

**B.C. Tap Water Alliance April 6, 2015 Backgrounder Table: ‘21’ Mount Polley Expert Review Panel Final Report  
Footnote References to Mount Polley Tailings Disaster Documents Currently Withheld by the BC Government**

(BC Tap Water Alliance, [www.bctwa.org](http://www.bctwa.org)) (For withheld documents list, [www.bctwa.org/MtPolley-Backgrounder-Feb1-2015.pdf](http://www.bctwa.org/MtPolley-Backgrounder-Feb1-2015.pdf))

<b>Reference Source &amp; Page</b>	<b>Reference Footnote Number</b>	<b>Referenced (Withheld) Documents – Company &amp; Engineers</b>	<b>Direct Quote</b> (with bold red highlights for themes and emphasis)
Mt. Polley Panel Main Report <i>Report on Mount Polley Tailings Storage Facility Breach</i> (page 69)	54	<b>MP00043.</b> Report. April 8, 2013 (98 pages)  <i>Mount Polley Mining Corporation, Mount Polley Mine, Tailings Storage Facility 2012 Annual Review</i>	<i>In other matters, the recurring problem of <b>tailings beach development</b> was not directly addressed in the 2012 inspection report, but an airphoto showed no tailings beach over approximately 40% of the impoundment perimeter.</i>
Mt. Polley Panel Main Report <i>Report on Mount Polley Tailings Storage Facility Breach</i> (page 72)	63	<b>BGC00002.</b> Memo. June 18, 2013 (5 pages)  June 2013 Site Visit Summary	<i>BGC made explicit the connection between the structural limitations of the dam and the ever-growing volumes of <b>surplus water</b> it was being called upon to contain. In a June 18, 2013 memorandum, it stated: <b>A continuous beach along the complete upstream length of the dam is the design requirement necessary for dam stability</b> and needs to be achieved moving forward regardless of the final targeted crest elevation. The current water pond surplus does not allow for the development/maintenance of above-water beaches.</i>
Mt. Polley Panel Main Report <i>Report on Mount Polley Tailings Storage Facility Breach</i> (page 72)	64	<b>BGC00003.</b> Memo. July 25, 2013 (8 pages)  Revised Targeted Crest Elevation Assessment	<i>It elaborated on this topic a month later, on July 25, 2013: An above-water tailings beach separating the till core from the reclaim water pond constitutes a fundamental design element of the dam. <b>Without a wide above-water beach</b>, the MPMC tailings dam is effectively being operated as a water-retaining dam, with the water pond effectively in direct contact with the till core, separated by only a narrow zone of tailings or waste rock.</i>
Mt. Polley Panel Main Report <i>Report on Mount Polley Tailings Storage Facility Breach</i> (page 72)	65	<b>MP00192.</b> Report/ Letter. June 2, 2014 (8 pages)  <i>MPMP Geotechnical Incident Memo, May 30</i>	<i>During the ensuing months, this <b>chronic water-surplus problem</b> would become acute. For years, dam raising had managed to stay one step ahead of the rising water. But on May 24, 2014, the water caught up. With Stage 9 nearing completion, what was described as “seepage flow” was observed over the dam core.</i>

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Mt. Polley Panel Main Report <i>Report on Mount Polley Tailings Storage Facility Breach</i> (page 72)	66	<b>BGC0004.</b> Memo. October 22, 2013 (26 pages)  TSF Stability Modeling	<i>As the <b>gravity of the water problem</b> was becoming apparent, so was the consequent necessity of dam raising beyond Stage 9. MPMC required some estimate of future dam footprint so that prerequisite stripping of additional areas could commence immediately. BGC responded on October 22, 2013, with a memorandum that outlined an approach to dam raising that resurrected the residual-strength interpretation for GLU, while at the same time establishing new factor of safety criteria conforming to MEM’s 2013 directive.</i>
Mt. Polley Panel Main Report <i>Report on Mount Polley Tailings Storage Facility Breach</i> (page 72)	67	<b>MP00208.</b> Report. July 25, 2014 (117 pages)  <i>Mount Polley Mine Tailings Storage Facility Stage 10 Raise Design Report</i>	<i>This approach [for “dam raising”] was formalized in BGC’s design report for Stage 10 issued on July 25, 2014, just eight days before the breach.</i>
Mt. Polley Panel Main Report <i>Report on Mount Polley Tailings Storage Facility Breach</i> (page 81)	80	<b>BGC00007.</b> Report. July 25, 2014 (116 pages)  <i>TSF Stage 10 Raise Design Report Final Draft</i>	<i>It should be noted that if failure were to occur suddenly, deformation monitoring could not provide timely warning and a more defensive design would be appropriate. <b>The failure mode encountered here was sudden</b> without any surface evidence and is an example of this behaviour. In their design for the proposed Stage 10, <b>BGC anticipated this issue</b> and recognized that a berm would be required for the Perimeter Embankment.</i>
Mt. Polley Panel Report <i>Appendix F: Instrumentation and Monitoring</i> (page 5)	11	<b>MP10000.</b> Logs. (portfolio)  Construction Daily Reports (MPMC), April 2013 to August 2014	<i>Also for reference, on April 22, 2013 <b>tailings discharge</b> into the Zone U cells was occurring between Stations 4+500 and 4+600 <b>on the Perimeter Embankment.</b></i>
Mt. Polley Panel Report <i>Appendix G: Water Balance</i> (page 6)	31	<b>MPMC00105.</b> Memo. June 18, 2013 (5 pages)  June 2013 Site Visit Summary	<i>At the end of May 2013 <b>the TSF was storing approximately 7.6 million m<sup>3</sup> of water.</b></i>

