



Leicester
City Council

WARDS AFFECTED
All Wards

FORWARD TIMETABLE OF CONSULTATION AND MEETINGS:

Cabinet Lead
Cabinet Briefing
OSMB
Cabinet

12th January 2011
7th February 2011
3rd March 2011
7th March 2011

Policy for Conservation of Road Salt Stock Levels

Report of the Strategic Director, Development, Culture and Regeneration

1. Purpose of Report

- 1.1 To seek Cabinet approval for a policy concerning Conservation of Road Salt Stock Levels.

2. Recommendations

- 2.1 Cabinet is asked to approve the attached Policy for Conservation of Road Salt Stock Levels (Appendix 1).

3. Summary

- 3.1 The last two winters have identified that there can be problems with the restocking of road salt during periods of severe winter weather. If restocking was not possible, the Council would somehow have to conserve its supplies and the attached policy document in appendix 1 details how this would be carried out.

4. Report

- 4.1 Following the severe winter weather in recent years and the problems with salt supply, the government advice is that local authorities should prepare a Road Salt Conservation Policy (see Appendix1) to deal with possible shortfalls.
- 4.2 The City is still reasonably well stocked with road salt (approx 1400 tonnes; 50%) when compared to other Local Authorities. However, the national salt supply chain resilience is of real concern to us, particularly if the severe weather situation returns for a further lengthy period and we do not get some new supplies in soon. This has also been flagged up as a concern by the Local Resilience Forum.
- 4.3 We have already placed an order for 1000 tonnes in late November 2010, but discussions with suppliers indicate to us that authorities in more urgent need are being

prioritised ahead of us at the moment. We therefore feel it prudent to have an agreed salt conservation policy in place to help conserve salt stocks when we are approaching or have entered into a low salt stock situation.

4.4 The approach we are proposing is detailed in the attached policy document and assumes a phased withdrawal of elements of the winter service based on the prevailing risk factors and salt stock levels. We have already circulated the draft policy to various staff for their comments. In addition, and in order to preserve highway salt stocks for longer, we will be advising other Divisions of the Council to ensure that they build up their own level of resilience for next the winter season by ordering in and storing salt themselves. This will help prevent unexpected and unnecessary demands being placed on the highways salt reserves.

5. FINANCIAL, LEGAL AND OTHER IMPLICATIONS

5.1. Financial Implications

The salt stock is purchased from the Highways Maintenance revenue budget, average spend in the last 2 years has been £50,000 per annum. Prices for Salt have increased by 50% and we are forecasting expenditure on salt stock to increase to £75,000 accordingly.

Paresh Radia, Finance Manager, Ext 29 6507.

5.2 Legal Implications

Section 41(1A) of the Highways Act 1980 provides that a highway authority is "under a duty to ensure, so far as is reasonably practicable, that safe passage along a highway is not endangered by snow and ice". There is therefore, in effect, a qualified duty to grit the highway network for which each authority is responsible.

The policy details how the Council will be able to maintain this duty should there be a shortfall in salt supply.

Jamie Guazzaroni Solicitor, Legal Services, RAD, Ext 29 6350.

5.3 Climate Change Implications

There are no climate change implications of the report.

6. Other Implications

| OTHER IMPLICATIONS | YES/ NO | Paragraph/References Within Supporting information |
|-------------------------------|--------------------|---|
| Equal Opportunities | No | |
| Policy | Yes | 4.1 – 4.4 |
| Sustainable and Environmental | No | |

| | | |
|------------------------------|----|--|
| Crime and Disorder | No | |
| Human Rights Act | No | |
| Elderly/People on Low Income | No | |
| Corporate Parenting | No | |
| Health Inequalities Impact | No | |

7. Background Papers – Local Government Act 1972

- 7.1 The Winter Resilience Audit Report written by David Quarmby is available at: <http://transportwinterresilience.independent.gov.uk/>.

8. Consultations

- 8.1 Legal Services, Emergency Management Team, Finance Team, Regeneration & Culture, Local Resilience Forum, Staff in Regeneration, Highways & Transportation Division.

9. Report Author

Alan Adcock, Head of Highway Maintenance

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Appendix1

Policy for Conservation of Road Salt Stock Levels.

