GUJARAT GAS

SOW

Backup Appliance at

PR DC & DR DC

with Compatible

Licenses

1. Executive Summary

Gujarat Gas Limited (GEL) is India's largest City Gas Distribution (CGD) Company in terms of sales volume operating in 44 districts in 6 states of Gujarat, Maharashtra, Rajasthan, Haryana, Punjab & Madhya Pradesh and 1 Union territory of Dadra & Nagar Haveli.

GEL continues to hold the leadership position in CGD industry in terms of size and scale of operation. The Company has a successful track record of providing uninterrupted services for over 3 decades through a network of more than 43,900 kms. of Natural Gas pipeline, distributing approx. 8.65 mmscmd of Natural Gas in Q2 of FY 2025-26. The Company operates over 834 CNG stations and has connected more than 23.44 lakh households, over 15,700 commercial customers and more than 4,425 industrial customers.

GEL has recently won the PNGRB Excellence Award 2025 in the category of Safety, Integrity & Technical Excellence in CGD (Round 1 to 8) for GA: Ahmedabad District – EAAA (Except Already Authorised Area) and PNGRB Excellence Award 2025 in the category of Overall Best Performance in CGD (Round 1 to 8) for GA: Anand District – EAAA (Except Already Authorised Area).

GEL is also the recipient of the following awards and accolades:

- Conferred with the Skoch ESG Award 2024 for Green Hydrogen Blending in City Gas Distribution.
- Won Downstream Project of the Year – India award for Natural Gas Distribution for Cleaner & Greener cities & villages and ESG Initiative of the Year - India award for Small Steps for Social, Environmental Cause, Giant leaps for Social & Environment by Asian Power 2024.
- Recognized as the World's Most Trustworthy Companies 2023 by Newsweek and Statista amongst the listed firms in Energy and Utilities category.
- Listed in Dun & Bradstreet's flagship publication India's Top 500 Value Creators 2023 in Gas Processing, Transmission and Marketing category.
- Won IEI Industrial Excellence Award 2023 for the commendable performance in the category of Engineering, Manufacturing and Processing.
- Received Supply Chain Champion Award in Oil & Gas industry category by ISCM (India Supply Chain Management) in 9th edition of its annual rankings.
- Conferred with the Skoch ESG Award 2023 in City Gas Distribution (CGD) Project.
- Ranked amongst the TOP 150 Wealth Creators by Dalal Street Investment Journal.

The company has successfully commissioned the country's first pilot project of blending green hydrogen with Piped Natural Gas for the domestic customers on collaboration with NTPC.

GEL is committed to reach out to every possible natural gas user in its expanded GAs. The size and scale of the combined entity gives it the ability to achieve efficiencies and effectively manage the transformational changes in the sector. This major gain in productivity would benefit all the key stakeholders i.e. Customers and Shareholders.

