

MINUTES OF THE MEETING

PRE BID MEETING OF TENDER FOR SUPPLY, INSTALLATION, COMMISSIONING AND VALIDATION OF FABRICATION EQUIPMENT PACKAGE-II AT HLL BIOTECH LIMITED, CHENGALPATTU

Document No.:

NPI-120310-EQP-S1-TD-16

Venue

HLL Biotech Limited, Chennai

Date

02.06.2016

Project

Integrated Vaccines Complex, Chengalpattu

Attendees

See attached list of attendees

Issued by

HBL

issued on

10.06.2016

1.	Pre-bid Meeting for Fabrication Equipment - II for IVC, Chengalpattu	
Agenda]



. No.	Clar	rifications	on queries													
	Ten	der for S	upply , Installation, commissioning an	d Validation of	Fabrication) equip	ment nackago									
4						- cquipi	ment package									
1.	Discussion on Tender Enquiry Document: NPI-120310-EQP-S1-TD-16 The last date for the tender submission has been extended till 05th July 2016; 03:00 PM and the tender opening will be on 05th July 2016: 03:30 PM															
	<u> </u>		5 51. 55 Guly 2010, 03.30 FIVE	nded till <u>05th Jul</u>	y 2016; 03:0	<u>0 РМ</u> а	nd the tender									
	Revi	ised NIT	shall be read as													
	Sch /Na		Equipment Name	Equipment ID	Capacity (W.V)	Qty.	EMD in INR									
			Collection Tank- Rabies	B4-COL-01	1.5KL	1										
		Bio-waste Inactivation System	Kill tank - Rabies	B4-KIL-01	0.5KL	1	2,80,000/-									
į	I	Bio-waste Inactivatio System	Collection Tank- Multiple Bacterial	B1-COL 01	6 KL	1										
		lio-	Kill Tank- Multiple Bacterial	B1-KIL-01,	1KL	 	2,00,000/-									
	<u> </u>	H I S	•	B1- KIL-02	IKL	2										
			Centralized CIP Station	B1-CCP-01	300 L	1										
				B1-CCP-02	400 L	1										
			CIP Vessel for Lyophilliser	F1-LCT 01	3000 L	1	1									
ļ			CIP Vessel for Lyophilliser	F4-LCT 01	2000 L	1	1									
			Mobile CIP system	B1-MCIP 01	500 L	1										
				B1-CIT 01	-	1										
			Mobile CIP Trolley	B1-CIT 02		1										
			The state of the s	B1-CIT 03		1										
				R1-CIT 01 F4 – CIT-01	-	1										
			Media Preparation Vessel	F4-MPV 01	40 L	1										
			•	B1-MPV 01	400 L	1										
							essels		B1-MPV 02	500 L	1					
2.		essels	essels	essels	essels	Process Vessels			R1-MPV 02	100 L	$\frac{1}{1}$					
ļ,								esse	esse	esse	esse	essel	essel	esse	essel	esse
		ss Ve		B1-BPV 01- 02	600 L	2										
		roce	B1-BPV 03 500 I			1										
	II		Harvest Vessel	B1-HRV 01	1200 L	1	28,22,000/-									
		m 6	C.I. L. W	B1-HRV 02	500 L	1	20,22,000/-									
		ste	Sub-lot Vessel	B1-SLV 01-03	600 L	3										
		CIP system &	Adsorption & desorption Vessel	B1-ADS 01- 03	600 L	3										
				B1-DDS 01	600 L	1										
			Holding vessel	B1-HDV 01	1200 L	1										
				B1- KCV 01	1200 L	1										
				B1-BHV 01-	200 L	2										
		-	Pressure vessel	02												
			- 1755410 705501	B1- PVE 01	1000 L	1										
				B1- PVE 02	500 L	1										
				R1- PRV 01- 02	100 L	2										
				R1- PRV 03- 04	50L	2										
			i i	R1- PRV 05- 08	20L	4										
			<u> </u>	R1- PRV 09-	10L	6										



