Chronology of major tailings dam failures

(from 1960)

(last updated 4 Sep 2014)

Note: Due to limited availability of data, this compilation is in no way complete

Date	Location	Parent company	Ore type	Type of Incident	Release	Impacts
2014, Aug. 4	Mount Polley mine, near Likely, British Columbia, Canada	<u>Imperial Metals</u> Corp. ₅	copper, gold	tailings dam failure	7.3 million m ³ of tailings, 10.6 million m ³ of water, and 6.5 million m ³ of interstitial water	tailings flowing into adjacent Polley Lake and, through Hazeltine Creek, into Quesnel Lake (Mitchell Bay)
2014, Feb. 2	Dan River Steam Station, Eden, North Carolina, USA	<u>Duke Energy</u> ⊨•	coal ash	collapse of an old drainage pipe under a 27- acre ash waste pond	about 82,000 short tons [74,400 t] of toxic coal ash and 27 million gallons [100,000 m ³] of contaminated water	ash flowing through drainage pipe into Dan River
2013, Nov. 15-19	Zangezur Copper Molybdenum Combine P, Kajaran, Syunik province, Armenia	Cronimet Mining AG ₽	copper, molybdenum	damage of tailings pipeline	?	tailings flowing into Norashenik River for several days
2012, Dec. 17	former Gullbridge mine site, Newfoundland, Canada		copper	embankment dam failure, width 50 m		non- consumption water advisory has been issued for the Town of South Brook (<u>view</u> <u>details</u> = - Newfoundland

						and Labrador Department of Environment and Conservation)
2012, Nov. 4	Sotkamo, Kainuu province, Finland	<u>Talvivaara</u> <u>Mining</u> <u>Company Plc</u> ⊧	nickel, (uranium by- product planned)	leak from gypsum pond through a "funnel-shaped hole"	hundreds of thousands of cubic metres of contaminated waste water	nickel and zinc concentrations in nearby Snow River exceeded the values that are harmful to organisms tenfold or even a hundredfold, uranium concentrations more than tenfold (<u>view</u> <u>details</u>)
2011, Jul. 21	Mianyang City, Songpan County, Sichuan Province, China	Xichuan Minjiang Electrolytic Manganese Plant	manganese	tailings dam damaged from landslides caused from heavy rains	?	tailings damaged residential roads and houses, forcing 272 people to leave; tailings were washed into the Fujiang River, leaving 200,000 people without drinking water supply
2010, Oct. 4	Kolontár, Hungary (Aerial View: <u>Google Maps</u> ☞)	<u>MAL Magyar</u> <u>Alumínium</u> ⊧	bauxite	tailings dam failure (<u>view</u> <u>details</u>)	700,000 cubic metres of caustic red mud	several towns flooded, 10 people killed, approx. 120 people injured, 8 square kilometres flooded
2010, Jun. 25	Huancavelica, Peru	Unidad Minera Caudalosa Chica	?	tailings dam failure	21,420 cubic metres of tailings	contamination of río Escalera and río Opamayo 110 km downstream

2009, Aug. 29	Karamken, Magadan region, Russia	?	gold	tailings dam failure after heavy rain (see <u>background</u> <u>info</u> - SRIC 2004)	?	eleven homes were carried away by the mudflow; at least one person was killed
2009, May 14	Huayuan County, Xiangxi Autonomous Prefecture, Hunan Province, China	?	manganese	tailings dam failure (capacity: 50,000 cubic metres)	?	The landslide set off by the tailings dam failure destroyed a home, killing three and injuring four people.
2008, Dec. 22	Kingston fossil plant, Harriman, Tennessee, USA	Tennessee Valley Authority ₽	coal ash	retention wall failure	Release of 5.4 million cubic yards [4.1 million cubic metres] of ashy slurry	The ash slide covered 400 acres [1.6 square kilometres] as deep as 6 feet [1.83 metres]. The wave of ash and mud toppled power lines, covered Swan Pond Road and ruptured a gas line. It damaged 12 homes, and one person had to be rescued, though no one was seriously hurt.
2008, Sep. 8	Taoshi, Linfen City, Xiangfen county, Shanxi province, China	Tashan mining company	iron	Collapse of a waste-product reservoir at an illegal mine during rainfall	?	A mudslide several metres high buried a market, several homes and a three- storey building. At least 254 people are dead and 35