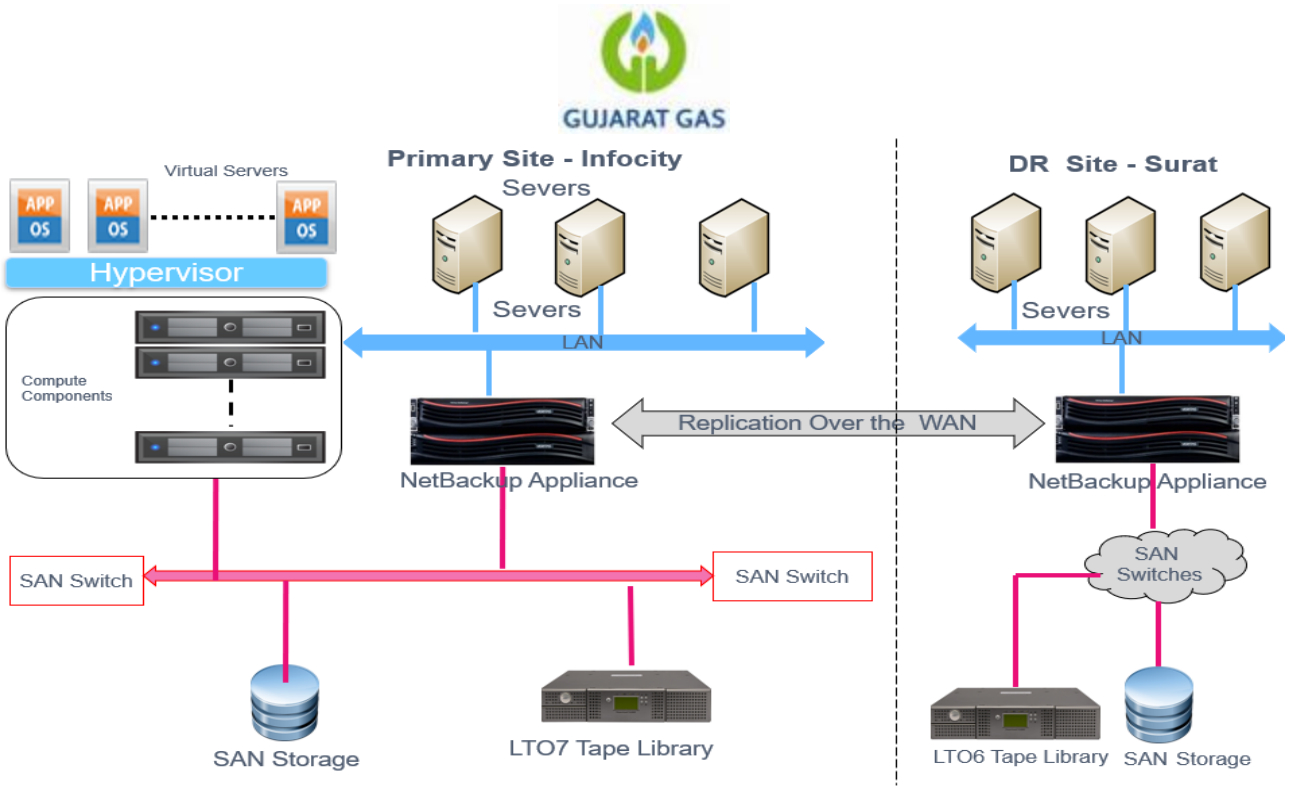
GEL is strategically aligned to energize India's Natural Gas vision.

* Data as on 30th September 2025

2. Current IT Infrastructure

The Backup solution deployed at GEL is as per below details

Sr No	Backup Devices	Location	Make & Model	Backup Type
1	NetBackup Appliance 27 TB & NetBackup Appliances Shelf Storage enclosure 49 TB.	Gandhinagar-PR DC	Veritas NetBackup 5240	Daily / Weekly
2	Tape Library LTO7	Gandhinagar-PR DC	NEO	Monthly / Yearly
3	NetBackup Appliance 27 TB	Surat - DR DC	Veritas NetBackup 5240	Daily / Weekly
4	Tape Library LTO6	Surat - DR DC	DELL	Monthly & Yearly
5	NetBackup Enterprise Licences 16 TB.	Gandhinagar-PR DC Surat - DR DC	Veritas	Daily/ Weekly Monthly/Yearly



GEL is using VERITAS Netbackup server 9.1.1 - Enterprise class license.

Media servers used for backup of Exchange and SQL. NDMP license is used to backup File server data.

The NetBackup clients/agents are installed on the following platforms:

- AIX and HP UNIX.
- Hitachi Vantara's Edge Server.
- Virtual Centre – for VMware backups.
- Oracle for SAP backups
- Veritas Enterprise Vault for archiving.
- SQL backups (Online).

3 Scope of work

Bidder to do site visit and study AS-IS Backup Environment to have clear cut idea of BACKUP Architecture. Bidder to study backup master catalogue to study existing backup taken at Gujarat Gas ltd. Bidder to go through all backup policies and scripts.

