

# First Responders and Deployments of Various Teams (Collapse to 11 p.m. on June 23)

<b>The collapse.....</b>	<b>48</b>
The Mall collapses at 2:18 p.m.....	48
<b>Accounts from eyewitnesses.....</b>	<b>49</b>
Jason Morrissey .....	49
Jean-Marie Marceau .....	50
Yves Bérubé.....	50
Adam Amyotte .....	52
<b>Accounts from victims' families.....</b>	<b>52</b>
Doloris Perizzolo's family .....	52
Lucie Aylwin's family .....	53
<b>Injuries to individuals present at the Mall.....</b>	<b>53</b>
<b>First responders on the scene .....</b>	<b>54</b>
2:29 p.m.: The Elliot Lake Fire Department arrives on the scene and shuts off the utilities .....	54
2:49 p.m.: Chief Officer activates the Emergency Control Group.....	56
3:01 p.m.: Chief Officer and other members of the Fire Department enter the Mall.....	57
3 p.m.: The Community Control Group meets to discuss the declaration of an emergency.....	58
3:04 p.m.: The first victim is located.....	59
3:55 p.m.: A state of emergency is declared.....	59
3:28 p.m.: The first communication with a victim is made .....	60
4 p.m.: Chief Officer updates City personnel and the OPP .....	61
4:20 p.m.: Communication with one of the victims is lost; Mrs. Perizzolo is located shortly thereafter .....	61
3:54 p.m.: Algoma Health Unit seeks vaccines from its office in the Mall.....	62
5 p.m.: The firefighters in the Mall use sewer cameras in an attempt to find missing persons .....	62
6:14 p.m.: Firefighters are pulled out of the collapse zone.....	63
6:30 p.m.: Chief Officer attends the Community Control Group meeting .....	64

<b>Deployment of the OPP .....</b>	<b>64</b>
<b>The command structure and complement of UCRT .....</b>	<b>64</b>
2:34 p.m.: UCRT is mobilized .....	65
2:39 p.m.: Cst. Cox is put in command of UCRT as it mobilizes .....	66
4:16 p.m.: UCRT advance team leaves for Elliot Lake .....	66
2:33 p.m.: OPP local forces in Elliot Lake respond .....	67
<b>Ordering a crane .....</b>	<b>68</b>
4:30 p.m. to 5:30 p.m.: Cst. Cox identifies the need for a crane .....	68
Insp. Jollymore was not familiar with UCRT .....	68
5:30 p.m.: Cst. Cox requests a crane .....	69
11:15 p.m.: The crane is finally ordered .....	72
Conclusion .....	73
<b>9 p.m.: The initial UCRT reconnaissance .....</b>	<b>73</b>
<b>11 p.m.: The perimeter is secure .....</b>	<b>76</b>
Insp. Jollymore establishes a missing persons list and a command post at the Collins Hall .....	76
<b>The Office of the Fire Marshal and the Provincial Emergency Operations Centre. . . .</b>	<b>77</b>
3:26 p.m.: Chief Officer requests HUSAR/TF3 assistance .....	77
3:36 p.m.: Province swings into action .....	78
<b>Ministry of Labour deployment to the rescue scene .....</b>	<b>83</b>
6:40 p.m.: Ministry of Labour sends a structural engineer to Elliot Lake to provide assistance . . .	83
6 p.m. and 7:15 p.m.: Ministry of Labour inspectors are sent to Elliot Lake to investigate the collapse and the missing workers .....	84
<b>Ministry of Labour confusion about its role at the scene of a rescue .....</b>	<b>85</b>
Background and responsibilities of the MOL engineers .....	85
Background and responsibilities of the Ministry of Labour inspectors .....	86
MOL engineers expressed uncertainty about their role during rescue and recovery operations .....	87
The MOL inspectors attended the scene to investigate but also felt they had a role to play in bringing dangerous situations to the attention of rescue workers .....	90
<b>The role and jurisdiction of the Ministry of Labour was a source of confusion and delay during the first day of the rescue .....</b>	<b>92</b>
6:30 p.m.: A decision is likely made by the Community Control Group not to proceed without Ministry of Labour clearance .....	92
12:45 a.m.: The Ministry of Labour arrives at the site and rescue efforts continue – confusion about the ministry’s role remains .....	95

<b>Deployment of HUSAR/TF3.....</b>	<b>96</b>
<b>HUSAR/TF3 personnel who provided accounts of the deployment.....</b>	<b>96</b>
Staff Insp. William Neadles.....	96
Capt. Tony Comella.....	97
Cmdr. Michael McCallion.....	97
Capt. Martin McRae.....	97
Capt. Chuck Guy.....	97
Don Sorel.....	97
Sgt. Scott Fowlds.....	98
Sgt. Phil Glavin.....	98
James Cranford.....	98
Dr. Michael Feldman.....	98
<b>Cost of the HUSAR/TF3 deployment is paid for by the province.....</b>	<b>98</b>
<b>3:45 p.m.: HUSAR/TF3 is notified of possible deployment.....</b>	<b>98</b>
<b>Approximately 4 p.m.: HUSAR/TF3 is deployed.....</b>	<b>99</b>
<b>The call-out gets barely half a full team.....</b>	<b>99</b>
<b>4 p.m. to 10 p.m.: between the call-out and wheels-up.....</b>	<b>99</b>
<b>5:05 p.m.: HUSAR/TF3 has problems obtaining tractors and drivers.....</b>	<b>100</b>
The muster point.....	100
8:05 p.m.: Vans and equipment depart the home of operations for muster point.....	101
9:56 p.m.: Drivers and tractors leave home of operations.....	101
It takes almost six hours for HUSAR/TF3 to get out the door.....	101
<b>Staff Insp. Neadles's actions.....</b>	<b>102</b>
<b>Notes.....</b>	<b>103</b>

## The collapse

### The Mall collapses at 2:18 p.m.

The Algo Centre rooftop collapsed on June 23, 2012, at 2:18 p.m. The collapse was captured in part by surveillance cameras, and the videos were screened during the Commission's hearings.<sup>1</sup> Owing to their graphic nature, I issued a warning to the public before they were shown. In one, shortly after the passage of a vehicle going one way and two pedestrians walking in the opposite direction, the deck gives way and a parked vehicle suddenly drops into the Mall. Another shows Mrs. Doloris Perizzolo and Ms. Lucie Aylwin at the lottery kiosk a second or two before the roof crashed down on them. The collapse was abrupt, precipitous, and without any forewarning.

Several calls were made to the authorities to report the collapse. One of the first came from an employee from Dollarama, who informed the dispatcher at the Elliot Lake Fire Department that the roof had collapsed and that she could not assess the situation beyond what she saw in her immediate area. She then handed the phone over to a man, who described the collapsed zone as consisting of the area on the rooftop parking deck extending from the doors of the Hotel offices to the doors of the structure over the escalators and the staircase leading into the Mall, also referred to as "the penthouse." He could not tell whether anyone had been hurt but stated that everyone from the food court had been evacuated:

*Operator:* Is anybody hurt, that you know of?

*Man:* I can't tell. Everybody that was in the food court is now mostly evacuated out. I think there might have been a few people in that area and there's a few people that [look] like they're helping.

*Operator:* Ok, we'll have everybody respond. We'll be there shortly.<sup>2</sup>



**Figure 2.3.1** The collapse zone

Source Exhibit 7924

## Accounts from eyewitnesses

To avoid unnecessary repetition, Commission counsel called only a representative sampling of the important eyewitnesses to testify at the hearings.

### Jason Morrissey

Jason Morrissey arrived at the Mall with his wife, Sherri Watson, at 2:10 p.m. They parked on the roof and entered the Mall through the doors of the penthouse. Mr. Morrissey confirmed that he and his wife were the two individuals seen on the surveillance video walking on the rooftop parking into the penthouse seconds before the roof collapsed.<sup>3</sup> They walked halfway down the stairs to a landing. From there, Mr. Morrissey described the scene:

She was about two steps ahead of me. As soon as it shook, I ... grabbed her by the neck, by the back of the shirt ... and I yanked her back. And as I was yanking her back, it came down, grazed her head, grazed her leg, and that's it.<sup>4</sup>

Mr. Morrissey testified that concrete slabs, drywall, and glass came down in front of them. His wife was hit on the head and on the left leg, which was covered in blood by the time he pulled her back. He wrapped her leg with his shirt. He was not hit at all. He and his wife then ran outside, through the doors on the west side of the penthouse. They had to be careful as they exited through the doors because the chasm from the collapse was there. They took a quick left and walked over part of a slab in order to get on a solid part of the rooftop parking.<sup>5</sup>

Once outside, Mr. Morrissey saw children at the Hotel office doors in front of the area where the elevators of the Hotel were located. These doors were on the perimeter of the collapsed section. He told them to stay back.<sup>6</sup> Mr. Morrissey got close to the gaping hole and looked down. He testified the view below was “[a] mess” and he saw people only at the food court one level below. He heard screaming but could not determine where it came from: “It was just all coming up at one time.”<sup>7</sup>

Mr. Morrissey was on the roof for five to 10 minutes, after which he drove off to the hospital with his wife. She was attended to right away. She had flesh wounds, including a deep cut, but did not require stitches.<sup>8</sup>



**Figure 2.3.2 Staircase with debris: looking into the collapse area**

Source Exhibit 7924



**Figure 2.3.3 Doors at the top of the staircase of the parking level**

Source Exhibit 7924

## Jean-Marie Marceau

Jean-Marie Marceau is an 80-year-old retired miner.<sup>9</sup> He uses an oxygen tank, which he had left in his truck when he went to the Mall.<sup>10</sup> He entered the Mall through the main entrance on the south side at 2:10 p.m. and took the elevator to the food court on the second floor, where he was supposed to meet a friend. His friend was not there,

**When he placed his coffee on the table, Mr. Marceau heard a big bang and was hit by debris on the head, over the eyes, and on the nose. He lost consciousness immediately.**

but another friend who was there offered to buy him a coffee. When he placed his coffee on the table, Mr. Marceau heard a big bang and was hit by debris on the head, over the eyes, and on the nose. He lost consciousness immediately.<sup>11</sup>

Mr. Marceau had been standing close to the kiosk when the roof collapsed. Before he heard the noise from the collapse, he heard people yell. He does not know how long he remained unconscious. When he regained consciousness he was alone, and he checked to see if he had any broken bones. He crawled a few feet, although he felt pain on the left side of his ribs. He was surrounded by dust and debris. He managed to get up eventually and walked up to Ms. Judy LaFleur, who was at the exit door. She helped him walk, and then

another person took over assisting him.<sup>12</sup> After sitting down for a few minutes to take a break, Mr. Marceau went to exit the Mall at the ramp where Zellers was located.<sup>13</sup>

Once outside, Mr. Marceau was attended to by a paramedic. He informed the paramedic that he needed oxygen, and he was told that others might need it more than he did. He eventually walked by himself to his truck, where his oxygen tank was located. He returned to the ambulance when his breathing had stabilized, and he was taken to the hospital about 45 minutes to one hour later.<sup>14</sup> Mr. Marceau was treated for cuts and a broken rib. He was released the same day, but he received follow-up care the next day.<sup>15</sup>

## Yves Bérubé

I also heard from Yves Bérubé, the owner of Creations and Things in the Mall. His store was adjacent to the north end of the collapse zone,<sup>16</sup> and its front was demolished by the collapse.<sup>17</sup> Mr. Bérubé had closed his store temporarily so he could have a cigarette break. On his way out of the Mall, he saw Ms. Aylwin working at the kiosk. When the collapse occurred he was standing outside, on the walkway located on the second level. The cigarette, it would appear, had taken him out of harm's way.<sup>18</sup> As he was about to light it, he heard a loud noise behind him. All the doors leading to the walkway blew open and a cloud of dust flew out.<sup>19</sup>

I immediately ran right back in. And as I got through those doors, I looked up and I was seeing sky, which wasn't right. And directly in front of me was the escalator going downstairs to the lower mall, that basically was all collapsed down there, all rubble and whatnot. There was ... basically dust clouds and water blasting everywhere and ... a few people frantically trying to get out ...<sup>20</sup>

He also saw Mr. Marceau sitting in a chair as well as an elderly woman who was surrounded by large pieces of concrete. Both of them seemed to be all right, so he walked around the area and noticed Ms. LaFleur and three other individuals who were helping other people:

The first person I came across actually was Mr. Marceau ... He was actually at that time sitting in a chair with his head in his hands, covered in blood. I quickly just kind of checked him out to see if he was okay ... just a few feet away from Mr. Marceau, there was another elderly lady sitting in a chair. And I remember that there [were] large pieces of concrete and steel and whatnot virtually all around her, but nothing on her. That was kind of shocking.<sup>21</sup>



**Figure 2.3.4 Second-level concourse facing north toward the kiosk area**

Source Exhibit 7924

Mr. Bérubé was not injured or struck by any debris. He described the collapse as being instantaneous and without warning.<sup>22</sup> Ms. LaFleur eventually called him to help get Mr. Marceau out of the Mall. They proceeded, with Mr. Marceau, toward the same doors he had walked through earlier. Mr. Bérubé saw through the rail of the walkway that firefighters and police had gathered at the scene, and he sought their help. He re-entered the Mall to see if there was anyone else inside, and he noticed a young lady on the rubble pile, calling out to ask whether anyone was there. He told her to leave the Mall “because it may not be done yet.”<sup>23</sup> He described pipes bursting and water blasting everywhere. He was not sure whether the building would crumble further.<sup>24</sup> At that time, he remembers only Ms. LaFleur, the three other individuals, and himself being present in the food court area.<sup>25</sup>

**He described pipes bursting and water blasting everywhere. He was not sure whether the building would crumble further.**

When they concluded that no one else needed help, they went onto the walkway. Mr. Bérubé first saw Danny Kluge, a firefighter, standing on the ground below him. When he informed him that no one else was in the Mall, Mr. Kluge told him to get down out of the Mall himself. He immediately descended the stairs at the east end of the walkway.<sup>26</sup>

When he reached the lower level, he did not see anyone being taken away by the ambulance. Everyone gathered in front of the main entrance to the Mall. He called his wife, and his mother-in-law came to drive him home.<sup>27</sup>

## Adam Amyotte

Adam Amyotte was working at the Bargain Shop in the Mall that day. He was walking through the Mall when he passed by Mrs. Perizzolo, who was standing at the lottery kiosk.<sup>28</sup> He was 150 feet from the kiosk when the roof collapsed. He did not hear anything before the collapse but testified that, when it occurred, it sounded as though pipes were falling: “[E]verything happened so fast. As it happened it sounded like pipes falling ... and everything was gone ... I don’t know how else to explain it.”<sup>29</sup>

“[E]verything happened so fast. As it happened it sounded like pipes falling ... and everything was gone ... I don’t know how else to explain it.”

– Adam Amyotte

Mr. Amyotte was not hit by debris, and he helped a few nearby individuals to get back on their feet. He described the scene on the second floor as “organized chaos”: the people who were there helped each other and worked as a team.<sup>30</sup> Among those helping were staff from various businesses who directed people out the emergency exits. Mr. Amyotte testified that this process lasted mere minutes, although “it felt like hours.”<sup>31</sup>

Once everyone had exited, Mr. Amyotte and others went to the parking lot in front of the Foodland store, where he remained for 45 minutes.<sup>32</sup>

## Accounts from victims’ families

### Doloris Perizzolo’s family

Teresa Perizzolo, the daughter of Doloris Perizzolo, was scheduled to work at the Bargain Shop the day of the collapse, but she informed her manager she would not be able to do so. She first heard about the collapse at 2:30 p.m., when she received a call from a friend who was worried that she may have been working at the Mall. She testified that she was not surprised to hear about the collapse because she recalls that, during the eight years she worked at the Mall, wet ceiling tiles had frequently fallen to the floor: “[T]hey called it cave-ins, which meant the ceiling tiles dropped down ... not slabs as big as the one that fell, but pieces of concrete would fall, and it was on a daily basis.”<sup>33</sup>

Ms. Perizzolo first believed her mother was in the Mall when she drove there and saw her mother’s van parked out front:

I ... drove down to where my mother got her hair done at 11:30 that morning, which was down at the lower plaza, and when I asked the lady if my Mom had gotten her hair done, she said ‘Yes, why?’ and I said, ‘I just want to know where she is,’ because I had [driven] by the house and ... she wasn’t at home. And then panic [struck] on the lady’s face, she started crying, and we walked up to the Mall and that’s when I [saw] her van in front of the Mall.<sup>34</sup>

Ms. Perizzolo saw many people crying and three ambulances in front of the Mall. She called her husband, Darrin Latulippe, and he went to the scene. An officer told him where he would find his wife. In the meantime, Ms. Perizzolo asked the paramedics where she could get more information, and she was told to call the hospital every five minutes to check whether her mother had been admitted. Shortly thereafter, Ms. Perizzolo and the other people who were standing in the area were evacuated because of fear of a gas leak. She stayed on site for another 20 to 25 minutes, waiting to get more information.<sup>35</sup>

At 4:00 p.m., Ms. Perizzolo and Mr. Latulippe went to the Collins Hall, which had been set up as a “command post” for family members of missing individuals.<sup>36</sup>



## Lucie Aylwin's family

Lucie Aylwin was employed at the Mall on the day of the collapse. She took a job at the lottery kiosk when the employees of her main employer, Boreal College, went on strike. Rachelle Aylwin, her mother, was unaware that her daughter was working that day because she was supposed to attend an event with her fiancé, Gary Gendron. Mrs. Aylwin found out about the collapse at 2:30 p.m. or 2:45 p.m., when she listened to voicemails on her phone from her daughter's friend, Adrena White, and from Mr. Gendron.<sup>37</sup>

I looked at my telephone. I saw that Adrena ... White, one of her best [friends] and Gary had called. So, I listened to the messages and I heard Adrena. She was crying ... She said 'Call me back.' The second message was from Gary telling me 'Call me. It's very important. Something happened to Lucie.'<sup>38</sup>

When Réjean Aylwin, Ms. Aylwin's father, returned the call to Ms. White at 3:00 p.m.; she explained what had happened at the Mall. At 3:30 p.m., Mr. and Mrs. Aylwin left their home in Sudbury to drive to Elliot Lake. They also informed their daughter-in-law in Alberta of the situation and asked that their son come to join them.<sup>39</sup>

Mr. Gendron was in Sault Ste. Marie on the afternoon of June 23, 2012. His phone rang at 2:30 p.m. or 2:45 p.m., and he found Ms. White on the line. She told him that the Mall had collapsed and that she thought Ms. Aylwin was inside:

[S]he was yelling and screaming and saying that the Mall had collapsed and I said, 'I've got a two-hour drive here, you know, like slow down. I'd like to – what's going on?' So she said, 'Well, they think Lucie is stuck in the collapse.'<sup>40</sup>

Mr. Gendron had last communicated with Ms. Aylwin by text message at 12:01 p.m. After the call, he briefly stopped by a friend's house before heading to Elliot Lake.<sup>41</sup>

At approximately 4:00 p.m., Mr. Gendron arrived in Elliot Lake. He went straight to the OPP station, even though "everybody" was telling him to go to the Collins Hall. At the station, he spoke with a police officer, who told him they were not sure where the collapse had occurred but they believed Ms. Aylwin was in the rubble. He proceeded to the Collins Hall, where he met up with Mr. and Mrs. Aylwin.<sup>42</sup>

He described the scene at the Collins Hall as chaotic: the number of missing individuals was not known at the time. He recalled that 40 to 50 people were there. About 24 hours after the collapse, the authorities narrowed the list of missing to two individuals.<sup>43</sup>

Mr. and Mrs. Aylwin arrived in Elliot Lake at 5:00 p.m. They first drove to Shoppers Drug Mart because Ms. White was there. When they approached the Mall, Mr. Aylwin spoke to a police officer, who told them to go to the Collins Hall. He and his wife went to the hall, where they introduced themselves to another police officer and were assisted by the Red Cross and another organization.<sup>44</sup>

## Injuries to individuals present at the Mall

A review of the medical records produced to the Commission by the St. Joseph's General Hospital reveals that 18 individuals were treated at the hospital as a result of the collapse. The injuries sustained by these individuals, as well as their symptoms, included, nausea and vomiting as a result of being hit on the head, shoulders, and neck with debris; headaches; dry eyes; decreased range of motion in the neck and back; rib fractures; dislocation of a lumbar vertebra; lacerations to the eyebrow and the ecchymosis under the eye; chest wall injury; laceration, abrasions, and contusions to the limbs and face; tenderness in the knees; sprained ankle; sinus tachycardia (elevated heart rate); mild trauma; anxiety; and post-traumatic stress disorder.<sup>45</sup> Considering the nature of the collapse and the fate of Mrs. Perizzolo and Ms. Aylwin, these individuals were fortunate not to have sustained more serious physical injuries.

## First responders on the scene

### 2:29 p.m.: The Elliot Lake Fire Department arrives on the scene and shuts off the utilities

Capt. John Thomas of the Elliot Lake Fire Department arrived on the scene at 2:29 p.m. He was not on duty at the time, and he explained that when he responds to a call while off duty, he responds as a firefighter, not as a captain. Another fire truck, which had been brought to the scene by Capt. David George and firefighter Danny Kluge, was already there when he arrived. Capt. George was the incident commander at that point because he was the most senior person on shift at the time of the call.<sup>46</sup>

Once he arrived, Capt. Thomas reported to the incident commander and asked him for instructions. He put on his self-contained breathing apparatus as directed, and then he was told to shut off the gas coming into the building while others were ordered to shut off the water and the hydro.<sup>47</sup>

Chief Paul Officer arrived on the scene at 2:30 p.m. and received an update from the incident commander.<sup>48</sup> His notes, prepared after the event and based on Fire Department radio communications, indicate at 2:31 p.m.:

The Incident Commander (IC) gave me a quick update.

The scene was a 2 storey mall L shaped with car park on the roof. It also has a 3 storey hotel starting above the mall roof level attached on the north side. The building is constructed on non combustible material with a sprinkler system and fire alarm system. The structure was built with structural steel, core slab with a concrete topping.

The command was set up at the mall front doors. The update from the IC was that the crews were already instructed to shut off all utilities. Looking in the main doors [of] the collapse zone I could see a large amount of water pouring into the zone, electrical cables hanging and a large steel beam hanging.<sup>49</sup>

Although he was not on duty at the time of the call, Chief Officer was able to make his way to the Mall directly from home because he carries the protective clothing for firefighters in the back of his car.<sup>50</sup> He assumed the role of incident commander shortly after he arrived. At that point, the firefighters could not see any injured persons on the scene. He also described the approximate area of the collapse. No fire personnel had entered the building at that time.<sup>51</sup>

Chief Officer's notes indicate that Bruce Ewald, the City's chief building official, arrived at 2:45 p.m.<sup>52</sup> He asked Mr. Ewald, who had experience with steel and precast concrete, to do a quick assessment of the collapse zone. He wanted him to assess the hazards they would be facing. Mr. Ewald went to the food court with Capt. Thomas and volunteer firefighter William Elliott.<sup>53</sup> Chief Officer further instructed the firefighters to clear the second floor of any people who might still be there.<sup>54</sup>

Capt. Thomas testified that they entered the Mall from the walkway on the second level and walked to the food court area. They stayed close to one another and looked for hazards and individuals who might still be inside. Capt. Thomas did not see anyone in the food court or hear any sounds from the collapse zone. On the second floor, he saw "[a] lot of dust, wires hanging, things still falling, beams swinging." He also observed someone looking down from the rooftop but noted it was not a firefighter.<sup>55</sup> They then went to the escalators to check whether anybody was trapped, but found no one. They walked to the other side of the collapse zone, on the second floor, to assess the area and ultimately left the Mall the same way they had entered. Capt. Thomas constantly communicated with Chief Officer via radio from inside the Mall to update him. Communications over radio are audible by all members of the Fire Department who have a radio at hand. Outside, the rescue team reported its findings to Chief Officer.<sup>56</sup>

At this stage, Chief Officer was still assembling information and setting up the area. The Fire Department members had to put in place a rapid intervention team, which consists of two firefighters who would be on standby, ready to rescue any firefighter inside the Mall who was hurt. Furthermore, accountability had to be set up in order to keep track of every firefighter's whereabouts.<sup>57</sup>

Accountability is a system used by the Fire Department to track each firefighter's location at any given time. In most situations there will be two locations for accountability: one at the command post, to track who is on the scene, and another by the entry to the "hot zone," to track who is in that area. During the response to the Mall collapse, these two zones of accountability were merged. A board was placed against a truck that was parked immediately in front of the Mall. The board listed the names of the firefighters, and they were all responsible for placing their tags on the "in" or "out" column beside their names. The firefighters also had to write the time next to their names, using the clock placed above the board. This system allowed anyone to see whether a given individual was in the hot zone and, if so, from what time. In any emergency, a firefighter is always designated to stand by the accountability post and to monitor it.<sup>58</sup> I pause to mention that, as the events unfolded, the Elliot Lake Fire Department was responsible for accountability of all the responders, regardless of their team.

