CITY OF IQALUIT
SPECIAL CITY COUNCIL MEETING #16
June 30th, 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 Simon Nattaq
Councillor Joanasie Akumalik
Councillor Stephen Mansell

ABSENT
Mayor John Graham

PRESENT FROM ADMINISTRATION
John Hussey, Chief Administrative Officer
Tracy Cooke, City Clerk
Luc Grandmaison, Fire Chief
George Seigler, Deputy Fire Chief
Eva Michael, Communications Officer
Valerie Collin, Recorder
Jeanie Eeseemailie, Senior Interpreter/Translator

PRAYER

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

ADOPTION OF AGENDA

Motion #14-202

Moved by: Councillor Akumalik
Seconded by: Councillor Stevenson

That the agenda be adopted as presented.

Unanimously Carried

1. DECLARATION OF INTEREST

None

2. SPECIAL BUSINESS

a) Verbal Update – Report on Landfill Fire Site Review

Mr. Jamessee Moulton thanked Council for giving him the opportunity to present. He noted that, through the National Air Pollution Surveillance (NAPS) Program, Environment Canada's long-term air quality monitoring equipment in Iqaluit has monitored air quality levels for several critical air contaminants such as nitrogen oxides, ozone, and fine particulate matter since 2012; this is done in partnership with the Government of Nunavut.

In early June, Environment Canada and Health Canada delivered additional equipment to monitor more chemicals attributed to the dump fire smoke. This advanced equipment is installed at four locations around Iqaluit; one is located at the four corners intersection, one at the Municipal Enforcement Office, one at the military base and one in Apex.

Currently, Health Canada and Environment Canada are monitoring the air quality in Iqaluit for several hundred chemical compounds, including pollutants that may have short-term and/or long-term health effects. These include particulate matter (PM (2.5)), ozone, nitrogen oxides, sulphur oxides, associated metals, volatile organic compounds (VOCs), polycyclic aromatic hydrocarbons (PAHs), and dioxins/furans. The Government of Canada continues to work closely with the Government of Nunavut to provide timely updates to the people of Iqaluit.

He stated that the monitoring system at the four corners was scheduled to measure every six (6) days but since the dump fire, has been changed to measure every day; it measures up to thirty (30) different types of metals. Volatile organic compounds and polycyclic aromatic hydrocarbons are measured every second day and the high volume sampler installed at the four corners measures every six (6) days or on event days. An event day is considered to be a day when one goes outside and can smell the dump smoke, smoke will be blown in the town's direction due to the forecasted winds or Environment Canada's weather modelling indicates that wind will be blowing into town.

Mr. Moulton stated that the Department of Environment received new data today indicating that the volatile organic compounds and metals have been very low to date, lower than what you would normally see in a large city. The levels seen in Iqaluit are very comparable to levels in Prince George, British Columbia, that has a population of approximately seventy six thousand (76,000) people. The department has seen some fine particulates spikes but nothing that exceeds that the Canadian wide standard for PM 2.5; these peeks are normally five (5) to ten (10) minutes in duration and have lasted up to an hour at times but are not alarming when monitored twenty four (24) hours per day.

Councillor Akumalik thanked Mr. Moulton for the updated information and noted that he lives in the 2700 area and that the smell is often worse in that area compared to where the Parnaivik building is located. He asked if the monitoring equipment would receive different data is located in different locations or at different elevations.

Mr. Moulton explained that equipment is normally installed lower to the ground so that measurements are taken based on what individuals would be exposed to. The equipment installed at the Municipal Enforcement office would have different data compared to the one installed at the four corners if the smoke is more present in the 2700 area compared to the downtown area.

Councillor Mansell asked if it would be fair to state that there has been an increase in certain measurements since the dump fire but remains below the standards.

Mr. Moulton explained that particulate matters were actually higher prior to the fire, possible due to the amount of dust in the air on a regular basis. The measurements really depend on the weather and wind direction at the time of measurement. Some data remains to be released and an increase in certain measurements cannot be confirmed at this time.

