To,

M/s. BPCL ESTIMATE

MUMBAI . India - 400038.

Ph:,Fax:.

Vendor Code:300648

REQUEST FOR QUOTATION

Collective RFQ Number/ Purchase Group

1000265104 / N46-DHT SER PROC

Contact person/Telephone

SINARE ANUP/-3269

Fax : -

Email:sinareanup@bharatpetroleum.in

Our ref.:

RFQ No/Date: 6000976265 / 21.09.2016

Quotation Due Date/Time: 28.09.2016/12:00:00

Material/Services required at:

M/s. BHARAT PETROLEUM CORPN. LTD

MUMBAI REFINERY

MAHUL,

MUMBAI - 400074

India

SUBJECT: MODIFICATION OF TANK-409 FOR DHT PROJECT AT BPCL, MUMBAI REFINERY.

You are invited to quote online through BPCL E-Procurement website https://bpcleproc.in on "Two-Bid-Basis" for the subject work as per the enclosed Tender Documents.

Your quoted rates shall be inclusive of all applicable taxes and duties except Maharashtra VAT, Service Tax, Swachh Bharat Cess (SBC) and Krishi Kalyan Cess (KKC), which shall be quoted separately in attached Form-A. Please note that submission of this FORM-A along with Technical / Unpriced Bid is mandatory. Your rates shall remain firm till completion of work. The applicability of Service Tax, Swachh Bharat Cess, Krishi Kalyan Cess and MVAT as a percentage rate of total quoted price shall be clearly mentioned in the Form-A. If the information is not provided, it will be assumed that Service Tax, Swachh Bharat Cess, Krishi Kalyan Cess and MVAT is not applicable. No claim for the Service Tax, Swachh Bharat Cess, Krishi Kalyan Cess and MVAT will be entertained subsequently.

Service Tax, Swachh Bharat Cess, Krishi Kalyan cess and MVAT shall be paid after verifiying Service tax registration number and MVAT TIN number in invoice. Break up of basic cost, Service tax, SBC, KKC, MVAT shall be provided in all your invoices along with service tax registration number, MVAT TIN number, category of Taxable service (service tax category), type of company and address/ source of supply of material.

Any statutory variation in Service Tax, Swachh Bharat Cess, Krishi Kalyan Cess and MVAT within the contractual completion period shall be to BPCL account, against submission of documentary evidence for substantiating the variation by way of relevant notification. However in case of delay in completion period beyond the contractual date, for reasons attributable to contractor, any increase in these rates shall be borne by the contractor, whereas any decrease in rates shall be passed on to the owner.

VALIDITY: Your quotation shall be valid for period of 120 Days from the Quotation due date/ extended due date whichaver is later.

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Submission of tenders on line:

Bidders are requested to submit / upload their UNPRICED & PRICED BIDS along with all required documents, on or before the due date by 12.00 hrs., on BPCL E-Procurement website https://bpcleproc.in maintained by M/s. E-procurement Technologies Ltd. For submitting the digitally signed copy of the unpriced tender documents as token of acceptance, bidders are required to put tick mark against tender documents in the "Bid common forms" of the E-Tender. In case nothing is mentioned regarding acceptance of the documents in separate attachment titled 'DEVIATIONS', it will be assumed that all tender documents are acceptable to the bidders. In case of any discrepency between SOR details in RFQ document and SOR document of E-tender, the details in RFQ document shall supersede.

For any assistance regarding online submission of bids on BPCL E-Procurement web site, you may contact ON +91-22-65354113, 65595111, on all working days (Mon - Fri) between 0900 hrs to 1700 hrs.

Hard copies of the bids shall not be submitted, unless specially asked for by BPCL and the same if submitted shall not be considered for evaluation. The PRICED BID shall be submitted online as per the pricing format given.

DEVIATION :

You are requested to have all your queries clarified before bidding. However, if you still have deviations from our RFQ and the attachments (specifications / scope of work / Drawings) etc. please indicate deviations in your offer under a separate attachment titled 'DEVIATIONS' giving reference to RFQ clause no. Deviations appearing in separate attachment of the E-Tender titled 'DEVIATIONS' shall only be considered while evaluating the offer. In case there are no deviations, please submit "NIL DEVIATIONS". Deviations mentioned elsewhere shall not be considered for evaluation.

NEFT PAYMENT:

Payments to contractors etc. shall be made by National Electronic Fund Transfer (NEFT) only. Payment by cheque will be made only to those vendors whose bank is located in the city where NEFT payment facility is presently not available. Bids received from vendors who are not accepting the NEFT payment terms are likely to be rejected.

MSME CLAUSE:

Owner reserves its right to allow Public Sector Enterprises (Central/ State), purchase preference as admissible/ applicable from time to time under the existing Government policy. Purchase preference to a PSE shall be decided based on the price quoted by PSE as compared to L1 Vendor at the time of evaluation of the price bid.

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Clause regarding purchase preference to Micro and Small Enterprises

Owner reserves its right to allow Micro and Small Enterprises (MSEs) and MSEs owned by Scheduled Caste (SC) or the Scheduled tribe (ST) entrepreneurs, purchase preference as admissible/applicable from time to time under the existing Government policy. Purchase preference to a MSE and a MSE owned by SC/ST entrepreneurs shall be decided based on the Net Evaluated Price quoted by the said MSEs as compared to L1 Vendor at the time of evaluation of the price bid, in case the contract is divisible. Bidders claiming purchase preference as MSE need to submit the following documents:

a. Notarized copy of all the pages of the EM-II certificate issued by the appropriate authorities mentioned in the Public procurement policy of MSEs-2012.

b. Vendors' declaration on a duly notarized Rs.100 stamp paper stating that, in the event of award of contract, all the ordered supplies shall be made from the unit for which MSE certificate has been submitted.

The photocopy of the Valid MSE registration with any notified body specified by ministry of micro, small and medium enterprises should accompany the bid documents. Failing which no price preference will be considered in such cases.

The Net Evaluated Price is the all inclusive delivered price.

Net Evaluated Price = Quoted Basic Price + Excise duty + Freight +local taxes and duties+ Octroi Charges and /or entry tax less Cenvat Benefits on Excise and Input Tax Credit on VAT.

Clause regarding ISO Certification and adherence:

BPCL Mumbai Refinery is an ISO:50001:2011 certified Refinery and is focused on energy efficiency. In line with the same, all contractors providing services for BPCL Mumbai Refinery should preferably deploy energy efficient equipments such as energy efficient welding machines, LED / CFL temporary lighting and temporary window AC of BEE 4-star rating and above for execution of the work.

Please submit following details in the E-Tender attachment titled "reply of point no.13 of special safety conditions" along with techno-commercial bid :-

- a) Complete work injury records per year for the last three years.
- b) Total man-hours worked per year for the last three years.
- c) Safety assurance plan.
- d) No. of supervisors
- e) No. of skilled workmen
- f) No. of unskilled workmen

In case, reply to Point No.13 is not submitted, bids are likely to be rejected/ bids may not be considered for technical evaluation.

In case of any clarification, please contact BPCL Project Manager, Mr. Hajela S. K., Chief Manager Projects on Tel- 022-25533353 Extn: 3353.

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For Bharat Petroleum Corporation Ltd.

The details of IEM (Independent External Monitor) as mentioned in section 8 of our Integrity pact attached:

Name of IEM: Shri. Brahm Dutt

Address: A-1/8 Safdarjung Enclave, New Delhi-110 029.

Mobile: 09871920282.

E-Mail: dutt.brahm@gmail.com

The details of Purchasing / Procuring Officer:

Name of procuring officer: Mr. Anup Sinare

office address : P&CS Department, Admin Building,

BPCL, Mahul Refinery, Mumbai-400074.

Contact Details : Ext. 022-25523269, Mo. 9619327662.

Item	Material	Qty	Unit	Unit Basic Rate
	Description		Delivery date	(in Figures)
00010	Modification of Tank-409 to	change servi	31.12.2016	

The item 00010 covers the following services:

10 89002394 1 NO TANK - SPADE n DESPADE >25M TO 50M DIA (Number)

Mechanical Jobs

Rate per tank for spading and despading of piping, opeining / boxing up of all types of manways (including D'manways, O'manways and Roof manways), easing, regland packing of all tank side valves for isolating and commissioning of tanks of following dia. Carrying out all the necessary spading/De-spading/hose connection/wedge opening/flushing/Gully sucker connection required to empty out the tanks. Disconnection of the tank from the Inlet line, outlet line, circulation line and OWS system and blind the same for the positive isolation. This shall include supply of all materials, tools, tackles, provide crane, labour and supervision, required for completing the job as per the instructions of BPCL engineer incharge. Note that required Spades, gaskets and fasteners, shall be provided by BPCL as free issue items.

Spading and despading of tanks of diameter more than 25M and upto 50M.

Service Item 10: Unit basic rate in words _____

20 89002431 120 M
TANK - REPLACEMENT OF RIM ANGLE (Meter)

Mechanical Jobs

Unit rate for replacing the following, for all tanks and from all heights,

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 For Bharat Petroleum Corporation Ltd.

