1.0 INTRODUCTION

Overview

This facility reached its mechanical completion in 2014 and has operated intermittently, depending on the needs to boost pressure of transporting gas from Company's facilities through gas pipeline system.

The facility has mostly remained in preservation mode, undergoing periodic preventive maintenance. Between 2018 and 2020, BCS was required to operate briefly to meet specific operational needs.

Due to minimal operational wear on key equipment, such as the compression and turbine systems, the Company is considering options for asset sales and repurposing to interested external parties.

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The BUYER shall be responsible to provide and execute the following scope of work but not limited to the following deliverables: -

1. GENERAL SCOPE OF SALE AND ASSET

a. BUYER shall pay the purchase price specified in the Letter of Sale and Purchase Confirmation to the COMPANY, as per the payment milestones, without any withholding, deduction, or set-off.

b. The BUYER shall remove and collect all the ASSET on an “As-Is-Where-Is” basis. The commencement date for work at the site shall be within ninety (90) days from the acknowledgment of the Letter of Award and after the First Payment Milestone has been remitted by the BUYER to the COMPANY.

c. The BUYER shall complete the removal and collection of the ASSET within five (5) months from the commencement date of work at the site. Any extension of the duration to complete the removal and collection thereafter shall be subject to mutual agreement between the BUYER and the COMPANY. This extension must be supported by the submission of a removal plan, progress report, and percentage of completion.

d. BUYER shall perform the shutdown, power off, software backup, disassembly, dismantling for all the equipment inclusive the provision of manpower, machineries, tools and equipment required for the activity, and all are under BUYER’s responsibilities and cost.

e. All logistics arrangement, transportation, shipping, machineries & engagement of forwarding agents related to the removal of the ASSET are under BUYER’s responsibilities and cost based on Ex-works at COMPANY’s premises.

f. BUYER shall comply with all laws (whether international, national and/or local) and COMPANY’s regulations pertaining to safety, health, environmental protection, fire protection and security regulations which are applicable to the location when executing the removal activities.

g. BUYER shall be responsible for and shall protect COMPANY from any claims, liabilities, cost, damages, and expenses with respect to injury or death or loss of property or damage of any person employed by BUYER arising during and/or as a result of the performance of this contract.

h. BUYER shall at their own cost and expenses carry and maintain in full force throughout this contract the insurances as stated in the contract document as a minimum requirement.

i. BUYER shall wipe-off, remove, or delete any information related to project, logos, name or any other identifying marks representing COMPANY that are present on the ASSET purchased, before the ASSET is reutilized or sold to a third party. The BUYER acknowledges that it is solely responsible for ensuring that any such information is removed, and that the COMPANY shall not be responsible for any damages or liabilities arising from the BUYER's failure to do so. The BUYER shall indemnify and hold the COMPANY harmless from any claims, damages, or liabilities arising from the BUYER's failure to remove such information.

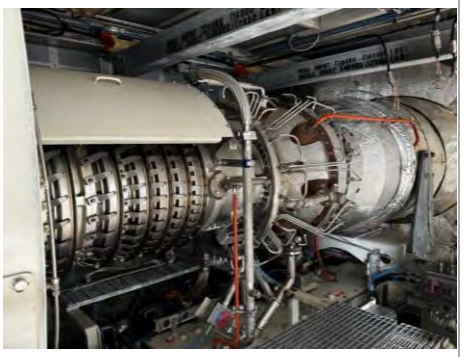
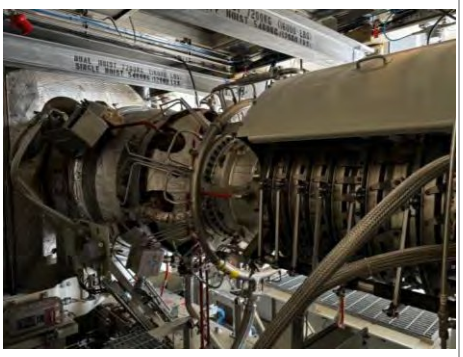
j. BUYER shall reinstate or make good the COMPANY’s premise, clean and tidy the area, dispose all debris or waste, install cover back any other structure which has been uninstall/ removed during the collection / removal work.

