

P R E F A C E

In the present scenario of liberalised industrialisation, large number of industries in every sector is being promoted in our country. This is bound to give a boost to our national prosperity but on the other hand we must also realise that this will bring a total change in our way of life, particularly in terms of Safety, Health and Environment. In order to reap the optimum output of this development, we should be equally concerned to abate the possible accidents, disasters and pollution. Any short cuts or ignorance towards these extremely important aspects can nullify all the good results of this development. It therefore becomes our prime responsibility to be ever vigilant right from the designing stage and till delivering our product to customers.

It has been established through world-wide industrial experience that the only way to minimise the chances of any type of disaster is to document all kinds of anticipated hazards, related with the activities of the organisation, its location and the effects of the natural conditions and then try to find out the possible modes of combatting them. Such a document has been termed as “Disaster Management Plan” (DMP).

After the industrial disaster at Bhopal, Government of India has made it mandatory for every major industry and local level Civic Authority to document, publish and publicise the DMP for on-site and off-site conditions respectively. District Authority Sambalpur has also taken initiative in preparing a well-documented “District Off- Site Emergency Plan” for the aforesaid purpose.

The activity does not end here, rather is the first step towards this good cause. Imparting training to the public in close vicinity of the industries involving hazardous processes and arranging “Mock Drills” based on the guidelines of our District Off- Site Emergency Plan document shall be helpful to fulfil our commitment. I wish a grand success to all my colleagues in their endeavour towards this objective.

This District Off- Site Emergency Plan is approved by me.

Sambalpur
October, 2006

(Vishal Gagan) IAS
Collector & District Magistrate
Sambalpur

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DISTRICT OFF-SITE EMERGENCY PLAN

CHAPTER - I

STATUTORY ASPECTS, OBJECTIVES & ACTION PLAN

1.1 Why is it?

Growth in industrial activities in the country has resulted in storage, handling and use of various types of chemicals often in large quantities. Many of these chemicals are either toxic and highly reactive and explosive in nature. Besides petroleum products 634 such chemicals have been notified as hazardous substances under the Manufacture, Storage and Import of Hazardous Chemical Rules 1989 (MSIHC Rules, 1989). These hazardous substances can be a source of potential danger to the life, property and environment if not handled properly. Wide spread disaster arising out of toxic release or fire, warrant Chemical Disaster Management. A contingency plan for mitigation of such disaster is termed as "Off- Site Emergency Plan". The local authorities are made alert to combat and contain the disaster in a pre-planned manner to meet any such eventuality. The Central Government has notified a set of rules entitled "Chemical Accident (Emergency Planning, Preparedness and Response) Rules, 1996 as complementary to Manufacture, Storage and Import of Hazardous Chemical Rules 1989 under the Environment (Protection) Act 1986. This rule provides a statutory back up for setting up of crisis groups in local, districts, states and at central level for management of chemical accidents. Under this set up it has been envisaged to set up functional control rooms at district, state and central level with information networking system. The district collector shall statutorily be the chairman of the District Crisis Group. This group shall pursue the on-site emergency plans of the industrial installations of the district for formulation of a "District Off-Site Emergency Plan".

1.2 Objective of the plan

The objectives of the district off-site emergency plan should make maximum use of the combined resources of the units and the outside services to:

- Initially contain and ultimately bring the incident under control.
- Minimise damage to property and the environment.
- Rescue the threat casualties and safeguard other people.
- Trace out the fatalities and provide assistance to their relatives.
- Provide authoritative information to the media.
- Secure the safe rehabilitation of affected areas.
- Preserve relevant records and equipment for the subsequent enquiry into the causes and circumstances of the emergency.

CHAPTER – II

DISASTER AND ITS MANAGEMENT

2.1 Disaster

A disaster is an unforeseen or unexpected event, which may result into injury to men or damage to property or both.

2.2 On-Site Emergency

If the accident / dangerous occurrence takes place in the factory and its effects are confined to the factory premises involving the workmen working in the factory, it is termed as 'ON-SITE EMERGENCY'.

2.3 Off-Site Emergency

If the effects of the accidents / dangerous occurrence are felt outside the factory premises, the situation thus generated is termed as 'OFF-SITE EMERGENCY'.

2.4 Causes For Disaster

Any one of the following may lead to a disaster

- Leakage of toxic gases, steam, hot water etc.
- Explosion due to entrapping of water in molten metal.
- Explosion and fire due to gas, coke, pitch and inflammable oils.
- Leakage and spillage of chemicals.
- Electrocution.
- Collapse of structure.

2.5 Who formulates and carries out the plan?

The Central Government has notified a set of rules entitled "Chemical Accident (Emergency Planning, Preparedness and Response) Rules, 1996 as complementary to Manufacture, Storage and Import of Hazardous Chemical Rules 1989 under the Environment (Protection) Act 1986. This rule provides a statutory back up for setting up of crisis groups in districts level for management of chemical accidents. Under this set up it has been envisaged to set up functional control rooms at district level with information networking system. The District Crisis Group of Sambalpur district has already been constituted by the district magistrate and collector vide letter no. 2548 dated 29/12/2001. The district magistrate and collector is statutorily the chairman of the District Crisis Group.

2.6 Objective of the District Crisis Group

The Objectives of this crisis group is to –

- Assess the anticipated emergency scenarios;
- Develop an action plan to combat and contain the emergency;

- Develop a scheme to generate public awareness;
- Conduct mock drills to reduce response time;
- Set up a control room for state-wide information networking;

2.7 Action Plan of the District Crisis Group

Emergency Plan has been prepared in the form of a manual and approved by the Chairman cum District Magistrate & Collector after deliberations with the members of the District Crisis Group. Further the manual shall be updated as and when required. The action plan of the District Crisis Group can be broadly divided into three major groups viz,

- Pre-disaster plan,
- During disaster plan,
- Post-disaster plan.

2.7.1 Pre-disaster Plan

- To generate awareness among the people about the precautions and remedial measures to be taken during a disaster.
- To assess the impact of foreseeable disasters in the district by reviewing the on-site emergency plans of installations / industries involving hazardous process.
- To formulate one " District Off-Site Emergency Plan".
- To conduct mock drills to enhance response time.
- To identify the areas where local crisis group formation is needed.

2.7.2 During disaster plan

- To combat and contain the disaster.
- To inform the public for necessary self-protection measures.
- To evacuate & protect the affected areas.
- Treatment of victims.
- To activate combat/ mutual aid/ technical services.
- To restrict the entry points.
- To maintain the law and order.
- To co-ordinate the functions of various agencies.
- To bring back normalcy.
- To provide authorized information to press and media.

2.7.3 Post disaster planning

- To rehabilitate displaced victims
- To send information to state/central crisis group
- To assess the shortcomings noticed during disaster management
- To update the action plan time to time

2.8 Emergency Control Centre

The office of the District Magistrate & Collector, Sambalpur shall function as the Emergency Control Centre in case of an emergency. This centre is well equipped with related data, communication facilities etc.

2.9 Assembly Points

A number of assembly points situated well away from the areas of risk, where employees / public are required to assemble in the event of emergency have been earmarked and publicized. **(Annexure-)**

2.10 Evacuation

In case of an emergency, it is necessary to evacuate personnel from areas already affected or likely to be affected. Distinct alarms (siren) should be used to evacuate and to assemble the personnel in an orderly manner to the pre-determined assembly points. **Refer 5.4.5 at page 37 of manual on EP.**

2.11 Exercises

Mock Drills shall be conducted once in a year to train the employees of the industries & the general public, test the plan and to observe & rectify the deficiencies if any.

2.12 Repairing and Restarting

Before taking up repairs and restarting the plant, it is required to ensure that:

- All fires are extinguished without risk of re-ignition.
- The source of gas release is isolated.
- The gas cloud is disappeared, the concentration is within safe limits and the working areas are free from risk.

2.13 Information for Public

Leaflets containing concise instructions regarding actions to be taken by the general public in case of an emergency have been prepared before hand in local language. These should be distributed to the public. **(Annexure-)**

CHAPTER – III

DISASTER PREPAREDNESS

3.1 Land Use Pattern: (Area in Hect.)

Forest Area	Misc. Tree crops & Groves not included in net area shown	Permanent Pasture	Culturable waste	Land put to Non agri. use	Barren land	Current fallow	Other fallow	Net area shown
137498	3417	21540	21950	33963	7895	28458	18528	136539

3.2 Type of Workers:

Type of Workers							
Main Workers		Marginal Workers		Non Workers		Total Workers	
M	F	M	F	M	F	M	F
208460	71507	48188	91224	214907	294603	256648	162731

3.3 Livelihood details: (No. of House Hold)

Sl. No	Name of the Tahasil	Cultivators	%	Agricultural laborers	%	Workers in Household industry	%	Other Workers	%
1	Kuchinda	37654	28.20	68,298	51.16	7869	5.89	19693	14.75
2	Redhakhhol	20387	35.87	19,920	35.05	5216	9.18	11314	19.90
3	Sambalpur	20595	12.79	29,907	18.58	22079	13.71	88407	54.92
4	Rengali	12460	18.31	15,818	23.25	22731	33.41	17301	25.03
Urban									
1	Kuchinda (NAC)	547	12.67	916	21.21	95	2.20	2760	63.92
2	Redhakhhol (NAC)	496	10.09	783	15.93	131	2.66	3506	71.32
3	Sambalpur (M)	821	1.73	462	0.97	2869	6.03	43402	91.27
4	Dhankauda (O.G.)	25	1.95	94	7.33	368	28.68	796	62.04
5	Burla (NAC)	196	1.76	113	1.01	189	1.70	10634	95.53
6	Amsadakat apali (O.G.)	252	17.37	561	38.66	127	8.75	511	35.22
7	Hirakud (NAC)	198	2.46	266	3.31	588	7.32	6983	86.91

3.4 Tahasil-wise position of different lands in the district

Sl No	Tahasil	Total area	Degraded waste land (in Ac.)	Forest land (in Ac.)	R.I. Circles	Homestead land available (in Ac.)	Agri. Land available (in Ac.)
1	Sambalpur	1371.53 Sq.Km,	Nil	23246.03	14	2075.82	284452.63
2	Rengali	760.7 Sq.km	Nil	16466.71	07	694.50	80847.28
3	Kuchinda	2367.3 Sq.K.m	Nil	239053.17	11	2523.09	32339.32
4	Rairakhol	2157.47 Sq,km	9060.97	395919.43	08	79.60	88465.77

3.5 Drinking Water Sources/ Status:

Sl.No	Category	No.
1	No of tube wells required as per 250 norms (as on 1.04.06) T.N. (N.C.) habitation P.C. habitation No. of N.C.Habitation as per ARWSP norm (provisional)	91 133 364
2	No of tube wells and sanitary wells in operation as on 1.04.06	7037 / 126
3	Pipe water project completed	30
5	No of on going pipe water projects	-
6	Target for installation of TWs/SW (2006-07)	-
7	Ach. For sinking of Tws/SWs during the year 2006-07	45

3.6 Carrying Capacity of the Rivers:

Name of the River	Gauge Station	Zero Level (in Mts. / Fts.)	Danger Level (in Mts. / Fts.)
U/S Mahanadi	Ghorari	854 Fts.	884.40 Fts.
Sionath	Nandaghat	235 Mts.	250.30 Mts.
Mahanadi	Seori Narayan	701 Fts.	742.15 Fts.
Hansdeo	Champa	847 Fts.	865.54 Fts.
Mahanadi	Saradihi	196 Fts.	676.75 Fts.
Mond	Tarapur	203.10 Mts	205.95 Mts.
lb	Deogaon	193.60 Mts.	200.55 Mts.
Veden	Kherwal	190 Mts.	200.90 Mts.
D/S Tel	Belgaon	512 Fts.	542.2 Fts.
Tel	Patharla	0 Mts.	11.33 Mts.
Mahanadi	Khairmal	328 Fts.	NA
Mahanadi	Barmul	168 Fts.	206 Fts.
Mahanadi	Mundali	72 Fts.	99.70 Fts.