To:M/	/s. BPCL ESTIMATE M	IUMBAI - 400038 Ind	ia (300648)	
Item	Material Description	Qty	Uni Del	t ivery date	Unit Basic Rate (in Figures)
	including removal fittings and support yard and shifting necessary transport fabrication and endrawings, and protesupervision, tools	by gas cutting / colorts. Shifting the retained the required material tation / crane assistection of same in conices. This shall also and tackles required the BPCL engineer inches	moved mate ls for the tance, etc mpliance w o include d to compl	rial to th job to si . Design (ith releva supply all	n all associated ne Warehouse/ scrap te, providing of if required), ant standards, necessary labour,
		eter for renewal of I of Rim Angle of tank:			
	Service Item 20: U	nit basic rate in wo:	rds		
30	89002430 TANK - REPLACEMENT	200 OF STAIR TRAIDS	NO (Number)		
	including removal fittings and support yard and shifting necessary transport fabrication and endrawings, and protesupervision, tools	acing the following, by gas cutting / colorts. Shifting the retained the required material tation / crane assistection of same in colores. This shall also and tackles required a BPCL engineer incharacters.	d cutting moved mate ls for the tance, etc mpliance w o include d to compl	along with rial to th job to si . Design (ith releva supply all	n all associated ne Warehouse/ scrap te, providing of if required), ant standards, necessary labour,
	Rate per piece of	corroded stair traid	s of all s	izes.	
	Service Item 30: U	nit basic rate in wo	rds		
40	89002429 TANK - REPLACEMENT	400 OF ALL TYPES VALVES	INI (Inch	Diameter)
	including removal fittings and suppo	acing the following, by gas cutting / color rts. Shifting the rea the required materia	d cutting moved mate	along with rial to th	n all associated ne Warehouse/ scrap
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tem	Material Description	Qty	Unit Delivery date	Unit Basic Rate (in Figures)	
	fabrication and er drawings, and prct supervision, tools	rtation / crane assistand rection of same in compli tices. This shall also in s and tackles required to ne BPCL engineer incharge	iance with relev nclude supply al o complete the j	rant standards, 1 necessary labour,	
		of all types of Valves (uding gland packing and s			
	Service Item 40: U	Unit basic rate in words			
50	89002426 TANK - REPLACEMENT	100 F OF NOZZLES (I	IND Inch Diameter)		
	Mechanical Jobs Unit rate for replacing the following, for all tanks and from all heights, including removal by gas cutting / cold cutting along with all associated fittings and supports. Shifting the removed material to the Warehouse/ scrap yard and shifting the required materials for the job to site, providing of necessary transportation / crane assistance, etc. Design (if required), fabrication and erection of same in compliance with relevant standards, drawings, and pretices. This shall also include supply all necessary labour, supervision, tools and tackles required to complete the job as per the instructions of the BPCL engineer incharge. Rate per inch dia. for renewal of nozzles, for all tanks and for all nozzles,				
		on and testing of reinfor Unit basic rate in words		per BPCL drawings.	
60	89002440 TANK - PATCH PLATI	1,200.0 ING (K	000 KG Kilogram)		
	Mechanical Jobs Rate per Kg. for p tanks, with requir of welds. Note tha gaskets shall be s	patch plating of roof / s red thickness of MS plate at structral steel, pipin supplied by BPCL free of our, supervision, transpo	shell / bottom p es, including ai ng material, pla cost. This shal	r / vaccum box test tes, fasteners and l also include suppl	
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Item	Material	<u> </u>				
	Description	Qty		it livery date	Unit Basic Rate (in Figures)	
		and tackles required e BPCL engineer inch		te the job	as per the	
	Service Item 60: U	nit basic rate in wo	ords			
70	89002450 TANK - PIT FILLING	1,0	00 EA (each)			
	heights, by weldin consumables, labou	illing of Pits of al g and grinding flush r, tools, tackles, s instructions of BPC	. This sha upervision	ll include , etc. req	supply of required uired to complete	
	Service Item 70: U	nit basic rate in wo	ords			
80	89002458 TANK - WATER FILLU	1 P TEST >25M TO 50M I	NO DIA (N	umber)		
	the tank with salt inspection is clea tank with fresh wa floatation test in of all necessary e		le and off er, cleani aces of sa of tanks. pervision,	ering for ng of tank lt, along This shall tools and	inspection. After and washing the with carrying out also include supply tackles required to	
	Rate per tank for water fill up test of Tanks from more than 25 Mtr. to 50 Mtr. in diameter.					
	Service Item 80: U	nit basic rate in wo	rds			
90	89002465 TANK - BUNDWALL SL	60 EEVE JOB	M (Meter)			
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To:M/	M/s. BPCL ESTIMATE MUMBAI - 400038 India (300648)					
Item	Material Description	C	Qty Ur De	it livery date	Unit Basic Rate (in Figures)	
	This shall include replacing the sleeve sleeve after inspersion good the bund wall of all necessary management to the supervision of the state of the supervision of the state	chifting / inspects to breaking of the to eve, inspection, clection, along with as per the originaterials (other them, tools and tack)	on / replace tank bund wal leaning, pair asbestos rop nal finish. T nan sleeve),	ement of sland, shifting and repecting and repecting shall consumable	leeves as required. ng of sleeve / reinstalling the / welding and making also include supply	
	instructions of en Service Item 90: U		words			
100	89002463 TANK - DRAIN LINE		:00 M (Meter)			
	deplugging, minor include repacking This shall also in	repairs and fitting swivel joint, offer a local clude supply of a local tack.	ng back the Bering for hyd Il necessary Les required	Roof drain drotest at consumable	5kg per cm2, etc.	
	Service Item 100:	Unit basic rate in	n words			
110	89002407 TANK - FABRN n ERE	CTN AUTO GAUG IND	_	Tumber)		
	Mechanical Jobs Preparation of det materials from own site, and fabricat relevant standards Conducting tests a supply of films), consumables such a	ers storage and /o ion and erection of / specifications, s specified, (when etc. as detailed :	or contractor of the follow instruction rever applica in the scope	r's supply wing, at al ns of Engir able, radic of work. S	items to the work ll heights, as per neer incharge. ography including Supply of all	
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		1		-		

Item	Material Description	Qty	Unit Delivery date	Unit Basic Rate (in Figures)		
	lifting and erecti clamps and wedges specifications and	ion tools and tackles, prand all labour for completion of Engineer rap materials to owners s	roviding all ter leting the work r-in-charge and	mporary structures, as per drawing, code,		
		fabrication and erection		indicator, nozzles,		
	Service Item 110:	Unit basic rate in words	5			
120	89002408 TANK - FABRN n ERE	2 ECTN FLOAT MECHANISM	M (Meter)			
	Mechanical Jobs Preparation of detailed fabrication drawings, transportation of free issue materials from owners storage and /or contractor's supply items to the work site, and fabrication and erection of the following, at all heights, as per relevant standards / specifications/ instructions of Engineer incharge. Conducting tests as specified, (wherever applicable, radiography including supply of films), etc. as detailed in the scope of work. Supply of all consumables such as gases, etc., providing all equipment, machinery, crane, lifting and erection tools and tackles, providing all temporary structures, clamps and wedges and all labour for completing the work as per drawing, code specifications and instruction of Engineer-in-charge and returning of all unused/balance scrap materials to owners storage point. Rate per meter height of of tank for fabrication and errection of float					
	mechanism with float, scale, etc. excluding painting and sign writing. Note that Pulley, pinions, guide rope and counter weight to be supplied by contrctor.					
	Service Item 120:	Unit basic rate in words	S			
130	89002413 TANK - FABRN n ERE	2 ECTN ANTI ROTATION PIPE	M (Meter)			
	Mechanical Jobs Preparation of detailed fabrication drawings, transportation of free issue materials from owners storage and /or contractor's supply items to the work					
		ners storage and /or cont	cractor b bappi.	y items to the work		

To:M/s. BPCL ESTIMATE MUMBAI - 400038 India (300648) Item Material Qty Unit **Unit Basic Rate** Delivery date Description (in Figures) site, and fabrication and erection of the following, at all heights, as per relevant standards / specifications/ instructions of Engineer incharge. Conducting tests as specified, (wherever applicable, radiography including supply of films), etc. as detailed in the scope of work. Supply of all consumables such as gases, etc., providing all equipment, machinery, crane, lifting and erection tools and tackles, providing all temporary structures, clamps and wedges and all labour for completing the work as per drawing, code, specifications and instruction of Engineer-in-charge and returning of all unused/balance scrap materials to owners storage point. Rate per running meter of Anti Rotation Pipes of specified dia along with supports and clamps, including gouging out stiffs for guide bozzoka. Service Item 130: Unit basic rate in words _____ 89002422 140 2.000 MTTANK - REPLACEMENT OF ROOF PLAT INC TEST (Tonnes) Mechanical Jobs Unit rate for replacing the following, for all tanks and from all heights, including removal by gas cutting / cold cutting along with all associated fittings and supports. Shifting the removed material to the Warehouse/ scrap yard and shifting the required materials for the job to site, providing of necessary transportation / crane assistance, etc. Design (if required), fabrication and erection of same in compliance with relevant standards, drawings, and prctices. This shall also include supply all necessary labour, supervision, tools and tackles required to complete the job as per the instructions of the BPCL engineer incharge. Rate per metric ton for renewal of Roof Plate / Pontoon (for floating roof tanks) with MS plates, including air/vaccum box test of welds. Service Item 140: Unit basic rate in words _ 150 89002423 160 TANK - REPLACEMENT OF SPLASH PLATES (RUNNING METER) Mechanical Jobs Unit rate for replacing the following, for all tanks and from all heights, Page 10 of 45 Vendor Sign & Stamp For Bharat Petroleum Corporation Ltd.

em	Material Description	Qty	Unit Delivery date	Unit Basic Rate (in Figures)	
	including removal fittings and suppryard and shifting necessary transportation and education and produced to the supervision, tool	by gas cutting / cold cuttourts. Shifting the removed the required materials for extation / crane assistance exection of same in compliantices. This shall also includes and tackles required to the BPCL engineer incharge.	ting along with material to the the job to si , etc. Design (nce with relevalude supply all	all associated e Warehouse/ scrap te, providing of if required), nt standards, necessary labour,	
	Rate per running meter for renewal of the Splash Plates.				
	Service Item 150:	Unit basic rate in words			
160	89002424	2.500	 MT		
			nnes)		
	Mechanical Jobs Unit rate for replacing the following, for all tanks and from all heights, including removal by gas cutting / cold cutting along with all associated fittings and supports. Shifting the removed material to the Warehouse/ scrap yard and shifting the required materials for the job to site, providing of necessary transportation / crane assistance, etc. Design (if required), fabrication and erection of same in compliance with relevant standards, drawings, and protices. This shall also include supply all necessary labour, supervision, tools and tackles required to complete the job as per the instructions of the BPCL engineer incharge.				
	Rate per MT for providing Wind girders for Tanks inclusive of erection of the same as directed by the Engineer in charge.				
	Service Item 160:	Unit basic rate in words			
170 Techa		2,000 RECTN PROCESS PIPELINE ng and repair (if necessary	INM (Inch Meter)	wing items of all	
zes, rryi all	on all types of t ng out minor repai also include suppl	anks and at all heights, ir rs / adjustments (as necess y of required consumables, ed to complete the job as present the complete the solution of the complete the solution and	ncluding remova sary) and refix labour, tools,	l, cleaning, ing the same. This tackles,	
			T		