The list of BCS Gas Turbine and Compressor Package (GTCP) and its associated equipment for asset sale is as per **Appendix I – List of ASSET.**

The overview photo of BCS facility can be referred **in Appendix II - Photos of Compressor Station.**

APPENDIX I – LIST OF ASSET

Main Gas Turbine and Compressor Package (GTCP) and Associated Equipment

No	Equipment Name	Specification	Quantity	Photo
Main Gas Turbine and Compressor Package (GTCP)				
1.0	**Gas Turbine Package BUA-KT-2401, BUA-KT-2501, BUA-KT-2201, BUA-KT-2301**			
1.1	Turbine Engine	Manufacturer: Solar Model: Titan 130-20502 Two-shaft, axial-flow design Air Inlet Assembly Compressor Case Assembly Compressor Rotor Assembly Fuel Manifold Compressor Diffuser Bleed Valve Assembly Combustor Liner Assembly Torch Igniter Assembly First-Stage Diaphragm Assembly Gas Producer Rotor Assembly Third-Stage Nozzle Assembly Power Turbine Bearing Support Housing Power Turbine Rotor Assembly Fourth- Stage Nozzle Assembly Turbine Exhaust Diffuser Exhaust Collector Forward Support Engine Rear Mount Assembly	4 units	 

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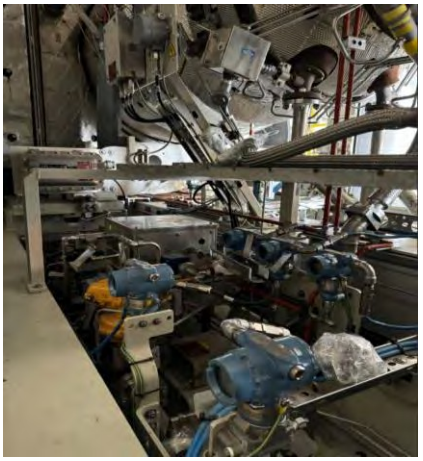
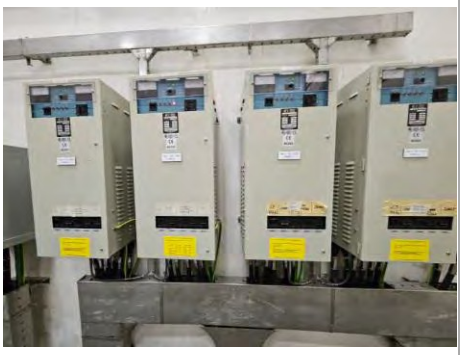
1.2	Fuel System	Pneumatic Actuated Valves Check Valves Electric Actuators Electric Fuel Control Valves* Fuel Flow Meter Filters/ Strainers Fixed Orifices Gas Fuel Flow Transmitter Pneumatically Actuated Valves Hand Valves Pressure Control Valves Pressure Differential Switch Pressure Differential Transmitters Pressure Safety Valves Pressure Transmitters Speed Element Solenoid Valves Engine Cleaning Tank Temperature Elements Thermowell Displacement Probes	4 units	 Note for Faulty or Removed Equipment/ Part: 1. Each 4 units EGF faulty and currently taken out from GTCP. Part available for potential refurbishment. *
1.3	Unit Control System Power	Power Supply Module Battery Charger Battery Banks	4 units	

				
1.4	Start System	Line Reactors Motors (Hub) Variable Frequency Drives (VFD)	4 units	

1.5	Unit Control System	ControlLogix™ Controller Assembly ControlLogix Chassis In-Chassis Power Supply ControlLogix Processor Module ControlNet Interface Module Modbus Module Ethernet Communications Module Flex Input/Output (I/O) System Flex I/O Redundant ControlNet Adapter Module Flex I/O Terminal Base Flex I/O 16-Channel Discrete Input Module Flex I/O 2/2-Channel Analog I/O Module Flex I/O 4-Channel Analog Output Module Flex I/O Fast-Speed Input Module Flex I/O 8-Channel Discrete	4 units	 

