

**CITY OF IQALUIT
SPECIAL CITY COUNCIL MEETING #26
September 18, 2014 at 6:00 PM
COUNCIL CHAMBERS**

PRESENT FROM COUNCIL

Deputy Mayor Mary Wilman
Councillor Kenneth Bell
Councillor Romeyn Stevenson
Councillor Noah Papatsie
Councillor Terry Dobbin
Councillor Stephen Mansell
Councillor Joanasie Akumalik

ABSENT

Councillor Simon Nattaq

PRESENT FROM ADMINISTRATION

John Mabberi-Mudonyi, A/Chief Administrative Officer
Tracy Cooke, City Clerk
George Seigler, Deputy Fire Chief
Matthew Hamp, A/Director, Planning and Development
Eva Michael, Communications Officer
Jeanie Eeseemailee, Senior Interpreter/Translator

PRAYER

Councillor Akumalik opened the meeting with a prayer at 6:00pm.

ADOPTION OF AGENDA

Motion #14-315

Moved by: Councillor Stevenson
Seconded by: Councillor Bell

That the agenda be adopted as presented.

Unanimously Carried

1. DECLARATION OF INTEREST

None

2. SPECIAL BUSINESS

a) Verbal Update – Landfill Fire

Administration expressed their excitement to announce that the landfill fire is finally fully extinguished. It has been a long process and would not have been possible if the City and other officials would not have worked together as a team to get the work done. Initially the timeline for extinguishing the fire was thirty (30) days. Work on the fire began on Sunday, August 31, 2014 and was fully extinguished on September 16, 2014 at 10:00am; extinguishment operations took seventeen (17) full days and were thirteen (13) days ahead of schedule. It was a tremendous amount of material to get through in that timeframe.

The department was fortunate enough to have the expertise of Hell Fire Suppression Services, Global Forensics Inc., Rapid Fire and Tower Arctic. The department would also like to recognize and thank the Government of Nunavut and the Government of Canada for providing the City with their assistance and expertise in environmental health and emergency services. This project would have been difficult to achieve if the City did not work together as well. Most City departments played a vital role including the Fire Department, Municipal Enforcement, Public Works, Engineering, Planning and Development, landfill staff, City garage staff and recreation staff, just to name a few.

Mr. Mike Noblett, Site Manager with Global Forensics Inc. thanked Council for giving him the opportunity to provide an update on the extinguishment operations of the landfill fire. He stated that he arrived in Iqaluit with Mr. Joe Towers on August 27, 2014 where they immediately met with Luc Grandmaison, Fire Chief and George Seigler, Deputy Fire Chief. After completing a review of the landfill site, they noted the geographic complexities and reviewed the water sources, primary wind directions, on site provisions, road access and immediately began to set up an incident command chart.

There were some issues to be addressed: One was the saltwater source for fire fighting; Frobisher Bay tides created a limitation on accessible time for water drafting. This would affect the daily work schedule and would have been reduced by approximately six hours per day. The salt water would further add surface coatings to the work area making them more slippery and more dangerous than what they already are. Salt water would also add to eye and skin irritation to fire fighters and equipment operators on site. Exposure of the excavating equipment to the salt water would also be costly to the City for the excessive damage that equipment would suffer in the long term. The area was reviewed and a small creek was found to hold enough flowing stream to facilitate the water demand. As a result, two miles of six inch hose was required for the initial run and then a double four inch hose was required to take water to the site and water reservoirs on the east side. An additional fire pump was required to work in conjunction with the pumps supplied by the Government of Nunavut. Equipment was flown to Iqaluit on August 29, 2014 and installation of equipment was completed on August 31, 2014.

The team initiated fire fighting at approximately 1:30pm on August 31, 2014 using the overhaul method. The excavators began by digging a trench in front of the work area so that material being extracted from the pile could be immediately stirred in the pond and piled behind them, leaving some material in front of them so they could advance with equipment. The excavator operators had to be trained and informed on how to properly carry out the work. As they started at the thinnest end of the pile, the machines were able to advance quickly and as space was gained, a dozer would push the extinguished material out flat to compress it. Heat readings were recorded throughout the project with temperatures of the extinguished materials found to be between twelve (12) and twenty one (21) degrees Celsius.