The scope of work outlines the responsibilities and deliverables expected from the selected bidder for the procurement and implementation of the Backup Appliance. The successful bidder will be required to perform the following tasks:

- Proposed Backup Software must be enterprise class and should Seamlessly integrate with existing backup software or provide native management.
- Proposed fully Integrated purpose build appliance should be containerized microservices based architecture for agility, faster deployment and optimized steady state resource usage.
- Master/Media Server of the backup solution must be integrated with/within the backup appliance for enhanced ransomware resiliency and total 'single OEM ownership'. Proposed backup solution must provide deduplication to allow users choose the dedup option based on the backup workload. Solution should support Deduplication Compression and encryption
- Provide a disk-based backup solution for on-premises and/or hybrid environments.
- Support for physical servers, virtual machines, databases,
- Offer centralized management and reporting.
- Ensure scalability for future growth.

3.1 Migration and implementation

- **Assessment of Current Infrastructure:** Conduct a comprehensive analysis of the existing data backup to understand current configurations, data volumes, and performance metrics.
- **Migration Planning:** Develop a detailed migration strategy that includes timelines, resource allocation, and risk management to ensure a seamless transition from the existing backup to the Backup Appliance.
- **Data Migration Execution:** Carry out the migration of all backup data, including configurations and policies, ensuring minimal disruption to ongoing operations. This includes validating data integrity post-migration.

- **Installation and Configuration:** Install the Backup Appliance in the designated environment and configure it according to best practices, ensuring optimal performance and security.
- **High Availability Setup:** If required, configure high availability (HA) settings to ensure continuous operation and redundancy.

3.2 Backup Policy Configuration

- **Backup Policy**: Establish and configure backup policies tailored to various data types, applications, and organizational requirements to ensure comprehensive data protection.
- **Backup retention policies**: Implement backup retention policies, that define how data is managed throughout its lifecycle, including retention periods and archival processes. Configure data retention policies that comply with regulatory requirements and organizational standards. WORM Configuration: Set up Write Once Read Many (WORM) storage policies to protect critical data from unauthorized modifications or deletions.
- **Security Policy Implementation**: Ensure that all backup policies incorporate security measures such as encryption and access controls.

3.3 Performance Optimization

- **System Tuning:** Optimize the Backup Appliance settings for peak performance, including deduplication settings and network configurations.
- **Network Optimization:** Configure network settings for efficient data transfer rates, ensuring that bandwidth is effectively utilized during backup operations.
- **Load Balancing Configuration:** If applicable, set up load balancing across multiple nodes to enhance performance and reliability.

3.4 Integration and Testing

- **Integration with Existing Systems:** Ensure seamless integration of the Backup Appliance with existing IT infrastructure, including servers (Bare Metal & Virtual Machines), storage solutions, and applications.

- **UAT Test:** Conduct comprehensive testing of all backup and recovery processes to validate functionality and performance. This includes unit testing, integration testing, and user acceptance testing (UAT).
- **Disaster Recovery Test:** Perform disaster recovery simulations to verify that all systems can be restored promptly in case of a failure or data loss scenario.

3.5 Documentation and Training

- **Technical Documentation:** Provide detailed documentation covering system architecture, configurations, policies, and procedures related to the Backup Appliance.
- **Standard Operating Procedures (SOPs):** Develop SOPs for routine operations, maintenance tasks, and troubleshooting procedures to facilitate smooth ongoing management**.**

Training to Gujarat Gas team:

- GEL will nominate a team of 2-3 members for training of the solution. Solution training for configuration, monitoring, troubleshooting, call logging, customization shall be provided by vendor for all hardware and software provisioned in the solution to nominated team. Required training material / documents / User manuals shall be provided at least 2 days ahead of training. Onsite Training at GEL office shall be for at least 3-5 days.

The backup appliance implementation will be deemed complete upon:

- Successful deployment and integration with existing IT infrastructure.
- Verification of backup and restore functionality through testing.
- Submission and approval of all documentation.