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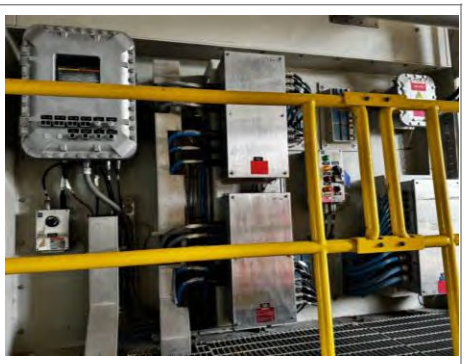
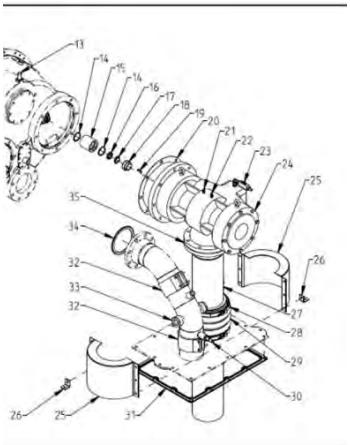
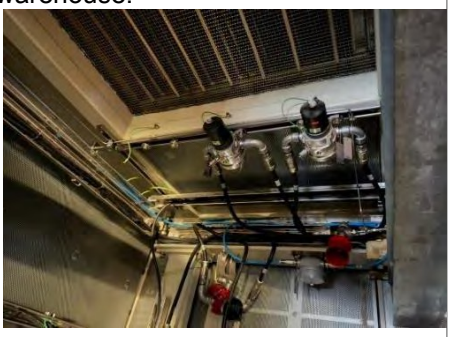
		Output Module Flex I/O 10/6-Channel Discrete I/O Module Flex I/O 16-Channel Discrete Output Module Flex I/O 8-Channel Thermocouple/RTD Input Module <u>Turbine Control and Interface</u> Turbine Control Panel Digital Display Terminal Display Computer Programming Computer <u>Vibration Monitoring System</u> Power Supply Rack Interface Module Keyphasor Interface Module 4-Channel Relay Module Proximitor/Seismic Monitor Module TDXNET Communication Processor		

1.6	Load Sharing panel	<u>ControlLogix™ Controller Assembly</u> ControlLogix Chassis In-Chassis Power Supply ControlLogix Processor Module ControlNet Interface Module Ethernet/IP Module Ethernet Communications Module <u>Flex Input/Output (I/O) – XT System</u> Flex I/O-XT Redundant ControlNet Adapter Module Flex I/O-XT Terminal Base Flex I/O-XT Analog 8 Input Module Flex I/O-XT Digital 24 VDC 8 Output – Fused Protected Module Flex I/O-XT Digital 24 VDC 10 Input / 6 Output Module Flex I/O-XT Analog 4 Output - Isolated Module Flex I/O-XT 24 VDC 16 Input Module	1 Unit	 

1.7	Lube Oil Syste m	Main Lube Oil Filter Check Valves Filters/ Strainers Air/Oil Separator Flow Sight Glasses Fixed Orifices Transfer Hand Valve Lube Oil Heater Lube Oil Cooler Hand Valves Level Indicators Level Transmitter Motors (DC Motor Contactor Unit A & D) * Pumps Pressure Control Valve Pressure Differential Transmitter Pressure Switches Pressure Safety Valves Pressure Transmitters	4 units	  Note for Faulty or Removed Equipment/ Part: 1. Train D Main Lube Oil Pump

		Lube Oil Tank Temperature Control Valve Temperature Element Thermowells Vibration Switch Flame Arrestor		removed from GTCP as part replacement at other plant. *   2. DC lube oil pump magnetic coil contactor for Train D removed from site as part replacement for other plant. * 

Open

1.8	Fire & Gas System	Local Operating Network Controller Enhanced Digital Input/ Output (EDIO) Module Flame Detectors Thermal Detector Thermal Sensor Gas Detector (Unit A) Primary, Extended, and Subsequent Release Solenoid Valves CO2 Fire Cylinder Cabinet CO2 Nozzles Release Confirm Pressure Switch Audile Alarms/Strobe Light Strobe Light	4 units	 Note for Faulty or Removed Equipment/ Part: 1. Six (6) units Gas Detector removed from enclosure borrowed by other plant. The Gas Detector already returned and available at warehouse.  

