

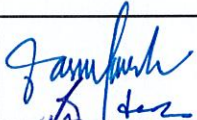
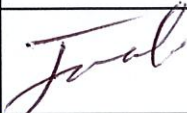





QAPCO
شركة قطر البتروكيماويات
QATAR PETROCHEMICAL COMPANY

HSE INSTRUCTION FOR EXCAVATION CERTIFICATE

Instruction NO: IN-250-HSE-10

Approved by	Name	Jonathan Cook	
	Position	Chief HSE Officer	
	Date	5/6/18	

Rev#	Date	Prepared by	Reviewed By			
1	22/05/2018	Sr. HSE / Safety officer	HSSE Support/ Safety Manager	TGM	MGM (PE/SC)	MGM (Vinyl)
						

 QAPCO شركة البتروكيماويات القطرية QATAR PETROCHEMICAL COMPANY	HSE INSTRUCTION FOR EXCAVATION ACTIVITIES	Procedure	:	IN-250-HSE-10
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Revision / Modification History

Rev#	Date	Page	Section	Reason of Revision / Modification
0	20-Nov- 2016	All	All	<ul style="list-style-type: none"> ▪ Converted as Instruction and modified as per new organization structure. ▪ Change from procedure to instruction as per BT requirements. ▪ Excavation permit is renamed as excavation certificate. ▪ Template of Form "D" altered as per business requirements. ▪ Add term and definition as per new template. ▪ Add section -5 Responsibilities. ▪ Update procedure reference. ▪ Add sequences of signatures & break down of Form D. ▪ Add issuing check list as section -2 in permit form D. ▪ Add contractor safety officer responsibilities. ▪ Change form Execution to Lead Executor. ▪ Change operation to Permit Issuer. ▪ Add Filed Operator signature in section 5 of certificate. ▪ Remove Operation specialist signature, add execution supervisor signature section 4 of form D.
01	22/5/2018	All		<ul style="list-style-type: none"> ▪ Instruction revised to integrate QAPCO PTW system with QVC PTW after merging. ▪ Updated the reference list as relevant. ▪ Updated the definitions as relevant. ▪ Removed Safety Agent authorization from signature list for excavation certificate. ▪ Add the requirement that all boxes in the certificate must be ticked (✓) for YES and (X) for NO. ▪ Changed the distribution of the certificate copies. ▪ Updated the certificate form as required. ▪ Update the roles and responsibilities as per revised excavation form. ▪ Provide unique form number on excavation certificate. ▪ Job readiness audit added

Distribution

Through *intranet* (QAPCO Staff)

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1.0 PURPOSE

This HSE instructions provides the guidelines on completing the excavation certificate form and to follow the safe practices during excavation activities in QAPCO premises.

These instructions lay down the requirement for safe systems of work to be administrated and maintained to ensure that safe disturbance of ground and floor. This document outline are carried out safely. It outlines the controls to be exercised, and specifies requirements for defining the precautions to be taken, and for identifying any consequent limitations that may become applicable.


2.0 SCOPE

These instructions applies to all QAPCO employees and contractor. A separate work permit should be issued for each excavation certificate and all control measure identified in the work permit procedure will be applicable with excavation activities.

The excavation certificate form is applicable in all areas within the QAPCO complex for all works that needs to be carried out by excavation of soil exceeding a depth of 30 centimeters.

Note: Any excavation deeper than 1.2 mtr. shall also be considered as a confined space and a confined space certificate shall be required.


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3.0 DEFINITIONS & ABBREVIATIONS


