

Equipment Specification Data Sheet

Equipment Name: Incubator

Document No.: DS-INC 01




Revision: 04

Project No.: 120310

Project Name: Integrated Vaccines Complex,
Chengalpattu

Block Code	Block Name	Identification No.	Capacity (L)	Quantity
B4	Rabies Bulk	B4-INC 01	240 - 300	1
B4	Rabies Bulk	B4-INC 02	240 - 300	1
B4	Rabies Bulk	B4-INC 03	400- 500	1
G1	Animal House	G1-INC 01	240 - 300	1
G1	Animal House	G1-INC 02	240 - 300	1
Q1	Admin QA & QC	Q1-INC 01	240 - 300	1
Q1	Admin QA & QC	Q1-INC 02	240 - 300	1
Q1	Admin QA & QC	Q1-INC 03	240 - 300	1
Q1	Admin QA & QC	Q1-INC 04	240 - 300	1
Q1	Admin QA & QC	Q1-INC 05	240 - 300	1

NNE Pharmaplan India Limited

Name	Designation	Signature	Date
Prepared by			
Mr. Manohar M S	Engineer - Process		8/6/15
Checked by			
Ms. Shilpa Roa	Senior Engineer - Process		8/6/15
Approved by			
Mr. Vikas Katial	GM - Projects (SME) & Head COC Vaccines		9/6/15

Equipment Specification Data Sheet

Equipment Name: Incubator








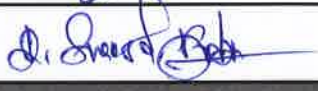
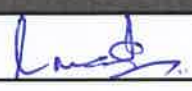
Document No.: DS-INC 01

Revision: 04


Project No.: 120310


Project Name: Integrated Vaccines Complex,
Chengalpattu


HLL Biotech Limited

Name	Designation	Signature	Date
Reviewed by			
P. NAVIN KUMAR	DEPUTY MANAGER (VIRAL VACCINE)		15/6/15
K. YASWANATH REDDY	Deputy Manager		15/6/15
Saijeev Kumar.R	Managers		12/6/15
Polina Sreenath	Deputy Manager		12/6/15
Approved by			
Dr. Juliet Selvi	Head - Viral Vaccine		20/6/15
Dr. K.A. Arun Anand	MANAGER		19/6/15
V. Sivagamesh	Manager		19/6/15
Dr. Suresh Babu	DM		22/6/15
Authorized by			
Raman K Ramachandran	CEO		24/6/15

Equipment Specification Data Sheet				
HLL Biotech Limited, Chennai				
HLL Biotech Limited Chennai	INTEGRATED VACCINES COMPLEX, CHENGALPATTU			HBL HLL Biotech Limited Chennai
	Equipment Name	Incubator		
	Document No.	DS-INC 01		
	Revision No.	04		
1	Process requirements			
1.1	The incubator shall be used for incubation of biological samples under controlled conditions.			
2	Identification no	Volume in L	Table top/floor model	In built Data logging
2.1	B4-INC 01	240 - 300	Table top	NA
2.2	B4-INC 02	240 - 300	Table top	NA
2.3	B4-INC 03	400- 500	Floor mounted with lockable castor wheel	Data logging with Thermal Printer Power Supply- provision to be provided to operate magnetic stirrers inside the incubator
2.4	G1-INC 01	240 - 300	Table top	NA
2.5	G1-INC 02	240 - 300	Table top	NA
2.6	Q1-INC 01	240 - 300	Table top	NA
2.7	Q1-INC 02	240 - 300	Table top	NA
2.8	Q1-INC 03	240 - 300	Table top	NA
2.9	Q1-INC 04	240 - 300	Table top	NA
2.10	Q1-INC 05	240 - 300	Table top	NA
3	Technical Specifications			
3.1	Model	cGMP Incubator		
3.2	Type	Standard		
3.3	Utility (Compressed air/gas)	Vendor to specify		
3.4	Shelves	4-5 Nos (adjustable); Perforated SS 304 shelves		
3.5	Temperature range	ambient+ 5 to 75°C		
3.6	Temperature Stability	±0.2°C		
3.7	Temperature Readability	0.1°C		
3.8	Temperature Uniformity	± 0.6 °C @37 °C		
3.9	Temperature Controller	PID controller		
3.10	Display Unit	Digital LED (set value, process value, date and time) / LCD		
3.11	Interlocking	Electromagnetic door interlocking		
3.12	Dimension (Chamber size, external size)	As per the volume specified above		