3.7 Availability of Irrigation Facility:

Sources	(Area in Hect.)
	Kharif
Major/Medium Irrigation Projects	31517
M.I. Projects	14000
Lift Irrigation Projects	2555
Other Sources (Dug well/Bore well/Kata / bandha)	615

3.8 Infrastructure: (Nos.)

No. of PDS Outlets	No. of Post Offices	Police Station	CHC	PHC	PHC (New)	Ayurvedic Dispens.	Homeo Dispensary	Educational Institutions			Livestock centers	Cottage Industries	SSI Industries	Godown
								Pry Sch	UP Sch	Hi. Sch				
104	249	18 + 1 Women PS	7	3	26	13	13	889	289	161		290	92	148 GP + 2 SWC

3.9 Financial Institutions:

Sl. No	Type of Institution	No. of offices
1	Public Sector Banks	55
2	Regional Rural Banks	24
3	All Scheduled Commercial Banks	78

3.10 Communication Facilities:**VHF Station and Telecommunication Link**

One Satellite telephone is available with District Collector.

All Police stations are connected with VHF/Telephone.

Besides the above VHF installations, 9 blocks of the district namely Rairakhol, Bamra, Dhankauda, Rengali, Jamankira, Naktideul, Maneswar, Kuchinda and Jujomura have been provided with VHF communication system and one at the District Control Room by OSDMA and UNDP.

The District Control Room has also been provided with two mobile VHF sets and two walkie-talkies by OSDMA.

All officials connected with relief / rescue operation are having telephone connections.

3.11 Distance of Sub-Divisional Hqrs. / Block Hqrs. from District Hqrs:

Sl. No.	Name of the Sub Divisions / Blocks	Distance from District Headquarters (K.M)
Sub-Divisions		
1.	Sambalpur	0
2.	Redhakhol.	69
3.	Kuchinda.	85
Blocks		
1.	Bamra	115
2.	Dhankauda	5
3.	Jamankira	40
4.	Jujumura	32
5.	Kuchinda	85
6.	Maneswar	8
7.	Naktideul	115
8.	Redhakhol	69
9.	Rengali	30

3.12 Railways:

The district is well connected by rail route with direct trains to New Delhi, Chennai, Ahmedabad, Mumbai and Kolkata and is coming under East Coast Railways with 244 Km of rail route length. There are 20 railway stations in the district.

RAILWAY ENQUIRY:

Khetrajpur station – (131)
Fatak station – (131), 0663-2520194

3.13 Road network:

Type of Road in the District	Road length (in km.)
National Highway	209
State Highway	189
Major District Roads	62
Other District Roads	135
Classified Village Roads	43
Village Roads	870
GP Road	6499
Panchayat Samiti Roads	603
Forest Roads	731

3.14 Internet facilities:

Internet facilities are available in all block headquarters of the district through NIC site. But, only the NIC site is accessible through the VSAT installed in all the block headquarters.

CHAPTER – IV

SAMBALPUR DISTRICT AT A GLANCE

4.1 Locations and Physiography:

Sambalpur lies between latitude 20°54' to 22°11' North and longitude 83°49' to 84°45' East. The district has an area of 6657 sq.km out of which forest area is 3631.77 sq.km. The district consists of wide expanse of fairly open country fringed by forest-clad hills as well as series of low hill ranges of irregular shapes. The plains' elevation range from 146m to 228m above MSL whereas the highest elevation point marked to be as Pariapahar 762m above MSL in the border of Sambalpur and Deogarh district (TS No. 73C/7). River Mahanadi and Maltijhor control the major drainage system. The district forms a part of central basin of Mahanadi river.

4.2 Geography:

Deogarh district in the east, Bargarh and Jharsuguda districts in the west, Sundergarh district in the north and Subarnapur and Angul districts in the south surround Sambalpur district with a total area of 6,704 Sq. Kms. The district has three distinctive physiographic units such as, Hilly Terrain of Bamra and Kuchinda in the north, plateau and ridges of Rairakhol in the southeast and valley and plains of Sambalpur sub-division in the southeast. Sambalpur district experiences extreme climatic condition with an average 66 rainy days and 153 centimeters rainfall per annum. Most of the rainfall is concentrated in the months from June to October visited by southwest monsoon. Mercury raises upto 49° Celsius during May with intolerable heat wave and falls as low as 4.5° Celsius during December with extreme cold. The rainfall is highly uneven and irregular and consequently drought in extensive areas is a common feature.

The district forms a part of the Mahanadi River basin. Mahanadi, the longest river of the state, entered into the district in the northwestern border, where the famous Hirakud Multipurpose Dam Project is built. Other important rivers of the district are the Maltijor, the Harhad, the Kulsara, the Bheden and the Phuljharan. Total land under cultivation in the district is 173540 hectares. Some villages of the district are inaccessible during the rainy season. Presence of a number of nallas without bridges cut off the villages from the nearby roads. The district is served by National highway No.6 & 42 with major district roads and a section of South Eastern Railways. Rural electrification has been extended to 63.6% of the villages of the district. Telecommunication Network is not adequate to cater to the needs of the people in the rural areas. Drinking water facilities are available in villages mostly from tubewells.

4.3 Geology:

Geologically, Sambalpur forms a part of Central Indian Craton, which has been stabilized since 2500 m.y. Most of the areas are covered by metamorphic rocks of Achaean age succeeded by sedimentary rocks of Proterozoic and Gondwana.

Metamorphic rocks of Achaean age belong to Dharwarian group. The rock types include schists, gneisses, porphyritic granite, younger granite (grey & pink coloured), quartzite, banded iron formation (BIF), charnockites, khondalites and intrusives like amphibolites, basic/ultrabasic rocks,

nepheline syenite, pegmatites and quartz veins. The Kolhan group (equivalent to Dhanjori group) comprising meta-sedimentary rocks underlain by granite gneiss and BIF. The regional trend of the

litho units is NNE-SSW to NE-SW. Sambalpur town is situated on the quartzite and quartz schist exposures having trend ENE-WSW belonging to Proterozoic age. The nepheline-syenite outcrops are marked around Redhakhol.

Proterozoic sediments such as quartzite/sandstone and shale overlie the Archaean rocks. These rocks are exposed on SW rim of Hirakud reservoir, which forms eastern margin of the Chhatisgarh basin. Lower Gondwana rocks (Talcher & Damuda group) represented by shale, sandstone and coal seams overlie unconformably the proterozoics. The rocks are exposed around Rail and Koing in Redhakhol sub division.

4.4 Topography:

Sambalpur district forms part of the Northwest upland of Orissa, which is rolling and multiplying the ground slopes from a height of 776 ft. to a height of 460 ft. The thick blanket of black cotton soil all over the district has been made somewhat sticky by the yellow earth developing in the undulating topography of the district. Isolated hills rising sharply from the surface are a regular sight.

4.5 Climate:

The district experiences extreme climate; where in summer mercury raises up to 47°C in the month of May and in winter it dips as low as 4.5°C during December/January. Humidity is normally 24% in winter and 35% in rainy season.

The rainfall data recorded in the district during the year from 2003 to 2006 are indicated below:

(In MM)												
Year	January		February		March		April		May		June	
	Norma 	Actual	Norma 	Actual	Norma 	Actual	Norma 	Actual	Norma 	Actual	Norma 	Actual
2003	14.3	Nil	24.4	14.8	16.4	4.4	17.6	18.2	30.9	3.0	218.7	311.9
2004	14.3	3.93	24.4	3.88	16.4	9.7	17.6	41.8	30.9	0.22	218.7	116.02
2005	14.80	58.16	24.50	7.96	18.20	12.87	16.50	0.77	32.30	36.53	221.0	287.34
2006	14.8	Nil	24.5	NIL	18.2	51.2	16.5	12.9	32.3	79.2	221.0	132.47
Year	July		August		September		October		November		December	
	Norma 	Actual	Norma 	Actual	Norma 	Actual	Norma 	Actual	Norma 	Actual	Norma 	Actual
2003	469.6	340.3	430.9	414.5	224.3	371.0	61.6	159.73	14.7	18.62	3.6	24.6
2004	469.6	387.56	430.9	540.84	224.3	143.27	61.6	69.29	14.7	NIL	3.6	NIL
2005	429.5	625.29	442.4	295.73	224.7	151.51	54.7	163.02	12.7	4.51	4.4	54.33
2006	429.5	449.53	442.4	839.55	224.7	164.47	54.7	-	12.7	-	4.4	-

The **annual normal requirement of rainfall** of the district is **1495.7 MM** against which the district has received **1048.62 MM** in the year **2002** and **1681.25 MM** in the year **2003**, **1316.51 MM** in the year **2004** & **1698.02 MM** in the year **2005**.

4.6 Sambalpur at a glance:

01	Population (2001 Census)	Male Female Total Ratio of Male/Female	4,68,950 4,54,805 9,23,755 1000:970
02	Literacy	Male Female Total	78.87% 54.79% 67.01%
03	Agricultural Indication (2001 Census)	Cultivators Agricultural Labourers Marginal Labourers	91,000 1,34,000 1,39,000
04	Hospitals & Medical Colleges	Medical College Headquarter Hospital Subdivisional Hospital Community Health Centre P.H.C./Mobile Health Unit Ayurvedic Hospital Homeopathic Hospital	01 01 03 05 35 13 14
05	Sub Divisions	3- Sambalpur, Kuchinda & Redhakhol	
06	Tahasils	4-Sambalpur, Kuchinda Redhakhol & Rengali	
07	Revenue Villages	1325	
08	Revenue Circles	40	
09	C.D. Blocks	9	
10	Gram Panchayats	148	
11	Police Stations	19 (One Women P.S.)	
12	Police Outposts	10	
13	Municipality	1 (Sambalpur)	
14	N.A.Cs	4 (Burla, Hirakud, Kuchinda & Redhakhol)	
15	Area of the district	6657 Sq. Km.	
16	Density of population	140 per Sq. Km.	
17	Forest Area	3631.77 Sq. Km.	

Source: District Statistical Handbook-2001

CHAPTER – V

ROLE AND RESPONSIBILITY OF VARIOUS DEPARTMENTS

5.1 Preliminary Considerations

The district authority needs to determine:

- Where, within the locality of the district, is there the potential for a major emergency, e.g. as the result of fire, explosion or large-scale release of toxic gases?
- Given the potential, what are the possible consequences in terms of risk to people and spread of damage?
- How adequate are the existing resources and arrangements to handle the most serious foreseeable emergency?
- What further provision or action is needed?

