

Step 1. Outline

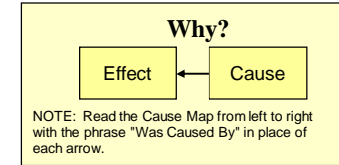
What	Problem(s)	Potential for issues while rescuing miners
When	Date	October 13, 2010
	Time	N/A
	Different, unusual, unique	Miners trapped for 69 days
Where	State, city	Copiapo, Chile
	Facility, site	San Jose Mine
	Unit, area, equipment	688 meters underground
	Task being performed	Removing miners from mine

Impact to the Goals

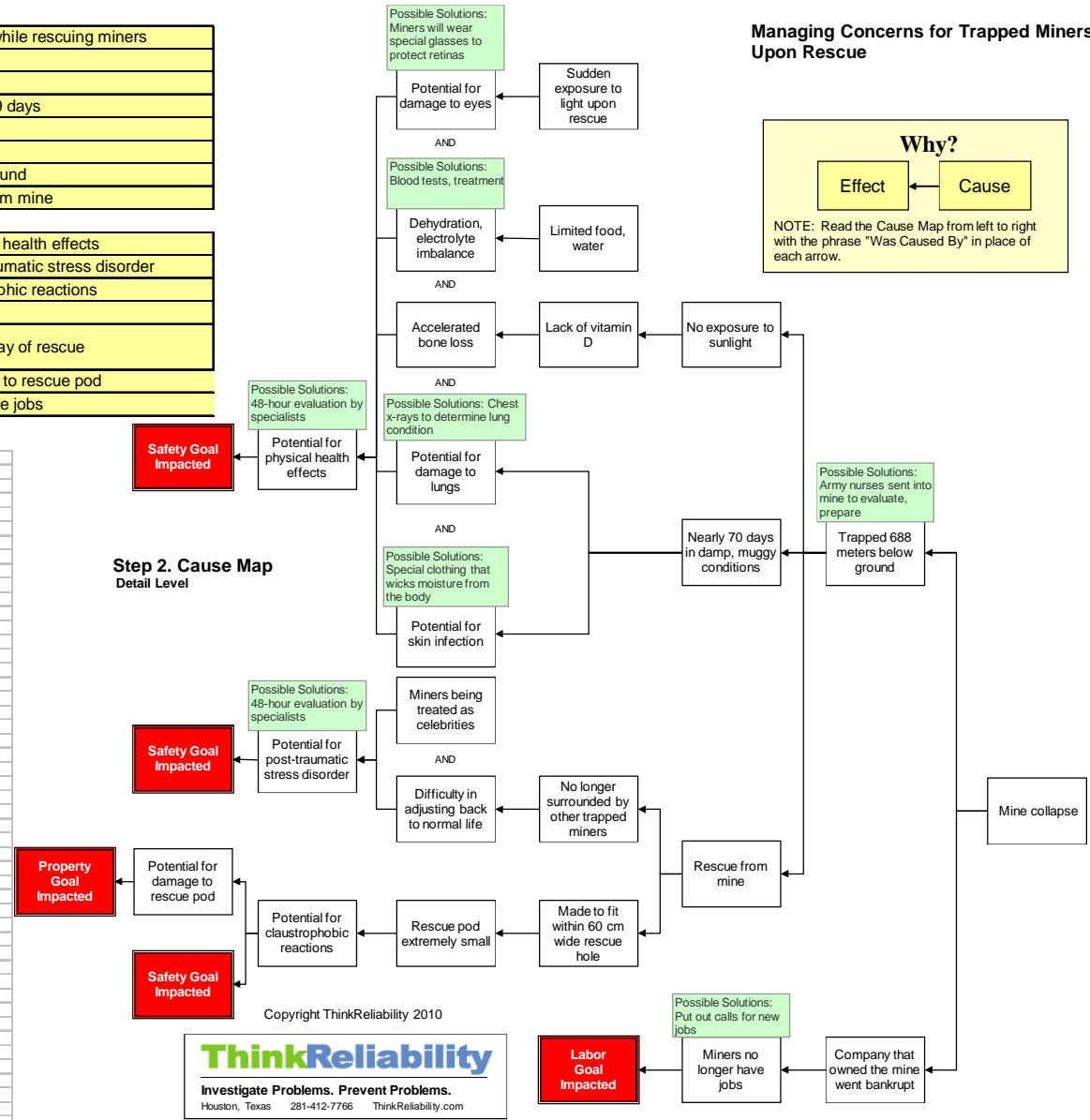
Safety	Potential for physical health effects
	Potential for post-traumatic stress disorder
Environmental	Potential for claustrophobic reactions
Cust. Service	?
Production-Schedule	Potential for stop/delay of rescue
Property, Equip, Mtls	Potential for damage to rescue pod
Labor, Time	Miners no longer have jobs

Date	Time	Description
August 5, 2010		Mine collapse seals
August 6, 2010		Rescuers begin descending through a ventilation shaft
August 7, 2010		Second collapse thwarts rescue plans
August 8, 2010		5-inch wide bore-holes drilled to attempt to locate miners
August 22, 2010		Miners attach a note to a drill at 688 meters
August 23, 2010		Food, water and equipment reaches the miners
August 30, 2010		Ground broken on the first of three rescue holes
August 31, 2010		Preliminary test hole begins to be drilled
September 2, 2010		Drilling suspended for hours because of geological faults
September 17, 2010		Rescuers reach the cavern where the miners are trapped
September 25, 2010		Rescue capsule arrives on site
October 9, 2010		Drilling rig reaches the chamber where the men are trapped
October 11, 2010		Test of the rescue capsule
October 12, 2010		First rescuer is set down the shaft
October 13, 2010	12:04 a.m.	Florencio Avalos freed
	1:10 a.m.	Mario Sepulveda Espina freed
	2:08 a.m.	Juan Illanes freed
	3:09 a.m.	Carlos Mamani freed
	4:10 a.m.	Jimmy Sanchez freed
	5:34 a.m.	Osman Isidro Araya freed
	6:21 a.m.	Jose Oieda freed
	7:02 a.m.	Claudio Yanez freed
	7:59 a.m.	Mario Gomez freed
	8:52 a.m.	Alex Vaga freed
	9:31 a.m.	Jorge Gallequillos freed
	10:11 a.m.	Edison Pena freed
	10:54 a.m.	Carlos Barrios freed
	11:30 a.m.	Victor Zamora freed
	12:07 p.m.	Victor Segovia freed
	12:49 p.m.	Daniel Herrera freed
	1:38 p.m.	Omar Revodas freed
	2:49 p.m.	Esteban Rojas freed
	3:27 p.m.	Pablo Rojas freed
	4:00 p.m.	Dario Segovia freed
	4:30 p.m.	Yohnni Barrios freed
	5:08 p.m.	Samuel Avalos freed
	5:36 p.m.	Carlos Buqueno freed
	5:56 p.m.	Jose Henriquez freed
	6:25 p.m.	Renan Avalos freed
	6:55 p.m.	Claudio Acuna freed
	7:14 p.m.	Franklin Lobos Ramirez freed
	7:44 p.m.	Richard Villaruel freed
	8:15 p.m.	Juan Aquilar freed
	8:35 p.m.	Raul Bustos freed
	9:00 p.m.	Pedro Cortez freed
	9:26 p.m.	Ariel Ticona freed
	9:50 p.m.	Luis Urzua freed
October 14, 2010	12:32 p.m.	Last rescue worker is on the ground

Managing Concerns for Trapped Miners Upon Rescue



Step 2. Cause Map Detail Level



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