#	Abbreviation / Key word	Definition summary
1.	Area/ Asset owner	PTW qualified & authorized person appointed by area owner Manager (Such as Shift supervisor, maintenance day coordinator OR responsible supervisor from area owner).
2.	Benching system	A method of protecting employees from cave-ins by excavating the sides of an excavation to form one or a series of horizontal levels or steps, usually with vertical or near-vertical surfaces between levels.
3.	Cave-in	Sudden movement into the excavation, either by falling or sliding, in sufficient quantity so that it could entrap, bury, or otherwise injure and immobilize a person.
4.	CHSSEO	Chief HSSE Officer.
5.	Dewatering	Removal of accumulated water from excavated trench.
6.	Excavation	An excavation is any man-made cut, cavity, trench, or depression in the earth's surface formed by earth removal.
7.	Excavation inspection	A competent person who will check the excavation safety inspection and verify that excavation/ trench is safe to work.
8.	Execution supervisor/ Planner	QAPCO Employee direct supervise Lead Executor or responsible to plan & execute the task and extensively knowledgeable about the task. He can be from QAPCO maintenance/ ESD/ Technical development / Project representative.
9.	Gas Testing	The testing of the atmosphere of the confined space using a calibrated portable direct reading instrument by QAPCO authorized gas tester (AGT) to detect the concentration of oxygen, flammable or toxic gases.
10.	Hand Tools	Manual tools used to excavate the ground (e.g. spade, pickaxe, etc.)
11.	Hazardous atmosphere/ Toxic Atmosphere/ Flammable Atmosphere	An atmosphere that may expose employees to the risk of death, incapacitation, impairment of ability to self-rescue, injury, or acute illness from one or more of the following causes: (1) Flammable gas above 0% LEL. (2) Atmospheric oxygen concentration below 19.5% or above 23.5%. (3) Airborne combustible dust at a concentration that meets or exceeds its LFL. (4) Toxic gases are present above their threshold limit value (TLV). (5) Any other atmospheric condition that is immediately dangerous to life or health.
12.	HOD	Head of Section.
13.	Job Readiness Audit	A audit to ensure the verification identified control measures implementation before start of activity at site.
14.	Ingress & Egress	Ladders, steps, ramps, or other safe means of egress for workers working in trench OR excavations.

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15.	Lead Executor	Is a person who is trained and qualified for QAPCO work permit system and responsible to ensure that all conditions of the permit, agreed to with the Permit Issuer, are being fulfilled at all times throughout the job. He can be a QAPCO staff or a contractor employee.
16.	MGM	Manufacturing Group Manager
17.	MSDS/SDS	It is a document that contains information on the potential health effects of exposure to chemicals, or other potentially dangerous substances, and on safe working procedures when handling chemical products.
18.	Power Tools	Mechanical tools and equipment used to excavate the ground (e.g. Excavator, Power shovel, Back Hoe, Jack hammer etc.)
19.	Ramp	An inclined walking or working surface that is used to gain access to one point from another.
20.	Shield System	A structure that is able to withstand the forces imposed on it by a cave-in and thereby protect employees within the structure. Shields can be permanent structures or can be designed to be portable and moved along as work progresses
21.	Shoring/Side Protection	Any type of protection provided to the sides of the excavation to prevent cave in is termed as side protection and can be shoring. A structure such as a metal hydraulic, mechanical or timber shoring system that supports the sides of an excavation and which is designed to prevent cave-ins.
22.	Sloping system	A method of protecting employees from cave-ins by excavating to form sides of an excavation that are inclined away from the excavation so as to prevent cave-ins.
23.	Standby man	A dedicated person who watch the excavation safety
24.	Support system	A structure such as underpinning, bracing, or shoring, which provides support to an adjacent structure, underground installation, or the sides of an excavation
25.	Surface encumbrances	Heavy loads such as heavy machinery, heavy materials or large spoil piles near edge of excavation result in cave-in. Existing site features such as buildings, curbs, trees, utility poles and other structures adjoining the excavation area may be considered as types of surface encumbrances.
26.	TGM	Technical Group Manager
27.	Trench	Narrow underground excavation that is deeper than it is wide, and is no wider than 15 feet (4.5 meters).
28.	Underground installation/ subsurface facilities	Estimated location of utility installations, such as sewer, telephone, fuel, electric, water lines, or any other underground installations that reasonably may be expected to be encountered during excavation work


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4.0 REFERENCES DOCUMENTS

S.no	Document ID	Document Title
1	M-250-QSS- 01	HSE-IMS (integrated Management System) manual (<i>Previously known as SMS</i>)
2	PR-QSS-114	Work Permit Procedure
3	IN-250 –HSE-07	HSE Instructions for Cold work Permit
4	IN-250-HSE-08	HSE Instructions for Hot work Permit
5	IN-250-HSE-09	HSE Instructions for Confined space entry
6	PR-QSS-127	Job safety Analysis
7	IN-250-HSE-03	QAPCO 12 Golden Rules at work
8	PR-QSS-110	Incident Reporting and investigation Procedure
9	F-250-HSSE-05	Excavation certificate


