

## **COMMITTEE OF THE WHOLE - SEPTEMBER 18, 2006**

### **CT-06-05 SUPPLY AND DELIVERY OF BULK SODIUM CHLORIDE**

#### **Recommendation**

The Commissioner of Engineering & Public Works, in consultation with the Director of Purchasing Services, recommends:

1. That the pricing submitted by Sifto Canada through the Region of York for co-operative tender CT-06-05 be accepted, for the supply and delivery of sodium chloride (winter road salt) for the 2006-2007, 2007-2008 winter seasons, plus any approved extension period;
2. That in accordance with the City's purchasing policy, the City continue its test ClearLane Enhanced De-icer, an alternate deicing material from Cargill Deicing Technology, for use in a portion of the City; and,
3. That the Mayor and Clerk be authorized to sign the necessary documents.

#### **Economic Impact**

The approved 2006 Operating Budget provides \$1,861,000 for the purchase of winter de-icing materials, of which \$520,942 has been spent. This leaves \$1,340,058 for the Public Works Department to stockpile sodium chloride (winter road salt) and other de-icing materials, to start the 2006-2007 winter season.

Based on the remaining funds in the 2006 Operating Budget account for salt purchases, approximately 19,400 tonnes of both winter road salt material from Sifto Canada and Cargill Deicing Technologies can be obtained without exceeding the line item amount. This number of tonnes would suffice to fill the domes prior to the start of the winter season to ensure the City can respond to winter storm events.

#### **Purpose**

The purpose of this report is to award the co-operative tender CT-06-05 for the supply and delivery of bulk sodium chloride (highway Coarse Rock Salt) to Sifto Canada Ltd. and to approve the continued use of the alternative deicing material ClearLane, supplied by Cargill Technology.

#### **Background - Analysis and Options**

In 2005-2006, over 14,280 tonnes of sodium chloride was used to maintain the east portion of the City's road and sidewalk network. In addition, over 9,952.57 tonnes of ClearLane (an alternative de-icing material), was used to maintain the road and sidewalk network in the west portion of the City. The total amount of material used was just over 24,232.63 tonnes.

The City has 4 salt storage domes, with an approximate total capacity of 24,000 tonnes. Salt storage domes are normally filled to capacity to start the winter season. This allows the City to obtain the best possible price for the de-icing materials, and provides assurance that should a number of early storms hit, there is sufficient material available. The domes are replenished throughout the winter season as the need arises.

#### **Bulk Sodium Chloride**

On April 27<sup>th</sup>, 2006 Bid call CT06-05 Supply and Delivery of Sodium Chloride was advertised on Bid Navigator, by The Town of Newmarket on behalf of the York Public Buyers Co-operative.

The Contract is for 2 years (2006-2007 and 2007-2008 winter season), plus a one year additional extension (2008-2009). Bidders were to give a price for the supply and delivery of bulk sodium chloride (winter road salt) per year as well as an early fill price for purchases made prior to November 15<sup>th</sup> of every start of the winter season.

The Bid closed on May 11<sup>th</sup>, 2006 and two (2) bids were received. Sifto Canada provided an early fill price for supply and delivery of bulk sodium chloride, allowing a discount of \$2.00 for product shipped between September 1<sup>st</sup> to November 15<sup>th</sup> of each season. While Canadian Salt Co. Ltd. provided no discount for the early fill rate, Public Works will be taking advantage of purchasing salt from Sifto Canada at an early fill rate of \$59.67 thus achieving an approximate cost savings of \$28,560.00, based on the required quantity to start our winter season. Following are the bid results:

<b>Bidder</b>	<b>2006/2007 Supply &amp; Delivery \$/Tonne (excluding taxes)</b>	<b>2006/2007 Early Fill \$/Tonne (excluding taxes)</b>	<b>2007/2008 Early Fill \$/Tonne (excluding taxes)</b>	<b>2008/2009 Early Fill \$/Tonne (excluding taxes)</b>
<b>Sifto Canada Ltd.</b>	<b>\$61.67</b>	<b>\$59.67</b>	<b>59.67</b>	<b>63.37</b>
<b>Canadian Salt Co. Ltd.</b>	<b>\$66.54</b>	<b>\$66.54</b>	<b>66.54</b>	<b>71.99</b>