Equipment Specification Data Sheet			
HLL Biotech Limited, Chennai			
HLL Biotech Limited Chennai	INTEGRATED VACCINES COMPLEX, CHENGALPATTU		 <small>HLL BIOTECH LIMITED Established in the year 2000 to manufacture of India's first</small>
	Equipment Name	Incubator	
	Document No.	DS-INC 01	
	Revision No.	04	
3.13	Quantity	10nos	
3.14	Power Requirement	To be compatible to standard Indian power supply sockets	
4	Material of Construction		
4.1	External body Construction	cGMP Compliant exterior	
4.2	Internal body Construction	SS 304 (Electropolished)	
4.3	Inner Door	Safety transparent door	
4.4	Finishes	a) Rounded inner chamber corners for easy cleaning b) Design of the equipment should enhance cleaning by providing minimum sharp corners, minimum crevices and smooth finished welds joints c) All bolts, nuts on the exterior part of the equipment will be with cap head or cap nut	
4.5	Gaskets, seals, O-ring	Food Grade/ nontoxic material;	
4.6	Validation	Validation port to be provided to insert probes for temperature mapping	
4.7	All welds shall be ground finish		
5	Specific Equipment Requirements		
5.1	Shelf shall be of perforated type		
5.2	Microprocessor controller unit with PID for system control		
5.3	Alarm : (Visual - Audio) 1. temperature over shoot of 2.5°C from set point 2. Alarm for prolonged door opening		
5.4	RS-232 Computer Interface allows remote data logging and monitoring of the system		
5.5	The heat given off by the unit must be stated (inside the room).		
5.6	Temperature mapping to be provided at the time of installation		
5.7	Temperature sensor (PT 100) should be provided.		
5.8	Equipment shall be compatible for cleaning with all standard disinfectants		
6	Other Requirements		
6.1	Training/Demo for the users on the operation and cleaning to be provided.		
6.2	Equipment should possess universal safety requirement.		
7	Regulatory Aspects		
7.1	DIN 12880 Class 3.1 (Temperature safety)		
7.2	IEC 61010-1 (Electrical safety)		
7.3	cGMP		
7.4	CE certification		

Equipment Specification Data Sheet			
HLL Biotech Limited, Chennai			
nne pharmaplan	INTEGRATED VACCINES COMPLEX, CHENGALPATTU		 <small>HLL BIOTECH LIMITED Building no. 10, Sector - 1 & Landmark: HLL Biotech</small>
	Equipment Name	Incubator	
	Document No.	DS-INC 01	
	Revision No.	04	
8	Safety requirements		
	Following facilities must be provided to protect personnel and equipment:		
8.1	Noise level should be below 60 decible at a distance of 1m from the equipment		
8.2	Chamber shall be insulated properly to maintain inner environment		
8.3	Appropriate closure of all parts.		
8.4	Proper Earthing is necessary.		
9	Documents		
	Following documents, but not limited to these, are expected from the vendor as part of the supply package in hard copy as well as editable electronic file.		
9.1	IOQ Documents		
9.2	Operation and maintenance manuals shall be provided along with IOQ documents during installation at site		
9.3	Warranty Letter for 1 year from the date of supply.		
9.4	Calibration certificate of critical instruments with respect to the traceable national reference standard instrument and their calibration procedure.		
10	Timelines		
10.1	Not Applicable		
11	Preferred list of make		
11.1	Esco, Thermo scientific, Binder, Memmert, Eppendorf.		
	NOTE: Accurate size and technical specification need to be mentioned by the vendor		