1. Background.

- 1.1 Leicester City Council's Highways Maintenance Service aims to commence the winter season with at least 2500 tonnes of road salt (maximum storage capacity is 2700). This level proved resilient during the severe winters of 2009 and 2010 and the Council did not run out of road salt. However, the Council struggled to obtain salt supplies for re-stocking to an acceptable level during the winter periods.
- 1.2 The national salt stock and supply chain has proved less resilient. Significant problems arose in 2009 and 2010 for some local authorities who needed urgent supplies in sufficient quantities in order to maintain their road gritting service. This resulted in the formation of the National Salt Cell to help co-ordinate the provision of salt supplies to where it was most needed and advise authorities on how best to minimise salt use and deliver a reduced winter service.
- 1.3 Nationally, efforts have been taken to try and address the issues surrounding the supply of salt. However, there remains a high risk that pro-longed severe weather and/or numerous severe weather events will see similar pressures on salt supplies in the future.
- 1.4 Accordingly it is prudent to ensure we have a policy document agreed by Cabinet, Emergency Management and the Local Resilience Forum for conserving road salt stocks when our stocks run low and we experience re-supply difficulties. Relevant Council Divisions would also need to be aware of the policy and the potential impacts on their services. Any such decision to activate the policy would be considered a "key decision" of the Council.

2. Normal Winter Service Gritting Activities.

- 2.1 Our Winter Service Operational Plan details the actions we take during normal circumstances when stock levels are satisfactory. These are summarised as follows:
 - i. Primary Routes salted overnight whenever frost or icy conditions expected.
 - ii. Primary Routes salted prior to and during snowfall.
 - iii. Secondary Routes salted during snowfall and pro-longed ice.
 - iv. Important pedestrian routes and shopping areas are salted during snowfall and pro-longed ice.
 - v. 180 Grit bins maintained with 50/50 sand/salt mix.
 - vi. Salting activities and/or salt supplied to other service providers including:
 - a. Schools
 - b. Healthcare facilities
 - c. Public events
 - d. Council car parks
 - e. Leicester Market
 - f. Housing Services
 - g. Other Council facilities.

3 Salt Conservation Arrangements.

3.1 **Risk Factors:** The need for the application of salt conservation measures will depend on the degree of risk arising from the following factors:

- i. Current Salt Stock Levels
- ii. Weather Forecast
- iii. Time in the Season
- iv. Expected Restocking Dates & Potential for Delays
- v. Actual Usage Rates

The County Surveyors Society & Salt Cell guidance also details other salt conservation measures and these will be deployed as necessary to help preserve salt stocks for as long as possible. See Annex 1.

3.2 For the purpose of assessing resilience, we assume salt usage rates of 125 tonnes per day during heavy snowfall and 25 tonnes per day during frost conditions.

3.3 The key aim of the Council's Winter Service in a Low Salt Stock emergency situation must be to maintain the Primary Route network in a safe condition including the possible use of the Council's roads as a possible diversion route from the M1. This is to ensure the safe passage of emergency service vehicles responding to incidents, public transport and goods vehicles carrying essential supplies (food stuffs, medical equipment, fuel, etc.) to the main distribution centres (e.g. supermarkets, hospitals, petrol stations, etc.). The Primary route network is also essential to maintaining economic activity in the City.

3.4 A phased approach to salt conservation will therefore be adopted, balancing the need to maintain the primary network whilst still maintaining a general service provision for as long as reasonably possible. Accordingly, the following salt conservation policy will be used as a general guide to decision making. However, the actual decisions made and actions taken will also need to take into account the above five risk factors: -

a) When stock levels fall to 1500 tonnes (12 days snowfall or 60 days frost):

- i. A re-supply order must be placed for 1000 tonnes. This may need to be placed sooner where considerable salt has been used early in the winter season and salt stocks are predicted to be at 1500 tonnes or lower by 31st December. The re-supply order quantity will need to be reviewed and further orders placed if conditions persist and depending upon the risk factors detailed above.

A normal service is maintained during phase a) and no road salt is therefore conserved.

b) When stock levels fall to 1000 tonnes (8 days snowfall or 40 days frost):

- i. Road salt will only be applied to the Primary and Secondary Route Networks and important pedestrian routes.
- ii. Spread rates contained in line with current County Surveyors Society & Salt Cell guidance and dependent upon prevailing weather conditions.

- iii. Spot salting only on non-primary routes and based upon incident reports and requests from the emergency services.
- iv. No salt will be supplied to other public services unless requested by the emergency services.
- v. The provision of salt to critical services will be considered on a case by case basis.
- vi. Grit bins will cease to be re-filled with sand/salt mix. Sand (grit) only may be used instead.

