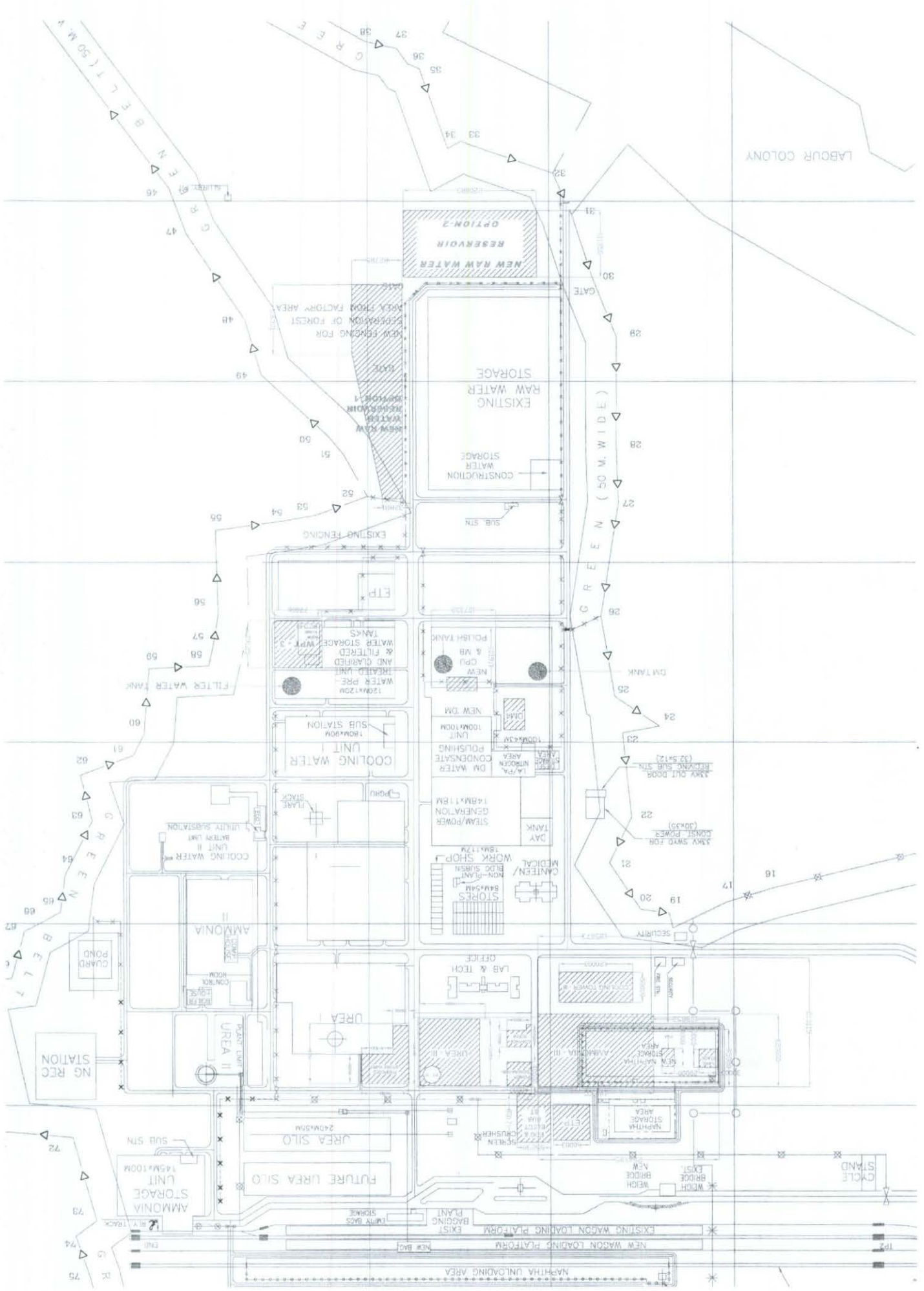


ANNEXURE – II

SITE PLAN



LABOUR COLONY

NEW RAW WATER RESERVOIR - OPTION 2

EXISTING RAW WATER STORAGE

NEW FORMING FOR SEPARATION OF FOREST AREA FROM FACTORY AREA

COOLING WATER UNIT I

COOLING WATER UNIT II

WATER PRE TREATED UNIT

WATER STORAGE & FILTERED

POLISH TANK

NEW DM UNIT

DM WATER CONDENSATE POLISHING

STEAM/POWER GENERATION

DAY TANK

CANTEN/BLDG SURVEY

MEDICAL STORES

WORK SHOP

LAB & TECH OFFICE

UREA III

UREA II

UREA SILO

FUTURE UREA SILO

AMMONIA STORAGE UNIT

AMMONIA STORAGE AREA

NAPHTHA STORAGE AREA

ETP

SUB STN

CYCLE STAND

WEIGH BRIDGE

EXIST. BRIDGE

NEW WAGON LOADING PLATFORM

EXISTING WAGON LOADING PLATFORM

BAGGING PLANT

UREA UNLOADING AREA

NEW REC STATION

GUARD POND

EXISTING FENCING



GATE

50 M. WIDE GREEN BELT

LABOUR COLONY

ANNEXURE -- III

OCCUPATIONAL HEALTH & SAFETY OF THE WORKERS

CHAMBAL FERTILISERS AND CHEMICALS LIMITED, GADEPAN KOTA	
HSEQ SYSTEM PROCEDURE	Doc. No. HSEQ/05/05
IDENTIFICATION OF UNSAFE CONDITIONS / ACT	Edition No. 01
& REPORTING OF NEAR MISS / INCIDENT / ACCIDENT	Rev. No. 00
INVESTIGATION AND ANALYSIS	Eff. date Sept 04 2007
Approved By: 	Issued By: 
Unit Head	MR

1 PURPOSE :

- 1.1 To identify unsafe act /conditions / ill health situations which may lead to accident, ill health / environment damage while at work in the factory premises and township.
- 1.2 To ensure that all near miss incidents or accidents are reported, documented and investigated to work out a corrective action plan for accident prevention.

2 SCOPE :

- 2.1 This procedure is applicable within factory premises including Precincts thereof to all employees /contract labour working inside factory premises and township.
