

## DOCUMENT

# *TRAGEDY AT BELLEVUE: Anatomy of a Mine Disaster*

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At half past six on the evening of Friday, 9 December, 1910, an explosion tore through West Canadian Collieries' No. 1 mine at Bellevue, Alberta. Several men were instantly torn apart by the explosion while more were suffocated by the deadly "after damp" — a mixture of carbon dioxide and carbon monoxide — that lingered for days in the shafts and rooms of the colliery. A mine rescue team from the Hosmer mine at Fernie, British Columbia, rushed to the scene along the Crows Nest Pass rail line equipped with Draeger breathing apparatus. One of these men also died in the mine when his oxygen supply ran out before he could return to the surface.<sup>1</sup>

All night and into Saturday the grim task of bringing out the corpses continued. Dead miners were laid out in the mine wash house to be identified by hysterical relatives while other wives and children waited expectantly at the main shaft entrance for word of loved ones. By noon all the living had been accounted for, the dead had been removed.<sup>2</sup> On a cold Tuesday afternoon of 13 December, twenty-one victims were buried at the Blairmore town cemetery. Flags in the town were lowered to half-mast while two bands marched with the long procession. Miners came from all the towns in the Pass to join the crowd estimated at one thousand. The papers called it "a day never to be forgotten in Blairmore."<sup>3</sup> In an area used to death in the coal pits, it was the worst tragedy since the 1902 Fernie explosion which had claimed 102 lives.

Within days after the Bellevue explosion stories began to circulate that the miners had complained of gas in the mine at least six days before it blew

<sup>1</sup> *Calgary Daily Herald*, 10 December 1910.

<sup>2</sup> *Ibid.*, 12 December 1910.

<sup>3</sup> *Ibid.*, 14 December 1910.

up.<sup>4</sup> Within a week a coroners inquest was started but it ended abruptly when two jurymen objected to the line of questioning.<sup>5</sup> The inquest resumed on 4 January, 1911.

No correspondence between the company, mines inspector E. Heathcote, who regularly visited the colliery, and Chief Provincial Mines Inspector John T. Stirling, was entered into evidence. Stirling told the inquest that those documents were "confidential and privileged."<sup>6</sup> The deliberations of the jury were thus based solely on the testimony of witnesses though the correspondence would have shed much light on the company's sorry record of violations of safety standards and its failure to comply with government



*The Number One Bellevue mine, scene of Alberta's first mine disaster in 1910.*

The inquest continued for nine days. Hearings were held into the evenings as a parade of witnesses told harrowing tales of narrow escapes underground, the discovery of a group of more than twenty bodies of miners who had died of gas poisoning, and the heroism of rescuers who risked their lives to guide the living to safety. Miners' union secretary Burke alleged that the

<sup>4</sup> *Ibid.*, 13 December 1910.

<sup>5</sup> *Ibid.*, 4 January 1911.

<sup>6</sup> *Ibid.*, 13 January 1911.

miners had been afraid to complain of gas in the mine because they feared dismissal. The company's lawyer denied this, and for most of the inquest, there was little indication that the explosion had been anything but an unavoidable accident.<sup>7</sup>

On the last day former fireboss John Oliphant damaged the West Canadian's credibility. He had worked in the mine until 15 September 1910, when he had resigned because of a disagreement with management over shiftwork. Oliphant testified that the company's mine plans were incorrectly drawn because at one place a large part of the coal seam had not been extracted, even though the plan showed that it had. There had been no record kept of the amount of coal taken out of that area, Oliphant charged, and a considerable amount of gas was escaping into the mine from that coal. No ventilation had been provided for and gas tended to accumulate in some of the rooms. He could not swear what had been done in the mine after he left, but subsequent witnesses, all firebosses, confirmed his testimony. They were followed on the stand by Chief Inspector Stirling who refused to say why he had not ordered a thorough post-explosion examination of the mine to determine the facts. District inspector Heathcote, who had examined the mine two days before the blast, and who had approved the condition of the pit and posted a notice to that effect at the mine entrance, testified that he had accepted the word of firebosses Powell and Anderson that the mine was gas free.<sup>8</sup>