Councillor Nattaq believed that the smoke density is less than what it was when the fire first started. You could smell the fire from a greater distance than you can today and the smoke is less visible. He asked if there was a health risk to residents of Iqaluit at this time.

Mr. Moulton explained that he is only familiar with the data collected and could not confirm what health affects this has on residents of Iqaluit.

Councillor Akumalik asked if the Department of Environment was concerned with the health of Iqaluit residents and could deliver up to date information each week to help residents better understand the possible consequences of smoke exposure if any were to arise.

Mr. Moulton explained that the laboratory is processing data results as quickly as possible and that this is the best the Department of Environment can do at this time.

Deputy Mayor Wilman asked where data samples are sent for analysis.

Mr. Moulton stated that data samples are sent to Environment Canada or Health Canada depending on the samples; they are then returned to the Department of Environment with explanations to assist with interpretation of the data.

Councillor Dobbin asked if analysed data will be released publically so that residents are informed.

Mr. Moulton noted that the Government of Nunavut has been releasing public service announcements to share information with the public and no new data received has changed the content of the public service announcements.
Deputy Mayor Wilman explained that it may seem like the Government of Nunavut or the City of Iqaluit is being vague or not sufficiently informative in their public service announcements, or perhaps not being circulated widely enough, but new information has

not been received in order for the public service announcements to change. She believed that data samples could take approximately two weeks to process and until new information is received, public service announcements will continue to be based on current information available.

Councillor Dobbin asked if public meetings would be held to answer questions residents may have or to share this information or new information with them directly.

Mr. Moulton stated that he could not answer as this would fall under the City's or Government of Nunavut's Communication Department.

Deputy Mayor Wilman explained that Council could decide to have the information shared with the public through public meetings, which will also be shared with the Emergency Preparedness Advisory Committee, which consists of several individuals from many different stakeholders, government agencies and other businesses and organizations.

Deputy Mayor Wilman thanked Mr. Moulton for his presentation and noted that Dr. Tony Sperling will continue with his presentation.

Dr. Sperling thanked Council for giving him the opportunity to present. He noted that Luc Grandmaison, Fire Chief contacted him to provide technical expertise on how to best address the landfill fire and was also asked to provide his recommendations to the working group for consideration.

He noted that the landfill site was established in 1995 as a short-term landfill site and continued to operate until today; it receives approximately nine thousand (9,000) tons of municipal solid waste annually. It is operated by City of Iqaluit staff and has little to no soil cover. It is simply a large pile of exposed garbage and has been operated in this fashion due to the limited amount of space and is considered one of the worst landfill sites in North America.

The City of Iqaluit has seen six (6) landfill fires since 2010 with most fires being in the same location. The first fire was in September 2010 and took approximately five (5) weeks to extinguish using an overhaul method; the burning pile contained approximately ten thousand (10,000) cubic metre of municipal solid waste. The landfill site then caught fire again in January and December 2013 and in January, March and May 2014. When the fire began in May, it was in the same problem location as the previous fires, which originated in 2010 but this time, measuring fifty thousand (50,000) cubic metres of municipal solid waste.

To date, the Fire Department has used many tactics to extinguish the fire, beginning with an offensive approach and extinguishing surface fires. The department then worked on stopping the spread of the fire to adjoining buildings and areas as well as containing the fire to the landfill area by creating a trench with heavy machinery and excavating a large firebreak. They controlled the fire to one specific area measuring ninety (90) by seventy

(70) square metres by spraying approximately eighty thousand (80,000) litres of water at a rate of forty eight (48) gallons per minute. The department sprayed an additional ninety thousand (90,000) litres of water to surrounding piles and areas to prevent the spread of the fire; a total of approximately one hundred and seventy thousand (170,000) litres of water has been used to date.