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5.0 RESPONSIBILITIES

Role	Responsibilities
Line Manager	<ul style="list-style-type: none"> Responsible to ensure that this guidelines are followed
Plant Section Head	<ul style="list-style-type: none"> Accountable for all works undertaken within his / her area of control Knowledge of the Excavation instruction (IN-250-HSE-10) Ensure that there is no conflicting activities in the area that may introduce the additional hazards and he should ensure that hazards are identified for conflicting and non- routine activities and control measures are in place.
Execution Planner	<ul style="list-style-type: none"> Schedule the activities and arrange the resources (Spare parts, manpower, equipment certificate, e.t.c) Identify the Job Safety Analysis requirement Identify the required permits and certificate. Develop a Method of statement (MOS) Assign task to execution supervisor
Execution supervisor (QAPCO)	<ul style="list-style-type: none"> Review and ensure that the Excavation Certificate details are correct and authorize its application Inspect work site with area owner when required and ensure that hazard /precautions are adequately identified in certificate form. If JSA is required, lead JSA process & ensure JSA is approved. Obtain the authorization from electrical, automation and mechanical planners/ engineers. Approve the excavation certificate
Electrical/ Automation / static planning engineers	<ul style="list-style-type: none"> Check excavation certificate and verify that all unground installations are identified and marked if any. Ensure updated drawings are available and marked up to identify all buried services if any underground services, communicate to execution supervisor & signed the excavation certificate.
Sr. Safety Officer	<ul style="list-style-type: none"> Participate job safety analysis Ensure that hazards are identified for the job & appropriate control measures are recommended. Onsite Coaching of people about safety system. Perform frequent audits and safety checks, advise the workers and ensure safe systems are followed.
Lead Executor	<ul style="list-style-type: none"> Understand the job and risks associated

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	<ul style="list-style-type: none"> Ensure underground installations are identified at site. Sign for acceptance of the excavation certificate It will be the lead executor responsibility to ensure that the PPEs requirements are followed by personnel working under his control. Ensure that the job safety analysis, control measures are reflected in excavation certificate It is the lead executor responsibility to ensure that all participants working under the task adhere to the conditions and agreement stated on the excavation certificates. If the conditions or the risks of the work changed, reassess the job and suspend if considered necessary.
Field Operator/ Contractor safety officer	<ul style="list-style-type: none"> Knowledge of excavation instruction (IN-250- HSE- 10) Ensure that all safety equipment is available & all workers are using required PPEs. Perform frequent audits and safety checks and ensure PTW system is complied with.
Sr. Safety Agent	<ul style="list-style-type: none"> Support working team for safety related issues. Perform the job readiness Audit Conduct site verifications and ensure the compliance with QAPCO procedures/instructions.

6.0 GENERAL HSE REQUIREMENTS:


- All excavation works must be properly planned, executed & monitored
- An excavation certificate is not authority to start the excavation activity, execution supervisor must obtain work permit from respective area owner to perform excavation.
- No work permit will be issued until relevant certificates are prepared and approved.
- Excavation certificate provides a provision to plan & communicate excavation activities at earlier stage.
- Area owner or his designate to conduct a “job site inspection” with the execution supervisor to understand equipment, worksite preparation and identify all the potential task hazards.
- All excavation certificate should be accompanied by a well-defined drawing outlining
 - The location of the excavation
 - The dimensions of the excavation (length, width and depth)
- The job requestor must ensure that all drawings and other relevant documents attached with the Certificate are current and up to date.
- Drawings are considered to be indicative only of the presence and approximate location of the underground services for the purpose of this instruction
- Any excavation of greater **than 30 cm** depth requires an excavation certificate
- The initial depth of **1.5 meters** will be manually dug using only hand tools. (In area, where as built undergrounds are not available, certificate issuer not sure about the underground facility.