20100 (0	Aerosol Preparation Vessel	14 R1- PRV 15- 20	5L	6				
20100 (00	Aerosol Preparation Vessel	R1- PRV 15- 20	5L	6				
20/00 / 1	Aerosol Preparation Vessel		!	1				
20/00 (5		F4-PRV-01-02	50 L	2				
² age 38/90 (P	ayment terms shall be read as)	B1- APV 01	200 L	1				
21.1 Payment A) Payment for	Terms: r Domestic Goods or Foreign Origin	n Located within India. as specified in the con	tract in the	following manner				
An adv 110% o Perforr	wance ance of 10% of the contract value s of the advance amount and submis mance Security in the form of Bank	shall be released againssion of 5% of the con	st Bank gu tract value	arantee equivalent as Security Depos	t to			
			•					
10% of invoice	the contract value shall be released.	d against approval of D	Q and sub	mission of Proform	าล			
c) On	delivery at site:							
60 % of the contract price shall be paid on receipt of goods in good condition and upon the submission of the following documents:								
(i)								
	i and our and our signee,			by the authorized				
(iii) Two copies of packing list identifying contents of each package:								
(IV) Dispatch Clearance from Purchaser or authorized agent								
(v) Inspection certificate issued by the nominated Inspection agency, if any.(vi) Certificate of Country of origin.								
d) On Installation Qualification(IQ) & Submission of IQ report by purchaser								
e) On Operational Qualification(OQ) & Submission of OQ report by purchaser 5% of the contract value								
f) On validation and Final Acceptance Certificate by Purchaser:								
Bala purc by th	nce 10 % payment would be made haser as per the Proforma mention e consignee/ purchaser subject to r	against Final Acceptaned in Section XVIII of t	nce Certif	icate approved by document to be is: nt of non-rectificat	y the sued			
	a) Add An adv 110% of Perform advance b) Dec 10% of invoice. c) On 60 % of submiss (i) (ii) (iii) (iv) (v) (vi) d) On I e) On O Balan purc by th	a) Advance An advance of 10% of the contract value of 110% of the advance amount and submiss Performance Security in the form of Bank advance bank guarantee shall be valid for b) Design Qualification Approval: 10% of the contract value shall be release invoice. c) On delivery at site: 60 % of the contract price shall be paid on submission of the following documents: (i) Four copies of supplier's invoice signification price and total amount; (ii) Consignee Receipt Certificate as prepresentative of the consignee; (iii) Two copies of packing list identifying (iv) Dispatch Clearance from Purchase (v) Inspection certificate issued by the (vi) Certificate of Country of origin. d) On Installation Qualification(IQ) & State of the contract value. e) On Operational Qualification(OQ) & State of the contract value. f) On validation and Final Acceptance Balance 10 % payment would be made purchaser as per the Proforma mention by the consignee/ purchaser subject to	An advance An advance of 10% of the contract value shall be released agains 110% of the advance amount and submission of 5% of the content of the advance amount and submission of 5% of the content of the performance Security in the form of Bank Guarantee from any scadvance bank guarantee shall be valid for a period up to the comb. b) Design Qualification Approval: 10% of the contract value shall be released against approval of Dinvoice. c) On delivery at site: 60 % of the contract price shall be paid on receipt of goods in good submission of the following documents: (i) Four copies of supplier's invoice showing contract number price and total amount; (ii) Consignee Receipt Certificate as per Section XVII in origin representative of the consignee; (iii) Two copies of packing list identifying contents of each pactive in the contract from Purchaser or authorized agent (v) Dispatch Clearance from Purchaser or authorized agent (v) Inspection certificate issued by the nominated Inspection (vi) Certificate of Country of origin. d) On Installation Qualification(IQ) & Submission of IQ report 5% of the contract value. e) On Operational Qualification(OQ) & Submission of OQ report 5% of the contract value. f) On validation and Final Acceptance Certificate by Purchase Balance 10 % payment would be made against Final Acceptance purchaser as per the Proforma mentioned in Section 20 Mills of the purchaser as per the Proforma mentioned in Section 20 Mills of the purchaser as per the Proforma mentioned in Section 20 Mills of the purchaser as per the Proforma mentioned in Section 20 Mills of the purchaser as per the Proforma mentioned in Section 20 Mills of the purchaser as per the Proforma mentioned in Section 20 Mills of the purchaser as per the Proforma mentioned in Section 20 Mills of the purchaser as per the Proforma mentioned in Section 20 Mills of the purchaser as per the Proforma mentioned in Section 20 Mills of the purchaser as per the Proforma mentioned in Section 20 Mills of the purchaser as per the Proforma	Advance An advance of 10% of the contract value shall be released against Bank gu 110% of the advance amount and submission of 5% of the contract value Performance Security in the form of Bank Guarantee from any scheduled conditional advance bank guarantee shall be valid for a period up to the completion of the by Design Qualification Approval: 10% of the contract value shall be released against approval of DQ and submission of the contract value shall be paid on receipt of goods in good condition submission of the following documents: (i) Four copies of supplier's invoice showing contract number, goods of price and total amount; (ii) Consignee Receipt Certificate as per Section XVII in original issued representative of the consignee; (iii) Two copies of packing list identifying contents of each package; (iv) Dispatch Clearance from Purchaser or authorized agent (v) Inspection certificate issued by the nominated Inspection agency, if. (vi) Certificate of Country of origin. d) On Installation Qualification(IQ) & Submission of IQ report by purch 5% of the contract value. on Operational Qualification(OQ) & Submission of OQ report by purch 5% of the contract value. f) On validation and Final Acceptance Certificate by Purchaser: Balance 10 % payment would be made against Final Acceptance Certificate by the consignee/ purchaser subject to recoveries if any light in this tender by the consignee/ purchaser subject to recoveries if any light in this tender by the consignee/ purchaser subject to recoveries if any light in this tender by the consignee/ purchaser subject to recoveries if any light in this tender by the consignee/ purchaser subject to recoveries if any light in this tender by the consignee/ purchaser subject to recoveries if any light in the subject	a) Advance An advance of 10% of the contract value shall be released against Bank guarantee equivalent 110% of the advance amount and submission of 5% of the contract value security perpendence Security in the form of Bank Guarantee from any scheduled commercial bank. T advance bank guarantee shall be valid for a period up to the completion of the contract. b) Design Qualification Approval: 10% of the contract value shall be released against approval of DQ and submission of Proform invoice. c) On delivery at site: 60 % of the contract price shall be paid on receipt of goods in good condition and upon the submission of the following documents: (i) Four copies of supplier's invoice showing contract number, goods description, quantity price and total amount; (ii) Consignee Receipt Certificate as per Section XVII in original issued by the authorized representative of the consignee; (iii) Two copies of packing list identifying contents of each package; (iv) Dispatch Clearance from Purchaser or authorized agent (v) Inspection certificate issued by the nominated Inspection agency, if any. (vi) Certificate of Country of origin. d) On Installation Qualification(IQ) & Submission of IQ report by purchaser 5% of the contract value. e) On Operational Qualification(OQ) & Submission of OQ report by purchaser 5% of the contract value. f) On validation and Final Acceptance Certificate by Purchaser: Balance 10 % payment would be made against Final Acceptance Certificate approved by by the consignee/ purchaser subject to recovering it any eithers.			



