evaluation shall be done as per clause nos. BB 1.0 to 5.0 of Annexure -C.

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<sup>(</sup>i) In the event of computational error between unit price and total price, unit price shall prevail and adopted for evaluation. Similarly, in the event of discrepancy between words and quoted figure, words will prevail.

<sup>(</sup>ii) GST should be quoted separately. If GST is not shown separately the offer will be considered to be inclusive of all taxes and will be binding on the bidder.

### Revised ANNEXURE – G (ii)

### PRICE SCHEDULE - FOREIGN BIDDERS (Revised)

(Bidders should fill up, sign and upload this price schedule [Annexure G(ii)] under "Notes & Attachments" > "Attachments" only. The filled up price breakup should not be uploaded in Technical RFx Response folder)

TENDER NO.	

		Item 10
1 A	Basic Material Value including cost of all accessories (but excluding	
	TPI), if any.	
1 B	Cost of Commissioning Spares	
1 C	Cost of Mandatory Spares	
1 D	Pre-despatch Inspection Charges, if any	
1 E	Packing & FOB charges	
2	FOB Value (1A+1B+1C+1D+1E)	
3	Quantity	1 Nos.
4	Total FOB Value (2 X 3)	
5	Ocean Freight Charges upto Kolkata, India	
	(For consignments weighing upto 100 Kg, Air Freight Charges upto	
	Kolkata, India to be quoted)	
6	Insurance, @0.5% of Total FOB Value (4)	
7	Banking Charges @1 % of Total FOB Value (4) above in case of	
	payment through Letter of Credit. If confirmed L/C at buyer's account	
	is required, 1.5% of Total FOB Value(4) will be loaded)	
8	CIF Landed Value (4+5+6+7)	
9	Basic Custom Duty (including cess, if any) on (8)	
10	CIF Landed Value + CD (8+9)	
11	IGST (including cess, if any) on (10)	
12	Compensatory Cess on (11), if any:	
13	CIF+CD+GST Landed Value, (10+11+12)	
14	Training Charges, if any:	
15	GST on Training Charges (14):	
16	Installation & Commissioning Charges, if any:	
17	GST on Installation & Commissioning Charges (16):	
18	Total Value (13+14+15+16+17)	
	HSN Code	
	Total weight of consignment	
	Total volume of consignment	
	Total Local Content (Refer definition of Local Content as per Appendix	
	A1 of the tender)	

#### Notes:

- (i) In the event of computational error between unit price and total price, unit price shall prevail and adopted for evaluation. Similarly, in the event of discrepancy between words and quoted figure, words will prevail.
- (ii) Loading & evaluation shall done be as per clause no. BB 1.0 to 5.0 of Annexure –C.
- (iii) Currency to be clearly indicated for all the items.

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### Revised ANNEXURE – G (iii)

### PRICE BREAK UP - Revised

(Bidders should fill up, sign and upload this price break up schedule [Annexure G(iii)] under "Notes & Attachments" > "Attachments" only. The filled up price breakup should not be uploaded in Technical RFx Response folder)

TENDER NO.

		Qty	Unit Price	Currency
1		-		-
Not	es:			
	ice break up of Basic Material Value , Cost of all accessories, Cost of Cooted in PRICE SCHEDULE ANNEXURE – $G$ (i) or $G$ (ii) to be provided		Spares, Mand	latory Spares
	the event of difference between price quoted in PRICE SCHEDULE A up is observed then prices of PRICE SCHEDULE shall be adopted for e		- G (i) or G (	(ii) and Price
(iii) C	Currency to be clearly indicated for all the items.			
	*************			
	te break up of Maintenance Spares and Operational Spares to be provided luation.	which shall n	ot be consider	red for Bid

BB) This amendment is also issued to extend the Bid Closing date, Technical Bid Opening date, Bid security submission date of the etender as under:

- i) Bid Closing Date & Time: 31.05.2023 at 11:00 (IST)
- ii)Bid security submission Date & Time: 31.05.2023 at 11:00 (IST)
- iii) Technical Bid Opening Date & Time: 31.05.2023 at 13:00 (IST).

CC) All other terms and condition of the tender remain unchanged.

Sd/-

(TUHIN ROY)
CMM-FD
MATERIALS DEPARTMENT
FOR GM- MATERIALS
FOR RESIDENT CHIEF EXECUTIVE

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