AMENDMENT NO. 3 DATED 03.09.2024 TO GEM/2024/B/5233953 Dtd 01.08.2024

This amendment is issued for the following:

AA) To amend the technical specifications of the tender as under:

Cl. No.	Existing specifications	Amended specifications
SECTION I		
2.0	**DETAILS OF THE PUMP FOR WELL KILLING PUMP PACKAGE**:	
2.7	Discharge manifold: Discharge manifold should have the provision of making discharge connection from either end and should comprise of two branches, one the main discharge line and other the bleed line. The discharge connection size should be (2-1/16 API 10000 #RTJ Flange). The discharge manifold should be assembled with the following accessories – Reset type 01 no. 2 inch relief valve (a full opening type) with a working pressure greater than the maximum working pressure of the pump (Make OTECO/ CAMERON/O'Drill/NOV) having hammer union connections of FIG 1502. The relief valve must be placed in the discharge line as close as possible to the pump fluid end or it may be mounted on the pump discharge manifold. A 2" nipple should be fitted on the outlet of the SRV. A Fig 1502 wing union should be fitted in the other end of the nipple. The SRV outlet line should be properly supported and anchored within the skid for ease of transportation. 1 No. 2-1/16 inch 10000 psi WP, API-6A monogramed plug valve should be fitted in the discharge line with 2 inch size nipple & wing union of style Fig. 1502. 1 No. 2-1/16 inch orifice size adjustable Choke valve of, 10000 psi W.P. with end connection of union of style Fig.1502 should be fitted in the bleed line. 1 No. pressure gauge (range 0-15000 psi) to be fitted on discharge line. Make: **OTECO**.	Discharge manifold: Discharge manifold should have the provision of making discharge connection from either end and should comprise of two branches, one the main discharge line and other the bleed line. The discharge connection size should be (2-1/16 API 10000 #RTJ Flange). The discharge manifold should be assembled with the following accessories – Reset type 01 no. 2 inch relief valve (a full opening type) with a working pressure greater than the maximum working pressure of the pump (Make OTECO/ CAMERON/O'Drill/NOV) having hammer union connections of FIG 1502. The relief valve must be placed in the discharge line as close as possible to the pump fluid end or it may be mounted on the pump discharge manifold. A 2" nipple should be fitted on the outlet of the SRV. A Fig 1502 wing union should be fitted in the other end of the nipple. The SRV outlet line should be properly supported and anchored within the skid for ease of transportation. 1 No. 2-1/16 inch 10000 psi WP, API-6A monogramed plug valve should be fitted in the discharge line with 2 inch size nipple & wing union of style Fig. 1502. 1 No. 2-1/16 inch orifice size adjustable Choke valve of, 10000 psi W.P. with end connection of union of style Fig.1502 should be fitted in the bleed line. 1 No. pressure gauge (range 0-15000 psi) to be fitted on discharge line. **Make OTECO/ CAMERON/O'Drill/ NOV** 1 No. suitable Discharge dampener to be fitted. All the necessary fittings, flanges, gaskets, stud & nuts to fit the above.