S. No.	radio on queries										
	Section - I										
	Qua	lification (Criteria (For ever	y schedule Quot	ed) (Points 2 and 4	shall be read as)					
	Poli	IL Z ;									
5.	 a. Following clarification has been provided to the vendors for the minimum eligibility criteria of Schedule-I. The Tenderer should have supplied, installed and commissioned successfully at-least (Schedule-I: 1 No. of 2KL Bio-Waste Inactivation System) i.e Total volume of the tanks to be considered as 2KL (for example: 1KL collection tank and 1KL kill tank). b. The Tenderer should have supplied, installed and commissioned successfully at-least For Schedule II: 2 no.s of 200 Lts CIP systems and 2 no.s each of 100 Lts, 200 Lts, 500 Lts and 1000 Lts of Process vessels in the field of Bio-Pharma / Pharma / Human Vaccine in the last Seven financial 										
	years	from the da	ate of Tender Open	narma / Pnarma / H ing. Client's Comple	uman Vaccine in the la	st Seven financial					
	Repo	rt for the sa	me has to be attach	ned. List-out the exp	erience under section	se Order/Service C.					
	Point										
	c. The a	c. The average annual turnover of the tenderer must be minimum Sch – I: INR. 70 Lakhs									
	SGI -	- I: INR. 70 I - II: INR. 911	₋akns								
3	General Disc			*	in the second						
1.	All Diaphragm	ı valves sha	Il be of forged type	for all the schedule.							
	Vendor shall A. Details of Length	Vendor shall include the following as a part of schedule-II, A. Details of silicone breaded flexible hoses[SIPble,Food grade, Pt –cure,sanitary type) Length Spec. Hep.B block Hib block BCG Block MD Block									
2.	1mtr	1"	5 no.s	Hib block 2 no.s	BCG Block	MR Block					
	2mtr	TC end	25 no.s	10 no.s	2 no.s	2 no.s					
	211111	-	20 no.s	10 no.s	8 no.s	3 no.s					
	3mtr			IU IIO S	4 no.s						
	3mtr	ection	20110.0		7110.5	-					
	3mtr B. End conn					-					
	3mtr B. End conn				provided for all the ed	- quipment.					



