

STATEMENT NO. 4.12

Summary of Findings of Enquiries into Fatal Accidents in Non-Coal Mines during 2015

Code : 0100 Ground Movement

**Code : 0111 Fall of Roof
 (2 Deaths)**

1. Date - 16/05/15 Mine - KHETRI COPPER MINE
 Time - 20.15 Owner - HINDUSTAN COPPER LTD.
 Dist. - Jhunjhunu, State - Rajasthan
 Person(s) Killed :
 1. Vijendra Singh, Driller, Male, 32 Years

While two drillers were connecting compressed air hose-pipe to jack hammer drill machine at a distance of 3.5m from the development face in an underground Metalliferous Mine, a mass of stone measuring about 1.0m(length) x 0.5m(width) x 0.35m (thick) fell from the unsupported roof from a height of about 4.0m on one of the drillers inflicting serious bodily injuries to him to which he succumbed after about seven hours.

Had the workings within 9.0m of the face been kept secured by rock bolts in accordance with the requirements of the Systematic Timbering Rules framed by the manager and approved vide this Directorate's letter No. 1882, dated 07.06.1988 and the face not been worked in contravention thereof, as required by Regulation 112(2) (C) of the Metalliferous Mines Regulations, 1961, this accident could have been averted.

2. Date - 28/11/15 Mine - KAYAD UNDERGROUND MINE
 Time - 3.30 Owner - HINDUSTAN ZINC LTD.
 Dist. - Ajmer, State - Rajasthan
 Person(s) Killed :
 1. Nana Lal Mali, Gen worker, Male, 24 Years

While a crew of four General Mazdoors standing on a scissor lift was charging ring holes in hanging wall drive of a stope, a mass of rock separated from the roof of the drive, supported in accordance with the SSR, broke into two pieces measuring about 1.5m x 0.7m x 0.3m and 1m x 0.4m x 0.25m in size and fell down over the platform of scissor lift from a height of about 1.5m, inflicting serious bodily injury to one of them to which he succumbed on way to hospital.

Had,

the roof been properly examined to ascertain the condition thereof as regards to the state of the roof, as required by Regulation 116(3) (b) read with Regulation 47(2) (a) of the Metalliferous Mines Regulations, 1961,

this accident could have been averted.

Code : 0112 Fall of Sides (Other than Overhangs)
(6 Deaths)

3. Date - 14/01/15 Mine - CHIKLA MANGANESE MINE
 Time - 16.30 Owner - MANGANESE ORE [INDIA] LTD.
 Dist. - Bhandara, State - Maharashtra
 Person(s) Killed :
 1. Saras Hariram, Piece Rated Worker, Male, 43 Years

While blasted muck was being removed manually in a stope of underground manganese mine, suddenly rock mass measuring about 6.5m X 3.0m X 0.45m thick parted from the hanging wall side right from floor level to the roof level (at 3m height) and fell over a face worker, inflicting serious bodily injuries to him to which he succumbed while being transported to the hospital.

Had,

the hangwall side of the stope been made and kept secured as required under Regulation 112 of the Metalliferous Mines Regulations 1961 and the stope been stowed with sand as prescribed,

this accident could have been averted.

4. Date - 22/02/15 Mine - MASARO KI OBERI SERPENTINE MINE
 Time - 9.00 Owner - M/S NARAYAN MARBLE
 Dist. - Udaipur, State - Rajasthan
 Person(s) Killed :
 1. Govind Meena, Worker, Male, 30 Years
 2. Prakash, Worker, Male, 27 Years

While two workers were working at the tow of 6m high side of a second bench in an opencast marble mine, all of a sudden a block of marble measuring about 7m (Length) X 2m (Width) X 1.25m (Thickness) fell from a height of about 4.5m and broken into pieces and the workers were buried under the marble piece of size 3m (Length) X 2m (Width) X 1.25m (Thickness) inflicting fatal injury to both the workers.

Had, it been ensured that sides are adequately benched, sloped and secured so as to prevent danger from fall of sides as required under the provisions of Regulation 106(3) of the Metalliferous Mines Regulations, 1961.

this accident could have been averted.

5. Date - 11/08/15 Mine - BILLI MARKUNDI STONE MINE (5390, 91, 94-96)
 Time - 8.00 Owner - M/S DEEPALI SEWA SAMITI
 Dist. - Sonbhadra, State - Uttar Pradesh
 Person(s) Killed :
 1. Hari Lal Baiga, Labour, Male, 30 Years

While a contractual worker was standing near the high-wall of a stone quarry, loose boulders embedded and hanging on the high-wall fell from a height of 22.5m on him inflicting serious bodily injuries, to which he succumbed while on way to the hospital.

Had

the sides of opencast workings been benched and kept sloped, secured and dressed of all loose stones/boulders, as to prevent fall of sides as required by the provisions of Regulation 106 of the Metalliferous Mines Regulations, 1961,

this accident could have been averted.

6. Date - 21/10/15
Time - 13.30

Mine - ARASU I MAGNESITE MINE
Owner - TAMIL NADU MAGNESITE LTD.
Dist. - Salem, State - Tamilnadu
Person(s) Killed :

1. G.Venkatachalam, Face Worker, Male, 62 Years

While two workers was engaged for picking magnesite from runoff mine against side of a bench in an opencast mine, side of the bench slided, partially buried one worker and one boulder measuring about 0.3m x 0.24m x 0.15m fell and hit him inflicting serious bodily injuries which turned fatal after nine days.

Had,

i) the sides of the bench been dressed properly before employing persons at the bottom of the bench as required under Regulation 106(3) of the Metalliferous Mines Regulations 1961 and

ii) effective supervision been provided as required under Regulation 116(3) (b), 46(1) (a) & 45(1) & (3) of the Metalliferous Mines Regulations 1961,

this accident could have been averted.

7. Date - 08/11/15
Time - 10.00

Mine - TANTRA-RAIKELA & BANDHAL IRON MINE
Owner - JINDAL STRIPS LTD.
Dist. - Sundergarh, State - Orissa
Person(s) Killed :

1. Seru Mandal, HEMM operator, Male, 35 Years

While an operator was marching an excavator on a bench of an open cast mine the sides of the bench measuring about 21m x 4.5m of the bench slided and the excavator fell on the lower bench from a height of about 9m with the slided materials and the operator with cabin was buried in it who was rescued after 15 min and died on the way to Hospital.

Had,

the sides of the bench been secured so as to prevent danger of fall of sides, as required under Reg 106(3) of the MMR 1961.

This accident could have been averted.

Code : 0200 Transportation Machinery (Winding)

**Code : 0228 Overwinding of Cages/Skip (downgoing)
 (1 Death)**

8. Date - 12/09/15 Mine - MOCHIA LEAD AND ZINK MINE
 Time - 13.50 Owner - HINDUSTAN ZINC LTD.
 Dist. - Udaipur, State - Rajasthan
 Person(s) Killed :
 1. Prem Singh Mal, Bellman, Male, 49 Years

While the man winding cage was signaled for lowering it from a landing level in an underground mine, the roof of the cage got stuck up with the lift bridge, as the lift bridges were forgotten to be lifted up, and the cage on getting released, travelled at high speed before coming to a stop; the bellman inside the cage, received serious bodily injuries to which he succumbed instantly.

Had

i) it been ensured that the lifting bridge was lifted before lowering of the cage as required under Regulations 55(i) of Metalliferous Mines Regulation, 1961;

ii) it been ensured that the winding engine would stop immediately on loosening of the winding ropes on the drum as required under Regulation 181 of Metalliferous Mines Regulations, 1961;

iii) the gap between the cage and the landing level (8 level) been maintained not more than 50mm as required under Regulation 82 of Metalliferous Mines Regulations, 1961 read with DGMS Circular (Technical)No. 7/2009;

iv) there been a system working to interlock the operation of the winding engine with the lifting of lift bridge, so that the cage could not have moved unless and until the lifting bridge was lifted to clear the space for movement of cage in the shaft, as required under Regulation 81(3)(b) of Metalliferous Mines Regulations, 1961;

v) there been a system working, to ensure that the winding engine would stop if there was any uneven slackness of winding ropes as required under DGMS Circular (Technical) No. 7/2001; and

vi) there been a system working, to ensure that the winding engine would stop of the tail rope loop was getting shortened as required under DGMS Circular (Technical) no. 7/2011.

this accident could have been averted.