- 2.2 This procedure shall cover near miss / incidents, accidents, and dangerous occurrences (Schedule annexed with Rule-101) and Notifiable Disease as mentioned in third schedule-see section 89 & 90 of factory Act 1948.
- 2.3 Procedure shall also cover reporting of "Make to Good" conditions identified as unsafe act /conditions / ill health situations which may lead to accident, ill health / environment damage while at work in the factory premises.

3 DEFINITIONS:

- 3.1 **"MAKE TO GOOD" CONDITIONS** Unsafe act/conditions/ill health situations which may lead to accident, ill health/environment damage while at work in the factory premises.
- 3.2 **NEAR MISS** Any undesired event that under slightly different circumstances, could have resulted in personal harm, property damage, and / or other losses.
- 3.3 **INCIDENTS** Work related event (s) in which injuries or ill health (regardless of severity) or fatality occurred or could have occurred.
- 3.4 **FIRST AID INJURY** An injury requiring only first-aid treatment, normally given by someone other than a physician.
- 3.5 **MINOR INJURY** A minor injury requiring first aid treatment at "Health Centre" and resume duty on same or next day and which is non-reportable.
- 3.6 **LOST TIME ACCIDENT** An accident that causes to someone disablement of temporary nature or his or her work impaired for more than 48 hours from the time of the accident.
- 3.7 **FATAL** Fatality resulting from an accident.
- 3.8 **DANGEROUS OCCURRENCES** Bursting of steam carrying equipment; pressure vessel, leakage of molten metal or toxic gas, collapse of floor/gall overturning of crane or collapse of lifting equipments like crane, winch, derrick etc.

