AL SHOLA AL MODEA GAS DIST. LLC
(Civil Defence Approved Company)
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INTRODUCTION
AL SHOLA AL MODEA GAS DISTRIBUTION LLC or AL SHOLA GAS LLC (ASG) in short, is one of the leading Engineering and Distribution Company in the LPG Industry.

ASG was established in 1990 has been in operations in Dubai for last 22 years. The company was founded under the able leadership of Mr. Mohammed Hilal Saeed Saif Al Muroushedi, a young and dynamic Emirati with brilliant business acumen & Mr. Safir Ahammed, an Indian businessman & civil engineer by profession. Under the able guidance of Mr. Safir, the company has grown to a well sized establishment. Today we are one of the leading suppliers & contractors of LPG centralized pipe line systems.

Al Shola Gas LLC is affiliated & approved by ‘General Directorate of Civil Defence’, Govt. of Dubai, U.A.E as ‘Central Gas Contractor’ & LPG Supplier’.

ASG is an ISO 9001-2008 certified company for quality management system, offering a wide range of services including Design, Consultation, Supply, Installation and Commissioning of Central Gas Systems, LPG – Cylinders Distribution, LPG – Bulk Distribution and LPG Systems Preventive Maintenance. ASG can provide you with a bespoke service allowing you to have one company service all your LPG related requirements which suit your needs perfectly.

The current company activities are:

1) CENTRAL GAS SYSTEM (LPG):
   - Design, Supply, Construct, Operate & Maintain (with DCD certification)
   - Design Consultancy & Project Management.
   - Repair and Preventive Maintenance
   - Billing & Monitoring Systems

2) LPG SUPPLY & DISTRIBUTION (Cylinder & Bulk)

CENTRAL GAS SYSTEM

Activities include design, supply & installation of above & belowground LPG tanks, including all pipeline & instrumentation. We specialize in installation of:

- Installation & Commissioning of LPG, Propane and SNG Compatible Systems
- Pressure Reducing & Distribution Stations
- GasLeak Detection Systems
- LPG Metering Stations
- Vaporizer system
- Deluge, Sprinklers systems and related Safety systems.
The activity includes designing and developing extensive LPG pipeline network for Commercial Buildings, Mixeduse Apartment Complexes, Shopping Complexes, Food Courts, Heavy Industries, Labour Accommodations, Catering Units, Commercial Kitchens, Restaurants, using LPG Tanks and Cylinders.

We highlight the importance of safety in all our projects considering the volatility of LPG as per the norms and standards laid out by Civil Defense. Along with all our projects we issue warranty and safety standards certificates as per the Civil Defense guidelines. Our USP is providing clients with the best solutions keeping in mind the economics of scale and more importantly Safety Standards. The equipments and accessories used are as per International Safety Standards. We also get approval for cylinder manifold system with special permission.

We develop customized LPG Pipeline Infrastructure for all kinds of requirements varying from as little as 3 points to over 1000 cooking points. Based on customer requirements Safety Systems are implemented from the basic to the most comprehensive.

**LPG DISTRIBUTION - CYLINDERS**

We have one of the leading LPG distribution network in Dubai. Along with our sister concern Oasis Gas; we are one of the top three in LPG Distribution in Dubai. Currently we have over 40 outdoor sales people and Drivers with 18 nos. 3 ton trucks, 2 nos. 2 ton trucks and 2 nos. 1.5 ton trucks plying the roads of Dubai. The sales team is well supported by a centralized call center and strong telesales team and administration staff. On an average we distribute over 20,000 LPG Cylinders a month.

ASG has dedicated and exclusive distribution agreement with Master Developers like NAKHEEL (Gardens), DUBAI PROPERTIES GROUP (Shorooq, Ghorooob and Layan Communities).

**LPG DISTRIBUTION – BULK GAS**

ASG is an approved supplier for Bulk LPG in the market. We outsource our Bulk LPG from Emirates General Petroleum Corporation (EMARAT). Currently we are distributing over 500,000 L of Bulk LPG in Dubai. As per the expansion plans ASG will be in a position to deliver over 1,000,000 L of Bulk LPG every month by the end of the year. Currently our fleet has 2 Nos. of 18,000 L Capacity Trucks and 1 Nos. of 25,000 L Capacity Truck.
تم إصدار الترخيص استناداً إلى القرار الوزاري رقم (24) لسنة 2014، في شأن تنظيم خدمات الدفاع المدني

الشركة المضيفة لتنويع الغاز (ش.م.م) 

اسم صاحب الترخيص
محمد هلال جبرالوسيف سيف المروشدي

الهند
 الجنسية

رقم الشهادة
222413

رقم الفاكس
971-4-2673291

المكتب (112) ملك دبي العالمي للعقارات - بر دبي - الكرمة
alshola@eim.ac.ae

تاريخ الانتهاء
11/11/2016م

تاريخ الإصدار
13/12/2015م

العديد من المعنيين
عدد الفنانين المعتمدين
3

يرجى من مدير الإدارة العامة للدفاع المدني/ دبي
كشف المعدات والأجهزة المعتمدة المراد صيانتها

الشركة معتمدة لتركيب أنظمة الغاز المركزي وفق متطلبات وشروط الدفع المدني وتحت إشرافه.