In addition to the general accountability system, the incident commander can demand that a personal accountability report (PAR) be performed to ensure that all firefighters are accounted for. In this verification process, a designated person calls each firefighter, or team of firefighters working together, via radio and asks them all to identify their location. That way, everyone's whereabouts are determined at that particular time. The PAR can be done, for example, when there is a drastic change of events on the scene. Although it is seemingly a quick exercise, it can take a lengthy period because the radio is being used constantly, and the firefighters may be performing tasks that could delay their response.<sup>59</sup>



**Figure 2.3.5 Accountability system for Elliot Lake firefighters**

Source Exhibit 7941

Chief Officer testified that the utilities' switches were located in a lockbox which was accessible to the firefighters from the exterior of the Mall.<sup>60</sup> Capt. Thomas stated that a Mall employee unlocked it, thereby providing the firefighters with access.<sup>61</sup> Chief Officer explained that it was difficult to communicate at this time because of a loud fire bell. When he approached the utilities area, he saw that the main water feed was sheared off, allowing water to flow onto the debris pile. Gas meters also had to be shut off, and he dispatched one or two firefighters for that task.<sup>62</sup>

**Union Gas responded quickly, but before its workers arrived the valve had snapped off and the gas was free flowing out of the gas line.**

Capt. Thomas testified that he was unable to shut off the gas because the main feed valve was seized. He notified Capt. George, and they made arrangements to have Union Gas take care of the problem. Union Gas responded quickly, but before its workers arrived the valve had snapped off and the gas was free flowing out of the gas line.<sup>63</sup>

Chief Officer was facing the front doors of the Mall when the valve snapped, at 2:57 p.m. Capt. Darren Connors was pulling up with the other pumper at the same time. Capt. Thomas communicated with Capt. Connors on the radio to stop the vehicle. Chief Officer described how everyone cleared out of the area "because this thing was just screaming when it broke." This break created very hazardous conditions, which required the Fire Department team to evacuate everyone standing nearby. Chief Officer shut off the first pumper and his car to eliminate all sources of ignition and, as he was about to break the window of a parked OPP vehicle to shut it off, the gas "started to fizzle out."<sup>64</sup>

I conclude that the Elliot Lake Fire Department acted promptly and efficiently when it arrived on the scene. As a first course of action, the firefighters shut off the utilities, thereby eliminating an additional source of danger to a situation that was already unsafe.

## **2:49 p.m.: Chief Officer activates the Emergency Control Group**

Chief Officer's notes indicate that, at 2:49 p.m., he "[c]alled dispatch to activate the Emergency Control Group."<sup>65</sup> He testified that he is a member of the Community Control Group (CCG) by virtue of his position as chief of the Fire Service.<sup>66</sup> As noted earlier, the CCG's role during an emergency is to provide support to the incident commander. It also considers the well-being of the community at large: City services have to keep operating during an emergency, which might last several days. The mayor is the chair of the group, and all attendees are asked to provide their updates. During the response to the Mall collapse, the meetings allowed everyone to be informed of the steps that had to be taken over the next period.<sup>67</sup>

When asked why he activated the CCG, Chief Officer testified: "I knew it was going to be an event that needed to activate the group. It is not your typical call. I knew it was going to be hours, and I knew I was going to need their help."<sup>68</sup> Chief Officer had not yet been in the Mall, and his decision was based on what Mr. Ewald had reported to him.<sup>69</sup>

At approximately the same time, Chief Officer asked the OPP's Sgt. Brian Fay to clear the roof deck. He also instructed a member of the rescue team to clear the Mall, starting from the area where Zellers was located.<sup>70</sup>

Realizing that the situation was beyond the Fire Department's capabilities, Chief Officer, according to his notes, "[t]ried contacting Bob Thorpe OFM [Office of the Fire Marshal] via cell phone on site to get heavy rescue" at 3 p.m.<sup>71</sup> Chief Officer knew about HUSAR/TF3, the Heavy Urban Search and Rescue Task Force 3 team operated by the City of Toronto, from some of the training he had undergone as well as through a communiqué he received from the Office of the Ontario Fire Marshal on how to activate the team. However, he did not know

exactly what it was able to do.<sup>72</sup> He was advised that the Provincial Emergency Operations Centre would not dispatch HUSAR/TF3 without a municipal declaration of emergency. He called Mr. Thorpe in an attempt to “work the back channels” and to give him notice that the process of declaring an emergency would soon begin. Initially he was unsuccessful in reaching Mr. Thorpe, but was able to contact him within the next half hour.<sup>73</sup>

### 3:01 p.m.: Chief Officer and other members of the Fire Department enter the Mall

The notes written by Chief Officer state that at 2:56 p.m., he asked firefighter Kluge to “work the pile from the north side for signs of life.”<sup>74</sup> He gave this order to Mr. Kluge because he was already in the Mall in order to silence the alarm. Chief Officer had not yet gone inside the Mall, and his knowledge of its condition was based on what he saw through the front doors and what Mr. Ewald had reported back.<sup>75</sup>

At 3:01 p.m., once the gas valve had been shut off, Chief Officer instructed Capt. Thomas and firefighters William Elliott and Wayne Millett to enter the collapse zone and to look for survivors, moving debris out of the way if necessary. He also communicated via radio, for all Fire Department members to hear, that they were to be “careful not to move anything that would cause further collapse.”<sup>76</sup> Capt. Thomas testified that they entered through the set of double doors at the main entrance and proceeded toward the collapse zone, climbing over debris in the process.<sup>77</sup>

Very shortly after the rescue team went into the Mall, Chief Officer and Mr. Ewald made their way in as well.<sup>78</sup> From his standpoint near the collapse zone, Chief Officer observed a slab hanging at 45 degrees and resting on the escalator.<sup>79</sup> He was greatly concerned about the precarious state of the slabs and the escalator. He could also see the dangerous position of the fallen beam. Referring to the slabs, he described the scene succinctly: “It really scared the bejesus out of me, if you could put it one way. It was not a good situation.”<sup>80</sup> When asked whether he had any idea how to handle the emergency, he testified that “what we were hoping to do was get in there, and [see] if there was anybody that was accessible. With our limited resources ... the size of the material that we had to deal with was way beyond our capability.” The firefighters managed to move smaller pieces of debris and checked voids for potential victims.<sup>81</sup>

As Chief Officer and Mr. Ewald made their way back to the command post, Capt. Connors was instructed at 3:04 p.m. to help with the search of the main collapse zone.<sup>82</sup> The command post was set up in front of the Mall, to the left of the main entrance. The chief chose that location because it was close to the Mall as well as his best vantage point. Moreover, it allowed the firefighters to tag themselves for accountability without having to walk far.<sup>83</sup>



**Figure 2.3.6** The debris faced by firefighters

Source Exhibit 7798

Capt. Connors entered the Mall through the doors near the Foodland store. He described the site upon entry as follows:

On approach to the doors, you saw nothing. The doors, they looked dark. Going through those doors, it was almost black. When you cleared the second set of doors, you were standing in water and light debris. You could hear the water running. When your eyes started to adjust, you could see the daylight from the collapse zone, and the lottery kiosk was right in front of you, the main floor one where the escalator goes up behind it, you could go around from both sides, and it was literally curtains I would call it of concrete slabs ... I couldn't walk standing up going through there. You would have to duck or move to the side. And so between the concrete, rebar, pipes, everything was hanging down in that area until you got past it.<sup>84</sup>

He walked to the right side of the kiosk in order to enter the collapse zone.<sup>85</sup> He informed the Chief that there was a heavy load on the beam and that he was not sure how long the beam would support that weight. He continued to search and move debris on the pile. He also checked the vehicle in the rubble for survivors. While he was on the pile, he heard noise from the water flowing in, the fire trucks, radio communications, chatter from other individuals on the pile, and, later on, the sound of blades from the OPP helicopter.<sup>86</sup>

### 3 p.m.: The Community Control Group meets to discuss the declaration of an emergency

The CCG met at 3 p.m. at city hall. Natalie Bray, the administrative assistant to the chief administrative officer, was the duty officer for the CCG as well as the scribe during its meetings.<sup>87</sup> The notes of the meeting indicate that it is "not necessary to declare an emergency right now."<sup>88</sup> Mayor Richard Hamilton testified that not all CCG members were present at the meeting and that he did not have all the information he needed to decide whether an emergency had to be declared.<sup>89</sup> It would appear that Chief Officer had not spoken to any CCG members at that point.

Robert deBortoli, the chief administrative officer for Elliot Lake, testified that when the notation was made, the attendees were still assessing the situation and wanted to make sure they were following the correct procedure. In this regard, he knew that the CCG had to meet, the mayor had to declare the emergency, and documents had to be submitted to the province. However, he had not gone through this process before. Throughout the response, Mr. deBortoli communicated with Chief Officer and reported back to the CCG on particulars going on at the scene.<sup>90</sup>

Michael Mantha, the MPP for the Algoma-Manitoulin riding in which Elliot Lake is located, had an office in the Mall. He found out that the roof had collapsed at approximately 3 p.m., after he left a meeting in the Espanola-Manitoulin area. When he returned to Elliot Lake, he went directly to the Mall. He first ensured that his son and staff were accounted for and subsequently made calls to various ministries to inform them of what had happened and to get "the ball ... moving forward as far as getting the resources here to Elliot Lake." Among others, he phoned the Ministry of Labour, the Ministry of Municipal Affairs and Housing, and the Premier's Office. He did not speak to the mayor because he did not want to get in the way of the rescue efforts. However, he informed some councillors that he wanted to attend a briefing, and he was invited to attend one later on.<sup>91</sup>

Mr. Mantha spent the entire day on the scene, providing whatever information he had to community members. He was aware that the Collins Hall, a city-owned building, had been designated as the place where families of missing individuals could gather to obtain information. He introduced himself to family members there and offered his support.<sup>92</sup>

### 3:04 p.m.: The first victim is located

At 3:04 p.m., volunteer firefighter Elliott informed Chief Officer that his team had located a person trapped in a void. Chief Officer was outside when he received this radio transmission. He did not recall whether he provided instructions to Mr. Elliott right away, but paramedics were eventually sent in to determine whether the person was deceased.<sup>93</sup> This report appears to have been the first indication that there might be a victim in the rubble.

A couple of minutes later, Chief Officer noted that the personal accountability report had been completed and that all firefighters were accounted for. He testified that a head count had been done at his request and that it took 15 minutes to complete: the radio was being used by several individuals, making it difficult for the accountability officer to get through.<sup>94</sup> The PAR was diligently performed at Chief Officer's request and demonstrated that the safety of the Fire Department personnel was a top priority.

### 3:55 p.m.: A state of emergency is declared

When Chief Officer could not reach Mr. Thorpe on his first attempt, he instructed dispatch to contact the Office of the Fire Marshal, to request that the heavy rescue team be deployed. The following excerpt from his notes documents the efforts leading up to the activation of HUSAR/TF3:

15:08:05 IC radioed base to contact OFM for Heavy Rescue.

...

15:14:29 IC advises to give my cell number to OFM to call directly on the scene.

...

15:26:26 IC requested through base to request HUSAR from OFM advisor Bob Thorpe

...

Approx 15:36:14 IC talking to Bob Thorpe OFM local adviser to ensure HUSAR has been activated. He advised he is on it

...

Approx 15:39 IC on phone with Bob Thorpe again, was Husar activated?

15:41:43 IC called base to have them call Provincial Operations centre to request HUSAR activation

15:45:14 Through the calls from the OFM we were advised that the mayor will have to declare an Emergency. OFM are already moving on it anyway.

Approx 15:45 On the phone with Carolyn Chambers OFM advisor to activate HUSAR. And she offered assistance.<sup>95</sup>

Staff Insp. William Neadles was the on-call site commander of the HUSAR/TF3 team. He received a call at 3:45 p.m. from Toronto Fire Services Communications regarding the collapse. His notes state: "Not much info. OFM – Looking to 'stand up' the HUSAR Team – How long will it take."<sup>96</sup> He explained that he wanted to find out the length of time needed to deploy the team.<sup>97</sup>

At 3:55 p.m., Mayor Hamilton officially declared an emergency in Elliot Lake, finally confident that he had sufficient information to make that call.<sup>98</sup> The declaration of emergency, signed by Mayor Hamilton, was faxed to the Provincial Emergency Operations Centre at 4:03 p.m.<sup>99</sup>

As will be seen later, HUSAR/TF3 was deployed shortly after 4 p.m.

I am satisfied that Chief Officer acted promptly in communicating with Fire Department dispatch as well as in making phone calls on his own to activate the HUSAR/TF3 team. He assessed the situation efficiently and, as soon as he established that the Fire Department could not handle the situation on its own, proceeded to reach out to the appropriate individuals.

### 3:28 p.m.: The first communication with a victim is made

Chief Officer's notes state that at 3:28 p.m., Capt. Connors reported having communicated with a victim.<sup>100</sup> It would appear, however, that it was Capt. Thomas who made first contact with the victim. Capt. Thomas and his team called out to ask whether anyone was there. They also looked into voids for limbs or bodily fluids. When he called out, Capt. Thomas described hearing a muffled noise. He then said, "Fire Department, can you hear me?"



**Figure 2.3.7** The area where the two victims were eventually found and where muffled noises were heard

Source Exhibit 8104

and heard another muffled noise. He tried identifying where the sound was coming from and found a void he believed was the source of the sound.<sup>101</sup>

Capt. Thomas testified that he continued trying for 20 minutes to communicate with the person he believed was responding to his calls. In that time, he obtained a response in the form of a muffled noise to each of the six to 10 questions he asked. Afterwards, he passed the task on to Capt. Connors while he tried to figure out what they could move without having a piece of concrete collapse on them.<sup>102</sup>

Capt. Connors's notes for his Fire Department witness statement indicate that he took over communicating with the victim from Capt. Thomas: "Approx ... 15 30 I took over communicating with victim. All coms with victim were mumbled. We tried to move what we could to get to her. OPP officers set up as eyes for safety for us."<sup>103</sup> In his radio communication with

Chief Officer, Capt. Connors referred to the voice as belonging to a woman because it seemed more feminine to him. In fact, he appeared very confident that he was communicating with the victim, and he even informed Chief Officer that he was "almost certain" that she was a staff member of Dollarama.<sup>104</sup>

Capt. Connors testified that he tried to determine whether she was an employee or a shopper by asking "yes" or "no" questions. He also told the victim to mumble twice for "yes" and once for "no," and he believed the victim followed his instruction when he asked whether she was an employee of the Mall. The delay between his questions and the answers was 10 to 15 seconds.<sup>105</sup> He did not know how long these communications went on for, but he asked approximately five questions, repeating each a few times. Eventually, the victim stopped responding. He was assigned something else, and another individual took over this task.<sup>106</sup>

Chief Officer testified that he knew that these sounds did not come from the same individual as the one that volunteer firefighter Elliott had brought to his attention. Capt. Connors and Capt. Thomas were in a different location on the pile.<sup>107</sup>

While the apparent communications with the victim were taking place, the firefighters were trying as best as they could to get to the victim who was underneath the fallen concrete. Various pieces of equipment were used without any success. These efforts continued after the communications with the victim stopped. The firefighters were very much aware of the dangers associated with moving the concrete, which meant they had to proceed with great caution in order not to cause a further collapse.<sup>108</sup> Capt. Thomas described the effort as follows: "We were trying to figure out what we could do with what we had and try not to bring everything else down on us, because there was so much stuff still dropping."<sup>109</sup>



## 4 p.m.: Chief Officer updates City personnel and the OPP

Shortly after 4 p.m., Chief Officer updated the mayor, Robert deBortoli, and a member of the OPP on the situation at the scene. He told the mayor that two or three individuals were missing. He spoke to Mr. deBortoli about the need for HUSAR/TF3. He also told Mr. deBortoli that two people were missing and that this information could be released to the public.<sup>110</sup>

As the incident commander, Chief Officer assigned tasks to some of the OPP officers who were on scene. He instructed two of them to act as spotters, one facing the concrete slabs resting on the escalators, and the other looking at the doors of the rooftop entrance to the Hotel which hung over the edge of the collapse zone. The officers were instructed to shout out if any hazards moved or fell. Moreover, Capt. Ken Barnes was appointed as the sector and safety officer in the collapse zone, meaning he was responsible for ensuring that the firefighters were safe from all hazards, not simply the ones the OPP were spotting.<sup>111</sup> Capt. Thomas described the safety officer's responsibility as follows:

His responsibility was our safety was number one. He was taking note of any changing conditions, looking for hazards. If he seen something that we didn't and then we were in that area, while we were looking, he pointed out and made sure that we were totally aware of what was going on around us. We weren't really paying attention what was going on. We were busy doing what we were doing.<sup>112</sup>

## 4:20 p.m.: Communication with one of the victims is lost; Mrs. Perizzolo is located shortly thereafter

Capt. Thomas informed Chief Officer at 4:20 p.m. that communication with the victim had been lost for about one hour. He also asked Mr. deBortoli for concrete blades and a sewer camera from the Public Works Department.<sup>113</sup> Chief Officer stated that these tools would be used to explore the voids.<sup>114</sup>

Ms. Bray's notes indicate, in the 4:20 p.m. entry: "2 trapped people in kiosk area. One female talking. [Shuffled or shifted] concrete – can't hear her anymore."<sup>115</sup> A second set of notes, taken on a flipchart by Elizabeth Lewis, the assistant to the City treasurer,<sup>116</sup> indicate: "2 trapped people in kiosk area. 1 was talking but concrete shifted + cannot hear them anymore."<sup>117</sup>

Natalie Quinn, who was a volunteer firefighter at the time of the event, took handwritten notes as the Chief's scribe, starting at 3:12 p.m. Her notes state, at 4:30 p.m., that Chief Officer communicated to the safety officer that, in order to locate one of the victims, they would need to "extricate," by which I presume she meant remove the overlying material. Capt. Thomas explained that Mrs. Perizzolo's body was discovered around that time by volunteer firefighter Jeff Schell in the southeastern part of the collapse zone.<sup>118</sup> He could confirm this fact because he eventually assisted in carrying out her body. When she was found, her hand and foot were visible. Capt. Thomas tried to get a radial pulse on her wrist, but he did not feel one. Therefore, at 4:30 p.m., Capt. Thomas determined that one victim appeared to be deceased. He contacted the Emergency Medical Services by radio and requested that paramedics enter the collapse zone to confirm that the victim was deceased.<sup>119</sup>

Capt. Connors testified that he led the paramedics to the body and subsequently left the collapse area.<sup>120</sup> Chief Officer testified that when the paramedics came back out, they informed him that they believed the victim was deceased. The victim was cold to the touch and non-responsive. They also believed, based on the age spots on her hands, it was an older female. Chief Officer overheard one of the paramedics say that they did not think the victim was Ms. Aylwin because of the spots. He had confidence in the paramedics' judgment. As of then, he knew that at least two people were trapped in the rubble and that one was deceased. He also knew that the other victim had shown signs of life, but that there had been no communications with this individual for approximately one hour.<sup>121</sup>

At 4:45 p.m., Chief Officer received news that HUSAR/TF3 was assembling from Toronto. He then requested that Staff Insp. Needles call him. He was also aware that Mr. Thorpe was on his way. Although he was unsure what Mr. Thorpe would do, he was thankful to have any available assistance because he had no idea how to rescue the person who had communicated with the firefighters.<sup>122</sup>

### **3:54 p.m.: Algoma Health Unit seeks vaccines from its office in the Mall**

Chief Officer's notes state that at 3:54 p.m., Marshall Chow from the Algoma Health Unit, a Mall tenant, asked that \$60,000 worth of vaccines be recovered from its office. The request was repeated a few minutes later, at which point he advised, "Base to send Marshal to the scene." At 4:53 p.m., a representative from Algoma Health Unit was on the scene, and Chief Officer instructed Capt. George that an OPP officer would take that person to the unit's office.<sup>123</sup>

Chief Officer explained that he was told that, if these vaccines were not retrieved from the Mall, the Health Unit's flu-shot program would be set back. Staff at the unit were concerned that they would not be able to acquire more. Considering that part of his job as a member of the Fire Department was to save property, Chief Officer decided that the request was important enough to act on.<sup>124</sup>

### **5 p.m.: The firefighters in the Mall use sewer cameras in an attempt to find missing persons**

Capt. Connors testified that once communications with the victim stopped, a sewer camera was brought to the rubble pile. In his Fire Department witness statement, he wrote:

I then suggested to get the sewer camera from Public Works to assist in search. I viewed the travels of the camera from a screen on the truck while Vance and Thomas probed with the camera. I don't recall how long we did this, but unfortunately found nothing. At this time, the OPP chopper was hovering overhead, causing vibrations in the truck and in the collapse zone. This is when we realized how unstable the zone was.<sup>125</sup>

Capt. Connors sat on the tail board of the truck, in front of the Mall, watching the monitor and instructing Capt. Thomas, who operated the camera, to move it one way or the other. The camera had a light that allowed for enhanced viewing. He explained that it was often not possible to determine the size of the void until he saw something recognizable, such as a pack of cigarettes. He mainly saw debris, including pieces of concrete or insulation, and the occasional magazine. He did not see clothing or a body part, such as someone's hand.<sup>126</sup>

Capt. Thomas explained that the camera was located at the end of a long hose and that he tried inserting it into all the voids he could find, following Capt. Connors's instructions. He checked the entire collapse area in detail, which took him 45 minutes to one hour. While he was on the pile, he heard radio chatter, trucks running outside, a helicopter flying overhead, and a lot of voices. Several pieces of debris were also dropping around them. However, he specified that the sound they had heard earlier from the victim was different from any of the other noises.<sup>127</sup>

Capt. Connors observed movement from dust and small pieces of concrete on the monitor. When the OPP helicopter was overhead (the ordering of the helicopter is discussed later in this chapter), he noticed more movement – in the sense of an "increase of the small debris raining down in front of the camera." After the helicopter left, the movement settled somewhat. He did not go back to the pile once the work with the camera was complete because Capt. Barnes, the safety officer, and Chief Officer had called everyone out except for Capt. Thomas and firefighter Adam Vance. Capt. Connors believed that Capt. Barnes's main concern was the stability of the severed beam and the doors hanging overhead.<sup>128</sup>

While rescuers were still in the rubble, Chief Officer asked them to check the cavity between the two escalators to ensure that no one was trapped there. They did, but found no one.<sup>129</sup> Shortly thereafter, at 5:05 p.m., Chief Officer's notes state:

I went into the scene and spoke to Ken Barnes and he felt the crews have done all they can and the area is very dangerous. I observed the crews trying to slide an 8 x12 hollow core slab down the pile. I had grave concern that the slab would smash into the hanging slabs off of the escalator[,] causing a further collapse.<sup>130</sup>

Chief Officer accessed the rubble pile on the right side of the escalators at ground level. By that point, his men had cleared a way to the pile which enabled him to proceed in a straight line. He witnessed a few firefighters on each side of a hanging slab, trying manually to move it. He stated:

I was really afraid that that was going to cascade down and slide into the vertical material that was hanging off of the escalator. And once a chunk of that size got going, if there is legs in the way, it is going to cut them right off. And that was when I pulled everybody out of there.<sup>131</sup>

At 5:07 p.m., Chief Officer pulled everyone out of the hot zone except for Capt. Barnes, Capt. Thomas, and firefighter Vance, who stayed in the pile.<sup>132</sup> They continued to search voids and probe holes with the camera. At 5:47 p.m., Capt. Barnes told Chief Officer that they had exhausted all their options and that they were risking lives. Capt. Barnes also asked the chief whether he wanted them to mark the position of the body of the victim they had located. He advised them to do so at 5:53 p.m.<sup>133</sup>

## 6:14 p.m.: Firefighters are pulled out of the collapse zone

At 6:14 p.m., Capt. Barnes evacuated the collapse zone completely because the OPP helicopter flying above caused the hanging beam and the set of double doors on the rooftop level to sway a lot more.<sup>134</sup> Capt. Thomas testified that he agreed with Capt. Barnes's order. However, he did not leave the site immediately and was ultimately pulled out by Chief Officer.<sup>135</sup>

Chief Officer had not been informed by the OPP that a helicopter had been ordered. When Capt. Barnes informed him that the rotor wash – the air movement caused by the rotors of the helicopter – was being felt in the collapse zone, he tried to contact an OPP member to have the helicopter waved off. He testified that he pulled his crew out at that time not only because of the effect of the rotor wash but also because they had done everything they could. When asked whether the increase of movement on the pile due to the rotor wash was significant, he replied: "Any increase in a hazardous condition is significant."<sup>136</sup>

**At 6:14 p.m., Capt. Barnes evacuated the collapse zone completely because the OPP helicopter flying above caused the hanging beam and the set of double doors on the rooftop level to sway a lot more.**

The Fire Department does not have a radio linked to the OPP communications system. Every agency has its own frequencies, making inter-agency communications difficult. Chief Officer agreed that it would make sense to enable the incident commander to have direct communication with the leads of the other agencies at the scene. If he had been able to communicate with the lead from the OPP directly, the helicopter could have been waved off more quickly. It should be noted that the OPP members on the ground also could not communicate directly with the pilots. Between two and four minutes elapsed, from the moment Chief Officer was made aware of the problem, before the helicopter was instructed to leave the area above the collapse.<sup>137</sup>

## 6:30 p.m.: Chief Officer attends the Community Control Group meeting

Capt. Thomas testified that, after the collapse area was clear of personnel, he was informed that the OPP's UCRT team was arriving and that the HUSAR/TF3 team had been activated. During the rest of the day, as well as through the night, he was either at the Mall or at the fire station. He believed that, given the condition of the collapse area, the Fire Department could not have moved any further debris without heavy equipment. Moreover, no one in Elliot Lake had the necessary equipment to assist; they had to await the arrival of the UCRT and HUSAR/TF3 teams.<sup>138</sup>

At 5:29 p.m., Chief Officer was advised that the chemical, biological, radiological, nuclear, and explosive (CBRNE) team had left its Gravenhurst base and was on its way to Elliot Lake. He testified that he was not aware they were part of the UCRT team. Therefore, at 6:30 p.m., when he attended the Community Control Group meeting, he did not realize that the UCRT team was on its way to Elliot Lake.<sup>139</sup>

Chief Officer informed the attendees at the meeting that he had activated the mutual aid protocol with the Blind River Fire Department. He also provided an update about what he had done at the scene until then. With regard to the victims, Ms. Bray's notes of the chief's update state:

Victim – trying to get to. Very muffled response for 45 mins – Attempted to locate, scene is very unsafe. Concrete slabs hanging by cables. 1 hour after could not hear her anymore.

Got to a limb – foot – no pulse verified – not confirming fatality. 2 hrs after trying to make way – pulled everyone out.<sup>140</sup>

Chief Officer did not understand why the notation "not confirming fatality" was made. He had informed the CCG members that there was a casualty and that the EMS had confirmed that one victim had no pulse.<sup>141</sup>

After the meeting, at 8 p.m., he returned to the fire hall and spoke with the firefighters. He told them that they had done a "good job" and that their work was appreciated.<sup>142</sup> He went to the scene on a couple of occasions that evening, and ultimately met the UCRT and MOL representatives who arrived that night. He also attended the CCG meeting at 10:05 p.m., when he reported on the status of the UCRT, MOL, and HUSAR/TF3 teams and discussed next steps.<sup>143</sup>

## Deployment of the OPP

In this section, I describe the initial actions of OPP resources that were deployed in response to the collapse. The main focus is on the deployment of the UCRT as well as the actions of the local OPP forces in Elliot Lake during the first 10 hours of the emergency response. Just as in the rest of this Report, the biographical description of all individuals, including their rank, reflects their status on the date they testified and is not necessarily current.