	1 No. suitable Discharge dampener to be fitted. All the necessary fittings, flanges, gaskets, stud & nuts to fit the above. Strong and rigid supports for the discharge and bleed lines should be welded on the skid.	Strong and rigid supports for the discharge and bleed lines should be welded on the skid.
2.8	The following high pressure fittings should be supplied along with the **pump.** (In conformance to applicable API) i) 15 Nos. of 2-inch piping in length of 10 feet and of 10,000 psi cold working pressure with the following specifications: - Size: 2 inch Type: One-piece, forged end construction with wing union of style Fig. 1502 of capacity of 10,000 psi Non shock cold WP(NSCWP). ii) 2 Nos. circulating steel hose of ID-2 inch size, 12 feet total length with single swivel joint **of style 10 M X M** , end connection with wing union of style Fig. 1502, capacity of 10,000 psi NSCWP. iii) **1 No. 2-1/16 inch Check valve(Top entry-Flapper type),** of capacity of 10,000 psi. Wing-ahead Fig. 1502. iv) 1 No. 2-1/16 inch plug valve, 10,000 psi capacity, Fig. 1502 wing end connection. v) 1 No. Tee, 10,000 psi capacity, Fig. 1502 wing end connection. vi) Robust type pipe rack for stacking these high-pressure pipes should be provided on the main skid itself in a convenient place with proper fixers and locking provision. vii) 01 No. of digital pump stroke counter per pump. viii) 01 No. Pressure Switch gage.	The following high pressure fittings should be supplied along with **each pump package**. (In conformance to applicable API) i) 15 Nos. of 2-inch piping in length of 10 feet and of 10,000 psi cold working pressure with the following specifications: - Size: 2 inch Type: One-piece, forged end construction with wing union of style Fig. 1502 of capacity of 10,000 psi Non shock cold WP(NSCWP). ii) 2 Nos. circulating steel hose of ID-2 inch size, 12 feet total length with single swivel joint **of style 10 X 10M** , end connection with wing union of style Fig. 1502, capacity of 10,000 psi NSCWP. iii) **1 No. 2-1/16 inch orifice size adjustable Choke valve,** of capacity 10,000 psi. Wing-head Fig. 1502 **for bleed line.** iv) 1 No. 2-1/16 inch plug valve, 10,000 psi capacity, Fig. 1502 wing end connection **for discharge line**. v) 1 No. Tee, 10,000 psi capacity, Fig. 1502 wing end connection. vi) Robust type pipe rack for stacking these high-pressure pipes should be provided on the main skid itself in a convenient place with proper fixers and locking provision. vii) 01 No. of digital pump stroke counter per pump. viii) 01 No. Pressure Switch gage.

	Any accessories other than those mentioned above require for safely operating the pump set is/are to be included in the bid.	Any accessories other than those mentioned above require for safely operating the pump set is/are to be included in the bid.
SECTION II		
3.3	Engine shall conform to STAGE-IIIA / TIER-III emission norms. The engine shall conform and meet to the latest emission norms/ standard as applicable in India at the time of delivery as per latest CP CB norms , Govt of India .-**Amendment 1**	The engine shall conform and meet to the latest emission norms/ standard as applicable in India at the time of delivery as per latest CPCB norms , Govt of India. **Engine shall conform to BS-6 / TIER-III emission norms.**
3.6	ACCESSORIES: The engine offered should be complete in all respect with the following components mounted on it. i) Heavy duty Air Cleaner with pre-cleaner & Vacuum Indicator. ii) Spark Arrestor cum Silencer covered with heat resistant material & capable of max exhaust back pressure: 75mmHg. Exhaust is diverted to off-operator side with 85 dB. iii) Heavy duty Radiator for Industrial use with Fan, Fan arrangement & low water level indication with alarm. The radiator must be having capacity of at least 20% in excess of total heat rejection of the engine. iv) Pneumatically operated Inlet Air shut off device & Fuel shut off device should be provided with the engine for emergency shut off & designed in such a way that it can be operated from engine. v) Instrument Panel will have Oil & Fuel pressure gauge, Oil, Water & Exhaust temperature gauge, Electronic Tachometer with R/Hrs meter, Emergency air shut off switch etc. There will be sufficient space for maintenance and repair of the Instrument Panel. vi) Suitable Safety Shut Off system with Alarm for Low lube oil pressure, High water temperature, Engine over speed etc. The bidder shall advise for any additional alarms and/or	ACCESSORIES: The engine offered should be complete in all respect with the following components mounted on it. i) Heavy duty Air Cleaner with pre-cleaner & Vacuum Indicator. ii) Spark Arrestor cum Silencer covered with heat resistant material & capable of max exhaust back pressure: 75mmHg. Exhaust is diverted to off-operator side with 85 db. iii) Heavy duty Radiator for Industrial use with Fan, Fan arrangement & low water level indication with alarm. The radiator must be having capacity of at least 20% in excess of total heat rejection of the engine. iv) Pneumatically operated Inlet Air shut off device & Fuel shut off device should be provided with the engine for emergency shut off & designed in such a way that it can be operated from engine. v) Instrument Panel will have Oil & Fuel pressure gauge, Oil, Water & Exhaust temperature gauge, Electronic Tachometer with R/Hrs meter, Emergency air shut off switch etc. There will be sufficient space for maintenance and repair of the Instrument Panel. vi) Suitable Safety Shut Off system with Alarm for Low lube oil pressure, High water temperature, Engine over speed etc. The bidder shall advise for any additional alarms and/or shutdowns considered essential to safeguard the equipment. vii) Air compressor of required capacity at