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11. Any excavation ≥ 1.2 meter should be considered as a confined space and confined space entry instructions (IN-250-HSE-09) must be applicable and confined space entry certificate to be issued.
12. All QAPCO authorities for all disciplines (Auto/electrical, mechanical and civil) shall check the proposed work scope before approving excavation certificate.
13. When exposing underground services, substantial barriers must be erected to prevent any damage.
14. If any exposed underground pipeline is leaking then work must stop until the leak is attended or the pipeline depressurized/gas-freed.
15. When excavating in the vicinity of pipe racks, the ground around the base of the support columns must not be disturbed unless alternate protection is provided for the supports.
16. Adequate protection shall be provided to protect employees from loose rock or soil that could pose a hazard by falling or rolling from an excavation face. Such protection shall consist of scaling to remove loose material; installation of protective barricades at intervals as necessary on the face to stop and contain falling material, placing and keeping materials or equipment at least 2 feet (0.61 m) from the edge of excavations, or by the use of retaining devices that are sufficient to prevent materials or equipment from falling or rolling into excavations, or by a combination of both if necessary.
17. When using mechanical excavation, a safe distance of 10 feet or 3.5 meters shall be maintained from the underground facilities. If this distance cannot be maintained manual excavation has to be performed.
18. Mechanical removal of surface concrete or asphalt surfaces is permitted.
19. If the excavation is going to block the main streets or avenues, the firefighting team shall be informed and an alternate route for emergency vehicle access determined prior to excavation
20. If any unidentified underground services are encountered during the excavation work, the permit issuer shall be contacted immediately and work shall be suspended until clearance is granted to proceed.
21. When any excavated soil is contaminated, lead executor has to contact the environment representative to discuss the approved method of disposal.
22. Excavated earth, vehicles and heavy-equipment are not allowed closer than 1 meter from the edge of the excavation.
23. If the excavation site is to be left unattended it must be fenced and barricaded off by hard barriers. The barricade should be made of material that will prevent a fall for e.g. scaffold pipes.
24. Excavation within plant operating area must be filled back if the job is not planned to be continued for more than one week and close relevant certificates. (Plant Operating area means areas within battery limits of Olefins and Polymer plants, Vinyl, Storages, WWT plant etc.)
25. Access facilities to the excavation (e.g; ladders) shall be removed or blocked when the excavation is left unattended.
26. Appropriate warning signs shall be provided on all excavations.
27. Warning lights are required for all excavations that remain operating overnight: yellow blinking lights.

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28. Personnel shall not work in excavations where there is water accumulation unless adequate precautions are taken. *The precautions necessary to protect employees adequately vary with each situation, but could include special support or shield systems to protect from cave-ins, water removal to control the level of accumulating water, or use of a safety harness and lifeline.*
29. In case of rain fall excavation certificate will be suspended and the excavation site must be inspected by the executor/issuer to ensure that the safety measures are still adequate and not breached.
30. The lead executor shall ensure that the excavation shall have a proper means of access and egress especially for trenches
31. The lead executor shall ensure that all means of side protections provided is of sound construction, good repair and is provided by using the best engineering practice.
32. The Lead Executor shall ensure all the temporary crossings provided over excavations are of suitable strength and width and provided with handrails.
33. During the excavation, the job Lead Executor has to ensure that the work crew are subjected to adequate rest periods and a standby person is present to alert in the event of any emergency.
34. No excavated earth (soil) shall be permitted to be accumulated inside the restricted area. It shall be removed from the site.
35. For any mechanical excavation a trial manual excavation using hand tools (i.e., Shovels, Spades, Trowels, etc.) is performed to a depth of 1.5 meters around the perimeter of the proposed excavation area. Execution supervisor area owner & safety representative has to inspect this trial excavation to confirm the absence of underground facilities and only then mechanical excavation can proceed.
36. All heavy vehicles, such as crane, excavator or dumper truck, must have a banksman to guide the driver while the vehicle is being manoeuvred within 3 meters of any or excavations.
37. For high risk excavation activities, a JSA to perform before issuing excavation certificate by involving execution supervisor / Planner, area owner representative and safety representative.
38. Job readiness audit is mandatory for excavation activities, field operator shall ensure its compliances before issuing the work permit.
39. Job reediness audit shall be performed by safety agent after the certificate is filled but just before the final signature for approval. It is the responsibility of area owner to call for job reediness audit. JRA (Job Reediness Audit) is a temporary check put in place by HSE to ensure smooth and safe transition to the new PTW system.


7.0 PROCESS:

7.1 Excavation certificate divided into following sections:

1. Job Scope identification
2. Underground services identification
3. Safety Precautions
4. Approval
5. Close Out

7.2 Sequence of Certificate- approval signatures is as follows;

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1. Requestor
2. Planning Engineers (Elect/ Auto/ Mechanical / Other)
3. Lead Executor
4. Execution supervisor

Close Out

5. Lead executor
6. Area/ asset owner

SECTION -1 Job scope identification

- a) Requestor/Execution Supervisor will complete the information for section-1 plant, tools and equipment to be used, execution party, proposed width and depth of excavation & description of excavation).