He believed that the deep-seated landfill fire had been burning since December 2013 and the extinguishment of these deep-seated landfill fires is very difficult. The Fire Department's resources are not set up and do not have the equipment or training required to fight landfill fires and multiple attacks are often required to fully extinguish a deep seated landfill fire. He noted that on June 11, 2014, Council requested that the fire be extinguished as soon as possible with the assistance of experts and assistance from the Government of Nunavut.

Dr. Sperling noted that the City of Iqaluit created a fire working group on June 20th which comprises of several individuals from different organizations such as Emergency Response and Recovery, Protection Services, Medical Health Officer, Airport Operations, Fire Marshall, the Department of Executive and Intergovernmental Affairs and the Department of Environment with the Government of Nunavut, Aboriginal Affairs and Northern Development Canada as well as the Fire Chief, Deputy Fire Chief and several other managers and directors with the City of Iqaluit.

One of the biggest concerns in Iqaluit is the health affect that the smoke may have on residents. The smoke has affected Iqaluit residents on a number of days due to wind directions but the most blows north or south on most days. Individuals who live in the West 40 area are most likely affected by the smoke more often than other areas in Iqaluit and instruments used to measure air quality should be as advanced as possible to ensure that this is closely monitored as accurately as possible.

He explained that there are many parameters being tested by the Government of Nunavut and Government of Canada including volatile organics, polycyclic aromatic hydrocarbons, metals such as chromium, arsenic, copper and lead, dioxins and furans. Results are taking approximately three weeks to be processed and received by the Government of Nunavut as they must be sent elsewhere to be analysed; the reporting of air quality measurements should be processed faster. Residents need to be kept up to date on air quality conditions and whether or not they should have concerns with exposure to the fire smoke, or if they should not have any concerns at all. He explained that his main concern is with staff working at the landfill site including fire fighters who are on site for an extended period of time. Prevailing wind directions usually keep the smoke out of the community and strong winds usually provide a lot of dispersion, reducing concentrations. Data provided by Environment Canada shows mostly no impact with few events of moderate impact on residents directly but the airport site is downwind and more often requires additional monitoring.

Dr. Sperling explained that the Fire Chief has also begun air quality monitoring on site at the landfill so that they are aware on current particulate levels when working on site. The

levels of particulate are very high at the landfill measuring seven thousand (7,000) to forty two thousand (42,000) ug/m3. The readings in smoke on site are five hundred (500) to one thousand (1,000) times the recommended safe exposure level. Carbon monoxide, volatile organics, polycyclic aromatic hydrocarbons, dioxins and furans are also common in smoke from landfill fires and could be very dangerous if exposed. All workers and fire fighters at the landfill site should be required to wear proper respirators to avoid health impacts. The City of Iqaluit should also consider closing the landfill site to staff and fire fighters when smoke is blowing south or air if the air is stagnant.

He explained that he has reviewed operations and fire history of the landfill fire. The fire is very deep-seated and is burning over previously combusted material. Landfill operations do not use best practices and have excessively steep slopes, inadequate cover to no soil cover, there have been no clean up and re-compaction after previous fires were extinguished and re-ignition of fires through spontaneous combustion is very likely and will continue to be until operations are changed.

During his visit to the landfill site, three test pits were excavated to assess the nature of waste, the amount of inert, the temperature at depth, the potential for accelerated burn and particulates released during work. When the excavation began, fire ignited to exposed areas within minutes ranging in temperatures between fifty (50) and four hundred (400) degrees Celsius.

Dr. Sperling noted that the Iqaluit Fire Department has twenty (20) full time fire fighters, fifteen (15) volunteers, one pumper truck, one ladder truck and three (3) emergency medical services vehicles. The city also has excellent contractor resources available that have assisted with fire extinguishment operations to date.

He explained that there are probably some particulates in the fire smoke or in the municipal waste pile itself that are hazardous to the environment, animals and the city; all individuals working to extinguish the fire must ensure that these are contained as much as possible so that environmental impacts are minimized.

The burning pile includes many types of material including drywall, steel, wood pieces, cardboard, plastic, iron boards, bed frames, television sets, oil jugs, diapers and more; materials burning are much more hazardous compared to a woodpile landfill.