Equipment Specification Data Sheet					
HLL Biotech Limited, Chennai					
HLL Biotech Limited Chennai	INTEGRATED VACCINES COMPLEX, CHENGALPATTU				
	Equipment Name	Incubator			
	Document No.	DS-INC 01			
	Revision No.	04			
Table-1: Equipment location					
Equipment ID	Block Name	Room Name	Room No	Room dimension in mm	Room height in mm
B4-INC 01	Rabies Bulk	Cell Lab - 1	B4G038	5900 x 4850	2700
B4-INC 02	Rabies Bulk	Virus Seed Lab	B4G048	4700 x 2950	2700
B4-INC 03	Rabies Bulk	Virus Inactivation	B4G059	5700 x 3350	2700
G1-INC 01	Animal House	Lab area - Testing	G1G055	4700 x 7300	2700
G1-INC 02	Animal House	Lab Area (Challenge)	G1G078	4000 x 5000	2700
Q1-INC 01	Admin QA & QC	Immuno chemistry lab	Q1S026	5300 x 5500	2400
Q1-INC 02	Admin QA & QC	Virus Testing Labs	Q1S036	5450 x 2700	2400
Q1-INC 03	Admin QA & QC	Cell culture area	Q1S069	2700 X 3760	2400
Q1-INC 04	Admin QA & QC	Microbiology lab	Q1S045	3700 X 4600	2400
Q1-INC 05	Admin QA & QC	Microbiology lab	Q1S045	3700 X 4600	2400
Table-2: Change Log					
Date	Name	Revision	Section	Change/Comment	
11-07-2014	Manohar	00	-	New document	
04-08-2014	Manohar	01	All	Updated as per comments received from HBL dated 04-08-2014	
27-10-2014	Manohar	02	All	Updated as per comments received from HBL dated 15-10-2014	
06-01-2015	Yogesha M J	03	All	Updated as per comments given by HBL team during meeting dated 06-01-2015 at HBL office	
06-05-2015	Manohar	04	All	Updated as per comments received from HBL dated 27-02-2015	
Table-3: Annexure					
Not applicable					

Equipment Specification Data Sheet

Equipment Name: BOD Incubator

Document No.: DS-BIC 01

Revision: 04

Project No.: 120310

Project Name: Integrated Vaccines
Complex, Chengalpattu


Block Code	Block Name	Identification No.	Capacity	Quantity
Q1	Admin QA & QC	Q1-BIC 01	200L to 260L	1


NNE Pharmaplan India Limited


Name	Designation	Signature	Date
Prepared by			
Mr. Manohar M S	Engineer - Process	<i>Manohar</i>	8/6/15
Checked by			
Ms. Shilpa Rao	Senior Engineer - Process	<i>Shilpa Rao</i>	8/6/15
Approved by			
Mr. Vikas Katial	GM - Projects (SME) & Head COC Vaccines	<i>Vikas Katial</i>	9/6/15

HLL Biotech Limited

Name	Designation	Signature	Date
Reviewed by			
Sanjeev Kumar R	Manager	<i>SK</i>	12/6/15
Polina Sreenath	Deputy Manager	<i>Polina</i>	12/6/15
Approved by			
V. Sivaraman	Manager	<i>V. Sivaraman</i>	19/6/15
D. Suresh Babu	Deputy	D. Suresh Babu	22/6/15
Authorized by			
Raman K Ramachandran	CEO	<i>Raman K Ramachandran</i>	24/6/15

Equipment Specification Data Sheet		
HLL Biotech Limited, CHENNAI		
nne pharma plan*	INTEGRATED VACCINES COMPLEX, CHENGALPATTU	
	Equipment Name	BOD Incubator
	Document No.	DS-BIC 01
	Revision No.	04
		
1	Process Requirement	
1.1	The incubator shall be used for storage of samples under controlled conditions.	
2	Equipment ID	
2.1	Q1-BIC 01	
3	Technical Specification	
3.1	Model	BOD Incubator.
3.2	Temperature control	Microprocessor with P.I.D
3.3	Temperature range	15 to 60 °C
3.4	Temperature Readability(Resolution)	0.1 °C
3.5	Number of shelves	3 or more adjustable and perforated SS316L shelves
3.6	Refrigerant	CFC Free
3.7	Display type	LED/LCD Display
3.8	Capacity	200L to 260L
3.9	Power supply	To be compatible to standard Indian Power supply socket
3.10	Quantity	1 No
3.11	Dimensions (W x D x H) Internal Work area External dimensions	Vendor to specify
4	Material of Construction	
4.1	External body Construction	cGMP compalint epoxy coated material
4.2	Internal body Construction	SS 316L/SS 304, electropolished.
4.3	Inner Door	Safety transparent door
4.4	Outer Door	Fully insulated SS door with lock and handle
4.5	Finishes	a) Rounded inner chamber corners for easy cleaning b) Design of the equipment should enhance cleaning by providing minimum sharp corners, minimum crevices and smooth finished welds joints
4.6	Gaskets, seals, O-ring	Food Grade/ nontoxic material like neoprene or better. Use of Asbestos is prohibited
4.7	Expected operational hours per day	24 hrs
4.8	Validation	Validation port to be provided to insert probes for temperature mapping
5	Specific Equipment Requirements	
5.1	Temperature mapping to be provided at the time of installation	
5.2	The body construction shall provide temperature stability.	
5.3	The gap between inner & outer walls of chamber should be fitted with high grade polyurethane foam (PUF), to ensure maximum temperature efficiency.	
5.4	It shall have forced air circulation to achieve uniformity of conditions.	
5.5	Incubator shall include a safety thermostat.	
5.6	Compressor shall have overload relay.	
5.7	It should have viewing window in the doors.	
5.8	There should be independent over-temperature safety protection.	

