ON SITE EMERGENCY PLAN

AND

DISASTER MANAGEMENT PLAN

OF

MAIHAR CEMENT LIMESTONE MINES

BHADANPUR

DISTT: SATNA

(MADHYA PRADESH)

PIN CODE - 485772

01. **LIST OF ANNEXURES**

S.No.	PAGE No /ANNEURES	TITLE OF ANNEXURES
01.	8A	Safety Organization chart
02.	14	List of fire equipment placed at Mines
03.	18	List of Lightening conductors
04.	23A	Emergency co-ordination chart of mines
05.	29A	Layout of Mines showing emergency control centre.

02. IMPORTANT TELEPHONE NUMBERS

S.No.	PARTICULARS	PHONE NUMBER	
		OFFICE	RESIDENCE
01.	Director Mines safety	07612412691	07612411856
02.	SHO (Police), Badera	9893901519	
03.	Sub Divisional Magistrate, Maihar	(07674)232050	(07674)232005
04.	Police Control Room- Maihar	(07674)232047	
05	Fire Brigade, Maihar	(07674)232054	
06	Fire Brigade, Satna	(07672)223202 & 101	
07.	Fire Brigade, Katni	(07622)101	
08.	Fire Brigade M/s. Satna Cement Works	(07672)412000	
09.	Fire Brigade M/s. Kymore Cement Works	(07626)272301, 272212	
10.	CMO- Birla Vikas Hospital- Satna	(07672)257411	
11.	Mines Security gate	4042	9425811240
12.	Factory Fire Station	2098	9425811704

03. INTRODUCTION

3.1.1 DEFINITION

A major emergency in industry is one, which has the potential to cause serious injury or loss of life. It may cause extensive damage to property and serious disruption in work inside and outside the premises. It would normally require the assistance of emergency services to handle it effectively.

It must be realized that any incident may develop into a major emergency even with the best safety measures and programmes in any industry.

Hence an emergency preparedness should be planned properly and documented for ease of implementation at the time of need without losing time and avoiding. Chaos and confusion etc. at the hour of the need by assigning specific responsibilities to persons, who will render services in meeting emergency smoothly and effectively

3.1.2 SCOPE

An important element of mitigation is emergency planning, i.e. recognizing that accidents are possible, and assessing the consequences of such accidents and deciding on the emergency procedures, both on-site and off-site, that would need to be implemented in the event of an emergency: -

- To protect mines personnel and nearby private citizens.
- To prevent or minimize damage of property or the environment.
- To render help to the person at site to provide him relief.
- To restore the affected area as soon as possible.
- To review incident to evaluate and strengthen the emergency management response for future emergencies.

04. OBJECTIVE

The objectives of Emergency Preparedness Plan is to describe the company's emergency preparedness organization, the resource availability and response actions applicable to deal with various types of emergencies that could occur at the mines with organization structure being deployed in shortest time possible during the emergency.

Thus the overall objectives of the emergency plan are summarized as:

(a) Rapid control and containment of Hazardous situation.

(b) Minimizing the Risk and impact of event/accident.

(c) Effective prevention of damage to property.

In order to achieve effectively the objectives of emergency planning, the critical elements that form the backbone of Emergency Management Plan are:

a. Reliable and early detection of an emergency and immediate careful planning.

b. The command, co-ordination and response organization structure along with availability of efficient trained personnel.

c. The availability of resources for handling emergencies.

d. Appropriate emergency response action.

e. Effective notification and communication facilities.

f. Regular review and updating of EMP.

g. Protect training of the concerned personnel.

Minimizing the effects may include rescue, first aid, evacuation, rehabilitation and giving information promptly to people living nearby and scrutinized information's to media.

05. ABOUT US

Maihar Cement Limestone mines complex is located near Bhadanpur village at a distance of 14 Kms from the town of Maihar on the Maihar-Dhanwahi road. Maihar Cement, one of the three pillars of the Cement Division of the "Century Textiles & Industries Limited" a leading multi- product company of the famous BK Birla Group of Companies.

Maihar Cement takes pride in adaptation of the most modern, scientific and state of art technologies and its constant and innovative technology up-gradation. It was commissioned in the year 1979.

Maihar cement is one of the pioneers in the production of Portland Pozzolana Cement (PPC), the crying need of the country from the point of view of extending the life of mineral lime stone (the basic raw material for cement), as also preserving the natural environment.

LOCATION OF THE MINE-

Bhadanpur lime stone mine – Distance from NH-7	=	14Km
Distance from Tehsil – Maihar	=	14 Km
Distance from Dist. Satna	=	50 Km
Distance from Bhadanpur Village	=	1.5 K m

Mailing address- Maihar cement lime stone mines (Bhadanpur)

Village- Bhadanpur, Tehsil- Maihar, Dist- Satna,

Pin No-485772 State- Madhya Pradesh.