	Material Description	(Qty	Unit Delivery date	Unit Basic Rate (in Figures)		
engi <u>ne</u>	eering incharge. Ra	te per piece of re	pair/sevi				
	Service Item 170:	Unit hasic rate in	n words				
	Service Item 170:	onic basic race in	i words				
180	89002412		.,000	INM			
	TANK - FABRN n ERE	CTN TUNDISH/DRAIN	LINE	(Inch Mete	r)		
	Markani sal Taka						
	Mechanical Jobs Preparation of det	ailed fabrication	drawings,	transporta	ation of free issue		
	materials from own	ners storage and /	or contrac	tor's suppl	y items to the work		
	site, and fabricat relevant standards				all heights, as per		
		-		_	liography including		
	supply of films),		_				
					t, machinery, crane, emporary structures,		
					as per drawing, code		
	specifications and				l returning of all		
	unused/balance scrap materials to owners storage point.						
		Rate per inch meter for supply, fabrication, erection and commissioning of					
	Tundish Lines including replacemening the old / providing of new supports.						
		Unit basis rate in	words				
	Service Item 180:	Unit basic rate in	n words				
_		Unit basic rate in	n words				
190			n words	ИО			
190	Service Item 180:			NO			
190	Service Item 180: 89002454		2	NO			
190	Service Item 180: 89002454 TANK - MAINT-PENST	COCK VLVE	? (Numbe	NO er)			
190	Service Item 180: 89002454 TANK - MAINT-PENST Mechanical Jobs Rate per penstock	COCK VLVE valve for carrying	(Numbe	NO er) tenace jobs	s of Penstock valves		
190	Service Item 180: 89002454 TANK - MAINT-PENST Mechanical Jobs Rate per penstock and pits in tank f	COCK VLVE valve for carrying farm. This shall in	Numbe y out main nclude car:	NO er) tenace jobs rying out b			
190	Service Item 180: 89002454 TANK - MAINT-PENST Mechanical Jobs Rate per penstock and pits in tank f all connected chan the same by remove	COCK VLVE valve for carrying farm. This shall in the control of sludge / decorate of sludge	(Number g out main nclude car ering of the ebris / m	NO er) tenace jobs rying out b he pit/ cha ud/ loose	olocking / diverting on the land of soil etc. from the		
190	Service Item 180: 89002454 TANK - MAINT-PENST Mechanical Jobs Rate per penstock and pits in tank f all connected chan the same by remov penstock valves pi	valve for carrying farm. This shall in the same of the state of the state of the state of the state. So	(Number of the carring of the caping and	NO er) tenace jobs rying out b he pit/ cha ud/ loose cleaning c	olocking / diverting on the soil etc. from the of all connected parts		
190	Service Item 180: 89002454 TANK - MAINT-PENST Mechanical Jobs Rate per penstock and pits in tank f all connected chan the same by remov penstock valves pi of penstock valve	valve for carrying farm. This shall in the setc, de-water alof sludge / details. Schassebly and offer	(Number of the caping and continuous of the caping and	NO er) tenace jobs rying out b he pit/ cha ud/ loose cleaning c ection. ca	olocking / diverting of annels , cleaning of soil etc. from the of all connected parts arry out repairs /		
190	Service Item 180: 89002454 TANK - MAINT-PENST Mechanical Jobs Rate per penstock and pits in tank f all connected chan the same by remov penstock valves pi of penstock valve replacements of p	valve for carrying farm. This shall in the setc, de-water alof sludge / detacts / channels. Schassebly and offer penstock valve part	Number (Number) g out main nelude carring of the pris / marring and reprise for inspects (ie steries)	NO er) tenace jobs rying out be he pit/ cha ud/ loose cleaning of ection. ca m, gate, ch	olocking / diverting on the soil etc. from the of all connected parts		
190	Service Item 180: 89002454 TANK - MAINT-PENST Mechanical Jobs Rate per penstock and pits in tank f all connected chan the same by remov penstock valves pi of penstock valves pi of penstock valve replacements of p as per inspection with painting of t	valve for carrying farm. This shall in the setc, de-water alof sludge / dets / channels. Screenstock valve particles are commondation / the same if require	(Number of the caping and caping	NO er) tenace jobs rying out be he pit/ cha ud/ loose cleaning ce ection. ca m, gate, ch ons of Engn BPCL stan	clocking / diverting of annels , cleaning of soil etc. from the of all connected parts arry out repairs / nannels, beams etc.) heer incharge, along adard practice.		
190	Service Item 180: 89002454 TANK - MAINT-PENST Mechanical Jobs Rate per penstock and pits in tank f all connected chan the same by remov penstock valves pi of penstock valves replacements of p as per inspection with painting of t Carrying out reass	valve for carrying farm. This shall in the same if require semly of the same	(Number of Number of Numbe	NO er) tenace jobs rying out be he pit/ cha ud/ loose cleaning comments ection. ca m, gate, ch ons of Engn BPCL stan er fasterne	clocking / diverting of manels , cleaning of soil etc. from the of all connected parts arry out repairs / mannels, beams etc.) meer incharge, along adard practice.		
190	Service Item 180: 89002454 TANK - MAINT-PENST Mechanical Jobs Rate per penstock and pits in tank f all connected chan the same by remov penstock valves pi of penstock valves replacements of p as per inspection with painting of t Carrying out reass	valve for carrying farm. This shall in the setc, de-water alof sludge / de ts / channels. Schassebly and offer assebly and offer recommondation / the same if require semly of the same of pen stock valve	(Number of Number of Numbe	NO er) tenace jobs rying out be he pit/ cha ud/ loose cleaning of ection. ca m, gate, ch ons of Engn BPCL stan er fasterne all also in	clocking / diverting of annels , cleaning of soil etc. from the of all connected parts arry out repairs / nannels, beams etc.) heer incharge, along adard practice.		

To:M/	s. BPCL ESTIMATE N	//////////////////////////////////////	ndia (30064	8)	
Item	Material Description	Qt	-	nit elivery date	Unit Basic Rate (in Figures)
	repairs of channel incharge. Offer pe inspection for finalso submit necess required consumable	enstock valve assemble al acceptence after sary records to be res, labour, tools, as per the instruct:	equired as oly and incompletin maintained. tackles, s	per instru luding pit, g all conne This shall upervision,	action of Engneer channels for ected jobs, and include supply of etc. required to
	Service Item 190:	Unit basic rate in	words		
200	89002410 TANK - FABRN n ERE	1,		NM Inch Meter)	
	materials from own site, and fabricat relevant standards Conducting tests a supply of films), consumables such a lifting and erecticlamps and wedges specifications and unused/balance scr Rate per inch meter hydrotesting, shot sprinkler lines for supports (inclusive fixtures, piping fixtures, civil supports, ci	a instruction of Engrap materials to own er for supply, fabrations of tanks including to tanks including the of all supports to for vertical risers will work, piping and tanks including the of all supports the control of the contro	contractor the followinstruction instruction the scope widing all es, providing completing gineer-in-chers storage ication, be and commistreplacement welded on to as necessing main hear storage in the storage ication.	r's supply wing, at al ns of Engir able, radio of work. S equipment, ng all temp the work a harge and r e point. nding, erec sioning of ng the old he tank she ary, along ders extens	items to the work al heights, as per neer incharge. Ography including Supply of all machinery, crane, corary structures, as per drawing, code, returning of all ction, galvanising, fixed foam / / providing of new cell), fittings, with all associated
	Service Item 200:	Unit basic rate in	words		
210	89003242 TANK - PAINTING AL		400 Mi	=	
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To:M/s. BPCL ESTIMATE MUMBAI - 400038 India (300648) Item Material Qty Unit **Unit Basic Rate** Delivery date (in Figures) Description Mechanical Jobs PAINTING Painting - Aluminum Painting Surface Preparation - Sa 2.5 (Cu slag blasting) Painting with, Epoxy Red Oxide Zinc Phosphate Primer - 1 x 60 micron Oil Based Aluminum Paint - 2 x 20 micron Total DFT 100 micron Service Item 210: Unit basic rate in words ____ 220 89002380 10.000 MT MECH-STRL FAB n ERCTN STR WTH SHOT BLSTG (Tonnes) MECHANICAL-STRUCTURAL FABRICATION and ERECTION STRUCTURAL FABRICATION and ERECTION OF STRUCTURES - INCLUDING SHOT BLASTING and PAINTING AS SPECIFIED IN THE SCOPE OF WORK. BEAMS, COLUMNS, CHANNELS, ANGLES, BRACINGS, PURLINS, GUSSETS, CLEATS, PLATFORMS, HAND RAILING ETC AT ALL HEIGHTS Service Item 220: Unit basic rate in words __ 230 89002384 8.000 MECH-STRL DISMLG STRLS (Tonnes) MECHANICAL-STRUCTURAL DISMANTLING EXISTING DAMAGED STRUCTURES LIKE PLATFORMS, COLUMNS, BEAMS AND TRUSSES, ETC. MADE OUT OF STRUCTURAL STEEL INCLUDING CONNECTIONS, TRANSPORTATION OF SCRAP TO DESIGNATED LOCATION ETC. COMPLETE AS DIRECTED. Page 14 of 45 Vendor Sign & Stamp For Bharat Petroleum Corporation Ltd.

	Material Description		Qty	Unit Delivery date	Unit Basic Rate (in Figures)
	Service Item 230:	Unit basic rate	in words		
240	89002037 PIPING DISMNTLG WE		1,600 (In		
	INCLUDING FITTINGS	; ELBOWS ;REDUCE PPORTS AS SADDLE	RS; OPENI S; SHOES;	NG OF FLANGE OF HANGERS; ANCHO	CUTTING, COLD CUTTIN JOINTS ETC ALONG WITH DRS; CLAMPS ETC. AND ALL HEIGHTS.
	Service Item 240:	Unit basic rate	in words		
250	89002292 MECH GEN SHOT BLST		2,000 ES (S		
	RATE PER SQUARE ME EQUIPMENTS/PIPILIN AS PER BPCL STANDA	ES/VESSELS/COLUM	NS/TANKS	ETC AT ALL HE	IGHTS and ELEVATIONS
	Service Item 250:	Unit basic rate	in words		
260	89002293 MECH GEN SHOT BLST	G EXTERNAL SURFA	2,400 CES	M2 (Square meter)
260	MECH GEN SHOT BLST	TER FOR SHOTBLAS	CES TING OF E NS/TANKS	(Square meter EXTERNAL SURFACETC AT ALL HE	CES OF IGHTS and ELEVATIONS
260	MECH GEN SHOT BLST RATE PER SQUARE ME EQUIPMENTS/PIPILIN	TER FOR SHOTBLAS ES/VESSELS/COLUM RDS AND AS DIREC	CES TING OF F NS/TANKS TED BY TF	(Square meter EXTERNAL SURFAC ETC AT ALL HE ME ENGINEER IN	CES OF IGHTS and ELEVATIONS CHARGE.
270	MECH GEN SHOT BLST RATE PER SQUARE ME EQUIPMENTS/PIPILIN AS PER BPCL STANDA	TER FOR SHOTBLAS ES/VESSELS/COLUM RDS AND AS DIREC Unit basic rate	CES TING OF E NS/TANKS TED BY TE in words	(Square meter EXTERNAL SURFACE ETC AT ALL HEI ME ENGINEER IN	CES OF IGHTS and ELEVATIONS CHARGE.

tem	Material Description	Qty	Unit Delivery date	Unit Basic Rate (in Figures)				
	all heights and lo	rection of steel tubular ocations as per BPCL standappe includes dismantling	dards with Cont	tractor's Scaffolding				
	Service Item 270: Unit basic rate in words							
280	89002099 SCAFLDG WITH MTRL	2,000 ERECT n DISMT-M2 (So	M2 quare meter)					
	all heights and lo	rection of steel tubular socations as per BPCL standappe includes dismantling	dards with Cont	tractor's Scaffolding				
	Service Item 280:	Unit basic rate in words						
290	89000493 PAINTG CLASS-I	500 II-b.ii SYSTM (So	M2 quare meter)					
	PAINTING "Class II.b.ii system Surface Preparation - St. 3 Painting with, Epoxy Red Oxide Zinc Phosphate Primer 1 x 60 Brush Oil Based Aluminum Paint 2 x 20 Brush Total DFT 100"							
	Service Item 290: Unit basic rate in words							
300	89000492 PAINTG CLASS-I	600 II-b.i SYSTM (So	M2 quare meter)					
	Page 16 of 45	Vendor Sign & Stamp	For Bha	rat Petroleum Corporation Ltd.				