5.2 Making the emergency known

- Inside the district.
- To the emergency services.
- To the key personnel of the district administration.
- To the neighbouring districts.

5.3 Role of various departments

The various departments of the districts are responsible to work in a team to mitigate emergency with minimum response time. Responsibilities of various departments are indicated herewith.

5.3.1 Public Relation Deptt. (District Information & Public Relation Officer)

Pre-disaster stage –

- To organize public awareness programmes on safety procedures to be followed in case of a disaster through distribution of hand notes, talks, audiovisual programmes and the likes.

During disaster –

- Dissemination of information through public address system regarding emergency measures to be taken during evacuation plans.
- To avert panic among the public arising out of rumours.
- To interact with media.
- To issue authorized statements of district administration to assess and plan for augmentation of existing facilities, if needed.

5.3.2 Role of Police Department (Superintendent of Police)

Pre-disaster stage –

- To identify access and escape routes to be followed during emergency so as to ensure passing of vehicles with least inconvenience.
- To document traffic control measures to be followed during emergency.
- To access and plan for augmentation of existing facility, if needed.

During disaster –

- Law & Order and traffic control.

Post-disaster stage –

- To protect the area

5.3.3 Fire Service Department (District Fire Officer)

Pre-disaster stage –

- To assess the requirement of fire tenders & other fire fighting equipment required for the anticipated hazard scenario.
- To identify the source of water.
- To identify access and escape routes.

During disaster –

- Command and control the fire fighting operations.
- Rescue the victim.

5.3.4 Health Department (Chief District Medical Officer)

Pre-disaster stage –

- To ensure adequate stock of medicines and antidotes for the identified hazard scenario.
- To identify ambulance services to be availed during emergency.
- To plan for additional capacity in the base hospital, if needed.

During disaster –

- To arrange for first aid at site of occurrence.
- To arrange for treatment at hospital.
- To arrange for deportation of affected persons for specialised treatment, if needed

5.3.5 Motor vehicle Department (Regional Transport Officer)

Pre-disaster stage –

- To identify, prepare and maintain a list of sources to be tapped for requisitioning transport depending on the gravity of the emergency.

During disaster –

- To ensure that required vehicles are available at control room.

5.3.6 Public Health Deptt. (Executive Engineer, Public Health Engg. Dept.)

Pre-disaster stage –

- To analyse possibility of water body contamination due to anticipated hazard scenario and to plan out remedial measures.

CHAPTER - VI

POTENTIAL HAZARDS IN THE DISTRICT

6.1 Identified hazards

The following potential hazards have been identified in the district of Sambalpur.

- Fire due to various reasons.
- Explosions due to various reasons.
- Chemical and Gas hazards.
- Electrical hazards.
- Collapse of Structures & Equipment.
- Major accident of transporting facilities.

6.1.1 Fire due to various reasons

The district of Sambalpur is having different industries / installations involving hazardous process which requires substantial amount of electrical energy for various operations at elevated temperatures. The main sources of energy are power, minerals, oils and petroleum products. Therefore all such activities are highly prone to fire hazards. The anticipated causes of fire hazards are as follows.

- Fire in petroleum products.
- Fire in minerals.
- Fire in oil storage tanks.
- Fire in electrical cables / accessories.
- Fire in transformers.
- Wood and wild fire.
- Fire in oil lines.

6.1.2 Explosion due to various reasons

Owing to the reason that there are various pressure vessels and storage tanks of combustible materials in the different industries / installations, the following are identified as explosion prone areas.

- Pressure vessels and pipelines such as boilers, compressors, storage tanks and pressure pipe lines for air etc.
- Furnaces and casting machines.

6.1.3 Chemical and Gas Hazards

The following chemicals and gases are used in bulk for various purposes and therefore chemical hazards are anticipated.

- Chlorine (Cl₂)
- Liquefied Petroleum Gas (LPG)
- Dissolved Acetylene (DA)
- Mercury (Hg)
- Sulphuric Acid (H₂ SO₄)
- Ammonia (NH₃)
- Oxygen (O₂)
- Cryolite

6.1.4 Electrical Hazard

Supply of power for various productions and other activities is done at 440/230 KVA that poses a potential hazard on account of electrocution.

6.1.5 Collapse of structures and equipment

The size and weight of various metallic and masonry structures are very large and most of the activities are carried out indoors. Any collapse of these structures due to whatsoever reason can cause a major disaster. This factor therefore needs constant vigil.

6.1.6 Major accidents during transportation

Transportation of various combustible / inflammable materials, such as petroleum products, furnace oil, petrol, diesel, chemicals, gas cylinders and chlorine is done by trucks / road tankers and therefore pose a major source of disaster.

CHAPTER - VII

STRUCTURE, ROLE & RESPONSIBILITY DURING DISASTER

7.1 District structure

The following officers of the district assist the Collector and District Magistrate.

- Superintendent of Police.
- Sub-Collector,
- District Emergency Officer.
- District Information and Public Relation Officer.
- District Fire Officer.
- Chief District Medical Officer.
- Assistant Director of Factories & Boilers.
- Executive Engineer, Public Health Engg. Dept.
- Regional Transport Officer.
- Regional Officer, Pollution Control Board.

7.2 Role of the officers

In case of emergency / disaster, the role and responsibility of individual officers shall be the following:

- **Chief Co-ordinator (Declarer of Emergency)** - Collector & District Magistrate.
- **Dy. Chief Co-ordinator (Incident Controller)** – Sub Collector
- **Unit Co-ordinators**
 - District Emergency Officer.
 - District Fire Officer.
 - Assistant Director of Factories & Boilers.
 - Exe. Engineer, Public Health Engg. Dept.
 - Regional Transport Officer.
 - Regional Officer, Pollution Control Board.
- **Communication Co-ordinator** - District Information & Public Relation Officer
- **Health Service Co-ordinator** - Chief District Medical Officer.
- **Law & Order Co-ordinator** - Superintendent of Police.

7.3 Responsibility of the officers

CHIEF CO-ORDINATOR		DISTRICT CRISIS GROUP		
MOBILISATION OF MATERIAL AND SERVICES				
DISTRICT FIRE SERVICE	SUPERINTENDENT OF POLICE	UNIT CO-ORDINATORS	CHIEF DISTRICT MEDICAL OFFICER	LOCAL & DISTRICT ADMINISTRATIVE AUTHORITY
Fire Service	Police Service	Technical Services	Medical Services	Local Authorities
1.Fire Fighting	1.Maintain law & order situation	1.Furnish technical Informations	1.Collection of Material Safety Data Sheets of Hazardous Substances	1.Actuate salvage measures
2.Plugging leaks	2.Control traffic	2.Prevent / control of pollution	2.Maintain inventories of medicines, anti-dotes and treatment-aids	2.Transportation of victims
3.Rescue	3.Cordning the area	3.Control of power supply system.	3.Actuate Ambulance & First-Aid Service	3.Educating public for self protection
	4.Evacuation measures from the risky area	4.Investigate in to the cause of event	4. Seek expert advices if required	4.Inform relatives of the victims
	5. Inform the public about the mishap & rescue			5. Maintain communication link
				6. To identify NGO's to serve
				7. Actuate relief camp

CHAPTER – VIII

INFRASTRUCTURE FOR EMERGENCY SITUATIONS

In a state of emergency / disaster, it is imperative that a well-planned system is made and disaster code developed to tackle the situation and minimize the losses.

8.1 Disaster Code

The following code has been devised to declare a state of emergency:

- The Declarer or his alternate shall make declaration of emergency through intermittent siren (alternate long and short pitch) for 5 minutes continuously.
- Declaration of emergency shall be conveyed to Control Room, Hospital, Fire Services, Police and other emergency service departments over phone or any other fast communication system.
- Public shall be trained to understand the coded audio sirens.
- After the emergency situation is brought under control, an “all clear siren” to be blown. This shall be notified by a continuous blowing of the siren for 5 minutes.

8.2 Communication during Emergency

The following sequence of communication shall be followed during emergency.

- The occupier of the factory / local police shall inform about the emergency to the Dy. Chief Co-ordinator (Incident Controller),
- Though the standard mode of communication shall be telephone / hotline / wireless, but in case malfunctioning of those, a special messenger shall be sent to the Dy. Chief Co-ordinator by the fastest possible means of transport.
- In case the Dy. Chief Co-ordinator is not available on account of tour / leave then he shall be officiated by his nominee.
- The Dy. Chief Co-ordinator (Incident Controller) shall in turn inform the Chief Co-ordinator (Declarer of Emergency) and seek his advice.
- The Chief Co-ordinator shall advise the Dy. Chief Co-ordinator (Incident Controller) to immediately rush to the spot of emergency, assess the situation and take overall control in his hands.
- Based upon the available information & communication from the spot of emergency, the Chief Co-ordinator shall advise for the blowing of siren to declare emergency.
- The Declarer shall inform the Superintendent of Police and other Unit coordinators.

8.3 Infrastructure available and procedural activities

Once the Disaster has been identified and the preliminary communication and activities have been initiated, the following departments shall extend all-out help to minimize the losses in terms of

man, material and machines. In order to ensure the preparedness to handle and control such a difficult situation, a definite infrastructure has been developed by various key departments.

8.4 District Health Department

The Chief District Medical Officer being the most vital officer in a “Disaster” situation, it is required to be in a state of preparedness. He is the overall in charge for the medical facility. He is to ensure that adequate personnel are identified and briefed from time to time to review the state of preparedness within the department. Availability of trained staff and nominated First Aiders, updating their knowledge, maintaining necessary stock of medicines and other medical gadgets and life saving devices etc are his prime responsibility.

In case of “Emergency Call” from the Declarer of Emergency or any other source, the Medical Shift-in-charge shall immediately respond, make necessary arrangements and take following actions:

- Inform Chief District Medical Officer immediately.
- Make arrangements in the hospital to receive and treat the affected persons.
- Keep the life saving devices and medicines ready for use.
- Arrange to send ambulances/along with medical personnel, first-aid facilities and life saving devices to the location of disaster, if required.
- Inform all “On-duty” and “Off-duty” medical staff residing in the vicinity and also the nominated “First Aiders” for assistance.

After the arrival of Chief District Medical Officer or his alternate the overall charge shall be taken-over by him. He shall initiate the following course of action.

- Relieve the Shift-in-charge for field duty.
- Assess the situation and if required, ask for medical aid from other sources.

The aforesaid request shall either be routed through “Emergency Declarer” or directly depending upon the situation.

8.5 Fire Services

The Fire Services is another vital agency in order to control and handle a situation of disaster. The department is therefore kept in a state of ever preparedness round the clock. District Fire Officer is also the in-charge for Fire Services facility. His prime responsibility is to ensure that the department is adequately manned and suitably trained to handle any situation of disaster. Review meetings are to be conducted periodically to identify and fulfill the departmental needs in terms of updating knowledge through training, checking of fire fighting facilities, system development, latest fire fighting technology etc. He should also collect information about the potential fire hazards in various industries / installations.