### The command structure and complement of UCRT

As noted above, a staff sergeant is in overall command of the UCRT team. When the Mall collapsed, Staff Sgt. Jim Bock occupied that position. The urban search and rescue (USAR) and CBRNE elements of UCRT are each commanded by sergeants. In June 2012, Sgt. Mike Dolderman was in command of the USAR element, and Sgt. Meshach Parsons was in command of the CBRNE element.<sup>144</sup>

The command structure of UCRT also includes an administrative sergeant. As of June 23, 2012, that position was occupied by Sgt. Jamie Gillespie. His duties are both administrative and operational. He was responsible for conducting most of the scheduling of the shifts of team members, budgeting, reviewing operational reports, and

generally all elements related to the administration of UCRT. Sgt. Gillespie is an OPP veteran. He joined the OPP in 1991 in Waterloo and became a part of the Provincial Emergency Response Team (PERT) in 2003. He became a member of the UCRT team after it was created out of former elements of the PERT in 2010.<sup>145</sup>

Sgt. Gillespie is a fully trained and experienced member of UCRT and is capable of participating in any team operation.<sup>146</sup> Specifically, he is trained to the technician level in structural collapse in accordance with the US National Fire Protection Association (NFPA) 1670 standard and, since 2003, has taken more than 100 hours of structural collapse training at Texas A&M Engineering Extension Service (TEEX).<sup>147</sup>

Cst. Ryan Cox is a constable with the OPP and has been with the force for 10 years. He joined the UCRT team in 2010.<sup>148</sup> Cst. Cox is trained to the NFPA 1670 technician level in structural collapse.<sup>149</sup> He has attended structural collapse rescue training at TEEX, where he learned how to conduct rigging operations – including how to move debris by lifting it and moving it with ropes and other lines.<sup>150</sup>

Cst. Dan Bailey is a constable in the USAR element of the UCRT as a canine handler. He joined the OPP in 1998, after working, among other things, as a certified firefighter with the London Fire Department. He began training dogs through the Canadian Kennel Club in 1994 and, in 2005, became a canine handler with the OPP.<sup>151</sup> He has undergone extensive training as a canine handler, both for the OPP generally and specifically for his UCRT responsibilities. This training has included canine urban search and rescue as well as cadaver detection courses. In addition, Cst. Bailey has taken canine search specialist training with the American Federal Emergency Management Agency (FEMA).<sup>152</sup> At the time of his deployment to Elliot Lake, he was responsible for two dogs, Dare and Charlie.<sup>153</sup>

Cst. Steve Hulsman joined the UCRT in 2010. He is trained to the technician level in structural collapse rescue, confined space rescue, and high-angle rope rescue.<sup>154</sup> He also has training in the use of ground-penetrating radar, and this skill, along with other technical search tools, is his specialty in the UCRT.<sup>155</sup> Before his involvement in the Elliot Lake Mall collapse, he had previous hands-on experience with structural collapses, including the recovery efforts after a building explosion in Woodstock and the tornado in Goderich, both in 2011.<sup>156</sup>

Cst. Patrick Waddick has been a member of UCRT since 2011. Previously, as an industrial mechanic, he had worked regularly with cranes and other heavy equipment. He also served as a volunteer firefighter.<sup>157</sup> As a UCRT member, Cst. Waddick received extensive training, including at TEEX, in all manner of structural collapse rescue techniques.<sup>158</sup>

## 2:34 p.m.: UCRT is mobilized

The mobilization of UCRT in response to the Algo Mall collapse began at 2:34 p.m., when the OPP's General Headquarters Duty Office contacted Sgt. Gillespie. He testified that Staff Sgt. Bock was not available to answer the call, and that the sergeants in charge of the USAR and the CBRNE elements of the team were on vacation. Accordingly, as the administrative sergeant, Sgt. Gillespie was the highest-ranking officer able to receive the call.<sup>159</sup>

Sgt. Gillespie was informed of the structural collapse of a mall in Elliot Lake and given the contact information for Insp. Percy Jollymore, the local (East Algoma) OPP detachment commander.<sup>160</sup> First, however, he tried to contact Staff Sgt. Bock, because he would normally be the decision-maker for mobilization of the team. Sgt. Gillespie sent out an email and a text message that would be received by all team members unless they were on vacation or their phones were off. He testified that he even attempted to contact the members of the UCRT team who were on vacation. As noted above, as of June 23, 2012, the complement of UCRT members was 23. Of that number, one member was on parental leave, five were on holiday, and one was in Montreal. Accordingly, only 16 were in

a position to respond.<sup>161</sup> Sgt. Gillespie testified that, in the circumstances, he would have liked every member of the UCRT members to respond, “but that wasn’t going to happen.”<sup>162</sup> In all, only 10 members of the UCRT team indicated that they were available to deploy.<sup>163</sup>

Soon thereafter, Sgt. Gillespie called Insp. Jollymore, who advised him that the rooftop parking at the Algo Mall had collapsed and that people were missing – and likely trapped. Sgt. Gillespie advised Insp. Jollymore that UCRT would have a response time of approximately six to seven hours. They did not discuss what supplies or equipment UCRT might require.<sup>164</sup>

The protocol for a request for UCRT services provides that the OPP General Headquarters Duty Office should immediately notify the commander of UCRT.<sup>165</sup> By initiating the deployment of the team, Sgt. Gillespie acknowledged that, because he was not the team commander, he was breaking with UCRT protocol. He testified that he made this decision “based on the urgency, that the facts were that people were trapped and we needed a response so I did not expect any issue. I was unable to get ahold of my chain of command so I made that decision on my own.”<sup>166</sup>

Sgt. Gillespie is to be commended for acting as decisively and as swiftly as he did in mobilizing and deploying UCRT.

### **2:39 p.m.: Cst. Cox is put in command of UCRT as it mobilizes**

Cst. Cox learned about the collapse in Elliot Lake in a telephone call from Sgt. Gillespie at 2:39 p.m. In that phone call, Cst. Cox testified, Sgt. Gillespie advised that the collapse had occurred approximately 15 minutes earlier. Cst. Cox thought this brief lag was a good sign because, normally, calls for such emergencies are not received by the UCRT team so rapidly. At that time, Cst. Cox was close to his home in Hamilton.

Because Sgt. Dolderman was on vacation, Cst. Cox had been put in charge of the USAR element of UCRT as acting sergeant about a week before June 23.<sup>167</sup> In the preliminary stages of the deployment of the team, Sgt. Gillespie left to Cst. Cox the responsibility for determining what equipment would assist in attempting to access any trapped victims.<sup>168</sup> He also told Cst. Cox that, as acting sergeant, he would be in charge of the UCRT response until he himself arrived at the scene.

Cst. Cox testified that Sgt. Gillespie instructed him to contact Insp. Jollymore, whom he identified as the incident commander. He also stated that, in his understanding, although he was to report to Insp. Jollymore, he did not necessarily have to take orders from him.<sup>169</sup>

### **4:16 p.m.: UCRT advance team leaves for Elliot Lake**

After speaking with Sgt. Gillespie, Cst. Cox drove to the UCRT office in Bolton, approximately 70 kilometres from Hamilton. He made sure that everything was organized and that the team had the vehicles and the assets they would take with them. Because Cst. Waddick lives close to the Bolton office, he had already been assigned this task, and, therefore, it was substantially complete by the time Cst. Cox arrived. Cst. Cox assigned the UCRT team members to vehicles while they were still finishing their preparations. He then requested that Cst. Chris Collins drive him in his vehicle to Elliot Lake. As a result, Cst. Cox left ahead of the rest of the team.<sup>170</sup> He departed for Elliot Lake at 4:16 p.m. on June 23. When he left, he was aware that there had been a collapse of a parking structure in or around a mall and that an unknown number of people were trapped in the debris. He had no further information.<sup>171</sup>

Cst. Waddick was in Sgt. Gillespie’s backyard enjoying a barbecue when they received the call from the Duty Office.<sup>172</sup> Sgt. Gillespie instructed Cst. Waddick to go to the UCRT offices in Bolton immediately, first to prepare the USAR trailer and ensure that all its equipment was in place, and, second, to assist the other members as they

arrived to get ready and en route.<sup>173</sup> The equipment would include power tools, search equipment, cameras, generators, hydraulic power pack, jackhammers, extrication tools, and chainsaws for concrete. Also included on the truck is a full complement of tools related to auto extrication. Cst. Waddick departed for Elliot Lake at 4:30 p.m. He arrived at approximately 9:25 p.m. and did not stop en route.<sup>174</sup>

Cst. Bailey was in Toronto when he received the text message. He returned immediately to his home, loaded Dare and Charlie and some clothing into his truck, and proceeded to Elliot Lake.

At 2:50 p.m., Sgt. Gillespie advised Acting Insp. Wayne Jacklin, who was at the time in charge of OPP emergency management (which oversaw UCRT), that he had paged the entire team and that 10 full-time members and two tactical medics had responded. Sgt. Gillespie further advised that he would manage the incident. Initially, he would manage by phone, because he had to attend to child-care issues, and that he would go to the scene as soon as possible.<sup>175</sup>

Sgt. Gillespie, at 3:35 p.m., contacted Insp. Jacklin to request the assistance of HUSAR/TF3. He took this step because, from his experience, the rescue of trapped persons from a collapsed building could take many days. Moreover, because of the limited number of team members UCRT would have available to respond to the emergency, HUSAR/TF3, with its larger force, should be activated. In addition, Sgt. Gillespie contacted Carol-Lynn Chambers of the Office of the Fire Marshal to advise her of the numbers that the UCRT had available to respond to the emergency.<sup>176</sup>

Very soon after receiving notice of the collapse, Ms. Chambers contacted the OPP Duty Office to reach Staff Sgt. Bock. When she could not reach him, she spoke with the next person in the UCRT command structure, who she understood to be Sgt. Gillespie.<sup>177</sup> Ms. Chambers testified that she contacted Sgt. Gillespie in order to get him to coordinate with HUSAR/TF3. She expected that UCRT would arrive at the scene more quickly, and it would therefore be helpful for the two operational units to share information by connecting directly and coordinating their requirements.<sup>178</sup> Sgt. Gillespie left Bolton for Elliot Lake at approximately 7 p.m. on June 23.<sup>179</sup>

## 2:33 p.m.: OPP local forces in Elliot Lake respond

Insp. Percy Jollymore is the detachment commander for the East Algoma region. This region has 11 communities, of which Elliot Lake is the largest. Insp. Jollymore joined the OPP in 1975 and rose through the ranks to his present position in 2009.<sup>180</sup>

Insp. Jollymore stated that he first became aware of the collapse at the Algo Mall at approximately 2:33 p.m. on June 23. He was initially contacted by the Provincial Communications Centre in North Bay.<sup>181</sup>

At 2:33 p.m., Sgt. Brian Fay, the sergeant then on duty in Elliot Lake, advised Insp. Jollymore that he was on the scene and that the OPP was overwhelmed with calls. As a result, the inspector immediately went to the Algo Mall. When he arrived, he found that the scene was not secure and that no scene control was in place. He noticed that the main entrance of the Mall was completely clogged with people and vehicles: a perimeter had not yet been established to funnel people safely away and to ensure that first responders could continue their work.<sup>182</sup> He gave directions to have the process of securing the scene started. He then communicated with the Provincial Communication Centre to state that he intended to take charge of the OPP at the scene.<sup>183</sup>

Insp. Jollymore instructed Sgt. Fay to ensure that the building had been cleared. He subsequently summoned additional resources from the East Algoma detachment to assist in establishing a perimeter around the entire building so that the OPP could keep track of who was entering and who was exiting the emergency scene. Insp. Jollymore estimated that, by 3:30 p.m., all the main entrances to the Mall area had been secured.<sup>184</sup>

Cst. Dale Burns, an OPP identification officer from Sault Ste. Marie, testified that soon after he arrived, Insp. Jollymore ordered him to photograph and videotape the collapsed area from an OPP helicopter. He stated that he did not speak about the order to fly over the Mall in a helicopter with anyone at the scene other than the air crew. Insp. Jollymore agreed that it would have been helpful for the OPP to communicate with the Elliot Lake Fire Department about a helicopter flying overhead.<sup>185</sup>

## Ordering a crane

During the hearings, the issue of ordering a crane for the purpose of removing debris from the collapse zone led to some controversial evidence that is not easy to reconcile. I heard evidence that UCRT requested a crane as early as 5:30 p.m. on June 23. Ultimately, a crane was not ordered until after 11:00 p.m. that evening, when the OPP finally contacted Dave Selvers, the president of Millennium Crane in Sault Ste. Marie.

### 4:30 p.m. to 5:30 p.m.: Cst. Cox identifies the need for a crane

Cst. Cox testified that while en route to Elliot Lake, he was able, by using Google on his smart phone, to find pictures of the Mall collapse. The photographs that he saw on his screen were similar to those in Exhibit 2114.<sup>186</sup> He could see from them that there were heavy concrete slabs in the pile and that those slabs were located in the middle of the collapsed structure, not on the exterior. As a result, Cst. Cox thought that, at some point, the rescue operation would require a crane to assist the operation. He reached this conclusion based on his training with the structural collapse technician courses at TEEX. He had learned there that cranes were usually one of the fastest and safest methods for removing debris from the site of a structural collapse.

At this initial stage, Cst. Cox's plan for the crane was that rescuers would start rigging the slabs and pulling them off the pile one by one, thereby avoiding having to cut slabs that could potentially harm people who were trapped underneath.

When the UCRT team requires a crane, it typically depends on local resources. As a result, the UCRT would normally rely on the commander of the local OPP detachment, in this case Insp. Jollymore, to make the necessary arrangements.<sup>187</sup>

### Insp. Jollymore was not familiar with UCRT

Before working with UCRT in response to the Mall collapse, Insp. Jollymore appeared to have little knowledge of or experience with this organization and its capabilities. He testified as follows:

- Q. ... Now, can I switch gears again and this time talk to you about the relationship with UCRT. You are an OPP officer. UCRT is a special tactical unit in the OPP. And what was your relationship – did you have any knowledge of them, or did you ever work with them prior to this collapse?
- A. Not under their new title, no.
- Q. And when you say not under a new title –
- A. Well, they have been reformed and specialized, so they have had a number of names. The unit has had a number of names, and it has done varied things. They are a specialized component of the Emergency Response and Tactics Team.
- Q. And did you know what their specialties were at the time of the collapse?
- A. I just had general knowledge of them.
- Q. And what was that?
- A. Just that they were in existence; that they had some specialized skills in relation to search of partly collapsed buildings; and they had some training to that aspect.<sup>188</sup>



Insp. Jollymore also did not have any knowledge about Cst. Cox's role within UCRT.<sup>189</sup> His lack of familiarity with UCRT and Cst. Cox's role on the team may, as I explain later, have influenced his conduct in ordering a crane to deploy to Elliot Lake.

### 5:30 p.m.: Cst. Cox requests a crane

At 5:30 p.m., Cst. Cox spoke with Sgt. Scott Taylor, a member of the Emergency Response Team Unit within the OPP (a unit, distinct from UCRT, which deals with such elements as evidence searches and ground search and rescue). At that time, Sgt. Taylor was in Elliot Lake. He advised Cst. Cox that he would soon be meeting with Insp. Jollymore. Cst. Cox told Sgt. Taylor that he would need at least one crane, lumber, and a structural engineer. Sgt. Taylor advised Cst. Cox that he would advise Insp. Jollymore of the request.<sup>190</sup> Cst. Cox therefore believed that Sgt. Taylor was going to advise Insp. Jollymore that UCRT was requesting at least one crane to conduct the rescue operation.<sup>191</sup>

Insp. Jollymore's notes record that at 6:04 p.m. on June 23 "Ryan Cox attending with urban unit will be the lead. Urban unit requires structural engineer, lumber, photographs, crane ..."<sup>192</sup> Insp. Jollymore testified that this notation did not reflect the conversation he had with Cst. Cox but, rather, a conversation that would have been relayed to him between one of his sergeants and Cst. Cox. Insp. Jollymore could not remember which sergeant had that conversation.<sup>193</sup> He agreed that the conversation recorded at 6:04 p.m. in his notes is the same conversation that Cst. Cox testified he had with Sgt. Taylor at 5:30 p.m.<sup>194</sup>

Cst. Cox spoke directly with Insp. Jollymore at 6:17 p.m., according to his notes. At that time, Cst. Cox advised Insp. Jollymore of his estimated arrival time of 9:30 p.m. and that UCRT would require a structural engineer, a crane, and rigging equipment, which generally comes with the crane, as well as lumber.<sup>195</sup>

Specifically, Cst. Cox made the following entry in his notes: "Spoke with Insp. Jollymore and advised him ETA 21:30 hours according to GPS. I advised him that we would require a structural engineer, a hydraulic crane, rigging equipment, lumber. He advised that he would request those items as he was just going into a meeting but would like to wait until we are on scene to make the orders."<sup>196</sup> In his testimony, he confirmed the accuracy of the notation.<sup>197</sup>

Cst. Cox interpreted this statement from Insp. Jollymore as meaning that he wanted UCRT to be at the scene to do a reconnaissance of the situation, and only then to decide whether it actually needed a crane and the other equipment. He testified that he did not believe that waiting until UCRT arrived on the scene before ordering a crane was a sensible thing to do. Cst. Cox's initial plan was to start operations with a crane as soon as possible. He testified that, having seen the size of the slabs and knowing their weights, he knew a crane would be needed at the outset of the rescue effort. He further testified that, while using tools for lifting and supporting the slabs were potential options, he knew that a crane would be part of the operation.<sup>198</sup> Cst. Cox testified that Insp. Jollymore did not ask him why he thought a crane was necessary. Rather, he advised Insp. Jollymore that, having looked at photos of the scene, he thought that a crane would be necessary.<sup>199</sup>

Sgt. Gillespie testified that while he was en route to Elliot Lake, he had several discussions with Cst. Cox, who advised him that he had seen pictures of the Mall and that he felt the best option was to have a crane involved in the rescue because of the lack of access to the collapsed area.<sup>200</sup> Sgt. Gillespie did not speak with Insp. Jollymore about the ordering of a crane. Instead, he left that to Cst. Cox.<sup>201</sup>

**Cst. Cox advised Insp. Jollymore of his estimated arrival time of 9:30 p.m. and that UCRT would require a structural engineer, a crane, and rigging equipment, which generally comes with the crane, as well as lumber.**

For his part, Insp. Jollymore recalled having the conversation noted in Cst. Cox's notes at 6:17 p.m.<sup>202</sup> He testified that Cst. Cox's notes were not quite accurate because they did not reflect his concerns about the type of crane that Cst. Cox was requesting. He further stated that he issued an order that a crane be ordered following his conversation with Cst. Cox. He wanted, he explained, to make sure that they were ordering the proper equipment and that it would be suitable for the area. He noted that the terrain around the Mall, as well as its layout, presented complications that needed to be addressed. He testified that, in his view, Cst. Cox was not an "expert" in the type of crane that he required because he would not know exactly what type of crane he would need for the Mall in question.<sup>203</sup>

Under examination from Commission counsel, Insp. Jollymore gave evidence that suggests his memory of giving the order to have a crane ordered was uncertain:

Q. So did you order a crane for him or not?

A. We ordered a crane for him.

Q. When did you order it?

A. They were – well ... he convinced me once he started talking about the type of crane and with the wedges to anchor it[,] I gave the okay to go ahead and order ... those items.

Q. And in that same phone call, as you put it at 18:19 p.m.?

A. Yeah. The sergeants were briefed and they were told that that was their assignment.

Q. At 18:19 after that phone call [ – ] that is reference there [in Inspector Jollymore's notes at Exhibit 6396]?

A. Right after the phone call, yeah.

Q. So they were ordered to get a crane; you were satisfied with the explanation?

A. Well, no. They were ordered to get a crane, lumber, locate a structural engineer, and photograph the scene[,] although that had already started to take place.

...

Q. ... So who did you tell to order the crane?

A. I don't recall which sergeant.<sup>204</sup>

Although insisting that he had given the order to have the crane requisitioned, Insp. Jollymore again appeared uncertain in his testimony about the extent of follow-up on the status of his order. He also appeared somewhat unclear with respect to who, within the chain of command, had authority to make an order for equipment:

Q. And you didn't follow up with anybody about the crane?

A. The crane in particular?

Q. Yes.

A. Well, I think so. I think when we get to later on in the evening there is –

Q. Well, it was ordered finally at 11:15 p.m., and that is on June 23?

A. Yes.

Q. Which was at least, putting the most favourable [light] on who called who when, a five hour delay in ordering the crane. Were you aware of that at that time?

A. There was five hours? No, I wasn't.

Q. And would that have troubled you if you knew?

A. Well, it did bother me, but I mean there is a number of other factors here also, right. Mr. Cox can't operate on his own. His instructions were to report to the incident commander, which is the fire chief, and he has to take his directions from the fire chief. The fire chief, while this was all going on, had closed down the site and evacuated the site because it was unstable and unsafe. So, I mean, I wanted the crane to be there, but I was just being told they couldn't find one –

Q. Who told you that and when?

A. I can't – I can't recall.<sup>205</sup>

Insp. Jollymore later exhibited further uncertainty with respect to the chain of command:

Q. And my question is: In terms of the crane, do you agree with me that it is obvious that there was going to have to be a crane used at this site at some point?

A. Well, that is why I okayed it to be ordered, but, you know, the issue with this, though, is that the logistical officer in this is the incident commander, which is unfortunately the fire chief. I mean ... it is his call on how they are going to do the rescue.

Q. But you undertook to get this crane?

A. I –

Q. You took on that responsibility?

A. I took it on, so when you see the time at 11 o'clock, you'll see that they were talking with the fire chief about the crane and it is actually the ident officer that comes up with the name Millennium Crane to make the phone call.<sup>206</sup>

Despite testifying that, in his view, Cst. Cox should have requested resources such as a crane through Chief Officer, Insp. Jollymore acknowledged that he undertook responsibility to order the crane. Furthermore, he did not advise Chief Officer that he should take responsibility for the crane, nor did he indicate to Cst. Cox that any such request should be made to Chief Officer.<sup>207</sup> Accordingly, if a crane was going to be ordered, it would have to be through him – Insp. Jollymore.

At a CCG meeting at 6:30 p.m., as reflected in the CCG log, the OPP reported: "Ryan Cox Urban Rescue asked for equipment structural engineer on site ... Bruce to find: one heavy hydraulic crane."<sup>208</sup> Mr. deBortoli testified that this note reflects that Insp. Jollymore was advising the CCG of what Cst. Cox had said he needed from the inspector.<sup>209</sup>

Cst. Cox arrived in Elliot Lake at 8:52 p.m. He went to the OPP detachment, where he was advised that Insp. Jollymore and other community officials were waiting to meet with him. Insp. Jollymore advised him of the history of the Mall, including the fact that it had a history of complaints related to water damage. He also provided Cst. Cox with an update on the status of the items he had requested in his earlier phone call, including the crane.

Insp. Jollymore advised Cst. Cox that they were still working to find a crane. Cst. Cox testified that he understood this information to mean that a crane still had not been ordered. He was concerned, yet no one gave him any explanation for the delay. He further testified that he was not certain of the resources in Elliot Lake and its surrounding area. Accordingly, he decided to rely on the local officials in the chain of command to secure those assets.<sup>210</sup>

Later in his examination, when Insp. Jollymore was told that it was Sgt. Fay who had contacted Mr. Selvers, his memory appeared to become somewhat refreshed: he testified that part of the instructions he gave to Sgt. Fay at approximately 6:19 p.m. or earlier in the evening on June 23 were to locate a crane. He stated that he subsequently asked Sgt. Fay why it had taken so long to order the crane. Insp. Jollymore indicated that Sgt. Fay responded by recounting the conversation during which the name of Millennium Crane was first mentioned, which – according to Insp. Jollymore's evidence – occurred *after* Cst. Cox had arrived in Elliot Lake.<sup>211</sup> Given that Cst. Cox did not arrive in Elliot Lake until almost 9 p.m., this evidence is totally inconsistent with Insp. Jollymore's testimony that he gave the order that a crane be obtained following his conversation with Cst. Cox at approximately 6:20 p.m.

The evidence relating to a 10:05 p.m. CCG meeting appears to confirm that Insp. Jollymore did not issue the order for a crane until after UCRT arrived in Elliot Lake. Insp. Jollymore confirmed that he spoke for the OPP at the meeting.<sup>212</sup> The notes from the CCG confirm the following information being provided by Insp. Jollymore in his update at the meeting: "Inquiries about a crane. Wants confirmation first before ordering."<sup>213</sup>

Under examination from Commission counsel, Insp. Jollymore indicated the following information about that notation:

Q. Is that a note of one of your comments during that meeting?

A. Yes. But I had already given instructions to order the crane prior to going in there, so –

Q. So this was –

A. So I don't know. I –

Q. Was it –

A. I can't speak to that. You know what? I really don't know how, the topic of the crane came up but before I went to that meeting Mr. Cox had already convinced me of the type of crane that was needed. So the instructions were given to make the order.

Q. So when they say "Confirmation first before ordering" you don't know what that means?

A. I don't – I don't know if that – there was a number of topics there about talking to the fire chief and how it was going to be deployed or the type of crane. There was some talk back and forth but I really – of all of those issues that we talked about.<sup>214</sup>

Mr. deBortoli could not recall what was meant or what he understood from the comment at the 10:05 p.m. meeting that Insp. Jollymore wanted confirmation before ordering the crane.<sup>215</sup> In any event, Cst. Cox was not advised when the crane was finally ordered.