Dr. Sperling noted that the Fire Department is adequately staffed to service the community but are overwhelmed when responding to a landfill fire such as this one. During one of their visits at the landfill site, Emergency Services were requested to respond to an emergency call and some staff members at the landfill site were required to leave in order to respond to the call. There is also a lack of equipment available in order to extinguish this fire and even if the department receives additional assistant from firefighters, without adequate equipment, extinguishment of this fire will not be possible.

He explained that the run off from the fire is limited and is not a concern at this time. This could also be controlled, placed into a holding pond and treated over time before being discharged back into the environment.

Council breaks from session at 7:15pm.

Council returns to session at 7:30pm.

Councillor Nattaq believed that many of the materials found in the landfill should be sorted and separated rather than having it all mixed into one pile. The city should close this landfill immediately and start a new one where sorting will be mandatory to prevent future landfill fires such as this one and previous ones that the city has dealt with over the past four years. He did not believe that the fire would be possible to extinguish as it is and that it would need to be broken down into smaller piles, and extinguished one at a time. Unfortunately, there is no water supply nearby the landfill site, and if a significant amount of water is sprayed onto the fire at once, there will be a significant amount of run off that would then need to be addressed prior to it being released into the environment. Water could also be used from the ocean to extinguish the fire rather than using the city's water supply.

Dr. Sperling thanked Councillor Nattaq for his comments and suggestions. He agreed that separating the burning pile into smaller piles would be a good method to extinguish the fire and is normally called the "overhaul" method.

He explained that based on his review of the current landfill fire; there are several options available to the City of Iqaluit. Of course the city could chose to do nothing and simply let the fire burn itself out, but this is not recommended as it may take a significant amount of time. The fire could be buried with dirt, but this increases the risk of the pile collapsing due to the steep slopes of the burning pile.

Water saturation could be used but this is not geometrically possible due to the height of the burning pile and would create significant run off. The department could also chose to use water in-situ mixing which would require mixing the pile with a significant amount of water to turn it into mud but this would take a significant amount of time to do so due to its size and there adequate equipment is not available to do so.

Injecting water could also be an option but again due to the size and density of the pile it would be very difficult if not impossible.

The overhaul method would mean separating the pile into small piles and extinguishing one at a time; this method has often been used in large and aggressive landfill fires and were proven to be successful. The fire could be covered with dirt to control the amount of smoke released and to slow the burning process, in addition to conducting the overhaul method. This method was discussed further today and is strongly being considered.

Other methods are also being recommended by various professionals, such as injecting carbon dioxide and or nitrogen to the fire, but this is not practical based on recent test piles and would require a significant amount of carbon dioxide and or nitrogen to successfully extinguish the fire.

Another method used in the past is a surface foam blanket where the entire pile would be covered with foam, but this would be very expensive and would not address a deep seated fire such as this one.

Dr. Sperling explained that many individuals come forward to assist in situations such as this one and make recommendations as to how the fire could possibly be extinguished; some are often sensible and good ideas and others are not.

Some have suggested in the past to use a geomembrane cover but this is not successful as it melts.

Another was to use a geomembrane welders taro, which is a fire resistant tarp but the placement of this tarp on steep slopes is impossible.
Others have suggested using water bombers, which are used to extinguish forest fires, but again this would not be successful with a deep fire and will create significant run off.

Sea ice or ice burial has been used in the past but this will cause environmental damage and is a very slow process.

An accelerated burn blow air method requires drilling or pushing pipes into the pile to accelerate the burn; this method was considered by the working committee and is to be explored further as the fire contains many types of particulates and would create more ash and more smell. The city could also consider using an accelerated burn pit, which would also use the overhaul method. An accelerated burn with diesel or blow up with explosives would not be acceptable nor can it be controlled and is therefore not being recommended.