06. GENERAL DETAILS OF MINES

01	Name of the plant	Maihar Cement
02	Address/Telephone Numbers Fax/E-mail address/Website.	**MAIHAR CEMENT** (Prop: Century Textiles & Industries Limited) P.O.: Sarlanagar - 485772 Tahsil: Maihar District: Satna (Madhya Pradesh). Telephones: 07674-277067,068,350 Fax: 07674-277802,352,806,836 **E-mail:** mc.mines@centurycement.com **Website:** www.maiharcement.co.in
03	Distance from nearest Railway Station (Maihar)	14 Kilometers
04	Distance from Railway Station (Satna)	44 Kilometers
05	Distance from main Bus stand	15 Kilometers
06	Important persons of Mines	Chief General Manager (Mines) General Manager (Mines) Sr Manager (Mines, Elect, Mech, P&A) Safety Officer
07	Name of mineral	Limestone
08	Probable danger	Fire, Explosion & Inundation etc
09	Name of the site controller	Shri S.K.Sinha CGM (Mines) Agent Mines

MAIHAR CEMENT: SARLANAGAR

07. NAME AND ADDRESS OF THE DIRECTORS OF THE COMPANY

(As on 01-04-2016)

S.No.	Name		Address
1.	Shri B.K.Birla,	Chairman	Birla Building 9/1, R.N.Mukharjee Road, Kolkata – 700 001
2.	Shri Kumar Manglam Birla	Vice Chairman	Aditya Birla Centre S.K. Ahire Marg , Worli , Mumbai -400 030
3.	Smt. Rajashree Birla	Director	Aditya Birla Centre S.K. Ahire Marg , Worli , Mumbai -400 030
4.	Shri Pradip Kumar Daga	Director	16, Hare Street Kolkata - 700 001
5.	Shri Yazdi P. Dandiwala	Director	Mulla & Mulla & Craigie Blunt & Caroe Advocates, Solicitors & Notaries 51,M.G. Road, Fort Mumbai- 400001
6.	Shri Rajan A. Dalal	Director	21,Nymph Off Narayan Dhabolkar Marg ,Nepeansea Road Mumbai – 400 006
7	Shri Sohanlal Kundanmal Jain	Director	Kundan Chambers, Turbe Chambers,Turbe Park, Near Sancheri Hospital,Shivajinagar Pune 411005
8	Shri D.K. Agrawal	Whole Time Director	Industry House 159, Churchgate Reclamation, Mumbai - 400 020

MAIHAR CEMENT: SARLANAGAR

08. Residential Address, Telephone Nos. of the Principal Officers in the Organization:

Description	Name	Residential Address	Phone Number	
			Office	Residence
INTERNAL NUMBERS				
President (Works)	Shri R.K Vaishnavi	Bungalow No. C/02 Maihar Cement P.O.: Sarlanagar- 485772 Distt: Satna (MP)	2024	3024
Sr. Vice President (Finance)	Shri Manoj Gupta	Bunglow No. C/06 Maihar Cement, Sarlanagar	2045	3045
Sr. Vice President (Pers. & Admn.)	Shri S.K Singh	Bunglow No. C/12 Maihar Cement, Sarlanagar	2104	3104
Chief General Manger (Mines)	Shri S.K Sinha	Bunglow No.C/02 (Mines) Maihar Cement, Sarlanagar	4022	4072
General Manger (Mines)	Shri P.K Rai	Bunglow No. D/02 (Mines) Maihar Cement, Sarlanagar	4012	4062
Deputy General manager	Shri S.S.Sarna	Bunglow No. D/05 (Mines) Maihar Cement, Sarlanagar	4031	4067
Senior Manager (Electrical)	Shri H.P.R Sharma	Bunglow No. D/01 (Mines) Maihar Cement, Sarlanagar	4015	4065
Senior Manager (Mechanical)	Shri N.K Shukla	Bunglow No. E/14 (Mines) Maihar Cement, Sarlanagar	4018	4068
Administrative officer (P & A)	Shri Roop Singh Thakur	Bunglow No. F/13 (Mines) Maihar Cement, Sarlanagar	4007	4057
Safety Officer (Mines)	Shri A.K Singh	Bunglow No. SE/01 (Mines) Maihar Cement, Sarlanagar	4019	4069

09. PARTICULARS OF THE PROCESS AND UTILITIES WITH THE SIGNIFICANCE IN RESPECT OF HAZARDS.

SL. NO.	VARIOUS STAGES OF PROCESSING	SAFETY MEASURES IMPLEMENTED	SAFETY MEASURES TAKEN DURING USE
01.	LIME STONE CRUSHER	1. Railings with toe boards are provided at one side of hopper for checking safely from top. 2. Emergency stop switch is provided at hopper top for crusher unit. 3. Paging system is provided for safe communication. 4. Warning hooter is provided for caution. 5. Wheel guard is provided on Grizzly feeder drive. 6. Crusher torsion shaft and other dangerous parts are fenced. 7. Dust extraction is provided to control air pollution. 8. Clearance indication is provided.	1. Electrical "Permit to work" is taken before starting any work. (In "Permit to work" system isolation of particular electrical line is to be done till work is completed) 2. Safety belt is used while work in hopper. 3. Before starting any work inside hopper, a caution board is kept and one man is posted at hopper top to stop feed from mines.
02.	Handling, Storage Trans- portation, Charging and Detonating of Explosives	1. Handling of explosive material is done by trained personnel only. 2. Storage of explosives is done in Magazines approved by Chief Controller of Explosives 3. Material used for construction of storage room is non flammable. 4. Lightening conductor, water quenching system, sand buckets are provided as per statue. 5. Storage site is free from shrubs and dry grass and overhead electrical line. 6. Transportation of explosives is done in explosive van of approved type and is maintained in sound mechanical condition.	1. As soon as fire or explosion is noticed, it is immediately informed to HOD (Mines), Mines Manager, Concerned Sectional Head, Time Office and Fire Station In-charge. 2. In case of major fires, information is sent to the factory fire tender. 3. For signaling emergency, the switch provided near the Magazine is operated to blow the Hooter provided near security gate. 4. Security persons shall also raise alarm and use telephone/ wireless/ PA system to inform all concerned.