Code : 0229 Other Accident due to Winding Operation
(1 Death)

9. Date - 30/09/15
 Time - 3.45

Mine - HUTTI GOLD MINE
 Owner - HUTTI GOLD MINES CO. LTD.
 Dist. - Raichur, State - Karnataka
 Person(s) Killed :

1. Sangappa, Mazdoor cum signalman, Male, 49 Years

While a hoisting mazdoor cum signalman was cleaning accumulated muck over a changeover door/flap by standing on the same at headgear frame of vertical shaft on surface, to facilitate changeover of door/flap from waste to ore storage bin, skip containing ore was unloaded into unloading pocket, carrying the mazdoor along with ore into waste rock storage bin resulting serious bodily injuries which proved fatal after about one and half hours.

Had

i) the banksman who was aware about the work and presence of the mazdoor at the changeover door/flap not given signal to unload skip;

ii) a system/ mechanism been put in place to ensure that power supply in winder disconnected before persons were allowed to work on or in vicinity of changeover door/flap;

iii) a system of changeover door/flap by cleaning by proper tools from landing platform been implemented as stipulated in Safe Operating Procedure (SOP's) framed by manager

as required under Regulation 44(3)(a), Regulation 45(1), Regulation 53(a)&(d), Regulation 55 and Regulation 181 of the Metalliferous Mines Regulations, 1961 read with DGMS Circular (Tech) No. 13 of 2002 and Section 18(4) of the Mines Act, 1952

this accident could have been averted.

Code : 0300 Transportation Machinery (Non-Winding)

Code : 0334 Conveyors
(1 Death)

10. Date - 14/07/15
 Time - 23.20

Mine - BARSUA IRON ORE MINE
 Owner - RAW MATERIAL DIVISION (SAIL)
 Dist. - Sundergarh, State - Orissa
 Person(s) Killed :

1. Kaushal Kandulna, Contrct. Worker, Male, 41 Years

While a contractor worker was taking measurement of discharge end take up pulley of a conveyor belt by standing on it, in an ore handling plant of an open cast mine, the belt was operated, trapping him between conveyor belt and take up pulley receiving serious bodily injuries to which he succumbed instantaneously.

Had,

the person not been allowed to take measurement of pulley of a conveyor belt while in motion without following Clause 3 of Standard Maintenance Practice to Assist in Maintenance Work at OHP & Beneficiation Plant Document No. 2C for Shut down thus negligently omitting to ensure the safety of persons in contravention of Regulation 174(3) read with Regulation 181 and 53(a) of Metalliferous Mines Regulation 1961.

**Code : 0335 Dumpers
(8 Deaths)**

11. Date – 05/01/15 Mine – CHECHAT LIMESTONE MINE
 Time – 16.45 Owner – M/S DILIP KUMAR MOTILAL JAIN
 Dist. – Kota, State – Rajasthan
 Person(s) Killed :
 1. Jugraj, Helper, Male, 25 Years

While a tipper was edge-dumping/tipping overburden material over the mine face for back-filling the worked out area in an opencast mine, the tipper rolled over the unstable edge to fall 20m below. Whereas the tipper operator jumped out to save himself, a helper sitting on the other side received serious bodily injuries to which he succumbed whilst undergoing treatment at the hospital after about an hour.

Had a protective berm not less than half the diameter of the tippers deployed for back-filling been made and kept maintained inbye of the unstable tipping-edge to ensure that the tippers were not reversed upto the unstable ground during dumping of overburden, as required by clause 14.0 of Directorate's letter No. Aj/89 dated 07.01.2002 granting relaxations from the provisions of Regulation 106(2) (b) of the Metalliferous Mines Regulations, 1961, read with Appendix – D of DGMS Circular Tech. No. 01 of 1989,

this accident could have been averted.

12. Date – 07/01/15 Mine – JHANJHAR MARBLE MINE
 Time – 8.30 Owner – SHRI MOHIT MAHESHWARI
 Dist. – Rajsamand, State – Rajasthan
 Person(s) Killed :
 1. Lahrilal, Mazdoor, Male, 22 Years

While a dumper was being reversed on a haul road in a marble mine, a mazdoor, who was present at the rear side, was hit by the rear of the dumper sustaining serious bodily injuries to which he later succumbed in the hospital.

Had

i) the dumper not been reversed without ensuring that no person was present in the rear side of the dozer as required under Regulation 106(2) (b) of the Metalliferous Mines Regulations, 1961 read with clause no. 13.1(e) of Appendix of circular no. 36 of 1972; and

ii) the mine not been worked appointing a duly qualified manager as required under the provision of section 17(1) of the Mines Act, 1952 read with Regulation 34(1) of the Metalliferous Mines Regulations, 1961.

this accident could have been averted.

13. Date - 12/02/15	Mine - SUBBRAYANAHALLI IRON ORE MINE
Time - 18.45	Owner - MYSORE MINERALS LTD.
	Dist. - Bellary, State - Karnataka
	Person(s) Killed :
	1. Veeresh, Tipper Driver, Male, 23 Years

While a tipper driver along with his helper was driving a tipper on a downhill haul road with 1 in 10 gradient, having air leakage in brake hose, the driver lost his control over the tipper due to failure of brake and the tipper fell down to lower haul road at a depth of 15m after crossing over the berm of 0.6m height inflicting fatal injuries to the driver.

Had

i) Ensured that the competent persons carried out their respective duties in a proper manner as required under the provision of Regulation, 46(2) (a) of the Metalliferous Mines Regulations, 1961 and,

ii) Ensured that every tipper plying in the mine was mechanically sound and in efficient working order as required under the provision of Regulation, 106(2) (b) of the Metalliferous Mines Regulations, 1961 read with Clause no. 5(2) (a) of HEMM governing conditions of letter no. H-II/3893 dated: 26.12.1996,

this accident could have been averted.

14. Date - 29/09/15	Mine - VEERBHADRA GRANITE MINE
Time - 9.35	Owner - M/S VEERBHADRA MINERALS PVT. LTD.
	Dist. - Prakasham, State - Andhra Pradesh
	Person(s) Killed :
	1. N. V. Subbaiah, Dumper Opnr., Male, 55 Years

While a dumper was driven up a steep haul road at a gradient of 1 in 7 of an opencast mine, slowed to give pass to a light vehicle, the dumper failed to accelerate further, got uncontrolled and started rolling back, in the meanwhile the operator jumped off the cabin and received serious injuries to which he succumbed while being taken to the hospital.

Had

i) the gradient of the main haul road at the mine been maintained as required under condition no. 8.4 (Annexure 106A) of the permission granted under Reg.106(2) (b) of the Metalliferous Mines Regulations, 1961,

ii) the dumper been effectively provided and maintained with safety features as required under permission condition no. 13 (Annexure 106A) of the permission granted under Reg. 106(2) (b) of the Metalliferous Mines Regulations, 1961,

this accident could have been averted.

15. Date - 15/10/15 Mine - Red Hills Magnesite Mine
Time - 16.30 Owner - M/S SAIL REFRACTORY CO.LTD.
Dist. - Salem, State - Tamilnadu
Person(s) Killed :
1. P.Soundararajan, Mining Mate, Male, 46 Years

While a tipper loaded with magnesite was overtaking two persons moving on a motorcycle at the end of a shift on a road within leasehold of an opencast mine, the tipper hit the motorcycle due to which the rider who was driving the motor cycle fell down below the rear wheel of the tipper inflicting fatal injuries while the pillion rider sitting behind him escaped with minor injuries.