3.6 Security Implementation

- **Security Best Practices:** Implement security best practices as recommended by Backup Appliance to safeguard against potential threats.
- **Access Control Configuration:** Establish user roles and permissions within the appliance to control access based on organizational policies.

- **Audit Logging Setup:** Configure audit logging features to monitor access and changes made within the system for compliance purposes.

3.7 Reporting and Monitoring

- **Performance Monitoring Setup:** Implement monitoring tools to track system performance metrics such as backup success rates, storage utilization, and system health.
- **Backup Reporting Tools:** Configure reporting mechanisms that provide insights into backup operations, including success/failure reports and capacity planning forecasts.

Support and Maintenance

- **Post-Implementation Support:** Provide ongoing support up to 5 years for post-deployment to address any issues or questions related to the Backup Appliance.
- **Periodic Health Checks:** Conduct Half yearly Backup Configuration and Setup: health checks of the Backup appliance to ensure optimal performance over time.
- **Firmware/Software Updates:** Assist with firmware updates and software patches as necessary to maintain system integrity and security up to 5 years for post-deployment.
- **Warranty Support:** Provide comprehensive OEM onsite 5 years warranty maintenance services from the date of Installation report or the installed hardware and software. This involves comprehensive maintenance of all installed hardware & software covered under the warranty as per 'Warranty' clause including repairing, replacement of faulty parts, modules, sub-modules, assemblies, subassemblies, spares etc. with genuine OEM components to make the system functional/ operational as per SLA.
- OEM to provide support for 24*7 over telephone, remote, onsite support.

4 Uptime Service SLA:

Vendor should be use GEL Support System for Ticketing tool of GIPL for call booking and Docket number.

Availability (uptime): Uptime is the amount of time Backup Service is operational and available without interruption.

- Response time: 4 hours.
- Resolution time: 24-hours

Type	Monthly Uptime (%)	Penalties
Backup Services	A>=99.50>=99	No penalty
	97.50>=A<99.50	2% of Yearly basic PO value
	95.50>=A<97.50	4% of Yearly basic PO value
	93.50>=A<95.50	6% of Yearly basic PO value
	A<93.50	Penalty at incremental rate of 4% (in addition to base value of 6%) of yearly basic PO value for every 0.1% lower than the stipulated uptime

5 Penalty:

Sr No	Stages	To be completed within	Penalty for non-compliance
1	Delivery of Hardware	12 weeks from issuance of PO	0.5 % of the PO basic value of the respective line item in the BOM per week.
2	Installation of Hardware with migration of existing backup data and policies	8 weeks from delivery of Hardware at resepctive DC and DR location	

6 Defect Liability: Applicable

Defect Liability Applicable period shall be 90 days from go-live of solution.

7 Payment Terms:

Hardware delivery, installation and support	Payment terms
Installation and Commissioning with one year warranty support	• 70% of payment on hardware delivery at all devices Primary DC and DR DC. • 30% of payment on successful installation and commissioning of Hardware boxes and signed installation report submission to GEL.
Warranty and support cost	• 2nd ,3rd and 4th year at start of the each year 5th year at end of contract

8 Delivery Time: 12 weeks from issuance of PO.

9 Liquid Damage: As per standard GEL T&C. **10**

Buyback Devices list:

Sr No#	Appliances/ Devices Name	Location	Make	Model	Serial Number
1	NetBackup Appliances 27TB	Surat	Veritas	NetBackup 5240	VTAS0012902
2	NetBackup Appliances 27 TB	Gandhinagar	Veritas	NetBackup 5240	VTAS0003485
3	NetBackup Appliances Shelf Storage enclosure 49 TB	Gandhinagar	Veritas	NetBackup 5240	SHT1012651GDMTV

All Buyback devices to be taken by bidder post data wiped off and disk degauss as part of this contract. Buyback shall be on AS IS WHERE IS basis.