THIS COMPANY IS APPROVED FOR INSTALLATION OF CENTRAL GAS SYSTEMS AND GAS TANKS AS PER THE REQUIREMENTS AND SUPERVISION OF CIVIL DEFENCE.
**Commercial License**

<table>
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<tr>
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<th>222413</th>
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<td>Company Name</td>
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**License Details / تفاصيل الرخصة**

- **License No. / رقم الرخصة**: 222413
- **Company Name / اسم الشركة**: AL SHOLA AL MODEA GAS DISTRIBUTION (L.L.C.)
- **Trade Name / الاسم التجاري**: AL SHOLA AL MODEA GAS DISTRIBUTION (L.L.C.)
- **Legal Type / الشكل القانوني**: Limited Liability Company (LLC)
- **Expiry Date / تاريخ الانتهاء**: 17/03/2017
- **D&B D-U-N-S® No. / رقم العلمي الأردني**: 534500913
- **Register No. / رقم الصندوق التجاري**: 6629961

**License Members / أطراف الرخصة**

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<tr>
<th>Role</th>
<th>Nationality / الجنسية</th>
<th>No. / رقم الهاتف</th>
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<tr>
<td>Manager / مدير</td>
<td>India / الهند</td>
<td>247542</td>
</tr>
<tr>
<td>Manager / مدير</td>
<td>India / الهند</td>
<td>151847</td>
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**License Activities / نشاطات الرخصة التجارية**

- Specialized Piping & Related Fittings Contracting
- Cookers & Cookstoves Trading
- Domestic Gas Distribution
- Central Gas Tanks Filling

**Address / العنوان**

- P.O. Box: 20111
- Parcel ID: 310-101

**Remarks / الملاحظات**

- P.O. Box 20111
- Parcel ID 310-101

- "For additional information or to verify the license, please visit http://www.dubaided.doe.gov.ae"

Print Date: 26/03/2016
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Print Date: 20/03/2016 8:12
Receipt No: 12250200
Commercial Register

Main Lice. Nr 222413
Register No. 1025061
Company Name AL SHOLA AL MODEA GAS DISTRIBUTION (L.L.C)
Legal Type Limited Liability Company(LLC)
Expiry Date 17/03/2017
D&B D-U-N-S ® No 554500913

Register Details

Capital Details

Nomination
Paid
No. of Shares
Currency UAE Dirhams

Capital Details

Nominated
300,000
Paid
300,000

License Address

No. of Address (112) مكتب (112) من رئيس المطبعة بالدار
Commerce Registry Address

No. of Address (112) مكتب (112) من رئيس المطبعة بالدار

Register Activities

Specialized Piping & Related Fittings Contracting
Cooks & Cookstoves Trading
Domestic Gas Distribution
Central Gas Tanks Filling

Print Date 20/03/2016 8:12
receipt no. 12250209

(http://www.dubai.gov.ae)

Approved electronic document issued without signature by the Department of Economic Development. To verify the license kindly visit http://www.dubai.gov.ae
Membership Certificate

License no. 222413
Membership no. 18782
Registration no. 1029961
Trade Name AL SHOLA AL MODEA GAS DISTRIBUTION (L.L.C)
Legal Status Limited Liability Company
Activity Cookers and cook stoves trading * Domestic gas distribution * Specialized piping & related fittings contracting * Central gas tanks filling

Member Since 25/03/1990
Date of Issue 20/03/2016
Expiry Date 17/03/2017

Remarks
This certificate shall be invalid incase of any alteration without chamber's authorization
For online verification of this Certificate, please visit our website http://www.dubaichamber.ae/verify

Dubai Chamber of Commerce & Industry
P.O. Box 1457 - Dubai, UAE. | Tel (Within UAE) 800 CHAMBER (800 2426237) | Tel (Outside UAE) (+971) 4 2298000
Fax (+971) 4 2211648 | customercare@dubaichamber.ae | www.dubaichamber.ae
Certificate of Registration

This is to certify that

Al Shola Al Modea Gas Distribution LLC
P.O. Box: 28111, Al Karama, Dubai, United Arab Emirates.

has been assessed by Bureau of Assessment Services and hereby attests that the organization complies with the requirements of Quality Management System in accordance with

ISO 9001:2008
(Quality Management System)

The Quality Management System is applicable to:


[EA/NACE: 28/43.22]

Initial certification date : 05-September-2012
Certificate issue date : 17-February-2016
Certificate valid till : 04-September-2018
Certificate No : AE-BAS-Q0003613

This certificate is validated through annual surveillance.

Further clarification regarding the scope of the certificate and the applicability of ISO 9001:2008 requirements may be obtained by consulting the organization.

This certificate remains valid while the holder maintains the management system in accordance with the standard above, which will be audited by Bureau of Assessment Services through surveillance audits. This certificate remains the property of Bureau of Assessment Services. Lack of fulfillment of conditions as set out in the certification agreement may render this certificate invalid.

Issuing Country: Bureau of Assessment Services LLC, P.O. Box: 116698, Al Karama, Dubai, United Arab Emirates.
PROJECT DETAILS
PROJECTDETAILS
Here with we are listing some of our prominent projects and clients that we have implemented successful solutions in the last three years.