The District Fire Officer is also to ensure the following mandatory requirements:

- a) To propagate Fire Safety through awareness programmes to the public.
- b) To maintain the fire fighting devices and to keep appropriate record.
- c) To carry out regular inspection in all industries/installations involving hazardous process to assess risk of fire.
- d) To co-ordinate with civic authorities and industries for mutual aid.
- e) To arrange periodic Mock Drills.

In case of "Emergency Call" from the Declarer of emergency or any other source, the Shift In-charge of Fire Station shall immediately respond and make necessary arrangements to take following actions:

- To inform the District Fire Officer immediately.
- To make necessary arrangement of fire fighting devices along with personnel to be deputed to the affected location.
- To inform all 'On-duty' and 'Off-duty' staff to rush for assistance.
- After the arrival of District Fire Officer or his alternate, the overall charge shall be taken over by him & shall immediately initiate the following course of action:
 - Send SOS calls to civic authorities and nearby industries for assistance either directly or through Emergency Declarer depending upon the situation.
 - Shall rush to the spot of disaster and take overall charge to control the fire.

8.6 Police

The Police have a very important role to play during the Disaster. So this department should be adequately prepared to handle any such situation round the clock. The prime responsibilities of this department are as follows:

- a) Overall law and order situation of the entire affected area and near by localities.
- b) To carry out security rounds during emergency particularly of the delicate zones, make observations and take appropriate steps to maintain fool-proof security of the men, materials and machines.
- c) To keep vigil on the entry and the activities of the public.
- d) In case of any Emergency or Disaster, extend help in terms of cordoning of the affected zone, assist in the fire fighting and rescue operation.

In case of any "Emergency Call" from the "Declarer of Emergency" or any other source, the Officer-in charge of the local police station shall immediately take steps to activate the following actions:

- a) Inform the Superintendent of Police immediately.
- b) Advise the staffs of the station to rush to the spot and cordon the affected area.
- c) Inform all other police stations.

8.7 District Welfare & Public Relation Department

This Department has a very important role to play in a "Disaster" situation. The affected personnel of any Disaster and their family members require not only rescue and medical help but are in need of psychological support to overcome the trauma. The prime functions and responsibilities of this department are as follows:

- a) To provide and maintain basic amenities required at the time of disaster in the identified "Assembly Points" in terms of mattresses, bed sheets, blankets, benches, drinking water, air coolers, fans, toilets, first-aid boxes etc.
- b) Sufficient stock of foodstuff to be maintained.
- c) To inform the relatives and meet the special needs of the affected personnel.
- d) To make arrangement for shelter for casualties and their relatives.
- e) To arrange additional vehicles, if required.
- f) To convert the existing facilities such as schools, clubs, guest houses into medical/welfare/accommodation facilities and also as "Assembly Points".
- g) To co-ordinate with local social organizations for providing assistance.
- h) To communicate with press and media with the prior approval of "Declarer of Emergency". All the data regarding the condition of casualties to be monitored and provided to the media.

CHAPTER - IX

COMMUNICATION AND EVACUATION DURING DISASTER

During Disaster, it becomes extremely difficult to assess the emergency, its gravity, reasons, damages and to activate the required resources to bring the situation under control. It is therefore imperative to identify and establish some basic needs for such a situation, which are as follows:

9.1 Mass Communication

The first and foremost action is to communicate the entire concerned mass about the emergency situation and make them alert to take appropriate action. For this purpose, CODED SIREN has been designed as an effective mass communication. Siren with alternate short and long pitch for continuous five minutes is the coded signal for the Disaster. After the situation is brought under control, it is equally important to communicate "All Clear" signal. A continuous siren for five minutes shall notify this condition.

9.2 Emergency Control Room

In case of any Disaster it is essential that the "Declarer" or his alternate from a pre-decided and designated spot having all required facilities control the entire situation. Office of the Collector and District Magistrate has been identified as the "Disaster Control Room". This control room shall be utilized by the Declarer to have overall control of the situation, communicate his decisions/instructions to the Incident Controller and other concerned personnel, and communicate with civic authorities and nearby industries.

The following facilities have been provided in this control room:

- (i) District layout drawing.
- (ii) List of emergency telephone numbers.
- (iii) Emergency lighting system.
- (iv) List of key personnel of the industries/installations involving hazardous process and the unit coordinators.
- (v) Demographic map of Sambalpur.
- (vi) List of first-aid / medical centers.
- (vii) P&T, Intercom and hotline phone facilities.
- (viii) Public address system (PAS)

9.3 Evacuation

Emergency evacuation of all affected personnel has to be done immediately from their affected area to a safer place, which is termed as "Assembly Point". The routes to be followed to reach the assembly point shall be known as "Evacuation Routes". Both the "Assembly Point" and "Evacuation Routes" are pre-determined, free from danger and have been marked on the district rescue layout drawing.

9.4 Assembly Points

The “Assembly Points” should be provided with the following facilities:

- Sufficiently ventilated accommodation
- Free flowing potable water and toilets
- First-aid boxes
- Stretchers
- Telephones - Both internal and P&T with directory
- List of important telephone numbers
- Sufficient stock of food stuff and beverages
- Emergency illumination

9.5 Rescue Routes

At the break out of any disaster it becomes essential to evacuate the affected personnel from the locations and assist them to collect in the identified assembly point. In order to carry out the evacuation, two “Rescue Routes” have been identified and designated. These routes have been marked in the district rescue layout drawing.

The following precautions to be ensured

- To provide identification boards near entry, exit & turnings of the rescue routes.
- To keep the rescue route free from any obstructions.
- To provide proper illumination with the emergency services.
- To maintain the roads in good condition.

ANNEXURE – I

FACTORIES INVOLVING HAZARDOUS PROCESS OF SAMBALPUR DISTRICT

Sl No	Name & location of the factory.	Name of the occupier.	Hazardous substances dealt with	Probable disaster	Vulnerability of population.		Contingency plan		Remarks
					Factory	Civil	Present	Mock drills conducted	
1	2	3	4	5	6	7	8	9	10
01	M/s. Bhushan Power & Steel Ltd. Thekoloji, Lapanga, Sambalpur. 2535000, 2562026 to 32	R P Goel, Director. Arun Jalali, Vice-President.	Petroleum Products, Chlorine, HCl Acid, Coal	Fire, Chlorine Leakage	1500		Yes	Yes	
02	M/s. Samaleswari Ferro Metal (P) Ltd. Bishalkhinda, Sason, Sambalpur. 2541891, 2541893	Jayant Ku. Agrawal, Director.	Coal, Petroleum Products	Fire	83		No	No	
03	M/s. Maa Samaleswari Sponge Iron Ltd. Sahara Para, Katarbaga, Sambalpur. (2412327, 2412546, 2412703-Fax.	Vikash Mittal. Director. Vaibhab Kedia. Director(Works)	Coal, Petroleum Products	Fire	90		Yes	No	
04	M/s. Maa Samaleswari Industries (P) Ltd. Lapanga, Sambalpur. 2401182, 2403268	Pramod Ku. Banka	Coal, Petroleum Products	Fire	150		No	No	
05	M/s. TR Chemicals (P) Ltd., Govindpur, Bamra, Sambalpur. 2006904, 2006905	Sanjeev Ku. Kapoor	Coal, Petroleum Products	Fire	250		Yes Not to this office	No	
06	M/s. R B Sponge Iron (P) Ltd. Kenghati, Jayantpur, Sambalpur. 2000259, 9437050410,9437050372	Sundarlal Purseth	Coal, Petroleum Products	Fire	100		No	No	
07	M/s. Aryan Ispat & Power Ltd., Bamloi, Rengali, Sambalpur. 2540563, 2541900, 2540563.	Vinod Ku. Jain	Coal, Petroleum Products	Fire	500		No	No	
08	M/s. Shyam DRI Ltd., Pandoloi, Rengali, Sambalpur. 2560663 / 518 / 537	Brij Bhushan Agrawal	Coal, Petroleum Products	Fire	500		Yes	No	

2230484 / 85 / 86 / 87

09	M/s. Viraj Steel & Energy Ltd., Gurupali, Rengali, Sambalpur. 2230586, 2230587	Ram Dilas Rai, Director	Coal, Petroleum Products	Fire	225	Yes	No	
10	M/s. Rathi Udyog Ltd., Sikirdi, 'A' Katapali, Sambalpur. 2541170, 9937331331	Vijay Surjan, GM	Coal, Petroleum Products	Fire	200	-	-	Under construction.
11	M/s. Ravi Metallics (P) Ltd, Sansinghari, Sambalpur. 2400250, 2401940, 9437045249	Manoj Ku. Agrawal	Induction furnace	Fire	50	-	-	Under construction.
12	M/s. Mamta Ispat (P) Ltd, Khinda, Sambalpur. 2540410, 9437054013	Deepak Ku Murjani, MD	Induction furnace	Fire	50	-	-	Under construction
13	M/s. Hindalco Industries Ltd., Hirakud Power, Hirakud, Sambalpur.	Askaran Agrawal	Chlorine, Furnace oil Coal	Fire, Chlorine Leakage	2000	Yes	Yes	
14	M/s. Hindalco Industries Ltd., Hirakud Smelter, Hirakud, Sambalpur.	Askaran Agrawal	Chlorine, Furnace oil Petroleum products	Fire, Chlorine Leakage	5000	Yes	Yes	
15	M/s. Hi-Tech Bottling (P) Ltd., Jayantpur, Sambalpur. 06681-276305, 0663-2404112	Manohar Jaiswal, Director	Ethanol	Fire	50	No	No	
16	M/s. Priti Oil (P) Ltd., (Solvent extraction) Rengali, Sambalpur.	Ramesh Ku. Agrawal.	Hexane	Fire		Updated plan under process	No	
17	M/s. Hindustan Petroleum Ltd. Mini Depot, Pradhanpali, Sambalpur.	Dibya Ch. Nayak.	Petroleum products	Fire	Less than 10	Yes	Yes	
18	M/s. Indian Oil Corpn. Depot, Khetrajpur, Sambalpur.	Sunil Ku. Singh.	Petroleum products	Fire	20	Yes	Yes	
19	M/s. Bharat Petroleum Corpn. Depot, Khetrajpur.	S Bhattacharjee	Petroleum products	Fire	25	Yes	No	
20	Water Treatment Plant, Baraipali, Sambalpur.	Executive Engineer, PHD	Chlorine	Chlorine Leakage	Less than 10	No	No	