11 Hardware Requirements

Backup Appliances & Licenses-Specification-Minimum requirement

Primary Site – Gandhinagar

Backup Applainces minimum 100**TB** and expandable up to 250 TB usable capacities with Storage Shelf with Memory Appliance kit B-4 10GBase-T- 6 25-10GB ENet - 4 32GB FC standard Appliance Kit ;Premium (24x7) Support with 4- hour Parts Delivery for Appliances-100TB-6x25G-4x32G-INFO. Minimum 100 TB Onprem Standard 5 years Warranty support.

DR Site - Surat

Backup Applainces minimum 35**TB** and expandable up to 250 TB usable capacities with Storage Shelf with Memory Appliance kit B-4 10GBase-T- 6 25-10GB ENet - 4 32GB FC standard Appliance Kit ;Premium (24x7) Support with 4- hour Parts Delivery for Appliances-35TB-6x25G-4x32G-INFO. Minimum 35 TB Onprem Standard 5 years Warranty support.

PR & DR Site – Gandhinagar & Surat

Backup Enterprise Licences Minimum 16 TB Onprem Standard 5 years Warranty support.

12 RFP Response

Following would be the deliverables from vendor / partner:

- Detailed BOM Including additional components.
- Implementation execution plan, timelines and resources with clear scope, deliverables with appropriate acceptance criteria.
- Technical Architecture & Landscape for solution with integrated existing Architecture and appropriate justification.
- Clearly mentioned Assumptions.
- Risk register and mitigation action plan.
- Support Documents.
- SLA agreement document with contact person details.
- Warranty Document with scope exclusion / inclusion detailed item wise list.
- Support organization chart with escalation matrix.
- Support resources in Gujarat and India with skill set.
- Total cost with individual component level detailing for material and labour and appropriate taxes in format provided by C&P GEL Requirements BOM.

Annexure – I - Backup Appliance

S.No.	Specifications

1	Proposed Backup Solution must be enterprise class and should integrate with existing Veritas NetBackup Backup Solution.
2	Backup Appliances should expandable up to 250 TB usable capacities. Backup Applainces minimum **100TB** and expandable up to 250 TB usable capacities with Storage Shelf with Memory Appliance kit B-4 10GBase-T- 6 25-10GB ENet - 4 32GB FC Standard Appliance Kit;Premium (24x7) Support with 4- hour Parts Delivery for Appliances- 100TB-6x25G-4x32G-INFO. Minimum 101 TB Onprem Standard 5 years Warranty support.
3	Backup Appliances should expandable up to 250 TB usable capacities Backup Applainces minimum **35TB** and expandable up to 250 TB usable capacities with Storage Shelf with Memory Appliance kit B-4 10GBase-T- 6 25-10GB ENet - 4 32GB FC Standard Appliance Kit ;Premium (24x7) Support with 4- hour Parts Delivery for Appliances- 100TB-6x25G-4x32G-INFO. Minimum 35 TB Onprem Standard 5 years Warranty support.
4	Backup Enterprise Licences Minimum 16 TB Onprem Standard 5 years Warranty support.
5	Proposed backup solution should support heterogeneous environment like windows/Linux/Unix/SAP HANA/Hitachi Vantara and should be able to backup open files on windows and another OS platform like RHEL, SUSE, Linux, AIX, Solaris and HP-UX.
6	Proposed backup solution upgrade and patches must be from single Box OEM to avoid multi-OEM management challenges and should support single patch upgrade to OS as well backup software. Backup Solution should have Operating System disk in mirroring and data disk on RAID 6 with Hot spare.
7	Proposed backup solution must support virtual backup without the need of any windows environment or backup server and should support instant recovery of VMWare virtual machines.
8	Proposed backup solution upgrade and patches must be from single Box OEM to avoid multi-OEM management challenges and should support single patch upgrade to OS as well backup software. Backup Solution should have Operating System disk in mirroring and data disk on RAID 6 with Hot spare.
9	Proposed backup solution should be provided with integrated DR orchestration features which can automate the recovery of Virtual Machines between DC and DR site if required.
10	The proposed backup solution must have integrated advanced backup technologies i.e. deduplication and Direct tape out from backup target. Deduplication should work