	shutdowns considered essential to safeguard the equipment. vii) Air compressor of required capacity at 7 kg/cm2 with a reservoir tank fitted with pressure gauge, safety relief valve & drain cock. viii) The critical wiring should be in separate rodent proof conduit with proper marking from other wiring for following: - a. Engine shutdown signals. b. Engine Throttle signal. c. Wiring which activates the special modes of engine like engine de-rate, idle RPM mode etc. d. Interfacing wiring between engine, transmission and safety system **Note**: *Engine Harness wirings must be of OEM supplied.* ix) Engine starting system will have both electric starter & pneumatic. x) 02 (Two) nos maintenance free Heavy-duty battery **suitable for hazardous area,** complete with cable & connection to be provided in an Aluminium or SS box with rubber insulation(min 6mm thickness) panelled inside the box. xi) Engine should have 24 volt battery **charging flameproof alternator**. xii) A fuel tank of 200 liters capacity *(may be mounted on a frame near the engine to tackle air lock issue in fuel system).* The fuel supply & return lines from the tank to the engine should be fitted. xiii) All the V-belts, cooling fan and all other moving parts should be well guarded.	7 kg/cm2 with a reservoir tank fitted with pressure gauge, safety relief valve & drain cock. viii) The critical wiring should be in separate rodent proof conduit with proper marking from other wiring for following: - a. Engine shutdown signals. b. Engine Throttle signal. c. Wiring which activates the special modes of engine like engine de-rate, idle RPM mode etc. d. Interfacing wiring between engine, transmission and safety system **Note**: *Engine Harness wirings must be of OEM supplied.* ix) Engine starting system will have both electric starter & pneumatic. x) 02 (Two) nos maintenance free Heavy-duty battery, complete with cable & connection to be provided in an Aluminium or SS box with rubber insulation(min 6mm thickness) panelled inside the box. xi)Engine should have 24 volt **battery charging alternator.** xii) A fuel tank of 200 liters capacity *(may be mounted on a frame near the engine to tackle air lock issue in fuel system).* The fuel supply & return lines from the tank to the engine should be fitted. xiii) All the V-belts, cooling fan and all other moving parts should be well guarded. xiv) General a. Flywheel complete with starter ring gear and resilient/flex plate to mount transmission. b. Flywheel housing having SAE no. 1 flange. c. Vibration Dampener and guard. d. Lifting eyes e. Fumes disposal f. Crankcase breather g. Standard painting of the engine h. Engine crank case design will be of shallow pan type. xv)The Fuel to be used by the prime mover: High speed Diesel Fuel conforming IS: 1460-2017