To:M/s. BPCL ESTIMATE MUMBAI - 400038 India (300648) Item **Unit Basic Rate** Material Qty Unit Description Delivery date (in Figures) PAINTING "Class II.b.i system Surface Preparation - St. 3 painting with, Epoxy Red Oxide Zinc Phosphate Primer 1 x 60 Brush Synthetic Enamel Paint 2 x 25 Brush Total DFT 110" Service Item 300: Unit basic rate in words _____ 89000490 600 310 PAINTG - - CLASS-II-a.i SYSTM (Square meter) PAINTING "Class II.a.i system Surface Preparation - Sa 2.5 Painting with, Epoxy Red Oxide Zinc Phosphate Primer 1 x 60 Brush Synthetic Enamel Paint 2 x 25 Brush Total DFT 110" Service Item 310: Unit basic rate in words _____ 89002382 320 0.500 MTMECH-STRL FAB n ERCTN GRATING GALVANIZED (Tonnes) MECHANICAL-STRUCTURAL FABRICATION and ERECTION FABRICATION and ERECTION OF HOT DIPPED GALVANIZED GRATINGS AS PER BPCL SPEC -INCLUDING CLAMPS, TREADS ETC AT ALL HEIGHTS Service Item 320: Unit basic rate in words _____ 330 89002496 1 NO TANK - SIGN WRITING >25M TO 50M DIA (Number) Page 17 of 45 Vendor Sign & Stamp For Bharat Petroleum Corporation Ltd.

	Material Description	Qty	Unit Deliv	ery date	Unit Basic Rate (in Figures)				
	Mechanical Jobs Sign Writing on foll Tank No. in all 4 di nozzles, etc. as dir paint to be applied, complete the job as	rections, Tank servi rected by the site in labour, consumables per instructions of	including ce, safe charge. The , tools, the Engine	g paintin filling h nis shall tackles a eer incha	ng of 2nos. Logos, neights, inlet/outl include supply of and supervision, to arge.				
	Rate per tank for si 50M.	Rate per tank for sign writing of tanks of diameter more than 25M and upto 50M.							
	Service Item 330: Un	nit basic rate in wor	ds						
340	89003058	20.00	0 MT						
340	TANK DISMTL PLATE		(Tonnes)						
	Unit rate for disman all heights, including associated fittings transportation, cran tools and tackles re	ng removal by gas cu and accessories. Thi me for lifting, suppl equired to complete t	tting / cos shall in y all nece	old cutti nclude pr essary la	ng along with all coviding of necessa bour, supervision,				
	BPCL engineer in cha								
350	Service Item 340: Un	nit basic rate in wor							
350		nit basic rate in wor	NO (Numbe						
350	Service Item 340: Un 89002470 TANK - CALBN WTH TAP Mechanical Jobs Calibration of all to of 20Mtrs.), by Tape manpower required fo authoritiesis (The n contractor), along w tools and tackles reengineer incharge.	1 PE >25M TO 50M DIA Eypes of tanks, of for the job and the characters for the vith all materials, or equired to complete to	NO (Number llowing dainclude starts duly le same sharonsumables he job as	r) iameters upply of approved all be pa s, equipm per the	(upto a max hieght all the resources, by competent id by the ment, supervision, instructions of th				
350	Service Item 340: Un 89002470 TANK - CALBN WTH TAP Mechanical Jobs Calibration of all tof 20Mtrs.), by Tape manpower required fo authoritiesis (The n contractor), along w tools and tackles re	1 PE >25M TO 50M DIA Eypes of tanks, of for the job and the characters for the vith all materials, or equired to complete to	NO (Number llowing dainclude starts duly le same sharonsumables he job as	r) iameters upply of approved all be pa s, equipm per the	(upto a max hieght all the resources, by competent id by the ment, supervision, instructions of th				

Item	Material		Qty	Uni		Unit Basic Rate
	Description			Del	ivery date	(in Figures)
						
	Service Item 350:	Unit basic rate	in words			
360			17,200			
	Pipe Erection CS/A	.S/SS 	(Inch I	Meter)	
	Service Item 360:	Unit basic rate	in words			
	Berviee Teem 300	onic basic race	III WOLGE	-		
370	Waldian of GC Dina		8,000			
	Welding of CS Pipe	Line			Diameter)	
	Service Item 370:	Unit basic rate	in words			
	201,100 100 070		111 1101 010			
380	Valve Removal / Er	ection up to 600	600 1#	INI (Inch		
			· π	(111011		
	Service Item 380:	Unit basic rate	in words			
390	Shifting of Scrap	to scrap yard /	25.000 wareho		(Tonnes)	
	Service Item 390:	Unit basic rate	in words			
400			000			
400	Spading, Despading	& Gasket Replac	800 cement	INI) (Inch Diame	eter)
	Service Item 400:	Unit basic rate	in words			
410			40	S08	3	
	Page 10 of 45	Vanda				Patrolaum Corporation Ltd
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em	Material Description		Qty	Unit Delive		Unit Basic Rate (in Figures)
	Manpower Supply-Su	pervisor		(Shift of	•	
	Service Item 410:	Unit basic ra	ate in word	ls		
420			80	S08		
	Manpower Supply-Ri	gger		(Shift of	8 Hours)	
	Service Item 420:	Unit basic ra	ate in word	ls		
430			15	S08		
	Equipment Hiring-H	ydra 		(Shift of	8 Hours)	
	Service Item 430:	Unit basic ra	ate in word	ls		
440	Equipment Hiring-T	railer	15	S08 (Shift of	8 Hours)	
	Service Item 440:	Unit basic ra	ate in word	ls		
450			100	S08		
	Manpowe Supply-Hel	per		(Shift of	8 Hours)	
	Service Item 450:	Unit basic ra	ate in word	ls		
460			30,000	INM		
	Hydrotest of Pipe	Lines		(Inch Met	er)	
	Service Item 460:	Unit basic ra	ate in word	.s		

em	Material Description	Qty	Uni Del	it livery date	Unit Basic Rate (in Figures)
470	Radiography	1,800	INI		(mr.igaroo)
	Service Item 470:	Unit basic rate in word	ls		
480	Stress Releaving	800	INI (Inch l	Diameter)	
	Service Item 480:	Unit basic rate in word	s		
490	Pipe Painting-W/O	1,000 Scaff System -1		e meter)	
	Service Item 490:	Unit basic rate in word	s		
500	Painting Sign Writ	600 ing on Pipe Lines	INN (Inch		
	Service Item 500:	Unit basic rate in word	ls		
510	Earthwork Excavati	50.000 on Soil Depth uo to 1.	М3		er)
	Service Item 510:	Unit basic rate in word	s		
520	Earthwork Backfill	120.00 ing with avble Earth 1		(Cubic met	er)
	Service Item 520:	Unit basic rate in word	ls		
				.	

em	Material Description	Qty	Unit Deliv		Unit Basic Rate (in Figures)
530	Earthwork Surface	3,000 Dressing Upto 150 MM D		Square me	ter)
	Service Item 530:	Unit basic rate in word	ls		
540	CVL PCC -1:2:4-20M		M3 (Cubic r	meter)	
	Service Item 540:	Unit basic rate in word	ls		
550	Dismantling Demoli		M3 (Cubic r	meter)	
	Service Item 550:	Unit basic rate in word	ls		
560	Tank-Servicing of	2 Dip Hatch Cover	NO (Number)	
	Service Item 560:	Unit basic rate in word	ls		
570	Tank-Dismantling &	4 Erectn of P&V Valves	NO (1	Number)	
	Service Item 570:	Unit basic rate in word	ls		
580	Fire Water Deplug	400 Sprinkler	INM (Inch Me	eter)	

Item	Material Description	Qty	Un De	it livery date	Unit Basic Rate (in Figures)
	Service Item 580:	Unit basic rate in wo	rds		
590	Tank-Replacement	8 of Gauge Pole Sleeve	M (Me	eter)	
	Service Item 590:	Unit basic rate in wo	rds		
600	Tank-Servicing of	2 Float Mechanism	NO (Numbe		
	Service Item 600:	Unit basic rate in wo	rds		
	Service Tax%	VAT%		CST%	
* 1	.0 scope Scope of work:	of work			
	Part-A: Tank Modi	fication jobs			
	tank for positive 2. Tank body valve 3. Tank Man way an 4. Internal cleans expected to be av operating group. 5. Steel scaffolds materials. The sc	ing at appropriate local isolation to be carrices shall be dismantled. In a sump man way covers ing of any residual shawailable for modifications wherever required to affolding should be as after work is over scaffolding should.	shall be ll be can be made per IS 4	dismantled rried out. of Hydro Ca e by contra 1014 and as	d / opened. Though the tank is arbon by S & B actor with his own s per BPCL standard
	away by him. No be Scaffolding around shall erect the second floats the tank for dispersion 7. Jet Mixer systems of the control of the contro	pamboo/wooden planks sha nd storage tanks shall b scaffolding to the satis ing suction system need	all be us be erected sfaction as to be of tank reference.	ed for scand in two red in two re	affolding. rows. Contractor and taken out of wing no. M4-2014 091
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ItemMaterialQtyUnitUnit Basic RateDescriptionDelivery date(in Figures)

- $8.\,\mathrm{Tank}$ Inlet and Outlet nozzles sizes shall be increased to 16" and 24" respectively from existing 12" & 16" and respective header shall be fabricated, erected as per BPCL piping specification with in the tank bund wall.
- 9. Foam maker system shall be converted into Foam pourer system and provision of additional sprinkler ring around tank shell along with supports shall be provided.
- 10. . Necessary piping modification including fabrication, erection, galvanizing etc. shall be carried out.
- 11. Carry out necessary modification / extension of spiral staircase and sprinkler system.
- 12. Necessary modifications on the existing fixed roof for provision of Vent, Radar LT etc. shall be carried out as per instruction.
- 13. Assistance for dismantling of existing servo LT & temperature probe and installation of new Radar LT & temperature probe.
- 14. Shot blasting and painting as per BPCL specification at all hot work effected zone shall be carried out.
- 15. Tank water fill-up test shall be prepared and offered to BPCL inspection.
- 16. Calibration of the tank through appropriate authorities shall be carried out and obtain the calibration certificate duly certified and submit it to BPCL engineer in charge.
- 17. The tank will be equipped with new Internal Aluminum Floating Roof (IFR) and erection will be done by another agency. Suitable access, front and assistance for erection of new IFR shall be provided after completion of all hot work.
- 18. New Remote operated MOVs as first tank body valves shall be installed on tank's mixer, inlet & outlet nozzles of appropriate sizes.
- 19. Tank Box-up and de-spading activities shall be carried out after obtaining BPCL clearance.
- 20. Assist S&B operating group for commissioning the tank post modification.
- 21. The contractor shall provide barricading around the tank as per drg.
- No.32817 the extent of barricading shall be intimated to you by BPCL Engineer in charge.
- 22. Develop temporary approach from the nearest road to tank for transporting / removal of plates, pipes etc. The drawings shall be submitted to BPCL for approval prior to developing the same.
- 23. Segregating of all dismantled metallic scrap to the required sizes (Pipes / plates / structures) & transporting to warehouse or designated area within Refinery as instructed by BPCL Engineer in-charge and dispose off all Non-Metallic Debris of uneconomic value outside the refinery.