Note: If depth of excavation is ≥ 1.2 meters then Confined Space Entry Certificate needs to be prepared..

- b) Execution supervisor shall verify the length, location and depth of excavation in the excavation certificate.
- c) Execution supervisor shall mention contractor /task execution party and ensure their competency to perform the job safely.


SECTION -2 underground services Identification):

- a) Based on information provided in section 1 of certificate form and width, depth and location of proposed excavation electrical / automation/ mechanical planners or engineers will mark the underground services with complete information on drawings.
- b) The estimated location of utility services, such as sewer, telephone, fuel, electric, water lines, or any other underground services that reasonably may be expected to be encountered during excavation work, shall be determined prior to opening an excavation.
- c) Excavation area should be marked at site clearly.
- d) An excavation certificate cannot be open without confirmation of underground services and electrical/ automation & mechanical planner signatures.

SECTION-3 Safety Precautions:

- a) Based on hazard identification and scope of work, permit issuer will describe the safe equipment condition and other precautionary measures under this section.
- b) All the safety precautions related to equipment that need to be taken to render the site safe are checked by the permit issuer.
- c) Lead Executor should understand the equipment safe conditions, other precautions and he should check and ensures that all the precautions are taken and acceptable.

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- d) Lead Executor must communicate the hazards and its precautions to his team through TBT
- e) Emergency rescue equipment, such as breathing apparatus, a safety harness and life line, or any other emergency equipment, shall be readily available where hazardous atmospheric conditions exist or may reasonably be expected to develop during work in an excavation, or when it deemed required by the JSA.
- f) If additional resources are requested by operation or identified by the involved team during hazard identification phase to perform activity safely, Lead Executor have to provide the additional required protection measures.
- g) Initial gas testing will be performed by field operator. (when required)
- h) If frequent gas test is recommended, Lead Executor is responsible to arrange frequent gas testing or continuous gas monitoring.
- i) All scaffolding platform must be inspected and approved by certified inspector and Lead Executor is responsible to ensure that scaffolding platform is checked and verified as per QAPCO requirement. (Daily check by users and weekly inspection by certified inspector).
- j) Execution supervisor shall brief to Lead Executor about required PPEs and other precautionary measures for the task & Lead Executor ensure that he & his team fully comply with PPEs requirement during execution of activities.
- k) Any other precaution to be taken but not listed shall be added in the space provided.

SECTION-4 Review & approval

- a) Before signing for approving excavation certificate, Lead Executor and Execution Supervisor (QAPCO) should understand the scope of work, hazards identified and precautionary measures then sign on the certificate to confirm that all conditions mentioned above are met.
- b) Execution Supervisor will sign the certificate after agreeing on the conditions/precautions mention in (Section-1, 2 & 3), work method and PPEs requirement.
- c) It is the Lead Executor responsibility to ensure that all participants working under the task adhere to the conditions and agreement stated on the Excavation certificates and other associates permits.
- d) Execution supervisor is final authority to approve the certificate.
- e) Field operator will process job readiness audit only after the complete verification of isolation and precautions.
- f) Job readiness audit will be conducted by safety agent with field operator and lead executor and noncompliance of permit or certificate shall be identified in audit form and communicate to concerned supervisors.
- g) On satisfactory result of Job readiness audit, field operator authorize the activity by signing on the hard copy of cold work permit

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Note: *Approval of certificate is not authority to start the excavation, a separate work permit shall be required to perform the activity.*

Hand over: If work is to be carried over to another shift, the job shall be properly handed over to the shift in charge personnel. The hand over shall ensure that the new crew is aware of the job, the status of the job, and any additional information in regards to the job.


SECTION-5 Close out:

- a) **Excavation within plant Operating area must be back filled if the job is not planned to be continued for more than One (01) week and excavation certificate to be closed.**
- b) It is the responsibility of Lead Executor to ensure the backfilling or compaction is done after completing task and housekeeping of the area has been performed.
- c) If required, the Executor shall revalidate the permit till the excavation is refilled.
- d) The executor has to ensure all the tools and barricades material are removed from the site then initiate the permit and certificate close out.
- e) The Field operator shall inspect the work area and confirm housekeeping conducted.
- f) Area owner will confirm job completion and initiate the certificate closure on both copies (hard & carbon)
- g) Before closing of certificate, area owner shall ensure that associate work permits shall be closed.
- h) Closing of certificate by area owner shall be considered as final closing.
- i) If the excavation certificates is linked with other certificates, area owner should ensure that associate certificates are closed before taking the equipment into service.
- j) If any isolation was performed, a cancellation of isolations to be performed only after closing of all other relevant work permits.