ANNEXURE - II**TELEPHONE DIRECTORY**

DESIGNATION	NAME	OFFICE	RES.	FAX	MOBILE
D.M. & Collector	Mr. V. Gagan	2400222	2400001	2404006	
A.D.M. (General)	Mr R.N.Pradhan	2410386	2411860		9861003952
Dist.Dev.Officer	Mr. P. Behera	2410653			
D.S.W.O.	Mr.G. Panda	2410557			
Emergency Officer	Mrs. P. Dora	2410011			9437319303
Dist. Project Officer (UNDP)	Mr. S,K,Sahoo	2410011		2404006	9437352051
Revenue Officer	Mr Sudhakar Naik	2410011	2404248		9437209698
D.I. & P.R.O.		2410582			
Civil Supplies Officer	Mr.S.Pattnaik (I/C)	2410845			9437257933
R.T.O.,Sambalpur		2410371	2520490		9437346384
P.A. to Collector,			2410601		
Sub-Collector, Sambalpur	Mr. H. H. Sahu	2410387	2411702	410387	9437051098
TAHASILDAR					
Sambalpur	Kabindra Kumar Sahu	2410818			9437330662
Rengali	Pradeep Sahu	2560542	2411209		9437333823
Kuchinda (956642)	Sidheswar Naik	220249	220249(extn.)		9437401437
Rairakhol (956644)	Pradeep Sahoo	253035	253325		9937330086
BLOCK DEVELOPMENT OFFICER					
Dhankauda	Mr.P. K. Nanda	2412721	2540864		9437205160
Maneswar 956681	Mr. Bimlendu Ray	235777			9437085556
Rengali	Mr. Raghunath Sahu	2560543	2560278	A.E.-94371-93049	
Jujumura (956681)	Mr.B.B. Behera	257609	257680		9437198559
Kuchinda (956642)	Mr.Saroj Patel	220262	220262	220162	9437005128
Jamankira (956642)	Mr. G.C. Naik	234201	[A.E.,Sri G.C.Biswal- 9437245128]		
Bamra (956622)	Mr. Fakir Panda	229207			
Rairakhol (956644)	Mr. B.K.Kanhar	253015	253191	253015 (fax)	9937127130
Naktideul (956647)	Mr.Pankaj K. Pradhan	246002	246002		9437543841
R.D.C. (N.D.), SAMBALPUR					
R.D.C.,N.D.	Mr Jagadananda Panda	2401975	2405153 (Direct)	2411645(Fax)	9437199999
Secretary to R.D.C.	Mr. A. Mishra	2410457	2410258		9437347171
MUNICIPALITY					
Chairman	Mr. Girish Patel	2411016, 2411316	2403147 2401774	2410096	9437051147
Ex.Officer, Sambalpur	Mr. S.Satpathy (I/C)	2411012	2522971		9437348030
Health Officer	Dr.Das	2410724			
Municipal Engineer		2411319	2400503	2520338(T)	

Chairman, Hirakud NAC		2481371	2000778		
Ex.Officer -do-	Mr. C. Sahu	2481464	2481405		
Chairman, Burla NAC		2430508	2430912	2430151	
Ex. Officer, -do-	Mr P.K.Mohanty	2430508	2430625		
ExOfficer Kuchinda NAC	Mr. Meher	220060	220070		
Chairman, Naktideul			246096		
POLICE DEPARTMENT					
D.I.G., N.R.	Mr. P. Acharya	2400016	2400017		9437175375
Supdt. of Police	Mr Sushant Ku Nath	2404330	2400002	2401308	9437084440
Add. S.P. (I)	R.K.Mishra	2410388			94372-94839
Add. S.P. (II)		2520597			
D.S.P.		2410214	2405747		
S.D.P.O.		2402597	2411871		94371-04353
C.I., Sadar		2520344	2403224		
Town P.S.	Sri G.Sahu	2403100			94371-37035
Ainthapali P.S.		2545192			
Dhanupali P.S.		2411100			
Hirakud P.S.		2481211			94371-27229
Burla P.S.		2430444			94370-88878
Rengali P.S.		2560519		Katarbaga PS-2230546	Theikoli-2230452
Sason P.S.		450608			
V.H.F. Control		2540097		Atabira VHF-956682-220210	
Sadar P.S.		2410127			
Jamankira PS (06649)		234203			
Kuchinda P.S. (06642)		22224			
Supdt. of Mahila Jail		2533042			
Mahila P.S.		2405405			
D.S.P., Hirakud Dam		2481219	2481243		
S.D.P.O., Burla		2430243	2430787		
Dy. Fire Officer,SBP	Sri A.C. Sethy	2521626	2522709		9437128826
Fire Brigade Asst. F.O.		2520101			9861006864
I.I.C., Town P.S.		2403224			
Traffic Inspector		2520243			
Burla Fire Station		2430333			
HEALTH & FAMILY WELFARE					
C.D.M.O., Sambalpur		2401843	2404571		
A.D.M.O.(Medical)		2404148	2532297		
A.D.M.O. (FW)	U.Sahu(I/C CDMO)	2520571	2401375		9437348631
A.D.M.O. (PH)	Dr.Samal	2533536	2405213		94373-52946
Hqrs. Hospital		2522222			
Red Cross Bhawan		2404226			
Rengali Hospital		2589571			
Ainthapali Trg, Centre		2401467			
Blood Bank Officer		2401464	2401465		

Eye Specialist	Dr.P.N.Joshi	2402752	2402182		
Medicine Specialist	Dr. R.K.Hota,		532758		
Medicine Specialist	Dr. Aswini Nayak	2404826©			
Gynic Specialist	Dr. Satyabati Nayak		532933		
-do-, Burla	Dr.Satyabati Patel		430368		
Inspector, Ayurved, SBP	Mr. Fakir Ch. Naik	2412918			
Blood bank Burla	Dr S.Kar	2431420	430315		
Blood bank Kuchinda		220309			
Homoeopathy	Dr. S.K.Dehury SBP	2404011			9437050230
Dentist	Dr. A. Satpathy		2402222		
Medicine Specialist	Dr. T.Panda,		2405667		9437104458
Pediatric (Special)	Dr. Govind Sahu		2521757		9437345919
Pediatric	Dr. K.K.Gupta		2541280		9861042514
Medicine	Dr.Ratan Kumar Mishra	2404975			9437053322
	Dr.Singhal				98610-17259
Pediatrics	Dr.Govinda Sahu				94373-45919
ADMO	Dr.Samal				94373-52946
Pathologist	Maharana				94372-55599
Orthopedic	Dr.N.C.Mohapatra				94371-26788
ENGINEERING DEPARTMENT					
Power House, Burla		2430156	2430167		
R & B, Sambalpur		2412303	2430735		
N.H., SBP.		2412461	412463		
BURLA					
Blood bank ,Burla		2431420	2430315		
Station Director, All India Radio	Mr.Rahas Bihari Mirdha	2410507	2400896	2410507	
Station Director, Doordarshan	Mr.Narottam Behera	2400291	2520951	2400492	
Divl. Rly Manager, S.E.Railways	Mr.S.K.Suri	2401331	2400498	2401331	
Ispat G.H. Rourkela		2540627			
MCL, G.H. Bhubaneswar		2403974; 2403992			
G.M.(Admn)		2542876; 2542461-470, 2430876			
State G.H. Bhubaneswar		2410819;410679			
PRESS					
Secy. Press Club	Mr Shiv Pr.Meher	2520992	2403913		
Indian Express	Mr.H.Mohapatra	2400945			
Asian Age	Mr. A.Naik	2410044			
Samaj	Mr.P.K.Mohanty	2402383	2401292		
Sambad	Mr. Bamapada Tripathy	2521651	2533330		
Prajatantra	Mr.A Nayak				

Janamukha	Mr.M.Pattnaik Mr.P. Pattnaik				98611-67250 98610-17915
Agnisikha	Mr.D.K.Panda	2400122			
Dharitri	Mr.Siba Sh. Nanda	2405816	2400697		
Ganabarta	Mr.Ashok Bisi		2411004		
Koshal	Mr.T.Tripathy	2400710			
Samaya	Mr.Prafulla Dash		2520997		
Times of India	Mr.P.K.Patnaik	2540855			
NATIONAL CADET CORPS					
Group HQrs. (Stadium)	Col.S.D.Redeker	2412776	2400735		
G.M.College		2400970	2520552		
Branch Recruitment Office			2533173		
	Maj. P.K.Panda	2400560	2532983		
	Maj.Dr.P.K.Panda, Burla	2430491	2430566		
BHUSHAN POWER & STEEL LTD., THELKOLOI, RENGALI					
Vice president	Sri Arun Jalali	2562001(Direct) 2590400(Thelkoli)	06645-2542956 (FAX) (Jharsuguda)		94370-61111 94370-53072 94370-56955 9437057941
Executive Director	Mr. K S Sukhi	2230454			94370-59060
G M (Commercial)	Sri B.M.Sharma	2562003			94370-55434
Sr. Manager (P&A)	Mr. A Choudhury	0663-2535172		0663 - 0562007, 2562011	9437057841
AG M, (Fire & Safety)	Mr. Pranabandhu Kar	0663-2230450	06645-277096		
ADITYA ALUMINIUM					
	Sri Jasbant Roy			2560730	94371-81543
Joint President	Sri J.C.Laddka	2544206 2547352 2544452		2543656	
DGM	Sri S.K.Gupta				94370-40948
SHYAM DRI POWER LTD., PONDOLOI, RENGALI					
Sr. Executive	Mr.B.Goyal				94370-55892
	Mr.Mittal	2412327 2412546			
RATHI STEEL & POWER LTD., KANTAPALI, SAMBALPUR					
	Mr.Udit Rathi	0674-2543804		2542956	
	Mr.R.D.Ray				94370-16235
Director (Operation)	Mr. S Kaushik				99370-91639
G M (Commercial)	Mr. Vijay Surjan	0663-2541170			9937331331
G M (Production))	Mr. P Patnaik				99370-91646
VIRAJ STEEL & POWER LTD., PONDOLOI, RENGALI					
Director	Mr.R.D.Rai	2230586 / 2230587			94370-16235 9861082000
Plant Manager	Mr.R.P.Ramaya,				9861082005
GM (Operation)	Mr. V S Singh				9861082007
HINDALCO INDUSTRIES LTD., HIRAKUD COMPLEX (SMELTER & POWER)					
HINDALCO, PBX, HIRAKUD		2481273 2481408			
Joint President, INDAL	Rabindra Mishra	2481435	2481302		9861029529
Vice President- Smelter	Mr.A.Pati	2481766	2481335		9437028766