He stated that while considering these available methods to extinguish the fire, and only selecting a few to be considered and further reviewed, it is also important to consider other things such as the health and safety of fire fighters and contractors, health and safety of landfill staff, air quality in Iqaluit during the extinguishment, leachate run off to the ocean, possible contamination of land, winter operations, fire fighter resources, contractor resources, material resources and complexity, duration of extinguishment, *Environmental Protection Act* compliance, *Fisheries Act* compliance, potential liability issues, continuity of landfill operations, public acceptance, cost, total score, likelihood of success and weighted score.

While reviewing all available extinguishment options available as well as the evaluation criteria listed above, a table was created giving each extinguishment method a score. The overhaul and accelerated burn methods scored the highest; the committee then decided to review these options further until one is strongly recommended.

Dr. Sperling advised that he and the working group carefully reviewed each extinguishment method, beginning with "do nothing option" and determined that:

- the fire would smoulder for a long time, possibly months to a year or longer
- downwind air quality at the landfill is and would not be safe for workers
- air quality downwind near the landfill site may not be safe on days that are not very windy; would need accurate data on these days
- odour impacts downwind will continue to be unpleasant
- testing is required to determine down wind air quality, especially dioxins, furans and volatile organic compounds
- fire could escalate
- collapse of core could potentially result in massive fire ball

Accelerated burn in-situ option:

- accelerated burn is situ will not work
- too much ash, will block air flow
- much more smoke and ash will be released than it is today
- fire could get seriously out of control with lots of venting and ash
- toxic ash from fifty thousand (50,000) tonnes of metals and plastics would be dispersed into the environment

Overhaul with accelerated burn option:

- working pile without adding water is impossible; once partially burned wood and plastics are exposed, it will burn vigorously
- massive ash, visibility problems, on going flare ups
- adding water or foam will be needed to control flare ups; this will reduce rate of burn
- ash removal will release lots of fine particulates; air quality will likely be much worse than it is today during burn
- on event days and foggy days, smoke could exceed health criteria; impacts will depend on wind direction

Controlled Overhaul with quenching pond option:

- operation can be controlled
- once started, operation cannot stop
- clean water application for dust and smoke control
- run-off direction to quenching pond
- will require overnight recirc; monitors for fire control
- smoke and dust control provided by fighters
- need to investigate leachate containment, develop leachate treatment plan
- need to confirm black ash cloud can be minimized
- need to confirm reliable water supply

Dr. Sperling advised that the estimated cost of accelerated burn would be as follows:

- 8 pieces of equipment at a rate of twenty nine thousand five hundred ($29,500.00) dollars per day
- 13 workers at a rate of fourteen thousand five hundred and fifty ($14,550.00) dollars per day
- supplies at a rate of six thousand nine hundred and twenty two ($6,922.00) dollars per day
- total estimated daily cost of fifty thousand nine hundred and seventy two ($50,972.00) dollars

He explained that this would allow for a daily production of five hundred (500) square metres over a period of approximately one hundred (100) days; total estimated extinguishment cost is five million ninety seven thousand ($5,097,000.00) dollars.

The total estimated cost of the overhaul and quench is as follows:

- 7 pieces of equipment at a rate of twenty four thousand five hundred ($24,500.00) dollars per day
- 13 workers at a rate of fourteen thousand five hundred and fifty ($14,550.00) dollars per day
- supplies at a rate of seventeen thousand seven hundred and thirty three ($17,733.00) dollars per day
- total estimated daily cost of fifty six thousand seven hundred and eighty three ($56,783.00) dollars

This would allow for a daily production of one thousand (1,000) square metres over an estimated number of sixty (60) days; total estimated extinguishment cost is three million four hundred and seven thousand ($3,407,000.00) dollars.

Dr. Sperling believed that it was very important to have the fire completely extinguished before the winter sets in; fighting a fire at minus 40 degrees Celsius would be very challenging. This would provide two to three months to have the fire fully extinguished but could possibly take longer. This is a very time sensitive matter and the city needs to act quickly.