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Mt. Polley Panel Report <i>Appendix G: Water Balance</i> (page 6)	32	MPMC00108. Memo. November 27, 2013 (9 pages)  TSF Interim Dam Design Proposed Path Forward – Draft Review 1	<i>From August 2012 to August 2013 the <b>water volume in the TSF</b>, as estimated from bathymetric surveys, increased by about 1.4 million m<sup>3</sup>.</i>
Mt. Polley Panel Report <i>Appendix G: Water Balance</i> (page 8)	38	MP00188. Email. May 27, 2014 (2 pages)  Mt. Polley TSF Dam Freeboard	<i>On Saturday May 24, 2014 a <b>potential “dam breach” event occurred</b> at the TSF following a large rainfall (approximately 24 mm in 24 hours) and it was still raining on Tuesday May 27, 2014 at the time of the internal MEM report relating to the incident.</i>
Mt. Polley Panel Report <i>Appendix G: Water Balance</i> (page 8)	39	MP00189. Email. May 27, 2014 (1 page)  Advice of Geotechnical Incident Form	<i>Actions included raising of the core at low spots, including Corner 3 where <b>overtopping might have occurred</b>. No additional surface water was directed to the TSF. The mine completed an “Advice of Geotechnical Incident”.</i>
Mt. Polley Panel Report <i>Appendix G: Water Balance</i> (page 8)	40	MP00190. Email. May 28, 2014 (2 pages) Advice of Geotechnical Incident Form	<i>Actions included raising of the core at low spots, including Corner 3 where <b>overtopping might have occurred</b>. No additional surface water was directed to the TSF. The mine completed an “Advice of Geotechnical Incident”.</i>
Mt. Polley Panel Report <i>Appendix G: Water Balance</i> (page 8)	42	MP00192. Report/ Letter. June 2, 2014 (8 pages)  MPMC Geotechnical Incident Memo, May 30	<i>Notes in report drawings indicated 2013 <b>as-built crest elevation varies</b> (see also Drawing F6). AMEC found the following in their review of site conditions <b>following the incident</b>:</i> <ul style="list-style-type: none"> <li>• On Monday May 26 the water level was at El.966.3 m, which resulted in a freeboard of 0.7 m to the top of Zone S (at El.967.0 m). This freeboard was lower than 0.9 m minimum outlined in the OMS Manual.</li> <li>• Zone S was also found to have a few low spots at 966.3 m (Corner 3), 966.4 m (Corner 2), 965.5 m (Corner 5) and 966.2 m (at the pipe crossing on the Perimeter Embankment). This indicates that the water was at the crest in Corner 3 and over the crest at the pipe crossing.</li> <li>• Wet spots and standing water were observed at Corner 3 and the pipe crossing but no major erosion or direct seepage.</li> </ul>

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Mt. Polley Panel Report <i>Appendix G: Water Balance</i> (page 8)	44	MP00195. Letter. June 6, 2014 (4 pages)  Advice of Geotechnical Incident Form – Follow-up (Design Plan)	<i>At this time, <b>despite having less freeboard</b> than the Maximum Operating Level specified in the OMS, <b>tailings deposition continued</b>. However, all water collection systems were diverted from the TSF and water was routed for storage in the Cariboo Pit.</i>
Mt. Polley Panel Report <i>Appendix G: Water Balance</i> (page 9)	45	MP00195. Letter. June 6, 2014 (4 pages)  Advice of Geotechnical Incident Form – Follow-up (Design Plan)	<i>MPMC submitted weekly follow-up reports to MEM on <b>June 6</b>,</i>
Mt. Polley Panel Report <i>Appendix G: Water Balance</i> (page 9)	46	MP00196. Letter. June 13, 2014 (2 pages)  Advice of Geotechnical Incident Form – Follow-up (Design Plan) – Update #1	<i>MPMC submitted weekly follow-up reports to MEM on ... <b>June 13</b>,</i>
Mt. Polley Panel Report <i>Appendix G: Water Balance</i> (page 9)	47	MP00198. Letter. June 20, 2014 (2 pages)  Advice of Geotechnical Incident Form – Follow-up (Design Plan) – Update #2	<i>MPMC submitted weekly follow-up reports to MEM on ... <b>June 20</b>,</i>
Mt. Polley Panel Report <i>Appendix G: Water Balance</i> (page 9)	48	MP00200. Letter. June 27, 2014 (3 pages)  Advice of Geotechnical Incident Form – Follow-up (Design Plan) – Update #3	<i>MPMC submitted weekly follow-up reports to MEM on ... <b>June 27</b>,</i>

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Mt. Polley Panel Report <i>Appendix G: Water Balance</i> (page 9)	49	<b>MP00202.</b> Emails. July 4, 2014 (3 pages)  Advice of Geotechnical Incident Form – Follow-up (Design Plan) – Update #4	<i>MPMC submitted weekly follow-up reports to MEM on ... and <b>July 4.</b></i>
Mt. Polley Panel Report <i>Appendix G: Water Balance</i> (page 9)	50	<b>MP00204.</b> Letter. July 18, 2014 (2 pages)  Advice of Geotechnical Incident Form – Follow-up (Design Plan) – Water Management Plan	<i>MPMC provided a <b>Water Management Plan</b> as a follow-up to MEM on July 18, 2014. At that time the pool was at El.966.6 m and the freeboard ranged from 1.3 m to 2.5 m on the TSF embankments.</i>