### **11:15 p.m.: The crane is finally ordered**

Dave Selvers owns and operates Millennium Crane in Sault Ste. Marie – a company he founded in 2002. Before then, he had extensive experience in crane operation: from 1980 to 1991, he served as a hoisting engineer for various employers; from 1991 to 1994, he worked on the construction of a natural gas pipeline as a crane operator; and from 1994 to 2001, he worked for a company called All Canada Crane, managing its Northern Ontario operations. Mr. Selvers is certified as a hoisting engineer, a designation conferred by the provincial government to people proficient in the use of cranes. The process of becoming a certified hoisting engineer involves a 5,000 to 6,000-hour apprenticeship, which usually takes four to five years to complete.<sup>216</sup>

Before the Algo Mall collapse, Mr. Selvers had operated a crane in emergency situations. For example, he had been involved in situations where crane operations have been necessary to address train collisions and train derailments.<sup>217</sup>

Mr. Selvers testified that, before the collapse of the Algo Mall, he had worked with the OPP on numerous occasions, responding to highway traffic accidents when he was with All Canada Crane or with Millennium Crane. In fact, around 2011, he stated, a representative of the OPP contacted him to ask if he would be willing to be placed on a vital services directory. The OPP later contacted him to let him know that his name had been placed on the list and to confirm the accuracy of their contact information. He testified that, after being placed on the vital services directory, he received no further communication from the OPP.<sup>218</sup> Mr. Selvers had not previously worked with UCRT or with HUSAR/TF3.<sup>219</sup>

At approximately 3 p.m. on June 23, Mr. Selvers explained, he first heard about the collapse at the Mall. He testified that his girlfriend was watching the news and saw a report on the collapse. When his girlfriend said, “Maybe you’ll get a call,” he responded, “Well, I’ll keep the phone on. I’ll be waiting.”<sup>220</sup>

Mr. Selvers testified that he was first contacted by the OPP at 11:15 p.m. in a call from Sgt. Fay. The officer advised Mr. Selvers that he would probably need an 80-tonne-capacity crane. However, Mr. Selvers judged – from his own viewing of pictures he had seen in the media of the collapse zone – that he would need a larger crane, given the length of boom that would be required to access the collapse zone. As a result, Mr. Selvers took it upon himself to send a larger crane to Elliot Lake.<sup>221</sup>

After speaking with Sgt. Fay, Mr. Selvers began the process of mobilizing his crew and the necessary equipment. Given that it was after 11 p.m. on a Saturday night, his crew was dispersed, with many in the bush and out camping.<sup>222</sup>

Mr. Selvers testified that he tried to mobilize a team of 12 to 18 crew members to respond to this type of event. He said that the crew began to assemble at around 1 a.m. and that the equipment he brought with him included welding machines, torches, an assortment of steel, plenty of rigging equipment, and suspended work platforms. He stated that he loaded steel for the purpose of shoring up pillars and columns that might have been compromised in the collapse. He also brought cable lashings and pulleys, to have them available to attach to a leaning column to support it and prevent it from becoming further compromised.<sup>223</sup>

## Conclusion

I accept that Cst. Cox requested that a crane be ordered when he spoke with Sgt. Taylor at 5:30 p.m. I further accept that Cst. Cox directly requested that Insp. Jollymore order a crane when they spoke at 6:17 p.m. However, the crane was not ordered until 11:15 p.m.

On the totality of the evidence I have heard in connection with the ordering of the crane, I am of the opinion that Insp. Jollymore’s memory is – to put it mildly – hazy and imprecise. He appears to have inexplicably refrained from issuing the order to have the crane requisitioned, resulting in a five-hour delay. I discuss the consequences of that delay, both direct and indirect, later in this Report.

**On the totality of the evidence I have heard in connection with the ordering of the crane, I am of the opinion that Insp. Jollymore’s memory is – to put it mildly – hazy and imprecise. He appears to have inexplicably refrained from issuing the order to have the crane requisitioned, resulting in a five-hour delay.**

## 9 p.m.: The initial UCRT reconnaissance

In the discussion that took place at 6:17 p.m., Cst. Cox made other requests of Insp. Jollymore, including that an engineer attend and that the provision of lumber be arranged. Insp. Jollymore advised Cst. Cox that a structural engineer was en route from Sudbury, but Cst. Cox is not sure whether such an engineer ever attended at the scene.

Cst. Cox testified that a structural engineer would have been helpful for two reasons: to advise on the construction of the collapsed building, and to assist with the calculation of loads and weights to help rescuers in shoring the structure for safe operations.

In addition, Sgt. Gillespie testified that he also considered whether a structural engineer would be required. The matter was essentially put to rest when he was advised while en route to Elliot Lake that HUSAR/TF3 would attend with its engineer. UCRT relies on local engineers because it does not have its own on-call structural engineers.<sup>224</sup>

As a general matter from an operational perspective, Cst. Cox agreed with the role of an engineer described by Stephenson Engineering:

The primary responsibilities of the Structural Engineer are to determine stabilization requirements of a structure that are beyond the scope of the teams [sic] FOG [field operation guide] manual, and to monitor changes in the structure using measurement equipment. This measurement information is to be supplied to the team to aid in the team's risk assessment process. The Structural Engineer will not be required to make conclusions about the structures [sic] safety. It is understood that the structure is not safe. It has collapsed and may again for many reasons that would be impossible to predict. Therefore, the Structural Engineer's role is to suggest possible methods of shoring that may improve rescuers' safety.<sup>225</sup>

Insp. Jollymore provided the contact information for the local Rona store for the purpose of supplying the lumber for the emergency response.<sup>226</sup>

There was some communication between UCRT and HUSAR/TF3 as the two teams travelled to Elliot Lake. Sgt. Gillespie testified that he spoke with Capt. Tony Comella, the HUSAR/TF3 team leader from the Toronto Fire Department, two or three times, primarily to coordinate their activities and to ensure adequate access to supplies such as lumber.<sup>227</sup>

After Cst. Cox arrived in Elliot Lake, he wanted to be able to view the photographs that had been taken of the collapse site – to get a better understanding of the situation and to put a plan together. He reviewed – evidently for the first time – some of the photographs that Cst. Burns had taken of the collapse zone from the helicopter earlier in the evening.<sup>228</sup>

Cst. Cox testified that the other members of the UCRT team arrived between 9:00 and 9:30 p.m. on June 23. After his meeting with Insp. Jollymore, Cst. Cox identified a location for the other UCRT vehicles to set up their operations.<sup>229</sup>

Cst. Bailey arrived in Elliot Lake at 9:00 p.m. He was advised by a sergeant with the local OPP detachment that Cst. Cox had already arrived. He was also told that approximately 50 people were missing or unaccounted for. One of the local firefighters informed him that they had made possible communication with one victim who was trapped under the debris pile and that they could see the hand and the arm of another victim. Cst. Bailey spent the rest of the evening assisting UCRT to prepare its equipment.<sup>230</sup>

Cst. Cox testified that UCRT set up its equipment and vehicles in the parking area immediately to the south of the Foodland store. From there, as part of their initial reconnaissance, the UCRT team members began assessing the collapse area from the main entrance of the Mall. From that vantage point, they could see that pieces of the concrete slabs had fallen into the collapse area. Cst. Cox proceeded up to the second level of the Mall and looked into the collapse zone from its west side. He could see that the slabs which had fallen on the escalators were putting a lot of stress on the beam running underneath the escalators and supporting the second level. At that point, he decided that the main entrance of the building was not a safe access point.<sup>231</sup>

Subsequently, Cst. Cox and his team went onto the roof and viewed the hole from the west side of the collapse zone. There, he and his team attempted to assess the structure to ensure that it was safe to work in the area immediately around the collapse zone. They also tried to assess whether it was a good location in which to set up rope operations for the purpose of lowering people into the pile.<sup>232</sup>

Cst. Cox testified that his initial reconnaissance plan was to set up a rope operation to lower two members into the collapse zone from the roof. The lowering would take place from the west side of the hole in the roof. Cst. Cox explained that they would lower the members down with equipment including a LifeLocator device,

air-monitoring equipment, and cameras. In addition, these members would call out to the potential victims to see if they could hear any responses coming from the pile.<sup>233</sup>

Having devised his reconnaissance plan to this point, Cst. Cox returned to the main entrance of the building, where he met with Chief Officer and Dave Howse, a program specialist from the Emergency and Preparedness Response Unit of the Office of the Fire Marshal. Chief Officer advised Cst. Cox that the Elliot Lake Fire Department was there to assist UCRT and that the firefighters were going to be on standby.<sup>234</sup>

Cst. Cox explained his initial plan to Chief Officer and Mr. Howse. Shortly thereafter, Mr. Howse informed Cst. Cox that the Ministry of Labour was shutting down the UCRT operation until it assessed the structure. Cst. Cox believed that the Ministry of Labour could not shut down a rescue operation when there were still live victims who could possibly be rescued. He testified that, although he questioned whether the ministry had the authority to shut down a rescue, his team had not yet lowered anybody on the pile; there was nothing to stand down at that point. He stated that, within two to five minutes, he was advised by Mr. Howse that, in fact, no official order had been given by the ministry and that it was unclear where that information had come from.<sup>235</sup>

Cst. Cox also testified that Chief Officer agreed with the initial plan he had proposed.<sup>236</sup>

On the roof, at the same time as the rope operations were being set up, UCRT members, assisted by members of the Elliot Lake Fire Department, were working to provide portable lighting on the roof.

Sgt. Gillespie arrived in Elliot Lake at 11:35 p.m. He did not speak to Insp. Jollymore and did not know if a crane had been ordered.<sup>237</sup> He testified that, when he arrived, his first priority was to find out what was going on with his team. He learned that UCRT members were on the rooftop parking deck, so he went to that location to find out what they were doing. Sgt. Gillespie explained that when he arrived, he could see the collapsed support beam that was hanging on an angle. It appeared to him to be so rusted that it looked as though it had been “sitting outside for 20 years.” He took photos of the scene and sent them to Capt. Comella. Sgt. Gillespie attempted to keep Capt. Comella informed as much as possible so that HUSAR/TF3 would be aware of what the UCRT team had been doing. He also spoke with local firefighters to gain intelligence from them about the nature of the emergency. Sgt. Gillespie testified that he was told by the firefighters that there had been some sort of verbal communication with a victim, and they identified where they thought that victim was. He further testified that the firefighters indicated an area around phone booths, in the food court area, where they believed a second person to be deceased.<sup>238</sup>



**Figure 2.3.8 UCRT members set up portable lighting on the roof of the Mall**

Source Exhibit 7925

Sgt. Gillespie testified that UCRT team members were planning to rappel down on the pile. He said he could see widow-makers (precariously hanging concrete that could fall at any moment) overhanging the collapse zone. He said he was not comfortable with the idea of team members rappelling down on the pile because there was limited access to, and egress from, the collapsed zone. If the building became unstable, there would be no way out. He was also concerned because he did not have a sense about the overall stability of the building. As a result, he wanted to get an assessment of the building before putting any of his team members into the collapse zone without a more certain escape route. He therefore ordered the team members to deploy a thermal camera in the hope of detecting a living person. Sgt. Gillespie testified that, as he expected, the thermal camera gave negative results because it had been only a few hours since the collapse. The fallen material would still have been emitting heat absorbed over the course of a warm summer's day. He stated that he also deployed air-monitoring equipment to identify any hazardous gases.<sup>239</sup>

When Cst. Cox formulated his plan, he did not factor the members of HUSAR/TF3 into the equation. His plan was a continuation of the initial reconnaissance.<sup>240</sup> He testified that he did not know if HUSAR/TF3 knew that UCRT had requested a crane.<sup>241</sup>

### 11 p.m.: The perimeter is secure

Insp. Jollymore stated he was satisfied that the perimeter of the Mall was secure by 11:00 p.m. He testified that one complication was the difficulty in securing the wooded area to the west of the Mall.<sup>242</sup> He estimated that, by approximately 11 p.m., he had close to 20 officers on site.<sup>243</sup>

### Insp. Jollymore establishes a missing persons list and a command post at the Collins Hall

Insp. Jollymore testified that another central component of his responsibilities was to identify who was in the building at the time of the collapse and to create a list of people who might be missing or still inside. He stated that the people who were in the Mall had to be accounted for, and that it was the OPP's responsibility to attempt to identify them.<sup>244</sup>

**Insp. Jollymore testified that another central component of his responsibilities was to identify who was in the building at the time of the collapse and to create a list of people who might be missing or still inside.**

In his testimony, Insp. Jollymore said that he approached the municipality and suggested that the Collins Hall, a short distance from the Mall, be set up to serve as a place for family members of victims or possible victims to gather, along with other people from the community. Victim support services would be available there. In addition, Insp. Jollymore assigned officers to that site to manage the missing persons list.<sup>245</sup>

Robin Kerr is the director of Victims Services of Algoma, a program indirectly funded by the Ministry of the Attorney General whose jurisdiction coincides with that of the East Algoma detachment of the OPP. She first learned of the

Mall collapse from one of the organization's volunteers in Elliot Lake at approximately 3:00 p.m. The organization will not deploy unless it is requested by the OPP. At 4:00 p.m., the OPP requested its assistance through the Communications Centre in North Bay. At that time, Victims Services had six volunteers who could respond to this deployment. Ms. Kerr herself arrived in Elliot Lake and went to the Collins Hall at 7 p.m.<sup>246</sup>

Insp. Jollymore made a point, on June 23, of trying to go to the Collins Hall to give additional information to the people who had gathered there. He testified that he did not provide a lot of updates, but at least he or one of his officers would be there from time to time so that the people in the Collins Hall could talk to them.<sup>247</sup>



The missing persons list was constantly updated with information coming in to the OPP Communications Centre, identifying people who might have been in the Mall when it collapsed. In fact, Insp. Jollymore testified, it included people whose names had been called in but who were not even in Elliot Lake that weekend. At one point, the list had more than 100 names.<sup>248</sup> He stated that the names of Lucie Aylwin and Doloris Perizzolo were on the list from the very beginning – and remained there throughout the rescue operation.<sup>249</sup>

## The Office of the Fire Marshal and the Provincial Emergency Operations Centre

Earlier in this Report, I described the roles of the Office of the Fire Marshal (OFM) and the Provincial Emergency Operations Centre (PEOC) in the context of an evolving emergency response. I now turn to the role they played during the early stages of deployment and rescue. The PEOC is supposed to be the first point of contact for a local mayor who is declaring an emergency, or for a local fire chief who is seeking provincial assistance. The centre then contacts the operations manager of the OFM's Emergency Preparedness and Response Unit. This unit becomes the liaison with the local fire chief to discuss needs and to activate the appropriate response. It keeps the PEOC, and thereby the commissioner of community safety and others within the government apparatus, apprised of developments on the ground.<sup>250</sup>

The situation did not unfold in exactly this manner in Elliot Lake, but the result was essentially the same. The PEOC was made aware of the Mall collapse, and the Emergency Preparedness and Response Unit was quickly engaged.

### 3:26 p.m.: Chief Officer requests HUSAR/TF3 assistance

As discussed earlier, Chief Paul Officer did not contact the PEOC when he realized he needed heavy search and rescue capabilities. His notes state that at approximately 3 p.m. on Saturday, June 23, he instead tried contacting Bob Thorpe, who was a fire protection adviser with the Northeast Region of the Office of the Fire Marshal (the area encompassing Elliot Lake).<sup>251</sup> He eventually reached Mr. Thorpe at 3:26 p.m. and requested HUSAR/TF3 assistance. Following conversations with Mr. Thorpe, Chief Officer also asked his fire department dispatch to contact the PEOC to request the activation of HUSAR/TF3, even though Mr. Thorpe had told him the declaration of emergency was still necessary. Chief Officer's notes for 3:45 p.m. read as follows: "Through the calls from the OFM we were advised that the mayor will have to declare an Emergency. OFM are already moving on it anyway."<sup>252</sup>

Chief Officer agreed in testimony that the normal protocol was to contact the PEOC first. He did not do so because he thought the PEOC required a declaration of emergency before a HUSAR/TF3 team could be activated.<sup>253</sup> Not knowing how long it would take for the City of Elliot Lake to declare an emergency, Chief Officer contacted Mr. Thorpe in the meantime to have him "work the back channels."<sup>254</sup>

Once contacted, Mr. Thorpe worked through a checklist of questions with Chief Officer, including whether there had been an explosion. Chief Officer did his best to answer all the questions and then was assured by Mr. Thorpe that he would indeed work the back channels to speed up deployment of a HUSAR/TF3 team.<sup>255</sup> Mr. Thorpe conveyed Chief Officer's request up the chain. It quickly reached Carol-Lynn Chambers, the operations manager with the OFM's Emergency Preparedness and Response Unit.

### 3:36 p.m.: Province swings into action

Ms. Chambers was no stranger to the emergency response milieu. From 1992 to 2002, she held a number of positions in fire protection, including deputy fire chief for the City of London, Ontario. She joined the Ontario public service in 2002. From March 2003 to April 2006, she was operations manager of the Strategic Development Unit, Fire Protection Services, within the Office of the Fire Marshal. From April 2006 to August 2010, she was operations manager with the Emergency Preparedness and Strategic Development Unit. In February 2012, she became operations manager at the OFM's Emergency Preparedness and Response Unit (EPRU) – the position she held at the time of the collapse.<sup>256</sup>

Ms. Chambers explained her responsibilities as operations manager during an emergency. She is on-call and available 24 hours a day on a rotating basis with another individual, based in Toronto, ready to respond to requests for assistance from municipal fire departments. The typical assistance she would offer would be in the area of CBRNE (chemical, biological, radiological, nuclear, and explosives) and HUSAR/TF3 services. She is the person responsible for coordinating the provincial CBRNE and HUSAR/TF3 teams. She assesses the needs and the resources sought and, through the PEOC, deploys the necessary teams.<sup>257</sup> In addition, her role includes assisting HUSAR/TF3 with logistics and peripheral support.<sup>258</sup>

Ms. Chambers had four program specialists on staff with the EPRU and available to deploy. These specialists play a liaison role during a local emergency and provide support in areas such as the acquisition of additional equipment available through the OFM. They are not meant to provide operational assistance or be intimately involved with the operation itself. They are, instead, the link between the OFM and the emergency response scene, reporting back to Ms. Chambers in real time.<sup>259</sup>

Since 2006, Ms. Chambers has responded to approximately 60 requests for assistance from local fire departments for various types of incidents. She has also participated in most of the HUSAR/TF3 exercises, five or six in total since 2006. She has extensive Incident Management System (IMS) training, along with training in the command structures used in the firefighting milieu, similar but not identical to IMS.<sup>260</sup>

Mr. Thorpe did not communicate directly with Ms. Chambers. Instead, he appears first to have contacted Art Booth (regional manager for the OFM's Northeast Region). At 3:36 p.m., Mr. Booth, in turn, sent an email to Ms. Chambers with the following information:

Elliot lake [sic] is reporting a mall collapse Chief requesting assistance Husar  
Bob Thorpe is on his way  
District coordinator informed  
Injuries and numbers of trapped unknown.<sup>261</sup>

Ms. Chambers acknowledged this email at 3:40 p.m., noting that no request had yet come to her from the PEOC. She nevertheless requested Chief Officer's contact information and said she would also advise UCRT: "Acknowledged. No request from PEOC. Pls provide Chief's contact information for details, Art. Will also advise UCRT."<sup>262</sup> In short, even without a formal request from PEOC, Ms. Chambers took the next step, which was to contact the local fire chief for more information.

Ms. Chambers agreed that this process was unusual because she was hearing about the need for HUSAR/TF3 directly from the field, and not through PEOC. It was also coming to her by email, instead of by phone.<sup>263</sup>

Ms. Chambers, who was visiting her sister at the time, started a sequence of calls, as she had done at least 60 times before. Within a short period she had spoken to or contacted a number of people, including Chief Officer, the PEOC, the OPP duty officer, UCRT's Sgt. Gillespie, and HUSAR/TF3. She wrote the following email at 3:55 p.m.:

Spoke with Bob Thorpe who is en route. Spoke to Paul Officer (Chief) rep who indicates persons trapped, still assessing. Contacted Toronto HUSAR via Comms to notify and request deployment availability and standup time. Contacted OPP Duty Office. UCRT is en route at this time ETA 8-9 hours per duty officer. Left message with UCRT lead Sgt Gillespie on cell to contact to coordinate re TO HUSAR.

Standby<sup>264</sup>

Ms. Chambers indicated that the request for a stand-up time from HUSAR/TF3 was essentially to find out how quickly it could deploy – it was a preliminary step in notifying the team of the incident and the potential need for its assistance.<sup>265</sup> However, it was clearly her intention at this point that the unit would deploy. So, too, would UCRT. She was therefore playing the additional role of conduit between both groups.<sup>266</sup>

Ms. Chambers addressed the email to Trevor Bain (executive officer for the Fire Marshal), Shayne Mintz (assistant deputy fire marshal), and Mr. Booth. She also copied Dave Howse, who was the on-call program specialist from her own Emergency Preparedness and Response Unit at the time. By 4:10 p.m., Ms. Chambers had also deployed Mr. Howse (by phone) in order to ensure an EPRU response and presence in Elliot Lake – in keeping with the standard procedure.<sup>267</sup>

In short order, then, Ms. Chambers had deployed two OFM staff to the scene, with a third to follow soon after. The first was Mr. Thorpe, sent to monitor and report to her, and to offer assistance to Chief Officer, whom he knew from previous encounters. Mr. Thorpe would assist Chief Officer with many things, including putting the mutual aid assistance into place. Mr. Howse, as a program specialist, was sent to liaise with Mr. Thorpe but also to serve as a liaison between HUSAR/TF3 and the EPRU. Mr. Howse was to assist HUSAR/TF3 with the acquisition of additional equipment, such as lumber and respirators, and with other needs.<sup>268</sup>

Shortly after 4 p.m., the PEOC received the City of Elliot Lake's official declaration of emergency. HUSAR/TF3 already knew its services would be needed.<sup>269</sup>

Shortly after 4 p.m., the PEOC received the City of Elliot Lake's official declaration of emergency. HUSAR/TF3 already knew its services would be needed.

At 4:41 p.m, Dan Hefkey, the commissioner for community safety at the Ministry of Community Safety and Correctional Services, received a call from the duty operations chief at PEOC and was provided with information about the situation in Elliot Lake.<sup>270</sup> At 4:42 p.m., he gave verbal authorization for HUSAR/TF3 deployment. News of the approval was sent at 4:51 p.m. by PEOC to Ms. Chambers. At this stage, it was merely a confirmation of the process Ms. Chambers had already set in motion. Normally, the approval would come first and then HUSAR/TF3 would be deployed, but in this instance Ms. Chambers had expedited it, based on her understanding and experience that there would be no hesitation to approve the deployment at Mr. Hefkey's end.<sup>271</sup>

Ms. Chambers continued to play the role of information quarterback. She spoke to Chief Officer and, at 5 p.m., provided an update on the situation in Elliot Lake to a number of people, now including Ted Wieclawek, the fire marshal, and UCRT's Sgt. Gillespie:

Spoke with Fire Chief Officer confirming OPP UCRT are attending and TO HUSAR responding with as many [as] can muster immediately based on sitrep (from OPP and TO HUSAR). Chief Officer confirms a 30 x 60 ft area of collapse with one confirmed patient not accessible. Structural concerns per Chief Building Official on scene (1<sup>st</sup> floor slab hanging, 1 beam of concern).

Standby for further sitreps as info becomes available\*

At 5:18 p.m., Ms. Chambers provided an additional update to Messrs. Mintz and Bain and the fire marshal, along with others in the OFM including Messrs. Howse and Thorpe. Added to the list was Dan Newburn, who would be the third staff person from the OFM to deploy to Elliot Lake. In addition to speaking to Chief Officer, Ms. Chambers spoke by phone to the OPP UCRT team lead, HUSAR/TF3 team lead, Toronto Fire Services "Comms," and the PEOC. She then sent the following message, typical of how she would report up the chain within her department:

Commercial mall 30 x 60 area affected. 1 confirmed patient, currently inaccessible per FC Officer (Elliot Lake).

TO HUSAR contacted via TO Comms and put on notice for deployment.

OPP UCRT responding 8–9 hrs out from deployment time. 10 members plus 2 medics. Requesting TO HUSAR support.

TO HUSAR confirms response with available personnel # TBA per Staff Insp Neadles as confirmed with TFS Chief Jenkins and Team Lead Comella.

Declaration of emergency received confirming request for HUSAR.

OFM staff responding: Thorpe, Howse, Newburn

...

Further info to follow as received. Continuing to monitor.<sup>272</sup>

Ms. Chambers also liaised with HUSAR/TF3's Staff Insp. Neadles. At 5:25 p.m., she wrote to him to get an estimate of how many members would deploy and the "wheels-up" time of departure. At 5:31 p.m., she wrote to him again, with a description of the collapse scene: "FC [Chief Officer] says 30 x 60 area involved. Lots of concrete. 1 person suspected viable but not accessible. 2nd potential."<sup>273</sup> With this message, Ms. Chambers was providing Staff Insp. Neadles, still in Toronto, with his first bit of detailed information about the collapse site and victims.<sup>274</sup>

At 6:08 p.m., the PEOC released its first Emergency Information Notification about the collapse. It was sent out by the duty operations officer to the people on the Emergency Management Ontario listserv – a list internal to the government and meant to inform those who needed to be involved in or aware of the emergency situation. While the notification did provide information about the Elliot Lake response, it was more of a general nature and clearly not intended as a guide to rescue workers on the ground and those assisting them. The notification read as follows:

.....

\* Exhibit 6441. Around this time, Ms. Chambers sent the same update to Pierre Yelle, who was the on-call manager for a different unit within the Office of the Fire Marshal. Ms. Chambers foresaw that the Elliot Lake deployment would be lengthy, and she kept him informed because she would likely need his assistance. Ultimately, Mr. Yelle did cover for her while she rested: Exhibit 6443; Chambers testimony, September 18, 2013, pp. 26109–10.

**Description of Threat/Event:**

At 2012-06-23 1509 the PEOC was advised of a structural collapse that had occurred at approximately 2012-06-23 1415 involving the roof of a three storey shopping mall ('Eastwood Mall') located at 151 Ontario Street in Elliot Lake. At least one person is trapped in the debris. Although other people have been injured, current reports indicate these individuals are mobile and their treatment is within the capacity of local medical services.