In order to proceed with the extinguishment plan, the City would need to secure funding for two (2) to three (3) million dollars in fire suppression effort, commence drafting of a health and safety plan to protect fire fighters and contractors, collect high volume samples of smoke at the landfill site and at the army base during event and rush analysis, identify a solution for waste diversion while dump site is closed and provide a summary of actions that the City is taking to improve waste management to minimize risk of future fires.

He advised that the City would also be required to form a unified command team to include an incident commander, site commander, on-site health and safety officer,

community health officer, public communications, fire fighting group leader, heavy equipment contractor, logistics, accounting and regulatory liaison.

Required resources would need to be secured and would include:

Heavy equipment

- 2 long stick excavators
- 1 medium excavator
- 1 dozer (D7 or larger)
- 2 loaders

Estimated cost for heavy equipment resources is four hundred ($400.00) dollars per unit for ten (10) to twelve (12) hours per day; total estimated daily cost is twenty four thousand five hundred ($24,500.00) dollars.

Fire suppression equipment

- 4 monitors (500 to 1,000 GPM)
- 2 low head, high volume diesel pumps
- 2 high head pumps capable of one thousand (1,000) GPM
- 4 inch manifold system and hose
- 10 day supply of Class A foam at one percent.

Manpower resources

- 9 people - incident command team
- 5 fire fighters plus 2 additional to relieve when necessary
- 7 equipment operators plus 2 additional to relieve when necessary
- 2 security officers

Logistics resources

- command post
- 30 radios with common frequency
- equipment storage
- food supply

Health and safety resources

- 40 full face respirators (NIOSH Olive Green)
- 40 half face respirators (NIOSH Olive Green)
- 20 gas analyzers
- 8 SCBA on stand-by with 4 operators trained
- Nomex overalls

- personal protection equipment such as helmets, glasses, boots and gloves.

Dr. Sperling explained that once the preferred extinguishment method is selected and confirmed, all individuals to assist with the extinguishment will require a health and safety orientation. A command post will need to be established as well as clear staging areas. A quenching pond will need to be built and the team will also need to prepare the extinguishment laydown area. The fire water system will need to be prepared as well as a four thousand five hundred (4,500) square metre lined drafting pond, which would provide a two day supply; overhaul would then be ready to commence.

Daily operations would include safety briefings, overhaul operations, fifteen (15) minute breaks every two (2) hours, thirty (30) minute lunch breaks, ten (10) to twelve (12) hours of productivity with a target of one thousand (1,000) square metres per day but may be much slower if there is significant heat and dry ash. There is an estimated total volume of fifty thousand (50,000) square metres of municipal solid waste burning at this time.

He explained that current landfill operations virtually guarantee fire ignitions and future operations will need to be changed in order to prevent landfill fires; slopes should be reduced and the landfill should be built in cells. The cells should be covered with three hundred (300) millimetres of dirt and cardboard and clean wood should be diverted or periodically burned or composted where plastics should be recycled and shipped south.

Councillor Mansell asked if the working group also believed that the overhaul method was the best extinguishment option for this fire at this time.

Dr. Sperling advised that the working group did discuss all options and does consider this one as one of the best possible options but some questions remain unanswered as data has not yet been received. The working group needs to have further discussions on which method they believe would be the best one to use but he believed that using the overhaul and accelerated burn methods combined, if possible, would be the best methods to use at this time to quickly extinguish the fire.

Councillor Mansell asked if the working group would make a decision on the extinguishment method to be used once data is received.

Dr. Sperling noted that this is a very time sensitive matter and that a decision should be made as quickly as possible. He believed that based on discussions with the working group that a method has somewhat been chosen but this could change once updated data is received.

Councillor Dobbin believed that Fire Chief indicated that the extinguishment would take approximately two months but Dr. Sperling indicated that this may take a few months or longer; he asked for clarification. He also noted that the estimated total cost for the extinguishment is significant and Council would need to discuss where funds are to come from.