						injured.
2006, Nov. 6	Nchanga, Chingola, Zambia	Konkola Copper Mines Plc (KCM) ➡ (51% Vedanta Resources plc ➡)	copper	failure of tailings slurry pipeline from Nchanga tailings leaching plant to Muntimpa tailings dumps	?	Release of highly acidic tailings into Kafue river; high concentrations of copper, manganese, cobalt in river water; drinking water supply of downstream communities shut down
2006, April 30	near Miliang, Zhen'an County, Shangluo, Shaanxi Province, China	Zhen'an County Gold Mining Co. Ltd.	gold	tailings dam failure during sixth upraising of dam	?	The landslide buried about 40 rooms of nine households, leaving 17 residents missing. Five injured people were taken to hospital. More than 130 local residents have been evacuated. Toxic potassium cyanide was released into the Huashui river, contaminating it approx. 5 km downstream.
				phosphogypsum stack failure, because the company was trying to increase the capacity of the pond at a faster		liquid poured

2005, April 14	Bangs Lake, Jackson County, Mississippi, USA	Mississippi Phosphates Corp. IP	phosphate	rate than normal, according to Officials with the Mississippi Department of Environmental Quality (the company has blamed the spill on unusually heavy rainfall, though)	approx. 17 million gallons of acidic liquid (64,350 m3)	into adjacent marsh lands, causing vegetation to die
2004, Nov. 30	Pinchi Lake, British Columbia, Canada	<u>Teck Cominco</u> Ltd.₽	mercury	tailings dam (100-metres long and 12- metres high) collapses during reclamation work	6,000 to 8,000 m3 of rock, dirt and waste water	tailings spilled into 5,500 ha Pinchi Lake
2004, Sep. 5	Riverview, Florida, USA	Cargill Crop Nutrition ₅	phosphate	a dike at the top of a 100-foot- high gypsum stack holding 150-million gallons of polluted water broke after waves driven by Hurricane Frances bashed the dike's southwest corner	60 million gallons (227,000 m3) of acidic liquid	liquid spilled into Archie Creek that leads to Hillsborough Bay
2004, May 22	Partizansk, Primorski Krai, Russia	Dalenergo	coal ash	A ring dike, enclosing an area of roughly 1 km ² and holding roughly 20 million cubic meters of coal ash, broke. The break left a hole roughly 50 meter wide in the dam.	approximately 160,000 cubic meters of ash	The ash flowed through a drainage canal into a tributary to the Partizanskaya River which empties in to Nahodka Bay in Primorski Krai (east of Vladivostok). For details download <u>Sept. 2004</u>

						report ⊧ (PDF) by Paul Robinson, SRIC
2004, March 20	Malvési, Aude, France	Comurhex (Cogéma/Areva)	decantation and evaporation pond of uranium conversion plant	dam failure after heavy rain in preceding year (view <u>details</u>)	30,000 cubic metres of liquid and slurries	release led to elevated nitrate concentrations of up to 170 mg/L in the canal of Tauran for several weeks
2003, Oct. 3	Cerro Negro, Petorca prov., Quinta region, Chile	Cia Minera Cerro Negro	copper	tailings dam failure	50,000 tonnes of tailings	tailings flowed 20 kilometers downstream the río La Ligua
2002, Aug. 27 / Sep. 11	San Marcelino, Zambales, Philippines	Dizon Copper Silver Mines, Inc.		overflow and spillway failure of two abandoned tailings dams after heavy rain (<u>view details</u>)	?	Aug. 27: some tailings spilled into Mapanuepe Lake and eventually into the Sto. Tomas River Sep. 11: low lying villages flooded with mine waste; 250 families evacuated; nobody reported hurt so far
2001, Jun. 22	Sebastião das Águas Claras, Nova Lima district, Minas Gerais, Brazil	Mineração Rio Verde Ltda	iron	mine waste dam failure (<u>view</u> <u>details</u>)	?	tailings wave traveled at least 6 km, killing at least two mine workers, three more workers are missing
2000, Oct. 18	Nandan county, Guangxi province, China	?	?	tailings dam failure	?	at least 15 people killed, 100 missing; more than 100 houses

