PERMIT TO WORK PROCEDURE

1 PURPOSE

This procedure defines the standard Permit to Work framework along with roles and responsibilities to be followed while performing non-routine tasks at BinRasheed Colors & Chemicals and Pakistan Coating Chemicals (PCC).

2 SCOPE

This Procedure is applicable to all locations and offices of BinRasheed Colors & Chemicals, Pakistan Coating Chemicals (PCC) and all employees and contractors working on those locations. The procedure and permits are to be used on any (part of a) location where BinRasheed Colors & Chemicals and has control.

Jobs requiring permit to Work (PTW):

a. De-energizing and isolating equipment LOTOTO
b. Execution of jobs involving Hot work
c. Line breaking/opening of process equipment
d. Execution of activities (routine & non-routine) involving working at heights or on unprotected / fragile / sloped roofs
e. Excavations or wall breaking etc.
f. Use of cranes/excavators/dumper truck or any other constructionequipment
g. Work on high voltage
h. Work on live circuits

Jobs exempted from PTW:

a. Any tasks for which a written safe working procedure is available. This procedure shall be based on a documented Risk Assessment and authorized by General Manager or his respective designate

b. Maintenance on equipment removed from the operational area e.g. in Maintenance Workshop. However, Permit to Work shall be required to remove the equipment in the first place and consideration shall be given to decontaminate any potentially hazardous chemicals within the equipment as per operating procedure.

c. All jobs being carried out by the Plant Operators to run the plants.

d. Jobs being carried out by Maintenance crew inside any area at the plant site and declared as “Maintenance Area”.

3 DEFINITIONS

3.1 Area Manager

Those having overall responsibility for the area under their control are Area Managers.

Unit 2:

Sr#	Areas	Area Manager
01	LMD Production Area	LMD Production Manager
02	PCC Production Area	PCC Production Manager
03	LMD Lab	Lab Manager (LMD)
04	PCC Lab	Lab Manager (PCC)
05	All Raw Material Stores, Bulk solvent storage areas, Drum Yard, open areas and roads where raw materials are placed	Store Manager
06	Administration building, Head office area, Canteens, lawns, Car Parking, Scrap Yard, Gate Offices, Boundary Wall (inside and outside)	Administration Manager
07	Electrical Sub Stations, Switch rooms, Diesel Generators, All electrical panels (anywhere at the site)	Maintenance Manager
09	Regional Offices	Regional Sales Manager

Unit 1:

Sr#	Areas	Area Manager
01	Production Line 1-8	Deputy Manager/Shift In charge
02	Filler Section	Deputy Manager/Shift In charge
03	SMDE Production & Lab	Deputy Manager/Shift In charge
04	SMD Lab	Deputy Manager / Assistant Manager QC
05	Raw Material Stores, Warehouse, open areas and roads where raw materials and Finished Goods are placed	Store Manager
06	Administration building, Open Areas (roads/lawns), Roof Top, Canteens, Car/Motor Cycle Parking, Scrap Yard, Prayer Area, Gate Offices, Boundary Wall (inside and outside) and Residential Colony	Administration Manager / Officer
07	HT Room, LT Room including Diesel Generator, All electrical panels (anywhere at the site)	Maintenance Manager

3.2 Authorized Issuing Authority

It is the group or individual who has been formally authorized by the Site General Manager (after passing test regarding PTW systems) to issue Permits to Work & has the ownership and / or operating control of the equipment to be worked upon e.g., Area Managers etc.

For jobs inside MCCs Maintenance Manager who has cleared the work permit test is the authorized Issuing Authority.

For all Admin Controlled areas Administration Manager/officer will be the Issuing Authority, Security Supervisor may also be given Issuing Authority for jobs on off days / off hours.

3.3 Authorized Receiving Authority

It is the group or individual which has been formally authorized by the General Manager on clearance of work permit test, to receive Permits to Work for execution of agreed work on any equipment, machine or system.

List of issuing and receiving authorities is attached as Annexure A & B for unit 2 and 1

3.4 Joint Visit

Visit by both Issuing and Receiving authorities to the location (before issuance of the permit) where job is to be executed. This joint visit is mandatory and is to be carried out for all jobs for which a Permit to Work is required.

3.5 Isolations

Isolation means creating a separation so that the energy or chemicals do not reach the job area.

For process piping

a- By inserting a blind
b- Breaking (separating) flanges
c- Closing and locking valves.