Smelter					
Asst. Vice President- Power	Mr.S.K.Guru	2481436	2481360		9437057212
General Manager- HR	Mr.N.P.Patro	2481310	2481504		9437051504
Manager, Safety- Smelter	Mr. Saroj Panda				9437126865
Safety Officer- Power	Mr. P K Pradhan				9437393297
BHARAT PETROLEUM CORPORATION LTD., DEPOT					
Sr. Operation Officer	Mr.J.Mazumdar	2522137			9437067385
Asst. Manager	Mr.Amit Gokhle,	2522137			
Plant (Depot)		2402116, 2522137	2522416	2405110	
INDIAN OIL CORPORATION LTD., DEPOT					
Control Room		2401940			
Sr. Depot Manager	Mr.R.P.Trivedi	2522132	2541232		9437035704
Dy. Manager Operation	Mr.M.C.Sethi	2401940	2404534		9937064882
ARYAN ISPAT & POWER PVT. LTD., BOMALOI, RENGALI					
Director	Mr.G.S.Garcha	2230599	2540563		9437059480
General Manager	Mr.Triveni Singh	2230599			
AGM (P&A)	Mr.S.Das				9437061801
KEEP SAFE TRADERS (PVT.) LTD., SASON, SAMBALPUR					
Director	Mr. Sunil Kumar Agarwal	2544758	2544298		9437051298
MAA SAMALESWARI SPONGE IRON LTD., KATARBAGA, RENGALI					
Director	Mr. Vikash Mittal	2412703, 2412546	2560351-Plant	2412327	9937250515, 9337050518
Prodn. Incharge	Mr. V Kedia				9437065508
MAA SAMALESWARI INDUSTRIES PVT LTD., LAPANGA, RENGALI					
Director	Mr. Promod Ku. Banka	2401182, 2403268			9861023155, 9437050268
Manager (P&A)	Mr. Rabindra Mishra				9937324360
SAMALESWARI FERRO METAL PVT LTD., BISHALKHINDA, SASON					
Director	Mr. Jayant Ku. Agrawal	2541891, 2541893			
T R CHEMICALS PVT. LTD., GOVINDPUR, BAMRA					
Director	Mr. Sanjiv Ku. Kapoor	06624—220189, 222462, 222446	0663-2006904 2006904		
Director	Mr. Mukesh Agrawal				9437040072
GM (Operation)	Mr. Subha Rao				9437047046
R B SPONGE IRON PVT. LTD., KENGHATI					
Director	Mr. Sundarlal Pruseth	06681-276329 276429,	0663-2000259		94370-50410, 94370-50372
MAMTA ISPAT PVT. LTD., KHINDA, SAMBALPUR					
Director	Mr. Deepak Ku. Murjani	0663-2540410			94370-54013
RAVI METALLICS PVT. LTD., SANSINGHARI, SAMBALPUR					
Director	Mr. Manoj Ku. Agrawal	0661-2400250			9437045249, 9437016882

ANNEXURE - III

FORMAT FOR RECORDING ESSENTIAL INFORMATION ABOUT THE INCIDENT

- 01 Date and time
- 02 Name of person receiving call
- 03 Name & telephone no. of on-scene contact
- 04 Location
- 05 Nearby populations
- 06 Nature (e.g., leak, explosion, spill, fire derailment)
- 07 Time of release
- 08 Possible health effects/medical emergency information
- 09 Number of dead or injured; where dead/injured are taken
- 10 Rescue accomplished? Rescue needed?
- 11 Name of material(s) released; if known
Manifest/shipping in voice/billing label
SSTC number
CAS number
MSDS available
Shipper/manufacturer identification
Container type (e.g., truck, rail car, pipeline, drum)
Railcar/truck 4-digital identification numbers
Placard/label information
- 12 Characteristics of material (e.g., colour, smell, physical effects), only if readily detectable
- 13 Present physical state of the material (i.e., gas, liquid, solid)
- 14 Total amount of material that may be released
- 15 Other hazardous materials in area
- 16 Amount of material released so far/duration of release
- 17 Whether significant amounts of the material appear to be entering the atmosphere, nearby water, storm drains, or soil
- 18 Whether the release was in a confined space
- 19 Direction, height, colour, odor of any vapour clouds or plumes
- 20 Weather conditions (wind direction, speed, inversion)
- 21 Local terrain conditions significant to dispersion
- 22 Personnel at the scene

ANNEXURE - IV

WEB RESOURCES

Chemical and Industrial Accidents

- www.sdnpc.delhi.nic.in : Sustainable Development Networking Programme, India
- www.lpaindia.org : Loss Prevention Association of India Ltd. (LPA) is engaged in promoting safety and loss control through education, training and consultancy
- www.unep.org/pc/apell : the (UNEP) has developed a programme called APELL, in conjunction with governments and industry with the purpose of minimizing the occurrence and harmful effects of technological accidents and environmental emergencies.
- www.ncmrwf.gov.in : website of National Center for Medium Range Weather Forecasting
- www.imd.ernet.in : website of India Meteorological Department.

Urban Structure Fires

- www.ifeindia.org
- www.fire-wind.net
- www.wmo.ch : World Meteorological Organisation is an intergovernmental organization with a membership of 187 member states and territories. WMO is a specialized agency of the United Nations for meteorology (weather and Climate), operational hydrology and related geophysical sciences

ANNEXURE – V

ANTICIPATED HAZARDS AND THEIR MANAGEMENT

A) FIRE DUE TO VARIOUS REASONS

SI No	TYPE OF DISASTER	PROPERTIES OF MATERIAL	EFFECTS OF DISASTER	PREVENTIVE MEASURES	FACILITIES REQUIRED
i)	Fire in petroleum products, oil storage tanks, electrical cables, transformer & Wood and wild life	Highly inflammable and greatly expands in volume after getting heated and changing into gaseous form. Electrical cables are highly combustible and gases due to fire are highly toxic and of obnoxious smell. Transformer oil is inflammable having a flash point of 140°C. Highly combustible and fast spreading.	Fire can result into huge explosion of the storage tanks causing wide spread fire and damage to men, material and machines. Transformer can burst causing disastrous fire accident	Stacking in as per standard norms. Storage area declared for restricted entry. No inflammable material stored in the proximity. Prohibition of smoking & other sources of fire. Work permit system to be followed.	Fire hydrants, Fire extinguishers, Fire tender, Trained work force, Smoke sensors and automatic water sprinkler, Emergency escape route, Proper house keeping, All inflammable combustible and explosive material to be removed immediately after the completion of work, All inflammable, combustible and explosive materials to be kept away from electrical installations.

B) EXPLOSION DUE TO VARIOUS REASONS

i)	Explosion of pressure vessels, pipelines, furnaces, Casting machines	Gaseous substances such as steam, compressed air & nitrogen are explosive due to the higher pressure under which they are retained and transported. If water from any source trickles into the molten metal, the water molecules break immediately into hydrogen and oxygen releasing immense amount of energy causing violent explosion.	The metallic vessels/containers/pipelines can burst open & cause high velocity splinters to fly in all directions resulting into fatalities and serious damage to plant. Superheated steam can cause serious burn.	Continuous pressure and temperature monitoring carried out. Pressure gauge regularly calibrated. Boiler inputs constantly monitored. Appropriate isolating valves, thermometers and by pass lines provided. Only highly skilled & experienced manpower is engaged. Standards operating practices and laid down safety procedures are followed.	Restricted entry in critical areas followed. Operation by only trained staff. Fire hydrants. Fire extinguishers. Emergency water tank and power supply. Preventive maintenance and norms of operation as per standard operating practice to be strictly followed.
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C) CHEMICAL AND GAS HAZARD

SI No	TYPE OF DISASTER	PROPERTIES OF MATERIAL	EFFECTS OF DISASTER	PREVENTIVE MEASURES	FACILITIES REQUIRED
i)	Chlorine (Cl₂)	<p>Greenish yellow in colour and acutely irritating in odour. Reacts slowly with water to form HCl. Moist Cl₂ are corrosive to most metals. Under sunlight it reacts explosively with H₂ to form HCl. It irritates the mucous membranes. In extreme cases the breathing difficulty may reach the point of death due to suffocation.</p> <p>Exposure to Cl₂ causes burning of eyes and nose.</p> <p>Non-combustible in air but most combustible materials will burn in Cl₂ as they do in Oxygen. Flammable gases & vapours from explosive mixture with Cl₂.</p> <p>Reacts explosively or forms explosive compounds with many common chemicals such as acetylene, turpentine, hydrocarbons, hydrogen and finely divided metals.</p>	<p>If exposed to heat or fire, the cylinder may explode violently releasing the contents. This will result into disaster causing wide spread fire and suffocation. In case of leakage, it will react with body moisture to form acid and at high concentration it will act as asphyxiant and cause wide spread fatalities.</p>	<p>Welding, cutting or any other hot work on the equipment of Cl₂ done only after the system is purged with steam and dried with hot air.</p> <p>Contact with combustible substances, Hydrogen, Acetylene prevented.</p> <p>Indoor storage, handling and use areas properly ventilated with cool and dry atmosphere. Cylinders stored in upright position with enough room between them.</p> <p>The vapour is heavier than air and travels along the ground, therefore the exhaust fans located near the floor of the store.</p>	<p>Proper system developed for storage handling & transportation</p> <p>Trained personnel.</p> <p>Breathing apparatus and gas masks.</p> <p>First aid.</p> <p>Sensors.</p> <p>Sprinklers.</p> <p>Fire and explosion proof fittings.</p> <p>Provision of fiberglass hood to direct the leaking gas into the neutralisation tank with lime dosing facility.</p> <p>Periodical medical check-up</p>

ii)	Ammonia	<p>Colourless & pungent in odour. Extremely soluble in water. Solubility decreases with increase in temperature. In presence of moisture corrosive to copper, zinc, copper alloys & galvanized surfaces. Being lighter than air, it will rise up in the air & its pocketing is likely to occur at roof level. The mixture of ammonia & air is flammable with explosion potentiality if the concentration of ammonia in air is less than 25% but greater than 16% by volume. It irritates skin, eyes & respiratory tract. Concentration above 2000 ppm may be fatal.</p>	<p>If exposed to heat & fire, the cylinder may explode violently releasing the contents. This will result into disaster causing wide spread fire & suffocation. The explosive/flammable limits of the gas are from 16 to 25% by volume of air. In case of leakage, it will react with skin, results chemical burns & at high concentration it will produce violent coughing, severe lung irritation & pulmonary oedema and cause fatalities.</p>	-As above-	-As above-
iii)	Oxygen (O₂)	<p>Non-combustible in itself but enhances combustion of other materials. Colourless & odourless. Oil & grease ignites spontaneously in presence of compressed oxygen. Inhalation of 100% oxygen under pressure causes nausea, dizziness, and irritation of lungs, pulmonary inflammation, pneumonia and collapse.</p>	<p>Cylinders if subjected to elevated temp. can explode violently and cause damage to men, materials and machines.</p>	<p>Open flames, sparks, smoking and contact with combustible and reducing substances prevented. The cylinders and pipings kept free of oil and grease. Stored in cool and well ventilated. Cylinders of Acetylene and LPG kept away from oxygen storage. Dropping of cylinders is strictly avoided and violent contact with one another is prevented.</p>	-As above-