Had

the driver of the tipper overtaken the motorcycle safely and not driven the tipper negligently so as to endanger safety of the person moving there at, as provided under Regulation 181 of Metalliferous Mines Regulations, 1961,

this accident could have been averted.

16. Date - 17/10/15 Mine - CHECHAT LIMESTONE MINE (M. L. NO. 95/2008)
Time - 23.00 Owner - JAIDEEP SINGH ANAND
Dist. - Kota, State - Rajasthan
Person(s) Killed :
1. Sunder, Drill helper, Male, 30 Years

While an empty tipper was returning from waste dump yard, it hit a drill-helper on surface haul road inflicting serious bodily injuries to him, to which he succumbed whilst on way to hospital.

Had,

i) Adequate general lightening, conforming to standards laid down in GSR 829 dated 18.06.1975 (DGMS Circular No. Legis, 3 of 1976), been provided during working hours at different places where natural light was insufficient, as required by the provisions of Regulation 146 and Regulation 148 of the Metalliferous Mines Regulation, 1961.

ii) The operator's cabin of the tipper provided with a wind screen and the tipper been kept maintained in good and safe working condition, as required by clause 5.9 of Directorate's letter No. 1130 dated 14.02.2012 granting permission under Regulation 106(2) (b) of the Metalliferous Mines Regulation, 1961, and,

iii) an engineer, holding prescribed qualifications has been appointed at the mine to hold general charge of machinery and equipment deployed in the mine, and be responsible for their installation, maintenance and safe working, as required by the provisions of Regulation 36 and clause 10.2 of Directorate's letter No. 1130 dated 14.02.2012 granting permission under Regulation 106(2) (b) of the Metalliferous Mines Regulation, 1961.

this accident could have been averted.

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| 17. Date - 19/10/15
Time - 12.45 | Mine - KARANKOTE LIMESTONE MINE
Owner - CEMENT CORPN. OF INDIA LTD.
Dist. - Ranga Reddy, State - Andhra Pradesh
Person(s) Killed :
1. Anil M. Hanumante, Tipper Operator, Male, 36 Years |
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While operator was driving a tipper on a Haul Road of gradient 1 in 20 of a Limestone opencast mine, the operator lost control and caused the tipper to topple on to a lower bench as a result, the operator received fatal injuries.

Had,

it been driven at a controlled speed, defensively, avoiding distractions thus not negligently omitting to ensure his own safety as required under provisions of Regulation 181 of the Metalliferous Mines Regulations, 1961, this accident could have been averted.

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| 18. Date - 14/12/15
Time - 22.30 | Mine - RAMPURA AGUCHA LEAD & ZINC OPEN CAST MIN
Owner - HINDUSTAN ZINC LTD.
Dist. - Bhilwara, State - Rajasthan
Person(s) Killed :
1. Bhupendra Paliwal, Dumper Opnr., Male, 51 Years |
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While a dumper operator, after parking his dumper during shift changeover, was moving across the parking yard towards exit, a 220T Komatsu 830 E make dumper being driven out of the parking yard ran over him, inflicting instant fatal injury.

Had

i) the dumper been driven defensively (paying due caution to the warnings given by proximity warning device), as required by clause 11(b) of the Directorate's letter No. AJ/DMS/Prem-106(2) (b). Metal/2009/3703 dated 17.07.2009 granting relaxations from the provisions of Regulation 106(2) (b) of the Metalliferous Mines Regulations, 1961 and

ii) none ventured in close proximity of the moving dumper, thus not negligently endangering his own life and safety, as called for by the provisions of Regulations 181 of the Metalliferous Mines Regulations, 1961,

this accident could have been averted.

Code : 0336 Wagon Movements
(1 Death)

19. Date – 13/05/15 Mine – DALLI MECHANISED IRON ORE MINE
 Time – 12.00 Owner – M/S BHILAI STEEL PLANT
 Dist. – Balod, State – Chhattisgarh
 Person(s) Killed :
 1. Ramnath, Contract Employee, Male, 34 Years

While a contractor employee deployed as points man was standing on a ladder of leading moving railway wagon of a rake of seventeen empty wagons being pushed by a locomotive at bottom station of an opencast Iron ore mine, lost his balance, fell down and run over by the wagon resulting into fatality.

Had,

i) the person not stood on a ladder of leading moving wagon of a rake of empty wagons being pushed by locomotive and accompanied it by walking along the track line for giving signal, thereby not negligently endangering his own life as required under the code of practice framed by the manager, Reg. 57(7) and 181 of the Metalliferous Mines Regulation 1961.

ii) the movement of wagons been carried out under the supervision of competent persons and prevented the points man from riding on a moving wagon by standing on its ladder as required under Reg. 104(2) read with Reg. 104(8) of Metalliferous Mines Regulation 1961,

this accident could have been averted.

Code : 0339 Wheeled Trackless(Truck,Tanker,etc.)
(5 Deaths)

20. Date – 30/01/15 Mine – KABIR CHAWDA PANCHPERA PAHAR SANDSTONE 8
 Time – 11.00 Owner – SHRI KABIR CHAWDA
 Dist. – Nagaur, State – Rajasthan
 Person(s) Killed :
 1. Ajharuddin, Mazdoor, Male, 21 Years

While a mazdoor was engaged in fixing wedges in blocks of sandstone loaded in a truck in an opencast sandstone mine the truck was suddenly started and moved down a ramp in the mine causing one of the blocks of the size of about 1.8m X 1.0m X 0.5m to shift and hit the mazdoor to press him against side of hopper of the truck inflicting seious bodily injuries to which he succumbed on way to a hospital.

Had

i) the truck not been negligently driven without ensuring that the sandstone blocks were secured and the mazdoor was out of hopper of the truck thereby not endangering his life,

ii) a competent person been appointed to secure thorough supervision of all operations in the mine and

iii) a duly qualified Manager in the mine been appointed for management, control supervision and direction thereof,

as required under the provisions of Regulation 181, 39(1)(a) and 34(1)(a) of the Metalliferous Mines Regulations, 1961 read with Sections 17(1) and 18(1)&(4) of the Mines Act, 1952,

this accident could have been averted.

21. Date - 26/02/15 Time - 14.15	Mine - SETHURAYANPUDUR LIMESTONE MINE Owner - K. KRISHNAMOORTHY Dist. - Tirunelveli, State - Tamilnadu Person(s) Killed : 1. A.Thangapandy, Driller, Male, 55 Years
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While a driller helper-cum-compressor operator was driving the tractor mounted compressor (TMC) on a haul road of an opencast mine, he lost control over it and the tractor toppled down, as result he was stuck beneath the tractor, inflicting serious bodily injuries to which he succumbed on the way to hospital.

Had,

a duly qualified manager been appointed for overall management, supervision, direction and control of the mine, as required under Regulation 34 of the Metalliferous Mines Regulations, 1961 read with section 17 of the Mines Act, 1952,

this accident could have been averted.

22. Date - 02/05/15 Time - 17.30	Mine - MORWAD MARBLE MINE Owner - R.K. MARBLE PVT. LTD. Dist. - Rajsamand, State - Rajasthan Person(s) Killed : 1. Shankar Meena, Worker, Male, 21 Years
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While a worker was engaged in loading the long hole drill rods in a pick and carry crane van, suddenly the jack of the stabliser was retracted by a crane operator helper from the opposite side as a result inflicting serious injuries to the worker, who succumbed to his injuries on way to the hospital.

Had the control lever of the jack of the stabliser not been operated form the side opposite to the side from which loading was being done in the pick and carry crane van thereby negligently endangering the live of a co-worker, as required under Regulation 181 of Metalliferous Mines Regulations, 1961, this accident could have been averted.