For electrical isolation

a- By ensuring physical separation using breakers
b- Local isolators only in the event of activity being performed by the machine owner and proper risk assessment and consequently SOP is available and worker trained and validated on that procedure
c- By removal of plugs for only plug fed equipment

For mechanical isolation

a- By physically separating the couplings and locking the mechanical motion of the shaft to be worked on.

LOTOTO

A systematic method for isolating installations, machinery and systems in order to prevent the release of stored energy and/or hazardous chemicals, in such a way that only the person carrying out the work can affect the flow of energy or supply of chemicals. Also known as

Lock-out, Tag-out and Try-out.

Confirmation of Isolation

The only recommended method is by giving a start signal to the equipment or physically approach to open the valve or rotate the machinery. This will be checked by both Issuing and Receiving authority before issuing a PTW.

For job on electrical panels and electrical circuits, confirmation of electrical isolation may be confirmed with the help of electrical tong tester (Multi meter).

3.6 Permit to Work

It is the documentation that ensures Safety, Health and Environment precautions have been considered and addressed prior to any repair / maintenance activity. The purpose of Permit to Work is to ensure that jobs are safely planned, equipment is properly prepared, employees are adequately informed and work is safely executed.

3.7 Excavation/ Break-In:

Any operation that disturbs ground, walls, floors, or ceiling which conceal services or provides structural support, and includes such operations as nailing, driving of poles, piles and pipes, drilling, chasing and excavations. For excavations more than 300 mm certificate is required to prevent direct contact with underground power lines or process piping or prevent employees from exposure to hazardous substances in polluted soil and groundwater.

3.8 Confined Space

Any vessel or space large enough for entry (depth greater than 4 feet) that is not intended for continuous occupancy, where there exist limited means of exit and/or the potential for life threatening condition (e.g. hazardous fumes or oxygen deficiency). This include holes in ground and temporary enclosures.

A confined space entry permit is required to be attached with the permit to work for entry of personnel into enclosed spaces such as tanks, vessels, bunds more than 4 feet deep, ducts and drains, some very enclosed spaces such as under floors or anywhere that it is possible that toxic vapors or gases could accumulate or oxygen level could be depleted.

3.9 Hot Work:

Hot Work is any activity capable of producing flames/sparks, heat generation, or any other form of ignition. Examples include welding, any equipment with open flames (e.g. blow torches, space heaters) grinding, drilling, hammering, using battery operated non-classified equipment in classified area etc.

All Electrical* Jobs on *Live Electrical Circuits shall be considered as Hot Work

3.10 Working at Height:

This permit is required when work is to be done at heights more than 1.8 meters with no working platform with guard railing. This includes roofs, pipe bridges or structural work where it is not practical to erect a temporary working platform. Scaffold is considered to be a safe working platform but Working at Height permit is usually necessary to ensure all other hazards along with height hazards are taken care of. The scaffold should be properly inspected, approved for use and display a valid "scaffolding inspection tag" indicating its safe status.

3.11 JSA:

Job Safety Analysis/ Task Risk Assessment are important analyzing tools that work by finding hazards and eliminating or minimizing them before the job is performed. These tools help prevent exposures before they have a chance to cause injuries or damage.

Job Safety Analysis/ Task Risk Assessment are used for job clarification and hazard awareness, as a guide in new employee training, for periodic contacts and for retraining of senior employees, as a refresher on jobs that run infrequently, and for informing employees of specific job hazards and protective measures. It can also be used as an incident investigation tool.

These risk assessments usually include listing the steps needed to perform the task, analyzing the potential hazards associated with each step, and documenting the steps taken to prevent or mitigate the hazards.

3.12 Locked and Tagged:

The fitting of a Lockout device together with a Tag to an Energy Isolating Device in order to ensure that the equipment cannot be energized until the Lock and Tag have been removed. In this context, locked means the physical installation of a (pad) lock, a blind flange in a pipe, the removal of an auxiliary energy supply (disconnection of the air line from an actuator), or some other adequate isolating device.

A Tag must always be attached to the lockout concerned.Tags alone are not sufficient isolation.

3.13 Risk Assessment

A detailed stepwise analysis of the activity to be executed in order to address the specific hazards and define the necessary control measures to be taken at each step.

3.14 Standard Operating Procedure (SOP):

Standard Operating Procedure is the stepwise activity detail including normal as well as emergency operation and has been developed using a risk assessment conducted for that particular activity.