Equipment Specification Data Sheet		
HLL Biotech Limited, CHENNAI		
nne pharmanplan*	INTEGRATED VACCINES COMPLEX, CHENGALPATTU	
	Equipment Name	BOD Incubator
	Document No.	DS-BIC 01
	Revision No.	04
		
5.9	It should have lockable adjustable feet and stable casters for stability and easy repositioning of the incubator.	
5.10	Alarm : (Visual - Audio) for temperature deviation	
5.11	Equipment design must realize zero contamination.	
5.12	The heat/noise level given off by the unit shall be stated (inside the room).	
5.13	Vendor should provide four electrical sockets for accessories.	
5.14	The equipment shall be compatible for cleaning with all standard disinfectants	
6	Other Requirement	
6.1	Training/Demo for the users on operation and cleaning to be provided.	
7	Regulatory aspects	
7.1	CE certification	
8	Safety Requirements	
	Following facilities must be provided to protect personnel and equipment:	
8.1	Appropriate closure of all parts	
8.2	Proper earthing is necessary	
8.3	Doors interlocking alarm (visual/ audio).	
8.4	Noise level should be below 60 decibel at a distance of 1m from the equipment	
8.5	Chamber shall be insulated properly to maintain inner environment	
9	Documents	
	Following documents, but not limited to these, are expected from the vendor as part of the supply package in hard copy as well as editable electronic file	
9.1	IOQ document.	
9.2	Operation and maintenance manuals shall be provided along with IOQ documents during installation at site.	
9.3	Calibration certificate of critical instruments with respect to the traceable national reference standard instrument and their calibration procedure.	
9.4	Warranty Letter for minimum 1 year from the date of supply.	
9.5	Vendor should provide list of standard spare parts with ordering information.	
9.6	Vendor should provide list of change parts (if applicable) with ordering information.	
10	Timelines	
10.1	Not Applicable	
11	Preferred list of Makes	
11.1	Binder, Memmert, Thermo Scientific, Eppendorf	
	NOTE: Accurate size and technical specification need to be mentioned by the vendor	

Equipment Specification Data Sheet					
HLL Biotech Limited, CHENNAI					
nne pharmaplan [®]	INTEGRATED VACCINES COMPLEX, CHENGALPATTU			 HBL <small>HLL BIOTECH LIMITED Subsidiary of HLL Lifescare Limited (A Government of India Enterprise)</small>	
	Equipment Name	BOD Incubator			
	Document No.	DS-BIC 01			
	Revision No.	04			
Table-1: Equipment location					
Equipment ID	Block Name	Room Name	Room No	Room dimension in mm	Room height in mm
Q1-BIC 01	Admin QA & QC	Microbiology Lab	Q1S045	3700 x 4600	2400
Table-2: Change Log					
Date	Name	Revision	Section	Change/Comment	
11-07-2014	Manohar M S	00	-	New document	
04-08-2014	Manohar M S	01	All	Updated as per comments received from HBL dated 04-08-2014	
27-10-2014	Manohar M S	02	All	Updated as per comments received from HBL dated 15-10-2014	
06-01-2015	Yogesha M J	03	All	Updated as per comments given by HBL team during meeting dated 06-01-2015 at HBL office	
05-05-2015	Manohar M S	04	All	Updated as per comments received from HBL dated 27-02-2015	
Table-3: Annexure					
Not applicable					

Equipment Specification Data Sheet

Equipment Name: CO₂ Incubator

Document No.: DS-CIN 01


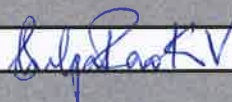

Revision: 04

Project No.: 120310



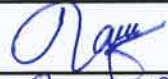
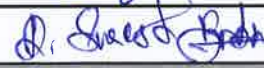
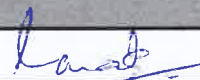
Project Name: Integrated Vaccines
Complex, Chengalpattu


