

A cement factory in Padang, Indonesia and
students of architecture and planning
looking to put it to new use



Photo Suditya Sinha 2009

REPORT

Inventory *OF*
Industrial
Heritage
IN India

VOLUME 1 Moulshri Joshi

5 JHARIA COAL MINES



Location: Jharia, Dhanbad, Jharkhand
Active Since: 1894
Status: In Operation
Industry: Extractive

Jharia represents the largest coal reserves in India having estimated reserves of 19.4 billion tonnes of coking coal. The Jharia coalfield spans an area of about 250 square kilometers. It is a storehouse of prime coking coal in the country, consisting of 23 large underground and nine large open cast mines.

Jharia is famous for a coal field fire that has been burning underground for nearly a century, mainly due to unscientific mining and extraction of coal in the past. The fire was detected in 1916. The fire never stopped despite sincere efforts by mines department and railway authorities and in 1933 flaming crevasses lead to deaths of many residents.

As of 2007, more than 400,000 people who reside in Jharia are living on land in danger of subsidence due to the fire, and according to Satya Prasad Singh, "Jharia townships on the brink of an ecological and human disaster".

SOURCES
en.wikipedia.org/wiki/Jharia
www.gazette.com/news/2014/05/11/living-with-fire-india-jharia-2014020607360a13721.html
www.nature.com/science/india/PhotoGallery/515.JPG
www.edugreen.net/en/india/india_renew/Jharia.htm



1. Jharia Coal mines
2. 3, 4, & 5. The measures for controlling coal mine fires, in the case of Jharia coalfield, include building, leveling and covering with soil to prevent the entry of oxygen and to stabilize the land for vegetation.

INVENTORY OF INDUSTRIAL HERITAGE IN INDIA

81 IP POWER PLANT



Location: Delhi
Built in: 1903
Status: Decommissioned
Industry: Power Generation

Generation of electricity in Delhi started with a 2 MW diesel set in 1903. Three diesel generating sets totaling 20 MW were installed at different locations in Delhi. As a first major step towards making Delhi self sufficient in power, first unit of 36.6 MW was installed in 1963 at Indraprastha Power Station. A 15 mw unit was installed at Rajghat in 1966 followed by three units of 67.5MW each in 1967-68 at Indraprastha Power Station. Delhi Electric Supply Undertaking was restructured and Delhi Vidyut Board was formed in 1997.

Indraprastha Power Generation Co. Ltd. came into existence on 1st July, 2002 after un-bundling of Delhi Vidyut Board into six entities. The main function of IPGCL is generation of electricity with an installed capacity of 994.5 MW and 3000 MW capacity addition in pipeline. IPGCL, Gas Turbine Power Station has an installed capacity of 270 MW. The power plant have nine power generating units. Six GT Units of 30 MW each. These units were commissioned during period 1985-86. Three ST Unit of 30 MW. These units were commissioned during period 1995-96.

SOURCES
en.wikipedia.org/wiki/Indraprastha_Power_Generation
en.wikipedia.org/wiki/IPGCL_Gas_Turbine_Power_Station
www.ipgl.coop.gov.in/
www.india.informatics.com/india/india/IP-power-plant-in-disuse-will-be-an-art-gallery/articlehow/715513.cms
articles.economictimes.indiatimes.com/2015-08-18/news/6530495_1-power-plant-delhi-restructured-india-renew-energy-corporation
www.slideshare.net/ShubhaDhyani/ipglppt-training-presentation



1. Six Gas Turbine Units of 30 MW each were commissioned in 1985-86 to meet the electricity demand in peak hours and were operating on liquid fuel.
2. The Rajghat power plant, which is operated by the Delhi government's Indraprastha Power Generation Company.
3. Indraprastha Power Station in Delhi.
4. An imagined view of the adaptive reuse of IP Power Plant as an aviary.
5. Gas Turbine Power Station

