



DALMIA CEMENT (B) LIMITED



ARIYALUR

MECHANICAL

Issue No. 01	Rev. No: 00	Effective Date: 01-11-2019	SOP/MECH/193
Issued By: M.R		Approved By: HOD (Mech)	
SOP-JSA FOR FIRE HYDRANT NEW PIPELINE CONNECTION			

Scope : This SOP is applicable to Safe working for FIRE HYDRANT NEW PIPELINE CONNECTION.

Responsibility : **Section Engineer – Mech.**

Accountability : **Section Manager – Mech.**

PPE:

1. Helmet.
2. Safety shoe.
3. Ear plug.
4. Safety goggles.
5. Hand Gloves.
6. Nose mask.

Tools:

1. Box Spanner set.
2. Ring Spanner set.
3. Welding machine.
4. Electrode.
5. Cutting set.
6. Nylon rope.
7. Waste cloth.



DALMIA CEMENT (B) LIMITED



ARIYALUR

MECHANICAL

Issue No. 01	Rev. No: 00	Effective Date: 01-11-2019	SOP/MECH/193
Issued By: M.R		Approved By: HOD (Mech)	
SOP-JSA FOR FIRE HYDRANT NEW PIPELINE CONNECTION			

Hazards:

Risks associated

Electrical shock

Pressurized water release

Fall of objects

Mitigating Measures

1.Safe and tested tools and tackles

2. on job training

1. Safe pressure release on pipeline.

1. Usage of certified lifting tools.

Training needs:

1. Fire fighting.
2. Emergency preparedness.
3. Electrical prevention training.
4. Assembly procedure.
5. Safe lifting procedure of equipment's.



DALMIA CEMENT (B) LIMITED

ARIYALUR

MECHANICAL



Issue No. 01	Rev. No: 00	Effective Date: 01-11-2019	SOP/MECH/193
Issued By: M.R		Approved By: HOD (Mech)	
SOP-JSA FOR FIRE HYDRANT NEW PIPELINE CONNECTION			

Procedure:

1. Take the Mechanical LOTO for pump or valves.
2. The LOTO and permit paper should be with the person who is working in the site.
3. Before LOTO make sure the availability of fire tender on that area for emergency.
4. Depressurized the water or liquids in the pipeline.
5. Poke a hole on top area of pipeline to depressurize the pressure on pipeline and for draining.
6. After complete drying clean the surface of the tapping area and weld the pipeline.
7. Clear the electrical and mechanical LOTO.
8. Take the trial check the for any leak.

Emergency / Emergency Shut OFF:

1. If body injury is there, First aid will be given and inform to the Safety department or Call Emergency number 3108/ 9865152222



DALMIA CEMENT (B) LIMITED



ARIYALUR

MECHANICAL

Issue No. 01	Rev. No: 00	Effective Date: 01-11-2019	SOP/MECH/193
Issued By: M.R		Approved By: HOD (Mech)	
SOP-JSA FOR FIRE HYDRANT NEW PIPELINE CONNECTION			

Records/Annexure:

1. JSA is enclosed below.
2. Isolation Matrix.

JOB SAFETY ANALYSIS :(JSA)

Job Safety Analysis	Job:Fire hydrant new pipe line connection.	Date: 04– 05 - 2020	Analysis by: Section Engineer	Reviewed by: Section Head
Title of employee doing job: Section Engineer	Supervisor: Section Engineer	Department: Mech.	Section: UTILITY	Approved by: HOD Machanical
Req'd/recommended PPE: Safety helmet, Safety shoe, Safety goggles, Ear plug, nose mask & Rubber hand Gloves.				
Sequence of Basic Job Steps	Potential Hazards	Recommended Safe Job Procedure	What Could Go Wrong	Corrective Action
Valve operation	Hand injury / Fatal	Closed the out let valve and open the drain (manual) valve	System will be pressure raised it will blasting the system	Ensure valve condition before start the work
Welding on pipeline	Electrocution/Fire incident	Proper earthing/Fire tender	Electrocution and fire hazard	Proper earthing /fire tender.
Pressure releasing	Hand injury / Fatal /fall	Gradual releasing of pressure	Slip,trip,and injury may occur.	Proper lifting procedure.
Lifting of pipe	Hand injury/slip and fall/Fatal	Proper lifting of heavy objects.	Fall of object	Proper lifting of heavy objects.



DALMIA CEMENT (B) LIMITED



ARIYALUR

MECHANICAL

Issue No. 01	Rev. No: 00	Effective Date: 01-11-2019	SOP/MECH/193
Issued By: M.R		Approved By: HOD (Mech)	
SOP-JSA FOR FIRE HYDRANT NEW PIPELINE CONNECTION			

Isolation Matrix:

SL No	Activity			Isolation Matrix for Utility & General Equipment.							
				Isolation Type							
				Electrical Energy				Other Energy			
1	Fire hydrant new pipeline connection	Fire hydrant pump & jockey pump 700-FYP-6A & 6B, 700JYP6A	Isolate the Related other energy isolation					Isolate or closed the valves			