S. No. | Clarifications on queries

List of preferred make of components present in URS is revised and the Following table shall be used as URS Annexure for List of preferred make of components for all the equipment of this tender [Schedule I & II]

S. No	Description	Make
1.	Actuated Piston Valve	Gemu/Saunders(Crane)/Burkert
2.	Air pressure regulator	Festo/SMC/Janatics / Pnuemax
3.	Angle seat valve(Automatic)	Gemu / SED / Burkert /Saunders(Crane)
4.	Ball Valve	President/ Modentic/ fluidline / Micro pneumatic
5.	Ball valve(Manual)	Modentic/Saunders/Alfa laval
6.	Centrifugal Pump	Grundfos / Alfalaval / Inoxpa
7.	Conductivity sensor	Metler Toledo/E+H / Yokogawa
8.	Diaphragm Valve (Manual)	Gemu / Saunders /Burkert / SED
9.	Diaphragm valve(Automatic)	Gemu / SED / Burkert /Saunders
10.	Dosing metering pump	Prominent/ Masterflex
11.	DP sensor	E+H/Rosemount /Emerson/Negele
12.	DP transmitter	E+H/Rosemount /Emerson/Negele
13.	Electrical Tracing for Vent Filter	PALL/ Thermon/Heaton
14.	Filter Integrity Connector	Sartorius/ Pall/ Millipore
15.	Filter housing	Sartorius/ PALL/Millipore
16.	Flexible hose	BBS/ AMI Polymer / Venair / Saint Gobian
17.	Float Trap	Spirax/ Steriflow/ ITT
18.	Flow Switch	Negele/Davis instruments / E&H / Danfoss
19.	Flush bottom valve	GEMU / Novaseptic
20.	FRL	Janatics/ Festo/ Ingersoll
21.	Pressure Gauge	Forbe marshal/ wika/ waaree instruments / Baume
22.	Lamp	PAPENMEIER/L.J.Star
23.	Level Sensor	E&H/WIKA/Emerson
24.	Level transmitter	E&H/WIKA/Emerson
25.	Load Cell	Mettler Toledo / Sartorius

3.



26.	Magnetic Mixer	Novaseptic / Roplan
27. NRV		Leader/ alfalaval / Modentic / President
28.	Operator Interface/HMI	Allen Bradley/ Siemens
29.	PLC	Allen Bradley/ Siemens
30.	pH sensor	Mettler Toledo / E&H
31.	Conductivity Sensor	Mettler Toledo / E&H
32.	PLC with IO Modules and HMI touch Panel	Allen Bradley/ Siemens
33.	PRV[sanitary]	ITT / Spirax / Jordan / Forbes Marshall
34.	Printer (Colour Laser Jet)	Epson / Canon / HP
35.	PC (23 inch)	HP / Dell
36.	Rupture Disc	FIKE/ZOOK
37.	Sampling valve	GEMU / Burkert /Saunders/Novaseptic
38.	Safety Relief Valve for jacket	Teleflo/ herose/ ciprani Harrison / Forbes Marsha Mascon / Fainger Lesser / Inoxpo
39.	SCADA	Siemens / Schindler
40.	Spray Ball	HAKE/Lechler / Alfa laval
41.	Steam trap	Steriflow/spirax marshall
42.	Centrifugal Pump[for Sch-I & II]	Grandfus/Alfa Laval
43.	Temperature sensor	NEGELE /Emerson/Wika / Radix
44.	Temperature sensor, PT 100 (For Vessel)	Negele/Radix/E&H/Rose mount
45.	Temperature transmitter	Radix/ Yokogawa/Emerson
46.	Top Driven Agitator[only for sch-l)	inoxpa / IKA / PRG / Thermotech / GMM
47.	Variable Frequency Drive	Siemens/ABB/ Allen Bradley / Danfoss
48.	Vent Filter Cartridge	Sartorius/ Pall/ Millipore