PROJECT : METCLUB, JEBEL ALI FREEZONE
CLIENT : AL HABTOOR GROUP
CONSULTANT : WAGNER FIRE & SAFETY LLC
APPROVAL : EHS & CED DEPT, JAFFZA
PROJECT VALUE : AED 520,000.00
TANK CAPACITY : 7000 LTS, 1 NO WITH V
TYPE : UNDERGROUND

PROJECT : DEWA-JEBEL ALI M SUBSTATION
CLIENT : DEWA-JEBEL ALI M SUBSTATION
CONSULTANT : FICHTNER CONSULTING ENGINEERS
CONTRACTOR : DOOSAN HEAVY INDUSTRY & CONSTRUCTION
APPROVAL : DUBAI CIVIL DEFENCE
PROJECT VALUE : AED 1,480,000.00
TANK CAPACITY : 5000LTS, 6 NOS A/G, MULTIPLE LEVEL, DESIGN & IMPLEMENTATION TYPE.
PROJECT: AL SHAMSII STAFF ACCOMODATION & LABOUR QUARTERS, SONAPUR (G+3)
CLIENT: GOLDLINEGROUP
APPROVAL: CIVILDEFENCEAPPROVAL
PROJECTVALUE: AED 540,00.00
TANKCAPACITY: 2000 LTRS CAPACITY, 3 NOS., WITH DELUGE & SPRINKLER SYSTEMS
TANK TYPE: ABOVEROOF
PROJECT: PROPANE BASED TANK FOR POWDER COATING PLANT IN JEBEL ALI IND. AREA
CLIENT: HIBUILD CONSTRUCTION LLC
APPROVAL: CIVIL DEFENCE APPROVAL
PROJECT VALUE: AED 700,000.00
TANK CAPACITY: 7000 LTS, 1NOS., WITH VAPORIZER
TANK TYPE: UNDERGROUND
PROJECT : STAFF ACCOMODATION, DIP
CLIENT : CORROSIONTECHNICALSERVICESLLC
CONTRACTOR : ABRAJ ELECTRO MECHANICAL
CONSULTANT : PARADISE HOME ENGINEERING CONSULTANCY
APPROVAL : CIVILDEFENCEAPPROVAL
PROJECTVALUE : 140,000AED
TANKCAPACITY : 2000LTS, 1NOS., WITH VAPORIZER, SPRINKLER AND DELUGE SYSTEM
TYPE : ABOVEGROUND
PROJECT : AL KHAIL MALL WITH 12 OUTLETS
CONSULTANT : ARC INTERNATIONAL
APPROVAL : DUBAI CIVIL DEFENCE
PROJECT VALUE : 1,000,000.00 AED
TANK CAPACITY : 7090LTS, 1NO., WITH VAPORISER, SPRINKLER AND DELUGE SYSTEM, PIPING NETWORK WITH COMPREHENSIVE DETECTION SYSTEM FOR 12 OUTLETS INCLUDING CONTROL PANEL, GAS METER AND OTHER SAFETY COMPONENTS
TYPE : ABOVEGROUND
PROJECT: LE MERIDIEN MINA SEYahi HOTEL SPA & RESORTS
CONSULTANT: BREWER SMITH BREWER GULF
CONTRACTOR: BIN SHAFAR CONTRACTING
APPROVAL: DUBAI CIVIL DEFENCE
PROJECT VALUE: AED 640,000.00
PROJECT : DFAC AT BAGHRAM AIRBASE, AFGHANISTAN
CLIENT : US ARMY
CONSULTANT : ENGINEERING CORPS – US ARMY
APPROVAL : INSPECTION DEPARTMENT – US ARMY
PROJECT VALUE : AED 1,963,000.00
TANK CAPACITY : 30,000 LTS 2 NOS WITH VAPOZER
TYPE : UNDERGROUND

PROJECT : JOSEPH INDUSTRIES
CLIENT : JOSEPH GROUP
CONSULTANT : WAGNER FIRE & SAFETY LLC
APPROVAL : DUBAI CIVIL DEFENCE
PROJECT VALUE : AED 220,000.00
TANK CAPACITY : 4880 LTS, 1 NO WITH VAPORIZERS
TYPE : ABOVEGROUND

PROJECT : FIRST GULF PROPERTIES – STAFF ACCOMMODATION, DIP
CLIENT : FIRST GULF BANK
CONSULTANT : AL JABAL CONSULTING ENGINEERING
APPROVAL : DUBAI CIVIL DEFENCE
PROJECT VALUE : AED 511,000.00
TANK CAPACITY : 7000 LTS, 1 NO WITH VAPORIZERS
TYPE : ABOVEGROUND

PROJECT : GILLANI BUILDING MIXED USE RESIDENCE – 92 APARTMENTS
CLIENT : FIRST GULF PROPERTIES
CONSULTANT :
APPROVAL : DUBAI CIVIL DEFENCE
PROJECT VALUE : AED 190,000.00
TANK CAPACITY : 2000 LTS, 1 NO WITH VAPORIZER
TYPE : ABOVEGROUND

PROJECT : G + 3, AL QUOZ – 32 APARTMENTS
CLIENT : PRAKASH TRADING
CONSULTANT : ARC INTERNATIONAL
APPROVAL : DUBAI CIVIL DEFENCE
PROJECT VALUE : AED 185,000.00
TANK CAPACITY : 2000 LTS, 1 NO
TYPE : ABOVEGROUND