INVENTORY OF INDUSTRIAL HERITAGE IN INDIA

INVENTORY MAP

1. Sindri Fertilizer Plant

2. Kodumalai Archaeological Site

3. Hindustan Shipyard

4. Darjeeling Himalayan Railway

5. Jheria Coal Mines

6. India Government Mint

7. Old Silver Mint

8. Sambhar Lake

9. Dandi

10. Jantar Mantar, Delhi

11. Jantar Mantar, Jaipur

12. Chhatrapati Shivaji Terminus

13. Kallanai Dam (The Grand Anicut)

14. Tonnur Kere (Moti Talab Dam)

15. Apsara Research Reactor

16. UCIL Factory

17. Digboi Refinery

18. Kolukkumalai Tea Factory

19. Grand Trunk Road

20. Top Ka Khancha (Gunfoundry)

21. Lal Imli Mills

22. Rewari Steam Centre

23. Mahatma Jyotiba Phule Mandal

24. Dapoon Viaduct

25. Bepore Shipbuilding

26. Mill Owners' Association Building

27. Kalka-Shimla Railway

28. Calcutta Tramways

29. Royapuram Railway Station

30. Opium Godown

31. New Egerton Woolen Mills Limited

32. Semaphore Telegraph Signalling Towers

33. Banda Railway Station

34. Girangaon Mills

35. Khetri Copper Mines

36. Odisha State Maritime Museum

37. East India Company Bungalow

38. Bhakra Nangal Dam

39. Jamshedpur Industrial Town

40. Iron Age Industrial Center, Guttur

41. Maheshwar Textile Industry

42. Watson's Hotel

43. Cossipore Gun & Shell Factory

44. Arya Vaidya Sala

45. Pragati Aroma Distillery

46. Sewri Port and Yard

47. Dhori Colliery

48. Om Sakthi Fireworks Industries

49. Wayanad Gold Mines

50. Currency Note Press
51. Solari Aqueduct

52. Kollur Diamond Mine

53. Saraya Sugar Mills

54. Birla Industrial and Technological Museum

55. Nehru Museum of Technology

56. Calico Museum of Textiles

57. Science City Kolkata

58. Zawar Copper Mines

59. Visvesvaraya Ind. & Tech. Museum

60. Ghazipur Opium Factory

61. Bhojtal (Upper Lake)

62. Government Press, Gulzarbagh

63. Shiva Lal's Paintings

64. General Post Office, Kolkata

65. General Post Office, Mumbai