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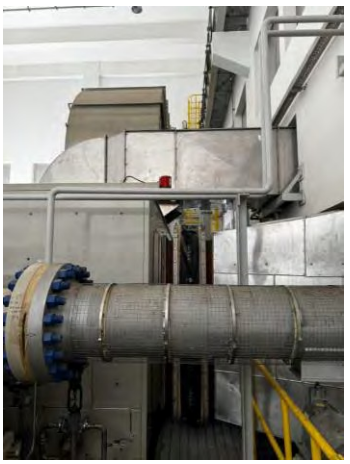
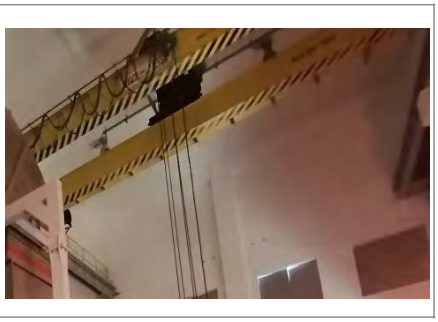
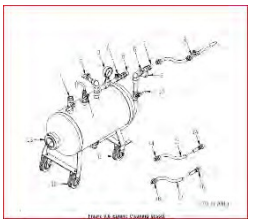
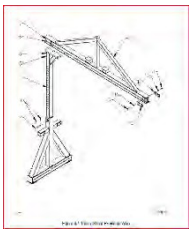
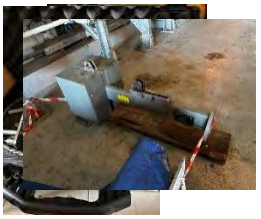
1.9	Enclosure and Air Inlet System	Enclosure Doors Door Position Alarm Enclosure Ventilation Silencers Ventilation Fan Dust Protection Filters Differential Pressure Switch Backdraft Dampers Fire Dampers Pressurization Lighting System Trolley Beam Air Inlet System Air Cleaner Air Inlet Filter Differential Pressure Transmitter Air Inlet Silencer Air Inlet Ducting	4 units	
1.10	Exhaust Stack	Exhaust System Exhaust Bellows Exhaust Silencer Exhaust Drain	4 units	

				
2.1	Gas Compressor	Tag Number: BUA-K-2401, BUA-K-2501, BUA-K-2201, BUA-K-2301 Design Pressure: 96 barg Design Temperature: 117°C/ 0°C Design Flow Rate: 270 MMSCFD Manufacturer Dresser- Rand Model: D107RS Rated Capacity Inlet: 3,688.5 ACFM Rated Power: 9,308 kw MAOP: 106.5 barg Allowable Working Temperature: 193.3°C/-28.89°C Minimum Operating Speed: 5060 rpm Max Continuous Speed: 8,856 rpm Trip Speed : 9,289 RPM Driver type : Gas Turbine Compressor Type : Centrifugal Compressor Stage : 7 stages	4 units	  

2.2	Overhead Crane	Manufacture: Kone Products & Engineering (M) Sdn Bhd Equipment name: 17t x 12,980mm Span Double Girder Ex-proof Crane Design Power: Long Travel – 2x0.68 KW, Cross Travel – 0.68 KW, Hoist – 12 KW	4 units	

2.3	Special Tools	**<u>Solar Turbine</u>** 1. Portable lube oil conditioner 2. Engine wash cart 3. Trolley beam extension assembly 4. FT33606 Power Turbine ground stand 5. FT33496 support plate PT/Trunnion 6. FT33603 Power Turbine lifting tools 7. FT33201-101 Tools, handling compressor half case 8. FT33377 Ground support stand kit, engine 9. FT33219 Ground stand, compressor housing half case 10. Enclosure Trolley Beam Chain Block 11. FT33003 Handling lift kit, air inlet ducting 12. FT33076 Installation / removal tools, balance screw 13. FTG7108-300 Dial gauge alignment kits 14. FTG7107-1101 15. FTG7006-100 16. FT33212 IGV ring drawing tool 17. FT33411 Retaining tool, Borescope holes 18. FT33410 N/C 19. FT33304 Guide pins / jack screws kit 20. FT33604 Engine / Trunnion support pin puller 21. FT33219 22. FT33306 Borescope guide tubes kit 23. FT33499-1 Engine lifting tool 24. FT33001-7 Tool adapter ring 25. FT33515-101 26. FT33001-105 Lifting field	1 set	     

		tool **<u>Dresser Rand Compressor</u>** 1. Tool, Hydraulic pump kits RiverHawk 2. Bundle puller block 3. Hydraulic pusher 4. Collar 5. Pusher 6. Bearing entering sleeve T.E 7. Bearing entering sleeve N.T.E	1 Set	   