SL. NO.	VARIOUS STAGES OF PROCESSING	SAFETY MEASURES IMPLEMENTED	SAFETY MEASURES TAKEN DURING USE
		7. Tools used for preparation of ANFO are of approved type made of wood and brass. 8. Charging of holes is done under the supervision of Blasting Foreman and Blaster. 9. No other activity is carried out in the vicinity where charging of holes is done. 10. Before detonating, the area of blasting is cleared around the radius of 500 M. No man or machine is allowed to remain in the danger zone. 11. Approved signaling system is used for getting clearance before and after blasting. 12. The key of the exploder is only in the possession of the blaster. 13. Certificates of the Blasting Foreman and Blaster have been granted by the Director General of Mines Safety. 14. All safety precautions laid down in the statue are being followed. 15. Fire extinguishers and sand buckets are provided at conspicuous places in mines area.	5. Fire is extinguished by trained fire fighting persons of mines and fire brigade of factory.
03.	Handling & Storage of Diesel	1. Smoking is not permitted in the storage area of Diesel. "No Smoking" boards have been displayed. 2. Persons have been trained for safe unloading of Diesel. 3. Earthing cable has been provided & used while unloading Diesel from tanker	In case of explosion or outbreak of fire, action shall be taken as per our onsite emergency plan.

SL. NO.	VARIOUS STAGES OF PROCESSING	SAFETY MEASURES IMPLEMENTED	SAFETY MEASURES TAKEN DURING USE
		4. Filling of underground tank is not done between the hours of sunset & sunrise 5. Water hydrant point and fire extinguishers provided near diesel storage area.	
04.	Transportation by dumpers	1. Area is kept Man Free. 2. Proper Signage like indicator lights for indicating the clearance for unloading operation is provided. Display boards indicating STOP is provided. 3. Provision of Reverse Audio Visual alarm.	Safe operating procedure as per MC-SOP-03 is followed
05.	BELT CONVEYORS (From crusher to plant and in the plant)	1. All conveyor belts are provided with trip wire system. 2. Head end and tail end are provided with nip guards. 3. Drives are provided with coupling guards 4. Walkway is provided at both sides for safe movement. 5. Cross over with railings provided wherever required. 6. Stop switches are provided 7. Proper illumination. 8. Interlocking is done to suit the process. 9. Water spray system provided on belts carrying hot clinker.	1. "Permit to work" is taken from concerned department. 2. Proper approach for work place is made. 3. Suitable tools and equipments are used. 4. Persons are sent away from the belt before starting it.
06.	Excavation and Loading	1. At the commencement of every shift, the operator shall personally inspect and test the machine, paying special attention to the following details; The brakes and every warning device	1. He is not swinging the bucket over the passing haulage units. While truck/dumpers are being loaded, he shall swing over the body of the truck/dumper and

SL. NO.	VARIOUS STAGES OF PROCESSING	SAFETY MEASURES IMPLEMENTED	SAFETY MEASURES TAKEN DURING USE
		are in working order and If the machine is required to work after daylight hours, lights are in working order. He shall not take out the machine for work, nor shall he work the machine, unless he is satisfied that it is mechanically sound and in efficient working order. 2. The operator shall keep the cab window glass clean so as to ensure clear vision at all times. 3. Walkways in or about the cab of any shovel shall be kept free of loose tools, grease containers, or other materials that might fall or present a falling or tripping hazard. 4. The operator is not operating the machine when persons are in such proximity as to be endangered. 5. The operator shall not allow any unauthorized person to ride on the machine.	not over the cab, unless the cab is protected by a substantially strong cover. 2. Before leaving the machine, the operator shall lower the bucket to the ground. 3. The operator shall not leave his machine during the shift. When he finishes his work, he shall hand over the machine to his relief, or lock the excavator cab. 4. The operator will perform loading and excavation work in such a manner that there is no undercutting or overhangs in limestone/overburden Benches. If any overhang is left it shall be reported to the shift in charge for remedial action.
07.	Drowning in Mines(Water logged area)	1. The peripheral area is properly is barricaded with a bund of 2 mtr height 2. Caution board displaying restricted area has been posted at adequate points 3. The whole area is monitored by the surveillance camera round the clock 4. Proper patrolling by security mobile van is done at adequate interval	1. Regular inspection by mining officials and Patrolling by Security

10. FIRE HAZARDS AND ITS PREVENTION

'No Fire - No existence of mankind'. If fire is not used properly, it can destroy everything. Loss of person and property is visible in day to day life.

For preventing fire, following points are suggested:-

1. Whenever highly inflammable goods are stored, electrical appliances to be used cautiously.
2. Do not keep waste papers, waste wooden pieces along with inflammable goods at a place.
3. Store inflammable liquids, lubricants in proper containers, tins with tight lid and also put label on it.
4. Knowledge of Fire extinguisher should be provided to the employees where the equipment is placed and how to use it.
5. Keep open-fire away from bed and cloths.
6. All of us should be educated about the consequences of storing petrol, kerosene near store and tool rooms.
7. Inspect your storing area periodically and put inflammable items, cloths etc. away from stores/ tool rooms.
8. Alertness proves fruitful in fighting fire hazards and saving society from huge loss of person and property.
9. Keeps firefighting equipment in good working condition.
10. Train security personnel in fire fighting to face situation in mishap.