	with SAS, SATA and nearline SATA. There should not be any dependency of SSD for dedupe backups.
11	The Backup Appliance should have redundant hot swappable cooling fans.
12	The Backup Appliances should provide remote monitoring capability (Ethernet based management port), And should support dual power supplies and supply should include dual power supplies.
13	Backup Appliance should be support for replication to DR site.
14	Single Console Mechanism should be deployed in a VM and can centrally monitor and manage all the backup locations and also alerts and notifications can be configured.
15	Master/Media Server of the backup solution must be integrated with/within the backup appliance for enhanced ransomware resiliency and total 'single OEM ownership'.
16	Warranty: Minimum 5 years OEM Warranty.

13 QHSE Requirements

SCOPE AND APPLICATION

Contractor/Service providers are the key stake holder and an integral part of Gujarat Gas Ltd (GGL's) business. Contractors'/Service provider' Quality, Health, Safety and Environment (QHSE) performance reflects on the company's business performance and reputation. GEL has established QHSE Management Systems, Procedures & Guidelines to ensure compliance with GGL's QHSE requirements. These requirements apply to all jobs whilst conducting work for GEL including; Project, Construction, Operation & Maintenance, Field Operations and Services within any given contract or agreement.

The overall objective of QHSE management in contract/agreement is to improve the company and Contractor's/Service providers' QHSE performance in all aspects of activities. Active and on-going participation by both the GEL and Contractor/Service provider is essential to achieve this objective.

RESPONSIBILTIES

It is responsibility of GEL management and staffs to ensure that all Contractors/Service providers work under their direction & control are provided with relevant Integrated Management System (IMS) Policies, Procedures & Guidelines that describe the GEL

requirements for undertaking work within the company. It is also the responsibility of Contractors/Service providers to ensure that their staff are informed of and comply with GGL's requirement whilst working for the company.

GEL HSE department provides advice and assistance on QHSE requirements across the complete spectrum of all work activities. Contract Owner (Department Head) and Contract Holder (Work in-charge) are responsible to ensure safe execution of work/service include the following:

1. Ensuring that the QHSE Policy, Procedures & Guidelines are known and understood by all contractors'/service providers' staff and work force
2. Monitoring, Inspecting & Auditing execution of work, activities to ensure adherence to the QHSE compliance requirements.

The Contractors'/Service provider' will take the responsibility for implementation of GGL's QHSE Policy, Procedures, Guidelines and other requirements with the advice and support of the GGL's Contract Owner / Contract Holder and HSE representative.
Contractor/Service provider to ensure that all aspects relating to QHSE are adequately addressed and implemented in accordance with the GEL QHSE requirements and QHSE Management Plan, which shall include the management processes and activities to be implemented during the course of work with GEL.
Contractor/Service provider shall be responsible for ensuring that adequate HSE resources are put in place to enable satisfactory implementation of QHSE Management Plan.

This responsibility also applies to ensure the Health and Safety of the people are directly and indirectly engaged / involved whilst working or present at GGL's work area / sites.

EXECUTION

1. Contractor/Service provider is responsible to ensure the compliance with GEL QHSE requirements. GEL overall QHSE performance is directly influenced by the contractors' performance.
2. Contractor/Service provider is responsible for QHSE compliance monitoring at site/work activities to ensure that work/activity is performed in a safe manner. Moreover, they are responsible for reporting of all incidents, Hazard and Near Miss that might happen during work/activity
3. Contractor/Service provider shall follow and comply with GEL ''Work Permit'' system During work execution and activities, GEL team will regularly monitor and evaluate the performance of the Contractor/Service provider to identify the shortfalls and

weaknesses and assist to improve the overall performance including QHSE performance through CPAR process (as applicable)

4. We believe that everyone at GEL, Employees, Contractors, Service providers and Associates have the right to go home safely to their families.