4 PROCEDURE FOR IDENTIFICATION OF "MAKE TO GOOD" CONDITIONS (UNSAFE ACT / CONDITIONS / ILL HEALTH SITUATIONS) :

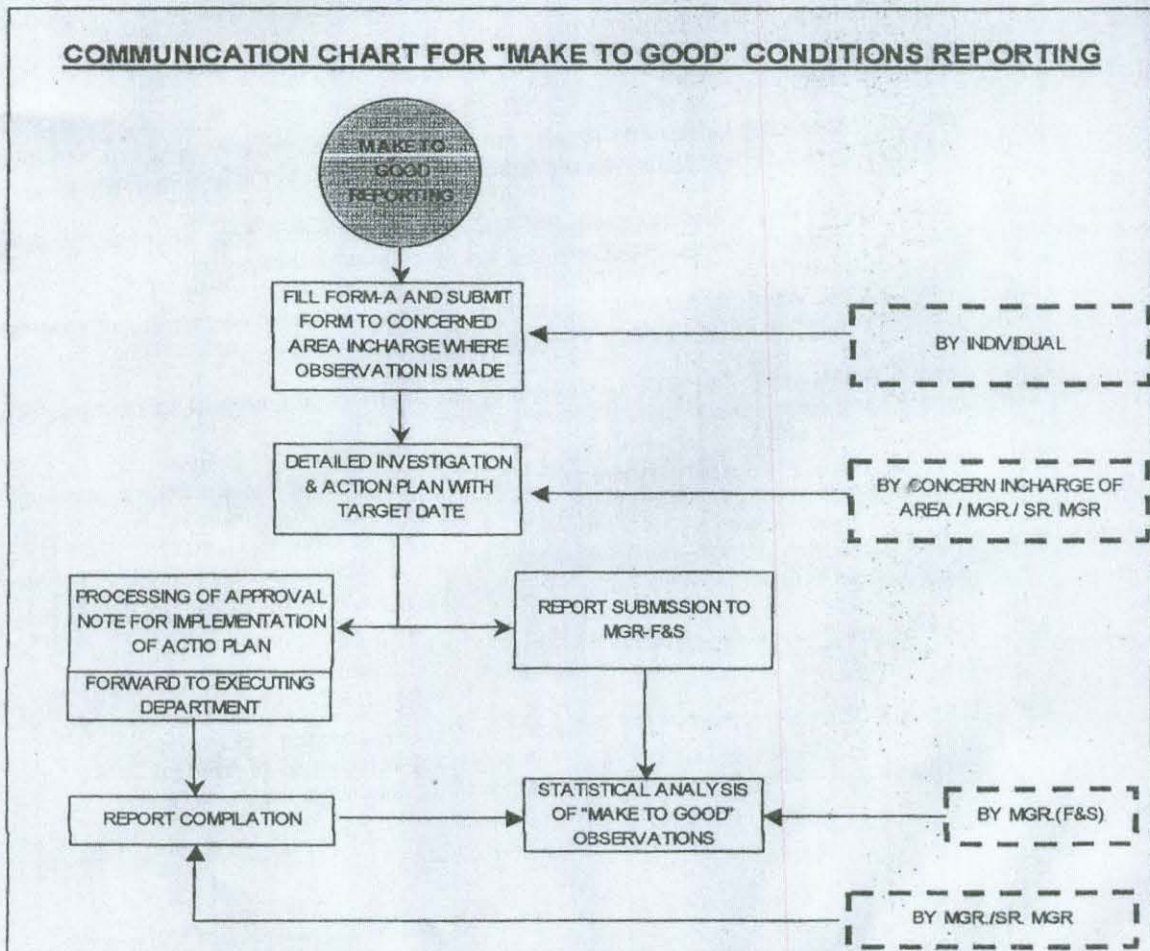
4.1 Potential hazardous situations, unsafe act and ill health causing conditions and corrective action can be identified by any individual company employee/contract labour within or outside his working area.

4.2 While identifying the potential hazardous situations, unsafe act, ill health causing conditions, importance is to be given to the situations and not the person involved for successful proactive monitoring.

4.3 The hazard can be categorized as :

<u>Category</u>	<u>Hazard Description</u>
Grade-A	Immediate Correction Required. (Activity should be discontinued till corrective action is taken to eliminate the risk or to lower it to the minimum level)
Grade-B	Urgent Attention Required (Activity should not be discontinued but urgent attention is required)

4.4 The identification of "Make to Good" conditions can be carried out by any individual and its reporting should follow the following route :



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4.5 Reporting Format :- The format for near miss incidence reporting shall be applicable to the "Make to Good" condition reporting also.