						destroyed
2000, Oct. 11	Inez, Martin County, Kentucky, USA	Martin County Coal Corporation (100% <u>A.T.</u> <u>Massey Coal</u> <u>Company, Inc.</u> ➡, Richmond, VA (100% <u>Fluor Corp.</u> ➡))	coal	tailings dam failure from collapse of an underground mine beneath the slurry impoundment (<u>view details</u>)	250 million gallons (950,000 m3) of coal waste slurry released into local streams	About 75 miles (120 km) of rivers and streams turned an irridescent black, causing a fish kill along the Tug Fork of the Big Sandy River and some of its tributaries. Towns along the Tug were forced to turn off their drinking water intakes.
2000, Sep. 8	Aitik mine, Gällivare, Sweden	Boliden Ltd. ⊧	copper	tailings dam failure from insufficient perviousness of filter drain (<u>view details</u>)	release of 2.5 million m3 of liquid into an adjacent settling pond, subsequent release of 1.5 million m3 of water (carrying some residual slurry) from the settling pond into the environment	
2000, Mar. 10	Borsa, Romania	Remin S.A.		tailings dam failure after heavy rain	22,000 t of heavy-metal contaminated tailings	contamination of the Vaser stream, tributary of the Tisza River. View <u>Romanian</u> <u>Govt. report F</u> · <u>UNEP report</u> F (527k PDF)
				tailings dam		contamination of the Somes/Szamos stream,

2000, Jan. 30	Baia Mare, Romania	Aurul S.A. (<u>Esmeralda</u> <u>Exploration</u> , Australia (50%), Remin S.A. (44.8%))	gold recovery from old tailings	crest failure after overflow caused from heavy rain and melting snow (<u>view details</u>)	100,000 m ³ of cyanide- contaminated liquid	tributary of the Tisza River, killing tonnes of fish and poisoning the drinking water of more than 2 million people in Hungary
1999, Apr. 26	Placer, Surigao del Norte, Philippines	Manila Mining Corp. (MMC)	gold	tailings spill from damaged concrete pipe	700,000 tonnes of cyanide tailings	17 homes buried, 51 hectares of riceland swamped
1998, Dec. 31	Huelva, Spain	<u>Fertiberia</u> ₽, Foret	phosphate	dam failure during storm (<u>view details</u>)	50,000 m3 of acidic and toxic water	
1998, Apr. 25	Los Frailes, Aznalcóllar, Spain	<mark>Boliden Ltd.</mark> ₪, Canada	zinc, lead, copper, silver	dam failure from foundation failure (<u>view</u> <u>details</u>)	4-5 million m3 of toxic water and slurry	thousands of hectares of farmland covered with slurry
1997, Dec. 7	Mulberry Phosphate, Polk County, Florida, USA	Mulberry Phosphates, Inc.	phosphate	phosphogypsum stack failure	200,000 m3 of phosphogypsum process water	biota in the Alafia River eliminated
1997, Oct. 22	Pinto Valley, Arizona, USA	BHP Copper B	copper	<u>tailings dam</u> slope failure ₽	230,000 m3 of tailings and mine rock	tailings flow covers 16 hectares
1996, Nov. 12	Amatista, Nazca, Peru	?	?	liquefaction failure of upstream-type tailings dam during earthquake	more than 300,000 m3 of tailings	flow runout of about 600 meters, spill into river, croplands contaminated
1996, Aug. 29	El Porco, Bolivia	Comsur (62%), <u>Rio Tinto</u> (33%)	zinc, lead, silver	dam failure	400,000 tonnes	300 km of Pilcomayo river contaminated
1996, Mar. 24	Marcopper, Marinduque Island, Philippines	Placer Dome Inc. ➡, Canada (40%)	copper	Loss of tailings from storage pit through old drainage tunnel	1.6 million m3	Evacuation of 1200 residents, 18 km of river channel filled with tailings, US\$ 80 million