23. Date - 11/06/15 Time - 21.15	Mine - MEGHATUBURU IRON ORE MINE Owner - RAW MATERIAL DIVISION (SAIL) Dist. - West Singhum, State - Jharkhand Person(s) Killed : 1. Dipnarayan Mahato, Sampler, Male, 56 Years
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While a person was walking on a pucca road in the plant area of an open cast mine he was hit by a reversing light vehicle inflicting serious bodily injuries resulting into death during treatment at hospital after about 15 hours

Had

i) the light vehicle not been reversed carelessly thus not negligently omitting to ensure the safety of the person walking on the road in contravention of the provision of the Reg 181 of the MMR 1961.

ii) the light vehicle been provided with Audio visual reversal alarm and a separate parking place near OHP control Room, thus not negligently omitting to ensure safety of person walking on the back side of the light vehicle in contravention of the Reg 181 of the The MMR 1961.

this accident could have been averted.

24. Date - 12/09/15	Mine - MORWAD MARBLE MINE
Time - 1.30	Owner - M/S SONI MARBLE
	Dist. - Rajsamand, State - Rajasthan
	Person(s) Killed :
	1. Ram Meena, Wire Saw helper, Male, 32 Years

While a tractor was being driven down along a steep haul road in an opencast mine; suddenly, the brakes of the tractor failed, tractor ran down uncontrolled and collided with a compressor in the adjoining mine which in turn hit two persons sitting behind it. One of them escaped unhurt, while the other during escaping away got entangled with the sting of the wire saw machine in operation nearby and received serious bodily injury to which he succumbed after Five(5) days during treatment in hospital.

Had

i) the gradient of the ramp not been steeper than 1 in 10 as required under provisions of Regulation 106(2)(b) of the Metalliferous Mines Regulations, 1961 read with condition No. 8.0(5)(4) of the permission No. UR/4085 dated 22.08.2007.

ii) the brakes of the tractor been maintained properly in good and safe working condition as required under provision of Regulation 172 of the Metalliferous Mines Regulations, 1961 read with condition No. 10.0 (3) (a) of the permission No. UR/4085 dated 22.08.2007.

iii) the operator driven the tractor defensibly thus not negligently endangering the life of the person employed in the adjacent mine as required under provisions of Regulation 181 of the Metalliferous Mines Regulations, 1961 read with condition No. 14.0(2) of the permission letter No. UR/4085 dated 22.08.2007.

this accident could have been averted.

Code : 0400 Machinery Other than Transp. Machinery

**Code : 0449 Other Non-Transportation Machinery
 (2 Deaths)**

25. Date - 25/02/15 Mine - BILLI MARKUNDI STONE (AS 4601, 2, 3, 6, 8, 9)
Time - 9.30 Owner - M/S B. AGRAWAL STONE PRODUCTS LIMITED
Dist. - Sonbhadra, State - Uttar Pradesh
Person(s) Killed :
1. Anita Kumari, Labour, Female, 22 Years

While one female contractual worker was standing near a tractor compressor at the top of the quarry, her scarf/duppata got entangled in the moving belt-drive of the compressor, strangulating her and inflicting serious injuries to her neck to which she succumbed within half an hour whilst on way to the hospital.

Had

i) the moving parts/belt-drive of the tractor-compressor been adequately fenced by suitable guards of substantial construction to prevent danger and such guards been kept in position while the tractor-compressor was in use, and none wearing loose clothes been allowed in close proximity of such moving machinery, as required by the provisions of Regulation 174(2) & (5) of the Metalliferous Mines Regulations, 1961, and,

ii) the mine, in absence of the manager, been placed under the charge of a duly qualified person authorized to act as manager, to ensure that all work in the mine was carried on in accordance with the provisions of the Mines Act, and of the Regulations, rules, bye-laws and orders made there-under, whereby safety of persons employed in the mine was ensured in every respect, or working of the mine been kept suspended till the return of the Manager from his leave, as required by the provisions of Regulation 34(7) (a) of the Metalliferous Mines Regulations, 1961,

this accident could have been averted.

26. Date - 25/06/15 Mine - BILLI MARKUNDI STONE MINE (A. NO. 7407)
Time - 9.15 Owner - ASHOK KUMAR MISHRA
Dist. - Sonbhadra, State - Uttar Pradesh
Person(s) Killed :
1. Nisha Kumari, Cont. Labour, Female, 19 Years

While a female contractual worker was hurriedly running past a tractor-compressor engaged for drilling at the bed of a stone quarry, her scarf/dupatta got entangled in the moving belt-drive of the compressor, strangulating her and severing her head from her body to which she succumbed almost instantaneously.

Had

the moving parts/belt-drive of the tractor-compressor been adequately fenced by suitable guards of substantial construction to prevent danger and such guards been kept in position while the tractor-compressor was in use, and none wearing loose clothes been allowed in close proximity of such moving machinery, as required by the provisions of Regulation 174(2) & (5) of the Metalliferous Mines Regulations, 1961,

this accident could have been averted.

Code : 0600 Electricity

**Code : 0665 Power Cables Other Than Trailing Cables
 (2 Deaths)**

27. Date - 05/10/15 Mine - JHANJHAR MARBLE MINE M/L NO.26/11
 Time - 12.30 Owner - SHRI HEERALAL TELI
 Dist. - Rajsamand, State - Rajasthan
 Person(s) Killed :
 1. Ramlal Meena, Mine Mazdoor, Male, 29 Years

While a Mine Mazdoor attempting to repair the live jointed cable connected to the 3 HP mono block pump motor, received electric shock and succumbed to his injuries in the hospital after half an hour,

Had

non designated person not been deployed and adequate work permit procedure for disconnection of power supply been followed as required under provision of Reg.3(1) read with Reg.19(3) & Reg.19(1) of Central Electricity Authority (Measures relating to safety and electric supply) Regulations, 2010,

this accident could have been averted.

28. Date - 29/11/15 Mine - MIDWEST GRANITE MINE
 Time - 18.15 Owner - MIDWEST GRANITE PVT. LTD.
 Dist. - Prakasham, State - Andhra Pradesh
 Person(s) Killed :
 1. Hemanth Choudhary, Wire-saw Helper, Male, 19 Years

While a person was priming 5HP pump in a quarry bed of an opencast granite mine, he received electric shock due to defective cable lying in water which proved fatal on the way to hospital.

Had

the cable been used in good condition as required under Reg. 107(5) ;

the installation of apparatus re-erected in the mine examined and tested before it is put into service in a new position as required under the provisions of Reg. 115(3) (ii) of Central Electricity Authority (Measures Relating to Safety and Electric Supply) Regulations, 2010, and;

the electrical equipment been placed at proper safe place, which was necessary for the life and safety of persons employed in such operation as was required under Regulation 94(1) and read with Reg-98(3) and Reg-109(1) of Central Electricity Authority (Measure Relating to Safety and Electric Supply) Regulations, 2010,

this accident could have been averted.

Code : 0700 Dust, Gas & Other Combustible Material

**Code : 0776 Well Blowout (With Fire)
(2 Deaths)**

29. Date – 18/04/15 Mine – ANKLESWAR PROJECT OIL MINE
 Time – 22.30 Owner – OIL & NATURAL GAS CORPORATION LTD.
 Dist. – Bharuch, State – Gujarat
 Person(s) Killed :
 1. Shivaram Kalgude, Contract crane opt, Male, 51 Years
 2. Manhar Vankar, cont.crane oprt., Male, 37 Years

While Pulling out operation of string in a Work over Gas well was carried out, suddenly, blow out occurred and caught fire after two days, during lifting of CAT walk near the Gas well with the help of a 24 Volts battery started diesel operated 40 Tonnes hydraulic crane deployed at a distance of about 16m from the blow out well, in which 12 persons sustained burn injuries and two of them succumbed to their injuries after 10 days.

Had

i) Hydrostatic pressure of the fluid column (brine) overbalanced the formation pressure to prevent the leakage of petroleum/gas at the Wellhead, thus, not negligently or willfully endangered the safety of the mine or of the persons employed therein, as required under Regulation 98 of the Oil Mines Regulations, 1984, and

ii) Proper Blowout preventer assembly been securely installed and maintained at the Wellhead during Well service Operation as required under Regulation 56(5) (a) of the Oil Mines Regulations, 1984, and

iii) 24 Volts battery started diesel operated 40 Tonnes capacity Hydraulic Crane not deployed within 500m of the Well on the down wind direction as demarcated as danger Zone for lifting of CAT Walk, as required under Regulation 46(2) (b) of the Oil Mines Regulations, 1984 and, 24 Volts battery started diesel operated 40 Tonnes hydraulic crane not used in danger Zone, as required under Regulation 46(2) (b) (i) of the Oil Mines Regulations, 1984,

this accident could have been averted.