MAIHAR CEMENT: SARLANAGAR

11. LIST OF FIRE EQUIPMENTS PLACED AT VARIOUS POINTS AS ON AT MINES : APRIL- 2016

S. NO	PLACE WHERE EQUIPMENT IN-STALLED	F/EXTI.NO.	TYPE OF FIRE/ EXTING.	CAPACITY	MANUFACTURING DATE
1	NEW CRUSHER UNDER GROUND FLOOR	1	DCP	05KG	2011
		2	DCP	05KG	2011
2	NEW CRUSHER 2nd FLOOR	3	DCP	05KG	_
		4	DCP	05KG	2011
		5	DCP	05KG	
3	NEW CRUSHER LC-1 PANEL ROOM	6	DCP	05KG	
		7	DCP	05KG	
		8	DCP	10KG	
		9	CO2	6.5KG	
		10	DCP	10KG	
		11	CO2	6.5KG	
		12	CO2	02KG	
5	WEIGE BRIDGE	13	DCP	05KG	
		14	DCP	10KG	
		15	CO2	6.5KG	
6	MCC ROOM NO.23 (NEARBC-2)	16	DCP	10KG	
		17	DCP	10KG	
7	COLONY GATE	18	DCP	05KG	2011
		19	DCP	05KG	2011
		20	MEC/FOAM	09LTR	
		21	CO2	6.5KG	
8	SECURITY GATE	22	CO2	02KG	
		23	DCP	05KG	
		24	DCP	05KG	
9	BATTERY ROOM	25	DCP	05KG	
		26	DCP	05KG	
10	PETROL/DIESEL TANK AREA	27	DCP	05KG	

S. NO	PLACE WHERE EQUIPMENT IN-STALLED	F/EXTI.NO.	TYPE OF FIRE/ EXTING.	CAPACITY	MANUFACTURING DATE
		28	DCP	05KG	
		29	MEC/FOAM	09LTR	
		30	MEC/FOAM	50LTR	2007
11	MOTER REPAIRING GARAGE	31	DCP	05KG	
12	MINES OFFICE, NEAR COMPUTER ROOM	32	DCP	05KG	2011
		33	DCP	05KG	2011
		34	DCP	05KG	2011
13	OFFICE MINES	35	CO2	02KG	2011
		36	CO2	6.5KG	
14	OLD CRUSHER CONTROL ROOM	37	CO2	02KG	
		38	CO2	6.5KG	
		39	DCP	10KG	2007
		40	DCP	05KG	2011
		41	CO2	6.5KG	
15	OLD CRUSHER OFFICE	42	CO2	02KG	
		43	DCP	05KG	
		44	WATER TYPE	09LTR	2007
16	MCC PANEL ROOM NO-22 HT SUB STATION	45	DCP	05KG	
		46	CO2	6.5KG	
		47	CO2	6.5KG	
17	OLD CRUSHER OIL ROOM	48	MEC/FOAM	09LTR	
		49	MEC/FOAM	09LTR	
		50	DCP	05KG	
18	MAGAZINE NO.1	51	WATER TYPE	09LTR	2007
		52	WATER TYPE	09LTR	2010
		53	MEC/FOAM	09LTR	
		54	MEC/FOAM	09LTR	
19	MAGAZINE NO.2	55	WATER TYPE	09LTR	2010

S. NO	PLACE WHERE EQUIPMENT IN-STALLED	F/EXTI.NO.	TYPE OF FIRE/ EXTING.	CAPACITY	MANUFACTURING DATE
		56	WATER TYPE	09LTR	2010
		57	MEC/FOAM	09LTR	2011
		58	MEC/FOAM	09LTR	
20	TT-1 (OLBC)	59	CO2	6.5KG	
21	TT-2 (OLBC)	60	DCP	10KG	
		61	DCP	10KG	
22	TT-3 (OLBC) MCC ROOM	62	DCP	10KG	
		63	DCP	10KG	
		64	CO2	6.5KG	
23	BC-6 (MCC ROOM)	65	DCP	05KG	
		66	DCP	05KG	
		67	CO2	6.5KG	
24	TT-4 (BC-7)	68	DCP	10KG	
		69	DCP	10KG	
		70	CO2	6.5KG	
25	TT-5	71	DCP	10KG	
		72	DCP	10KG	
		73	CO2	6.5KG	
26	BC-8 (MCC ROOM)	74	DCP	10KG	
		75	DCP	10KG	
27	DUMPER NO.09	76	DCP	05KG	
28	DUMPER NO.12	77	DCP	05KG	
29	DUMPER NO.13	78	DCP	05KG	
30	DUMPER NO.14	79	DCP	05KG	
31	DUMPER NO.15	80	DCP	05KG	
32	DUMPER NO.16	81	DCP	05KG	
33	DUMPER NO.17	82	DCP	05KG	
34	DUMPER NO.18	83	DCP	05KG	
35	DUMPER NO.19	84	DCP	05KG	
36	DUMPER NO.20	85	DCP	05KG	