iv)	Liquefied Petroleum Gas (LPG)	<p>Colourless & odourless. Odourised by addition of Ethyl-mercaptan as warning agent. It is doubly heavier than air and has a tendency to settle down on floor. Degree of fire and explosion hazards is very high due to following properties :</p> <p>Extremely low boiling point.</p> <p>Large liquid to gas expansion ratio at room temp. and subsequently the air/LPG flammable mixture is 10 to 100 times the gaseous volume of LPG.</p> <p>Poor visibility of the ignitable mixture and high burning velocity.</p> <p>Very high calorific value 22,000 KCal/kg.</p>	<p>High burning velocity (0.38m/sec) it can injure instantly any one coming in contact with it and cause severe burn injury and even death.</p> <p>It has ability to ignite and burn as a deflagration giving rise to fire ball with intensive heat radiation and thus cause wide spread disaster.</p> <p>Fire reports have been received for its ignition from sources as far as 200 Mts. from the source of gas leakage.</p>	<p>Industrial and commercial grade cylinders are only used.</p> <p>Naked lights cigarette ends, sparks from static and live discharges, metal impacts, sparks from welding and cutting, friction in moving parts are avoided.</p> <p>Cylinders are stored in cool locations.</p> <p>Quality of pressure regulators and other devices and rubber hose as per ISI standard.</p>	-As above-
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v)	Dissolved acetylene (C ₂ H ₂)	<p>Colourless and the commercial grade has a garlic like odour.</p> <p>Non-toxic when pure and mildly anaesthetic in mixture with oxygen.</p> <p>Explodes violently when mixed with Cl₂ under sunlight.</p> <p>Inhalation causes dizziness and suffocation.</p> <p>Decomposes violently under pressure when subjected to heat or shock even in the absence of the air.</p>	<p>Because of its wide explosive range even a small leakage, on contact with the spark leads to an explosion.</p> <p>Explosion of C₂H₂ develops pressures higher than explosions of most other gases and are therefore very violent and damaging.</p>	<p>Conform to standards.</p> <p>Full-proof shut-off valves and pressure regulator be attached to the cylinder valve.</p> <p>If leaks are identified it is rectified by tightening glands, nuts etc. and removed to a place well away from any possible ignition and gas is allowed to escape.</p> <p>It is ensured that the valve protective caps remain in place before and after the use of cylinders.</p> <p>These valve are kept closed even for the cylinders, which are supposed to be empty.</p> <p>Cylinders are stored and handled in upright position and protected from direct sunlight.</p> <p>Cylinders of Cl₂ and oxygen not stored with C₂H₂ cylinders.</p>	-As above-
vii)	Sulphuric acid (H ₂ SO ₄)	<p>Colourless, oily dense liquid.</p> <p>Reacts vigorously with evolution of heat.</p> <p>Powerful oxidizing agent and can dissolve most metals.</p> <p>It can cause severe damage to eyes leading to blindness.</p> <p>It causes deep and rapid skin burning which may be difficult to heal.</p> <p>Violent splattering occurs in water is added to concentrated acid.</p> <p>The acid does not burn but spillage of concentrated acid into organic material can cause fire.</p>	<p>Large scale personnel can get affected due to following reasons.</p> <p>Severe damage to eyes/ blindness.</p> <p>Severe skin burns.</p> <p>Damage to respiratory digestive tracts.</p> <p>The above situation can cause chaos.</p>	<p>Smoking and using naked lights prohibited in the storage area.</p> <p>Hot jobs in the vicinity of acid storage area is done only under permit.</p> <p>Stored in metal drums/glass/polyethylene carboys and kept in separate well ventilated location away from all sources of ignition.</p> <p>Raised sills/ramps provided at store room door openings.</p> <p>Only trained employees engaged for handling of this acid and suitable PPEs provided.</p>	-As above-

D) ELECTRICAL HAZARD

SL NO	TYPE OF DISASTER	PROPERTIES OF MATERIAL	EFFECTS OF DISASTER	PREVENTIVE MEASURES	FACILITIES AVAILABLE	REMARKS
	Electrical hazard	Electrical shock affects the nervous system, muscles and other parts of the body.	Severe burns. Damage to nervous, muscular and pulmonary systems and may cause permanent disability and even death. Can cause fire and explosions. Electrocutio n can cause falling of persons from height and death.	Generation and transmission system has been designed and operated as per Electricity Act and Rules. Suitable tripping devices, isolators, non-conducting materials being used. Properly insulated tools, tackles and testing devices provided. Suitable lighting arrestors and "earthings" provided. PPEs such as shock proof gloves, shoes etc. provided and used. Fire retardant sheathing for cables and barriers. Suitable rubber mattings. Moistening of critical electrical equipment and operating personnel avoided.	Smoke sensors and alarms. Sprinklers. Suitable fire extinguishing system.	As per the latest findings following are the disastrous effects of strong electromagnetic field. Children living near power lines are likely to develop lumphatic cancer. People working regularly in the strong magnetic fields have 60% higher probability of getting affected by leukemia. Ladies working in the electro-magnetic field created by VDUs have the probability of having miscarriage.

E) COLLAPSE OF STRUCTURES & EQUIPMENT

S L N O	TYPE OF DISASTE R	PROPERTIES OF MATERIAL	EFFECTS OF DISASTER	PREVENTIV E MEASURES	FACILITIES AVAILABLE	REMARKS
	Collapse of structures and equipment	Higher concentrated loads, height and massive volume make the structures vulnerable to collapse. Being most metallic (mostly carbon steel) is prone to corrosion, leading to weakening and collapse.	Since most of the equipment, personnel and activities are concentrated indoors a collapse of structures shall lead to disaster.	All the structures designed and erected as per safety norms considering factors such as soil, wind velocity and direction, rainfall, seismic record, salinity of atmosphere etc. Preventive maintenance regularly done. Additional load avoided.	Fire and security people trained for rescue operation. Well laid out fire fighting system.	Special attention to be paid towards structural stability studies, painting and reinforcement of structure. Roof cleaning and cleaning of drainage system to be ensured.

F) MAJOR ACCIDENTS OF TRANSPORT FACILITIES

S L N O	TYPE OF DISASTE R	PROPERTIES OF MATERIAL	EFFECTS OF DISASTER	PREVENTIV E MEASURES	FACILITIES AVAILABLE	REMARKS
	Major accident of transport facilities	Hazardous & inflammable material such as chemicals, gas cylinders, oils, etc. that are transported by trucks/road tankers, if meet with an accident can cause major disaster.	Chemical poisoning Oil & fire explosion Heavy loss of materials & equipment	Road conditions and traffic control maintained in good order. Proper safety and traffic regulations ensured for trucks, road tankers carrying chemicals and oils. Reputed & recognised transporters are only employed.	Trained security and fire fighting staff. First aid, ambulance and medical facilities.	People residing inside and outside the plant premises to be made aware about the hazard of chemicals, gas, oils etc. and informed about the preparedness.

ANNEXURE – VI**RESOURCE INVENTORY/ CAPACITY ANALYSIS****BLOCK WISE MEDICAL INSTITUTIONS OF SAMBALPUR**

Name of the Block	Sl. No.	Name of Medical Institution	Total beds	In-charge	Tel. Number
Dhankauda	1	Police Hospital	10	Dr. P. Tripathy	
	2	Hirakud Hospital	24	Dr. K. Rout	
	3	Debeipali PHC.	6	Dr. B.B. Sahu	
	4	Chaurpur PHC (N)	-	Dr. S. Supkar	
	5	Dhanupali PHC (N)	-	Dr. S. Debi	
Maneswar	6	Themera PHC.	6	Dr. B.K.Dora	
	7	Dhama PHC (N)	6	Dr.R.N.Sahu	
	8	Sagramal PHC (N)	-	Dr.S.Sahu	
	9	Parmanpur PHC (N)	-	Dr.A.K.Goswami	
	10	Maneswar PHC (N)	-	-	
Rengali	11	Laida CHC.	16	Dr.G.Meher	0663-2580280
	12	Rengali PHC (N).	10	Dr. Barik	
	13	Katarbaga PHC (N)	-	Dr.Panigrahi	
	14	Babukhinda PHC (N)	-	Dr.Pandit	
Kuchinda	15	S.D.Hospital, Kuchinda	35	Dr.S.M. Mahapatra	06642-220309 06642-227290
	16	Kuntara PHC.	6	Dr.L.K.Choudhuri	
	17	Gochhara PHC (N)	-	Dr.S.Bhoi	
	18	Tureiniktimal PHC (N)	-	Dr.P.Sahu	
	19	Kusmi PHC (N)	-	Dr.S.C.Naik	
	20	Kutrachuan PHC (N)	-	Dr.R.K.Sahu	
Jamankira	21	Up-graded PHC, Fashimal	30	Dr.S.C.Guntia	
	22	Jamakira PHC (N)	-	Dr.J.M.Patel	
	23	Banjari PHC (N)	-	Dr.S.K.Naik	
	24	Kenadhipa PHC (N)	-	Dr.B.Tandi	
	25	Bhojpur PHC (N)	-	Dr.K.M.Parida	
	26	Kulundi PHC (N)	-	Dr.S.Sahu	
Jujomura	27	Jujomura CHC.	16	Dr.V.K.Mishra	06681-257789
	28	Padiabahal PHC (N)	-	Dr.S.Supkar	
	29	Meghapal PHC (N)	-	Dr.B.K.Mishra	
	30	Hatibari Health Home	20	Dr.K.K.Barei	
Rairakhol	31	S.Dhospital, Rairakhol	35	Dr.S.S.Mahapatra	06644-253031 06644-252107
	32	Charmal PHC.	6	Dr.H.N.Padhi	
	33	Badmal PHC.	-	Dr.B.Mirdha	
Naktideul	34	Naktideul PHC.	6	Dr.J.S.Das	06648-246128
	35	Batagaon PHC (N)	-	Dr.B.A.Topo	
	36	Girischandrapur PHC(N)	-	Dr.P.K.Sahu	
Bamra	37	Govindpur PHC.	30	Dr.S.B.Naik	
	38	Garposh PHC.	6	Dr.P.K.Das	
	39	Burbuda PHC.	-	Dr.A.K.Patel	
	40	Jarabaga PHC	-	-	
	41	Keseibahal PHC (N)	-	Dr.S.K.Padhi	
	42	Mahulpali PHC (N)	-	Dr.P.Minj	
	43	Babuniktimal PHC (N)	-	-	

Ambulance

Sl. No.	Hospital	No. of Vehicle	Tel. Number
1	HQ. Hospital, Sambalpur	2	0663-2522222
2	S.D. Hospital, Rairakhol	1	06644-253031
3	CHC, Naktideul	1	06647-246128
4	S.D.Hospital, Kuchinda	1	0662-220309
5	CHC, Jujomura	1	06681-257799

Fire Station Information

Sl. No.	Name of the fire station	Disposition of Vehicle & Pumps	Disposition of Man Power.	In-charge	Tel. No.
1.	Sambalpur F.S.	Motor Fire Engine-1 Towing Tenders-2 Water Tanker-1 Trailer Pump-2	Asst. Fire Officer-1 Fireman –10 Driver–2 L.F.M-2	N.K.Mishra	0663-2520101
2	Redhakhol F.S.	Motor Fire Engine-1 Towing Tender-1 Trailer Pump-1	Asst. Station Officer-1 Fireman –8 Driver–2, LFM - 2	Madhaba Chandra Das	06644-2503021
3	Kuchinda F.S.	Motor Fire Engine-1 Towing Tender-1 Trailer Pump-1	Havildar-1 Fireman –8 Driver–2, LFM - 2	Chakradhar Lakra	06642-220277
4	Rengali F.S.	Towing Tender-1 Trailer Pump-1 Mini Motor Fire Engine	Asst. Station Officer-1 Fireman –6 Driver–2, LFM - 1	Sarbeswar Baral	0663-2560142
5	Burla F.S.	Motor Fire Engine-1 Towing Tender-1 Trailer Pump-1	Station Officer-1 Fireman –8 Driver–1, LFM – 2	Kalandi Charan Naik	0663-2430333
6	Naktideul FS	Towing Tender-1 Trailer Pump-1	Asst. Station Officer-1 Fireman –6 Driver–1, L.F.M – 1	Rabinarayan Samal	06647-246180

V.H.F.SYSTEM/INSTALLATION OF TEMPORARY POLICE WIRELESS STATIONS & PHONES

V.H.F. Stations at the following places are functioning round the clock to receive and transmit urgent messages in the event of any natural calamities.