89002441 TANK - SERVICING OF DIP HATCH COVER

Servicing and repair (if necessary) of the following items of all sizes, on all types of tanks and at all heights, including removal, cleaning, carrying out minor repairs / adjustments (as necessary) and re fixing the same. This shall also include supply of required consumables, labour, tools, tackles,

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	To:M/s.	BPCL	ESTIMATE	MUMBAI	_	400038	India	(300648)
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supervision, etc. required to complete the job as per the instructions of BPCL engineering in charge. Rate per piece of

89002402 TANK - DISMNTLG n ERECTN P&V VALVES

Unit rate for dismantling and erection of the following, including removal and shifting the same to the Workshop / Warehouse, providing of necessary transportation, crane, etc. Fetching the same from Workshop after servicing/repair or bringing a replacement from Warehouse and installing the same at site. This shall also include supply all necessary consumables, labour, supervision, tools and tackles required to complete the job as per the instructions of the BPCL engineer in charge. Note that only valves, fasteners and gaskets will be supplied by BPCL free of cost. P and V valves of all sizes.

89002090 FIRE/COOLG WATR MISC DEPLUG-SPRINKLER

"DEPLUG-SPRINKLERS-STORAGE TANKS.

THE WORK INVOLVES DEPLUGGING OF SPRINKLER NOZZLE OF COOLING RINGS OF STORAGE TANKS IN BPCL AS PER THE REQUIREMENT. THE WORK INCLUDES REMOVAL OF SPRINKLER HEAD, FIXING OF NEW SPRINKLER HEAD/NOZZLE, BENDING AND FIXING OF SPRINKLER ARMS, IF REQUIRED, ETC. THE WORK SHALL BE DONE AT ALL ELVATIONS INCLUDING CARRYING OUT ALL SAFETY REQUIREMENTS OF BPCL AND COMPLETE THE WORKS IN ALL RESPECTS. THE PAYMENT SHALL BE BASED ON THE DEPLUGGING ACTIVITY CARRIED OUT PER TANK ON INCH METER BASIS

89003320 TANK - REPLACEMENT OF GUAGE POLE SLEEVE

Unit rate for replacing the following, for all tanks and from all heights, including removal by gas cutting / cold cutting along with all associated fittings and supports. Shifting the removed material to the Warehouse/ scrap yard and shifting the required materials for the job to site, providing of necessary transportation / crane assistance, etc. Design (if required), fabrication and erection of same in compliance with relevant standards, drawings, and practices. This shall also include supply all necessary labour, supervision, tools and tackles required to complete the job as per the instructions of the BPCL engineer in charge.

Supply & Installation of Gauge pole sleeve on Storage tank for Dip gauge, auto tankage radar well & anti-rotation pipe.

It should be custom designed with min. thickness of $0.4\ \mathrm{mm}$ and shall be corrosive resistance to Hydrocarbon.

Sleeve material shall be fabric and shall not wick or become brittle during its service life.

The sleeve shall be resistant to the effects of wind, rain, sand, UV rays &

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To:M/s. BPCL ESTIMATE MUMBAI - 400038 India (30064)	To:M/s.	BPCL	ESTIMATE	MUMBAI	_	400038	India	(300648)
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shall be suitable for service up to +80 deg. C.

The sleeve should be installed while the tank is in service.

Item-400. Piping Erection (CS/AS/SS)

Rate per Inch Meter for erection of pipelines and making of flange joints/primary supports/ clamps etc for all heights. Quoted rate should include scaffolding at all elevations and locations, arranging all necessary equipments and tools to carry out the job.

Item-410 Welding of CS pipeline

Rate per Inch Dia of weld joints for fabrication (gas cutting, grinding for beveling, fit up & welding) of CS pipe lines of all class such as NON IBR, IBR, H2 class etc including, elbows, tees, reducers, valves and fittings for all heights including U/G pipelines. Quoted rate should include scaffolding at all elevations and locations, arranging all necessary equipments and tools to carry out the job.

Item-420 Valve removal/ erection upto 600# Rating

Rate Per Inch Dia of valve for removal or erection of valves upto 600# rating including check valves/ globe valves/ plug valves/ gate valves/ control valves/ relief valves (for relief valves, payment will be made as per larger flange size) at all elevation and heights as directed by Engineer-in-charge. Quoted rate should include scaffolding at all elevations and locations, arranging all necessary equipments and tools to carry out the job.

Item-430 Shifting of scrap to Scrap yard/ warehouse

Transporting dismantled pipeline (CS/AS/SS), fittings, valves, studs, gaskets, cement lined pipeline, gratings, structure and other metal scrap to Scrapyard/warehouse in the lengths/forms specified by warehouse including use of suitable lifting & transporting machines like hydra, crane, trailer etc. Contractor to consider cutting of pipes, structures, grating etc in the quoted rates. Payment shall be made on the basis of weighment slip issued by BPCL warehouse.

Item-440 Spading, despading, blinding & gasket replacement

Rate per Inch Dia to carry out spading, de-spading, wedge opening, graphiting, blinding, man way opening/box up & gasket replacement for flange rating up to 600#. Quoted rate should include arranging all necessary equipments and tools to carry out the job. Scaffolding required to carry out this job will be paid separately. Plates required for spades will be provided by BPCL. Cutting of spades of required size is in contractor's scope.

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To:M/s. BPCL ESTIMATE MUMBAI - 400038	ınaıa	(300648)
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Item-450 Manpower supply - Supervisor

Contractor to quote for 8 hours shift. This manpower supply/ equipment hiring will be used for commissioning & decommissioning purpose.

Item-460 Manpower supply - Rigger

Contractor to quote for 8 hours shift. This manpower supply/ equipment hiring will be used for commissioning & decommissioning purpose.

Item-470 Equipment Hiring - Hydra

Contractor to quote for 8 hours shift. This manpower supply/ equipment hiring will be used for commissioning & decommissioning purpose.

Item-480 Equipment hiring - Trailer

Contractor to quote for 8 hours shift. This manpower supply/ equipment hiring will be used for commissioning & decommissioning purpose.

Item-490 Manpower supply - Helper

Contractor to quote for 8 hours shift. This manpower supply/ equipment hiring will be used for commissioning & decommissioning purpose.

Item-500 Hydro test of pipelines

Job involves carrying out hydro test of pipelines/tubes etc at the specified pressure including arranging hydro testing pumps and accessories, attending leaky flange joints, valve gland packing etc, offering the same for inspection and clearing the same, as per the directions of the engineer-in-charge, inclusive of de-pressurizing. Quoted rate should include scaffolding at all elevations and locations, arranging all necessary equipments and tools to carry out the job.

Item-510 Radiography

Rate per inch dia for radiography of weld joints at all heights and elevations as per the directions of the Engineer in charge, inclusive of all tools/tackles/equipments and other consumables and mobilization. D4/D7 films to be used to carry out for radiography. Repeat radiography due to Contractor's fault, defective instrument or techniques or poor performance of Contractor's welders shall be at Contractor's own cost.

Item-520 Stress relieving

Stress relieving(PWHT) - Carrying out stress relieving of weld joints of all

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ItemMaterialQtyUnitUnit Basic RateDescriptionDelivery date(in Figures)

types of piping as per codes and approved procedure, scaffolding at all elevations and locations, arranging all necessary equipment, tools, recording devices, material for stress relieving, manpower, safety arrangement etc. required to perform the work as per specification/instructions of UIL/owner. Repeat stress relieving due to contractor's fault. Defective instrument or technique or poor performance of contractor's welders shall be at contractor's welders shall be at contractor's own cost.

Item-530 PNTG - W/O SCAF SYSTEM-1

PAINTING WITH OUT SCAFOLDING:

Painting - System 1.Surface Preparation - Sa 2.5 (Cu slag blasting). Painting with, Inorganic Zinc Ethyl Silicate Primer - 1 x 60 micron High build two pack polyamide cured epoxy - 2 x 100 micron aliphatic acrylic modified high solids weather resistant recoat able two pack polyurethane (finish coat) - 1 x 30 micron. Total DFT 290 micron.

Item-540 PAINTG SIGN WRITING NEW UP TO 2MT HT

PAINTING SIGN WRITING NEW RATE PER INCH METER OF SIGN WRITING UPTO 2 MTR HEIGHT

Item-550 EWK Excvn soil Depth upto 1.5M
EARTHWORK CVL PCC - 1:2:4-20mmAG-I/C FW Excavation up to specified depths for work in foundations including trenches, sleepers, manholes pits etc. in all kinds of soil, Murom, soft rock etc. including removal of vegetation, shrubs and debris, leveling, grading and ramming of bottoms, dewatering of accumulated water, hydrocarbon fluids and oily water etc. from any source, using pneumatic pumps wherever required and keeping the surface dry for subsequent works and disposal or stacking of excavated material within a lead of 100M as decided including providing temporary supports to existing underground cables, process pipe lines, all complete but excluding shoring and strutting. Depth up to 1.5 M.

Item-560 EWK B/flng with avl earth 100M

Backfilling after execution of work to proper grade and level with material obtained in specified manner including re excavating deposited soil (excavated earlier or brought by the contractor from outside/inside refinery), laying at all depths and heights in layers of thickness not exceeding 150mm, watering, rolling and ramming by manual methods/mechanical compactors to achieve 90% LAB max. Dry density, dressing, trimming etc. in foundations, plinths, trenches, pits, etc, all complete.

Item-570 EWK surface dressing up to 150mm depth

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ItemMaterialQtyUnitUnit Basic RateDescriptionDelivery date(in Figures)

Surface dressing of the area including removal of earth, debris, vegetation, sludge, muck etc. up to a specified depth and transporting the same beyond refinery premises (keeping BPCL indemnified of any liability) and leveling the area to specified slope as directed.

Item-580 CVL PCC - 1:2:4-20mmAG-I/C FW

PCC Providing and laying Cement Concrete 1:2:4 (1 cement:2 coarse sand:4 graded stone aggregate 20 mm nominal size) for leveling course, pedestals etc., at ground floor level and above to true line and levels, mixing, transporting, placing, consolidating, curing etc. including necessary formwork, scaffolding etc. complete.

Item-590 DISMTL Demolishing PCC

DISMANTLING WORKS" Demolishing/ Dismantling of specified items including taking all necessary safety precautions like scaffolding, propping etc. The scrap generated shall be transported to BPCL scrap yard and unserviceable material shall be transported outside the refinery all complete as directed. Demolishing plain cement concrete work including disposal of unserviceable material outside the refinery, all complete as directed.