8.0 SUSPENSION AND CANCELLATION OF CERTIFICATE:

- a) Lead Executor shall ensure that if job is stopped due to arising hazardous situation developing in the area he should correct the situation and all tests and precautions stated on the original work permit form and excavation certificates shall be repeated and confirmed.
- b) If the Lead Executor has to **suspend** his job due to job of higher priority he has to inform the permit issuer and leave the certificate in the control room.
- c) If the copy of the Work Permit or excavation certificate is lost during the execution of activities, Lead Executor shall immediately stop the work and approach the permit Issuer to close the Work Permit/ certificate. Lead Executor should inform the reason for closure of certificate.
- d) In case of any **incident** related to activities performed under specific excavation certificate or its associated permits, Lead Executor should stop the job & inform to CCR (permit Issuer). All the relevant permits/certificates will be closed and new permits/certificates will be issued.

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- e) If plant **Emergency siren sounds** at any time during the job: Stop all work, excavation certificate is cancelled automatically in both affected and non-affected areas. Refer to the Emergency Response Procedure and action plan for more details. Equipment must be turned off and secured as quickly as possible. Job Lead Executor is to notify the Permit Issuer when they are at the designated assembly point.

-
- 1. Fire & Safety Representatives must inspect the job site after a work stoppage due to emergency or incident to revalidate jobs in this site.*
 - 2. Field Operator shall immediately barricade the area in case of any incident happen to preserve the scene for investigation purposes.*
-

- f) If **Changes in conditions** (such as Work method, scope of work or tools and equipment during validity of the certificate, execution supervisor & permit Issuer must review the changes and work must be stopped, If changes affect the certificate conditions then new certificate shall be issued.

9.0 CERTIFICATE DISTRIBUTION

- After approval the certificate original or the first copy will remain with area owner (CCR)
- The hard copy will be attached with work permit and kept at work site when activity is being performed.
- The hard copy can be requested at any time by any QAPCO responsible person.

10.0 FOLLOW UP AND RECORDS

- After closing of certificate, the hard copy (**with all attachment**) will remain with the area owner in the CCR and the original (first copy) will be kept by the Executor department.
- All work permits are kept in CCR for a period of one month.


11.0 APPENDIX:

11.1 Excavation certificate Template

11.2 Job readiness Audit


11.3 Excavation Certificate Process Flow

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11.1 Excavation certificate Form: (F-250-HSSE-05)

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11.2 Job readiness Audit: (Excavation Activities)

PTW #						
S.No.	ACTIVITY	Yes	No	NA	*Action Taken (If No)	**status
1.	Job scope and detailed work description identified					
2.	Equipment to be used identified					
3.	JSA recommendations are implemented and identified in the respective Permits.					
4.	Underground services identification done. (Drawings attached with certificate and marked on site) in case any underground facilities.					
5.	Signboards are in place for excavation and area barricaded					
6.	Shoring/sloping/benching done (if required)					
7.	Mechanical excavation (if required) to be done after 1.5 meters is clearly understood by crew					
8.	If excavation is deeper than 1.2 meters confined space requirement is understood by the permit issuer and receiver					
9.	If streets or avenue is blocked due excavation, an alternate route for emergency vehicle is provided and FF informed.					
10.	PPE's required are available at site					
11.	TBT is conducted and workers aware of task hazards and communication					
12.	If excavated soil is contaminated, Environment representative has been informed about the safe method of disposal.					
13.	Rest periods has been defined and a standby person is present to alert in the event of any emergency.					