QHSE Defaults and Penalties (As applicable)		
SN	Description	Penalty amount (will be decided by Contract Owner)
1	Lost Time Injury	Rs. 5000/Instance
2	Non-compliance - HSE Engineer	NA
3	Un authorised work	NA
4	Work without PtW/WA	NA
5	Non-compliance - Safety Training Card (STC)	NA
6	Non-compliance - Health Check up	NA
7	Non-compliance - PPEs	NA

Remark: Issuance of MEMO against HSE non-compliances including above mentioned defaults shall be decided by Contract Holder.

HSE GUIDELINE (AS APPLICABLE) FOR ALL TYPE OF CONTRACTS

- Contractor/Service provider…

a) Shall ensure that all staff/work force comply with the requirements of the GEL HSE Management System, QHSE policy, standard, procedures, guideline, plan & Life Savers at work site

b) Shall ensure issuance of Identity Card to their team members

c) Shall apply and obtain Permit to work (PtW/WA) before start of the work

d) Shall arrange work related Personal Protective Equipment (PPEs) for their staff/work force and ensure proper use during the execution of job

e) Shall carry out the work within the duty hours/office hours. No Work shall be carried out without permission of GGL's representative beyond the official duty hours unless otherwise agreed upon prior to start of work and recorded appropriately

f) Shall ensure that all tools, tackles, appliances, machines, vehicles, instruments or other equipment are Fit for Purpose and maintained safe working condition at all times and are used only by authorized and competent persons

g) Shall ensure that all the QHSE requirements are properly discussed for any sub-contracted activities with GEL. No such activity shall be performed without clearance from GEL management

h) Shall ensure that all Hazards, Near miss, accident, incident, injuries are reported promptly to GEL. Action arises due to reported Hazards, Near miss, incident investigation; audit/inspection shall be closed out as per agreed timelines with site in-charge

i) Shall deploy staff & work force trained, qualified and competent for the work and well aware of risks and mitigation action/s for the activities undertaken

j) Shall make necessary arrangements for safe custody of equipment, materials in stores/warehouse and at site shall ensure safe transportation, storage and handling of materials to prevent any damage which may impair safe performance of the equipment / material etc

Shall initiate immediate actions to hospitalize injured person(s)

k) Shall ensure an injury free, incident free workplace and protect people from harm caused by work activities

l) Shall ensure use of seatbelts while driving four-wheeler and use of crash helmet for Two-wheeler riders during job execution

m) Shall ensure Lock out and Tag out (LOTO) after de-energizing and double check before starting any jobs. In case of conducting job for the purpose of fault finding & monitoring of voltage & current it is to be considered live working and all PPE'S to be worn to avoid exposure of flash arc current

n) Shall take note that the use of open wires in sockets, use of wires with tape joints shall not be accepted at work site.

o) Shall ensure proper collection, storage and disposal of solid / liquid waste as per GEL procedure and guideline

p) Staff/work force shall not smoke or resort to misuse of drugs, medicines or alcohol while on duty

- In case of any incident like fire, gas leakage etc. due to gross negligence of the Contractor's staff/work force, GEL reserves the right to impose penalty up to actual damage cost and or termination of work order depending upon the gravity of the situation.
- Any breach of the QHSE requirements shall be deemed by the company to be a material breach of the terms & condition of the contract. GEL shall be entitled to take appropriate actions including instructing the contractor to (a) remedy the breach; (b) suspend the work or (c) terminate the contract.

All activities shall be carried out as per GGL's documented procedures and QHSE requirements; deviation from it shall be dealt with very strictly.
Contractor shall ensure that all tools, appliances, machines, vehicles or other equipment, are in safe working condition

- All activities shall be carried out as per GEL documented procedure and HSE requirement, and deviation from it shall be dealt with very strictly.