That night the jury sat until midnight and then gave their verdict. They concluded that most of the men had died from gas poisoning and recommended that Draeger breathing apparatus be stationed in the Crows Nest Pass district. They also suggested that telephones be put underground and that a thorough investigation be made to prevent future loss of lives. They concluded: "We consider that negligence is in evidence on the part of operators and miners in the carrying out of the coal mines act. And we would most strongly recommend a stricter adherence to the intent of that act."<sup>9</sup> Despite the jury's belief that negligence had contributed to the disaster, the Alberta government failed to bring charges against anyone. A little more than a year later, C.M. O'Brien, Socialist Party of Canada member of the legislature for Rocky Mountain House, introduced a motion to censure the government for its failure to prosecute. O'Brien spoke for seven hours detailing the sorry history of mine No. 1 and the negligence and carelessness that marked inspection and enforcement procedure.<sup>10</sup> In the course of his speech he tabled the correspondence that Stirling had refused to introduce at the inquest the previous year. The documents were subsequently filed with the Chief Clerk of the Legislative Assembly of Alberta and the Alberta Provincial Library.

<sup>7</sup> *Ibid.*, 5 January 1911.

<sup>8</sup> *Ibid.*, 13 January 1911.

<sup>9</sup> *Ibid.*, 14 January 1911.

<sup>10</sup> *Morning Albertan*, 13 February 1912.

They are now on deposit at the Provincial Archives of Alberta in Edmonton and are catalogued as "Sessional Papers for 1911-1912, Sessional Paper 15, Copies of Telegrams etc., Respecting the Coal Mine Disaster at Bellevue" (Accession no. 70.414). When examined in sequence they reveal the complete story of the negligence that the inquest jury could only guess at. Though the legislature had this evidence before them at the time of O'Brien's motion, he was the only one who voted for it.<sup>11</sup>

The first document in the collection was a routine inspection report filed in March 1910 by District Mines Inspector Heathcote:

Chas. Emmerson, Esq.,  
 Mine Manager,  
 West Canadian Collieries Ltd.  
 Bellevue, Alta.

Calgary, March 4th, 1910.

Sir,

On the occasion of my visit to the mine operated by The West Canadian Collieries Ltd., at Bellevue, I found the Coal Mines Act was being infringed in several instances.

I would draw your attention more particularly to the following: — Sec. 51, General Rule 8, clauses a, b, c and d re explosives. As I pointed out to you at the time, in a large number of cases, powder was being taken into the mine openly and not in a secure can or canister as required by the Act. It was also being taken in excess of the quantities allowed by the Act. I also pointed out that shot holes were being tamped with coal or coal dust and not with clay or some other non-inflammable material. As I have had to take up this matter with you before, I trust you will take steps to prosecute any person who persists in this.

General Rule 23 re fencing of machinery.

I would also draw your attention to the fact that in several places along the main haulage road there is not a sufficient distance between the side of the cars and the side of the road.

The notice posted at the entrance to the mine stating at what time each shift begins and terminates is not in accordance with the "Eight Hour Law". Please forward to me a copy of the altered notice.

I also understand you are having the several report books and registers that were destroyed by fire some time ago replaced.

Kindly give these matters your immediate attention.

I am forwarding a copy of this letter to The West Canadian Collieries Ltd. at Blairmore.

Your obedient servant,  
 E. Heathcote  
 Dist. Inspector of Mines

The Company replied to Heathcote's charges several days later.

WEST CANADIAN COLLIERIES

Blairmore, Mar. 12th, 1910.

Sir,

In answer to your letter of the 5th inst., we beg to inform you that we have received yesterday the following letter from our Supt. at Bellevue.

<sup>11</sup> *Ibid.*, 14 February 1912.

“Re the letter from Mines Inspector, you may say that I have taken steps to prevent men taking more than the regular quantity of powder into the mine.

Re the using of clay, orders have been issued to Fire Bosses to use only clay or other noninflammable tamping material.

Steps will be taken against anyone leaving explosives in the mine.

Re the widening of rock tunnel or man holes, I have some men on this work. . . .