Code : 0800 Falls (Other than Fall of Ground)

**Code : 0881 Fall of Person from Height/into Depth
(10 Deaths)**

30. Date - 03/01/15 Mine - BILLI MARKUNDI STONE MINE (S. N. 7402KA, 740
 Time - 8.30 Owner - SHRI RAM NARESH
 Dist. - Sonbhadra, State - Uttar Pradesh
 Person(s) Killed :
 1. Ram Govind, Mine Worker, Male, 23 Years

While, three persons were employed for drilling on a ledge at a height of about 12.5m on a 29.7m high and near vertical side of a stone quarry, one worker slipped and fell down onto blasted stone below and received serious bodily injuries, to which he succumbed whilst on way to the hospital.

Had

i) the sides of the opencast workings been kept benched, sloped and secured whilst working the mine and the mine been worked by benching the sides top downwards and under personal supervision of a manager, as was required by the provisions of Regulation 106(1) (2) & (3) of the Metalliferous Mines Regulations 1961, and stipulations of Directorate's letter No. S 29013/103/2013-14/VR(NZ)/SNB-Stone/1564 dated 24.12.2013 imposing Order under Section 22(3) of the Mines Act, 1952, and,

ii) a duly qualified manager been appointed to carry out all the mining activities at the mine in accordance with the provisions of Regulations, Rules and orders made there-under, as required by the provisions of Regulation, 34(1) (a) of the Metalliferous Mines Regulations, 1961, and

iii) persons not been allowed to work at any place/ledge from where they are likely to slip or overbalance to fall more than 1.8m, unless they were secured by a safety belt/full body harness of an approved type, suitably fixed to prevent them from falling, as required by the provisions of Regulation 118(4) of the Metalliferous Mines Regulations, 1961, read with DGMS Circular No. Tech. 3 of 2006 & DGMS Tech Circular (Approval) No. 06 dated 27.12.2010,

this accident could have been averted.

31. Date - 30/03/15 Mine - DHELANA SERPENTINE MINE
 Time - 11.00 Owner - M/S EVERGREEN MARBLE
 Dist. - Udaipur, State - Rajasthan
 Person(s) Killed :
 1. Kailash Meena, General Mazdoor, Male, 44 Years

While a worker was engaged in drilling in the marble block on the floor of First bench in an opencast marble mine, the moment he started drilling, the drill rod was subjected to severe vibration probably due to failure in adopting proper drilling methodology and this vibration was transmitted in the body of the worker resulting his imbalance and as he was standing on the edge of the floor of the first bench, he fell down on the floor of second bench (quarry bed from a height of approx. 4m, which inflicted fatal injury to him.

i) the person used the safety belt provided by the management while performing drilling operation, an act done negligently which endangered the life of the worker under provisions of Regulation 41(1)(a) read with Regulation 181 and Regulation 182c of the Metalliferous Mines Regulations, 1961.

ii) it been ensured that all the persons are using protective equipments including safety belt, an act done by him either negligently or willfully and which endangered the life of the worker in the mine under provisions of Section 18(5) of Mines Act, 1952 read with Regulation 44(9) of the Metalliferous Mines Regulation, 1961.

This accident could have been averted

32. Date - 16/04/15 Mine - UMRAYA MARBLE MINE
Time - 13.00 Owner - M/S VIKASH BALAJI MARMO PVT. LTD
 Dist. - Rajsamand, State - Rajasthan
 Person(s) Killed :
 1. Pintu Gupta, Driller, Male, 38 Years

While a worker was engaged in observing the drilling area in the marble block on the floor of First bench in an opencast marble mine, he slipped resulting into his getting imbalanced and he fell down from the floor of the first bench to the floor of the second bench (i.e quarry bed) from a height of approx. 6m, receiving serious injuries in the head to which he succumbed after 14 hours while under treatment at the hospital.

Had

i) the person used the safety belt provided by the management while performing drilling operation, thus not negligently endangered his own life as required under the provisions of Regulation 182C read with Regulation 181 of the Metalliferous Mines Regulations, 1961.

ii) the manager of the mine ensured that all the persons are using protective equipments including safety belt, to avoid an act which endangered the life of the worker in the mine as required under the provisions of Section 18(5) of Mines Act, 1952 read with Regulation 44(9) of the Metalliferous Mines Regulations, 1961.

this accident could have been averted.

33. Date - 23/04/15 Mine - NIZARNA MARBLE MINE (ML.NO. 59/08)
Time - 15.00 Owner - M/S PARSAWNATH MARBLE
 Dist. - Rajsamand, State - Rajasthan
 Person(s) Killed :
 1. Ramlal , General Mazdoor, Male, 26 Years

While a worker was engaged in placement of air bag for its inflation so as to topple the marble block on the floor of second bench in an opencast marble mine, he slipped resulting into his getting imbalanced and he fell down from the floor of the second bench to the floor of the 3rd bench (i.e. quarry bed from a height of approx. 6m, receiving serious injuries in the head to which he succumbed on the way to hospital.

Had

i) the Owner of the mine ensured that all the persons have been provided protective equipments including safety belt, to avoid an act which endangered the life of the worker in the mine as required

under the provisions of Section 18(4) of Mines Act, 1952 read with Regulation 181 of the Metalliferous Mines Regulations, 1961.

ii) a qualified manager appointed in the mine for the overall management, control, supervision and direction of the mine under Section 17 of the Mines Act, 1952 read with Regulation 34 of the Metalliferous Mines Regulation, 1961.

this accident could have been averted.

34. Date - 22/05/15 Time - 12.00	Mine - SETHURAYANPUDUR LIMESTONE MINE Owner - K. KRISHNAMOORTHY Dist. - Tirunelveli, State - Tamilnadu Person(s) Killed : 1. G.Ratish, General Mazdoor, Male, 38 Years
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While a person was cleaning the loose boulders at the edge of the bench to prepare the area for drilling in a quarry, his leg slipped and fell down from a height of about 30m and got serious bodily injuries to which he succumbed later.

Had

i) proper safety appliances such as safety belt, lifeline, guard rails etc. been provided to secure the life of persons working at heights or edge from where he is likely to slip and fall, as required under Regulation 114(2) & 118(4) of the Metalliferous Mines Regulations, 1961,

ii) a duly qualified manager been appointed for overall management, supervision, direction and control of the mine, as required under Regulation 34 of the Metalliferous Mines Regulations, 1961 read with Section 17 of the Mines Act, 1952,

this accident could have been averted.

35. Date - 07/07/15 Time - 12.15	Mine - AGARIA MARBLE MINE (M.L. 36/09) Owner - M/S CHANDRESH MAHESHWARI Dist. - Rajsamand, State - Rajasthan Person(s) Killed : 1. Chogga Kumawat, General Mazdoor, Male, 50 Years
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While one mazdoor was traveling on a slippery surface near the edge of a bench, suddenly he got unbalanced and fell down to the bottom of the quarry from a height of about 4.0m and got injured. Later he succumbed to his injuries in the hospital.

Had

he not traveled over the slippery surface near the edge of the marble bench thus negligently endangering his life as required under the provision of Regulation 41(1)(a) & 181 of the Metalliferous Mines Regulations, 1961,

this accident could have been averted.

36. Date - 27/08/15
Time - 9.15

Mine - BILLI MARKUNDI STONE MINE (S. N. 7536)
Owner - SHRI ASHOK KUMAR SINGH
Dist. - Sonebhadra, State - Uttar Pradesh
Person(s) Killed :
1. Sinod Baiga, Mine Worker, Male, 20 Years

While, eight worker were working on a ledge at a height of about 47.5m made on a 79.63m high high-wall of a stone quarry, two workers slipped and fell down on a heap of overburden stacked at the quarry bed. One person received serious bodily injuries, to which he succumbed whilst on way to the hospital, and other person escaped with minor injuries.