PROJECT : BELHASA LABOUR ACCOMMODATION – 4 BUILDINGS
CLIENT : BELHASA ENGINEERING AND CONTRACTING
CONSULTANT : WAGNER FIRE & SAFETY LLC
APPROVAL : DUBAI CIVIL DEFENCE
PROJECT VALUE : AED 684,000.00
TANK CAPACITY : 7000 LTS 1, 4880 LTS 1, 1825 LTS 2
TYPE : UNDERGROUND
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<th>PROJECT</th>
<th>TYPE</th>
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<th>PROJECT VALUE</th>
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<td>B+G+7 APARTMENT BUILDING - 63 APARTMENTS</td>
<td>ABOVEGROUND</td>
<td>1825 LTS</td>
<td>AED 175,000.00</td>
<td>ENG. ADNAN SAFFARANI</td>
<td>DUBAI CIVIL DEFENCE</td>
<td>AMIN MOHAMED AL SHARIF</td>
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<tr>
<td>2B + G + 9 - 72 APARTMENTS</td>
<td>ABOVEGROUND</td>
<td>2000 LTS, 1 NO WITH VAPORIZERS</td>
<td>AED 215,000.00</td>
<td>ARKIPLAN CONSULTING ARCHITECTS &amp; ENGINEERING</td>
<td>DUBAI CIVIL DEFENCE</td>
<td>CITY DIAMOND CONTRACTING</td>
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<td>2B + G + 13 - 80 APARTMENTS</td>
<td>ABOVEGROUND</td>
<td>7000 LTS, 1 NO WITH VAPORIZERS</td>
<td>AED 225,000.00</td>
<td>DESIGN CONCEPTS</td>
<td>DUBAI CIVIL DEFENCE</td>
<td>BELHASA ENGINEERING &amp; CONTRACTING</td>
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<td>2B + G + 47 + R</td>
<td>ABOVEGROUND</td>
<td>4880 LTS, 1 NO WITH VAPORIZER</td>
<td>AED 340,000.00</td>
<td>ENG. ADNAN SAFFARANI</td>
<td>DUBAI CIVIL DEFENCE</td>
<td>EMIRATES GRAND HOTEL - SZR</td>
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<tr>
<td>GURUDUWARA – SIKH TEMPLE, JEBEL ALI</td>
<td>ABOVEGROUND</td>
<td>2000 LTS, 1 NO</td>
<td>AED 135,000.00</td>
<td>HOLFORD ASSOCIATES</td>
<td>DUBAI CIVIL DEFENCE</td>
<td>CONDOR</td>
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<td>STAFF ACCOMMODATION IN DIP</td>
<td>ABOVEGROUND</td>
<td>1825 LTS 1 NO.</td>
<td>AED 108,000.00</td>
<td>HI ART ENGINEERING CONSULTANTS</td>
<td>DUBAI CIVIL DEFENCE</td>
<td>DRAKE &amp; SCULL</td>
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Our other valuable Clients with whom we are associated with