**Source of Reporting:**

- Elliot Lake Fire
- OFM
- OPP

**Current Actions:**

- Local Police, Fire and EMS have responded to the scene.
- The community has declared an emergency and formally requested HUSAR assistance. This request has received Provincial approval.
- OFM EPSD is currently liaising directly with Toronto Fire Service regarding deployment of HUSAR resources in support of this event. Toronto HUSAR deployment plan currently in process. Specific details and ETA to follow.
- OPP UCERT is deploying 10 members and 2 medics from Bolton to Elliot Lake (ETA approximately 2012-06-24 0000)
- OFM is deploying 3 members to the scene (first ETA approximately 2012-06-23 1730).

**Initial Analysis/Assessment**

- All stakeholders are actively engaged in providing an appropriate level of response as quickly as possible.
- The PEOC continues to closely monitor the situation should there be additional requests for Provincial support.<sup>275</sup>

The PEOC would continue to send out notifications of this type at regular intervals throughout the emergency response. These notifications clearly served to keep concerned people within the government apparatus informed of developments, but I saw no evidence to indicate that they were of any practical assistance in keeping rescue workers at, or heading to, the scene informed. Again, Ms. Chambers appeared to play the most active role in keeping those parties informed in real time of events on the ground in Elliot Lake, at least during the early stages of deployment.

At 6:17 p.m., Ms. Chambers and others with the OFM were aware that Chief Officer had pulled his firefighters off the pile. Mr. Thorpe sent an email stating: "Update ... due to unsafe conditions of the structure all responders are evacuating the building. There is one confirmed VSA [vital signs absent]."<sup>276</sup>

Mr. Thorpe was also present at the 6:30 p.m. Community Control Group meeting in Elliot Lake that day. He was the first provincial attendee.<sup>277</sup> He reported back to Ms. Chambers at 7:36 p.m. on the results of the meeting, advising that the operations would be suspended until the arrival of both HUSAR/TF3 and a structural engineer to assess the structural integrity of the building. He added that nine people were unaccounted for and that 17 had reported to the hospital emergency department.<sup>278</sup>

At the same time, Ms. Chambers again acted as a conduit of information between HUSAR/TF3 and UCRT. She sent an email to Staff Insp. Neadles following a conversation with Sgt. Gillespie:

10-4. Just spoke to Jamie Gillespie from the OPP UCRT. Based on their sitrep, most urgent need is a structural engineer which they don't have in Elliot Lake, a heavy crane for removing the large slab(s), and a relief crew from TO HUSAR early morning. He and I agree that best to send what you have now, with that in mind, rather than await 65 or 70 which could delay any response. Wheels up time?<sup>279</sup>

Staff Insp. Neadles had just conveyed to Ms. Chambers that the team had about 34 members ready to go. Following Ms. Chambers's suggestion that the team deploy with those numbers, Staff Insp. Neadles immediately wrote back to say that members were loading the tractor trailers and aiming for an 8:30 p.m. departure.<sup>280</sup> Ms. Chambers soon learned that HUSAR/TF3 was bringing its own engineer, and abandoned efforts to find one elsewhere.<sup>281</sup> At 7:42 p.m., she also conveyed the news of the departure time to Mr. Thorpe and Mr. Howse and even suggested to them that OFM might assist with local inquiries for a crane, given the information she had that Sgt. Gillespie was anticipating the need for one.<sup>282</sup>

At 7:57 p.m., Ms. Chambers wrote to Sgt. Gillespie, copying Staff Insp. Neadles. She advised UCRT of HUSAR/TF3's departure time, and also of the fact that Messrs. Thorpe and Newburn had arrived at the scene and were providing local liaison. Mr. Howse was en route with additional radios and lighting. She also provided Sgt. Gillespie with photos of the scene taken by Mr. Thorpe.<sup>283</sup>

At 8:22 p.m., Insp. Neadles wrote to Ms. Chambers to say that "wheels up" time had been pushed back another 30 to 60 minutes because of a delay with the tractor.<sup>284</sup>

At approximately 8:30 p.m., Ms. Chambers spoke to Chief Officer at the scene. Although he had pulled his firefighters from the scene for safety reasons, he wanted to do all he could for anyone who was trapped. Ms. Chambers said she would put him in direct contact with UCRT's Sgt. Gillespie.<sup>285</sup>

At 9:15 p.m., Ms. Chambers sent a detailed update to people within the OFM and the PEOC, and to Sgt. Gillespie at UCRT. The message included reference to the fact that Mr. Thorpe was finalizing accommodation for the teams that were en route<sup>286</sup> and also looking into the provision of meals. These arrangements were part of Ms. Chambers's responsibilities at the OFM, so that the rescue workers could focus on operations.<sup>287</sup>

By the time of the Community Control Group meeting at 10:05 p.m., the Office of the Fire Marshal was well represented. Messrs. Newburn, Howse, and Thorpe were all present.<sup>288</sup>

At 11:16 p.m., Ms. Chambers sent another internal update to the OFM. At 11:31 p.m., she forwarded it to Sgt. Gillespie and Staff Insp. Neadles. The update indicated, among other things, that UCRT was now on scene with 13 members and was either in the process of being briefed, or had been briefed, by the Elliot Lake Fire Department incident commander.<sup>289</sup>

Ms. Chambers continued to be the main source of information for Staff Insp. Neadles, who told the Commission that, up to this point (11:16 p.m. on June 23), he had not had contact with Sgt. Gillespie except indirectly through her.<sup>290</sup>

At 11:35 p.m., Mr. Neadles wrote to Ms. Chambers asking her for more pictures and floor-plan drawings. Ms. Chambers forwarded the request to Messrs. Howse and Thorpe. She also told them to convey locally that HUSAR's estimated time of arrival was now 4 a.m.<sup>291</sup>

A short time later, Ms. Chambers interacted with Staff Insp. Neadles and OFM staff about the role of the Ministry of Labour at the rescue site. I discuss that issue later in the chapter.

The preceding paragraphs have described the important role of the Office of the Fire Marshal, and in particular of Ms. Chambers, as a liaison between provincial resources and the local response during an emergency. I find the OFM's involvement to have been efficient, focused, and useful.

I am somewhat troubled by the fact that Chief Officer felt he could not contact the PEOC to request HUSAR/TF3 services until the City of Elliot Lake formally declared an emergency. In this instance, it was not important because Ms. Chambers facilitated the process and no time was lost. I worry, though, that this requirement might cause unnecessary delay and confusion during future missions. It should be made clear to local emergency responders that they should never hesitate to send the request to the PEOC, even if a formal declaration of emergency has not yet been issued.

There is little to say about the role of the PEOC as an information conduit.

That role appears to me to be higher level, of assistance to the larger government infrastructure but not to the rescuers at the scene.

The preceding paragraphs have described the important role of the Office of the Fire Marshal, and in particular of Ms. Chambers, as a liaison between provincial resources and the local response during an emergency. I find the OFM's involvement to have been efficient, focused, and useful.

## Ministry of Labour deployment to the rescue scene

### 6:40 p.m.: Ministry of Labour sends a structural engineer to Elliot Lake to provide assistance

At 4:35 p.m., Mr. Hefkey spoke to Sophie Dennis, an assistant deputy minister with the Ministry of Labour (MOL). He informed her of the structural collapse, that some people had been injured, and that others, possibly, were still trapped. He told her it might be wise to have a member of her staff go to Elliot Lake.<sup>292</sup> At the time, Mr. Hefkey's only expectation was that the MOL worker would investigate the circumstances leading to injury. He did not suggest that Ms. Dennis send a structural engineer.<sup>293</sup>

At 5:03 p.m., the Premier's Office also contacted the Ministry of Labour. Fahim Kaderdina, the chief of staff,<sup>294</sup> and another individual from the ministry were copied on email correspondence about the collapse and the response.<sup>295</sup> Mr. Kaderdina wrote to John O'Leary of the Premier's Office at 5:34 p.m., saying: "First responders call in MOL when necessary. Right now, no MOL presence on site. Will let you know if that changes."<sup>296</sup>

At 5:46 p.m. on June 23, Ms. Dennis contacted Roger Jeffreys, the provincial engineer with the ministry.<sup>297</sup> She told him there had been a mall collapse in Elliot Lake, someone was trapped under the rubble, and a structural engineer was needed.<sup>298</sup>

Mr. Jeffreys called all four of the MOL structural engineers available in Ontario. He had difficulty reaching any of them: MOL engineers are not on call, nor are they paid overtime. He called an engineer in Brampton, who did not answer. Another was on vacation. A third was busy investigating a stage collapse causing death. The fourth, Brian Sanders,\* from London, did call him back, but was not immediately available because of family commitments. He said he would go to Elliot Lake the following day.<sup>299</sup>

• • • • •

\* I also discuss Mr. Sanders's qualifications in the next section. Mr. Sanders went to Elliot Lake the following day: Sanders testimony, October 4, 2013, pp. 28277–80.

Ms. Dennis had not initially provided specifics on what she expected the structural engineer to do at the scene of the collapse. Mr. Jeffreys thought the structural engineer was needed only to assist MOL inspectors with an investigation into the cause of the collapse and the injuries. However, when he called Ms. Dennis back at 6:40 p.m. to say that he was the only engineer available to deploy, he received what he described as “very unusual” instructions. Ms. Dennis told him to go to Elliot Lake and provide whatever assistance he could:

... So I called Ms. Dennis back and explained there was no structural engineers available except myself.

I told her she was scraping under the barrel, and I said I don’t usually go to the field. In fact, my manager doesn’t want me in the field, and her instruction was [for] me to go. And she said something very unusual. She said, “I want you to go. I want you to sister up with the organizations that are there, and I want you to give them whatever help you can.”<sup>300</sup>

Mr. Jeffreys therefore understood he was going to Elliot Lake not for enforcement of the *Occupational Health and Safety Act* but to assist in his capacity as a structural engineer. He did not question the order. From his point of view, human lives were at stake, and he had been asked to help.<sup>301</sup>

Mr. Jeffreys was in Brantford when he received the call. He did not leave Brantford until approximately 7 p.m. on June 23.<sup>302</sup> He arrived at the Elliot Lake OPP detachment at 12:30 a.m. on June 24, where he met with two Ministry of Labour inspectors and went to the collapse site.<sup>303</sup>

## 6 p.m. and 7:15 p.m.: Ministry of Labour inspectors are sent to Elliot Lake to investigate the collapse and the missing workers

At 5:35 p.m., Martinette Venter, the owner of the Shoppers Drug Mart in Elliot Lake and the lottery ticket kiosk where Ms. Aylwin worked in the Mall, called the MOL to report that a worker (Lucie Aylwin) was missing.<sup>304</sup> Employers are required under the *Occupational Health and Safety Act* to report fatalities and critical injuries. An inspector is then dispatched to the scene to gather information and begin an investigation into the cause. Donald Jones and Michel Lacroix were the inspectors dispatched in response to this call.\*

Mr. Jones was contacted around 6 p.m. on June 23 by Don Jewett, the MOL regional manager. He was asked to go to Elliot Lake because there had been a partial collapse of a mall, but was not given specific instructions on what to do. The MOL investigates occurrences such as this one, and he felt he knew what to look for. However, he had never been to a structural collapse similar to the Elliot Lake Mall collapse, and he did not know what he would be facing on arrival.<sup>305</sup>

Mr. Lacroix was contacted by the same regional manager who contacted Mr. Jones, at approximately 7:15 p.m. Mr. Lacroix did not receive any particular instructions, other than to assist Mr. Jones with the investigation. He understood there was one fatality and that he was going to Elliot Lake to investigate the root cause of the collapse. He was not told that he would attend the scene to oversee or participate in a rescue operation. From his point of view, he was doing what he typically did – deploying in short order to the scene of a fatality at a workplace.<sup>306</sup>

Although it seems that the genesis for the deployment of the two inspectors was the call from Ms. Aylwin’s employer, Messrs. Jones and Lacroix were soon aware that Mr. Jeffreys had also been dispatched. The inspectors were instructed to go to the OPP station in Elliot Lake and wait for him there.†

.....

\* Jones testimony, September 26, 2013, pp. 27428–9. I discuss the background and credentials of these individuals in the next section.

† Exhibit 6385; Lacroix testimony, October 3, 2013, pp. 27963–9. Interestingly, Ed Hudson, the MOL inspector who had inspected the Mall in the months before the collapse, was the inspector actually responsible for the Elliot Lake region and on call that day. According to Mr. Lacroix, Mr. Jewett had contacted Mr. Hudson but, because he was about to retire, Mr. Hudson asked that someone else be assigned: Lacroix testimony, October 3, 2013, pp. 28030–1.



Messrs. Jones and Lacroix arrived in Elliot Lake at approximately 10:30 p.m. and went to the OPP detachment as planned.<sup>307</sup> They waited there for Mr. Jeffreys, as instructed, and did not go directly to the scene of the collapse.<sup>308</sup>

## Ministry of Labour confusion about its role at the scene of a rescue

In this section, I discuss the background and qualifications of the Ministry of Labour staff deployed to the collapse, the role of provincial and regional engineers within the MOL, and the understanding the MOL engineers and inspectors who went to Elliot Lake had about their respective roles at the scene of an ongoing rescue. This latter question was the source of much confusion, both for the ministry staff deployed and for the rescue workers at the scene.

### Background and responsibilities of the MOL engineers

Mr. Jeffreys graduated from Queen's University in 1966 with a bachelor's degree in applied science and a specialization in civil engineering, a subset of which included structural engineering. He had a long career in the private sector before joining the MOL. From 1966 to 1970, he worked for a company doing structural design work. From 1970 to 1987, he worked first for General Electric and then for Atomic Energy of Canada Limited (AECL) at a heavy-water manufacturing plant in Cape Breton. He held numerous positions over the years, starting out as a project and commission engineer, then head of planning, manager of engineering and maintenance, operations manager, and, finally, general manager of the entire plant.<sup>309</sup>

Mr. Jeffreys's work with AECL involved structural engineering on a continuous basis until the late 1970s, including structural design and structural assessment (looking at why buildings failed). He was sent on one occasion to look at a 500-foot flare tower to examine a structural failure and determine how workers could safely carry out repairs. On another occasion, he assessed damage to a collapsed tower. With the help of confined-space rescuers, he tunnelled down 6 to 7.5 metres into the rubble to assess the situation and develop a plan for safe repair. Structural engineering continued to be relevant to his work in managerial positions at the plant. For a period of time, he was responsible for approving structural design and maintenance engineering work, including rigging, in a work environment containing highly toxic, flammable, and potentially explosive substances. As he put it: "[E]verything had to be done precisely, including the removal of every piece of maintenance equipment in that plant."<sup>310</sup> In short, Mr. Jeffreys, at least in the early part of his career, was no stranger to structural engineering and associated safety issues, including working together with rescuers, using cranes, and overseeing engineered procedures to move heavy equipment.<sup>311</sup>

Mr. Jeffreys left AECL in 1987. He worked first as a plant manager and then ran his own business from 1990 to 2004 as a management and engineering consultant. This period of his career involved very little structural engineering work, other than a certain amount of demolition consulting early on.<sup>312</sup>

In December 2004, Mr. Jeffreys joined the Ministry of Labour as an occupational health and safety inspector. He worked in that capacity for three years until, in 2007, he was promoted to the position of regional engineer. In 2010, Mr. Jeffreys became the provincial engineer.<sup>313</sup> In his testimony, he explained that regional engineers are allocated to the various regions in Ontario. When he held this position, he covered the area west of Mississauga and part of southern Ontario. However, because there were only three structural engineers in the ministry for the whole province, he would often be asked to deploy to other areas. The other regional engineers had mechanical, chemical, and mining specializations.<sup>314</sup>

**When Mr. Jeffreys held this position, he covered the area west of Mississauga and part of southern Ontario. However, because there were only three structural engineers in the ministry for the whole province, he would often be asked to deploy to other areas.**

As a regional engineer, with his specialty in structural engineering, Mr. Jeffreys's duties usually involved assisting MOL inspectors who, after inspecting a workplace, felt they had identified and required assistance with assessing a structural issue. Mr. Jeffreys would be called to the workplace in question to determine whether the structural issue was significant and created safety concerns. He might also attend in response to a collapse, such as one occurring during the construction process. In these instances, he explained, if he identified a safety issue for the future, he would require an engineering plan to make the area safe again and assess the reasonableness of the proposed plan. During his time as regional engineer, he visited close to 100 structures that had collapsed or were in the process of collapsing, or about which the inspectors were concerned.<sup>315</sup>

Mr. Jeffreys explained that MOL engineers are designated inspectors and have the same powers as an inspector under the *Occupational Health and Safety Act*. The engineers do not tend to issue orders, though some of the MOL mining engineers in the North inspect the mines themselves and do issue orders. Typically, however, engineers

accompany the inspectors, who issue the orders. One reason is that engineers are limited in number and do not usually have the time to follow up on compliance and paperwork, as an inspector would.<sup>316</sup>

Mr. Jeffreys explained that MOL engineers are designated inspectors and have the same powers as an inspector under the *Occupational Health and Safety Act*.

In April 2010, Mr. Jeffreys became the provincial engineer and continued to hold that position at the time of testimony. The province has one provincial engineer, whose functions include the coordination of the activities of the regional engineers in the province, training, preparation of documentation, and the creation of a uniform approach to engineering matters. The provincial engineer's office also prepares guidelines for workplaces and for the public, and prepares engineering data sheets and answers to technical questions for the various

engineering programs: mining, construction, industrial, and health care. Although the role of the provincial engineer on paper is chiefly supervisory, in practice Mr. Jeffreys has gone out into the field on occasion, to mentor and train but also, as occurred in Elliot Lake, for actual field work.<sup>317</sup>

The other MOL engineer to go to the Algo Mall collapse was Brian Sanders. He graduated from the University of Western Ontario in 2001 with a bachelor of engineering, majoring in civil engineering with a structural option. He has been a professional engineer since 2005. He worked for a structural engineering firm on industrial, commercial, and agricultural buildings for two years. He then joined an engineering consulting firm, again in the field of structural engineering, for approximately seven more years. He joined the Ministry of Labour as a regional engineer in the western region in 2009. At the time of the collapse, he was one of only four MOL structural engineers.\*

Before his involvement at Elliot Lake, Mr. Sanders had investigated about a dozen collapsed buildings.<sup>318</sup>

### Background and responsibilities of the Ministry of Labour inspectors

Mr. Jones was an industrial inspector. Before joining the MOL, he worked in maintenance at a steel mill in conjunction with millwrights, riggers, ironworkers, and welders.<sup>319</sup>

Mr. Lacroix was also an industrial inspector, but cross-trained for the construction milieu. He joined the ministry in 2004. His previous experience included work as an electrician with Algoma Steel in Sault Ste. Marie from 1979 to 1987.<sup>320</sup>

• • • • •

\* Sanders testimony, October 4, 2013, pp. 28268–70. Mr. Sanders told the Commission that the ministry was currently in the process of hiring more structural engineers.

As industrial inspectors, Messrs. Lacroix and Jones were responsible for all workplaces, with the exception of construction projects, new construction demolition, and mine sites. As Mr. Lacroix put it, they inspected a wide variety of workplaces in the province, large and small, including “corner stores, schools, retail stores, factories, tool mills, steel plants, paper mills, [and] hospitals.”<sup>321</sup>

### **MOL engineers expressed uncertainty about their role during rescue and recovery operations**

Mr. Jeffreys had never before received training on safe rescues in a collapse situation, nor had he ever trained with HUSAR/TF3 or UCRT before his involvement in Elliot Lake. He had, however, worked with UCRT on a previous occasion when he was asked to assist during the response to the 2011 Woodstock fire and explosion. He had also been involved in an incident where rescue workers were looking to recover a body from a collapsed building, and his advice had been sought and provided.

Mr. Jeffreys told the Commission that, while it happens, it is not typical for MOL inspectors and engineers to be present at a rescue or recovery operation in a collapsed structure. The victims have usually been removed before the MOL staff arrive, and the scene has usually been turned over to the coroner. It does happen on occasion that the MOL staff arrive and the victim is still inside. In such an instance, Mr. Jeffreys felt that the MOL engineer’s primary role was to assist the overall MOL investigation. In the past, however, he has gone the extra step and provided suggestions on how to extricate victims safely. Prior to Elliot Lake, he had never given advice of this nature in a situation where a live person was trapped.<sup>322</sup>

In his testimony, Mr. Jeffreys described the assistance he provided during the response to the Woodstock fire and explosion in 2011. The local fire chief had sent a request to the MOL to have an engineer go to the scene. The western region where Woodstock was located did not have a structural engineer, and the structural engineer in Toronto could not attend immediately. Mr. Jeffreys went instead.<sup>323</sup>

Mr. Jeffreys could not clearly describe the role he played in Woodstock. He was there to assist the MOL inspector, once that person arrived, but also to help the fire chief, who had asked for assistance:

- A. I went there to support an inspector in an investigation, and I was asked to go around the site by the Fire Chief, and I had no problem doing that.
- Q. But what role did you see yourself performing when the Fire Chief asked you to go around? What were you there for?
- A. I was there to do an investigation. He asked me to do something else.
- Q. What did you understand you were doing for him?
- ...
- A. To see if I could see any issue with what they were doing from a safety perspective.
- Q. Thank you. And did you understand at that time that your role was to determine whether that particular workplace where the UCRT members were working was safe?
- A. Oh, I knew the workplace wasn’t safe.
- Q. So what was your role?
- A. ... he asked me to look to see if I had an issue with what they were doing, whether it was a reasonable approach, and I did not have an issue with that.
- Q. Reasonable approach from what perspective?
- A. Well, were there risks that I could see that perhaps he hadn’t seen? That’s all I can suggest he was asking me to do.<sup>324</sup>

When he arrived at the scene of the Woodstock explosion, Mr. Jeffreys reported to the fire chief. The centre portion of a building had blown up completely. The southern section was still standing but had sustained significant damage. Mr. Jeffreys understood it to be a recovery operation with the intent to send in a search dog to look for bodies in the building.<sup>325</sup> I did not hear the details of the advice Mr. Jeffreys gave on that occasion.

Mr. Jeffreys described another situation where he was present at the scene of a recovery and provided advice to the rescue workers on how to proceed safely. Again, the situation involved the attempt to recover a deceased person. The victim had been pinned by two large and heavy concrete blocks used as retaining walls. Mr. Jeffreys noticed that the rescue workers were going to move one of the blocks in a manner that could possibly have caused further trauma to the deceased's body. He also noticed that the intended manoeuvre could potentially create a secondary collapse which could have injured the rescue workers. He pointed out the danger to the rescue workers, who revised their approach.<sup>326</sup>

After providing these two examples of previous involvement at a recovery scene, Mr. Jeffreys was asked to expand on how he perceived his role in such situations. If the rescue workers had ignored his advice about the secondary collapse, would he have issued an order under the *Occupational Health and Safety Act* to stop them? He replied that he would at least have threatened to do so:

Q. And in that circumstance, if after you gave them your views, the workers ignored your views and decided to continue, would you have felt it appropriate to issue an order under the Act to prevent them from doing that?

A. If they were going to continue to place themselves in harm's way under a structure that was going to fall on them, I would've been definitely more positive and would've suggested that that's what I would do.<sup>327</sup>

In essence, Mr. Jeffreys told the Commission that MOL engineers and inspectors at the scene of a recovery operation might indeed intervene to stop recovery efforts perceived as dangerous. He even agreed with the suggestion put to him that his role at a collapsed building with a deceased victim was essentially the same as at a regular workplace.<sup>328</sup>

Mr. Jeffreys was also questioned on how he perceived the role of the MOL at the scene of a rescue (ongoing attempts to save a living person) as opposed to a recovery (attempts to extricate a deceased person). At a rescue, he stated that the *Occupational Health and Safety Act* did not explicitly indicate a modified role for the MOL. He did, however, conduct his own exercise in statutory interpretation and suggested that, because the Act contains provisions saying that first responders cannot refuse unsafe work, there was an "implied statement" that unsafe work can take place and that MOL inspectors or engineers would speak up only if something was "patently unsafe." As he explained:

So there is an implied statement here that unsafe work may take place, and the inspector has to recognize that or the engineer has to recognize that. And so the inspector or engineer would not step in and issue orders to stop a rescue operation. If they saw something that was patently unsafe for one of those first responders, they would bring it to the attention of that responder's supervisor or to the responder's attention if he couldn't get anybody else in time, but that's what would normally take place.<sup>329</sup>

On the day of the collapse, Mr. Jeffreys testified, he had this same understanding of the MOL's role at a rescue operation. He had formulated it not on the basis of any training he had received with respect to rescue situations or conversations he had with other engineers and inspectors, but based on his own understanding of the *Occupational Health and Safety Act* and the training he had received on the powers of an inspector. The Act gives

inspectors the power to issue stop-work orders in a rescue situation, but in his opinion it wouldn't be reasonable for the ministry to stop a rescue:

Somebody's trying to save somebody's life, and, you know, the occupational health and safety inspector or engineer, we're all about protecting people's lives and their safety. So if somebody is being rescued, well, it's important that that move forward unimpeded.<sup>330</sup>

Mr. Jeffreys went on to add, though, that while he felt it was acceptable for rescue workers to subject themselves to a higher risk during a rescue situation,<sup>331</sup> there was a point along the spectrum of risk at which he would issue a stop-work order. For example, he would do so if four first responders' lives were clearly in danger:

THE COMMISSIONER: But bottom line, if you had a fundamental disagreement with the supervisor and if you had spoken to him, and he says, "No. We're going to do it anyway," and you say, "But that's crazy. You're risking the lives of" – let's say, for example, four first responders, ultimately you could, nevertheless, stop the work – issue a stop order?