Had

i) the sides of the opencast workings been kept benched, sloped and secured whilst working the mine and the mine been worked by benching the sides top downwards and under personal supervision of a manager, as was required by the provisions of Regulation 106 of the Metalliferous Mines Regulations 1961, and stipulations of Directorate's letter No. S 29013/73/2014-15/VR(NZ)/SNB-Stone/1340 dated 25.07.2014 imposing Order under Section 22(3) of the Mines Act, 1952,

ii) Persons not been allowed to work at any place/ledge from where they are likely to slip or overbalance to fall more than 1.8m, unless they were secured by a safety belt/full body harness of an approved type, suitably fixed to prevent them from falling, as required by the provisions of Regulation 118(4) of the Metalliferous Mines Regulations, 1961, read with DGMS Circular No. Tech. 3 of 2006 & DGMS Tech Circular (Approval) No. 06 dated 27.12.2010, and,

iii) the mine been placed under the charge of a duly qualified manager to ensure that all work in the mine was carried on in accordance with the provisions of the Mines Act, and of the Regulations, rules, bye-laws and orders made there-under, whereby safety of persons employed in the mine could be ensured in every respect, as required by the provisions of Section 17 of the Mines Act, 1952, read with Regulation 34 of the Metalliferous Mines Regulations, 1961,

this accident would have been averted.

37. Date - 31/08/15
Time - 11.00

Mine - SRI LAKSHMI BALAJI STONE QUARRY
Owner - M/S SRI LAKSHMI BALAJI STOE CRUSHERS
Dist. - Guntur, State - Andhra Pradesh
Person(s) Killed :
1. Soura Nandu, Driller, Male, 25 Years
2. Mudili Buttu, Driller, Male, 23 Years

While two workmen were drilling holes at the top bench of an opencast working, suddenly the drill rod of the jack hammer broke and both of them got overbalanced and fell from a height of about 45m and hit upon the blasted muck at the bottom and got grievously injured to which they succumbed almost instantly.

Had

the sides of the working been kept properly benched and the workmen not permitted to work at the narrow bench at height unless being secured by a safety-belt or life line so as to prevent him from

slipping or overbalancing and falling down and the operations at the mine was kept under the statutory supervision of a dully qualified manager having the prescribed qualifications for the overall management, supervision, direction and control at the mine and other statutory officials appointed as required under Reg.106(1), 114(2), 34(1), 37 & 116 of the Metalliferous Mines Regulation 1961 read with section 17(1) of the Mines Act 1952,

this accident could have been averted.

38. Date - 18/12/15 Mine - GELEKI PRODUCTION OIL MINE
Time - 12.05 Owner - OIL & NATURAL GAS CORPORATION LTD.
Dist. - Sibsagar, State - Assam
Person(s) Killed :
1. Kanak Hatimuria, Scrapper Mazdoor, Male, 40 Years

While wax scrapping operation in an Oil Mine was being done by a contractual worker, he lost balance and fell down from a height of 3.5m over a 2" iron gas pipe to which he sustained serious bodily injuries which proved fatal within 25 minutes.

Had

i) the wax scrapping operation been done carefully by not endangering the life of persons employed therein, there by violating provisions made under Reg. 18(3), (98) of OMR 84 and

ii) the use of personal protective equipment been ensured as required under Reg. 16(1) read with Reg. 27, 87 and 88 of OMR' 84

this accident could have been averted.

Code : 0883 Fall of Objects incl. Rolling Objects
(4 Deaths)

39. Date - 10/03/15 Mine - ASAHI INDIA GLASS LTD. (ML NO. 14/06)
Time - 17.30 Owner - M/S ASAHI INDIA GLASS LIMITED
Dist. - Karauli, State - Rajasthan
Person(s) Killed :
1. Muniram Meena, Worker, Male, 21 Years

While an excavator operator was pushing ROM silica sand minerals into the hopper in a crushing plant located in the leasehold area of an opencast mine, the front wall of the hopper measuring about 8.5m

Length X 3.0m Height having thickness about 0.65m collapsed and the stone boulder pieces of the said collapsed wall hit and covered a worker, working near there, who was recovered dead after about half an hour.

Had the excavator been operated in proper and safe manner and the ROM mineral was not pushed hard against the front wall of the hopper, thus, not negligently omitting to ensure safety of persons in contravention of Regulation 41(1)(a) read with Regulation 181 of the Metalliferous Mines Regulations, 1961,

this accident could have been averted.

40. Date - 16/08/15
Time - 8.45

Mine - TRIPURA DRILLING MINE
Owner - OIL & NATURAL GAS CORPORATION LTD.
Dist. - West Tripura, State - Tripura
Person(s) Killed :

1. Deb Das Chkraborty, Dy. S. Engineer, Male, 58 Years

While a crew of 05 persons was breaking off a drill pipe stand consisting of 03 drill pipes at derrick floor of a drill rig in an Oil Mine, the diving board extension weighing about 81 kgs fell down on derrick floor from a height of 26m, thus inflicting serious injuries to a person on head and body, to which he succumbed after nine days during treatment in hospital.

Had

i) the downward movement of travelling block been done cautiously considering swing to avert its hitting to the diving board extension and thus the safety of persons working thereat not been negligently endangered as required under Regulation 23(3) read with Regulation 98 of OMR, 1984 and

ii) Proper precautions been taken to avoid the contact between the travelling block and diving board extension by actions like folding of diving board extension to provide a larger clearance for the safe passage of travelling block and thus the safety of persons working thereat not been negligently endangered as required under Regulation 25(3) read with Regulation 98 Of OMR, 1984,

this accident could have been averted.

41. Date - 31/10/15
Time - 2.00

Mine - Thoria Marble Mine
Owner - Shri Govind Singh Sarangdeot
Dist. - Rajsamand, State - Rajasthan
Person(s) Killed :

1. Satish Meena, Mazdoor, Male, 30 Years

While an already cut marble block was being toppled with the help of an excavator bucket, placing excavator near the bottom of the bench, suddenly a part of marble block measuring about 3m(width) x 3m(Height) x 2m(thickness) detached along the plane of weakness and fell down to depth of about 3m over the cabin of the excavator causing serious bodily injuries to excavator operator to which he succumbed instantaneously.

Had

i) the already cut marble block not been toppled, with the help of the excavator bucket, placing excavator near the bottom of the bench thus not negligently endangering excavator operator's life as required under the provision of Regulation 41(1)(a) read with 181 of the Metalliferous Mines Regulations, 1961; and

ii) mine not been worked without appointing a duly qualified manager as required under the provisions of Section 17(1) of the Mines Act, 1952 read with Regulation 34(1) of the Metalliferous Mines Regulations, 1961,

this accident could have been averted.

42. Date - 08/12/15
Time - 11.51

Mine - SOHAGPUR WEST, EAST & SONHAT CBM WELLS
Owner - M/S RELIANCE INDUSTRIES LIMITED
Dist. - Shahdol, State - Madhya Pradesh
Person(s) Killed :

1. Ramprasad Kushwaha, Contract helper, Male, 55 Years

While a contractor worker of a housekeeping group was standing near the sand filled transition pit of size 9.60m (L) x 1.75m(W) x 10.90m (H) made to cover exposed gas pipe line on surface, at CBM well site of the mine, one of the longer random rubble masonry walls of the pit had collapsed suddenly, trapping him in the debris and inflicting serious bodily injuries, which proved fatal instantaneously.

Had

the transition pit of adequate strength and quality been constructed without altering the approved engineering design parameters, thus not negligently omitted to do necessary to ensure the safety of the work persons employed in the mine, as required under Regulation 98 of the Oil Mines Regulations, 1984;

this accident could have been averted.