66. Digboi Centenary Museum

67. Dharasana Salt Factory

68. Champaran Indigo Plantation

69. Khewra Salt Mines

70. Jogighopa Bridge

71. Kovvur-Rajahmundry Bridge

72. Godavari Arch Bridge

73. Nawab Rampur Railway Station

74. Indian Railway Heritage Park

75. Bhatti Mines

76. Iron Pillar, Delhi

77. Loha Pul

78. Dhar Iron Pillar

79. Dhodand Quarries

80. Jajampur Railway Workshop

81. IP Power Plant

82. Old Delhi Railway Station

83. Bengal Chemicals And Pharmaceuticals

84. E.I.D. Parry's Sugar Mill

85. Farrukhnagar Railway Station

86. Indian Institute Of Natural Resins & Gums

87. Arvind Mills

88. Raksha Mines Railway Station

89. Mosaboni OR Musabani Copper Mine

90. Gol Ghar OR Patna Granary

91. Porto Novo Iron Works

92. Shalimar Paint Colour & Varnish Company

93. SBI Archives & Museum

94. Khairna Suspension Bridge

95. Britannia Biscuit Factory

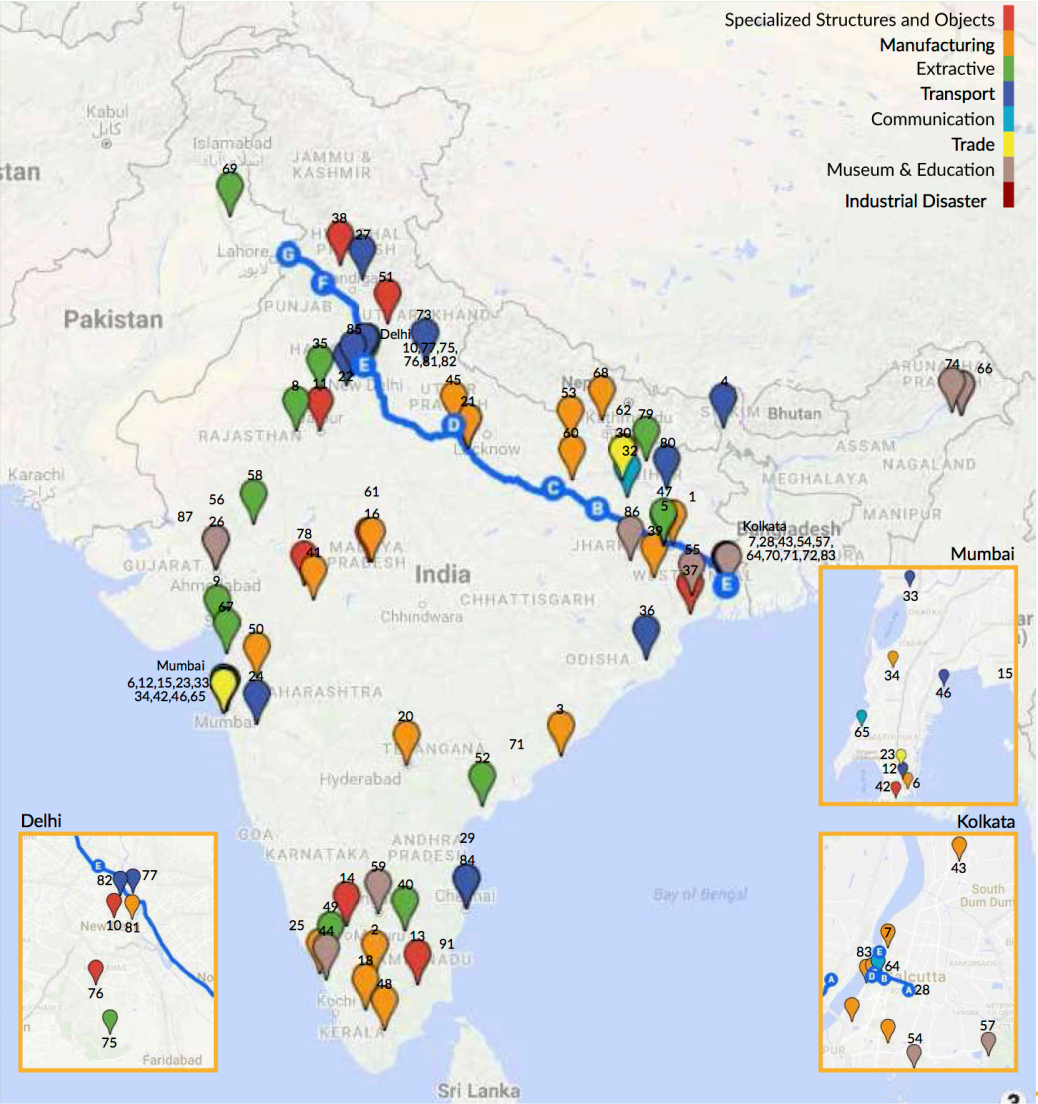