[Mr. Jeffreys]: You're quite correct, and I would honestly hope, Mr. Commissioner, that that position would never come up.<sup>332</sup>

After giving this evidence on when he would or would not intervene in a recovery or rescue situation, Mr. Jeffreys was also asked to compare the role of an MOL engineer at a rescue or recovery scene to the role played by the engineer who accompanied HUSAR/TF3 (James Cranford). He was read the following description of the HUSAR/TF3 engineer's role:

The primary responsibilities of the Structural Engineer are to determine stabilization requirements of a structure that are beyond the scope of the teams [*sic*] FOG manual, and to monitor changes in the structure using measuring equipment. This measurement information is to be supplied to the team to aid in the team's risk assessment process. The Structural Engineer will not be required to make conclusions about the structures [*sic*] safety. It is understood that the structure is not safe. It has collapsed and may again for many reasons that would be impossible to predict. Therefore, the Structural Engineer's role is to suggest possible methods of shoring that may improve rescuer safety.<sup>333</sup>

Mr. Jeffreys felt the description was "probably a little more extensive than what I would have expected one of our Ministry of Labour engineers to do."<sup>334</sup>

Mr. Jeffreys told the Commission that he struggled with determining the appropriate role for MOL engineers at rescue and recovery operations. The situation is rare. He pointed out that he was probably the only MOL engineer to have ever been sent to the scene of an active rescue. Since the Elliot Lake deployment, HUSAR/TF3 and UCRT have both asked him if MOL engineers could train with them. The following passage is illustrative of the confusion he felt about the appropriate role for MOL engineers at a rescue, and the role he ended up playing in Elliot Lake:

Q. Would you expect the MOL engineer to give advice to the rescue workers?

A. If they wanted advice, I would ... hope that they would give the advice. I mean, this is an area that I'm struggling with right now, thinking about this very matter, because I know that the HUSAR team and the UCRT team both have asked me if I would ... have our engineers trained with them so that they can assist more on structural collapses. And I know for a fact that if our engineers were trained and I was to ask them to ... go to a rescue situation, none of them would refuse.

They are professional, and they would offer their services. However, I must say that I'm now struggling with the issue of whether or not I would want to put them in that position, having gone through this situation myself.

I really am struggling as to whether that is something that I can do –

Q. And why is that?

A. – down the road. I don't think any of us have an issue with answering the questions as to why we've reached certain decisions or why we did certain things or the advice we gave. I think all of us can stand up and say that, but I think that this process has been an extremely arduous process, a stressful process for me. And I now have to ask myself: Do I want to put my engineers in a position of having to do that? And it's something that I'll have to struggle with and talk to my management and come to a conclusion about.

THE COMMISSIONER: Are there considerations involving legal responsibilities?

THE WITNESS: Exactly, yes. I mean, our position in the Ministry has been that our engineers are not to give advice. That is our position: That they don't give advice as to how to meet compliance. They tell the workplace parties what has to be complied with. The inspector issues the order and says, "That machine has to be guarded."

The engineer does not step in and say how it is to be guarded.

Our legislation is results oriented. You guard it. You prevent worker access to it. We don't tell them how. It's not prescriptive. So we advise our engineers, "Don't give advice on how to do it. That could lead you into a legal situation down the road."

I was asked to step beyond those bounds and come here and assist in whatever way I could, foreign territory. And now I'm considering very strongly whether I'd ask our engineers to be in my shoes.<sup>335</sup>

Mr. Sanders, for his part, had never been involved with a rescue, nor had he received training related to extricating people from collapsed structures or the proper exercise of MOL authority in a rescue or recovery situation. At the time of the collapse, he understood that the MOL had jurisdiction over a rescue or recovery operation, just as it has jurisdiction over any workplace. The *Occupational Health and Safety Act* takes precedence over all other legislation. He therefore understood that the MOL had the jurisdiction to stop a rescue or

a recovery operation, but he had never faced the situation before his involvement at Elliot Lake. At the time of the rescue, he held the view that the decision about whether to intervene to stop a rescue was a discretionary one to be made by the ministry inspector.<sup>336</sup>

Like Mr. Jeffreys, Mr. Sanders felt the proper approach, if he saw something unsafe during a recovery operation, would be to bring the unsafe situation to the attention of rescue personnel. He was not asked what he would do if his advice was ignored, and he did not provide suggestions for how the situation might differ in the context of an ongoing attempt to save a living person.<sup>337</sup>

Having heard the evidence from Mr. Jeffreys and Mr. Sanders, it is clear to me that there is significant confusion about almost all aspects of the role of MOL engineers at rescue and recovery situations. When can they be called in? What type of advice do they provide the rescue workers? What are the limits, if any, to their authority? These are important questions that must be clarified

for future operations. As I discuss below, the role of the MOL was a source of significant confusion, and even a certain amount of delay, during the Elliot Lake rescue operation.

**Having heard the evidence from Mr. Jeffreys and Mr. Sanders, it is clear to me that there is significant confusion about almost all aspects of the role of MOL engineers at rescue and recovery situations. When can they be called in? What type of advice do they provide the rescue workers? What are the limits, if any, to their authority?**

### **The MOL inspectors attended the scene to investigate but also felt they had a role to play in bringing dangerous situations to the attention of rescue workers**

Messrs. Jones and Lacroix were also questioned about their role in Elliot Lake and how they would act if they observed rescue workers in a dangerous situation. Similar to the engineers, the MOL inspectors had never been trained on how to exercise their powers pursuant to the *Occupational Health and Safety Act* at the scene of a rescue or recovery. Both were hesitant to intervene in a rescue situation but also at a loss to define how and when it would be appropriate to do so.

Mr. Jones's understanding was that he was being dispatched to the Elliot Lake scene in order to investigate a critical injury or a fatality. He was sent, as was always the case, to verify what had happened, gather information, and begin an investigation into the cause of the occurrence.<sup>338</sup> Clearly, he saw these three tasks as his primary role.

Although trained in the provisions of the *Occupational Health and Safety Act*, Mr. Jones did not have any specific training on the safety risks associated with a rescue or a recovery operation. Given the rescue workers' greater relative expertise, Mr. Jones said he would "only note very, very obvious hazards." While he believed that, "technically," MOL inspectors have the authority to intervene in or stop a rescue if they see something unsafe, he said: "[T]his was not the case in Elliot Lake. The rescue people on-site were doing good work." He had no intention of shutting down the rescue there.<sup>339</sup> His answer implied, however, that he felt he had the power to do so.

Mr. Lacroix, also trained in all facets of the *Occupational Health and Safety Act*, said he had no specific training on the role and powers of the MOL at the scene of an emergency. He had never received instructions to oversee a rescue operation and, before Elliot Lake, had never been present as a MOL inspector during a rescue. Mr. Lacroix's understanding, like Mr. Jones's, was that the MOL, pursuant to the *Occupational Health and Safety Act*, has authority at a rescue operation, but he said he "would not interfere with any rescue operations because they are there to save lives." His personal opinion was that "the goal is to save a life and if there is any thought of someone being alive ... I am not prepared to stop something to take away someone's life. It's not my role as a Ministry of Labour inspector."<sup>340</sup>

Mr. Lacroix described the approach he would take if he saw a severe hazard for rescue workers during an attempt to save a life or recover a body. He felt the powers of the MOL were the same whether at a rescue or a recovery. It was all a matter of discretion. Nothing in the Act or the regulations existed to guide him other than his professional code of conduct requirement to act with integrity, professionalism, and honesty. His approach, if he saw something dangerous, would be to bring it to the attention of the commander, and his expectation was that he would not need to do anything further because his advice would be heeded:

Say we found something that was a severe hazard that could endanger a rescue worker, what I would do is I would go to their Commander and make them aware that – let's take for example ... at the mall itself, there was widow-makers, cement blocks, if one started to dislodge, I would inform the Incident Commander, them being professionals saying: This block is loosening up, you may want to look out for it. They are professionals. They know their capabilities and qualifications and I would be very confident that they would take the proper actions to remove their person from that area, where I don't think I would have to go in and actually tell them what to do.<sup>341</sup>

Interestingly, Mr. Lacroix said that when he arrived on the scene at 12:43 a.m. on June 24, it was clear to him that it was a rescue situation. Although he said his role was to investigate, he saw some role for himself in overseeing the health and safety of the rescue workers. He did, however, show a degree of uncertainty about the scope of his role:

Q. So you know it's a rescue that's going on?

A. Yes.

Q. At that point, what did you think your role was?

A. At that point my role would have been to, again, the health and safety and our investigation.

Q. The health and safety of what?

A. Of the workers, I apologize.

- Q. Which workers?
- A. Of the rescue workers, overall, just overseeing, making sure that – not making sure but just that nobody got hurt indirectly, but the biggest part of my role there was our investigation, to gather information for the investigation.
- Q. But upon learning this was a rescue, you made a determination that you also had a role to serve as an inspector to oversee the health and safety of the workers; is that right?
- A. ... at that point it was more of looking to see what went on and gather information for our investigation.<sup>342</sup>

It is clear to me that MOL inspectors, like MOL engineers, are also uncertain about their role and jurisdiction at rescue and recovery operations. Both roles must be clarified.

### **The role and jurisdiction of the Ministry of Labour was a source of confusion and delay during the first day of the rescue**

The MOL engineer and inspectors would not arrive at the scene of the collapse until approximately 12:45 a.m. on June 24. Even before their arrival there was confusion and a slight delay related to whether the MOL had somehow shut down the rescue, and whether it was even within its jurisdiction to do so.

### **6:30 p.m.: A decision is likely made by the Community Control Group not to proceed without Ministry of Labour clearance**

At 6:30 p.m., the CCG met in Elliot Lake. This meeting corresponded with the approximate time that Ms. Dennis ordered Mr. Jeffreys to go to Elliot Lake to provide assistance. At the meeting, it appears that a decision was made not to resume the rescue without the clearance of either the Ministry of Labour or an engineer, or both. Somehow, this decision developed into a rumour at the rescue scene that the Ministry of Labour had indeed shut down the rescue.

Notes from the CCG meeting include the first mention anywhere that the MOL might somehow have a say in the resumption of the rescue effort. One set of notes stated: “[C]an’t go in w/o clearance from Min of Labour.”<sup>343</sup> Another set of notes contains the following: “Ministry of Labour – no-one can go in until structural engineer gives go ahead.”<sup>344</sup> A third set of notes stated: “Need MOL clearance based on structural engineer ...”<sup>345</sup> The reference to the MOL is in all cases attributed to the OPP.<sup>346</sup>

Mr. Thorpe (from the Office of the Fire Marshal) also attended the meeting at 6:30 p.m. At 7:36 p.m., he wrote to Ms. Chambers. His email does not specifically mention the MOL but does say that rescue workers were waiting for an engineering opinion before re-entry: “CCG meeting concluded all operations suspended pending arrival of HUSAR team and structural engineer to determine structural integrity.”<sup>347</sup>

The notes from the meeting suggest that MOL clearance and the opinion of an engineer would be required before re-entry. Mr. Thorpe’s email suggests that Chief Officer and others were merely awaiting the opinion of an engineer, not necessarily one from the MOL.

Capt. Thomas of the Elliot Lake Fire Department provided evidence which illustrated the confusion that first day about the role of the MOL. He was not at the CCG meeting, but he had heard about a decision to await MOL clearance. He told the Commission that he thought the order that nobody should enter the building until the MOL had given its approval came from the local incident command, and not from the ministry itself. However, his evidence also suggests that he thought the MOL might have issued it.<sup>348</sup> When pressed about



how he personally learned that ministry approval was required, he was unable to assist the Commission. He described the first hours as a time of confusion and uncertainty:

- Q. Do you recall who, in terms of this communication of the MOL, this stoppage that is noted here, do you know who told you this, because you said you were at the station?
- A. I think, you know, what went on within the first 24 or 36 hours is like a dream. You know, you kind of think you remember something but you are really not quite sure, okay, did that actually happen or did I subconsciously thought it happened? I don't know.
- Like I said, you would have to go through my radio communications. *If I was there, Incident Commander, it would have been radioed to dispatch saying Ministry of Labour has shut us down, or if I was receiving command, it would have been on the radio communication that I had received command from whoever, either Capt. Connors, Captain George, Fire Chief Paul Officer or Ken Barnes. But to sit here without having to look at that, I can't honestly say.*<sup>349</sup> [Emphasis added.]

I cannot determine with certainty whether Chief Officer, the OPP, and others felt they could not re-enter the collapse scene without approval from the MOL and/or an engineer, or whether a decision had simply been made not to do so until the ministry engineer, or an engineer in general, had assessed the situation. Whatever the case may be, the impression developed over the next few hours among some people at the scene and in the media that the MOL had shut down the rescue scene. It was not true – no such order had been issued.

Mr. Jones, for example, said that when he arrived in Elliot Lake at approximately 10:30 p.m., someone told him people were saying the MOL had shut down the operation. He asked who had said that, and no one seemed to know.<sup>350</sup> In truth, Mr. Jones was not even aware that the scene had been evacuated before his arrival. He made it clear to this person that the MOL would not be shutting down the rescue or limiting it under any circumstances:

I can't speak to what happened there before I got there. I was just kind of surprised that when I got there, there was already this talk of the Ministry of Labour shutting down an operation, and I was very surprised. And then they told me that they had cleared it up. It was some kind of miscommunication or misunderstanding between somebody somewhere, and I never was able to find out who, but certainly the Ministry of Labour did not shut down anything.<sup>351</sup>

When Sgt. Gillespie from the UCRT arrived on scene around 11:30 p.m. on June 23, he too heard a rumour that the MOL had shut down the site. However, he was told almost as quickly by Elliot Lake firefighters that it was not true.<sup>352</sup>

The rumour somehow spread to the media and then on to Staff Insp. Neadles and HUSAR/TF3. It created significant confusion for Staff Insp. Neadles and Ms. Chambers. Indeed, it appears to have created additional confusion for Chief Officer, who was working with UCRT on a plan possibly to re-enter the scene.

Shortly after midnight, Staff Insp. Neadles, still en route to Elliot Lake with the HUSAR/TF3 team, wrote to Ms. Chambers about media reports that the MOL had shut the scene down. He expressed frustration and confusion about whether the MOL actually had the jurisdiction to do so and thought he might have to deal with an MOL order shutting down the rescue scene when he arrived in Elliot Lake:

Little bit of a shitfest I see when we get there with the MofL. Media stating NO rescue till they say so ... Where does that come from ... Do they trump us? I have an engineer here??<sup>353</sup>

Staff Insp. Neadles's understanding at the time was that the MOL would not exercise authority over a scene if it was an ongoing rescue, whereas it might do so to some degree during a recovery. He was obviously not certain whether the MOL could use its powers at a rescue scene. He didn't think so but needed clarification.<sup>354</sup>

Ms. Chambers felt from experience that the MOL did not have jurisdiction at an emergency scene, but she also needed to clarify.<sup>355</sup>

At 12:06 a.m., Ms. Chambers wrote to the OFM's Mr. Howse, who was at the scene: "I am advised that the MOL is not allowing the rescue to proceed until they say so. Please find out what is happening there, by liaising with the IC asap. Thanks."<sup>356</sup> Her email seeking clarification instead created more confusion. Mr. Howse appears to have understood from Ms. Chambers's email that the MOL had actually shut the rescue scene down. At 12:13 a.m., he wrote back to Ms. Chambers to say that he was with Chief Officer and that they had discussed the situation. The following emails were exchanged between Ms. Chambers and Mr. Howse:

[Mr. Howse at 12:13 a.m.] With the Chief now and discussing it with OPP they feel its still rescue and have a safe way to continue. They are lowering cameras and monitors down only at this time.

[Ms. Chambers at 12:16 a.m.] Is the MOL there with you? Who is it and who do they report to. Will need to find out. Thx

[Mr. Howse at 12:18 a.m.] They are not here that was the first we heard of it

[Ms. Chambers at 12:39 a.m.] Spoke again with Bill Neadles, who seems to have the only source on this rumour about the MOL stepping up and potentially halting the operation, that being a media report. As discussed, if MOL steps in while the rescue is still ongoing, please notify me immediately so that I can engage the next level in the chain of command to address the blockage asap. Thanks, be safe.

[Ms. Chambers at 12:41 a.m.] PS – this is the Fire Chief's scene and he calls when it's rescue and when it's recovery, as the IC. Thx<sup>357</sup>

Chief Officer's notes and Capt. Thomas's transcription of his radio transmissions both refer to the MOL as having shut down the site at 12:13 a.m. on June 24 – at exactly the same time that Ms. Chambers wrote to Mr. Howse to inquire about the media information. Chief Officer's notes state: "Command advises base that OFM received an email advising that the MOL is shutting us down on the rescue component until the MOL Engineer can do an assessment. UCRT will be sending down camera and equipment but no personnel into the collapse zone."<sup>358</sup> Capt. Thomas's transcription of his radio communications states: "00:13:51 – Received report from Chief – MOL shut down site."<sup>359</sup>

A simple attempt to confirm a media report was, at least for a time, taken as the gospel truth at the rescue scene. Chief Officer agreed that the email traffic created confusion. Indeed, at the time of his testimony, Chief Officer, like Capt. Thomas, still seemed to think the MOL had shut down the rescue at some point:

Q. So it sounds like the original plan was for the UCRT team to have two men ... be lowered into the collapse zone with some form of monitoring equipment, and as a result of this information that the Ministry of Labour was shutting them down, the plan was altered and, rather than people and equipment going into the collapse zone, it was simply now going to be equipment; is that correct?

A. That's right. Yeah, that's right.

...

A. Well, essentially, it was a bit of confusion more so than anything I think on the e-mail and how it all came about. The end result was that there really was, at that stage there was no need to put the officers rappelling into the hole when they could do essentially the same thing by lowering the equipment down.

Q. But was it not more fundamental than that, that it was a question of whether the Ministry of Labour had the power to do it or they didn't have the power to do it?

- A. Well ... that got sorted out as well. You have to remember, that came in from the MOL. It took a little bit of discussion to get that cleared up. I believe that was probably somewhat sorted out as well on chain – you have to remember, MOL, they think they are going to be thinking differently. They are still thinking as under the industrial regulations where this is a rescue. And we had that one hiccup I believe at the start, and that was pretty much it until later.<sup>360</sup>

The confusion lasted for approximately one-half hour. Chief Officer thought it might have been clarified by the email Ms. Chambers sent at 12:39 a.m., saying that the only source of the rumour was a media report.<sup>361</sup> His notes at 12:41 a.m. on June 24 indicate that he advised base that rescue efforts would continue.<sup>362</sup> Capt. Thomas's transcription of his radio communications states: "00:41:00 – Rescue is back on – no paper work from the Ministry of Labour."<sup>363</sup>

### **12:45 a.m.: The Ministry of Labour arrives at the site and rescue efforts continue – confusion about the ministry's role remains**

Ministry of Labour staff arrived at the actual collapse site at approximately 12:45 a.m.<sup>364</sup> Although it was likely already clear to Chief Officer that the MOL had not shut down the site at that point,<sup>365</sup> confusion about the MOL role persisted. As I mentioned earlier, Chief Officer and Capt. Thomas showed confusion about this point during testimony and still appeared to believe that the MOL had shut down the rescue for a time late on June 23.

Ms. Chambers appears also to have continued to believe that the MOL had shut down the site. At 12:58 p.m., she learned from Mr. Howse that the MOL was on scene and had no issues with proceeding. The following exchange, which occurred a little after 1:00 a.m. on June 24, suggests that Ms. Chambers was left with the impression that the MOL had actually attempted to assert jurisdiction and stop or pause the rescue, and might attempt to do so again:

[Mr. Howse at 12:58 a.m.] MOL has arrived on scene they are speaking with the Chief now and at this point have no issues with proceeding, they will be looking at the operations up top accompanied by UCRT members.

...

[Ms. Chambers at 1:01 a.m.] Thank goodness. It really doesn't matter what they think at this RESCUE stage. And monitor to make sure they aren't pushing the FC toward a turnover to RECOVERY until he is comfortable doing so. That would be after OPP UCRT and HUSAR weigh in, I would expect.<sup>366</sup>

I find the apparent confusion about the role of the Ministry of Labour troubling, to say the least. I cannot conclude with certainty how the impression developed that the ministry had shut down the rescue scene, nor can I say with certainty who held the belief and for how long. It is clear that the ministry had not issued any such order, nor even conveyed that it would.

The source of the problem appears to flow from a lack of understanding about the scope of MOL powers at ongoing recovery and rescue operations. MOL staff sent to the Mall collapse were uncertain and lacked guidance about their role. People involved with the rescue operation, even experienced ones such as Ms. Chambers, were even more confused. This situation is certain to arise again. When it does, all involved, from MOL staff to boots on the ground, must have a solid understanding of the jurisdiction and role of the MOL at recovery and rescue operations. In this particular case at the Algo Mall, Chief Officer had other reasons to delay the rescue efforts – he needed to wait for expert assistance before resuming. The delay caused by confusion about the role of the MOL appears to have been minimal and of little to no consequence. In future rescues, however, the delay could prove fatal.

**The delay caused by confusion about the role of the MOL appears to have been minimal and of little to no consequence. In future rescues, however, the delay could prove fatal.**

## Deployment of HUSAR/TF3

HUSAR/TF3 was one of two search and rescue teams that deployed in response to the Mall collapse. In this section, I describe the actions of HUSAR/TF3 in its initial eight hours of deployment on June 23 from the perspective of the team members who testified before me, beginning with the notification of the collapse and continuing until the team was on the road to Elliot Lake.

### HUSAR/TF3 personnel who provided accounts of the deployment

#### Staff Insp. William Neadles

Staff Insp. Neadles was the site commander for HUSAR/TF3 – a position that meant he was in charge of the entire team. He has been a member of the Toronto Police Service since 1976. He was a unit commander of the Public Safety and Emergency Management Unit and oversaw the Incident Management Team Program. This role involved, among other things, supervising the Toronto Police Service's response to large-scale events and major planned events. Unplanned events which, because of their size and scope, may have an impact on the entire Toronto Police Service are considered large-scale events, while the Gay Pride and Caribana parades are examples of major planned events.<sup>367</sup>

In addition, Staff Insp. Neadles oversaw the emergency management procedures for the force – in other words, he oversaw all the emergency planning that requires collaboration with other emergency responders, notably fire and Emergency Medical Services (EMS), as well as the City of Toronto's Office of Emergency Management and the emergency management teams of the other city agencies, boards, and commissions.<sup>368</sup>

Staff Insp. Neadles has been involved with HUSAR/TF3 since its inception. In the early days, he was in charge of the search component as a staff sergeant in the Public Order Unit. At the same time, the Province of Ontario was introducing adequacy standards for policing, which made missing persons searches a police responsibility. As the composition of the team took shape, it made sense for the police to take on the search function within the team.<sup>369</sup>

From 2003 on, Staff Insp. Neadles gradually completed his HUSAR/TF3 training. He received structural collapse training at TEEX as well as in Vancouver.<sup>370</sup> His first team position was as a search specialist and then as a search manager. In 2006, he became a site commander,<sup>371</sup> and in 2012, he was one of four site commanders.<sup>372</sup>

In addition to his position on HUSAR/TF3, Staff Insp. Neadles oversees the HUSAR/TF3 program for the Toronto Police Service. All police personnel wishing to join the team have to be approved by him. In order to be considered for approval, a candidate must hold a minimum rank of sergeant and have completed the training prerequisites: a two-week Toronto Police Search and Rescue course as well as a one-week OPP search manager course.<sup>373</sup>

Staff Insp. Neadles is a member of the Toronto HUSAR/TF3 Working Group – the administrative or oversight body that looks after and directs the organization administratively and strategically. Other members of the working group included Capt. Comella from the Fire Department, Cmdr. Michael McCallion from EMS, and Don Sorel from Toronto Water.<sup>374</sup>

Staff Insp. Neadles was appointed to the steering and working committees that developed the Incident Management Service (IMS) doctrine.<sup>375</sup> Consequently, he is very well acquainted with this system.<sup>376</sup>

### **Capt. Tony Comella**

Capt. Comella, the team coordinator of HUSAR/TF3, has been a member of the team since its inception in 1999.<sup>377</sup> He has been a firefighter since 1987. Before assuming his full-time responsibilities with HUSAR/TF3, he was part of the heavy rescue squad with the North York and then the Toronto Fire Services. This squad was responsible for technical rescues, which were mainly auto-extractions.<sup>378</sup>

Beginning in 1988, Capt. Comella had extensive technical rescue training as a firefighter.<sup>379</sup> In early 2000, he became an instructor for the fire service in rope rescue skills. Over the next three years, he renewed his technical skills and then took structural collapse training<sup>380</sup> in California.<sup>381</sup> He is the lead instructor for HUSAR/TF3.<sup>382</sup>

On the Elliot Lake deployment, Capt. Comella said he was, from time to time, the safety officer, operations section chief, and the planning section chief.<sup>383</sup> As operations chief, he would do a scene survey, assess the building's situation, and then propose an incident action plan for the next operational period to the site commander. If the site commander approved the plan, the commander would then assign tasks to the rescue squad.<sup>384</sup>

Capt. Comella appeared to see the role of operations section chief as advisory only, despite the fact that, according to the HUSAR/TF3 organizational chart, the search, rescue, and medical components all report to the operations section chief.<sup>385</sup> He testified that he does not give orders. The squad leaders get their orders from the command post.<sup>386</sup>

### **Cmdr. Michael McCallion**

Cmdr. McCallion was a commander of operations with the Toronto EMS. He joined EMS in 1983,<sup>387</sup> and in 2004 or 2005 he joined HUSAR/TF3 as a medic,<sup>388</sup> going on to become medical manager.<sup>389</sup> He completed Rescue Systems 1 and 2 training in California and Vancouver, and he has acted as an instructor for HUSAR/TF3.<sup>390</sup>

When Cmdr. McCallion left for Elliot Lake, it was his expectation that he would be the medical manager. It was only after he arrived in Elliot Lake that his role changed, and he became a site commander<sup>391</sup> for the first time.<sup>392</sup>

### **Capt. Martin McRae**

Capt. McRae is a captain with the Toronto Fire Service, where he teaches firefighters who are assigned to the heavy rescue trucks. The courses he covers include confined space and high-angled rescue.<sup>393</sup> He joined HUSAR/TF3 in 2003 as an instructor.<sup>394</sup> On deployments he is usually a rescue specialist.<sup>395</sup> However, on this deployment, Capt. McRae was occupied primarily as the logistics section chief,<sup>396</sup> because that post was vacant.<sup>397</sup>

### **Capt. Chuck Guy**

Capt. Guy is a 34-year veteran of the Toronto Fire Service. He was one of the original members of HUSAR/TF3. He has acted as an instructor since that time, teaching each of the five core courses described earlier. He has been a technical rescue instructor with Toronto Fire Service for 15 years.<sup>398</sup> On the Elliot Lake deployment, he was a rescue squad leader.<sup>399</sup>

### **Don Sorel**

Mr. Sorel is the manager in charge of the operation, maintenance, and inspection of the combined sanitary and storm trunk sewer within the City of Toronto. He has worked for the city for 35 years. He is knowledgeable and experienced in the operation of heavy equipment and joined HUSAR/TF3 in 2003. He completed Rescue Systems 1 in Vancouver and Rescue Systems 2 in California in 2004. In addition to the rigging training offered in Rescue Systems 2, he has rigging experience through his regular employment.<sup>400</sup>

### **Sgt. Scott Fowlds**

Sgt. Fowlds is a sergeant with the Toronto Police Service canine unit. He joined the Toronto Police Service in 1990 and the canine unit in 1994, where he remained until 2007. He returned to the unit in 2009 as a supervisor.<sup>401</sup> He deployed to Elliot Lake with his dog Ranger.<sup>402</sup> He has also received the same structural collapse training as the other team members.<sup>403</sup>

### **Sgt. Phil Glavin**

Sgt. Glavin is a 34-year veteran of the Toronto Police Service who holds the rank of sergeant. He is part of the in-service training team at the Toronto Police College. In addition, he is also a search manager.<sup>404</sup> Sgt. Glavin joined HUSAR/TF3 in 2007. His role is a technical search specialist, and he uses equipment, as opposed to dogs, to assist in the search.<sup>405</sup>

### **James Cranford**

Mr. Cranford is a structural engineer who has worked for Stephenson Engineering since 2008. He first became involved with HUSAR/TF3 in 2010. At that time, he volunteered to attend a training exercise with the team, but did not receive any search and rescue training. However, he did accompany the unit to the Goderich deployment in 2011.<sup>406</sup>

Mr. Cranford understood his role as an engineer to be advisory. If team members had questions about the structure, how it was constructed or how it reacted to the collapse, they could seek his opinion. This advice could include methods of shoring. He did not see his role as including an assessment of whether the building was safe.<sup>407</sup>

### **Dr. Michael Feldman**

Dr. Feldman deployed to Elliot Lake as a physician. He specializes in emergency medicine and has practised that specialty at Sunnybrook Health Sciences Centre since 2005. He is also the medical director for the Toronto Fire Service. Sunnybrook Hospital in Toronto provides physicians to HUSAR/TF3 pursuant to a memorandum of understanding.