5 REPORTING, INVESTIGATION AND ANALYSIS OF NEAR MISS / INCIDENTS & FIRST AID INJURIES:

5.1 "NEAR MISS / INCIDENTS & FIRST AID INJURIES" REPORTING PROCEDURE

Any near miss incident and all first aid injuries occurring within factory premises shall be reported by an individual verbally or in a pre-structured reporting Form-A to the immediate supervisor.

In case of verbal information concerned immediate supervisor shall fill the Form-A.

5.2 INVESTIGATION OF NEAR MISS / INCIDENTS & FIRST AID INJURIES AND ACTION PLAN BUILD-UP

5.2.1 ACTION BY IMMEDIATE SUPERVISOR

Immediate supervisor on receiving the verbal information or the Form-A from an individual shall carry out preliminary investigation of near miss incidents and submit the report (Form-A) to his Mgr/SM.

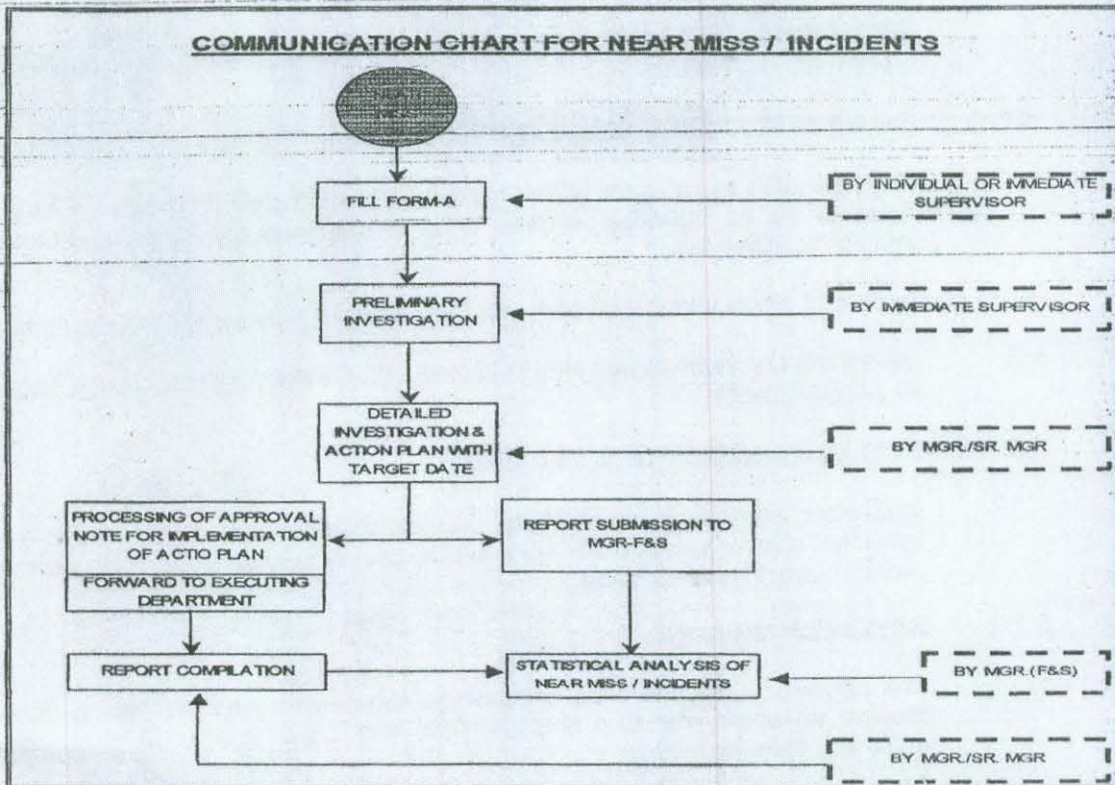
5.2.2 ACTION BY MGR / SM

5.2.2.1 The concerned Mgr/SM shall carryout the detailed investigation of the incident and prepare an action plan with responsibilities and target date for its implementation to avoid any accident in future.