96. Mumbai's Harbour Railway Line

97. Empress Mills

98. Sanskar Kendra

99. Metal and Steel Factory

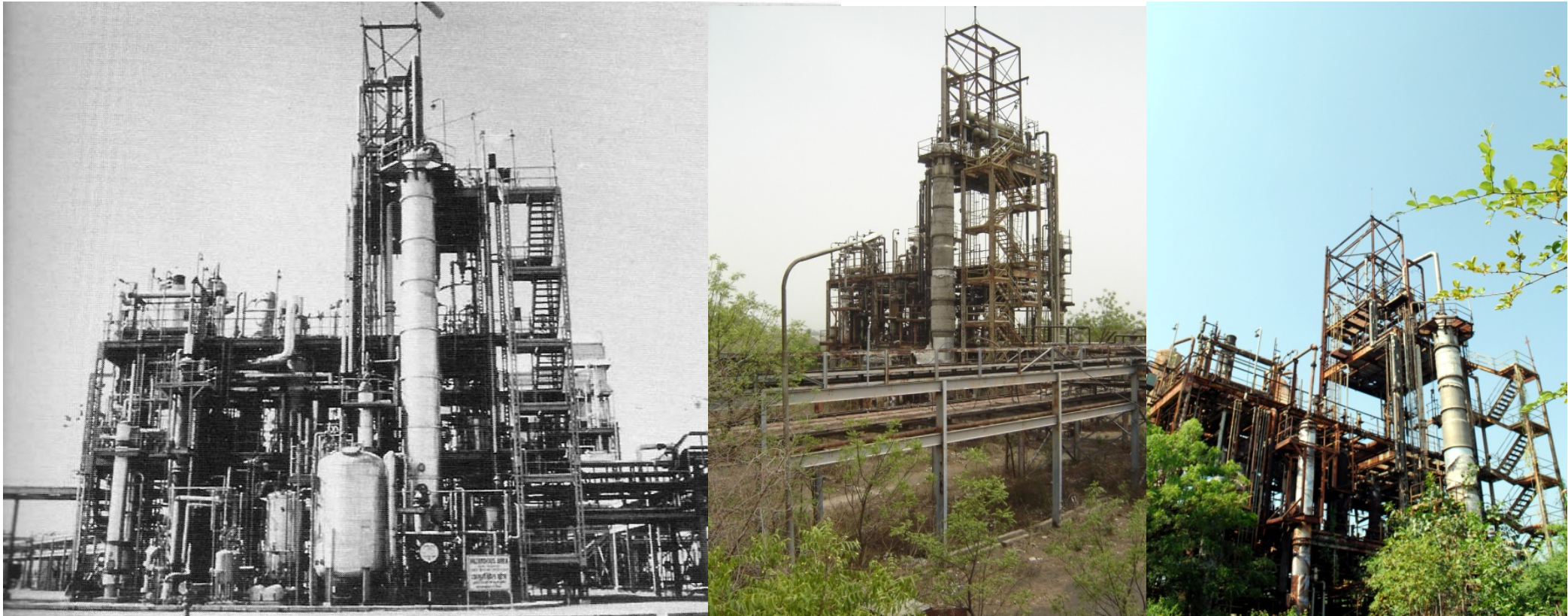
100. Ellis Bridge



Children playing outside the former Union Carbide factory in Bhopal



Photo by Jan af Geijerstam 2009



UCIL Factory plant : 1970, 2007 and 2014

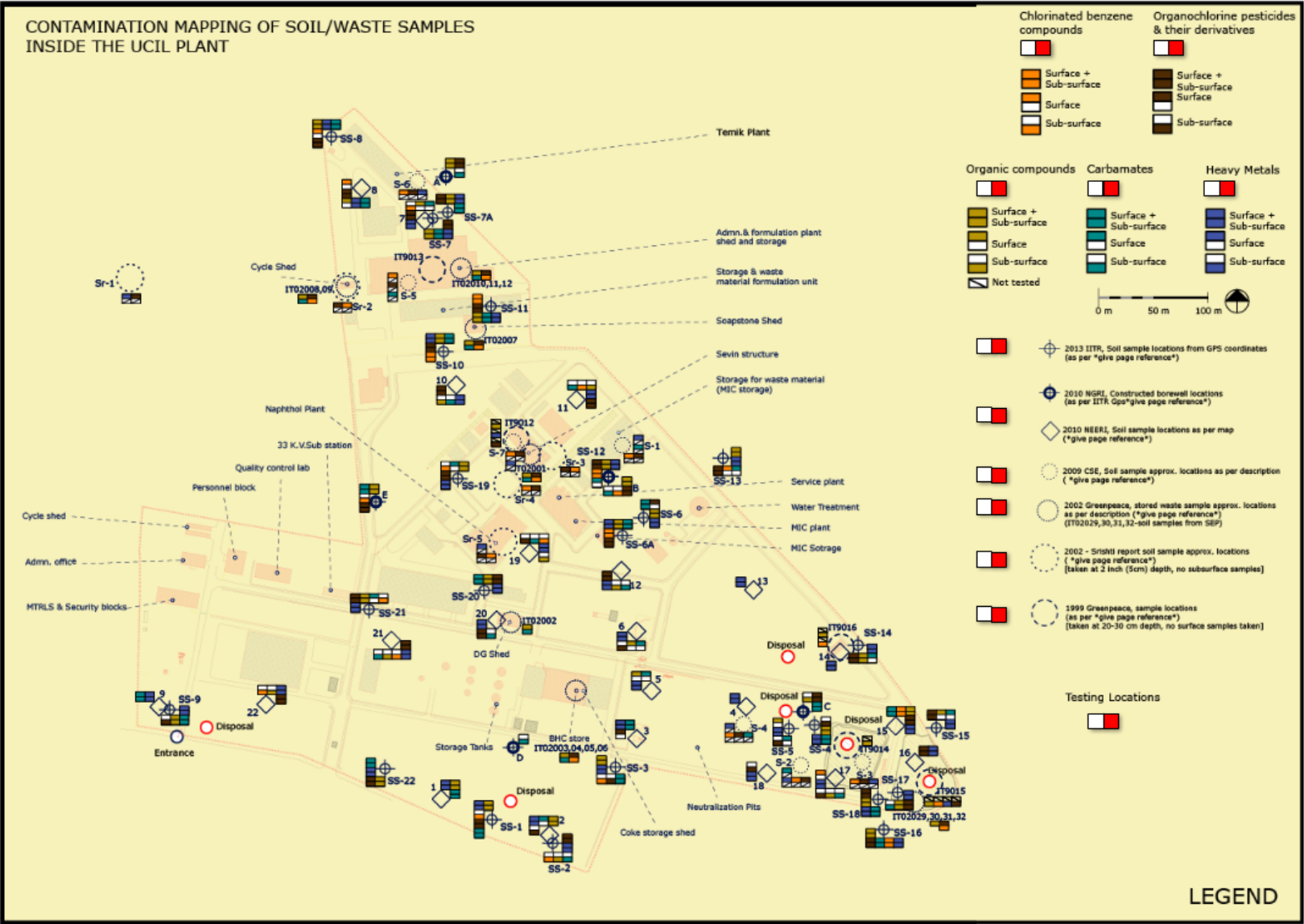


Scenes of forgetting and abandonment at the former Union Carbide factory in Bhopal
Photo by Jan af Geijerstam

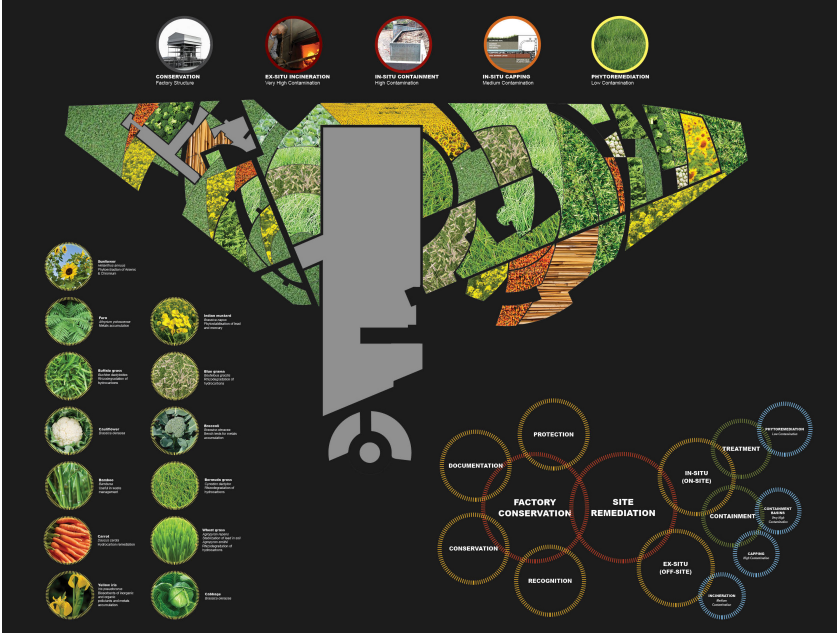


Hiroshima and Bhopal

A contamination map of Bhopal; the site becomes a document that written over



SpaceMatters' proposal to clean toxic soil and water using native plants and in-situ technologies at the site of Bhopal Gas Tragedy



Tank 601 from where the Gas leaked



Photo by Jan af Geijerstam 2017



Soil collected from lynching sites across the America at the National Memorial for Peace and Justice, USA