Block Code	Block Name	Identification No.	Capacity	Quantity
Q1	Admin QA & QC	Q1-CIN 01	200-250 L	2


NNE Pharmaplan India Limited


Name	Designation	Signature	Date
Prepared by			
Mr. Manohar M S	Engineer - Process		8/6/15
Checked by			
Ms. Shilpa Rao	Senior Engineer - Process		8/6/15
Approved by			
Mr. Vikas Katial	GM - Projects (SME) & Head COC		9/6/15


HLL Biotech Limited

Name	Designation	Signature	Date
Reviewed by			
Sanjeev Kumar R	Manager		12/6/15
Polina Sreenath	Deputy Manager		12/6/15
Approved by			
V. Sivaganesh	Manager		19/6/15
D. Suresh Babu	Deputy		22/6/15
Authorized by			
Kamran K. Karmachandani	CEO		24/6/15

Equipment Specification Data Sheet		
HLL Biotech Limited, Chennai		
nne pharma plan*	INTEGRATED VACCINES COMPLEX, CHENGALPATTU	
	Equipment Name	CO ₂ Incubator
	Document No.	DS-CIN 01
	Revision No.	04
		
1	Process Requirements	
1.1	The incubator shall be used for incubation of microwell plates, Tissue culture flasks with active culture. The incubator should maintain optimal temperature, CO ₂ , Humidity as required.	
2	Equipment ID	
2.1	Q1-CIN 01,02	
3	Technical Specification	
3.1	Model	cGMP CO ₂ Incubator. Upright type.
3.2	Jacket type	Air jacket / Direct heat
3.3	Filter type	HEPA/ULPA
3.4	Temperature range, °C	Ambient +5 to 50 °C (In empty chamber)
3.5	Temperature uniformity, °C	±0.5 (In empty chamber)
3.6	Temperature Accuracy	±0.1°C
3.7	Temperature Readability	0.1°C
3.8	Temperature Recovery time after door was opened for 30 sec. at 37 °C	Not more than 4 minutes
3.9	CO ₂ sensors	IR type
3.10	CO ₂ Connection	Vendor to specify
3.11	CO ₂ Pressure to Indicator Inlet	Rated @ 5-40 psi (0.345-2.76 bars) not to exceed 40 psi (2.76 bars)
3.12	CO ₂ Recovery time When Door is Opened and Closed	Vendor to specify
3.13	Shelves	4 nos or more (adjustable)
3.14	CO ₂ range	1-20 %
3.15	CO ₂ accuracy	0.01
3.16	Humidity indication range	Ambient +20% to 90%
3.17	Humidity recovery time when door is opened	6 to 9 minutes
3.18	Temperature Sensor	IR
3.19	Temperature Controller	Microprocessor based with CE approved
3.20	Temperature Display Sensor	LED/LCD
3.21	Display type	Digital
3.22	Control system	Microprocessor with PID
3.23	Capacity	200-250 L
3.24	Power supply	To be compatible to standard Indian Power Supply.
3.25	Quantity	2 No.s
3.26	Utility Requirement	Vendor to specify