5.2.2.2 Process the approval note for action plan and get it executed through Concerned Deptt. Prepare the compliance report of action plan.

5.3 ANALYSIS OF NEAR MISS / INCIDENTS & FIRST AID INJURIES

F&S Deptt. shall carry out the statistical analysis of near miss incidents and submit the same to management as well as publish the information for all concerned on monthly basis.



5.4.1 ACCIDENT REPORTING PROCEDURE

5.4.1.1 ACCIDENTS WITHIN FACTORY PREMISES

(a) In case of any accident, which shall include road accidents while coming or going back from duty the injured with help of co-worker / immediate supervisor shall be sent to Health Centre after providing first aid at site (if any).

(b) The concerned supervisor shall fill the preliminary Accident Reporting Form-B and deliver it to Health Centre for further action by Medical Officer.

5.4.1.2 ACCIDENTS OUT SIDE THE PREMISES

In case of accident outside the factory premises i.e. in township residential area the concerned employee shall report to Health Centre for treatment.

Medical Officer in turn shall inform

- Concerned Deptt. Head / Supervisor
- Manager (Fire & Safety)

so that all relevant procedures as defined in Section 5.4.3 can be initiated by concerned officials.

5.4.2 ACTION BY INJURED PERSON

5.4.2.1 Immediately report about injury /accident to the concerned supervisor.

5.4.2.2 If injury is not serious, get the preliminary accident reporting form "B", duly filled in by the supervisor and reach the health center for treatment.

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5.4.3 ACTION BY IMMEDIATE SUPERVISOR OF INJURED:

- 5.4.3.1 On receipt of information of accident rush to site, ascertain the injury and, if required, provide first aid with available facilities at site.
- 5.4.3.2 Prepare Preliminary Accident Report in - "Form-B" and send it to Health Centre through a special messenger or through injured person (Hard copy). The same form also to be e-mailed to Medical Officer for further routing.
- 5.4.3.3 In case of serious injury immediately send the patient to health centre and inform the following:
- SM / Mgr. Concerned Plant
 - Medical Officer / Health centre
 - Fire & Safety Deptt.
- 5.4.3.4 Carry out the detailed investigation and prepare report in "Form-C" and send it to Mgr.-F&S through plant in-charge within 24 hours of accident.
- 5.4.3.5 In case of loss time accidents, send the joining intimation (after resuming duty by injured) to Mgr.(F&S). Employee must produce a Medical Fitness Certificate from Company's Medical Officer before joining the duty.
- 5.4.3.6 In case of fatal accident, preserve the site evidence after removal of Casualty till further instruction from Deptt. Head.

5.4.4 ACTION BY SECTION IN-CHARGE / HEAD OF DEPARTMENT:

Section in-charge / Head of department shall ensure that:

- (i) Ensure that injured person has been moved to Health centre and is under proper medical care.
- (ii) Ensure that accident is reported well in time in Form-B.
- (iii) Carryout the detailed investigation and prepare necessary corrective action plan, fill in Form-C and send it to Mgr-F&S.
- (iv) Take the required administrative approval for implementing the action plan within targeted time frame and monitor the same.

5.4.5 ACTION BY MEDICAL OFFICER / HEALTH CENTRE:

- (i) On receipt of information of accident, send ambulance (after ascertaining location of accident site) to bring the injured to "Health Centre".
- (ii) As Soon as injured person reaches health center provide him the medical aid ascertaining the extent of injury. If injured is serious, arrange to send him to Kota for specialized treatment and telephonically inform the following officials:

- (a) VP-O
- (b) GM-TS&P
- (c) GM-concerned
- (d) DGM-HR&A
- (e) Mgr.-F&S

} In case of serious injury where person has to be sent for specialized treatment.