Your obedient servant,  
West Canadian Collieries Ltd.  
R. W. Coulthard.  
Gen. Mangr.

Heathcote sent a copy of this note to Stirling. In reply, Stirling warned him that “It would be as well for you to keep in touch with the different matters complained of as we have had considerable trouble in enforcing the provisions of the Coal Mines Act at this mine.”<sup>12</sup> Two days later Stirling received an urgent telegram from James Burke, secretary of the miners’ union at Bellevue, complaining that the colliery was badly ventilated and full of gas. Stirling ordered Heathcote to Bellevue to investigate.<sup>13</sup> Heathcote was disturbed by what he found. He notified the mine manager that he had discovered a gas buildup in certain rooms and that no further work could be done until the gas had been cleared away and the places “made safe.”<sup>14</sup> On 11 April 1910, he sent this report to Stirling:

. . . From 26 room outwards where the pillars had been [extracted] a long length of roof had not caved. This roof caved and would from my experience of large caves cause a big wind blast on a larger scale than a windy shot, also the roof caved to the surface and there is no doubt that the windy blast would [disturb] the bulkhead stoppings short circuiting. The air current would cause the air to intake down [room] 8 and up 26 at cave, thus cutting off the ventilation from rooms 94 to 115 which would fill with gas. Men were repairing the bulk head stoppings along the main entry and had sealed off all places around the cave. Coal was being loaded from the chutes along the main entry which I considered was safe to do if the coal bunkers did not go up into the rooms. The Manager assured me that the fire bosses were there to prevent them and this point was the contention between the Union Officials wishing to prevent any workmen from entering the mine on Monday the 4th [of April]. . . .

The caving of the roof where pillars had been taken out is a condition of mining, and where a large territory is standing for some time and then caves, this condition should be seen to and precaution taken to avert the mine from filling with gas. I pointed out to the Mine Manager during our conversation in the mine that in future precautions ought to be taken to prevent such conditions from taking place.

Also I pointed out to the Manager that however tight he made the bulkhead stoppings he could not hope to ventilate two miles of main-entry with 50400 cub. ft. of air, and if he did not do something he could not in the near future hope to provide an adequate amount of ventilation to the face of the main entry.

<sup>12</sup> Provincial Museum and Archives of Alberta, Accession No. 70.414 “Sessional Papers for 1911-1912, Sessional Paper 15, Copies of Telegrams etc. Respecting the Coal Mine Disaster at Bellevue.” Stirling to Heathcote, 4 April 1910.

<sup>13</sup> *Ibid.*, Stirling to Heathcote, 6 April 1910.

<sup>14</sup> *Ibid.*, Heathcote to Emmerson, 11 April 1910.

These conditions which existed in Bellevue Mine ought never to be brought to the notice of your Department. Precautions ought to be taken to prevent them from taking place.

Stirling replied two days later:

... I have discussed this question with Mr. Emmerson [manager of the mine] and I have repeatedly impressed upon him the necessity of giving this his particular attention along with the question of conducting the air current into the faces of the workings.

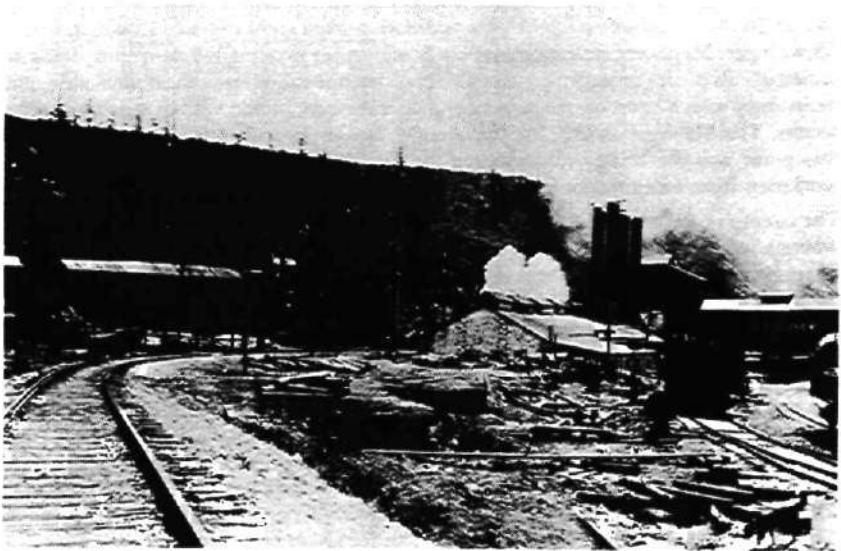
We also note you have instructed Mr. Emmerson that Room No. 94 to 115 and main entry and any other places which contain explosive gas, are not to commence work until such noxious gas has been cleared away and the place made safe. And we would suggest that you make another visit to this mine as soon as convenient to make sure your instructions are being put into effect.