Code : 0900 Other Causes

**Code : 0992 Flying Pieces(Except due to Explosives)
 (2 Deaths)**

43. Date - 13/02/15
Time - 16.45

Mine - BALAKUNDI PINK GRANITE MINE
Owner - BHARAT TIMBER & CONSTRUCTION CO. LTD.
Dist. - Bagalkot, State - Karnataka
Person(s) Killed :

1. Muttappa, Helper, Male, 34 Years

While two persons were cleaning at pit bottom of an opencast granite mine near a block being separated by Expansive Mortar (Crack Powder) from top bench and an excavator was engaged for pit bottom cleaning nearby simultaneously, a piece of stone measuring 7.5cm (Length) X 7.5cm (Width) X 1.5cm(Thickness) fell on them from a height of about 6m inflicting serious bodily injuries to one of them which proved fatal after four days.

Had

i) every official and competent person understood and carried out their duties as per the Mines Act-1952, Regulations & rules framed and orders made there under as required under Regulation 44(4) of Metalliferous Mines Regulation, 1961,

ii) a system been established that while separating a block by using Expansive Mortar (Crack Powder), manual cleaning and cleaning by excavator not been carried out endangering the lives of the persons employed therein as required under Regulation 181 of Metalliferous Mines Regulation, 1961 &

iii) it been ensured that the persons carried out their respective duties in a proper manner as required under Reg. 46(2) (a) of the Metalliferous Mines Regulations, 1961,

this accident could have been averted.

44. Date – 14/07/15 Mine – MASARO KI OBERI SERPENTINE MINE
Time – 17.00 Owner – M/S NARAYAN MARBLE
 Dist. – Udaipur, State – Rajasthan
 Person(s) Killed :
 1. Sohanlal Meena, Worker, Male, 34 Years

While two workers were working on the quarry floor in an opencast marble mine, all of a sudden a huge block of rock mass measuring approx. 30m (length) x 5m(Av. Thickness) comprising of top two benches of north eastern side of quarry fell from a height of approx. 15m on the bed of the bottom most bench and broken into pieces, as a result, a rebounding rock mass of approx. 5kg hit a worker approx. 50m distant from the site of fall inflicting fatal injury to the worker.

Had it been ensured that sides are adequately benched, sloped and secured so as to prevent danger from fall of sides as required under the provisions of Regulation 106(3) of the Metalliferous Mines Regulations, 1961.

this accident could have been averted.

Code : 0993 Drowning in Water
(1 Death)

45. Date – 28/09/15 Mine – CHANDRIKA GRANITE MINE
Time – 9.30 Owner – M/S CHANDRIKA GRANITES
 Dist. – Prakasham, State – Andhra Pradesh
 Person(s) Killed :
 1. A. Raju, General Mazdoor, Male, 35 Years

While a workmen was standing at the edge of the submerged bench of an opencast mine for rectification of pump foot-valve, he suddenly slipped and fell down into water and drowned.

Had

due precautions been taken by the supervisory staff and the workmen was not permitted to work in the vicinity of the water without using lifeline etc. as required under Reg. 47(1) (b), Reg. 114, Reg. 181 of the Metalliferous Mines Regulation 1961,

this accident could have been averted.

STATEMENT NO. 4.13

Details of major accidents in non-coal mines (involving 4 or more deaths) during the year 1901-2015

Sl. No.	Date of Accident	Name of Mine	Number of Persons		Cause of Accident
			Killed	S/Injured	
1	2	3	4	5	6
1	02/02/01	A. Subha Naidy & Co. Mica	9	0	Fall of Roof
2	11/04/02	Redhill Ruby	5	4	Fall of Roof
3	26/09/04	Hannumanoya/41B Mica	7	0	Fall of Sides
4	29/12/06	Salayakhad Mica	4	2	Fall of Sides
5	24/01/07	Chirki Mica	5	0	Fall of Sides
6	10/02/08	Murwara Limestone	7	2	Fall of Sides
7	06/12/10	Shivrajpur Manganese	12	0	Fall of Sides
8	26/04/11	Charki Mica	4	0	Fall of Sides
9	04/06/12	Make Myebya Wolfram	4	0	Fall of Sides
10	21/10/13	North Anantapur Gold	7	0	Fall of Roof
11	24/07/14	Maya Salt	5	2	Explosives
12	05/11/14	Tadaiya Mica	5	0	Irruption of Water
13	12/08/16	Wazunchaung Wolfram	9	0	Miscellaneous on Surface
14	13/05/19	Aulajhari Manganese	4	2	Fall of Sides
15	28/01/20	Hsaikho (Mile 28.6) Limestone	5	0	Fall of Sides
16	13/09/20	Bhalua Mica	4	0	Suffocation by Gases
17	18/09/20	Badwin Lead-Silver	11	0	In Shaft Ascending/Descending
18	19/02/23	Bawdwin Silver-Lead-Zinc	6	1	In Shaft Ascending/Descending
19	20/02/23	Cherangcode Mica	7	1	Fall of Sides
20	01/03/27	Telewadi Manganese	4	0	Fall of Sides
21	26/05/27	Bawdwin Silver-Lead	5	0	Suffocation by Gases
22	10/09/27	Tarki Limestone	4	0	Fall of Sides
23	12/10/27	Kyauktalone Limestone	9	18	Explosives
24	16/05/29	Bawdwin Silver-Lead-Zinc	10	0	Fall of Roof
25	06/01/31	Kanbank Tin and Wolfram	4	0	Fall of Sides
26	14/09/31	Taungpila Tin	5	0	Fall of Sides
27	12/04/32	Lady Rangi Mica	19	0	Suffocation by Gases
28	24/08/36	Wagon North Tin & Wolfram	7	0	Fall of Sides
29	26/02/37	Salaiya Pahari Limestone	9	0	Fall of Sides
30	22/12/38	Matauni Mica	4	0	Fall of Sides
31	05/10/40	Porcupine Steatite	4	2	Fall of Roof
32	15/07/43	Tatahwa Mica	5	0	Falling Down Shaft
33	07/11/45	Noamundi Iron	4	0	Fall of Sides
34	13/05/46	Kaza Limestone	4	0	Fall of Sides
35	06/12/46	Pattabhirama & Margin Mica	8	0	Irruption of Water
36	21/01/49	Kharonia Mica	5	0	Explosives
37	08/07/50	Basorhai Diamonds	6	0	Fall of Sides
38	14/06/51	Mysore Gold	4	0	Rock Burst
39	11/10/51	Oorgaum Gold	9	9	Rock Burst
40	02/11/51	Champion Reef Gold	4	0	Rock Burst

Statement 4.13 (Continued)