Action taken to mitigate risk if answer is NO

** Verify the condition of equipment/ requirement after actions taken

- If the answer for any of the above check points is NO, the work shall not commence and concerned superiors shall be notified
- This check list is valid only for one shift, If the work duration exceeds more than a shift, the next incoming Area Operator shall ensure that PTW and relevant certificate requirements are complied
- The check list should be attached to the cardboard(executor) copy of cold/hot work permit and available at site

Check & Confirm By:

Checked By	Name	Signature	Date/ Time
Sr. Safety agent			

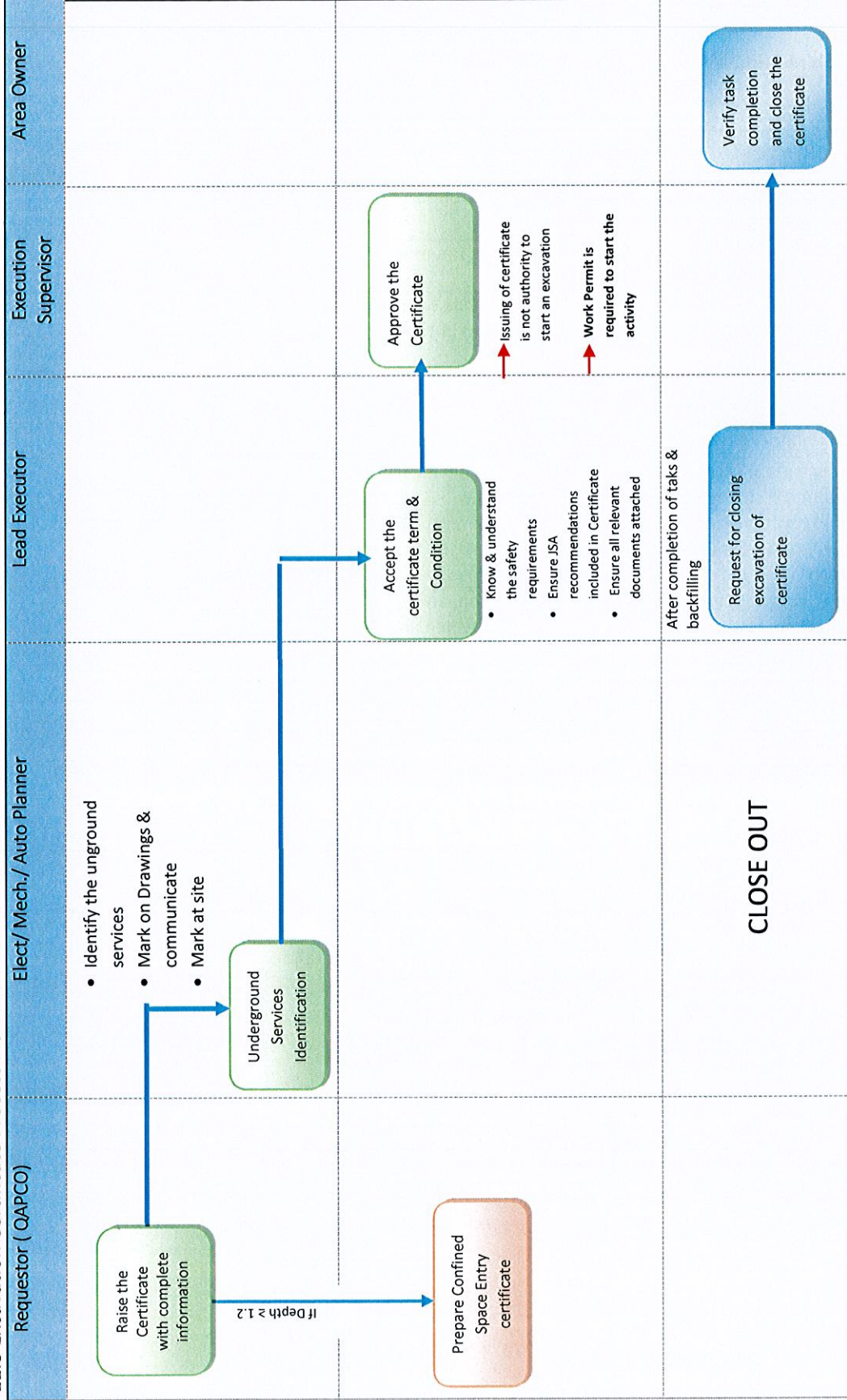
Prepared by	Sr. HSE/ Safety Officer	Reviewed by	HSE Support / Safety Manger	TGM	MGM (SC/PE)	MGM (Vinyl)	Approved By	CHSSEO
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11.3 Excavation Certificate Process Flow



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