Part-B: List of associated Pipe Lines (Hookups to MS piping net work and Tank Outlet & Inlet Headers

HOOK UP LIST FOR TANK 409 MODIFICATION

1. INLET HEADER (16INCH DIA) HOOK-UPS

A. EURO IV MS PRODUCT LINE : 8 INCH
B. AVO BLEND LINE : 6 INCH
C. MTBE LINE : 4 INCH
D. EURO III MS PRODUCT LINE : 12 INCH
E. MS BLEND LINE : 12INCH
F. INBLEND LINE : 6INCH
G. CCG LINE : 4 INCH

2. OUTLET HEADER (24 INCH DIA) HOOK-UPS

A. AVO SUCTION LINE : 12INCH
B. MS SUCTION LINE : 12INCH
C. OLD NAPHTHA SUCTION : 20INCH

General Terms & Conditions:

1. The intending Bidders shall be deemed to have visited the site & familiarized themselves with the existing conditions with respect to material

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ItemMaterialQtyUnitUnit Basic RateDescriptionDelivery date(in Figures)

handling, transportation, safety requirement, working condition with respect to the execution of the job before submitting the offer. Non familiarity with site conditions shall not be considered a reason either for extra claims or for not carrying out the work conforming to the specifications/drawings.

- 2. The contractor shall submit Quality Assurance Plan (QAP) plan as per applicable codes / standards & BPCL inspection scope of work and submit the same to BPCL for approval. The QAP shall be approved by BPCL inspection Department. The contractor shall offer for stage wise inspection to BPCL inspection. All inspection reports and materials test certificates etc shall have to be submitted to BPCL regularly and before final bill.
- 3. BPCL will not provide any security for the site area during the tenure of the contract. Therefore, security for contractor's office, storage and construction areas shall be suitably considered by the contractor.
- 4. It will be imperative on each bidder to acquaint himself with all local laws, conditions and factors which may have any effect or bearing on the execution of works and supplies under the scope of this tender.
- 5. The Bidder shall be deemed to have satisfied himself before tendering, as to the correctness and sufficiency of the tender for the works and of the rates stated in the Schedule of rates, which shall cover all his obligations under the Contract and all matters and things for proper completion of the works.
- 6. Special conditions of contract need to be read in conjunction with the general conditions of contract, specifications of contract wherever the context so applicable.
- 7. The contractor shall construct a temporary site office at his own cost at the space allocated by Engineer-in-charge. On conclusion of the job contractor shall demolish the respective site office, cart away all the debris and level the area to the original finish.
- 8. During monsoon and other period it shall be the responsibility of the contractor to keep the construction site free from water logging at his own cost.
- 9. Prior to quote for the job, the bidder will be required to visit the site and clarify all the doubts (if any) from Engineer in charge. Otherwise it will be presumed that the party has understood the work in all respect.
- 10. The work shall be carried out in a safe manner as per BPCL safety norms and work permit conditions shall be followed. The contractor will have to take shift wise daily clearance from BPCL operation.
- 11. BPCL conducts an intensive training program on various aspects of Fire and Safety, on regular basis, at Refinery-Fire Station. It is the responsibility of the Contractor to nominate all the supervisors / labors (likely to be employed for this job) for training through BPCL site engineer. The successful completion of training is mandatory requirement (in addition to other qualifications/experiences mentioned earlier) for any supervisor / labor to be eligible for working at Refinery work site. Failing which no supervisor / labor will be deputed for working at Refinery work site. Contractor shall also send all the other workmen deployed at Refinery for this training.
- 12. Contractor shall arrange all BIS approved personnel protective equipments

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and safety gadgets like safety helmet, safety Belt, safety shoes, Boiler suit, Gloves, Goggles etc. for their workmen/supervisors.

- 13. Contractor shall submit detail safety action plan and quality assurance plan before start of work within 7 days from the date of PO/LOI and get it approved from BPCL
- 14. The contractor shall prepare a detailed schedule of all the activities mentioned in scope of work.
- 15. The contractor shall mobilize necessary manpower and deploy equipments within 7 days from the date of Issue of Contract Letter / LOI and start the job at site as per the instruction of BPCL Engineer In-Charge.
- 16. The contractor shall depute experienced / qualified (Degree/Diploma Holder with Minimum five years experience) Mechanical Engineers, and trained in safety for site supervision/quality assurance/safety officer to look after safety aspect at site during execution of job. Adequate no of supervisors shall be deployed at site. Contractor shall deploy sufficient manpower of various trades and categories to complete the job within the specified time schedule as agreed.
- 17. The time schedule as mentioned below. The works shall be executed strictly as per the time schedule. Contractor shall mobilize for the simultaneous working of various activities at site to complete entire activities in stipulated time.
- 18. The detailed activity chart for all activities with duration shall be prepared by the contractor and the same shall be submitted to BPCL for approval.
- 19. Contractor shall provide at his cost, all types of construction equipments, crane, tools, tackles and all such materials including consumables required for timely completion of job in all respects to the satisfaction of Engineer in-charge. All Lifting tools/tackles, Hydraulic Jacks, cranes etc shall be tested prior to use as per statutory requirement. Copy of the certificate shall be submitted to BPCL prior to use.
- 20. Provide scaffolding as per approved BPCL standard. Aluminum ladders shall be provided for climbing. Only steel planks shall be used and no extra payment shall be made for providing additional planking.
- 21. The contractor shall submit forms / format for quality records. These forms / formats shall be approved by BPCL Inspection. These reports shall form part of the completion documents which will have to be submitted to BPCL before submission of final bill.
- 22. Extra fabrication done by the contractor if any will not be compensated.
- 23. In case any modifications/additions other than scope of work are required, the same shall be carried out by the contractor without any delay as per written instructions of BPCL Site-in-charge for which unit rates are already specified in the contract, the contractor is bound to carry out all such addition/extra works at the same rates.
- 24. Fabrication workshop and construction equipment's shall be subjected to the satisfaction of BPCL'S Engineer-in-charge. Contractor shall obtain prior approval for this by organizing a visit of Engineer-in-charge for inspection and certification.

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- 25. Fresh water shall be used for hydro testing of pipelines and salt water for hydro test of tank.
- 26. Performance test of sprinkler system will be done by the contractor at site using fresh water. Fresh water will be supplied by BPCL.
- $27.\,$ BPCL is an ISO 14001 certified company. All welding machines & any other diesel engines to be used shall be checked periodically for pollution emission within permissible limits.
- 28. Good housekeeping shall be maintained at site while executing job.
- 29. All conditions mentioned in BPCL authorizations, permits and Fire & Safety Regulations handbook have to be followed by contractor while executing the job. In case of hot work all material like asbestos cloth and MS sheets for making booths have to be supplied by contractor at no extra cost. Contractor is to take permits on daily shift basis.
- 30. All conditions mentioned in BPCL authorizations, permits and Fire & Safety Regulations handbook have to be followed by contractor while executing the job. In case, if hot work is required to be carried out, all material like asbestos cloth and MS sheets for making booths have to be supplied by contractor.
- 31. Any work rejected by BPCL inspection has to be redone by contractor. No extra payment will be done for rework.
- 32. Contractor shall closely pursue all the clauses of contract.
- 33. All commissioning assistance including standby personnel is in contractor's scope.
- 34. The contractor shall provide temporary supports at no extra cost. All the temporary supports shall be removed once the permanent ones are provided.
- 35. For all supply items excise challan (duplicate for transporter) with consignee name as BPCL has to be submitted to BPCL to enable BPCL claim MODVAT benefit. Excise duty component for which MODVAT benefit can be availed by BPCL, must be indicated by vendor. For both indigenous and imported material supplied vendor shall furnish the documents to BPCL to avail MODVAT benefit.
- 36. Contractor has to work on extended hour / round the clock basis. No extra charges will be paid by BPCL for the same.
- 37. The drawings enclosed are only for reference, contractor to check all dimensions at site prior to fabrication.
- 38. All the quantities mentioned in the schedule of rates/quantities are estimated and indicative only and are liable to vary. Any variation in the quantities shall not call for any revision in the rates of item of work.
- 39. Payment shall be made based of the actual quantity executed. Joint measurements of executed work will be made and certified by site supervisor and bills will have to be raised on the basis of this measurement.
- 40. Contractor has to maintain HINDRANCE BOOKS and MEASUREMENT BOOKS for both tanks separately.
- 41. BPCL shall have right to delete/add any item of the scope of work from the tender scope and award part of the contract. Payment will be made as per Schedule of Rates based on actual executed quantities. Quantities indicated in schedule of rates may vary +/ 20%.
- 42. Contractor has to extend full cooperation with other contractors,

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Consultant /Inspection authorities and any other agency in addition to the BPCL supervisor/site engineer as per instruction of Engineer in charge.

- 43. The contractor will submit final bill, only after the area is cleared of
- all debris and scrap transported to BPCL salvage yard at Refinery.
- 44. All the material under contractor's scope of supply to be procured from
- 45. Pipes & Plates shall be withdrawn from warehouse and transported to site by the contractor.
- 46. BPCL will not entertain any idling charges due to non availability of work clearance.
- 47. Crane, all tools and tackles, boson's chair, chain blocks etc required for erection of piping/ structure/ equipment/ or any other job to be arranged by contractor. All crane, tools & tackles should have factory inspectorate approved valid certificate in form-12 and contractor shall submit all the certificates to BPCL for approval before start of work.
- 48. After completion of erection and system hydro-testing the complete piping, structure support to be painted as pre BPCL painting standard/procedure attached.

COMPLETION DOCUMENTS:

On completion of job, the contractor shall submit the following documents in triplicate.

- i. The technical documents according to which work was carried out.
- ii. Test and calibration report
- iii. Welding procedure qualification report.
- iv. Welder qualification report,
- v. Radiographic films and Heat treatment charts and reports.
- vi. Certificates of final elevation level measurement and settlement readings vii. Six sets of prints As Built drawings.
- viii. Manufacturing certificates / Test certificate of bought out items.

DEFECT LIABILITY AND GUARANTEE:

The contractor shall give full guarantee for satisfactory performance of the modifications / repair jobs carried out on tank in the service / duty intended and designed for. Contractor shall also guarantee for conformity with the relevant codes, specifications, workmanship, etc. The defect liability period shall be for a period of 12 (twelve) months from the respective date of final completion, handing over and acceptance of tank along with its piping. Any defect, deviations or failures observed/identified/developed during the defect liability period shall be rectified, repaired, replaced, modified, altered as necessary and made good completely to the entire satisfaction of the BPCL engineer in charge immediately without any extra cost to BPCL. Contractor shall bear all the costs of repairs, replacement, transportation, taxes, duties, etc. involved in carrying out such rectifications/alterations. All such work shall be carried out only after written permission from the engineer in charge. In case the contractor fails to make good any such defects within

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reasonable time, BPCL shall be free to get the same carried out through another agency and all the cost incurred on this shall be recovered from the contractor.