It appears to us that 50,000 cub. ft. of air per minute is quite inadequate to ventilate this mine and immediate steps should be taken to have a better supply of fresh air produced.

Your obedient servant,  
John T. Stirling  
Provincial Inspector of Mines.

Before the end of the month West Canadian Collieries was again in trouble with provincial authorities for contravention of mining regulations. Stirling reported the following to Jonathan Stocks, Deputy Minister of Public Works:

Apr. 29th. 1910



*Draegermen at the Bellevue explosion.*

Sir,

I beg to report that as I had reason to suspect that Michel Angelo Valpiola, who was killed in Mine No. 87, operated by the West Canadian Collieries at Bellevue on the 26th Feb. 1910 had been employed in contravention of the Coal Mines Act. I met Mr. W. M. Campbell, Agt. [sic] of The Attorney General, at Macleod, and acting on his advice, laid information against the West Canadian Collieries, Ltd. on the following three charges: — First, for employing Valpiola at their Bellevue mine above ground during the month of Dec. 1908 while he was under the age of 12 years, in contravention of sec. 8 of the Coal Mines Act; Second, for employing Valpiola at their Bellevue Mine underground on or about Feb. 26th, 1910, while he was under the age of 16 years, in contravention of sec. 6 of the Coal Mines Act, Third, for employing Valpiola between the ages of 12 and 16 without his having furnished a certificate from a duly qualified Provincial School teacher, in accordance with sec. 6 of the Coal Mines Act. I may here state that the third charge was not pressed and was eventually withdrawn.

The Company acting through their lawyer, pleaded "not guilty" to the first charge, but after putting up a very stiff fight, eventually pleaded "guilty" on the first and second charges.

I have received a notification from Inspector Belcher J.P. who tried the case at the Police Barracks at Frank on the 21st inst., that he had imposed upon the West Canadian Collieries Ltd., a fine of \$20.00 and costs on each of two charges.

This was the last sign of trouble at Bellevue for many months. In early May, Heathcote returned to the mine for a routine inspection. He reported that "The gas which was in the mine due to the large cave-in [in] the pillars, in rooms 94 to 115 on the 11th of Apr. is cleared away, the stoppings made good." He was satisfied with the general condition of the mine and found mine records of inspections, registers, plans and notices, up to date.<sup>18</sup> In September, James Burke, secretary of the Bellevue miners union, complained that mine regulations were being contravened because men were not guaranteed easy exit in case of danger<sup>19</sup> but before Heathcote could investigate, a major explosion tore through the mine on 31 October 1910. It was a holiday, no one was underground.

Heathcote rushed to the workings and filed a report to Deputy Minister Stocks:

... Examining Fire Boss report book I found gas reported in 122, 123, 124, 125, 126 and 127 rooms on October 20th. owing to a stoppage of the fan for two hours. Men withdrawn from these rooms. Fan started at 1.30 P.M.

Monday October the 31st. being labour day [sic] and a holiday no one was in the mine after twelve o'clock midnight on October 29th. until Monday morning October 31st. when dust was seen coming to the surface at 81 chute and through the big cave at 28 chute. which big cave occurred in the pillars at 28 sometime ago. At the rock tunnel in No. 1 Gangway 63000 cubic feet of air was circulating in the mine, this is above the usual average, the air short circuiting owing to the stoppings being blown out at 28 and inwards. . . .