S. No.	Clarifications on URSs						
С	URS: Bio-waste Inactivation System (URS-BIS 01)						
	Specific revision in the URS						
	URS Point number and excerpt* / description of the specification *	Point modified as					
10434		Point no: 2.2.2, a					
1.	Point no: 2.2.2, a Air supply: The collection tank shall have a sterile grade 0.22µ (absolute) hydrophobic filter	Air supply: The collection tank shall have a sterile grade 0.22µm (absolute) hydrophobic filter with SS housing along with heating element[electrical tracing					
	with SS housing.	2 nos. of 10 inch housing for 6 KL tank and 1 no. of 1 inch housing for 1.5 KL tank					
	Point no: 2.2.2, c	Point no: 2.2.2, c					
2.	Pumps: 2 nos of submerged cutter pumps shall be provided in the collection tank to transfer the bio-waste in the kill tank. The pumps shall be controlled by a feedback control loop the	Pumps: [1W+1S] 2 nos. of centrifugal pumps for 6 KL tank and [1W+1S] 2 nos. of Centrifugal pumps for 1.5 KL shall be provided in the collection tank to transfer the bio-waste into the kill tank.					
	feedback for which is obtained from the level sensors.	The pumps shall be controlled by a feedback control loop, the feedback for which is obtained from the level sensors.					
	Point no: 2.2.3, c						
3.	Addition: Shell Design pressure: Vendor to specify						
	Jacket design pressure: Vendor to specify						
	Point no: 2.2.4, d	Point no: 2.2.4, d					
4.	Agitation system: The Kill tank shall be designed with a top-mounted mechanical driven agitation system with a fixed speed geared motor. A single dry mechanical seal shall be provided to the agitator. The Kill tank shall be provided with a removable, height adjustable propeller turbus impeller suitable for mixing and	Agitation system: The Kill tank shall be designed wit a top-mounted mechanical driven agitation system wit a variable speed geared motor (with VFD). A single dimechanical seal shall be provided to the agitator. The Kill tank shall be provided with a removable, height adjustable propeller turbine impeller suitable for mixing and good heat transfer.					
	good heat transfer.	[2W+2S] 4 nos. of centrifugal pumps for 2 nos. of 1 KI tank shall be provided in the discharge.					
j.	Point no: 6.4, Level of instrumentation						
	Temperature and pressure instrumentation provided the parameters	for kill tank shall be able to monitor, control and record					
	Point no: 6.7.1.4 Addition: Port for pressure gauge – 1 no.						
	Point no: 6.7.3 Addition: Isolation valves shall be provided for the ver	nt filters					
I	Point no: 6.7.3 Addition: Piping between collection ta						



S. No.	Clarificatio	ns on URS							
D	URS: Centralized CIP System (URS/CCP 01)								
1.	The Skid mo Supply pum exchanger, I	Point no: 2.0 The Skid mounted CIP station with integrated Supply pump, Lockable castor wheels, Heat exchanger, Process vessel, HMI, valves, instrumentation and control panel with following					Point no: 2.0 The Skid mounted fixed CIP station with integrated Supply pump, Heat exchanger, Process vessel, HMI, valves, instrumentation and control panel with following features:		
2.	Point no: 2.0, M Addition: CIP Transfer rigid piping from CIP station to process vessels will be in HBL's scope however an required auto valves & manual valves (2 way or zero dead leg), handshakes (including fermenters and all vessels in Hep B & Hib area), pneumatic tubing, wiring, etc., will be in vendor scope								
	Point no: 6.					Point no: 6.4			
3.	pH & Conductivity	To monit control at the Cond	nd record			Conductivity	To monitor, co and record the Conductivity	ntrol Conductivity sensor and transmitter	
Ξ.	URS: Mobile	URS: Mobile CIP system (URS/MCP 01)							
1.	Point no: 6.1	· · · · · · · · · · · · · · · · · · ·	4)	*		Deleted	· · · · · · · · · · · · · · · · · · ·	•	
2.	Point no: 6.4	Point no: 6.4 pH					Deleted		
	URS: Mobile	CIP Trolle	ý (URS/C	IT 02) B1 CI	T 01	02			
	Pg No. 1 :- Qty and equipment list has been mod URS Doc# Block Area I					lified	Qty (Nos)		
1.		Code B1	Multiple	Bacterial		-CIT 01	1	Capacity(WV)	
	URS/CIT 02	B1	Block-H Multiple Block-H	Bacterial	-	-CIT 02	1	NA NA	
		B1		Bacterial	B1	-CIT 03	1	NA	
2.	Flow Switch, (SS pipes and	Point no. 2.0 The skid consists of Centrifugal pump with variable frequency drive, Pneumatic diaphragm valves, Flow Switch, Conductivity sensor, interconnecting SS pipes and flexible hoses for connection				Switch, Conduc	e, Pneumatic diap	pump with variable hragm valves, Flow flexible hoses for	
1	Point no: 6.4 pH							101 OF VG3361.	