From the time fire fighting began, large volume water spray was the significant factor in reducing smoke emissions on site. The water spray was directed, when required, to rain down over the areas where hot ash and smoke would emit. This raining water application allowed for small particles of water to grab onto smoke particles and force them down to the ground. Most of the smoke reduction was maintained within the site itself. He explained that water was pumped from the creek to the site and deposited into the drafting pond, which was also supplied with leachate water from the landfill. Each day, the average amount of water pumped was approximately one thousand (1,000) gallons of water per minute, for eleven (11) hours each day.

Mr. Noblett advised that the second issue was that the drafting pond on the east side of the landfill site was leaking into the ground. This was a particular problem and made it so the team could no longer use leachate water to mix into the clear water for fire fighting. To maintain a working level of water, particularly for morning start-ups, the team initiated a twenty four (24) hour water-pumping program to ensure the pond was full for morning start-ups. A new retention pond was then built along the road and next to the landfill site, with a complete liner that would allow for the storage of water from the creek as well as allow the use of leachate water. This would also allow the landfill additional space for leachate water in the future as the primary retention pond, along with the existing retention pond, further south along the roadway. The extinguished pile of material will take a number of days to fully drain and this will allow this process to occur.

The team suffered a nighttime temperature drop during the operation with concerns that the supply line would freeze. It was decided after that night that hoses be drained at the end of each day and that pump operators would take an additional fifteen (15) minutes each morning to warm up the pumps and check for ice before high pressure pumping would begin. The additional work was completed outside of regular working hours so that it would not interrupt the eleven (11) to twelve (12) hour working day. On September 16, 2014 at approximately 10:00am, the last of the smoking ash was overhauled and laid to rest with the cooled material at the landfill; the landfill fire was then fully extinguished. This was the first of two steps of the operation.

The second step includes work to be completed as quickly as possible to ensure that the fire remains extinguished. The material will return to its normal activity of decomposing, which will cause heating to occur. Although this is a natural process, it must be

controlled. To ensure that the fire remains extinguished, the forming of the pile into an aerodynamic shape must occur. This means that the sides are compressed and shaped into a three to one slope and the top is compressed. There are to be no sharp edges, all changes in direction shall be rounded and smooth and the top shall be flat with no ridge. The final step will include applying material to the sides of the mount, twelve (12) to eighteen (18) inches deep; this is an important final step to ensure the fire remains extinguished. This will maintain the shape of the pile and prevent wind from driving through the pile raising the heat of the material to dangerous levels.

Mr. Noblett advised that as a continued finishing effort, the pile should be covered with material over the top as a complete cover. With the area size of this material piled, it is recommended that nothing be added to the top once the pile is covered. He and another individual from Global Forensics Inc. spent time with landfill staff and assisted them with planning and reviewing what they should do to manage the landfill. They have also been tasked with monitoring the existing pile to ensure it remains in control. Landfill staff will be submitting heat recordings of the extinguished and new piles of material to George Seigler, Deputy Fire Chief as a review mechanism to ensure that any issues are reported and addressed immediately.

This site is not a dump, but a landfill site to be managed so it can be reused when the City relocates the landfill site. This site can be used for whatever the City chooses; industrial development, camp sites, ski hill, et cetera. A dump is where waste is thrown without a care. Iqaluit residents should be encouraged to sort their waste so that landfill staff can sort items received in the best possible location, safely. There can be no secrets about what is in the waste and the operation of the landfill site requires sufficient staff members so that they can properly manage the site.

Councillor Stevenson thanked administration and Mr. Noblett for the update on the landfill fire. He believed that discussions had indicated that the leachate water collected would be left on site over the winter months so that it would freeze and be treated next summer prior to being released back into the environment; he asked if this remained the plan for the leachate water.