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(iii) Complete 'Form-B' clearly indicating if rest is advised for more than 48 hours send it back to the concerned Plant In-charge. A soft copy of the same shall also be forwarded to following officials :

- (a) VP-O
- (b) GM-TS&P
- (c) GM-concerned
- (d) DGM-HR&A
- (e) Mgr.-F&S

(iv) In case Form-B has not been received from the concerned Supervisor, advise the concerned plant/area In-charge to expedite the same [communicating through e-mail or phone].

5.4.6 ACTION BY MGR- F&S / F&S DEPTT. :

- (i) After receiving information of accident from Health Center/Department concerned, rush to the accident site to know the root cause/ to provide assistance if required.
- (ii) In case form-B has not been received from the concerned Supervisor at Health Center, advise concerned area / plant In-charge to expedite the same communicating through e-mail with a copy to HOD.
- (iii) **In case of loss time accident:** On receiving the Form-B from Medical Officer for accidents where the rest has been advised by the Doctor for more than 48 hours, prepare "Form-20" based on "Form-C" and send it to Dy. Chief Inspector of Factories and Boilers, Kota through Unit head.
- (iv) **In case of Fatal Accident:** Complete Form -20, based on Form -"B" & "C" and send the information to following authorities as per rule-101 of Rajasthan Factories Rules-1951 :

Authorities

- a) Chief Inspector of Factories & Boilers Jaipur.
- b) DY. Chief Inspector of Factories & Boilers Kota
- c) District Magistrate or sub-Divisional Officer Kota
- d) The officer I/c of SIMLIYA Police Station.
- e) Relatives of Victim

Information by

- Through GM (TS&P)
- By DGM (P&IR)

This information should be sent within 12 hours of fatality.

5.4.7 ACTION BY DGM (HR & A) / DGM (P & IR):

In case of loss time / serious / fatal accident, DGM (HR&A) / DGM (P&IR) shall take care of medical / welfare part of injured person and liaison with local authorities.

5.4.8 INVESTIGATION OF ACCIDENTS:

- 5.4.8.1 In all the cases of accidents, immediate supervisor shall fill the "Departmental Accident Investigation Report Form-C" and send it to SM /Mgr for review within 24 hrs of Accident.

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5.4.8.2 SM-Concerned, after review shall mention the necessary corrective action plan and forward the "Form-C" to the Mgr-F&S.

5.4.8.3 Mgr-F&S along with the concerned Mgr/SM shall carryout the detailed investigation of accident and prepare accident investigation report in pre-structured "Form-D" and forward the same to the following officials;

- (a) VP-Q
- (b) GM-TS&P
- (c) GM-concerned
- (d) DGM-HR&A

5.4.8.4 Manager (F&S) shall also prepare a synopsis from this report along with remedial measures / action taken and circulate it to all departments for information of employees.

5.4.8.5 In case of fatal or serious accident over and above the routine investigation as defined in 5.3 if required by Unit Head further investigations shall be carried out by a committee separately formed by Unit Head.

5.4.9 ANALYSIS OF ACCIDENTS:

Mgr-F&S shall carry out the statistical analysis of accidents and submit the report to management on Monthly and Yearly basis.

Statistical Analysis shall be carried out for following indices:

$$\text{Incident Rate} = \frac{\text{No. of Loss Time Injury} \times 1000}{\text{Average number of persons employed}}$$

$$\text{Frequency Rate} = \frac{\text{No. of loss time injury} \times 10^6}{\text{Total manhours worked}}$$

$$\text{Severity Rate} = \frac{\text{No. of mandays lost} \times 10^6}{\text{Total manhours worked}}$$

$$\text{Safety Index} = \frac{\text{Total manhours due to loss time injury}}{\text{Total million manhours worked}}$$

6 CLOSURE & COST ANALYSIS OF ACCIDENT

6.1 Accident closure shall be initiated by Medical Officer through Form-E.

6.2 At the time of issuing fitness certificate, Medical Officer shall also fill cost incurred on the *treatment including cost of providing Ambulance and additional nursing assistance, if any.*

6.3 Medical Officer shall forward the form to concerned SM / Mgr who shall complete the balance entries on the form and send it to Mgr. (F&S) through HOD.

6.4 Based on the information provided on Form-E, Mgr.(F&S) shall complete the accident closure and statistical reports.