	xiv) General a. Flywheel complete with starter ring gear and resilient/flex plate to mount transmission. b. Flywheel housing having SAE no. 1 flange. c. Vibration Dampener and guard. d. Lifting eyes e. Fumes disposal f. Crankcase breather g. Standard painting of the engine h. Engine crank case design will be of shallow pan type. xv) The Fuel to be used by the prime mover: High speed Diesel Fuel conforming IS: 1460-2017 xvi) Operating Site Condition The engine should be suitable for operation at the following site condition: a) Engine site temperature b) Engine site temperature c) Maximum relative humidity at 21°C d) Maximum relative humidity at 35°C e) Maximum relative humidity at 45°C f) Altitude above sea level g) Average annual rainfall	xvi)Operating Site Condition The engine should be suitable for operation at the following site condition: a) Engine site temperature : 50°C(Max) b) Engine site temperature : 2°C (Min) c) Maximum relative humidity at 21°C : 100% d) Maximum relative humidity at 35°C : 95% e) Maximum relative humidity at 45°C : 70% f) Altitude above sea level : 150 m. g) Average annual rainfall : 343 cms.
4.0	Transmission and drive line :- i) A Torque Matic Transmission (Make: Allison Transmission) of suitable model should be directly mounted on engine flywheel to transmit required power to the pump with the following main features:- a) 5 forward speeds with reverse locked. b) Gear ratios will be as per requirement to meet various discharge parameters of the pump. c) Oil filter completed with all hoses and fittings. d) **Gear shifting: - automatic** e) Allison pushbutton shifter with Gear indicator and mode display. f) Transmission oil pressure & temperature indicator. g) Transmission low oil level protection.	Transmission and drive line :- i) An Torque matic Transmission (Make: Allison Transmission) of suitable model should be directly mounted on engine flywheel to transmit required power to the pump with the following main features:- a) 5 forward speeds with reverse locked. b) Gear ratios will be as per requirement to meet various discharge parameters of the pump. c) Oil filter completed with all hoses and fittings. d) Gear Shifting:- automatic with **Gear shifter: - Pushbutton or Lever type** e) Allison pushbutton shifter with Gear indicator and mode display. f) Transmission oil pressure & temperature indicator. g) Transmission low oil level protection. • Series/model is to be quoted as per design requirement and is to be clearly mentioned in the offer.

	• Series/model is to be quoted as per design requirement and is to be clearly mentioned in the offer. ii) A short coupled adjustable splined cordon shaft with maximum of 100 mm telescopic movement should be mounted between output shaft of the transmission and input shaft of pump crankshaft. This drive line should be well guarded. iii) Cooling System: Transmission oil should be cooled either by engine coolant or radiator fan with the help of proper "Heat Exchanger".	ii) A short coupled adjustable splined cordon shaft with maximum of 100 mm telescopic movement should be mounted between output shaft of the transmission and input shaft of pump crankshaft. This drive line should be well guarded. iii) Cooling System: Transmission oil should be cooled either by engine coolant or radiator fan with the help of proper "Heat Exchanger".
SECTION III		
10	Skid with detachable roof for each pump package	
10.1	Skid with detachable roof for each pump package:: All the equipment and other accessories detailed in Annexure-I and Annexure-II should be unitized and mounted on a suitable 4 runner portable oil field type skid made from ISMB 250 X 125 . At the end portion of the #I" section structure on both the sides, steel pipe **of size** 152mm NB x 9.5 mm wall thickness should be inserted and welded properly. The 'I' section beam should be placed at equal distance and connected with same size beam at 1500 mm apart & the pipe of MS on both ends in welded construction. The skid should be covered and welded with checkered plate and painted by one coat of red oxide followed by blue enamel paint. The over all dimension of the skid with all equipment mounted on it should not exceed as mentioned below: Length X Breath X Height = 6000 mm X 2500 mm X 2700 mm The skid shall be provided with lifting lugs for at least a four-point lift. Lifting the skid complete with all equipment mounted shall not permanently distort or otherwise damage the skid or the equipment mounted on it.	Skid with detachable roof for each pump package:: All the equipment and other accessories detailed in Annexure-I and Annexure-II should be unitized and mounted on a suitable 4 runner portable oil field type skid made from ISMB 250 X 125 . At the end portion of the I" section structure on both the sides, steel pipe of **min. dia** 152mm NB x 9.5 mm wall thickness should be inserted and welded properly. The 'I' section beam should be placed at equal distance and connected with same size beam at 1500 mm apart & the pipe of MS on both ends in welded construction. The skid should be covered and welded with checkered plate and painted by one coat of red oxide followed by blue enamel paint. The over all dimension of the skid with all equipment mounted on it should not exceed as mentioned below: Length X Breath X Height = 6000 mm X 2500 mm X 2700 mm The skid shall be provided with lifting lugs for at least a four-point lift. Lifting the skid complete with all equipment mounted shall not permanently distort or otherwise damage the skid or the equipment mounted on it.