<sup>18</sup> *Ibid.*, Heathcote to Stocks, 4 May 1910.

<sup>19</sup> *Ibid.*, Burke to Heathcote, 7 September 1910; Burke to Stirling, 17 October 1910.

There are two questions to consider in this remarkable case, which wrought such havoc in the mine. What is it, a wind blast or was it an explosion[?] It was not a wind blast because the coking on the props proves that there was flame, and if flame was produced there must have been an explosion, but how did such an explosion occur when no lights were in the mine at the time, no damaged safety lamps[?] No person in the mine who could have any matches in his possession.[?] Where did the explosion start.[?]

I am of the opinion that the explosion started in the place where the pillars had been taken out between 61 and 70 chutes and where the big cave of rock occurred. [How?] The lift from the main gangway to the rise of the mine to the surface is 500 feet. The pillars are extracted to the outcrop. The fan was stopped on Sunday October the 30th. from 7.30 a.m. to 4.30 p.m. in the afternoon for repairs. From 4.30 p.m. Sunday afternoon to 12 o'clock Monday there was time to sweep any gas out of the rooms which were working, but in the place where the pillars had been extracted and nearest the outcrop gas would be lodged. The big cave of rock would occur sometime during Monday morning, and the rock, which is of a hard gritty sandstone mixed with conglomerate would in falling produce a concussion of inflammable sparks due to the edges of the rocks striking each other in falling. The cave would not all fall at once, a large portion would fall first this would cause a vacuum and the gas would be drawn into this vacuum other rocks would fall causing a concussion of sparks which would fire the gas. During the weighting of the rocks before falling the roof would have a large lateral draw on the solid coal which would no doubt squeeze out the occluded gasses from the coal.

If the caving of the roof had occurred on a working day there would have been a large loss of life.

In my opinion to prevent as far as possible such an accident would be to have all the old wastes where pillars have been taken out kept well ventilated.

Your obedient servant,  
Elijah Heathcote.  
District Inspector of Mines.

Stirling agreed with Heathcote about the probable cause of the explosion and wanted to know what the company's reaction was. He was particularly upset that all the miners had not been called out of the pit on October 29 during the time when the fan was not working: "are we to understand . . . that the mine was kept working for two hours when the fan was not running? If this was so, I don't think it should have been allowed, as in a mine giving off the amount of gas which apparently is being given off at Bellevue, there should be a good current of ventilation passing."<sup>17</sup> Heathcote, in turn, warned R.W. Coulthard, general manager of West Canadian Collieries that "if a fan ventilating any mine is stopped all the men in such mine should be immediately withdrawn . . ."<sup>18</sup> On the matter of the prevention of future explosions, Heathcote sent Coulthard the following letter:

<sup>17</sup> *Ibid.*, Stirling to Heathcote, 15 November 1910.

<sup>18</sup> *Ibid.*, Heathcote to Coulthard, 19 November 1910.





*A group of miners using Davy safety lamps in 1910.*

November 11th, 1910.

Sir,—

In our recent conversation of November 3rd, 1910, in Bellevue Hotel re cause of explosion in Bellevue Mine, I pointed out to you the cause, that is the roof caving causing a concussion of sparks which must have fired some gas in the immediate vicinity of the cave. My opinion when placed before you, you accepted as being the only solution of the cause of the explosion, and we both said that had the explosion occurred when a full working force of men had been in the mine a large loss of life would have been the result.

We cannot prevent the taking out of the coal, and we cannot prevent the roof from breaking down, but might I suggest to you that where pillars of coal have been taken out and a large area of roof laid bare that a good sweeping ventilation is constantly kept going through such places until the roof has caved, by this means the gas will be carried away and will eliminate one factor of danger. I would like your hearty co-operation in this matter.

Stirling agreed with this and hoped Coulthard would comply without delay.<sup>19</sup> But Coulthard stalled. On 14 November he wrote:

... I do not remember... having made the statement that this was the only solution, because a thorough investigation of the affair in the part affected, had not been made.