Dr. Feldman has worked with HUSAR/TF3 since 2006<sup>408</sup> and has trained in structural collapse rescue. In addition to this training, he has participated in exercises with HUSAR/TF3, as well as taken a disaster medical specialist course.<sup>409</sup>

## **Cost of the HUSAR/TF3 deployment is paid for by the province**

When HUSAR/TF3 is deployed as a provincial asset, the memorandum of understanding between the City of Toronto and the Province of Ontario provides that the province assumes the cost of the salaries and expenses associated with the deployment. Staff Insp. Neadles testified that if he was going to incur significant single expenses exceeding \$10,000, he would need to seek the approval of the Office of the Fire Marshal, through Ms. Chambers.<sup>410</sup>

## **3:45 p.m.: HUSAR/TF3 is notified of possible deployment**

Staff Insp. Neadles was the on-call site commander for the month of June 2012.<sup>411</sup> According to his notes, at approximately 3:45 p.m. on June 23, he was told of the Mall collapse by Toronto Fire Services communications. He was also told that the Office of the Fire Marshal was anticipating the deployment of HUSAR/TF3 and inquiring

the time it would take to deploy. Ms. Chambers was identified as his contact at the Office of the Fire Marshal.<sup>412</sup> This call was characterized as a “heads up”: the normal approval process must take place before any deployment can happen. Once the approval is given, the call-out for the team members can begin.<sup>413</sup>

As soon as Staff Insp. Needles received this information, according to his notes, he called and left a message for Capt. Comella. He then contacted Ms. Chambers at 4 p.m. She told him that UCRT was already en route and asked him how long it would take to deploy the team.<sup>414</sup> At 4:21 p.m., Staff Insp. Needles received approval from Deputy Fire Chief Ronald Jenkins to deploy the team.<sup>415</sup> The call-out could commence.

Capt. Comella received a heads-up that HUSAR/TF3 might be deployed for the Mall collapse at 3:30 p.m., even earlier than Staff Insp. Needles, when Division Chief Doug Silver of the Toronto Fire Service called him. At 3:35 p.m., Capt. Comella, in turn, put Capt. McRae on notice of the possible deployment.<sup>416</sup> At the time, Capt. McRae was participating in a HUSAR/TF3 training exercise at Rouge Valley, a natural environment park in the east end of the Greater Toronto Area.<sup>417</sup>

### Approximately 4 p.m.: HUSAR/TF3 is deployed

Capt. Comella received confirmation of the deployment from Division Chief Silver at 4:05 p.m.<sup>418</sup> Capt. McRae said he was notified by Capt. Comella shortly before 4 p.m. that the team was being deployed. He later corrected himself, saying it was Staff Insp. Needles who made the call. That, however, does not appear likely because it was not until 4:21 p.m. that Staff Insp. Needles received approval of the deployment from Deputy Chief Jenkins. In any event, at 4 p.m., according to his notes, Capt. McRae instructed those HUSAR/TF3 members who were on training to return to the staging areas.<sup>419</sup>

### The call-out gets barely half a full team

The technical elements of the call-out procedure for HUSAR/TF3 were described earlier. The Elliot Lake experience demonstrates a glaring and worrisome feature of the procedure – the lack of predictability of the response to the call-out. The team leaders do not know in advance who will be showing up. As I describe later in this Report, this deployment suffered from a low turnout as well as an absence of key personnel, most notably a trained planning section chief.

Based on the organizational chart<sup>420</sup> prepared by Capt. Comella and the deployment roster disclosed to the Inquiry, it appears that 33 team members and three drivers were deployed by HUSAR/TF3 on June 23.<sup>421</sup> The fact that it was a training day was a plus, according to Staff Insp. Needles. It meant that a number of the instructors who were participating in the training would be available for deployment – an enhanced and experienced leadership presence.<sup>422</sup>

The limited turnout – less than half of the potential complement – is illustrative of a major weakness of the HUSAR/TF3 call-out system. Because the team is made up of volunteers, the members cannot be forced to attend, despite a commitment to do so. Luck is therefore a major determinant of availability.

### 4 p.m. to 10 p.m.: between the call-out and wheels-up

As mentioned earlier, at 4 p.m., Capt. McRae started the process of rounding up the members who had been training at Rouge Valley and were scattered through this forested area.<sup>423</sup> Once they were back at the staging area, and everyone had been accounted for, they all travelled back to the HUSAR/TF3 building – which is also known as the home of operations. A number of instructors, including Capt. McRae, travelled in a support vehicle,

while the rest of the members returned to the building by bus. Not everyone who had been training was available for deployment. The bus dropped all the members off at the home of operations so they could pick up their cars, and those who were going to deploy went home to get needed personal items.<sup>424</sup>

The bus left Rouge Valley at 4:50 p.m. and arrived at HUSAR/TF3's home of operations at 5:35 p.m. Capt. McRae and his colleagues had arrived there at 5:10 p.m.<sup>425</sup> Immediately, Capt. McRae and others began work on the necessary tasks to allow the vehicles and the equipment to travel to Elliot Lake.

### **5:05 p.m.: HUSAR/TF3 has problems obtaining tractors and drivers**

HUSAR/TF3 owns the trailers that transport its equipment; however, it does not own any tractors to pull them and must rely on rental tractors. At 5:05 p.m., Capt. McRae called Paul Demy, HUSAR/TF3's main driver, and instructed him to arrange for the rental of the tractors and to line up the drivers for them. Capt. McRae acknowledged that he would have known from the time he found out that they were going to be deployed (4 p.m.) that these arrangements would have to be made. The delay of over one hour in calling Mr. Demy, he explained, arose because his first priority was to get the training group back safely to the staging area.<sup>426</sup>

Mr. Demy had trouble finding both drivers and tractors, so Capt. McRae phoned Mr. Sorel at 5:12 p.m. for assistance. Ultimately, it was Mr. Sorel who got the drivers.<sup>427</sup> Mr. Sorel testified that he was called because Toronto Water had supplied drivers in the past when there was no other alternative. He explained that his heavy equipment operators have the AZ licences required to operate a tractor-trailer combination.<sup>428</sup> However, there is no formal arrangement between HUSAR/TF3 and Toronto Water to supply drivers. On this occasion, Mr. Sorel assisted in getting the drivers because he realized that the team would be unable to leave without them.<sup>429</sup>

Mr. Sorel received approval from his general manager at Toronto Water to deploy three drivers. He contacted their supervisor for assistance in contacting them, and, between the two of them, they managed to get three drivers.<sup>430</sup>

After being contacted, the drivers reported to the home of operations, located on Old Eglinton Avenue near the Don Valley Parkway. It is also the site where HUSAR/TF3 team members do some of their training and store their deployment equipment,<sup>431</sup> including their kit bags.<sup>432</sup> At 6:08 p.m., the truck drivers left the home of operations in a police vehicle to pick up the tractors that had been located in Mississauga, approximately 25 kilometres away.<sup>433</sup> They arrived back at 8:10 p.m.<sup>434</sup>

On January 1, 2013, Mr. Sorel resigned from HUSAR/TF3 and its steering committee because of his work commitments. He informed the Inquiry that one of the drivers was injured in Elliot Lake, and this injury had adverse consequences for his unit. Consequently, HUSAR/TF3 will not be able to call on Toronto Water's drivers in the future. He informed the steering committee of that fact so it could make alternative arrangements. He was not aware of what steps, if any, have been taken to remedy this situation. I, too, have not been informed of any arrangements.<sup>435</sup>

### **The muster point**

The HUSAR/TF3 members who are deploying report to a muster point. For the Elliot Lake deployment, the muster point was the Public Order Unit facility of the Toronto Police Service, located near the intersection of McCowan Road and Finch Avenue in Toronto.<sup>436</sup>



At the muster point, the members received a brief physical examination from either a doctor or a paramedic to ensure that they were healthy enough to work on the pile.<sup>437</sup> They were then given their kit bags,<sup>438</sup> containing their uniforms, personal protective equipment, helmet, and other items.<sup>439</sup> They also received a briefing from the site commander.<sup>440</sup>

Although it may appear inefficient to have the members report for duty at a place different from where their equipment is stored, the muster point is a more suitable venue as a staging area for the members than the home of operations. It has an auditorium, secure parking facilities, and sufficient space to accommodate the physical examinations and to allow the members to change into their team gear. The home of operations, in contrast, is more like a warehouse.<sup>441</sup>

### **8:05 p.m.: Vans and equipment depart the home of operations for muster point**

At 5:20 p.m., Capt. McRae instructed members to fuel the vehicles and get the trailers ready. At the same time, he ordered a member to get the kit bags loaded into a cube van so they could be transported to the muster point. Because the team management does not know who is going to show up for deployment, they pack all 100 or so member bags into the van. The cube van was loaded at 7:57 p.m., more than 2.5 hours later. Capt. McRae testified that the task could reasonably be done in less than an hour.<sup>442</sup> I heard no evidence justifying the delay.

The deployment equipment, other than the members' kits, is stored on the trailers and is ready to go. Depending on the needs of the particular deployment, not all the equipment will be taken. In this case, only three of the four trailers were needed, requiring a rearranging of the loads.<sup>443</sup>

The loaded cube vans left the home of operations at 8:05 p.m. and arrived at the muster point at 8:28 p.m. The members were issued their kits by 9:15 p.m.<sup>444</sup> According to Staff Insp. Needles's notes, the team bus left the muster point at 9:30 p.m. to rendezvous with the vehicles, which would be leaving from the home of operations.<sup>445</sup>

### **9:56 p.m.: Drivers and tractors leave home of operations**

Meanwhile, at 8:10 p.m., the drivers and the tractors arrived back at the home of operations after picking up the tractors in Mississauga. All vehicles left that location at approximately 9:56 p.m. to meet up with the team bus at a Petro Canada station north of Toronto,<sup>446</sup> in order to travel to Elliot Lake in a convoy. The team bus carried most team members, including Staff Insp. Needles, Cmdr. McCallion, and Mr. Cranford. Other members such as Capt. Comella, Capt. McRae,<sup>447</sup> and Sgt. Fowlds<sup>448</sup> went up in other vehicles, but in the convoy.

Mr. Sorel was able to deploy the next day and made his way to Elliot Lake on his own.<sup>449</sup> Dr. Feldman was on shift when he was notified of the deployment shortly before 5 p.m. He arranged for another doctor to deploy first. He went to Elliot Lake the next morning, arriving there in the early afternoon.<sup>450</sup>

### **It takes almost six hours for HUSAR/TF3 to get out the door**

Capt. McRae indicated that HUSAR/TF3 is mandated by the national program to respond – to get out the door – in six hours.<sup>451</sup> Capt. Comella similarly said the team has to be on the road, heading to the call, within six hours.<sup>452</sup> I recognize that mobilizing this type of operation may present challenges. However, I was struck by how long it took to get on the road to Elliot Lake. I discuss this matter further in the analysis chapter of the Report.

## Staff Insp. Needles's actions

At 5:31 p.m., Ms. Chambers informed Staff Insp. Needles by email that the "FC says a 30 x 60 area involved. Lots of concrete. 1 person suspected viable but not accessible. 2nd potential."<sup>453</sup> At 6:27 p.m., she sent him a further email that the responders were evacuating the building because of its unsafe condition. She also confirmed that there was one death (VSA).<sup>454</sup>

At 5:25 p.m., Ms. Chambers had asked Staff Insp. Needles to inform her when he knew the size of his team and the time they would be leaving.<sup>455</sup> At 7:28 p.m., he replied that they had about 34 members, but did not provide a time of departure.<sup>456</sup> She suggested that, because of the situation, it would be preferable for the team to leave then with what they had rather than waiting to get 65 or 70 members, which could have caused further delay. She once again asked about a departure time.<sup>457</sup> He replied that they were "shooting for 20:30 hours."<sup>458</sup> Staff Insp. Needles agreed that waiting would likely have made no difference. They would not likely have got more than 34 responders, given that the call-out had been made over three hours earlier.\*

At 8:23 p.m., Staff Insp. Needles informed Ms. Chambers that the departure would be held up by at least 30 to 60 minutes owing to a tractor delay.<sup>459</sup> Even if the team had not encountered problems in getting the rental tractors, it would not have been ready to leave at 8:30 p.m. because the kits were being issued to the team members until 9:15 p.m.

On the bus trip to Elliot Lake, Staff Insp. Needles showed Mr. Cranford some photographs taken of the collapse site. He testified that he did not find the photos very useful: all they showed him was that the collapse was in a sealed building with a pre-cast concrete slab system. He and a team member had googled the Mall website, where they found a basic layout. That is the extent of the information he possessed en route.<sup>460</sup> For his part, Staff Insp. Needles did not recall seeing any photographs of the collapse zone.<sup>461</sup> However, the email traffic indicates that photos were sent to him at 7:57 p.m.<sup>462</sup> and the plans at 12:02 a.m.<sup>463</sup>

At about 9:24 p.m., Staff Insp. Needles spoke to Chief Officer by telephone. Chief Officer provided him with information, including that there were two fatalities, that the total number of victims was unknown, and that one female victim, still alive, had been spoken to.<sup>464</sup>

As discussed earlier, Staff Insp. Needles sent an email to Ms. Chambers shortly after midnight on June 24, telling her that the media were reporting that there would be no rescue until the Ministry of Labour allowed the rescue to proceed. There does not appear to be any factual foundation for the speculation that the ministry had halted any rescue operation. What the incident revealed, however, was confusion among experienced emergency personnel about the ministry's power to enforce the *Occupational Health and Safety Act* at the scene of an emergency rescue. I return to this issue later in my Report.

The team arrived in Elliot Lake at 4:18 a.m.

.....

\* Needles testimony, September 10, 2013, p. 25260. Staff Insp. Needles refers to 34 responders. The actual deployment roster lists 33.

## Notes

- <sup>1</sup> The videos and a re-creation by NORR can be found at Exhibits 7796 and 3141.
- <sup>2</sup> Exhibit 6258.
- <sup>3</sup> Morrissey testimony, August 7, 2013, pp. 19845–7; Exhibit 7796.
- <sup>4</sup> Morrissey testimony, August 7, 2013, pp. 19848–9; Exhibit 7924, p. 055.
- <sup>5</sup> Morrissey testimony, August 7, 2013, pp. 19849–55.
- <sup>6</sup> Morrissey testimony, August 7, 2013, pp. 19852–4.
- <sup>7</sup> Morrissey testimony, August 7, 2013, pp. 19856–7.
- <sup>8</sup> Morrissey testimony, August 7, 2013, pp. 19857–8.
- <sup>9</sup> Marceau testimony, August 7, 2013, p. 19811.
- <sup>10</sup> Marceau testimony, August 7, 2013, p. 19798.
- <sup>11</sup> Marceau testimony, August 7, 2013, pp. 19790–5.
- <sup>12</sup> Marceau testimony, August 7, 2013, pp. 19794–7.
- <sup>13</sup> Marceau testimony, August 7, 2013, pp. 19800–1.
- <sup>14</sup> Marceau testimony, August 7, 2013, pp. 19801–4.
- <sup>15</sup> Marceau testimony, August 7, 2013, pp. 19805–9.
- <sup>16</sup> Bérubé testimony, August 7, 2013, pp. 19814–15.
- <sup>17</sup> Bérubé testimony, August 7, 2013, p. 19830; Exhibit 7924, p. 034.
- <sup>18</sup> Bérubé testimony, August 7, 2013, pp. 19817–19.
- <sup>19</sup> Bérubé testimony, August 7, 2013, pp. 19819–20.
- <sup>20</sup> Bérubé testimony, August 7, 2013, p. 19820.
- <sup>21</sup> Bérubé testimony, August 7, 2013, pp. 19820–1, and 19823.
- <sup>22</sup> Bérubé testimony, August 7, 2013, p. 19822.
- <sup>23</sup> Bérubé testimony, August 7, 2013, pp. 19825–7.
- <sup>24</sup> Bérubé testimony, August 7, 2013, pp. 19829–30.
- <sup>25</sup> Bérubé testimony, August 7, 2013, p. 19828.
- <sup>26</sup> Bérubé testimony, August 7, 2013, p. 19828.
- <sup>27</sup> Bérubé testimony, August 7, 2013, p. 19832–4.
- <sup>28</sup> Amyotte testimony, August 7, 2013, pp. 19769–71.
- <sup>29</sup> Amyotte testimony, August 7, 2013, p. 19773.
- <sup>30</sup> Amyotte testimony, August 7, 2013, pp. 19774–5.
- <sup>31</sup> Amyotte testimony, August 7, 2013, pp. 19776–8.
- <sup>32</sup> Amyotte testimony, August 7, 2013, pp. 19778–80.
- <sup>33</sup> Perizzolo and Latulippe testimony, August 7, 2013, pp. 19865–6.
- <sup>34</sup> Perizzolo and Latulippe testimony, August 7, 2013, pp. 19866–7.
- <sup>35</sup> Perizzolo and Latulippe testimony, August 7, 2013, pp. 19868–72.
- <sup>36</sup> Perizzolo and Latulippe testimony, August 7, 2013, p. 19873.
- <sup>37</sup> Mr. and Mrs. Aylwin testimony, August 7, 2013, pp. 19963–5.
- <sup>38</sup> Mr. and Mrs. Aylwin testimony, August 7, 2013, p. 19965.
- <sup>39</sup> Mr. and Mrs. Aylwin testimony, August 7, 2013, pp. 19965–6.
- <sup>40</sup> Gendron testimony, August 8, 2013, pp. 20017–18.
- <sup>41</sup> Gendron testimony, August 8, 2013, pp. 20018–19.
- <sup>42</sup> Gendron testimony, August 8, 2013, pp. 20020–3.
- <sup>43</sup> Gendron testimony, August 8, 2013, p. 20023.
- <sup>44</sup> Mr. and Mrs. Aylwin testimony, August 7, 2013, pp. 19966–9.
- <sup>45</sup> Exhibits 7670 and 9916–33.
- <sup>46</sup> Thomas testimony, August 15, 2013, pp. 21017–20.
- <sup>47</sup> Thomas testimony, August 15, 2013, pp. 21021–2.
- <sup>48</sup> Officer testimony, August 21, 2013, p. 21562.
- <sup>49</sup> Exhibit 8025.
- <sup>50</sup> Officer testimony, August 21, 2013, p. 21568.
- <sup>51</sup> Officer testimony, August 21, 2013, pp. 21565–7.
- <sup>52</sup> Exhibit 8025.
- <sup>53</sup> Officer testimony, August 21, 2013, pp. 21571–2; Exhibit 8025.
- <sup>54</sup> Exhibit 8025.
- <sup>55</sup> Thomas testimony, August 15, 2013, pp. 21032–5.
- <sup>56</sup> Thomas testimony, August 15, 2013, pp. 21035–6, and 21040.
- <sup>57</sup> Officer testimony, August 21, 2013, p. 21573.
- <sup>58</sup> Officer testimony, August 21, 2013, pp. 21535–9, and 21543–4; Exhibit 7941.
- <sup>59</sup> Officer testimony, August 21, 2013, pp. 21544–6.
- <sup>60</sup> Officer testimony, August 21, 2013, p. 21569.
- <sup>61</sup> Thomas testimony, August 15, 2013, pp. 21027–8.
- <sup>62</sup> Officer testimony, August 21, 2013, pp. 21570–1.
- <sup>63</sup> Thomas testimony, August 15, 2013, pp. 21022–3.
- <sup>64</sup> Officer testimony, August 21, 2013, pp. 21579–80; Exhibit 8025.
- <sup>65</sup> Exhibit 8025.
- <sup>66</sup> Officer testimony, August 21, 2013, pp. 21573–4.
- <sup>67</sup> Officer testimony, August 21, 2013, pp. 21632–3.
- <sup>68</sup> Officer testimony, August 21, 2013, pp. 21573–4.
- <sup>69</sup> Officer testimony, August 21, 2013, p. 21575.
- <sup>70</sup> Exhibit 8025.
- <sup>71</sup> Exhibit 8025.
- <sup>72</sup> Officer testimony, August 21, 2013, pp. 21605–6.
- <sup>73</sup> Officer testimony, August 21, 2013, pp. 21582–3, and 21608.
- <sup>74</sup> Officer testimony, August 21, 2013, pp. 21580–2; Exhibit 8025.
- <sup>75</sup> Officer testimony, August 21, 2013, pp. 21574–5.
- <sup>76</sup> Officer testimony, August 21, 2013, pp. 21584–5; Exhibit 8025.
- <sup>77</sup> Thomas testimony, August 15, 2013, pp. 21036–8.
- <sup>78</sup> Officer testimony, August 21, 2013, pp. 21584–5.
- <sup>79</sup> Officer testimony, August 21, 2013, pp. 21587–8; Exhibit 7798.
- <sup>80</sup> Officer testimony, August 21, 2013, pp. 21588–90.
- <sup>81</sup> Officer testimony, August 21, 2013, pp. 21590–1.
- <sup>82</sup> Exhibit 8025.
- <sup>83</sup> Officer testimony, August 21, 2013, p. 21610.
- <sup>84</sup> Connors testimony, August 20, 2013, pp. 21374–5.
- <sup>85</sup> Connors testimony, August 20, 2013, p. 21375.
- <sup>86</sup> Connors testimony, August 20, 2013, pp. 21378–81.
- <sup>87</sup> Exhibit 9673.
- <sup>88</sup> Exhibit 3743.
- <sup>89</sup> Hamilton testimony, October 7, 2013, p. 28504.
- <sup>90</sup> deBortoli testimony, October 7, 2013, pp. 28393–6.
- <sup>91</sup> Mantha testimony, September 23, 2013, pp. 26733–7.
- <sup>92</sup> Mantha testimony, September 23, 2013, pp. 26737–9.
- <sup>93</sup> Officer testimony, August 21, 2013, pp. 21597–8; Exhibit 8025.
- <sup>94</sup> Officer testimony, August 21, 2013, p. 21599; Exhibit 8025.
- <sup>95</sup> Exhibit 8025.
- <sup>96</sup> Exhibit 6250.
- <sup>97</sup> Neadles testimony, September 10, 2013, pp. 25242–3.
- <sup>98</sup> Hamilton testimony, October 7, 2013, pp. 28504–6; deBortoli testimony, October 7, 2013, p. 28391.
- <sup>99</sup> Exhibit 8114.
- <sup>100</sup> Exhibit 8025.
- <sup>101</sup> Thomas testimony, August 15, 2013, pp. 21041–4.
- <sup>102</sup> Thomas testimony, August 15, 2013, pp. 21045–8.
- <sup>103</sup> Exhibit 7524.
- <sup>104</sup> Connors testimony, August 20, 2013, pp. 21383–5; Exhibit 6296.
- <sup>105</sup> Connors testimony, August 20, 2013, pp. 21385–7.
- <sup>106</sup> Connors testimony, August 20, 2013, pp. 21388–90.
- <sup>107</sup> Officer testimony, August 21, 2013, pp. 21602–3.
- <sup>108</sup> Thomas testimony, August 15, 2013, pp. 21047–9; Connors testimony, August 20, 2013, pp. 21391–2.
- <sup>109</sup> Thomas testimony, August 15, 2013, pp. 21057–60.
- <sup>110</sup> Exhibit 8025.