Equipment Specification Data Sheet				
HLL Biotech Limited, Chennai				
nne pharma plan		INTEGRATED VACCINES COMPLEX, CHENGALPATTU		
		Equipment Name	CO ₂ Incubator	
		Document No.	DS-CIN 01	
		Revision No.	04	
3.27	Dimensions (W x D x H) (mm) Internal Work area, External dimensions	Vendor to specify		
3.28	Qualification's in Vendor Scope	Temperature Mapping, Carbon dioxide % Recovery studies, Temperature recovery studies, humidity recovery studies		
4 Material of Construction				
4.1	External body Construction	Powder coated SS 304		
4.2	Internal body Construction	Stainless steel SS 316L		
4.3	Inner Door	Safety glass door with validation sampling nozzle		
4.4	Outer Door	Heavy Duty SS 304 (MOC should be comply with cGMP)		
4.5	Gaskets, seals, O-ring	Food Grade/ nontoxic material; Use of Asbestos is prohibited		
5 Specific Equipment Requirements				
5.1	Shelf shall be of perforated type.			
5.2	It should display set and current values of but not limited to temperature, CO ₂ and Relative Humidity.			
5.3	It should be capable of inbuilt dry heat sterilisation/ sterilization/Decontamination of shelves and chamber.			
5.4	It should designed to hold full size units, it shall be used in combination with the optional shelves.			
5.5	It shall have double walled construction to provide better thermal efficiency.			
5.6	Active humidification system should provide less evaporation of culture media and eliminates a potential source for contamination.			
5.7	It should have user controllable active humidification system.			
5.8	It should have capacitive probe to regulate humidity between 60% and 90% RH			
5.9	It should have copper drain for contamination control.			
5.10	Vendor should provide CO ₂ regulator with connectors.			
5.11	It should have heated triple-pane glass door minimizes condensation and permits a clear view.			
5.12	There should be independent over-temperature safety protection.			
5.13	CO ₂ gas should shut off when door is opened or switch is turned off.			
5.14	Provision for inserting temperature probes during temperature mapping.			
5.15	Alarm : (Visual - Audio) 1. temperature exceeds > 1°C at set point. 2. Deviation in Reltive humidity and CO ₂ 3. Alarm for long period of door opening and record of time period during open door.			
5.16	Inner door (glass) shall be provided to monitor the sample without hampering the sterility of the chamber.			
5.17	Inner door and Heavy-Duty Door Gasket maintains a leak-free seal and temperature uniformity.			
5.18	Equipment design must realize zero contamination.			
5.19	The heat given off by the unit must be stated (inside the room).			
5.20	Equipment shall be compatible for cleaning with all standard disinfectants.			
6 Other Requirements				
6.1	Must ensure high safety of products.			
6.2	Must be perfect for handling.			
6.3	Training/Demo for users on operation and cleaning to be provided.			
6.4	Vendor shall provide more features apart from above (incorporate list incase of deviation)			
7 Regulatory aspects				
7.1	CE certification.			
8 Safety Requirements				
Following facilities must be provided to protect personnel and equipment:				
8.1	Noise level should be below 60 decibel at a distance of 1m from the equipment			

Equipment Specification Data Sheet			
HLL Biotech Limited, Chennai			
nne pharmaplan	INTEGRATED VACCINES COMPLEX, CHENGALPATTU		 HBL <small>HLL BIOTECH LIMITED (a subsidiary of HLL Biotech Limited) (a Government of India Enterprise)</small>
	Equipment Name	CO ₂ Incubator	
	Document No.	DS-CIN 01	
	Revision No.	04	
8.2	Appropriate failure detection and alarm notification		
8.3	Chamber shall be insulated properly to maintain inner environment		
8.4	Proper earthing is necessary.		
8.5	Appropriate closure of all parts		
9	Documents		
	Following documents, but not limited to these, are expected from the vendor as part of the supply package in hard copy as well as editable electronic file		
9.1	IOQ documents		
9.2	Operation and maintenance manuals shall be provided along with IOQ documents during installation at site.		
9.3	Warranty Letter for 1 year from the date of supply.		
9.4	Calibration certificate of critical instruments with respect to the traceable national reference standard instrument and their calibration procedure.		
10	Timelines		
10.1	Not Applicable		
11	Preferred list of makes		
11.1	Thermo Scientific, Esco, Nu Aire, Binder		
	NOTE: Accurate size and technical specification need to be mentioned by the vendor		

Equipment Specification Data Sheet					
HLL Biotech Limited, Chennai					
nne pharma plan	INTEGRATED VACCINES COMPLEX, CHENGALPATTU			 HBL HLL BIOTECH LIMITED <small>Subsidiary of HLL, Ministry of Health Government of India, Bangalore</small>	
	Equipment Name	CO ₂ Incubator			
	Document No.	DS-CIN 01			
	Revision No.	04			
TABLE NO: 1 Equipment location					
Sl no	Block Name	Room Name	Room No	Room dimension in mm	Room height in mm
1	Admin QA & QC	Virus Testing Labs	Q1S036	5450 x 2700	2400
Table-2: Change Log					
Date	Name	Revision	Section	Change/Comment	
11-07-2014	Manohar M S	00	-	New document	
04-08-2014	Manohar M S	01	All	Updated as per comments received from HBL dated 04-08-2014	
27-10-2014	Manohar M S	02	All	Updated as per comments received from HBL dated 15-10-2014	
06-01-2015	Yogesha M J	03	All	Updated as per comments given by HBL team during meeting dated 06-01-2015 at HBL office	
05-05-2015	Manohar M S	04	All	Updated as per comments received from HBL dated 27-02-2015	
Table-3: Annexure					
Not applicable					