3.15 Method Statement

Method statement is the statement that is mentioned on each PTW that defines "WHAT" will

be done to carry out the job as per the PTW. The method statement should include the activity detail along with the tools that are going to be used. Method statement should give clear guidance regarding the job to the person who is going to perform the job (Receiving Authority)

3.16 Validity of Work Permits

Confined space and hot work permits are valid for single (8 hr) shift and can be extended only once, if the conditions and the counter measures have been reassessed and found adequate for the safe execution of the job.

Cold work permit is also valid for single (8 hr) shift and can be extended for multiple times (not more than 6 times) if the conditions and counter measures have been reassessed each time and found adequate for the safe execution of the job.

All permits shall be considered cancelled if issuing /receiving authority leaves the site for remaining part of the day/permit validity time.

4 Requirements

4.1 Following requirements are mandatory;

Planning the work

During planning of jobs one must consider the below mentioned:

a- Sequence of activities/sub activities for the execution of the planned job.
b- How the activities/sub activities of planned jobs will be executed.
c- Interaction of planned activity with other ongoing activities.
d- Time and resource requirements for risk assessment.
e- Preparation of worksite.
f- Preparation of equipment/piping/vessels etc. for safe execution of planned job including LOTOTO requirements.
g- Preparing required work permits.
h- Simultaneous jobs/activities and assessment for compatibility.
i- Consider if the hazardous task can be performed in an alternatively, less hazardous way? If so, examine the advantages and disadvantages before deciding to proceed with the work.
j- Risk assessments on any new or modified tasks.

4.2 Preparation of work site

Before a permit can be issued, the worksite & the equipment must be made ready for work. Hazards need to be eliminated or controlled, & provisions made for the actual work.

4.3 Preparation of worksite requires

a- Provision for easy access to and exit from the worksite e.g. scaffolding etc.

b- Work area cordoned off and protected.

c- Equipment isolations from energy sources and proving of isolations (LOTOTO).

d- Removal of hazardous materials, depressurization, cooling and draining.

e- Equipment cleaning/de-contamination.

f- Drains covered and sources of vapor isolated

g- Combustible materials removed e.g. pigments dusts/powder on floors.

h- Adequate lighting and ventilation provided.

4.4 Retention Period

Documentation requirements for storage of signed forms in place.

The original as well as the hard copy of PTW needs to be stored 3 months to allow proper review and record.

4.5 Training of all employees and contractors involved in PTW system

All roles identified must have a defined level of competency. Training, including refresher training, should be given to ensure that the roles and responsibilities within the Permit to Work process are fully understood, and the competency matches the level defined for the role.
Competence levels should be regularly checked and training and competency records kept and updated.
The purpose of training is to provide individuals with the understanding, knowledge and skills necessary to fulfill their responsibilities.

4.6 Audit of Permit to Work system

The Permit to Work process audit to be planned as mandatory requirements.

4.7 Maintenance at off-site locations:

Since there are limited technical expertise available at off- site locations (Regional Offices and warehouses), all major jobs are carried out through approved vendor by our engineering team. For minor repairs off-site maintenance procedure is followed.

5 COMMUNICATIONS AND TRAINING

All area managers will be responsible for communication and training for the effective implementation of this procedure.

Amendment History Record

Revision Number	Section	Amended Text

PERMIT TO WORK PROCEDURE

Annexure A

List of PTW Issuing and receiving Authorities – Unit 2

Area	Issuing Authority	Backup
LMD Production	Faisal Altaf	Tariq Naveed
PCC Production	Ahmed Raza	Muhammad Bashir
LMD Lab	Muhammad Mughees Saif	Ramesha Fatima
PCC Lab	Muhammad Wajahat	Fareed ul Haq
Store	Rao Faheem	Shaheed Ullah
Admin	Ali Raza	
Receiving Authorities	Muhammad Abu Bakar	Istikhar Ahmad

Note: Personnel mentioned above shall be responsible issuing/receiving authorities subject to passing the validation test and formal approval by GM.

PERMIT TO WORK PROCEDURE

Annexure B

List of PTW Issuing and receiving Authorities – Unit 1

Area	Issuing Authority	Backup
SMD Production	Imran Rasheed	Fazal Khan
SMDE Production	Umair Afzal	Suleman
Line 10	Rafaqat Ali	Suhail Haider
Lab	Maqsood Ahmad	Arif Kamal
Store	Irfan Shahid	Zaheer Abbas
Admin	Muhammad Zeshan	Imran Abid
Receiving Authorities	Arqam Sattar	Waqar Aslam

Note: Personnel mentioned above shall be responsible issuing/receiving authorities subject to passing the validation test and formal approval by GM.