NOTE: The Bid Security if submitted in the form of BG/e-PBG must be valid at least for a period of 165 days from the date of original bid closing date of the tender **i.e. upto 09.02.2025.**

BB) To extend Bid Closing date and Last date of submission of Bid security of the tender upto **18.09.2024 11:00 Hours (IST).**

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

****

AMENDMENT NO. 2 DATED 21.08.2024 TO GEM/2024/B/5233953 Dtd 01.08.2024

This amendment is issued for the following:

AA) a) Pre-Bid Conference is scheduled to be held at **OIL INDIA LIMITED, DULIAJAN, ASSAM 786602** tentatively on **26-08-2024** to explain the requirements of OIL in details to the interested prospective Bidders and to understand bidders' perspective including exchange of views/clarifications, if any, on the Scope of Work, Bid Rejection/Bid Evaluation Criteria and other terms & conditions of the Tender.

Pre-bid conference shall be conducted at **Duliajan, Assam**. Bidders interested to attend the pre-bid conference as above must send their confirmation to: Mr. Tuhin Roy, Deputy General Manager Materials (FD), Oil India Limited, P.O. Duliajan–786602, ASSAM, E-mail: tuhin_roy@oilindia.in at least 2 (Two) days prior to the date of pre-bid conference.

Those bidders who send their confirmation for participation at least 2 (Two) days prior to date of pre-bid conference shall be allowed to attend the pre-bid conference.

b) The prospective bidders shall submit their queries against tender conditions, through e-mail at least 2 (Two) days prior to the date of pre-bid conference. OIL expects that the Bidders should comply to the tender conditions in Toto. However, clarifications/exceptions /deviations, if required any, should be brought out by the bidders prior to or during the Pre-Bid Conference only. After processing these suggestions, as a sequel to the pre-bid conference, Company shall communicate the changes/modifications in this regard, if agreed any, through an addendum to tender document in e-portal and thereafter Company shall be at liberty to reject all such non-compliant Bids.

c) Maximum Three (3) representatives from each prospective bidder (authorized to participate in the tender), shall be allowed to participate in the pre-bid conference. All costs associated to attend the pre-bid conference by Bidders representatives shall be borne by the interested Bidders.

d) Details :

Pre Bid Queries/ Clarifications on the Tender	To submit through e-mail addressed to tuhin_roy@oilindia.in.
Date of Pre-bid Conference	26-08-2024
Venue	**OIL INDIA LIMITED, DULIAJAN, ASSAM 786602**
Last date for receipt of Pre-bid participation confirmation	24-08-2024
Time of Pre-bid Conference	09.00 Hours (IST)

BB) To extend Bid Closing date and Last date of submission of Bid security of the tender upto 10.09.2024 11:00 Hours (IST).

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

****

AMENDMENT NO. 1 DATED 16.08.2024 TO TENDER NO. GEM/2024/B/5233953

This amendment is issued for the following:

AA) To amend the technical specifications of the tender as under:

Sl NO	**Existing specifications**	**Amended specifications**
As per Tender Clause 2.2 of Sec II	i. Discharge of min. 10 GPM to max. 30GPM at 10000 psi ii. Discharge of min. 220GPM to max. 250GPM at 2100 psi.	i. Discharge of min. 10 **USGPM** to max. **30USG**PM at 10000 psi ii. Discharge of min. 220**USGPM** to max. 250**USGPM** at 2100 psi.
As per Tender Clause 3.3 of Sec II	Engine shall conform to STAGE-IIIA/TIER-III emission norms.	The engine shall conform and meet to the latest emission norms/standard as applicable in India at the time of delivery as per latest CPCB norms , Govt of India .

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

****