I may say, however, that I am having this matter taken up very carefully with a view to giving the upper workings access to the surface, and expect in a few days to arrive at some decision in regard to the plan of operation.

<sup>19</sup> *Ibid.*, Stirling to Heathcote, 15 November 1910.

That same day Heathcote again pointed out to Coulthard a violation of mine safety regulations:

Nov. 14th, 1910.

Sir,—

I beg to point out to you that the manholes made in the rock tunnel in No. 1 Mine Gangway, Bellevue, are not strictly in accordance with section 51, General Rule 12, as the manholes require to be white washed.

Your obedient servant,  
(sd) Elijah Heathcote,  
District Inspector of Mines.

By mid-November the management of West Canadian Collieries had had several disagreements with government officials over the safe operation of their No. 1 mine at Bellevue. The miners had complained about lack of emergency escape routes, the Provincial Mines Inspector had complained about keeping men underground when the fan wasn't running. On several occasions there had been excessive gas reported in some rooms and men had been evacuated. The company had pleaded guilty to employing at least one under age miner and had been less than vigorous in rectifying violations of safety regulations. There had been an explosion. It was a sorry record. Then, on 3 December 1910, the union sent an urgent wire to Stirling demanding that Heathcote be sent to Bellevue without delay.<sup>20</sup> There was, they claimed, too much gas in the mine.<sup>21</sup> Heathcote was despatched the next day.<sup>22</sup> He investigated conditions in No. 1 mine and certified it to be gas free:

I went from Macleod on the morning of the 6th instant being detained in office giving particulars of prosecution cases to Mr. Campbell, on the 5th, arriving in Bellevue on the 6th. I interviewed Mr. J.W. Powell, Mine Manager and informed him that it was reported that gas was in Bellevue Mine and asked him to find out where such gas was present in the mine. After making enquiries Mr. Powell informed me that there was no gas in any appreciable quantity in the mine. On the morning of the 7th examining fire boss' report book I found the following entries:

- December 6th, 11 p.m. gas in 128 brattice, too far back, being attended to
- December 7th, 8 a.m. clear of gas, ventilation good
- December 7th, 3 p.m. gas in 129 owing to compressed air being cut off.
- December 7th, 3 p.m. all clear.
- December 7th, 11 p.m. gas in 128 brattice too far back

The above reports are for the several districts in the mine. Knowing that the ventilation would be worst at the farthest point in the mine and that gas in considerable quantity might be found in the rooms working at the farthest point in the mine I travelled to the face of main entry, which is about two miles in extend [sic] and started at 129 travelling up and across the rooms to 119, in each room making a thorough search and asking the men working in the rooms if they had seen any gas at the time. I received the answer "No". Coming to 123 room where W. Beck works, I asked him if he found gas in his room; he said "Yes" he had found gas three feet back from the face

<sup>20</sup> *Ibid.*, Burke to Stirling, 3 December 1910.

<sup>21</sup> *Ibid.*

<sup>22</sup> *Ibid.*, Stirling to Heathcote, 4 December 1910.

the brattice being twelve feet back but the room was stopped until the gas was cleared out. This was nine or ten days ago. George Grosso working in 121 room said he found gas pretty nearly every night when working on the night shift and went home, but he did not find any gas when working on the day shift. Andy Ziskar working in 120 room said that he found gas once on the night shift. I could not find any other miner who had found gas in his working place.

Finding that the air current was good and getting stronger I asked John Anderson, pit boss, if there was any place where gas had accumulated, but he said there was no gas in the mine. I went to 88 and 89, where preparations were being made to take out pillars. I did not go into the old rooms, deeming it unnecessary as a good ventilation was reported to me going through these rooms. I did not go up 52 chute which was working as the chute has a separate split of air and the air going up 52 travels over the old caves of rock to 81 outlet.

I posted the following notice at the mouth of the mine:

"That I have examined that No. 1 seam and found the timbering, ventilation and general conditions to be good: did not find any gas present."

Your obedient servant,

Elijah Heathcote.

District Inspector of Mines.

Two days later, No. 1 mine blew up. The exact cause of the blast was never determined.