> AL JABER LTA ENGINEERING & CONTRACTING – DUBAI
> AL JABER LTA ENGINEERING & CONTRACTING – ABUDHABI
> WESTERN INTERNATIONAL
> OUTLETS IN MALL OF THE EMIRATES
> OUTLETS IN DUBAI MALL
> EMARAT & EPPCO
> AL FAJER CONTRACTING
> AL HUDAIBA CONTRACTING
> NATIONAL CATERING AND CONTRACTING
> WONDERLAND WATER THEME PARK - DUBAI
> INTERNATIONAL CHAIN OF RESTAURANTS – CHILLIS, KFC, PIZZAHUT, COCOS, INDIAN PAVILION, MEATSHOP, NAWAB RESTAURANT, MADO CAFÉ, BAJA FRESH, ORGANO, THYME, WENDYS, NY FRIES, BUTCHER SHOP,
> ABUDHABI – DEPARTMENT OF DEFENCE
> CHELSEA PLAZA HOTEL AND RESORTS - DUBAI
> BELHASA ENGINEERING & CONTRACTING CO. L.L.C.
> PRIME PROJECTS INTERNATIONAL
> ALWATAN ENGINEERING
> TARGET & JIMA
> A.A.ALMOOSA(ARENCO LLC)ENTERPRISES
> FABTECH TECHNICAL SERVICES
> ALBANAA ENGINEERING
> AL SAHEL CONTRACTING
> ASCO INTERNATIONAL
> CONDOR ABELA CO.
> CITY DIAMOND CONTRACTING
> ZABEELECONTRACTING
> AVON CONTRACTING
> PRIDE HOME CONTRACTING
> PETRON EMIRATES
> BU HALEEBA CONTRACTING
> TOPAZ ENGINEERING (NICO INTERNATIONAL)
> JOSEPH ADVERTISERS
> LUTFI GROUP OF COMPANIES
> CREDO INVESTMENT
> MODERN BAKERY
> AL FARIS GROUP OF COMPANIES
> AL AQUILLI GROUP OF COMPANIES
> UNITEDMOTORS
> SARHAD DARBAR GROUP OF RESTAURANTS
> ELEMEC
JOBS UNDER EXECUTION
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<td>1</td>
<td>EMIRATES GRAND HOTEL</td>
<td>CENTRAL GAS SYSTEM FOR THE HOTEL BLOCK 2B + G + 47 + R, PROVIDING SERVICES TO</td>
<td>ENG. ADNAN SAFFARANI</td>
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<td>PARKING BUILDING AND RESTAURANTS IN THE 1ST FLOOR, 2ND FLOOR, 3RD FLOOR, 41ST FLOOR,</td>
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<td>43RD FLOOR, 47TH FLOOR &amp; ROOF TOP – LOCATED IN SHEIKH ZAYED ROAD</td>
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<td>FIRST GULF PROPERTIES</td>
<td>CENTRAL GAS SYSTEM FOR THE LABOUR ACCOMMODATION IN DIP CATERING TO 9 KITCHENS WITH</td>
<td>AL JABAL CONSULTING ENGINEERING</td>
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<td>550 INDIVIDUAL COOKING POINTS – LOCATED IN DIP</td>
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<td>AL REYAMI ELECTRO MECHANICAL LLC</td>
<td>CENTRAL GAS SYSTEM FOR THE GEMS SCHOOL PROVIDING TO THE 2ND &amp; 3RD FLOOR PHYSICS</td>
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<td>&amp; CHEMISTRY LABS – LOCATED IN SILICON OASIS</td>
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<td>AL HINANI GULF CONTRACTING COMPANY</td>
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<td>NATIONAL ENGINEERING BUREAU</td>
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<td>CHEMISTRY LABS – LOCATED IN RAK</td>
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<td>5</td>
<td>AL MUSALLA CONTRACTING</td>
<td>CENTRAL GAS SYSTEM FOR THE B+G+7 RESIDENTIAL BUILDING CATERING TO 62 APARTMENTS –</td>
<td>ENG. ADNAN SAFFARANI</td>
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<td></td>
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<td>LOCATED IN DEIRA</td>
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<td>CITY DIAMOND CONTRACTING</td>
<td>CENTRAL GAS SYSTEM FOR THE 2B+G+9 RESIDENTIAL BUILDING CATERING TO 72 APARTMENTS –</td>
<td>ARKIPLAN CONSULTING ARCHITECTS &amp; ENGINEERING</td>
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<td>AMBB</td>
<td>CENTRAL GAS SYSTEM FOR THE COMMERCIAL BUILDING AND CATERING TO THE 4 RESTAURANTS</td>
<td>WANDERS WEMER FALASI CONSULTING ARCHITECTS</td>
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<td>IN THE BUILDING – LOCATED IN SHEIKH ZAYED ROAD</td>
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<td>AL QASSEM INTERNATIONAL</td>
<td>CENTRAL GAS SYSTEM FOR THE G+6+GYM RESIDENTIAL BUILDING CATERING TO 43 APARTMENTS –</td>
<td>OBE ARCHITECTS</td>
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<td>9</td>
<td>ZABEEL CONTRACTING</td>
<td>CENTRAL GAS SYSTEM FOR THE B+G+7 RESIDENTIAL BUILDING CATERING TO 90 APARTMENTS –</td>
<td>CHAWLA ARCHITECTURAL &amp; CONSULTING ENGINEERS</td>
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<tr>
<td>10</td>
<td>ANSAR MALL</td>
<td>CENTRAL GAS SYSTEM FOR THE APARTMENT BUILDING G + 1, PROVIDING SERVICES TO 30 APARTMENTS – LOCATED IN DEIRA</td>
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<td>Mr MOHAMMED IBRAHIM BIN OBAIDULLA</td>
<td>G + M + P3 + 12 TYPICAL + ROOF OFFICE &amp; RESID BUILDING ON PLOT NO 246-102 AT AL QUSAIS</td>
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<td>KHALIFA BIN ZAYED AL NAHAYAN FOUNDATION</td>
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<td>21</td>
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<tr>
<td>NO</td>
<td>CLIENT</td>
<td>DESCRIPTION OF WORK</td>
<td>CONSULTANTS</td>
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<td>23</td>
<td>WASL</td>
<td>PROP COMM &amp; RESD BUILDING ON PLOT NO 318- 7266 LOCATED AT KARAMA - DUBAI</td>
<td>NATIONAL ENGINEERING BUREAU</td>
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</tbody>
</table>
ASG shall furnish the design, supply and installation of central piped gas system as described in the specification all in perfect work to the satisfaction of the engineer and in the accordance with the relevant accepted codes of practice and standards. The system shall meet the requirements of local authorities and civil defense approval. This work shall include but not limited to the following:

- Storage tank
- Gas pipe work
- Filling point
- Risers/Laterals/Droppers
- Appliance connection
- Gas leak detection system
- Pressure regulation and distribution panel
- Emergency shut off valve
- Seismic valve

The work covered under this section we include:
All the supply, installation, testing, commissioning, maintenance and delivering in good operating conditions, of a complete system.

**LP GAS STORAGE TANK:**

Horizontal tanks shall be installed as per DCD regulations. The tank is fully equipped with the following:

- Magnetic level gauge
- Check lock filler valve
- Multivalve assembly
- Safety relief valve
- Check lock liquid withdrawal valve
- Check lock drain

**LPG TANK CONTROL:**

There are numbers of fittings mounted on the top of the tank to permit safe filling and use these controls are under a hood, which should be kept locked (if the tank itself is not fenced). The tank should be equipped with a magnetic liquid level indicator. The liquid level indicator (float gauge) gives the customer an approximate indication of the liquid level inside the tank in percentage:

- A fixed maximum level gauge e.g. The vent valve type, with 1.5mm or less orifice diameter.
- A shutoff valve for each connection of the outlet pipes for both gaseous and liquid phases
- A double check filler valve & an isolation valve on the filling connection.
- The 1st stage regulator is fitted to the vapor outlet on the tank.
- Isolation valve is fixed downstream from regulator, in close proximity.

**GAS PIPE WORK**

Seamless carbon steel (Sch-40) are used in risers, laterals & droppers according to the design. All the pipe work to be kept exposed & painted yellow as per Dubai Civil Defense regulations.