S. No.	Clarifications on URSs								
				Point no: 6.5.	3				
4.	Point no: 6 HMI should	.5.3 be provided		FLC / HIVII. UI	it will be controlled e junction box shal out & output signals	he provided to			
				(vendor to prov	ride 2 sets of extra ment as a spare)				
5.	withstand pr	le piping use fSS re-enford essure, temp	d for cleaning services ced and PTFE lined to erature.		,				
6.	Solvent may	7.4 be used for	cleaning hence all essories should be flan	ne Deleted					
7.	Point no: 6.	7.8		Point no: 6.7.8					
/ , 	Flow rate: 6	3-8 m3/ h (Ve	ndor to specify)	Flow rate: Ven					
8.	end should b	oint to the equiple hose (2 m	uipment, food grade n, 2 nos) with 1 inch TC r all vessels.	Deleted	Deleted				
9.	From the equ	7.10 Jipment to the ole hose (3 m	e drain, food grade	Deleted	Deleted				
10.	Point no: 6.7	'.11 (Additio		pass box of size (I. C	200 × W 200 × LL 00	10)			
	URS: Mobile	CIP Trolley	(URS/CIT 03) iment list has been m						
1.	URS Doc#	Block Code	Area	Identification #	Qty (Nos)				
	URS/CIT 03	R1	Measles and Rubella Bulk Block	R1-CIT-01	1	Capacity(WV) NA			
		F4	BCG Bulk and Formulation block	F4-CIT 01	1	NA NA			
ļ	Point no. 2.0			Point no. 2.0		147			
	The skid consists of Centrifugal pump with variable frequency drive, Pneumatic diaphragm valves, Flow Switch, Conductivity sensor, interconnecting SS pipes and flexible hoses for connection between the inlet/ outlet of vessel.			The skid consists frequency drive, I Switch, Conductive	of Centrifugal pum Pneumatic diaphra vity sensor and flex en the inlet/ outlet	gm valves, Flow			
1	Point no: 6.7.0 Solvent may be electrical conne	e used for cle	aning hence all sories should be flame	Deleted					



		on URSs						
4.	Point no: 6.7		Point no: 6.7	Point no: 6.7.10				
		8 m3/ h (Vendor to confirm)	Flow rate: Ve	endor to specify				
5.	end should be	nt to the equipment, food grade le hose (2 m, 2 nos) with 1 inch T provided for all vessels	-C Deleted					
6.	From the equipal SIPable flexible	12 Dement to the drain, food grade the hose (3 m, 2 nos) with 1 inch The provided for all vessels.	C Deleted					
H		Vessels (URS/V_02)						
	Pg # 1:- the cap	pacity has been modified for the fo	llowings,					
			Preparation Ves	sel				
	Block Code	Area	Identification #	Quantity(Nos)	Consolts I (IV)			
	F4	BCG Bulk and Formulation	F4-MPV-01	1	Capacity L (W.V			
1.		Buffer	Preparation Vess	el				
	Block Code	Area	Identification #	Quantity(Nos)	A 7			
	F4	BCG Bulk and Formulation	F4-BPV-01	Quantity(1408)	Capacity L (W.V 40			
	Mobile Hot water Recirculation System -B1- HRS 01[1qty]-deleted							
	Block Code	Area	Identification #	Quantity(Nos)	Capacity L (W.V.			
····	B1	Multiple Bacterial Bulk-HepB	B1- HRS 01	0	Capacity L (W.V.			
2.	utilities (plant stoetc.) in the jacket preparation (tole	control: The temperature during uld be controlled via circulation of eam, cooling water, chilled water et. Temperature control during erance limit: ± 2 °C) & during temperature should be 122 °C ± 1 °C)	utilities (plant si in the jacket. Te (tolerance limit: temperature she KSCN vessel a provided with system (inbui	emperature control ±2°C) & during s ould be 122°C (to and Desorption v	via circulation of er, chilled water etc.) during preparation terilization the elerance limit: ± 1 °C essel to be appearature control			
3.	Heading no: 2.2		Deleted	- augus With tole	rance of +/- 1 °C			
	Point no: 6.7.8	Addition						
4.	Each equipment specifications. TI Hib. The SCADA	will be having individual HMI and nese Common PLCs to be conne PC will be placed in the same flactions will be in vendor scope.	d Common PLC as spected to the common oor. Any required boo	pecified in the vess SCADA of each fa osters, cabling,con	sel design cility i.e Hep-B and duit,router switch			
		iall be available in HMI						
- 1		used for collecting the data from	all PI Cs and to take	the printer-				
	Vendor to provide	e the Laser colour printer, UPS fo	or PC , monitor of eige	e not less than 22	inal			
1		,, (c nociess than 23	INCN.			