1. Collectorate, Control Room, Sambalpur,
2. Sub Collector Office, Kuchinda
3. Tahasil Office, Rairakhol
4. Block Office, Naktideul,
5. Block Office, Rairakhol
6. Block Office, Rengali
7. Block Office, Dhankauda
8. Block Office, Jamankira
9. Block Office, Bamra

ANNEXURE - VII

CRISIS RESPONSE STRUCTURE OF THE DISTRICT

Department	Response System			
	Preparedness	Pre (after Warning)	During Disaster	Post Disaster
District Control Room	<p>Setting up of Control Room and ensuring round the clock functioning</p> <p>Assignment of duties to the District Level officials and Subcollectors/Tahasildars/BDOs</p> <p>Arrangement of vehicles and public announcement system with RTO & DIPRO for warning dissemination</p> <p>NGO coordination and assignment of duty</p> <p>Proper record keeping and transmission of information to all the levels</p> <p>Early warning to fishermen</p> <p>Holding of Natural Calamity meeting</p> <p>Ensure proper maintenance and functioning of warning s & communication systems</p> <p>Awareness generation among public on natural hazards</p> <p>Ensure Mock drill</p>	<p>Monitor functioning of DCR round the clock</p> <p>Coordination with District Level officials and Subcollectors/ Tahasildars/BDOs</p> <p>Coordination with RTO/DIPRO for vehicles and public announcement system for warning dissemination</p> <p>NGO coordination and assignment of duty</p> <p>Proper record keeping and transmission of information to all the levels</p> <p>Holding of DDMC meeting</p> <p>Ensure proper maintenance and functioning of warning s & communication systems</p>	<p>Dissemination of information regarding status of the disaster & submission of report to state govt. and media.</p> <p>Try to check rumors.</p>	<p>Providing information about the disaster and information about the relief and rehabilitation programme undertaken by the district administration.</p>
Police	<p>Ensure functioning of the warning system.</p> <p>Formation of team</p> <p>Delegation of areas</p> <p>Formation of zones/Sub-Zones</p>	<p>Keeping close contact with DEO</p> <p>Deploy personnel to guard vulnerable embankment points</p> <p>Alert Police officials to remain at the Head Quarter</p>	<p>Collection of vital information</p> <p>Inform DEO after getting authentic message</p>	<p>Support District officials & volunteers during search & rescue operation</p> <p>Assist firebrigade personnel in their efforts</p> <p>Maintain law and order situation</p>
Health	<p>List out the staff with contact address</p> <p>Stock position of the sub-center and PHC/AWCs</p> <p>Prepare the plan and indent for stock</p> <p>Train Paragraphmedical staff/ ANMs / male health workers / volunteers/task forces/ Anganwadi workers for use and providing minimum health services to the community.</p> <p>Arrange for mobile health unit for</p>	<p>Medical and Paragraphmedical staffs will be directed to join Head Quarter immediately</p> <p>Settings of a Control Room and will be kept operational for 24 hours</p> <p>Delegation of duties /Area distribution</p> <p>Request CDMO and requisition of vehicle</p>	<p>Arrangement of medical help for the rescued.</p> <p>Inform to respective Para medical staff regarding evacuated people.</p>	<p>IEC activities regarding health and sanitation</p>

	<p>inaccessible areas</p> <p>DDC at village level Health awareness campaign Re install telephone connection Arrangement of vehicle for uninterrupted mobility Repair of Sub Centers buildings Registration of Birth /Death and other vital events Dis-infections of Drinking water Sources thrice before flood season at least, one month before</p>	<p>Meeting of Sector</p> <p>MO/Supervisors Record keeping</p>		
Fire Brigade	<p>Take stalk of all the equipments (boats, motors, life jackets, crane etc) needed during the disaster and prepare for a mock drill.</p>	<p>Divide into teams in coordination with the Dist. admn. along with police, CD(Home) vol. and get ready for</p>	<ul style="list-style-type: none"> •Deployment of fire officials at risk point •Arrangement for the safety of property of the people. •Arrange rescue kits. •Support admn officials and volunteers during evacuation operation •Assist police, CD home personnel in their efforts 	<ul style="list-style-type: none"> •Support District/Block officials and volunteers during search and rescue operation •Assist police/ CD home vol. personnel in their efforts •Maintain law and order situation

Mock Drills Plans: Twice in a year (June & Dec.)

Schedule for updating plans:

Plans	Updating Time
District Disasters Management Plan	½ Yearly (May & Nov)
Line Departments Disasters Management Plan	½ Yearly (May & Nov)

ANNEXURE - VIII
NOTIFICATION ON DCG

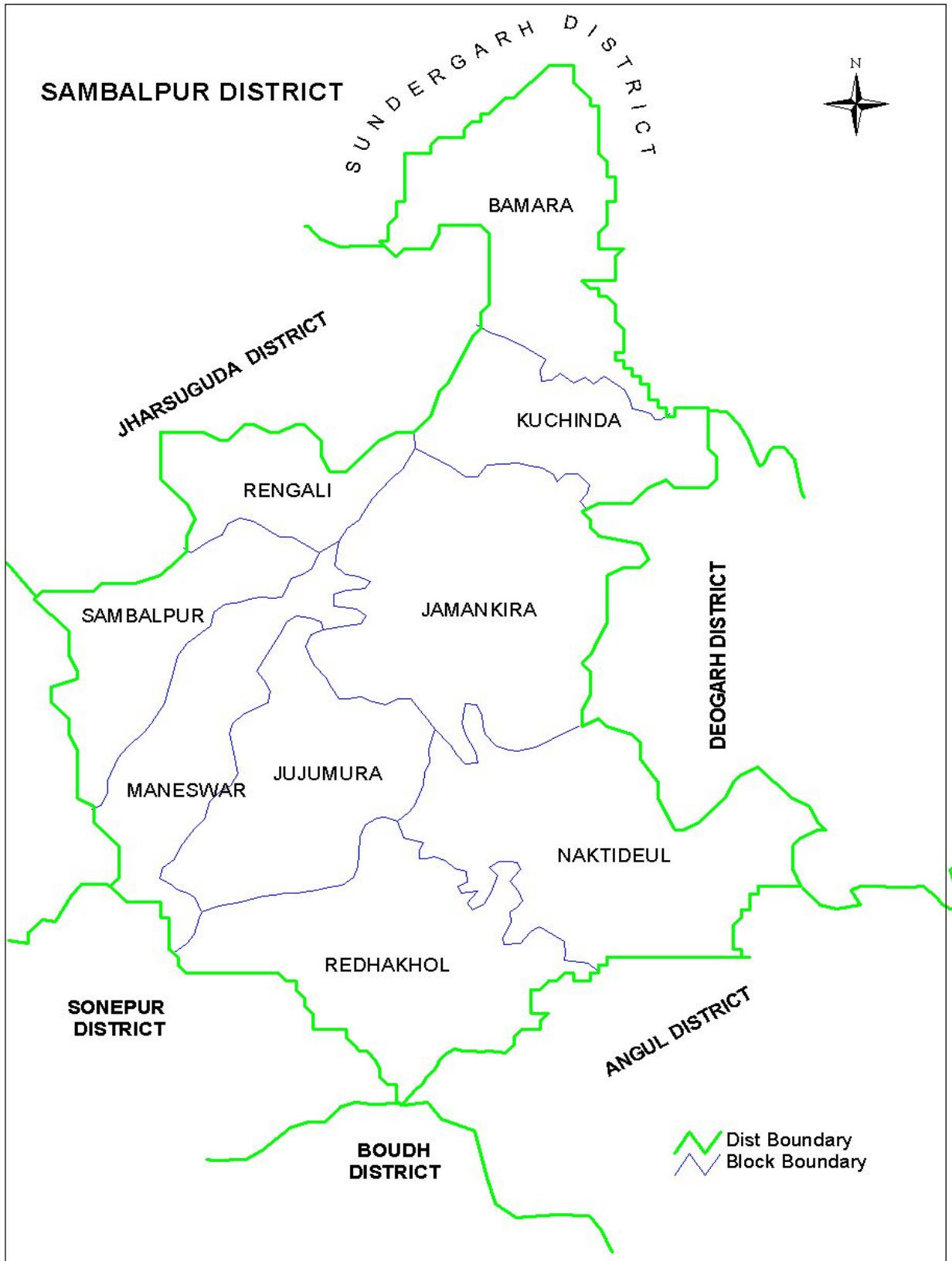
OFFICE OF THE DISTRICT MAGISTRATE & COLLECTOR, SAMBALPUR (JUDICIAL SECTION)

No: 2548 Dated, the 29/12/2006

ORDER

In accordance with Rule 8 of Chemical accidents (Emergency Planning, prepare chess and response) Rules, 1996 I Shri Susil Kumar Lohani, IAS, District Magistrate and Collector, Sambalpur do hereby constitute the District Crisis Group with the following members.

- | | |
|--|------------------|
| 01. District Magistrate & Collector, Sambalpur. | Chairman |
| 02. Inspector of Factories & Boilers, Sambalpur. | Member Secretary |
| 03. District Emergency Officer, Sambalpur. | Member |
| 04. District Fire Officer, Sambalpur | Member |
| 05. District Information & Public Relation Officer, Sambalpur. | Member |
| 06. Controller of explosives, Rourkela | Member |
| 07. Civil Defence Officer, Sambalpur | Member |
| 08. Deputy Superintendent of Police, Sambalpur. | Member |
| 09. Chief District Medical Officer, Sambalpur. | Member |
| 10. Executive Officer, Sambalpur Municipality, Sambalpur. | Member |
| 11. Executive Officer, Hirakud N.A.C., Hirakud. | Member |
| 12. Executive Engineer,
Public Health Engg. Department, Sambalpur. | Member |
| 13. Regional Officer, Orissa Pollution Control Board,
Hospital Road, Modipara, Sambalpur. | Member |
| 14. District Agriculture Office, Sambalpur. | Member |
| 15. Regional transport Officer, Sambalpur. | Member |
| 16. Sub-Collector, Sambalpur. | Member |
| 17. Chief Executive, Hindalco Industries Ltd., (Hirakud Smelter)
Hirakud. | Member |
| 18. Safety Officer, Hindalco Industries Ltd., (Hirakud Smelter)
Hirakud. | Member |
| 19. Safety Officer, Hindalco Industries Ltd., (Hirakud Power)
Hirakud. | Member |
| 20. Chief Manager (Medical), Hindalco Industries Ltd., Hirakud. | Member |
| 21. Depot Manager, Indian Oil Corporation Ltd.,
Khetrajpur, Modipara, Sambalpur. | Member |
| 22. Depot Manager, Bharat Petroleum Corporation Ltd.,
Khetrajpur, Modipara, Sambalpur. | Member |
| 23. Mrs. Sipra Mohanty, President
Hindalco Workers Union, Hirakud. | Member |



OFF-SITE EMERGENCY PLAN SAMBALPUR DISTRICT