S. NO	PLACE WHERE EQUIPMENT IN-STALLED	F/EXTI.NO.	TYPE OF FIRE/ EXTING.	CAPACITY	MANUFACTURING DATE
37	WATER TANKER	86	DCP	05KG	
38	EXPLOSIVE VAN (OLD)	87	DCP	05KG	
39	DRILLING MACHINE NO.1	88	DCP	05KG	
40	DRILLING MACHINE NO.3	89	DCP	05KG	2011
41	POCLAIN NO.4	90	DCP	05KG	
42	POCLAIN NO.5	91	DCP	05KG	
43	POCLAIN NO.6	92	DCP	05KG	
44	POCLAIN NO.7	93	DCP	05KG	
45	POCLAIN NO.8	94	DCP	05KG	
46	PAYLODER NO.4	95	DCP	05KG	
47	PAYLODER NO.5	96	DCP	05KG	
	AMBULANCE No. 2	97	DCP	05KG	
48	AMBULANCE No. 2	98	DCP	05KG	2011
49	WEIGE BRIDGE	99	DCP	05KG	
51	PIPRAHAT	100	DCP	05KG	
52	PIPRAHAT	101	DCP	05KG	
53	PIPRAHAT	102	DCP	05KG	

SUMMARY		
1	DCP- DRY CHEMICAL POWDER 05KG	53
2	DCP- DRY CHEMICAL POWDER 10KG	16
5	MEC- MECHANICAL FOAM 09LTR	8
6	WATER CO_2 TYPE 09LTR	5
8	CO_2- CARBON DI OXIDE 6.5KG	14
9	CO_2- CARBON DI OXIDE 02KG	5
10	MECHANICAL FOAM 50 LTR.	1
Total No of Fire extinguisher		**102**

12. SPECIAL EQUIPMENTS FOR FIRE FIGHTING

Following special equipments are also available with us for firefighting:

a) Combine Fire Tender (Water, Foam & Dry Powder) One

b) Super jet Foam Monitor (complete) One

c) Fire tanker Van with full equipments One

Combine Fire Tender

The above mentioned fire tender is with us. It has water tank of 3000 litres capacity; foam compound tank of 550 liters and dry chemical powder tank of 1000 kilo grams capacity in single vessel. All above tanks are provided in only one vehicle called combine fire tender.

In case of any type of fire, we can extinguish it with the help of water, compound foam or dry chemical powder whichever is needed on the fire ground. Thus this fire tender may protect our plant from major loss in case of fire.

FACILITIES AVAILABLE FOR FIRE FIGHTING IN NEARBY AREA

1. **Maihar Town:**

   The Maihar Municipality is having its own Fire-brigade. It is situated at only about 8 Kms distance.

2. **Satna City:**

   The Satna Municipal Corporation is having separate full fledged Fire brigade. It is situated at only about 45 Kms distance.

3. **Satna Cement Works:**

   It is situated at about 50 KMs from our site. In case of emergency requiring additional help they can assist with their mobile water pump mounted tankers.

4. **Kymore Cement Works:**

   It is situated at about 30 Kms from our site. They are also having adequate mobile facilities for fire fighting.

5. **Katni City:**

   The Katni Municipal Corporation is having separate full fledged Fire-brigade. It is situated at about 75 Kms distance.

13. LIST OF LIGHTENING CONDUCTORS

Lightening conductors are positioned at various locations in the Mines as follows:-

S.No.	Location	Height	Number of Lightening Conductors
01.	Magazine NO.1	4 M	4
02.	Magazine NO.2	4 M	4
03.	Magazine Camera Tower	7 M	1
04.	Near Transfer house	9 M	1
05.	Diesel dispensing pump	9 M	1
06.	Filtration plant	18 M	1
07.	Near Mines Time office	12 M	1
08.	Near 120T WB	26 M	1
09.	Purchase Stock	13 M	1
10.	Pit -A	12 M	1
11.	Near Panchwati	12 M	1
12.	ML-1 (South Block)	12 M	2

14. IDENTIFICATION OF HAZARDS

The following types of Hazards are identified at Limestone Mines:

a) Fire in HEMM, Electric Panels, Oil room, Diesel storage and near magazine.

b) Inundation in rainy season due to seasonal Nallah and barrier gets breached or when impermeable barriers are removed.

In case of fire in equipment emergency plan must be prepared and it can be controlled to quench it immediately at the source itself and not to allow it to spread. The relief to the person, who might be inside the machines or standing close by, is also considered along with revival of machines & preventing fire to spread further.

However a team of trained persons have been kept in readiness all the time, who can deal not only with fire emergency but also other emergencies if arise inside mines or off site emergency of any sort. So to deal the above emergencies, the Emergency Plan is prepared.

15. RESPONSIBILITY

The responsibility for establishing and maintaining DMP updated is of Head (Personnel and Administration) who is also nominated as liaison officer. He is responsible for preparation of the DMP and for ensuring that the plan and the applicable implementing procedures are reviewed and revised periodically.

Head (P&A) is also responsible for training of personnel to ensure that the adequate emergency response capabilities are maintained in accordance with the plan. He is further responsible for ensuring the adequacy of conducting mock drills outlined in DMP.

Head (Mines) is responsible for co-ordination jobs with various site managers and through him with the emergency team members for morale boosting and better co-ordination and liaison with district and tehsil level Government Officers for seeking as well as rendering services for ONSITE DISASTER MANAGEMENT as may be required.

15.1.1 ON-SITE EMERGENCY PLANNING

We shall discuss DMP in case of Fire applicability as under:

15.1.2 Code of Practice In Case Of Fire at Mines

Objective:-

To deal with Fire efficiently and quickly at different location of Mine including HEMM.

Source of Fire:-

i) HEMM

ii) Diesel Pump/storage area.

iii) Magazine Area.