Mr. Noblett believed that the City had chosen to proceed in this fashion with the leachate water and noted that Matthew Hamp, A/Director, Engineering and Sustainability has taken the lead on this matter. This was also the reason for the creation of the second holding pond so that there was sufficient space to collect all the water from the landfill site.

Councillor Stevenson believed that it was suggested at the last meeting that the City begin to land farm the land where the City is currently placing waste and asked if this process had begun.

Mr. Noblett confirmed that the process has begun and that landfill staff was informed on how to proceed with this matter. They have begun to flatten the area by removing material and have been recording temperatures at the same time; temperatures reduced

significantly as material was being removed. The goal is to continue with this work during the next couple of days to reduce the size of the pile and to have it compacted. He believed that the landfill site would reopen by Monday to receive regular waste while making sure that it is properly compressed and sorted; soil would be added between each section of waste added to the pile.

Councillor Mansell believed that they discussed rotating between fire fighters of the Iqaluit Fire Department and Hell Fire to provide additional training to local fire fighters on how to address these types of fires. He asked if this type of service was provided to Iqaluit Fire Department fire fighters and if any new information was gained from Hell Fire.

Administration advised that twelve (12) to fourteen (14) fire fighters of the Iqaluit Fire Department rotated during the extinguishment operation with three (3) fire fighters on site per day. The Iqaluit Fire Department fire fighters worked in conjunction with Hell Fire and Rapid Fire staff under the assistance of site managers from Global Forensics Inc., gaining some knowledge on how to address fires such as this one.

Councillor Dobbin noted that Luc Grandmaison, Fire Chief had indicated in a previous meeting that the fire was very deep seated and could take up to two months to fully extinguish, but it was extinguished in seventeen (17) days.

Mr. Noblett explained that after the excavators proceeded with material extraction from the burning pile, they were able to identify the depth of the fire, which was down to permafrost level. They found burning material through the entire mass of the pile and were able to extinguish the fire much faster than anticipated due to the number of hours worked each day and the use of fresh water rather than salt water.

Councillor Dobbin thanked the Iqaluit Fire Department, Global Forensics, Hell Fire and Rapid Fire as well as all other City departments and government officials who assisted with the extinguishment operation. He expressed his appreciation for the fire finally being completely extinguished.

Councillor Akumalik asked if any injuries occurred during the extinguishment operation.

Mr. Noblett advised that there were no injuries reported during the operation but there was a situation where a fire fighter called a mayday, meaning they needed assistance prior to getting injured; he was assisted and was not injured.

Councillor Akumalik also thanked everyone for his or her hard work and dedication and for fully extinguishing the fire.

Councillor Papatsie also thanked Mr. Noblett and George Seigler, Deputy Fire Chief for the update and thanked everyone for working together on the extinguishment operation. He asked if residents will be asked to recycle or separate their waste and if landfill staff has seen a difference to date in waste separation.

Mr. Noblett explained that information would be shared with the public in the very near future by City staff relating to recycling and waste separation. Landfill staff has worked hard to create different areas for different types of waste and believes that this will move forward in a positive manner.

Deputy Mayor Wilman noted that landfill staff has been tasked to monitor incoming waste and asked if there is an overall monitoring system in place to track the type of waste coming in and if separated.

Mr. Noblett explained that landfill staff has been asked to monitor temperatures, which would then be given to George Siegler, Deputy Fire Chief. If there are irregularities in temperatures or any information that may be worrisome and need to be addressed, the departments will discuss it with appropriate staff and move forward to address the matter.

3. **IN CAMERA SESSION**

None

4. **ADJOURNMENT**

Motion #14-316

Moved by: Councillor Bell

Seconded by: Councillor Stevenson

That Council adjourn at 6:45pm.

Unanimously Carried



Mary Wilman
Deputy Mayor

Deputy Mayor
Romeyn Stevenson

John Mabberi-Mudonyi
A/Chief Administrative Officer

Approved by City Council on the 14 day of July, 2015, AD.