Sl. No.	Date of Accident	Name of Mine	Number of Persons		Cause of Accident
			Killed	S/Injured	
1	2	3	4	5	6
41	19/04/52	Champion Reef Gold	20	4	Rock Burst
42	30/06/52	Champion Reef Gold	10	5	Rock Burst
43	01/05/53	Lanjhera Manganese	5	2	Fall of Sides
44	21/06/54	Kachhidhana Manganese	5	1	Fall of Sides
45	30/11/54	Mysore Gold	4	1	Rock Burst
46	23/12/54	Venkajigudda (Vajra) Manganese	5	0	Fall of Sides
47	27/05/55	Champion Reef Gold	10	8	Rock Burst
48	21/04/56	Yeshwantanagar Manganese	5	1	Fall of Sides
49	18/08/56	Tikuri Bauxite	5	0	Fall of Sides
50	22/01/57	Madadakere Manganese	4	0	Fall of Sides
51	29/09/57	Rajupalem Barytes	11	2	Fall of Sides
52	19/02/58	Aytemvalasa Manganese	7	3	Fall of Sides
53	12/05/59	Siddimella Steatite	8	0	Fall of Sides
54	14/05/59	Serima White Earth	4	2	Fall of Roof
55	26/06/61	Gua Iron	4	1	Explosives
56	24/03/62	Champion Reef Gold	4	4	Rock Burst
57	01/06/63	Junawani Manganese	5	2	Fall of Sides
58	13/08/63	Nundydroog Gold	5	2	Rock Burst
59	16/02/64	Sonnedenhalli Iron	4	1	Fall of Sides
60	13/10/64	Patnibona (Bakudih) Stone	6	0	Fall of Sides
61	06/02/66	Mysore Gold	7	0	Overwinding
62	02/08/66	Borgafall Iron	5	0	Explosives
63	25/12/66	Venkateshwara Beryl & Mica	6	0	Fall of Sides
64	06/06/68	Sarvodaya Stone	7	0	Explosives
65	19/11/69	Morija Iron	4	3	Fall of Sides
66	14/10/70	Bhadrasai Manganese	4	0	Fall of Sides
67	29/01/71	Bhatti Badarpur Stone	4	0	Fall of Sides
68	20/06/72	Balawali Mica	4	0	Fall of Roof
69	22/08/78	Kukda Limestone	7	6	Fall of Sides
70	10/05/80	Kalidungri Dolomite	5	0	Fall of Sides
71	17/08/80	Bhatti Badarpur Stone	4	0	Fall of Sides
72	08/09/83	Manoharpur Iron	4	1	Truck
73	04/04/84	Surda Copper	5	0	Nitrous Fumes
74	30/05/84	Ahmedabad Oil Project	4	0	Fire
75	22/02/86	Rekha Fluorspar	8	2	Fall of Sides
76	15/11/88	Ankleshwar Oil Project	5	0	Outbreak of Fire
77	14/07/89	Nundydroog Gold	5	0	Rock Burst
78	30/05/90	Bhatti Badarpur Stone	7	0	Fall of Sides
79	22/06/91	Bandu Basaria Limestone	6	1	Fall of Overhangs
80	11/07/93	Pali Silica Sand	4	0	Fall of Sides
81	25/10/93	Pokarna Granite	5	1	Explosives
82	09/07/94	Maruthi Manganese	4	1	Fall of Sides
83	28/08/94	Rajpura Dariba Galena & Sphal.	13	0	Irruption of Water
84	16/02/95	Pali Silica Sand	4	0	Fall of Sides
85	08/11/96	God Granite	4	6	Explosives

Statement 4.13 (Continued)

Sl. No.	Date of Accident	Name of Mine	Number of Persons		Cause of Accident
			Killed	S/Injured	
1	2	3	4	5	6
86	17/04/99	Barkundi Soapstone No. 1	6	2	Fall of Sides
87	21/04/01	Jogogoria Stone Mine	4	0	Explosion/Ignition of Gas
88	02/06/02	Borli Limestone Mine	4	0	Fall of Sides
89	18/11/02	Devka Harmada Cheja Pathar Mine	5	2	Fall of Overhang
90	11/03/06	Surya Granite Opencast Mine	4	0	Fall of Object
91	12/09/06	Tollem Group Iron Ore Mine	6	0	Fall of Sides
92	10/07/07	Mandodi Limestone Mine	5	1	Fall of Sides
93	12/05/08	SMS Infrastructure Ltd. Stone	9	20	Other explosive accident
94	25/02/10	Hamsa Mineral Granite Mine	14	1	Fall of Sides
95	26/03/10	Bharkundi No. 1 Soapstone Mine	8	0	Fall of Sides
96	24/04/10	Prashant Mining Quartz & Felspar Mine	4	0	Fall of Overhang
97	27/08/10	Deokhera Garnet Mine	5	0	Fall of Overhang
98	23/07/13	Granite Buid Stone Quarry SY 376/3-2	4	1	Fall of Overhang
99	26/11/14	PIPALJORI STONE MINE	4	0	Fall of Slides

STATEMENT NO. 4.0

Codes for classification of accidents by cause and place of occurrence

Code	Cause of Accident	Code	Cause of Accident
Ground movement		Explosives	
0111	Fall of roof	0551	Solid blasting projectiles
0112	Fall of sides(other than overhangs)	0552	Deep hole blasting projectiles
0113	Fall of overhang	0553	Secondary blasting projectiles
0114	Rock burst/bumps	0554	Other projectiles
0115	Air blast	0555	Misfires/sockets(while drilling into)
0116	Premature collapse of workings/pillars	0556	Misfire/socket(other than drilling into)
0117	Subsidence	0557	Delayed ignition
0118	Landslide	0558	Blown through shots
0119	Collapse of shaft	0559	Other explosive accident
Transportation machinery(winding)		Electricity	
0221	Overwinding of cages/skip, etc. (upgoing)	0661	Overhead lines
0222	Breakage of rope, chain, draw/suspn. gear	0662	Trailing cables
0223	Falls of persons from cages, skip, etc.	0663	Switch gears, gate end boxes, pommel, etc.
0224	Falling of objects from cages, skip, etc.	0664	Energized machines
0225	Hit by cages, skip, etc.	0665	Power cables other than trailing cables
0228	Overwinding of cages/skip (downgoing)	0669	Other electrical accidents
0229	Other accident due to winding operation	Dust, gas & other combustible material	
Transportation machinery(non winding)		0771	Occurrence of gas
0331	Aerial ropeway	0772	Influx of gas
0332	Rope haulage	0774	Explosion/ignition of gas/dust, etc.
0333	Other rail transportation	0775	Outbreak of fire or spontaneous heating
0334	Conveyors	0776	Well blowout (with fire)
0335	Dumpers	0777	Well blowout (without fire)
0336	Wagon movements	0778	Other combustible material
0339	Wheeled trackless(truck, tanker, etc.)	0779	Other accidents due to dust/gas/fire
Machinery other than transp. machinery		Falls(other than fall of ground)	
0441	Drilling machines	0881	Fall of person from height/into depth
0442	Cutting machines	0882	Fall of persons on the same level
0443	Loading machines	0883	Fall of objects incl. rolling objects
0444	Haulage engine	0889	Other accident due to falls
0445	Winding engine	Other causes	
0446	Shovel, dragline, frontend loader, etc.	0991	Irruption of water
0447	Crushing & screening plants	0992	Flying pieces(except due to explosives)
0448	Other heavy earth moving machinery	0993	Drowning in water
0449	Other non-transportation machinery	0994	Buried in sands, etc.
		0995	Bursting/leakage of oil pipe lines
		0999	Unclassified

Statement 4.0 (Continued)

Code	Place of Accident	Code	Place of Accident
BELOW GROUND		OPENCAST	
Development area		Benches	
111	< 10m of development face	211	Waste/overburden alluvium
112	> 10m and within working district	212	Waste/overburden float
Long wall panel		213	Waste/overburden hard rock
121	> 10m of long wall face	214	Coal/ore benches
122	Gate roads in long wall panels	Quarry (other than benches)	
Depillaring / stoping		221	Top of the quarry
131	< 10m of face	222	Bed of the quarry
132	> 10m but < 30m	Roads	
133	> 30m but within working district	231	Haul roads
Outside working district		232	Rope haulage roads
141	Traveling roadways	239	Other transportation roads
149	Unclassified	Other open cast places	
Tramming roadways		241	Waste dump
151	Within district	249	Other places (specify)
152	Outside district	ABOVE GROUND	
Haulage roadways (within district)		Transportation road/sites	
161	Rope haulage roadways	311	Aerial ropeways
162	Conveyor roadways	312	Rope haulage roads
163	Loco roadways	313	Wheeled trackless transportation roads
169	Unclassified	314	Railway lines belonging to mines
Haulage roadways (outside district)		315	Petroleum pipelines
171	Rope haulage roadways	319	Unclassified
172	Conveyor roadways	Plant sites	
173	Loco roadways	321	Site of ore handling plants
179	Unclassified	322	Workshop, powerhouse, engine room, etc.
180	Shaft	323	Erection/rigging site
199	Other below ground places	324	Gas col stn/gas comp stn/group gather.
		325	Oil wells/water inject wells
		329	Unclassified
		Other above ground places	
		331	Depot
		332	Waste dump
		333	Water reservoir
		339	Unclassified