Line of Action:-

i) Any person notices any sign of fire shall start shouting FIRE, FIRE (Aag, Aag) to seek assistance and also immediately take steps to give warning by blowing the siren continuously and take steps to extinguish the fire by using appliances available near the site.

ii) **Duties of Mine Official: -** The Mine officials receiving the warning shall forthwith inform following on Phone.

a) Fire fighting station – for sending fire-fighting team. **Phone No-2098, 4042**

b) Security main gate – to inform senior person and to prevent unauthorized entry. **Phone No-4042**

c) Shift Engineer – to manage with available resources till then.**Phone.no- 4044 and 811112**

d) Mines Manager – for overall supervision and control.**Phone.no-4022, 4072, 4012, 4062, 4019 and 4069**

e) **Sr Manager – Electrical/ Shift Electrician to be informed to shut off power, if required.**

After giving information reach the spot, remove Man & Machinery and take steps to tackle the fire in accordance with the fire fighting instructions.

Inform at security office to get Ambulance if required.

I. **Duties of Fire Fighting Team: -** On receiving warning the team shall reach the site of fire and depending on its nature, class and extent shall take steps to extinguish it and rescue persons if involved in fire.

II. **Duties of Mines Manager: -** (a) On receipt of information about fire the Manager shall forthwith rush to the spot and assess the extent of fire. He shall supervise the fire fighting operation and make necessary arrangement for medical aid to affected person, if any.

III. Inform to senior officials and statutory bodies.

15.1.3 Code of Practice in case of Inundation

Objective:-To deal with the incidence efficiently and quickly

Line of Action:-

I. Any person notices any rise in water level over danger mark (as marked in field at Nallah or any unsafe seepage or flow of Water over bunds in the working shall immediately take steps to give warning by blowing Siren and at the same time take necessary action for withdrawal of men and machinery.

II. **Duties of mine officials: -** receiving the warning shall forthwith inform to following on Phone.

a) Security main gate, **Phone no-4042**

b) Mines Manager, **Ph.No-4022, 4012, 4019**

c) Mines Agent, **Ph.No-4023**

After giving information rush to the spot and take actions for safe removal of men & machinery from the site. Inform Hospital on Phone No. for

Ambulance, if required.

I. **Duties of Security personnel: -** They shall help in safe removal of men & machinery and rescue the persons, if required.

II. **Duties of Mines Manager: -**

a) On receipt of information about inundation the Manager shall forthwith rush to the spot and supervise safe removal of affected person, if any.

b) Inform to senior officials and statutory bodies

15.2 INFORMATION ON ACTION TO BE TAKEN FOR MITIGATION OF ACCIDENTAL CONSEQUENCES.

In "Procedure to meet fire hazards", the procedure of fire alarm and organization of an emergency team for firefighting rescue operation etc. is explained.

The equipment to be used to fight fire is kept at main gate office and also in all departments.

We have displayed the emergency phone numbers (4042/2090/2190/2115) everywhere which are to be contacted in case of fire. Every department is connected with phone.

Emergency phone number 4042/2090 is one way i.e. to receive messages only.

Main Gate has also been declared as **"Assembly Point"** in case of natural calamities, major accidents etc.

(A) PROCEDURE TO MEET FIRE HAZARD:

1. In case of fire, the department is to inform Mines Main gate office (Emergency Control Centre No.1) on Telephone No. 4042 and security main gate 2090 and also to the concerning head of the department. The fire information contains the place and type of fire which facilitate the Fire fighting team to rush with appropriate equipments on the spot.
2. As soon as the above information reaches to the Security In charge, he has to rush to the site with fire fighting staff and equipments. There, he has to assess the situation and inform for additional help if necessary to security main gate on telephone no 2090. The officer at Emergency Control No.1 is to inform accordingly about the seriousness of fire to the following officers:-
   i) President (Works)
   ii) Joint Vice President (Finance)
   iii) Senior Vice President (Personnel & Administration)
   iv) Chief General Manager (mines)
   v) General Manager (mines)
   vi) Senior Manager(electrical)
   vii) Senior Manager(Mechanical)
   viii) Senior Manager(Personnel & Administration)
   ix) Senior Manager (Safety)
   x) Manager (mines)
   xi) Others

   In case of personnel injury, Medical officer/Hospital is to be informed and arrangement of ambulance to be made.

   Emergency co-ordination chart is attached. (Page-23 A)
3. Two numbers of fire tenders are kept in ready position at Factory Main gate (Unit-1) to meet the situation at any place any time.
4. In case of non availability of drivers, officers are to drive the tanker.
5. Three long hooters (30 seconds duration each) are to be blown at an interval of 10 seconds. This is called fire alarm.
6. On hearing (fire alarm) every concerned person is to rush to the site of fire and act as per order of Senior Officer present.

7. The Resident Executive, in consultation with senior most officers is to organize man power as under:-
    a) Fire fighting team
    b) First Aid team
8. The fire fighting team is to act according to the orders of Senior most officers.

(B) EMERGENCY TEAM FOR OPERATION:

1. Emergency Coordinator Executive President (Mines & Project)
    a) Ensure proper Co-ordination between the rescue operation coordinator and emergency service coordinator
    b) Communication to higher management
    c) Provide information to Government officials like DGMS local authority.
2. Rescue Operation Coordinator: General Manager Mines
    a) Tackle as per site situation.
    b) Co-ordination with Safety officer and Medical team to transfer the injured quickly for medical treatment.
    c) Action for evacuation if required.
3. Senior Managers /Safety Officer
    a) Ensure that injured persons are removed from the contaminated area and brought to a safe place.
    b) Shut down the Plant/system causing hazard.
    c) Co-ordinate with Medical department to render medical aid to the injured.
4. Security Officer/Safety Officer:
    a) Direct rescue operations in the affected area
    b) Render first aid to the injured.
    c) Use suitable extinguishers.
    d) Control Ambulance/Transport to send the injured to Medical Centre for treatment.
    e) Decide and intimate necessary evacuation measures.
    f) Ensure that preventive safety measures are intimated in nearby area/plant.
    g) Replacing of used breathing safety items
    h) Invalidate all safety permits in the affected area.