Road salt conserved under phase b):

- A. Road salt conserved by above measures equivalent to 1 additional day snowfall or 5 days frost (12.5% @ 1000 tonnes and equivalent to **125 tonnes** road salt conserved).
- B. Cumulative total equivalent to 1 day additional snowfall or 5 days frost (12.5% @ 1000 tonnes and equivalent to 125 tonnes road salt conserved in total).

c) When stock levels fall to 500 tonnes (4 days snowfall or 20 days frost):

- i. Road salt will only be applied to the Primary Route Network.
- ii. Spread rates contained in line with current County Surveyors Society & Salt Cell guidance and dependent upon prevailing weather conditions.
- iii. Secondary routes and important pedestrian routes will not be treated with road salt. Sand (grit) may be used instead to provide a degree of grip/traction.
- iv. Spot salting only on non-primary routes and based upon incident reports and requests from the emergency services.
- v. No salt will be supplied to other public services unless requested by the emergency services.
- vi. Grit bins will cease to be re-filled with sand/salt mix. Sand (grit) only may be used instead.

Road salt conserved under phase c):

- A. Road salt conserved by above measures equivalent to 1 additional day snowfall or 5 days frost (25% @ 500 tonnes and equivalent to **125 tonnes** road salt conserved).
- B. Cumulative total equivalent to 2 days additional snowfall or 10 days frost (25% @ 1000 tonnes and equivalent to 250 tonnes road salt conserved in total).

d) When Stock Levels fall to 250 tonnes (2 days snowfall or 10 days frost):

- i. Road salt will only be applied to the Principal and Non-Principal Classified Road Network, comprising A, B & C roads, and other critical roads in the City essential for the emergency services.
- ii. Other key commuter and bus routes on the Primary Gritting Route Network will no longer be treated with road salt. Sand (grit) may be used instead to provide a degree of grip/traction.
- iii. Spread rates contained in line with current County Surveyors Society & Salt Cell guidance and dependent upon prevailing weather conditions.
- iv. Secondary routes and important pedestrian routes will not be treated with road salt. Sand (grit) may be used instead to provide a degree of grip/traction.

- v. Spot salting only on Non-Classified routes and based upon incident reports and requests from the emergency services.
- vi. No salt will be supplied to other public services unless requested by the emergency services.
- vii. Grit bins will cease to be re-filled with sand/salt mix. Sand (grit) only may be used instead.

Road salt conserved under phase d):

- A. Road salt conserved by above measures equivalent to 2 additional days snowfall or 10 days frost (100% @ 250 tonnes and equivalent to **250 tonnes** road salt conserved).
- B. Cumulative total equivalent to 4 days additional snowfall or 20 days frost (50% @ 1000 tonnes and equivalent to 500 tonnes road salt conserved in total).

4. Decision Making

- 4.1 The decision to conserve salt and reduce the winter service service provision (see paras 3.4b –d above) will be taken by the Cabinet Lead for Highways and Transportation in consultation with the Director of Regeneration, Highways and Transportation. This will be after discussion with the Resilience Forum, the Emergency Management Team, the Emergency Services, the Chief Operations Officer, Risk Management and Leicestershire County Council.

5. Communications Plan

- 5.1 After the decision to conserve salt is taken, a press release detailing the revised salting procedures will be issued and it will be publicised on the Council's website, by the Traffic Information Service and Customer Services. Key organisations will be contacted directly.

Annex 1



Matthew Lugg
Chair of CSS Engineering Committee

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National Salt Shortage

Advise to CSS Members on how to help Preserve Salt Stocks

In order to ensure that essential winter services can be maintained it is paramount that existing salt supplies are optimised.

It is strongly recommended, therefore, that all CSS members involved in managing winter maintenance services consider the following actions to use the existing supplies in the most effective and efficient way:-

- To consider no longer providing a salt spreading service on secondary networks but continue to concentrate on published priority networks, which are generally A and B and some heavily trafficked C roads.
- On minor roads where compacted snow and ice lies it is still possible to provide a service without the application of salt by spreading grit only. This will provide traction and help break up the frozen surfaces.
- To ensure all spreaders are correctly calibrated and that calibration checks are undertaken as soon as possible to make certain that these vehicles are spreading the prescribed rates.
- For general precautionary salting there should be no need to spread at rates over 15g/m² for salt stored in the open and 10g/m² for salt stored under cover (as recommended by the Code of Practice).
- To make use of all available technology such as salt sensors to check salinity levels and where there is adequate residual salt on the road then not to provide further treatment.
- In conditions where snow has already settled on the carriageway consideration should be given to mixing salt and grit (single size abrasive aggregate not exceeding 6mm or 5mm sharp sand) to ratio of up to 50/50.
- Where larger highway authorities have potentially different climate domains consideration should be given to partial network treatment rather than blanket cover when appropriate.
- In circumstances where roads may be dry in places but have areas of moisture through snow melting or seepage on the carriageway then spot salting could be considered rather than full precautionary runs.