Associated Equipment for GTCP				
3.0	**Balance of Plant (Process)**			
3.1	Station Process Filter Skid	Tag Number: BU-S-2401 & BUA-S-2402 Design Pressure: 96 barg Design Temperature: 70°C/0°C Design Flowrate: 760 MMSCFD Size: Vessel ⌀1.981m x 4.089m, Blowflask ⌀0.508m x 4.089m	2 units	
3.2	Train Unit Blowdown and Silencer	Tag Number: BUA-SL-2401, BUA-SL-2501, BUA-SL-2201, BUA-SL-2301 Design Pressure: 96 barg Design Temperature: 70°C/-29°C Design Flow: 270 MMSCFD	4 units	

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3.3	Station Senior Orifice	Tag Number: FE-2450 Manufacturer: Daniel Model: Cat 510-3DVS Size: 36” concentric bore Bore Size: 19.1746”	1 unit	
3.4	Station Blowdown and Silencer	Tag Number: BUA-A-2401 Design Pressure: 2.5 barg Design Temperature: 70°C/-40°C Size: Silencer ⌀2.1m x 5.3m, Vent Stack ⌀1.5m x 6.1m	1 unit	
3.5	Station Blowdown Control Valve	Tag Number: BUA-XV-2450 Manufacturer: CCI Ltd Model: 100D with Diffuser Size: 18” Class: Inlet 600# / Outlet 150# Design Pressure: 96 barg Design Temperature: 70°C/-40°C	1 unit	
3.6	Station Drain Tank	Tag Number: BUA-V-6401 Design Pressure: 3.5 barg Design Temperature: 70°C/ 15°C Capacity 5 m^3 Size: ⌀1.5m x 3m	1 unit	

3.7	Train Unit Gas Cooler	Tag Number: BUA-E-2401, BUA-E-2501, BUA-E-2201, BUA-E-2301 Design Pressure: 96 barg Design Temperature: 117°C/ 0°C Design Flow: 270 MMSCFD Manufacturer: ABB Model: M3JP200MLC4 Rating: 37 kw	4 units	 Note for Faulty or Removed Equipment/ Part: 1. Motor not available and will be repurposed to other plant
3.8	Train Unit Recycle/ Antisurge Control Valve	Tag Number: BUA-FCV-2420, BUA-FCV-2520, BUA- FCV-2220, BUA-FCV-2320 Manufacturer: Fisher Model: Actuator 657, Body EWT Size: 10” Class: 900#	4 units	 Note for Faulty or Removed Equipment/ Part: 1. Solenoid and Terminal Box not available and will be repurposed to other plant
4.0	**Balance of Plant (Fuel)**			
4.1	Fuel Gas Filter	Tag Number: BUA-S-6001 & BUA-S-6002 Design Pressure: 96 barg Design Temperature: 70°C/0°C Design Flow Rate: 12.10 MMSCFD Size: Vessel ⌀0.457m x 2.198m, Blowflask ⌀0.168m x 2.198m	2 units	

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4.2	Fuel Gas Meter	Tag Number: BUA-FE-6050 & BUA-FE-6052 Design Pressure: 96 barg Design Temperature: 70°C/0°C Design Capacity: 12.10 MMCSFD Manufacturer: Elster- Instromet Model: SM-RI-X4X Class: 900#	2 units	
4.3	Fuel Gas Regulator	Tag Number: BUA-PCV-6050, BUA-PCV-6051, BUA- PCV-6052, BUA-PCV-6053 Manufacturer: Fisher Model: EZHOSX c/ w PRX120-AP	4 units	
4.4	Train Unit Fuel Gas Conditioning Heater	Tag Number: BUA-F-6010, BUA-F-6011, BUA-F-6012 Design Pressure: 96 barg Design Temperature: 70°C/0°C Design Flowrate: 3.82 MMSCFD Manufacturer: Chromalox Power Rating: 62.2 kw	3 units	