						damage
1995, Dec.	Golden Cross, New Zealand	<u>Coeur d'Alène</u> ⊾, Idaho, USA	gold	Dam movement of dam containing 3 million tonnes of tailings (continuing) (view details (-))	Nil (so far)	Nil (so far)
1995, Sep. 2	Placer, Surigao del Norte, Philippines	Manila Mining Corp.	gold	Dam foundation failure	50,000 m3	12 people killed, coastal pollution
1995, Aug. 19	Omai, Guyana	Cambior Inc. ➡, Canada (65%), Golden Star Resources Inc., Colorado, USA (30%)	gold	tailings dam failure from internal dam erosion (<u>preliminary</u> <u>report on</u> <u>technical</u> <u>causation</u>)	4.2 million m3 of cyanide slurry	80 km of Essequibo River declared environmental disaster zone (<u>view details</u> ➡)
1994, Nov. 19	Hopewell Mine, Hillsborough County, Florida, USA	IMC-Agrico ₽	phosphate	dam failure	Nearly 1.9 million m3 of water from a clay settling pond	spill into nearby wetlands and the Alafia River, Keysville flooded
1994, Oct. 2	Payne Creek Mine, Polk County, Florida, USA	IMC-Agrico ₽	phosphate	dam failure	6.8 million m3 of water from a clay settling pond	majority of spill contained on adjacent mining area; 500,000 m3 released into Hickey Branch, a tributary of Payne Creek
1994, Oct.	Fort Meade, Florida, USA	<u>Cargill</u> ⊫	phosphate	?	76,000 m3 of water	spill into Peace River near Fort Meade
1994, June	IMC-Agrico, Florida, USA	IMC-Agrico P	phosphate	Sinkhole opens in phosphogypsum stake	?	Release of gympsum and water into groundwater
						tailings traveled 4 km

1994, Feb. 22	Harmony, Merriespruit, South Africa	Harmony Gold Mines	gold	Dam wall breach following heavy rain	600,000 m3	downstream, 17 people killed, extensive damage to residential township
1994, Feb. 14	<u>Olympic Dam</u> , Roxby Downs, South Australia	WMC Ltd.	copper, uranium	leakage of tailings dam during 2 years or more	release of up to 5 million m3 of contaminated water into subsoil	?
1993, Oct.	Gibsonton, Florida, USA	<u>Cargill</u> ₽	phosphate	?	?	Fish killed when acidic water spilled into Archie Creek
1993	Marsa, Peru	Marsa Mining Corp.	gold	dam failure from overtopping	?	6 people killed
1992, Mar. 1	Maritsa Istok 1, near Stara Zagora, Bulgaria	?	ash/cinder	dam failure from inundation of the beach	500,000 m3	?
1992, Jan.	No.2 tailings pond, Padcal, Luzon, Philippines	Philex Mining Corp.	copper	Collapse of dam wall (foundation failure)	80 million tonnes	?
1991, Aug. 23	Sullivan mine, Kimberley, British Columbia, Canada	Cominco Ltd ₅	lead/zinc	dam failure (liquefaction in old tailings foundation during construction of incremental raise)	75,000 m3	the slided material was contained in an adjacent pond
1989, Aug. 25	Stancil, Perryville, Maryland, USA	?	sand and gravel	dam failure during capping of the tailings after heavy rain	38,000 m3	tailings flowside covered 5000 m2
1988, Apr. 30	Jinduicheng, Shaanxi province, China	?	molybdenum	breach of dam wall (spillway blockage caused pond level to rise too high)	700,000 m3	approx. 20 people killed

1988, Jan. 19	Tennessee Consolidated No.1, Grays Creek, TN, USA	Tennessee Consolidated Coal Co.	coal	dam wall failure from internal erosion, caused from failure of an abandoned outlet pipe	250,000 m3	?
1988	Riverview, Florida, USA	Gardinier (now <u>Cargill</u> ₅)	phosphate	?	acidic spill	Thousands of fish killed at mouth of Alafia River
1987, April 8	Montcoal No.7, Raleigh County, West Virginia, USA	Peabody Coal Co. (now <u>Peabody</u> <u>Energy</u> ⊧)	coal	dam failure after spillway pipe breach	87,000 cubic meters of water and slurry	tailings flow 80 km downstream
1986, May	Itabirito, Minas Gerais, Brazil	Itaminos Comercio de Minerios	?	dam wall burst	100,000 tonnes	tailings flow 12 km downstream
1986	Huangmeishan, China	?	iron	dam failure from seepage/slope instability	?	19 people killed
1985, July 19	Stava, Trento, Italy	Prealpi Mineraia	fluorite	dam failure, caused from insufficient safety margins and inadequate decant pipe construction (<u>view details</u>)	200,000 m3	tailings flow 4.2 km downstream at 90 km/h; 268 people killed, 62 buildings destroyed (<u>view details</u>)
1985, Mar. 3	Veta de Agua No.1, Chile	?	copper	dam wall failure, due to liquefaction during earthquake	280,000 m3	tailings flow 5 km downstream
1985, Mar. 3	Cerro Negro No.4, Chile	Cia Minera Cerro Negro	copper	dam wall failure, due to liquefaction during earthquake	500,000 m3	tailings flow 8 km downstream
1985	Olinghouse, Wadsworth, Nevada, USA	Olinghouse Mining Co.	gold	embankment collapse from saturation	25,000 m3	tailings flow 1.5 km downstream
1982,	Sipalay,	Marinduque		dam failure, due		widespread inundation of