DETAILED SPECIFICATION OF JOB:

A. STORAGE TANKS

- a. The scope of work covers design, Engineering, development of construction drawings for shell, roof, bottom, nozzles, spiral stair case, structure etc of fixed roof tank (Cone Roof), fabrication, erection of tank as well as sprinkler piping / foam piping, testing, calibration, painting and providing commissioning assisting of tank 409 strictly In compliance with relevant design codes as under:
- 1. Std. API 650: Welded steel tanks for oil storage.
- 2. Std. API 620: Design and construction of large welded low pressure storage tanks.
- 3. IS:875 (Part 3): Code of practice for design loads(other than earth Wind Loads. quake) for building and structures.
- 4. IS:1893: Criteria for Earthquake resistant design of structures.
- 5. API 2000: Venting atmospheric and low pressure storage tanks.
- 6. IS:2007: Method for calibration of Vertical Oil Storage tanks.
- 7. IS 2008: Method for Computation of Capacity tables for Vertical Oil storage Tanks.
- $8.\ API:RP:2003:\ Protection\ against ignitions\ arising\ out\ of\ static,\ lighting\ and\ stray\ currents.$
- b) Fabrication of roof structure, stairways, handrails, platforms, wind girders, walkways, stairways /track curb angles, Stairways, platforms, walkways etc. Grating shall be galvanized.
- c) Radiography on tanks, nozzles etc., shall be carried out as per code and drawings requirement. However, any additional radiography required by BPCL Inspection shall be carried out at no extra cost.
- d) Carrying out hydrostatic, pneumatic, vacuum, non destructive testing and other tests as recommended in codes/specifications and BPCL Inspection.
- e) Shot blasting, surface preparation, and painting as per BPCL specifications
- f) Water fill up test shall be carried out as per BPCL procedure. Roof air test shall be carried out as per details given in the document.
- g) Tank shell and nozzles shall be stress relieved wherever called for as per API-650, technical specifications, drawings and in accordance with BPCL inspection.
- h) Inspection during fabrication, erection and at various stages shall be carried out by BPCL as per approved QAP & code/specification. Contractor shall submit QAP before start of work and get it approved from BPCL inspection Dept. The contractor will have to strictly follow as per approved QAP for all the activities. Contractor shall plan the inspection visit in such a way that the

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BPCL inspection department before start of work.

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work in progress does not get hampered. All the inspection reports, material test certificate, radiography report/films etc to be submitted to BPCL inspection department for record and verification regularly and before submission of final bill.

- i) Any activity before starting should have a written down safety procedure which has to be signed by the contractor site supervisor & safety officer.
- j) Any gaps between the tank bottom bitumen pad and tank bottom plate shall be filled with liquid bitumen after water fill up test.
- k) A planning / monitoring/QC officer shall be deployed at site by contractor for entire duration of the execution of work at site.
- 1) All pipe / plate material shall be inspected at site to ensure that any damage received during transportation is corrected before erection to the satisfaction of the site Engineer. Particular attention shall be given to the removal of buckles and other forms of distortion in shell and bottom plates.

 m) The contractor will have to submit QAP, WPS & PQR and get it approved by
- n) Welders will have to be qualified before start of work, and their radiographic films will have to be submitted to BPCL inspection department for approval.
- o) Testing of all lifting tools and tackles including chain blocks, cranes, slings, shackles, hydraulic jacks etc. and maintaining records of all such equipment being used at site (certification in Form 12). The same have to be submitted to BPCL before starting of the work at site
- p) The contractor shall arrange necessary resource for carrying out inspection of NDT tests & necessary instrument for testing of material being purchased/ fabricated/galvanized during construction at site and also at the vendors work.
- q) Contractor shall arrange for witnessing & approval by BPCL of all the NDTs carried out at site. Stage wise inspection shall be carried out as per approved OAP.
- r) Calibration of tanks including supply of strapping tapes with accessories, providing necessary scaffolding/de-scaffolding, labour and supply of calibration Charts, duly approved by competent authorities. The necessary fees shall also to be paid by the contractor.
- s) Any lighting arrangement, scaffolding, planking etc, required for fabrication, erection, inspection and painting shall be provided by contractor as per BPCL standard.
- t) All nozzles, clean out doors assembly shall be fabricated / welded to the bottom shell plates and post weld heat treatment as per applicable code prior to erection at site shall be done.
- u) Stage wise inspection shall include but not limited to the following:-
 - 1) Dimension checking of plates and pipes before cutting.
- 2) Fit ups.
- 3) Checking of plumb, peeking, banding and circularity.
- 4) Stage-wise clearance ensuring correct sequence of welding.
- 5) Visual inspection of welds.

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- 6) Suitable recommendation for rectification of defects if any.
- 7) Radiography as Per API-650 and its interpretation.
- 8) Inspection of every shell course and clearing of radiographs before giving clearance for next stage erection.
 - 9) Inspection of connected piping.
- 10) Witnessing and approval of stress relieving, pneumatic test of RF pads, roof air test and water fill up test.
- 11) Recording of initial settlement reading of the tank before water fill up, during stage-wise water fill up and draining as per the cycle approved by BPCL
- B. Tank Fire Protection System: Foam Pourer & Sprinkler lines-
- a. The contractor has to carry out fabrication & erection of sprinkler piping / foam piping up to isolation valves & it's civil and structural supports for sprinkler / foam system for the tank as indicated in the enclosed drawings.
- b. Sprinkler / Foam Pipes shall be of hot dip galvanized as per IS-4736 after fabrication of piping. Lines shall be fabricated / radio graphed (10%) and tested as per BPCL practice and offered to BPCL for inspection. The radiography film after due certification from BPCL have to be submitted to BPCL inspection dept for records.
- c. The job involves carrying out fabrication, welding, bending in case of sprinkler piping / foam piping, hydro testing, galvanizing, transportation, erection/alignment, leak testing, spading/de-spading, box up by fixing blind flanges. Performance testing of sprinkler piping by fresh water, shot blasting, painting of structural supports (where ever required).
- d. Shot blasting /painting of all piping/structure should be carried out as per attached specifications/instructions of BPCL site-in-charge. All pipes shall be shot blasted and painted as per BPCL painting specifications attached. Arrangement made for erection of sprinkler piping / foam piping will not be considered as an extra item.
- e. After installation of the sprinkler piping / foam piping, if any misalignment or any other defect is observed, the contractor at no extra cost will rectify the same. No welding of the pipes will be allowed after galvanizing.
- f. Supply of structural material, fabrication, shot blasting, painting, transportation and erection/alignment of structural supports.
- g. Fabrication, hydro testing, galvanizing shall be carried out at a place (fabrication workshop) outside BPCL premises (in Mumbai, Navi Mumbai and Thane area). Contractor must make the necessary arrangements (provision of equipment's, tools/tackles etc) at this workshop required for the completion of jobs as per the relevant engineering. Standards and to the satisfaction of BPCL's Engineer in-charge / BPCL inspection. The finished line after galvanizing is to be brought to site for erection.
- h. Application of 3 mm FRE lining on the valves as per enclosed company standard procedure including testing of valves for a seat leaks, prior to

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installation at site.

- C. Instrumentation facilities:
- a. Preparation of drawings, fabrication and erection of Auto Radar gauging stand pipe and Temperature probe including supports, etc., for the tanks with proper perforations.
- b. Mechanical float level including angles, graduated scale, float, wires, rollers, hood etc.

All materials required for the system shall be provided by the contractor.

- c. Fabrication and erection of gauge pipe with spark proof cover with suitable perforations as per drawings/standards. Supply of Spark proof covers of gauge / dip hatch pipes shall be in contractor's scope.
- D. SHOT BLASTING AND PAINTING: SHOT BLASTING
- 1. Shot blasting to Sa 2.5 finish as per Swedish standard SIS-05-5900 and painting of piping system as follows:
- 2. In view of the difficulty of shot blasting the piping/ structure insitu, all piping/structure shall be shot blasted at the yard and painted as indicated in attached specification.
- 3. Prior to surface preparation, the job shall be offered for inspection to determine if the surface is ready for cleaning/painting. Heavy deposits of grease, oil, dust, scales and other contaminants shall be removed by solvent cleaning. Weld spatters, tacks, lugs etc shall be ground. Notches, pitting shall be filled up suitably.
- 4. After carrying out the above, mechanical clearance shall be obtained from inspection for starting the shot blasting.
- 5. Before start of blast cleaning or mechanical cleaning, the ambient conditions shall be checked. This is important in early mornings or during seasonal changes when condensation may take place. The surface preparation/blast cleaning shall be avoided / stopped if the surface temperature is lower than the dew point.
- 6. After shot blasting, the pipe shall be offered for inspection.
- 7. Care is to be taken to avoid damage to piping during shot blasting.
- 8. Any damaged piping has to be repaired using BPCL approved procedure by contractor at no extra cost.

PAINTING

- 1. Adequate time shall be given for drying of the paint between two consecutive coats. A minimum of time shall be given for drying of one coat.
- 2. Prior to application of any consecutive coat of paint, it shall be ensured that the earlier coat has not got contaminated/damaged/dirtied.
- 3. After completion of final coats as per the standard/procedure, It shall be

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offered for dry film measurements to BPCL/BPCL appointed third party inspection. In case the dry film thickness is less than specified, additional coat shall be applied to obtain the required paint thickness. No additional cost will be borne by BPCL for additional coats.

SCOPE OF SUPPLY:

All material supplied by the contractor / issued by BPCL shall be duly protected at site by the contractor at his own cost. The Contractor shall construct suitable sheds to protect the materials from rain, fire, theft and arrange his own necessary security personnel.

BPCL'S SCOPE OF SUPPLY

FREE ISSUE

The following material shall be supplied by BPCL free of cost at BPCL warehouse within Refinery premises. Necessary handling and transportation between warehouse and site work shall be done by the contractor.

- a) Steel plates of width between 2000 mm 2500 mm for 10 mm and higher thickness and between 1500 2500 mm for less than 10 mm thickness of varying lengths for shell, reinforcement pads of nozzles & manholes, manhole necks, manhole bolting flanges, manhole cover flanges, wind girders, clean out door's neck, Clean out door bolting flange & cover flange, nozzle necks for 12" NB and above size, drain sump.
- b) Steel plates for cone roof, reinforcement pad for roof nozzles & manholes, nozzle neck, roof manhole necks, manhole bolting flange and roof manhole cover flange.
- c) Pipes & pipe fittings, Radar Gauge, gaskets and stud bolts.
- d) Salt water for hydro test from a nearest point of battery limit (Dyke wall).
- e) Water for drinking purpose (This water shall be used strictly for drinking purpose only) Fresh water for construction purpose will not be supplied by BPCL.
- f) All pipes for nozzle necks, level transmitter / level indicator, still well, gauge well and foam & sprinkler system.
- g) All nozzle flanges and blind flanges up to 16" NB size wherever required. h) Blind flanges, plugs, nipples, pipes, bolts/nuts, gaskets., required for hydro testing.