Dr. Sperling explained that estimating exactly the amount of time it will take to fully extinguish the fire is challenging as things may arise during the process. He stated that he is very confident that this method will be successful and that the fire will be completely extinguished but the team would require all resources mentioned in order to do so effectively and as quickly as possible. The estimated total cost is based on daily operations and resources required to undertake the daily operations to extinguish the fire.

Councillor Bell believed that the Fire Chief was in agreement with these recommendations as well and that this information was very useful. He expressed his concern with the total estimated cost and noted that this is a significant amount of money for the City to expense and wonders where the City will find the funds to compete this operation.

Dr. Sperling explained that in previous operations, he has also seen municipalities being overwhelmed with the cost of the operation and often requests the assistance of the territorial government to cover costs. The City could declare a state of emergency to receive assistance with the extinguishment of the fire. He believed that the Government of Nunavut is also very concerned and would like to have the matter addressed as soon as possible. A detailed plan should be presented to the Government of Nunavut indicating how future landfill operations will be undertaken and to show that the City is dedicated to making operations much better to prevent such landfill fires.

Councillor Bell asked how the City would cover the cost of the fire extinguishment if the Government of Nunavut decides not to assist the City with the costs of the operations.

Deputy Mayor Wilman believed that the Government of Nunavut was fully in support of this operation and supportive of the City in whatever way they could.

John Hussey, Chief Administrative Officer, explained that if the City is held responsible for the costs of the operation solely on their own, Council would need to revisit the budget and reallocate funds and possibly defer projects that are not of high priority. The City could also place a hiring freeze until such time when the City would have the funds available.

Councillor Akumalik thanked Dr. Sperling for his presentation and stated that the information was appreciated. He believed that Council needed to discuss this further and make a decision as soon as possible; this operation is going to cost a significant amount of money no matter the method selected and the City will simply need to address it as best they can. Future landfill operations seriously need to be considered and changed to prevent future landfill fires.

Councillor Papatsie thanked Dr. Sperling for his presentation and expressed his support for the suggested extinguishment method. He understood that the operation would be very expensive and believed that the Government of Nunavut and Government of Canada should assist the City with this matter. All levels of government should work together to identify the best solution and to share the costs of the operation.

Councillor Stevenson noted that it was recommended that the landfill site be closed on event days for the health and safety of workers as well as identifying an alternate site for the period of time where the extinguishment will take place. He did not believe that an alternate site was available and that the City has been looking into this matter and had great difficulty in finding an alternate site. There remains to be many things to be clarified and identified before the City can proceed with the extinguishment plan.

Dr. Sperling understood Councillor Stevenson's concerns and explained that in order to properly undertake daily operations at the landfill site for extinguishment of the fire, it will be necessary for waste to be diverted to an alternate site until such time where the landfill site can be safely accessed and used for its purpose again. There is a significant amount of municipal solid waste delivered to the landfill site on a daily basis and it would not be safe for workers to continue daily operations at the site until the fire is completely extinguished. Perhaps sealift containers could be used for storage of waste if an alternate site cannot be identified. Clean wood waste should also be diverted as much as possible and this would require all regulating authorities' assistance as well to identify a suitable site where wood could be stored for a period of time. He suggested that a meeting be held with government officials and any other representatives that should be included to discuss the next steps and current issues that need to be addressed before the City can proceed with the extinguishment plan.

Deputy Mayor Wilman thanked Dr. Sperling for his presentation and his time and noted that she looks forward to discussing the matter further with other individuals to possibly address current challenges that prevent the City from moving forward with the extinguishment plan.

3. IN CAMERA SESSION

None

4. ADJOURNMENT

Motion #14-203

Moved by: Councillor Stevenson
Seconded by: Councillor Dobbin

That Council adjourn at 9:00pm.

Unanimously Carried

Mary Wilman
Deputy Mayor

(Muhammad Hassan June 2015)

John Hussey
Chief Administrative Officer

Approved by City Council on the 23 day of June, 2015, AD.