4.5	Train Unit Fuel Gas Conditioning Regulator	Tag Number: BUA-PCV-6081, BUA-PCV-6082, BUA- PCV-6091, BUA-PCV-6092, BUA-PCV-6061, BUA-PCV-6062 Manufacturer: Masonelian Model: 87-21124 Size: 1 1/2”	6 units	
5.0	**Balance of Plant (Instrument Air)**			
5.1	Instrument Air Compressor	Tag Number: BUA-KQ-5401 BUA-K-5401 Design Pressure: 12 barg Design Temperature: 70°C/ 15°C Design Flowrate: 400 SCFM Manufacturer: Ingersoll Rand Model: 90-160kW Sierra Oil-Free Rotary Screw Air Compressor	1 unit	 Note for Faulty or Removed Equipment/ Part: 1. Air compressor air-end faulty. Spare air-end available for overhaul and service.

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5.2	Air Dryer Package System	Tag Number: BUA-AQ05401 (Air Dryer Pre-Filters BUA-S- 5401 & BUA-S-5402, Air Dryer BUA-V-5405 & BUA-V-5406, Air Dryer After Filters BUA-S-5403 & BUA- S-5404) Design Pressure: 12 barg Design Temperature: 70°C/ 15°C Design Flowrate: 509 SCFM Manufacturer: Dumnick Hunter Model: DTX-42	1 package	
5.3	Dew Point Transmitter	Tag Number: BUA-JB-5401 Manufacturer: COSA- Xentaur Model: XDT-PM-PB	1 unit	
5.4	Air Compressor & Air Dryer Local Control Panel	Tag Number: Manufacturer: Yokogawa Model: Stardom	1 unit	

5.5	Water Knock Out Drum	Tag Number: BUA-V-5401 Design Pressure: 12 barg Design Temperature: 70°C/ 15°C Operating Pressure: 8.9-9.9 barg Operating Temperature:	1 unit	

		50°C Capacity: 1.83 m^3		
5.6	Buffer Air Receiver Vessel	Tag Number: BUA-V-5402 Design Temperature: 70°C/ 15°C Operating Pressure: 4.5-9 barg Operating Temperature: 50°C Capacity: 162 m^3	1 unit	
5.7	Instrument Air Receiver Vessel	Tag Number: BUA-V-5404 Design Temperature: 70°C/ 15°C Operating Pressure: 4.5-9 barg Operating Temperature: 50°C Capacity: 120 m^3	1 unit	
5.8	Utility Air Receiver Vessel	Tag Number: BUA-V-5403 Design Temperature: 70°C/ 15°C Operating Pressure: 4.5-9.7 barg Operating Temperature: 50°C Capacity: 1.2 m^3	1 unit	
6.0	All Piping in Compressor Station	Process gas piping Fuel gas piping Instrument air piping	Lump Sum	

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Appendix II - Photos of Compressor Station

No	Description	Photo
1	Overall Compressor Station	
2	Station Inlet Area (Suction Valve, Filter Inlet Valve, Filter Outlet Valve, Process Filter, Fuel Gas Filter, Fuel Gas Skid, Piping)	

3	Station Outlet Area (Discharge Valve, Orifice, Pressure Safety Valve, Piping)	

4	GTCP Train Unit Area (Inlet Valve, Outlet Valve, Recycle Valve, Vent Stack, Exhaust Stack, Gas Cooler, Piping)	
5	Station Blowdown	
6	Train Unit Fuel Gas Conditioning Skid (Heater, Pressure Regulator, Coriolis Meter) and Lube Oil Cooler	

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7	Instrument Air Area (Air Compressor Package, Buffer Air Receiver, Instrument Air Receiver, Utility Air Receiver, Water Knock Out Drum Vessels)	

Please fill in your company particulars as below:

Company Name :
License No. :
Expiry Date :
Address :
Contact No :
Contact person :

I hereby certify the information is true to the best of my knowledge.

Information provided by : .....
(Signature)

Name : ……

Designation : ……

Contact No : ……

Date : ……

Company Stamp : ……

Address : ……