- <sup>111</sup> Officer testimony, August 21, 2013, pp. 21610–13; Exhibit 8025.
- <sup>112</sup> Thomas testimony, August 15, 2013, p. 21066.
- <sup>113</sup> Exhibit 8025.
- <sup>114</sup> Officer testimony, August 21, 2013, pp. 21613–14.
- <sup>115</sup> Exhibit 3743.
- <sup>116</sup> Officer testimony, August 21, 2013, p. 21631.
- <sup>117</sup> Exhibit 7965; deBortoli testimony, October 7, 2013, pp. 28398–9.
- <sup>118</sup> Thomas testimony, August 15, 2013, pp. 21049–52; Exhibit 6336.
- <sup>119</sup> Thomas testimony, August 15, 2013, pp. 21053–7.
- <sup>120</sup> Connors testimony, August 21, 2013, pp. 21415–18.
- <sup>121</sup> Officer testimony, August 21, 2013, pp. 21614–17.
- <sup>122</sup> Officer testimony, August 21, 2013, pp. 21617–19.
- <sup>123</sup> Officer testimony, August 21, 2013, p. 21621; Exhibit 8025.
- <sup>124</sup> Officer testimony, August 21, 2013, p. 21621.
- <sup>125</sup> Exhibit 7524.
- <sup>126</sup> Connors testimony, August 21, 2013, pp. 21409–11.
- <sup>127</sup> Thomas testimony, August 15, 2013, pp. 21061–4.
- <sup>128</sup> Connors testimony, August 21, 2013, pp. 21419–22; Exhibit 8025.
- <sup>129</sup> Officer testimony, August 21, 2013, pp. 21620–1; Exhibit 8025.
- <sup>130</sup> Exhibit 8025.
- <sup>131</sup> Officer testimony, August 21, 2013, pp. 21592–4.
- <sup>132</sup> Thomas testimony, August 15, 2013, pp. 21064–6.
- <sup>133</sup> Officer testimony, August 21, 2013, pp. 21624–5; Exhibit 8025.
- <sup>134</sup> Exhibit 8025.
- <sup>135</sup> Thomas testimony, August 15, 2013, pp. 21067–70.
- <sup>136</sup> Officer testimony, August 29, 2013, pp. 23354–5.
- <sup>137</sup> Officer testimony, August 29, 2013, pp. 23356–7, and 23364–6.
- <sup>138</sup> Thomas testimony, August 15, 2013, pp. 21072–5.
- <sup>139</sup> Officer testimony, August 21, 2013, pp. 21628–9; Exhibit 8025.
- <sup>140</sup> Exhibit 3743.
- <sup>141</sup> Officer testimony, August 21, 2013, pp. 21657–8; Exhibit 3743.
- <sup>142</sup> Officer testimony, August 21, 2013, p. 21659.
- <sup>143</sup> Exhibits 3743 and 8025.
- <sup>144</sup> Gillespie testimony, September 3, 2013, pp. 23461–4.
- <sup>145</sup> Gillespie testimony, September 3, 2013, pp. 23455–9.
- <sup>146</sup> Gillespie testimony, September 3, 2013, pp. 23464–5.
- <sup>147</sup> Gillespie testimony, September 3, 2013, pp. 23472–5.
- <sup>148</sup> Cox testimony, August 26, 2013, pp. 22202–3.
- <sup>149</sup> Cox testimony, August 26, 2013, pp. 22209–10.
- <sup>150</sup> Cox testimony, August 26, 2013, pp. 22214–15.
- <sup>151</sup> Bailey testimony, August 27, 2013, pp. 22685–6.
- <sup>152</sup> Bailey testimony, August 27, 2013, pp. 22706–7.
- <sup>153</sup> Bailey testimony, August 27, 2013, p. 22710.
- <sup>154</sup> Hulsman testimony, August 28, 2013, pp. 22882–3.
- <sup>155</sup> Hulsman testimony, August 28, 2013, p. 22892.
- <sup>156</sup> Hulsman testimony, August 28, 2013, pp. 22902–3.
- <sup>157</sup> Waddick testimony, August 23, 2013, p. 21949.
- <sup>158</sup> Waddick testimony, August 23, 2013, pp. 21951–3.
- <sup>159</sup> Gillespie testimony, September 3, 2013, pp. 23506–7.
- <sup>160</sup> Gillespie testimony, September 3, 2013, pp. 23504–5.
- <sup>161</sup> Gillespie testimony, September 3, 2013, pp. 23498–9.
- <sup>162</sup> Gillespie testimony, September 3, 2013, p. 23508.
- <sup>163</sup> Gillespie testimony, September 3, 2013, pp. 23512–13.
- <sup>164</sup> Gillespie testimony, September 3, 2013, p. 23512.
- <sup>165</sup> Exhibit 7847.
- <sup>166</sup> Gillespie testimony, September 3, 2013, pp. 23512–13.
- <sup>167</sup> Cox testimony, August 26, 2013, pp. 22252–3.
- <sup>168</sup> Gillespie testimony, September 3, 2013, pp. 23525–6.
- <sup>169</sup> Cox testimony, August 26, 2013, pp. 22253–4.
- <sup>170</sup> Cox testimony, August 26, 2013, pp. 22256–7.
- <sup>171</sup> Cox testimony, August 26, 2013, pp. 22258–9.
- <sup>172</sup> Waddick testimony, August 23, 2013, p. 21976.
- <sup>173</sup> Waddick testimony, August 23, 2013, p. 21976.
- <sup>174</sup> Waddick testimony, August 23, 2013, pp. 21978–9.
- <sup>175</sup> Gillespie testimony, September 3, 2013, pp. 23513–14.
- <sup>176</sup> Gillespie testimony, September 3, 2013, pp. 23518–20.
- <sup>177</sup> Chambers testimony, September 18, 2013, p. 26079.
- <sup>178</sup> Chambers testimony, September 18, 2013, p. 26083.
- <sup>179</sup> Gillespie testimony, September 3, 2013, pp. 23526–7.
- <sup>180</sup> Jollymore testimony, September 23, 2013, pp. 26801–5.
- <sup>181</sup> Jollymore testimony, September 23, 2013, pp. 26811–12.
- <sup>182</sup> Jollymore testimony, September 23, 2013, pp. 26813–15.
- <sup>183</sup> Jollymore testimony, September 23, 2013, pp. 26811–14.
- <sup>184</sup> Jollymore testimony, September 23, 2013, pp. 26817–9.
- <sup>185</sup> Jollymore testimony, September 24, 2013, pp. 26989–90.
- <sup>186</sup> Cox testimony, August 26, 2013, p. 22260.
- <sup>187</sup> Gillespie testimony, September 3, 2013, pp. 23527–30.
- <sup>188</sup> Jollymore testimony, September 24, 2013, pp. 26933–4.
- <sup>189</sup> Jollymore testimony, September 24, 2013, pp. 26955–6.
- <sup>190</sup> Cox testimony, August 26, 2013, pp. 22262–4.
- <sup>191</sup> Cox testimony, August 26, 2013, p. 22265.
- <sup>192</sup> Exhibit 6396, p. 3.
- <sup>193</sup> Jollymore testimony, September 23, 2013, pp. 26844–6.
- <sup>194</sup> Jollymore testimony, September 23, 2013, p. 26851.
- <sup>195</sup> Cox testimony, August 26, 2013, p. 22265.
- <sup>196</sup> Exhibit 6377.
- <sup>197</sup> Cox testimony, August 26, 2013, p. 22265.
- <sup>198</sup> Cox testimony, August 26, 2013, pp. 22265–7.
- <sup>199</sup> Cox testimony, August 26, 2013, pp. 22267–8.
- <sup>200</sup> Gillespie testimony, September 3, 2013, pp. 23527–8.
- <sup>201</sup> Gillespie testimony, September 3, 2013, pp. 23532–3.
- <sup>202</sup> Jollymore testimony, September 23, 2013, pp. 26851–2.
- <sup>203</sup> Jollymore testimony, September 23, 2013, pp. 26852–3.
- <sup>204</sup> Jollymore testimony, September 23, 2013, pp. 26853–5.
- <sup>205</sup> Jollymore testimony, September 23, 2013, pp. 26858–60.
- <sup>206</sup> Jollymore testimony, September 23, 2013, pp. 26861–2.
- <sup>207</sup> Jollymore testimony, September 24, 2013, p. 26986.
- <sup>208</sup> Exhibit 3743, pp. 6–7.
- <sup>209</sup> deBortoli testimony, October 7, 2013, pp. 28418–19.
- <sup>210</sup> Cox testimony, August 26, 2013, pp. 22286–9.
- <sup>211</sup> Jollymore testimony, September 24, 2013, pp. 26875–6.
- <sup>212</sup> Jollymore testimony, September 23, 2013, p. 26866.
- <sup>213</sup> Exhibit 3743, p. 14.
- <sup>214</sup> Jollymore testimony, September 23, 2013, pp. 26866–7.
- <sup>215</sup> deBortoli testimony, October 7, 2013, pp. 28435–6.
- <sup>216</sup> Selvers testimony, September 9, 2013, pp. 24992–6.
- <sup>217</sup> Selvers testimony, September 9, 2013, pp. 24998–9.
- <sup>218</sup> Selvers testimony, September 9, 2013, pp. 25001–4.
- <sup>219</sup> Selvers testimony, September 9, 2013, p. 25004.
- <sup>220</sup> Selvers testimony, September 9, 2013, p. 25007.
- <sup>221</sup> Selvers testimony, September 9, 2013, pp. 25009–10.
- <sup>222</sup> Selvers testimony, September 9, 2013, pp. 25012–13.
- <sup>223</sup> Selvers testimony, September 9, 2013, pp. 25016–18.
- <sup>224</sup> Gillespie testimony, September 3, 2013, p. 23533.
- <sup>225</sup> Exhibit 245; Cox testimony, August 26, 2013, pp. 22271–3.
- <sup>226</sup> Cox testimony, August 26, 2013, pp. 22282–6.

- 227 Gillespie testimony, September 3, 2013, pp. 23539–41.
- 228 Burns testimony, August 20, 2013, pp. 21270–1.
- 229 Cox testimony, August 26, 2013, pp. 22291–2.
- 230 Bailey testimony, August 27, 2013, pp. 22722–30.
- 231 Cox testimony, August 26, 2013, pp. 22293–6; Exhibit 2114; Exhibit 2115.
- 232 Cox testimony, August 26, 2013, pp. 22294–7.
- 233 Cox testimony, August 26, 2013, pp. 22297–8.
- 234 Cox testimony, August 26, 2013, pp. 22294–7.
- 235 Cox testimony, August 26, 2013, pp. 22297–300.
- 236 Cox testimony, August 26, 2013, pp. 22300–2.
- 237 Gillespie testimony, September 3, 2013, pp. 23542–3.
- 238 Gillespie testimony, September 3, 2013, pp. 23543–7.
- 239 Gillespie testimony, September 3, 2013, pp. 23544–52.
- 240 Cox testimony, August 26, 2013, p. 22310.
- 241 Cox testimony, August 26, 2013, pp. 22312–13.
- 242 Jollymore testimony, September 23, 2013, pp. 26821–4.
- 243 Jollymore testimony, September 23, 2013, pp. 26824–5.
- 244 Jollymore testimony, September 23, 2013, pp. 26830–2.
- 245 Jollymore testimony, September 23, 2013, pp. 26831–3.
- 246 Kerr testimony, September 25, 2013, pp. 27287–99.
- 247 Jollymore testimony, September 23, 2013, pp. 26834–5.
- 248 Jollymore testimony, September 23, 2013, pp. 26835–6.
- 249 Jollymore testimony, September 23, 2013, pp. 26836–7.
- 250 See, as well, Chambers testimony, September 18, 2013, pp. 26073–5.
- 251 Chambers testimony, September 18, 2013, p. 26076.
- 252 Exhibit 8025; Officer testimony, August 21, 2013, p. 21608.
- 253 Officer testimony, August 21, 2013, p. 21582.
- 254 Officer testimony, August 21, 2013, pp. 21582–3 and 21600–1; Exhibit 8025.
- 255 Officer testimony, August 21, 2013, pp. 21605–6.
- 256 Chambers testimony, September 18, 2013, pp. 26064–6.
- 257 Chambers testimony, September 18, 2013, pp. 26068–70 and 26222.
- 258 Chambers testimony, September 18, 2013, pp. 26231–2.
- 259 Chambers testimony, September 18, 2013, pp. 26069–70.
- 260 Chambers testimony, September 18, 2013, pp. 26223–8.
- 261 Exhibit 6413; Chambers testimony, September 18, 2013, p. 26076. “District coordinator informed” is a reference to the district coordinator for the mutual aid program: Chambers testimony, September 18, 2013, p. 26077.
- 262 Exhibit 6413.
- 263 Chambers testimony, September 18, 2013, pp. 26077–8.
- 264 Exhibit 6426; Chambers testimony, September 18, 2013, pp. 26078–80.
- 265 Chambers testimony, September 18, 2013, p. 26081.
- 266 Chambers testimony, September 18, 2013, p. 26083.
- 267 Exhibit 6426; Chambers testimony, September 18, 2013, pp. 26080–5.
- 268 Chambers testimony, September 18, 2013, pp. 26097–104; Exhibit 6434; Officer testimony, August 21, 2013, pp. 21619–20; Exhibit 6585.
- 269 deBortoli testimony, October 7, 2013, p. 28392; Exhibit 8114.
- 270 Hefkey testimony, October 8, 2013, pp. 28601–3.
- 271 Chambers testimony, September 18, 2013, pp. 26103–5; Exhibit 6436.
- 272 Exhibit 6451; Chambers testimony, September 18, 2013, pp. 26111–14.
- 273 Exhibit 6464.
- 274 Needles testimony, September 10, 2013, pp. 25256–7.
- 275 Exhibit 8128.
- 276 Exhibit 6483; Chambers testimony, September 18, 2013, pp. 26114–15.
- 277 Exhibit 3743, p. 006; deBortoli testimony, October 7, 2013, p. 28417.
- 278 Exhibit 6499.
- 279 Exhibit 6501.
- 280 Exhibit 6501.
- 281 Chambers testimony, September 18, 2013, pp. 26116–18.
- 282 Exhibit 6504; Chambers testimony, September 18, 2013, pp. 26118–19.
- 283 Exhibit 6515; Needles testimony, September 10, 2013, pp. 25261–3. The photos in question are Exhibits 9585 and 9586.
- 284 Exhibit 6555.
- 285 Exhibit 9232, p. 008; Chambers testimony, September 18, 2013, pp. 26119–22.
- 286 Exhibit 6571.
- 287 Chambers testimony, September 18, 2013, pp. 26124–5.
- 288 Exhibit 3743, p. 012.
- 289 Exhibit 6596.
- 290 Needles testimony, September 10, 2013, pp. 25271–2.
- 291 Exhibit 6604; Needles testimony, September 10, 2013, p. 25273.
- 292 Exhibit 7812.
- 293 Hefkey testimony, October 8, 2013, pp. 28599–601.
- 294 O’Leary testimony, September 17, 2013, pp. 25848–9.
- 295 Exhibit 8121; Exhibit 8119; O’Leary testimony, September 17, 2012, pp. 25842–3.
- 296 Exhibit 6348; O’Leary testimony, September 17, 2013, pp. 25848–9.
- 297 I discuss Mr. Jeffreys’s qualifications in detail below.
- 298 Jeffreys testimony, October 3, 2013, pp. 28068–70.
- 299 Jeffreys testimony, October 3, 2013, pp. 28070–1.
- 300 Jeffreys testimony, October 3, 2013, pp. 28069–70, and 28072; Exhibit 9449, p. 731.
- 301 Jeffreys testimony, October 3, 2013, pp. 28072–4.
- 302 Exhibit 9449; Jeffreys testimony, October 3, 2013, pp. 28074–7.
- 303 Jeffreys testimony, October 3, 2013, pp. 28077–8; Exhibit 9449.
- 304 Exhibit 7020; Jones testimony, September 26, 2013, pp. 27386–7.
- 305 Jones testimony, September 26, 2013, pp. 27377–9.
- 306 Exhibit 6385; Lacroix testimony, October 3, 2013, pp. 27963–9.
- 307 Jones testimony, September 26, 2013, pp. 27379–84.
- 308 Lacroix testimony, October 3, 2013, pp. 27969–74; Exhibit 6385; Jones testimony, September 26, 2013, pp. 27378–9.
- 309 Jeffreys testimony, October 3, 2013, pp. 28032–6.
- 310 Jeffreys testimony, October 3, 2013, pp. 28032–6.
- 311 Jeffreys testimony, October 3, 2013, p. 28037.
- 312 Jeffreys testimony, October 3, 2013, pp. 28037–40, 28042.
- 313 Jeffreys testimony, October 3, 2013, pp. 28037–40, 28042.
- 314 Jeffreys testimony, October 3, 2013, pp. 28040–1.
- 315 Jeffreys testimony, October 3, 2013, pp. 28041–2.
- 316 Jeffreys testimony, October 3, 2013, pp. 28055–6.
- 317 Jeffreys testimony, October 3, 2013, pp. 28042–4.
- 318 Sanders testimony, October 4, 2013, pp. 28270–2.
- 319 Jones testimony, September 26, 2013, pp. 27374–7.
- 320 Lacroix testimony, October 3, 2013, pp. 27946–9.
- 321 Lacroix testimony, October 3, 2013, p. 27948.
- 322 Jeffreys testimony, October 3, 2013, pp. 28049–50.
- 323 Jeffreys testimony, October 3, 2013, p. 28045.
- 324 Jeffreys testimony, October 3, 2013, pp. 28046–9.
- 325 Jeffreys testimony, October 3, 2013, pp. 28045–6.
- 326 Jeffreys testimony, October 3, 2013, pp. 28050–1.

- 327 Jeffreys testimony, October 3, 2013, pp. 28051–2.  
328 Jeffreys testimony, October 3, 2013, p. 28056.  
329 Jeffreys testimony, October 3, 2013, p. 28057.  
330 Jeffreys testimony, October 3, 2013, pp. 28058–61.  
331 Jeffreys testimony, October 3, 2013, pp. 28061–2.  
332 Jeffreys testimony, October 3, 2013, pp. 28059–60.  
333 Exhibit 245.  
334 Jeffreys testimony, October 3, 2013, p. 28064.  
335 Jeffreys testimony, October 3, 2013, pp. 28064–6.  
336 Sanders testimony, October 4, 2013, pp. 28272–5.  
337 Sanders testimony, October 4, 2013, pp. 28275–7.  
338 Jones testimony, September 26, 2013, pp. 27428–9.  
339 Jones testimony, September 26, 2013, pp. 27439–45.  
340 Lacroix testimony, October 3, 2013, pp. 27953–9.  
341 Lacroix testimony, October 3, 2013, pp. 27958–63.  
342 Lacroix testimony, October 3, 2013, pp. 27976–7.  
343 Exhibit 3743, pp. 006–7; Exhibit 6396.  
344 Exhibit 6180, p. 808.  
345 Exhibit 6396.  
346 deBortoli testimony, October 7, 2013, p. 28418;  
Exhibit 3743, p. 006; Exhibit 6396; Exhibit 6180, p. 808.  
347 Exhibit 6499.  
348 Thomas testimony, August 15, 2013, pp. 21081–4.  
349 Thomas testimony, August 15, 2013, pp. 21084–5.  
350 Jones testimony, September 26, 2013, pp. 27393–4.  
351 Jones testimony, September 26, 2013, pp. 27394–5.  
352 Gillespie testimony, September 3, 2013, p. 23565.  
353 Exhibit 6662.  
354 Needles testimony, September 10, 2013, pp. 25274–6.  
355 Chambers testimony, September 18, 2013, pp. 26133–4.  
356 Exhibit 6674.  
357 Exhibit 6674.  
358 Exhibit 8025.  
359 Exhibit 6619; Officer testimony, August 21, 2013, pp. 21666–7.  
360 Officer testimony, August 21, 2013, pp. 21666–8.  
361 Officer testimony, August 22, 2013, pp. 21701–2, and 21903–4.  
362 Exhibit 8025; Officer testimony, August 21, 2013, p. 21667.  
363 Exhibit 6619.  
364 Lacroix testimony, October 3, 2013, pp. 27975–6; Jeffreys  
testimony, October 3, 2013, p. 28077–8; Exhibit 6385, p. 160.  
365 Officer testimony, August 22, 2013, pp. 21905–6.  
366 Exhibit 6690.  
367 Needles testimony, September 10, 2013, pp. 25178–83.  
368 Needles testimony, September 10, 2013, pp. 25183–4.  
369 Needles testimony, September 10, 2013, pp. 25188–9.  
370 Needles testimony, September 10, 2013, pp. 25190–1.  
371 Needles testimony, September 10, 2013, pp. 25190–2.  
372 Needles testimony, September 10, 2013, pp. 25201–2.  
373 Needles testimony, September 10, 2013, pp. 25194–7.  
374 Needles testimony, September 10, 2013, pp. 25207–8.  
375 Needles testimony, September 10, 2013, p. 25212.  
376 Needles testimony, September 10, 2013, pp. 25187–8.  
377 Comella testimony, September 4, 2013, p. 23891.  
378 Comella testimony, September 4, 2013, pp. 23893–6.  
379 Comella testimony, September 4, 2013, pp. 23893–4.  
380 Comella testimony, September 4, 2013, pp. 23895–8.  
381 Comella testimony, September 4, 2013, pp. 23963–4.  
382 Comella testimony, September 4, 2013, p. 23962.  
383 Comella testimony, September 4, 2013, p. 23927.  
384 Comella testimony, September 4, 2013, pp. 23920–2.  
385 Exhibit 9278.  
386 Comella testimony, September 4, 2013, pp. 24032–4.  
387 McCallion testimony, September 6, 2013, p. 24444.  
388 McCallion testimony, September 6, 2013, p. 24446.  
389 McCallion testimony, September 6, 2013, p. 24453.  
390 McCallion testimony, September 6, 2013, p. 24449.  
391 McCallion testimony, September 6, 2013, pp. 24474–5.  
392 McCallion testimony, September 6, 2013, p. 24473.  
393 McRae testimony, September 25, 2013, pp. 27164–5.  
394 McRae testimony, September 25, 2013, p. 27167.  
395 McRae testimony, September 25, 2013, p. 27170.  
396 McRae testimony, September 25, 2013, p. 27172.  
397 McRae testimony, September 25, 2013, p. 27171.  
398 Guy testimony, September 24, 2013, pp. 27038–46.  
399 Guy testimony, September 24, 2013, pp. 27046–7.  
400 Sorel testimony, October 1, 2013, pp. 27533–7.  
401 Fowlds testimony, September 19, 2013, pp. 26284–5.  
402 Fowlds testimony, September 19, 2013, p. 26296.  
403 Fowlds testimony, September 19, 2013, pp. 26284–5.  
404 Glavin testimony, October 1, 2013, pp. 27633–6.  
405 Glavin testimony, October 1, 2013, pp. 27638–9.  
406 Cranford testimony, September 9, 2013, pp. 24720–3.  
407 Cranford testimony, September 9, 2013, pp. 24725–7.  
408 Feldman testimony, September 18, 2013, pp. 26004–5;  
Exhibit 1087.  
409 Feldman testimony, September 18, 2013, pp. 26005–8.  
410 Needles testimony, September 12, 2013, pp. 25568–71.  
411 Needles testimony, September 10, 2013, pp. 25238–9.  
412 Exhibit 6250.  
413 Needles testimony, September 10, 2013, pp. 25243–4.  
414 Exhibit 6250.  
415 Exhibit 6250.  
416 Exhibit 6393.  
417 McRae testimony, September 25, 2013, pp. 27179–80.  
418 Exhibit 6393.  
419 McRae testimony, September 25, 2013, pp. 27180–3.  
420 Exhibit 7817.  
421 Exhibit 6251.  
422 Needles testimony, September 10, 2013, pp. 25248–9.  
423 McRae testimony, September 25, 2013, pp. 27180–1.  
424 McRae testimony, September 25, 2013, pp. 27184–6.  
425 Exhibit 6393.  
426 McRae testimony, September 25, 2013, pp. 27183–5.  
427 McRae testimony, September 25, 2013, pp. 27187–9.  
428 Sorel testimony, October 1, 2013, pp. 27545–6.  
429 Sorel testimony, October 1, 2013, pp. 27595–6.  
430 Sorel testimony, October 1, 2013, pp. 27547–8.  
431 Guy testimony, September 24, 2013, pp. 27054–5.  
432 Guy testimony, September 24, 2013, p. 27059.  
433 Cornella testimony, September 4, 2013, pp. 24063–4.  
434 Exhibit 6393.  
435 Sorel testimony, October 1, 2013, pp. 27596–8.  
436 Comella testimony, September 4, 2013, pp. 24062–3.  
437 Comella testimony, September 4, 2013, pp. 24061–2.  
438 McRae testimony, September 25, 2013, p. 27196.  
439 McRae testimony, September 25, 2013, p. 27192.

- <sup>440</sup> McRae testimony, September 25, 2013, p. 27196.
- <sup>441</sup> Guy testimony, September 24, 2013, pp. 27059–60.
- <sup>442</sup> McRae testimony, September 25, 2013, pp. 27190–3.
- <sup>443</sup> Guy testimony, September 24, 2013, pp. 27056–7.
- <sup>444</sup> Exhibit 6393.
- <sup>445</sup> Exhibit 6250.
- <sup>446</sup> Exhibit 6393.
- <sup>447</sup> McRae testimony, September 25, 2013, p. 27205.
- <sup>448</sup> Fowlds testimony, September 19, 2013, p. 26313.
- <sup>449</sup> Sorel testimony, October 1, 2013, pp. 27550–3.
- <sup>450</sup> Feldman testimony, September 18, 2013, pp. 26010–3.
- <sup>451</sup> McRae testimony, September 25, 2013, p. 27207.
- <sup>452</sup> Cornella testimony, September 4, 2013, pp. 24071–2.
- <sup>453</sup> Exhibit 6464.
- <sup>454</sup> Exhibit 6485.
- <sup>455</sup> Exhibit 6457.
- <sup>456</sup> Exhibit 6498.
- <sup>457</sup> Exhibit 6500.
- <sup>458</sup> Exhibit 6503.
- <sup>459</sup> Exhibit 6537.
- <sup>460</sup> Cranford testimony September 9, 2013, p. 24741.
- <sup>461</sup> Neadles testimony September 10, 2013 pp. 25263 –4.
- <sup>462</sup> Exhibit 6515.
- <sup>463</sup> Exhibit 6663.
- <sup>464</sup> Exhibit 6250.