Nov. 8	Negros Occidental, Philippines	Mining and Industrial Corp.	copper	to slippage of foundations on clayey soils	28 million tonnes	agricultural land up to 1.5 m high
1981, Dec. 18	Ages, Harlan County, Kentucky, USA	Eastover Mining Co.	coal	dam failure after heavy rain	96,000 m3 coal refuse slurry	the slurry wave traveled the Left Fork of Ages Creek 1.3 km downstream, 1 person was killed, 3 homes destroyed, 30 homes damaged, fish kill in Clover Fork of the Cumberland River
1981, Jan. 20	Balka Chuficheva, Lebedinsky, Russia	?	iron	dam failure	3.5 million m3	tailings travel distance 1.3 km
1980, Oct. 13	Tyrone, New Mexico, USA	<u>Phelps Dodge</u> ₽	copper	dam wall breach, due to rapid increase in dam wall height, causing high internal pore pressure	2 million m3	tailings flow 8 km downstream and inundate farmland
1979, July 16	Church Rock, New Mexico, USA	United Nuclear	uranium	dam wall breach, due to differential foundation settlement	370,000 m3 of radioactive water, 1,000 tonnes of contaminated sediment	Contamination of Rio Puerco sediments up to 110 km downstream
1979 or earlier	(unidentified), British Columbia, Canada	?	?	piping in the sand beach of the tailings dam	40,000 m3 of ponded water	considerable property damage
1978, Jan. 31	Arcturus, Zimbabwe	Corsyn Consolidated Mines	gold	slurry overflow after continuous rain over several days	30,000 tonnes	1 person killed, extensive siltation to waterway and adjoining rough pasture

1978, Jan. 14	Mochikoshi No.1, Japan	Mochikoshi Gold Mining Company	gold	dam failure, due to liquefaction during earthquake	80,000 m3	1 person killed, tailings flow 7-8 km downstream
1977, Feb. 1	Homestake, Milan, New Mexico, USA	Homestake Mining Company ⊧	uranium	dam failure, due to rupture of plugged slurry pipeline	30,000 m3	no impacts outside the mine site
1976, Mar. 1	Zlevoto, Yugoslavia	?	lead, zinc	dam failure, due to high phreatic surface and seepage breakout on the embankment face	300,000 m3	tailings flow reached and polluted nearby river
1975, June	Silverton, Colorado, USA	?	(metal)	dam failure	116,000 tonnes	tailings flow slide polluted nearly 100 miles (160 km) of the Animas river and its tributaries; severe property damage; no injuries
1975, Apr.	Madjarevo, Bulgaria	?	lead, zinc, gold	rising of tailings above design level caused overloading of the decant tower and collectors	250,000 m3	?
1975	Mike Horse, Montana, USA	?	lead, zinc	dam failure after heavy rain	150,000 m3	?
1974, Nov. 11	Bafokeng, South Africa	?	platinum	embankment failure by concentrated seepage and piping through cracks	3 million m3	12 people killed in a mine shaft inundated by the tailings; tailings flow 45 km downstream
1974, Jun. 1	Deneen Mica, North Carolina, USA	?	mica	dam failure after heavy rain	38,000 m3	tailings released to an adjacent river

1973	(unidentified), Southwestern USA	?	copper	dam failure from increased pore pressure during construction of incremental raise	170,000 m3	tailings traveled 25 km downstream
1972, Feb. 26	Buffalo Creek, West Virginia, USA	<u>Pittston Coal</u> ⊧	coal	collapse of tailings dam after heavy rain (view <u>Citizens'</u> <u>Commission</u> report ு)	500,000 m3	the tailings traveled 27 km downstream, 125 people lost their lives, 500 homes were destroyed. Property and highway damage exceeded \$65 million. (see details F)
1971, Dec. 3	Fort Meade, Florida, USA	Cities Service Co.	phosphate	Clay pond dam failure, cause unknown	9 million m3 of clay water	tailings traveled 120 km downstream with Peace River, large fish kill
1970	Mufulira, Zambia	?	copper	liquefaction of tailings, flowing into underground workings	some 1 million tons	89 miners killed
1970	Maggie Pie, United Kingdom	?	china clay	dam failure after raising the embankment and after heavy rain	15,000 m3	tailings spilled 35 meters downstream
1969 or earlier	Bilbao, Spain	?	?	dam failure (liquefaction) after heavy rain	115,000 m3	major downstream damage and loss of life
1968	Hokkaido, Japan	?	?	dam failure (liquefaction) during earthquake	90,000 m3	tailings traveled 150 meters downstream