5. Emergency Service Coordinator: Senior manager (P&A)

   a) Arrangement for external medical treatment through Medical Officer.

   b) Arrangement for evacuation of people from affected area.

   c) Inform Statutory Authorities of accident.

   d) Contact local voluntary service organizations for help. Arrange transport facility and fire brigades.

6. Medical Officer:

   a) Render medical treatment to the injured

   b) Transfer badly affected persons to nearby hospital

   c) Mobile extra medical help from outside if required

   d) Keep information about the availability of medicines and facilities.

7. Emergency Control Centre:

   Our Emergency Control Centre is Security Control office located at Main Gate. It is equipped with following items for emergency purpose:-

   a) Telephone - Internal Telephone, Mobile & Walkie-Talkie.

   b) It contains Plan of Mines, Surveillance camera control room covering all risk prone areas of Mines, locations of fire extinguishers and numbers.

   c) List of addresses with telephone numbers of rescue operation team and other related persons.

   d) Emergency vehicle.

   As soon as the emergency is announced through siren, the emergency Coordinator will go to the emergency control centre and rescue operation coordinator and safety personnel will go to the emergency spot.

16. **PREVENTIVE MEASURES FOR EARTHQUAKE:-**

As unpredictable events of nature, earthquakes can cause much damage and destruction and much loss of life. During an earthquake injury and death to persons are usually caused by falling objects and collapsing buildings. In order to minimize the impact that earthquakes can have it is most important that safety precautions are observed and adhered to.

The following safety precautions take into consideration:

a. Before an earthquake.

b. During an earthquake.

c. After an earthquake.

a) BEFORE AN EARTHQUAKE

1. Potential earthquake hazards in the home and workplace should be removed and corrected. Top-heavy furniture and objects, such as book cases and storage cabinets, should be fastened to the wall and the largest and heaviest objects placed on lower shelves.
2. Supplies of food and water, flashlight, a first-aid kit and a battery- operated radio should be set aside for use in emergencies.
3. One or more family members should have a working knowledge of first-aid measures because medical facilities nearly are always overloaded during an emergency or disaster, or may, themselves, be damaged beyond use.
4. All family members should know what to do to avoid injury and panic. They should know how to turn off the electricity, water and gas. They should know the locations of the main switch valves. This is particularly important for teenagers who are likely to be alone with smaller children.

b) DURING AN EARTHQUAKE

1. Make no moves or take no action without thinking about the possible consequences. Any irrational movement may be an injurious one.
2. If you are inside stay there. Stand in a doorway or crouch under a desk or table, away from windows or glass fixtures.
3. If you are outside, stay there. Stay away from objects such as light poles, buildings, trees and telephone and electric wires, which could fall and injure you.
4. If you are in an automobile, drive away from underpasses/overpasses, and stop in the safest place possible and stay there.

c) AFTER AN EARTHQUAKE

1. After an earthquake the most important thing to do is to check for injuries in your Office / Home and in the neighborhood. Seriously injured persons should not be moved unless they are in immediate danger of further injury. First-aid should be administered, but only by someone who is qualified or has a working knowledge of first-aid.
2. Evacuate the building as soon as the shaking stops. Carefully inspect the exterior of the building for cracks in walls, shifted posts and pillars. If you see anything other than minor cracks do no re-enter the building until it has been inspected for safety by a professional.
3. Check for safety-hazards - gas, water sewage breaks; downed power lines and electrical short circuits, damaged and weakened buildings and foundations, fires and fire hazards.
4. Turn off appropriate utilities. Do not use matches, lighters or open flame, appliances or electrical switches until you are sure that there are no gas leaks.
5. Do not use the telephone except in extreme emergency.

6. Wear shoes and protective clothing, for example, hard hats and gloves, to avoid injuries while clearing debris.
7. Keep battery-operated radios and listen for emergency bulletins.
8. If electrical power is off for any length of time use the foods in your refrigerator and freezer before they spoil. Canned and dry foods should be saved for last.
9. Co-operate with all public safety and relief organizations. Do not go into damaged areas unless authorized by appropriate personnel.
10. Be prepared for additional earthquake shocks.

17. **PREVENTIVE MEASURES FOR FLOOD:-**

As per National Flood Commission report. Floods cause damage to houses, industries, public utilities and property resulting in huge economic losses, apart from loss of lives. Though it is not possible to control the flood disaster totally, by adopting suitable structural and non-structural measures the flood damages can be minimized. For planning any flood management measure latest, reliable, accurate and timely information is required. In this context satellite remote sensing plays an important role.

Preparing for a Flood

Here are some basic steps to take to prepare for the flood :

- Identify potential hazards and know how to secure or protect them before the flood strikes.
- Be prepared to turn off electrical power when there is standing water, fallen power lines etc.
- Turn off gas and water supplies before you evacuate.
- Secure structurally unstable building materials.
- Keep ready fire extinguishers and make sure persons know where it is and how to use it.
- Install sump pumps with back-up power.