In accordance with the recommendations made by the City's Operational and Compliance Auditor, this tender required, *"that the supplier be responsible for the loading and weighing of sodium chloride on a suitable government certified weigh scale to determine net weight measurement."* As such, Public Works staff will be making arrangements to spot check tractor-trailer loads for weigh ticket accuracy to ensure the City receives the amount of material they are being billed for.

Use of Alternative De-icing Materials

For the past four winter seasons (2002-2003, 2003-2004, 2004-2005, 2005-2006) the City has used both, sodium chloride (straight rock salt) and a modified salt product call "ClearLane", to maintain its roads during winter storms. Salt has been used in the east portion of the City, while ClearLane has been used in the west portion of the City.

ClearLane was chosen as an experimental de-icing agent due to its ease of use (pre-mixed), environmental benefits, its ability to provide de-icing abilities at temperatures lower than that of straight salt, and the fact that the residue is left to promote quick melting of subsequent snow/ice. Last year, a newer version of the ClearLane product was used (ClearLane Enhanced De-icer), with very good results. However, with the additional benefits come additional costs. The following table outlines the 2005-2006 price per tone costs comparing ClearLane to straight salt.

<b>Material</b>	<b>Cost per Tonne (excluding taxes)</b>
Salt	\$59.67 (early fill rate)
ClearLane Enhanced Deicer	\$67.77

There is a difference in the price per tonne comparing ClearLane to salt. However, since ClearLane can be applied at spread rates that are less than salt, the cost per lane kilometer of roadway maintained is similar. The following table outlines the costs, and uses the 20% differential in spread rates used for the past four winter seasons.

<b>Cost per lane kilometer for ClearLane vs Straight Salt</b>		
<b>Material</b>	<b>Spread Rate Per Lane Km</b>	<b>Cost/km</b>
Salt	130kg/km	\$7.75
ClearLane Enhanced Deicer	104kg/km	\$7.05

As this will be the first full season using the new “Enhanced” version of the ClearLane product, it is not recommended that it be the sole deicing product used by the City. Having two de-icing material suppliers ensures that should there be a delivery issue mid-winter, de-icing materials can be obtained. This was an issue in the past, when severe storms have depleted the City’s supplies earlier than anticipated, and deliveries were not able to be made in a timely fashion.

Staff are also investigating the use of the ClearLane product in other areas of the City, and will make every effort to do test it in areas of Maple and Thornhill this winter.

Although the ClearLane products have been used for the past 4 winter seasons, and ClearLane Enhanced De-icer is recommended for the 2006-2007 winter season, staff have sought out and reviewed other alternative deicing materials. Based on cost comparisons to date, the ClearLane products are the most economical, and require no changes to the City’s or contractors’ fleet, or its operations. However, in accordance with our Salt Management Plan, staff will continue to seek out and evaluate other alternative de-icing materials to determine their overall effectiveness and cost, and report further to Council with any recommended changes for future de-icing practices.

**Relationship to Vaughan Vision 2007**

The recommendations contained in this report are consistent with the priorities previously set by Council, and are in accordance with Vaughan Vision A-2 “Promote Community Health, Safety, & Wellness”, as well as A-3 “Safeguard Our Environment”.

**Conclusion**

Based on the Co-operative tender results, it is recommended that the price submitted by Sifto Canada through the Region of York for the supply and delivery of bulk sodium chloride for the 2006-2007 and 2007-2008 winter season be approved, and that in accordance with the City’s purchasing policy, and Salt Management Policy, ClearLane Enhanced Deicer continue to be used in a portion of the City.

**Attachments**

N/A

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Respectfully submitted,

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Commissioner of Engineering and Public Works

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