ON RETURNABLE BASIS (if available)

- a) Fire hose, Fog nozzles
- b) Fire Extinguishers

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CONTRACTOR'S SCOPE OF SUPPLY

- a) The procurement and supply in sequence and at the appropriate time of all materials and consumables, structural steel required for completion of works as per drawings and specifications except the materials specifically listed under BPCL's scope of supply as above shall entirely be the contractor's responsibility. All materials under contractor's scope of supply shall accompany with test certificates as per standard. Acceptance of any material at site shall be subject to acceptance of the same by BPCL Inspection. The items to be supplied by the contractor are in general but not limited to the following:
- b) All consumables such as electrodes, filler wires, oxygen, acetylene, grease, oils, paint, etc.
- c) All major component materials like structural steel sections for curb angles, spiral stairways, landing platforms, galvanized gratings, handrails, structural supports etc.
- d) Structural steel for roof structure (trusses & centre drum) in case existing one found not suitable for re-use.
- e) Pipe for handrails
- f) Strapping tapes and accessories for calibration.
- g) Radiographic films, radiographic equipments etc
- h) All drawings/documents required as per vendor data
- i) Bosom chairs / anchor bolts.
- j) The baking ovens for electrodes
- $k\,)$ All other metallic and non-metallic parts not specified but required to complete fabrication and installation of tanks including testing, inspection etc.
- 1) Fresh water with necessary pumping arrangement for :-
- m) Water washing tank after hydro testing
- n) Hydro testing of sprinkler system / foam system
- o) For concreting and other civil construction works
- p) All material required for mechanical level indicator and Non spark proof cover for gauge hatch on tank top shall be in contractor's scope.
- q) All material including GI sheets for
- r) Local barricading wherever required
- s) GI gratings and GI hardware for fixing gratings as per BPCL
- t) Pneumatically operated hand tools (grinders and drilling machine etc.) alongwith compressor for fixing GI sheet.
- \mathbf{u}) All material and arrangement required for hydro testing, Stress relieving
- v) All the necessary manpower (skilled, semi skilled), supervisors, materials and equipments such as diesel generator set including diesel for shot blasting machines, shots, air compressors, cranes with fuel and lubricant, plate rolling machine, construction equipments such as lifting tools and tackles, hydraulic jacks duly tested and certified, vacuum box testing arrangement, holiday tester, paint thickness gauges, surface quality/roughness measuring instruments, Kerosene-chalk test kit, radiographic equipments inclusive of

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radiographic films, welding gauges as required for fabrication, erection, testing, painting of the tanks.

- w) Scaffolding will be erected by the contractor for all kinds of work at height as per BPCL standard attached with this document. Necessary scaffolding materials, clamps, ladders, steel planks etc required for painting and other erection work will be under contractor scope. All scaffolding erected for the tank shell would be box type scaffolding with metallic platforms and toe plates for the workers/ inspection personnel to walk on.
- \mathbf{x}) Safety equipments such as safety belts, hard hats, safety shoes, Goggles, hand gloves etc.
- y) Necessary lighting arrangements along with transformers, plug points, clusters, hand lamps with ELCB .
- z) Construction equipment / lifting tackles
- aa) It shall be entirely the contractor's responsibility to provide all types of cranes and other construction equipments, tool tackles, hydraulic jacks and all material necessary to perform the work in an efficient manner.
- All the tools & tackles to be certified in Form 12 as per factory rules.
- bb) Contractor shall use only high quality welding equipments and cables. Electric boards shall be fitted with ELCB. The Contractor shall strictly adhere to all safety precautions which will be reviewed by BPCL from time to time. All mobile equipments viz. cranes, DG sets etc., shall be fitted with flame arrestors.
- cc) Necessary equipments for ultrasonic testing / scanning, fluorescent magnetic particle testing, Dye Penetrate testing kit etc along with couplets, calibration blocks, sprayers, lighting transformers etc.
- dd) Necessary earthling cables, brackets, bosses required for earthling connection.
- ee) All other metallic and non-metallic parts not specified but required to complete the fabrication, installation of tanks including testing, inspection and purpose of material reconciliation.
- ff) All material required for barricading structure as per BPCL drawing no 32187 shall be in contractor's scope.
- gg) All material necessary to install mechanical float for the tank.
- hh) All materials like concrete, Hume pipe, reinforcement etc required for making temporary approach to tanks shall be supplied by the contractor.

MATERIAL RECONCILATION

On completion of the work, the Contractor shall submit "Material Reconciliation" statement for all materials issued by BPCL.

- 1. Every month the contractor shall submit an account of all the material issued by BPCL, in the Performa prescribed by the Engineer-in-charge duly certified. In case of non-compliance of the above, the Engineer-in-charge without prejudice in any Clause of tender enquiry shall have the powers to stop further issue of material or refuse payment for R.A. bills.
- 2. The contractor shall return all wastage/scrap serviceable / unused material

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to BPCL Salvage Yard at Refinery.

TIME SCHEDULE: The contractor shall strictly adhere to the following time schedule. The completion period is inclusive of fabrication, erection, testing, painting and the tank should be ready for commissioning.

Four months from the date of handing over of tanks which is inclusive of Four weeks required for installation of IFR by other party.

TERMS OF PAYMENTS: 100% payment shall be made based on actual executed quantities after completion of job and after due certification by BPCL Enginner-In-Incharge.

RETENTION AMOUNT: 10% amount for each bill payable will be deducted as retention amount and will be released after the completion of defect liability period of 12 Months. In lieu of retention money, contractor shall submit bank guarantee of 10% of contract value along with acknowledgement of purchase order valid for defect liability period of twelve months from the date of completion of contract with claim period six months extra.

LIQUIDATED DAMAGES: If the contractor is not able to complete the work by the date as specified above reasons attributable to him, liquidated damages shall be levied to contractor for the period of delay as per GCC clause 22.

MEASUREMENT OF WORKS FOR PAYMENT

1. Measurements of works shall be as per latest version of relevant IS codes if nothing is mentioned in the schedule of rates/quantities.

BILLING:

- 1. Contractor's bill for executed works shall be accepted only when jointly certified and signed measurements for the completed works are enclosed.

 2. Contractor shall be paid on every month against R.A. bills for the work done during proceeding month on basis of item rates as agreed in the contract.

 3. Final bill shall be submitted along with jointly certified & signed measurements within one month from the date of completion of total work.
- Any deviations not brought out as per above format and written elsewhere in the tender document shall not be recognized and the same is treated as null and void.

ANNEXURES

- a. ANNEXURE 1 : CONSTRUCTION POWER
- b. ANNEXURE 2: WATER FILL UP TEST OF A STORAGE TANK

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To:M/s. BPCL ESTIMATE MUMBAI - 400038 India (300648) Item Material Qty Unit **Unit Basic Rate** Description Delivery date (in Figures) Annexure-1) a. CONSTRUCTION POWER: No construction power shall be provided to the contractor by BPCL. The contractor has to arrange construction power at his own cost and shall comply with the following conditions before use: 1. All fuse switch units in the contractors construction distribution board shall be EE make or Siemens make, fuse-switch shall be fitted with HRC fuses of EE/Siemens make only. Re wire fuses will not be acceptable under any circumstances. Further fuse ratings also shall have to be approved by BPCL. 2. Construction distribution board shall be provided with a suitable canopy shed approved by the owner to ensure monsoon protection. 3. Proper sizing of the cable should be ensured and the cables used should be without joints. The cable shall be PVC insulated, PVC sheathed, steel armored aluminum or copper conductor type without any joints. Before laying of this cable the contractor shall get it okayed for safe operation of the owners switch board. Also, contractor shall get the cable route okayed by BPCL before laying the cable. 4. The switchboard and the electric arc welding machine should be properly cordoned or fenced so that no unauthorized person can go inside at any time. 5. Whenever the power supply is on one person has to be attending on source so that in case of emergency the main power can be switched off. 6. At the close of work, the 440V supply to the switchboard should be switched off and the fence to be locked up. 7. All 230V portable tools shall be inspected/certified by BPCL prior to taking to site for use. From extension board to the point of use, flexible cable for tools should be routed overhead. In extreme unavoidable circumstances when cable has to be laid through PVC flexible pipe for extra mechanical protection. 8. Electrical connection shall be taken from a metal clad extension board having a ELCB 30mA sensitivity as main incomer/isolator. 9. Contractor shall provide two separate earthlings for the construction distribution board. For this purpose, contractor shall provide two separate earth pits of minimum depth 5m & earth pipes to be used shall be of minimum size 2" G.I, class D type. Earthling cable of minimum size 1 X 50mm2 copper to be used by the contractor for earthling of the construction distribution board. 10. Letter painting shall be done by the contractor for all the incoming/outgoing fuse switch units in the construction distribution board to indicate where the supply is tapped from/to which equipment supply is being tapped.

b. ANNEXURE - 2: WATER FILL UP TEST OF TANK-

The following stage wise filling shall be carried out:- (16.1M height of tank)

WATER LEVEL DURATION OF HOLDING TIME RATE OF WATER FILLING

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tem	Material	Qty	Unit	Unit Basic Rate
	Description First 5 mts. 8 hrs.		Delivery date 150 M3/hr	(in Figures)
	Second 10 mts. 8 hrs.		150 M3/Hr 150 M3/hr	
	Third 16 mts. 8 hrs.		150 M3/hr	
	NOTES:		before and offer	. 6:11:6
	1. The settlement readings seach stage and also at least			•
	2. If the settlement of tank till the tank pad is stabili	pad continues ized.	s t he holding t	ime may be increased
	3. Bench mark shall be made points to take settlement red. Contractor shall submit to	eadings.		
	5. Contractor shall make all from fire water line outside	arrangements	at his own cost	for water filling
	APPENDIX - 7: LIST OF STANDA 1 General arrangement of Ta		-	16.10 Meters Ht)
	2 Provision of auto Radar 1			·
	3 Mixer arrangement drawing	no. FSK 2824	Sht.1, 2 & 3.	
	4 Barricading drawing no. 3			
	100 Standard Drawings			
	20 General Condition			
		naitions		
	60 Financial Deterre	Integrity Pact		
	70 QEHS Policy	:11C		
	80 Energy Policy			
	90 Hydra Ban			
In	d Total (inclusive of all taxe figure: Words :	s, duties/cha	rges etc)	
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To:M/s.	BPCL ESTIMATE MUMBAI - 400038 India (300648)		
TERMS &	CONDITIONS		
Important	Notice		
Sr.No	Description		
001	Quotation received after due date will not be entertained		
002	Your quotation must specify exact amount or percentage discount, Excise, S.T., Charges, Transport, Packing & forwarding, Octroi, etc. as applicable.		
003	In case you are unable to quote, kindly send the quotation with a regret for our records. Non-receipt of a regret will adversely affect your vendor rating.		
004	No quotation will be accepted without your rubber stamp and signature.		
005	Your quotation must be strictly in enclosed envelope indicating Collective RFQ No., RFQ No. and due date.		
006	For all future correspondences please mention the vendor code Collective RFQ Number & RFQ Number.		
007	Retention Money 10 % shall stand deducted from each and every running bill submitted in the event of contract is awarded.		
	IST OF ENCLOSURES . scope of work		
2			
_	. General Conditions of contract		
4	. General Terms & Conditions		
5	. Special Safety conditions		
6	. Integrity Pact		
•	. Financial Deterrent		
_	. QEHS Policy		
	. Energy Policy O. Hydra Ban		
1	o. nyara ban		

To:M/s. BPCL ESTIMATE MUMBAI - 400038 India (300648)			
Tear off Portion to be pasted on the envelope containing offer			
	Collective RFQ No. : 1000265	104	
Our Reference: RFQ No. : 6000976265 Subject:		Due Date : 28.09.2016 Due Time : 12:00:00	
To,			
Purchase Group : N46-DHT	SER PROC		
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