1967, Mar.	Fort Meade, Florida, USA	Mobil Chemical	phosphate	dam failure, no details available	250,000 m3 of phosphatic clay slimes, 1.8 million m3 of water	spill reaches Peace River, fish kill reported
1967	(unidentified), United Kingdom	?	coal	dam failure during regrading operations	?	tailings flow covered an area of 4 hectares
1966	(unidentified), East Texas, USA	?	gypsum	dam failure	76,000 - 130,000 m3 of gypsum	flow slide traveled 300 meters; no fatalities
1966	Derbyshire, United Kingdom	?	coal	dam failure from foundation failure	30,000 m3	tailings traveled 100 meters downstream
1966, Oct. 21	Aberfan, Wales, United Kingdom	Merthyr Vale Colliery F	coal	dam failure (liquefaction) from heavy rain	162,000 m3	the tailings traveled 600 meters, 144 people were killed (<u>view</u> <u>details</u> [5+, <u>watch video</u> [5+)
1966, May 1	Mir mine, Sgorigrad, Bulgaria	?	lead, zinc, copper, silver, (uranium?)	dam failure from rising pond level after heavy rains and/or failure of diversion channel	450,000 m3	the tailings wave traveled 8 km to the city of Vratza and destroyed half of Sgorigrad village 1 km downstream, killing 488 people. (View <u>details rached</u> <u>historic</u> <u>photographs</u> rached rached rached photographs rached
1965, Mar. 28	Bellavista, Chile	?	copper	dam failure during earthquake	70,000 m3	tailings traveled 800 meters downstream
1965, Mar.	Cerro Negro No.3, Chile	?	copper	dam failure during	85,000 m3	tailings traveled 5 km

28				earthquake		downstream
1965, Mar. 28	El Cobre New Dam, Chile	?	copper	dam failure (liquefaction) during earthquake	350,000 m3	tailings traveled 12 km downstream, destroyed the
1965, Mar. 28	El Cobre Old Dam, Chile	?	copper	dam failure (liquefaction) during earthquake	1.9 million m3	town of El Cobre and killed more than 200 people
1965, Mar. 28	La Patagua New Dam, Chile	?	copper	dam failure (liquefaction) during earthquake	35,000 m3	tailings traveled 5 km downstream
1965, Mar. 28	Los Maquis, Chile	?	copper	dam failure (liquefaction) during earthquake	21,000 m3	tailings traveled 5 km downstream
1965	Tymawr, United Kingdom	?	coal	dam failure from overtopping	?	tailings traveled 700 meters downstream, causing considerable damage
1962	(unidentified), Peru	?	?	dam failure (liquefaction) during earthquake and after heavy rainfall	?	?
1961	Tymawr, United Kingdom	?	coal	dam failure, no details available	?	tailings traveled 800 meters downstream

tonnes = metric tonnes

Sources:

- Tailings Dam Incidents, U.S. Committee on Large Dams <u>USCOLD</u>, Denver, Colorado, ISBN 1-884575-03-X, 1994, 82 pages [compilation and analysis of 185 tailings dam incidents]
- Environmental and Safety Incidents concerning Tailings Dams at Mines: Results of a Survey for the years 1980-1996 by Mining Journal Research Services; a report prepared for <u>United Nations Environment</u> Programme, Industry and Environment Paris, 1996, 129 pages [compilation of 37 tailings dam incidents]
- Tailings Dams Risk of Dangerous Occurrences, Lessons learnt from practical experiences, Bulletin 121, Published by United Nations Environmental Programme (UNEP) Division of Technology, Industry and

Economics (DTIE) and International Commission on Large Dams (ICOLD), Paris 2001, 144 p. [compilation of 221 tailings dam incidents mainly from the above two publications, and examples of effective remedial measures]

and many others.

> See also: <u>Chronology of uranium tailings dam failures</u>

HOME WISE Uranium Project > <u>Tailings Dam Safety</u> >

http://www.wise-uranium.org/mdaf.html