**FILLING POINT**

Shut off and non-return valves are provided at the filling point, which is located at the LPG tank. Filling point is secured by lockable box.
**APPLIANCE CONNECTION**

- The final connection to the appliance are in carbon steel the same are risers and it is included a union to allow for easy disconnection.
- Hoses are used on the low pressure side of the regulators.
- Each connection points are provided with a service, close to the appliance so that the equipment can be isolated and removed, without having to shutdown the whole gas supply system.
- Auto shutoff valves (mechanically operated) are provided upstream to each appliance.

**GAS LEAK DETECTION SYSTEM**

Gas tank and kitchen are protected with a gas leak detection system.

- A central control panel (including sensors) flashing light alarms and horn for 15% level and closing the gas supply at 30% level 0-100% level indicator each zone.
- The gas control panel is inter locked with the fire alarms panel
- Gas leak detector on the tank area is explosion proof.

**PRESSURE REGULATING & DISTRIBUTION PANEL**

Panel is located on the ground floor. Enclosure constructed from powder coated aluminum sheet with approved lock and locked doors

- Shut off valves
- Solenoid valve
- Emergency Bypass
- Pressure gauge
- Test/ purging point

**EMERGENCY SHUT OFF SYSTEM OF GAS SUPPLY**

This system includes

- A control panel linked to LPG sensors at tank yard & kitchen. The panel is also interlinked to fire alarm control panel to provide shutdown in case of fire.
- A Solenoid valve 24 V DC (N/C) linked to control panel
- Cables and accessories
- Emergency push button shut down switch is provided at the kitchen exit to manually shut down the supply of LPG in case of any potential hazardous situation.

**FIRE PROTECTION:**

- Deluge valve assembly & sprinkler system with mechanical & heat fuse sprinklers as per DCD regulations.
- Dry riser & breaching inlet. This system is used where the pump capacity is not sufficient to supply water for deluge valve, for roof top tanks installation.
- Fire extinguishers, suitable for LPG fire (such a dry powder & CO2) are located at strategic points adjacent to the installation.
- Provision for interlinking to fire alarm control panel or IFU (for malls) as per DCD regulations
- Hazard warning notice like “No Smoking”, “Danger, LPG”, are displayed in prominent position around the tank installation.
OUR HSE POLICY
OUR SAFETY SYSTEM

A safety and environmental philosophy is normally developed for the project. It is formulated to ensure that hazards, which can affect the safety of the personnel, the integrity of the facilities and the conservation of the environment, are properly and adequately considered. In doing so, all legislative requirements are observed and complied with and the appropriate codes and standards are introduced onto the execution of work to ensure the retentions of good and well proven engineering practice throughout.

Probable hazards are established by comprehensive analysis. Then appropriate safety and environmental system and procedures are then incorporated into the project.

The principal objectives are:
To provide a safe working environment for personnel
To provide minimize the potential of hazardous occurrence
To avoid exposure to the potential hazards
To contain or minimize the effect of hazards
To provide means of escape from hazards
To provide environment protection

SITE SAFETY MANUAL OUTLINE

A. Prevention Programs

In addition to regular site safety meeting under the direction of the project manager and safety engineer outlined in project execution tool box meeting also be periodically arranged by the members of the ASG’s field supervision to remind sub contractor’s supervisor and labour of their responsibilities towards ensuring site safety and ensure they are informed for current practices.

Regular information will be developed by ASG for its employee in order to make them aware of any hazards associated with fieldwork progress.

For this purpose ASG will, as part of the site prevention programme, provide field bulletin boards, which will include posters, general instruction prevention score boards and the like.

These boards will be located at strategic points throughout the site in order to keep personnel informed on all safety matters.

B. Safety Manual Guideline

The main provision of the safety manual that project manager will distribute after owners approval, to all field personnel are summarized in the following subsections:

1. Personnel protection equipment
2. Fire prevention
3. Mobile equipment and rigging practices
4. Excavation and rigging practices
5. Ladders and scaffolding safety
6. Transportation safety
7. Work permits
8. House keeping
9. Emergency situation
10. Reporting of accidents
11. Procedure to obtain first aid/assistance for injuries.
1. **Personnel Protective Equipment**

The provision and use of personal protective equipment by all the labour force is considered to be an essential part of safe construction practices. This includes the wearing at all times of safety hats and footwear, and the use of goggles, gloves and safety belts, breathing apparatus as may be required by particular operation.

2. **Fire Prevention**

ASG will provide and maintain in good working order such firefighting equipment and facilitates it may be necessary in order to control and extinguish any fires that may occur within their working area. The requirements of client and local regulations would be complied with and personnel would be trained in the use of the fire protection equipment provided.

3. **Mobile Equipment and Rigging Practices**

All lifting equipment including cranes, chains, hooks slings and shackles will be inspected and maintained in good construction practice and client’s standards.

4. **Excavation and Form Work Safety**

ASG will enforce any excavation work and the preparation and erection of form work carried out by ASG will be in full compliance with the requirement of client safety manual.

5. **Ladders Scaffolding Safety**

Ladders will be of timber or metal or of an approved type erected and used in a safe manner.

6. **Transportation**

Particular attention will be paid to all matter relating to safety in use of motor vehicle and construction equipment. All ASG drivers and equipment operators will be qualified to ensure their capabilities and field safety acquaintance.

7. **Work Permits**

Work permits will be obtained prior to the commencement of any work within owner specified restricted area when applicable.