S. No.	Clari	Clarifications on URSs						
ı	Anne	exure-I: V	essel design specifica	tion & Layo	out Refer	ence		
1.	Poin:	t no: 8			Point Additi	no: 8	with 4 way valve group e spare port)	
2.	Point	no: 12- F	Rupture disc has been re	eplaced with				
	#		Aerosil Prep. Ves	ssels	#	T		
3.	2	Type of vessel	Fixed		2	Type of vessel	Aerosil Prep. Vessels Mobile	
	32	PLC	Common PLC witl adsorption vessels		32		Independent PLC	
4.	Mobil	e Hot wat	er Re-circulation syst		Delete	d		
5.	# Media & Buffer Prep. Vessels F4-MPV 01 F4-BPV 01 3 Max working 30				#		Media & Buffer Prep. Vessels F4-MPV 01 F4-BPV 01	
	32	Max. wo volume, PLC	rking 30 L No	3	Max. working volume, L	40		
					32	PLC	Yes (dedicated)	
6.	30	Level of	automation		30	Level of automa Automatic – ESI Semiautomatic –	tion P, FSIP, CIP - Harvest & Transfers	
J	URS: I	Pressure	vessels[URS/PRV_2]				Trainvest & Trainsiers	
	Pg #1:	qty has b	een added					
	Bloc	k Code	Area	Identific	ation #	Quantity (No.)	Capacity (WV)	
1.				R1-PR		2	100 L	
			Measles and Rubella	R1-PR	V-02	2	50 L	
		R1	Bulk block	R1-PR	V-03	4	20 L	
				R1-PR	V-04	6	10 L	
				R1-PR	V-05	6	5 L	
		F4	BCG Bulk & Formulation block	F4-PRV-	01_02	2	50L	

For HLL Biotech Limited

Senior Manager - Procurement

nne pharmaplane



List of Attendees

Date:

02-June-2016

Venue:

HBL, TICEL Biopark, Chennai

Project:

Integrated Vaccine Complex, HBL, Chengal pattu

Subject:

Pre-Bid Meeting for supply, installation, commissioning and validation

of Fabrication Equipment Package-IVC

S NO.	NAME	COMPANY	EMAIL ID/ MOB NO.	SIGNATURE
01	M.B. Naga Hussaim Aldy	Praj Hipurila Systems	NAGA HUSS AIN REDOY & PRATHIPURITY NET	gur.
02	MEHUL PATEL	Phormatech.	mehilpatel. Salos e pharmatech proces. com. 9909925045.	mehul
03	CH. RAJESH	HBC	rafeshch1982egv:1	Rel
04	B. SANYASIRAO	HBL	Lanamillas Q HII bio led . com	Byano
05.	J. Navien Kumai	HBC	navien kumasjahlbioteis	J. Navien
06.	N-Visaya Kuman	HBL	45 ayoukumarah Ubidah com	
07.	ELAYAVANI.K	1/	elayavaria hll pictalia	Elay
18	T. Sommanuel Gladston	HBL	immanuel @ hll bioteche	01/1
09	Aswalny Diresh. T	HBL	aswathyd@hllbiotech-com	
10	kumaresan. c	HBL		as of
11.	VIGALESA HARAS T	LBL	Vigantwerent Q Lubisteck	T-gul
12	S.G. SURESH	HBL	Suresneg @hllbiotech com	Series
13	G. NARASIMHA REDDY	HBL	Navasimhareddy @ hilbiotech com	I New to
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15.	A-ANTO FELIX	HBL	antofelix @ hil bio tech . com	, u
16.	Swith S. R	HBL	Swithsr@hll.biotech.com	