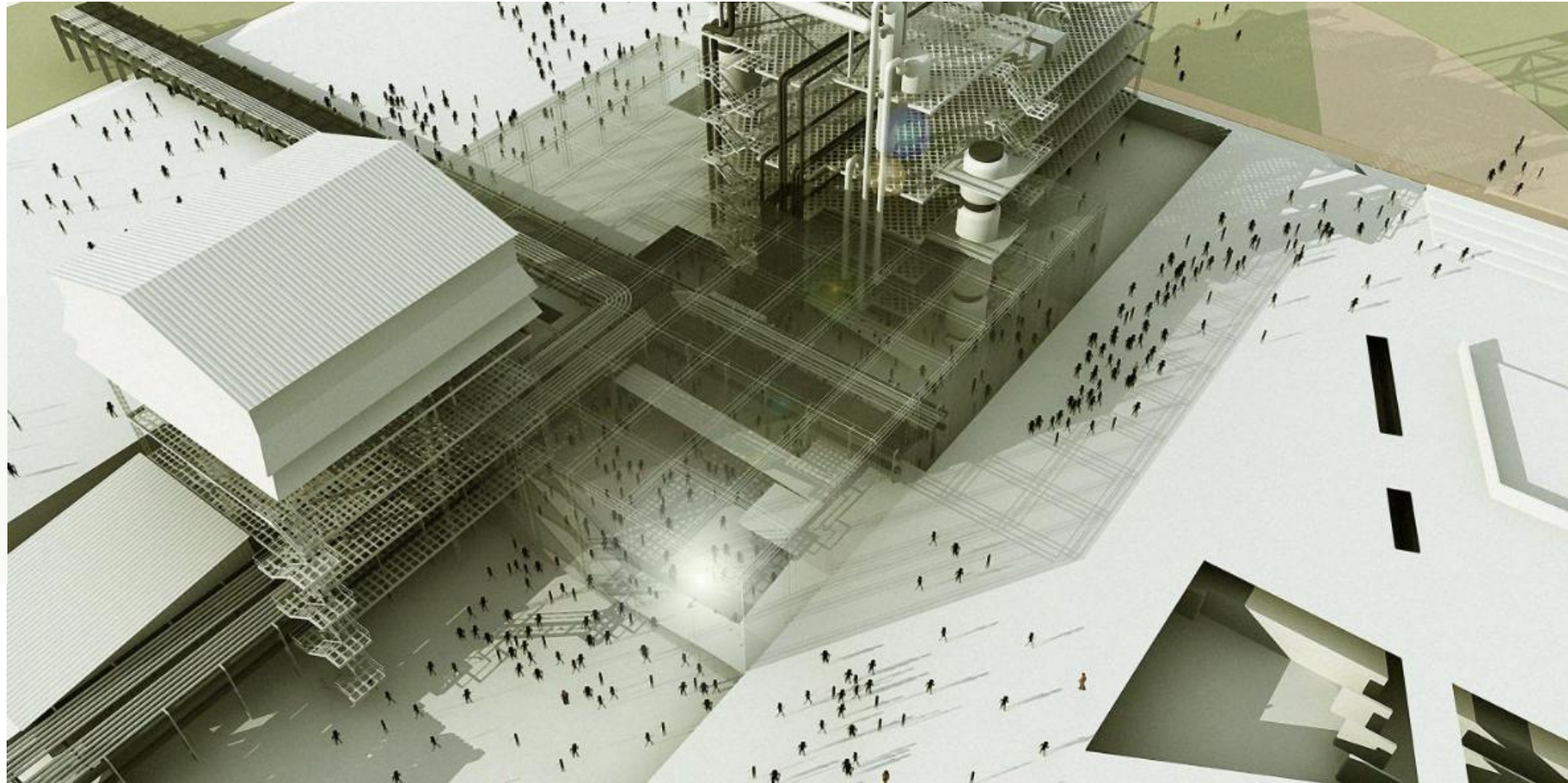




Photo source D'source Design Gallery



Indigenous iron making in Madhya Pradesh



Iron sculptures in memory of those who lost their lives

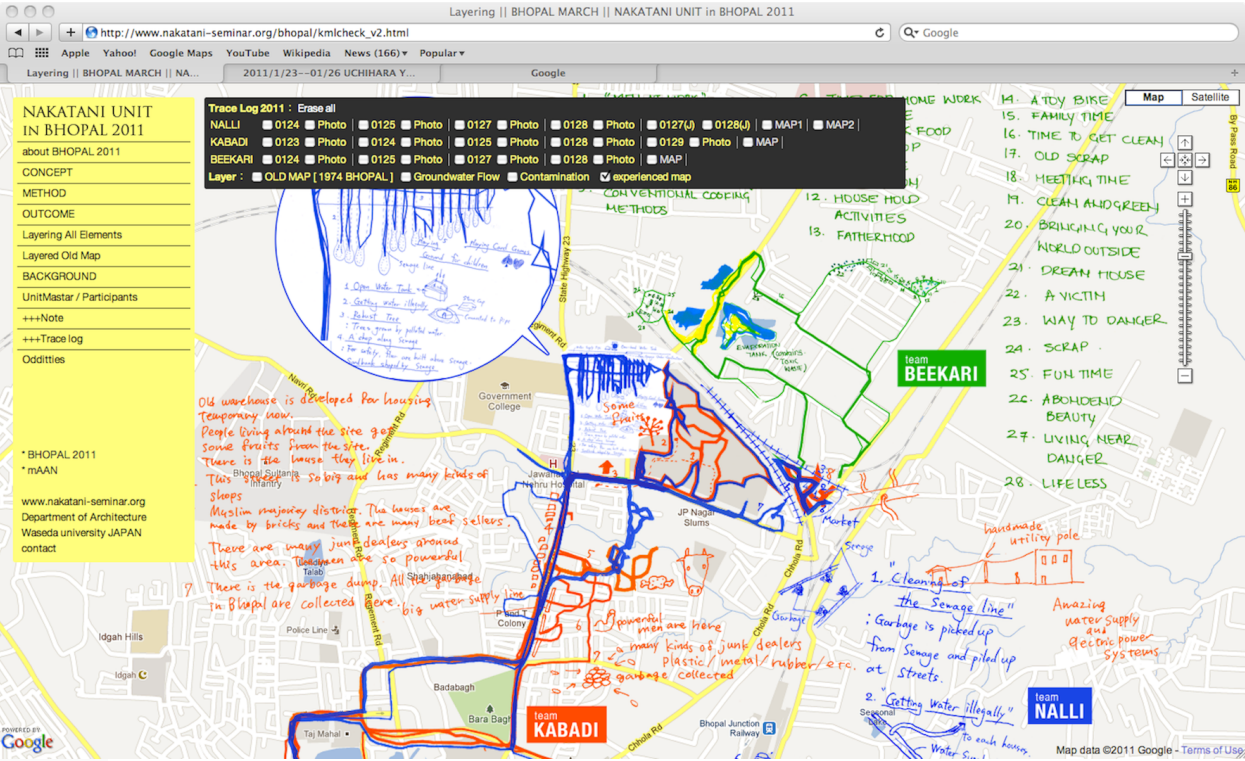
Source : SpaceMatters

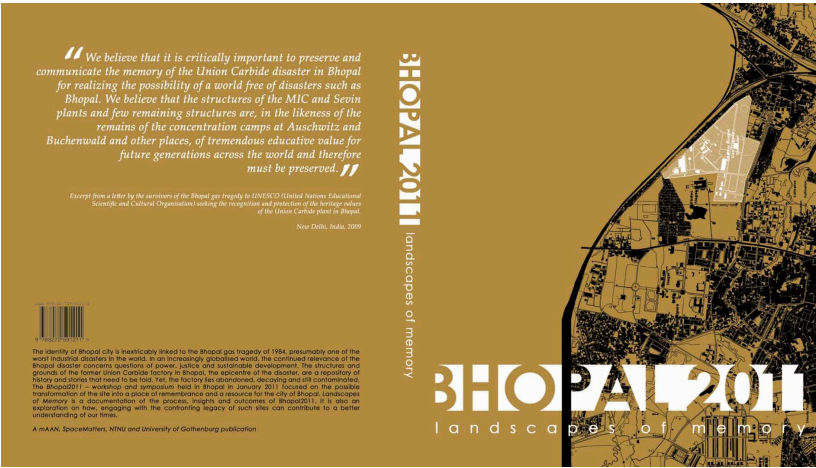


Students at IP Thermal Power Plant and at UCIL, Bhopal

4. Connect Bhopal photo rhizome out to the World.

Make a postcard with all the pictures taken by unit members and Bhopal citizen.
Send them out of Bhopal.
And extend Bhopal photo rhizome to the world.





Bhopal 2011 International Workshop & Symposium
www.bhopal2011.in





One of my student taking rest during a site visit