8. **Housekeeping**

ASG will comply with the established and continued operation of a good housekeeping program is an important factor in ensuring that lost time is kept to a minimum and may be considered to include, amongst other things.

   a) The regular collection and removal to a suitable disposal point of debris, garbage etc.
   b) Provision and maintenance of good sanitary facilities and sanitation practice
   c) Prevention of personnel entering the work site if suffering from any contagious disease
   d) Provision and maintenance of adequate first aid facilities on the job site
   e) Emergency situation

9. **Emergency Situation**

ASG will develop action plans to cater for emergency situations incorporating clients requirements and will ensure that subcontractor personnel are aware of the procedures. Periodic reviews will be undertaken with client’s representatives.
10. Reporting Of Accidents

- Client will be informed in a case of
- All injuries to personnel requiring medical attention
- All damage to ASG or subcontractor plant and equipment
- All damage to client’s equipment is property
- All fires
- Application of owner’s standards
- ASG expects that clients has already developed various safety standards, which will be applicable to this project
- ASG will include in the safety manual a summary of the standards indicating the associated responsibilities at field

Safety Engineer

 Reports to : Project Manager
 Supervises : site engineer and supervisor of sub-contractors

Responsibilities:

In day to day operations he has the responsibility to provide all levels of supervision with the services and technical advice needed for proper compliance of the job site safety program. He is responsible to the project manager for objective and independent accident prevention judgments, which will make the job site program effective

Duties:

a) Develop guidance and programs to eliminate physical hazards from the job site substitute safe practices for any unsafe practices of contractor and subcontractor personnel
b) Formulates recommend and administer all approval changes in the accident prevention program
c) Monitor all area supervision by regular reports system personally investigating serious accident
d) Maintain an adequate report system, personally investigating serious accidents and taking corrective action to take eliminative accident causes
e) Cooperative with sub-contractors supervisors in establishing training of their personnel when required
f) Conduct inspection to discovered and initiate corrective action on unsafe conditions or work practice through site patrolling and monitoring
g) Monitor sub-contractors for full compliance with governmental rules bearing on construction safety.
h) Recommended to sub contractor’s programmers and activities that will stimulate and maintain the interest in safety. Assure posting of appropriate safety signs, posters, bulletins etc., and require subcontractor supply for periodic changes. Check that proper warning signs and tags are used.
i) Prepare and submit safety audits monthly to the clients safety engineer
j) Supervise job site security and traffic control personnel
k) Call and conduct safety meetings
l) Establish first aid center with adequate facilities

Note: Sub-contractors means:

- Firefighting contractors
- Electrical sub-contractors
- Civil sub-contractors
PLANNING & METHODOLOGY
A properly planned site does require minimum monitoring & a properly monitored site fetches good productivity and enhanced output

1. The total information system is centered on micro level estimation of cost at the elemental level, translating the contract amount to minute elemental level costs for costing and budgeting which would be later on used as the control measure.

2. To facilitate such detailed costing necessary data has to be built up over the years on various types of job, various location, various environment etc.

3. The control mechanism is built on a 2-tire system for the site itself via, work break down structures (WBS) which are controlled by operation manager (as they may be called) and work package (WP) which form part and parcel of WBC (EQ). In a site different systems, which could be separately traced and distinctly identified, would be called as different WBS. For each WBS there would be one man in charge (operation manager) and he would be held responsible for the cost of pertaining to the WBS. The system is through up feedback information regarding a particular type of work incidentally.

4. When it comes to work packages, a group of packages would form a WBS. Work package would comprise of work relating to a homogeneous group activities of a WBS and hence would also helping the process of proper estimation for future job.

5. ESTIMATION

The estimation is done for the following, categories of cost, which would be called as sub head of expenditure

- A) Direct labor
- B) Support staff/ supervisory man power (called as contractors staff)
- C) Construction equipment /aids
- D) Temporary facilities (such as site office)
- E) Temporary materials (wooden plank, piping etc)
- F) Erection tools
- G) Mobilization and de mobilization (travel & transport for men & machinery)
- H) Insurance
- I) Ancillary
- J) Material/ Equipment
- K) Consumables
- L) Material handling
- M) Commissioning assistance
- N) Any other supply

6. BUDGET

After completing estimation in great detail, as listed in previous paragraphs, the project manager does the budgeting. Budget is broken into three levels via estimators, managers and corporate level budget. The corporate budget is the stripped down version of the overall estimation. The manager budget is a sub-set of the corporate budget without the head office overhead inclusive of contingency. The estimator’s budget forms part of the manager’s budget but is devoid of any provisions of contingency. After the budgeting process costing is done. While the estimation and the budget are according to the heads of expenditures given in the paragraph on estimation, the costing is based on WBS, W.P and heads the expenditure (sub codes). This means that for each WBS, cost with respect to every head of expenditure is arrived at. Such an exercise is done for every single WBS.

The total cost of all WBS would be equivalent to the total budgeted amount. The total budgeted amount could also be broken into different heads of expenditure by adding the values of different WBS. Thus there would be a total picture of cost looking at it from either the WBS angle or from the head of expenditure angle. Work packages are very small and are nothing but miniature of WBS in concept.

7. MAN POWER SCHEDULING

The various activities in the project are fitted into the overall time schedule in terms of different months. The requirement of manpower for each of the categories is estimated on the basis of
assumptions made at the estimation stage in terms of manpower and the time frame as decided. The manpower schedule is drawn in terms of each category of manpower on the frame. The charging of manpower is done to the respective WBS. The starting point is the overall schedules, which is given by the client, and this is split up into weekly fortnightly and monthly schedules.