18. **MEDICAL FACILITIES AVAILABLE AT SITE AND NEARBY AREA**

A. Mines Dispensary

It is adequately equipped to render first aid medical treatment

1.	Number of Doctors.	Male Doctor	-	One
2.	Para Medical Staff	Compounder	-	One

B. Maihar Cement Seva Trust Hospital

It is sufficiently equipped to render emergencies and general medical treatment.

1.	Number of Doctors.	Male Doctor	-	Three
		Female Doctor	-	One
		Dentist	-	One

2. Para Medical Staff	Pharmacist	-	One
	Lab technician	-	One
	Female Nurses	-	Five
	X-ray technicians	-	Two
	Clerk	-	One
	Male Nurse	-	One

3. Number of beds - Thirty

4. The following facilities are available at Hospital:
   a) 24 Hours emergency services
   b) X-Ray
   c) Pathological Lab (Computerized)
   d) Maternity
   e) Vaccination
   f) Dental Clinic
   g) Eye OPD

5. Two Nos. Ambulances are always ready for emergency.

6. Naturopathy branch of Maihar Cement Seva Trust Hospital consists of one qualified Doctors and two staff.

C. Government Hospital, Maihar

1. It is situated about 8 Kms from our site. They are having sufficient numbers of Male Doctors and Lady Doctors.
2. Number of beds in general ward and private wards are 20.
3. Qualified Dental Doctor is available.
4. X-Ray facilities are available.
5. Preliminary pathological / clinical investigation facilities are available.

D. Birla Vikas Hospital & District Health Centre at Satna

Major accident cases are referred for treatment at above two Hospitals, at about 50 KMs. from our site.

E. Gandhi Memorial Hospital Rewa

This Government Hospital is situated at about 75 KMs. from our site and has facilities to render major cases.

F. Nahar Nursing Home at Satna:

Major accident cases are referred for treatment at above

Hospital, at about 50 KMs. from our site.

G. Marble City Hospital at Jabalpur:

For all types of emergency cases are referred for treatment at above

Hospital, at about 175 KMs. from our site.

19. **THE ARRANGEMENT FOR TRAINING OF WORKERS / LABOURERS AS HOW TO ACT**

We are conducting various training programmes for our employees (staff & workmen). Training for taking proper action at the time of emergency is provided to them through these programmes.

The following trainings are being provided to employees:-

1. First Aid Training

   It is being provided to our employees on regular basis through the Doctors approved by St John Ambulance Association, Bhopal. We have trained not only our workers/staff but trained Contractors' labour also. Time to time "Mock Drill" is also being carried out by us.

2. Fire fighting Training

   It is provided by our Fire Supervisor. Fire fighting demonstration is also carried out. During demonstration, participants are also involved in identification and selection of the appropriate type of fire extinguisher and to extinguish the fire.

3. Workers Development Training

   This training is provided to workmen in batches. All aspects of plant operation and safety are covered in this.

4. Safety Training

   It is provided by our safety personnel at HRD centre and on the job also. Through this training, employees are motivated to eliminate unsafe acts and unsafe conditions from the site and to promote positive safety culture. Stress is given to follow safety rules and use required safety appliances at work place. They are trained as how to act in emergency situation.

19.1 PARTICULAR OF THE ASSEMBLY POINT, EMERGENCY CONTROL CENTRES AND DETAILS AS HOW THE CENTRE WILL ACT ON THE SITE / HOW THE OFF SITE ACTION (IF ANY) WILL BE ORGANISED:

Our Assembly point located at Mines:

Our Emergency Control Centers are located at:

1. Main Gate Office
2. EV crusher Hopper Area
3. Colony Gate

The location is shown in our layout of mines showing emergency control centre.

The Assembly point and Emergency Control Centers are at safe places. The Four centers are located to suit the design of plant.

The Assembly point and emergency control centers have adequate communication facilities and contain all the documents required.

A list of important Phone Numbers (Fire Brigades and Government Officials) is enclosed. (Page-02)

19.2 PARTICULARS OF KEY PERSONS, SUCH AS WORKS INCIDENT CONTROLLER / WORKS MAIN CONTROLLER / EMERGENCY CREW / THEIR DUTIES, AND RESPONSIBILITIES.

A Chart is enclosed (page-23 A) showing particulars of key persons and their responsibilities.

Cont'd....29 A

20. **OTHER RELEVANT INFORMATION:**

We have given following Personal Protective Equipments to our workers:

1)	Safety Helmet & Safety Shoe	:	To every worker
2)	Safety Goggle	:	To all Operators
3)	Respirator	:	To every worker engaged in drilling.
4)	Hand Gloves	:	To every welder and Khalasi. In all Departments hand gloves are available whenever required.
5)	Safety Belts	:	Are available in all departments.
6)	Welder's screen	:	To all Welders and are available in all departments

The information furnished in the documents on the subject has been verified by me and is submitted seeking modification/suggestion from your office to make the document viable. I also assure that I will immediately review and amend the document and seek your consent before any change in the plant, machinery, building, structure, substance, storage and manufacturing process is intended or after at least every period of 24 months until the factory, for any reason, is not closed for ever. In later case it will ours liability to inform closer of the factory to your office and dispose off all hazardous substance/material of the factory in such a manner rendering those safe for the life and environment.

For MAIHAR CEMENT

Prop: Century Textiles & Industries Ltd.

(S.K.SINHA)

C.G.M (Mines)