8. MAN POWER MONITORING
The direct labor, which generally has more percentage contribution, requires close monitoring. This shall be monitored for each WBS and WP. Also the information forms basis to compute:
   - Efficiency of manpower
   - Composition of trades
   - Costing of future projects

9. PROGRESS MEASUREMENT
One method of progress measurement is based on billing value. Billing is done based on agreed milestones. The primary input for billing is only the total man hours deployed. Projects are divided into two categories—labor oriented and equipment oriented. For the purpose of such a categorization, the total cost as estimated and budgeted for labor and rest of the components is compared and if labor outweighs the other components, it is termed as labor oriented and vice versa. The ratio of this comparison is used as a weighing factor for estimating the progress.

There can be other methods of progress measurement also depending upon client’s agreement.

10. INVENTORY CONTROL
Inventory control is exercised at the level of WBS, based on monthly reports. Based on value and life, an item is categorized either asset or inventories. Control is exercised on inventory items and charged 100% to the project. As regards assets, 100% value is credited to the project but the salvage value is also taken into account at the end of the project depending on whether it is sent to another project or disposed of etc. Control on certain categories of consumables like the electrode requires systematic analysis of theoretical requirements and comparison with actual requirements.

11. ENGINEERS OF CONTRACT AND CLAIMS
Knowledge of contract is essential for everyone. However there should be a designated engineer of contract who is authorized to study and point out deviations of jobs in site.

12. EQUIPMENT UTILISATION
All construction aids / equipment are analyzed with respect to their utilization and this utilization factor is recorded as measurement of the extent to which the equipment is utilized in comparison to the total hours for which it has been made available at site also the fuel used is recorded for proper monitoring which forms as basis for future project estimation.

13. MATERIALS HANDLING
The permanent materials should be segregated based on WBS and WP and also should be stored in yard accordingly. This will eliminate double handling of material thus saving manpower and machine hours.

14. DRAWING CONTROL
The drawings used should be approved for construction drawing. This depends on the method of drawing issue by client segregation of drawings based on WBS, WP and also relevant materials in advance based on master drawings list has to be done. This will enable to project the problem areas while monitoring whether it is material or drawing related problem.

15. WEATHER
Day-to-day recording of weather is also carried out and reported on monthly basis. This information is used primarily to analyze shortfalls in productivity and progress. Also it is used for time extension against liquidated damage.
TRAINING PROGRAMS
Good ranges of training are given to ASG engineers at regular Interval. The below mentioned training programs are usually given to our staffs.

A) LPG tank installation and maintenance training – Lapesa, Spain
B) LPG tank installation and safety precautions – Antonio Merloni ,Italy
C) Gas detection system& trouble shooting methods- Oldham, France.
D) LPG bulk storage tank &bottling system training.- Emirates gasUAE
E) LPG system maintenance seminars-conducted by Emirates gasUAE
F) Deluge valve system design, installation, testing & commissioning -RAPIDROP, UK
G) Fire safety& Good engineering practices: Al Shola Safety & Security , UAE
<table>
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<tr>
<th>EQUIPMENT</th>
<th>QTY</th>
<th>BRAND NAME</th>
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<tbody>
<tr>
<td>POWER THREADING MACHINE</td>
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<td>RIGID</td>
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<tr>
<td>VICES</td>
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<tr>
<td>TOOLBOX</td>
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<tr>
<td>WELDING MACHINE</td>
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<td>MILLER</td>
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<tr>
<td>OXYGEN / ACETYLENE CYLINDER SET</td>
<td>04</td>
<td>EIG</td>
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<tr>
<td>GRINDING MACHINE</td>
<td>06</td>
<td>BOSCH</td>
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<tr>
<td>DRILLING MACHINE</td>
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<td>HILTI</td>
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<td>PIPE WRINCHES</td>
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<td>DEWALT</td>
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<td>CUT OF MACHINE (DISC TYPE)</td>
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<td>RIGID</td>
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<td>DIAMOND DRILLING MACHINE</td>
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<td>HAND BEVELLING MACHINE</td>
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<tr>
<td>AIR COMPRESSOR</td>
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<td>GENERATOR</td>
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<td>MULTI METER</td>
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<td>FLOW METER</td>
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<td>HAND HELD GAS DETECTORS</td>
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<td>SCIENTIFIC INDUSTRIAL</td>
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<tr>
<td>GAS LEAK TESTING DEVICES</td>
<td>06</td>
<td>SCIENTIFIC INDUSTRIAL</td>
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MAINTENANCE
# MAINTENANCE INSPECTION REPORT LPG SYSTEM

## SYSTEM DETAILS:

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<th>STATUS/ CONDITION</th>
<th>REMARKS</th>
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<tr>
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<td>2</td>
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<tr>
<td>3</td>
<td>Stand-by Batteries</td>
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<td>Emergency Shutdown Switch</td>
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<td>Fire Alarm Interface</td>
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<td>Sounder/ Flasher</td>
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<td>7</td>
<td>Signal to main LPG Solenoid valve</td>
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<td>Signal to Sprinkler Solenoid Valve</td>
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<td>Cabling/ Conduit</td>
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<td>LPG Detector Zone 1 (Tank Yard)</td>
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## OBSERVATION/ RECOMMENDATION

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<tr>
<th>B</th>
<th>MANIFOLD /TANK ACCESSORIES</th>
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<td>Pressure Regulator</td>
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<td>6</td>
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<td>7</td>
<td>Pressure Gauge</td>
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## OBSERVATION/ RECOMMENDATION
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**OBSERVATION/ RECOMMENDATION**

**INSPECTION CONDUCTED BY:**

**APPROVED BY:**

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