**MANAGING SNOW / ICE AT COUNCIL PREMISES GUIDANCE**

There are a lot of myths surrounding snow clearance. Don't be deterred from clearing paths due to the fear of liability. People walking on snow and ice have a responsibility to be careful themselves.

## 1. Role of the Premises Manager

1.1 The Premises Manager must ensure that the procedures outlined in this guidance are planned, risk assessed and adhered to and must designate competent persons to carry out these roles in advance of bad weather. If the conditions are unsafe for staff and others then the premises manager must take the decision to restrict or close facilities.

## 2. Areas of Responsibility for Snow Clearing/Gritting Council premises.

2.1 In snow/icy conditions premises managers have a responsibility to make a safe route of access where there is an assumed invitation to persons onto their premises by way of offering a service, and must consider the following:

- Do you have adequate resources to clear and grit all footpaths/roads throughout a sustained period of snow/icy weather;
- You must be able to keep these routes safe by thorough and adequate clearing and gritting throughout the period of inclement weather;
- If not all areas can be cleared following an assessment on the above, the responsible person is required to assess primary routes that can be cleared and gritted. This should include one main entrance to the building from the external perimeter and one main footpath access from any car park;
- Where only primary routes are identified and treated, all other routes should not be used and must be adequately signed and/or coned marked with hazard tape;
- Any known black spots must be subject to localised clearing and treating – this will include car parks or where cars/pedestrians can be in close contact;
- All fire exits and escape routes must be clear of snow/ice to enable safe evacuation in an emergency;
- There must be a safe route for emergency vehicles to access the premises if required;
- Premises Managers should arrange for an inspection of outdoor play equipment by a routine inspection qualified person;
- Other areas that need to be assessed are outdoor playing areas, astro turf, ski centre, football pitches, skate park etc. The Premises Manager must make an inspection to decide if these areas are safe for use, if not they should be closed and area secured if possible with appropriate signage.

## 3. Snow Clearance

3.1 The presence of salt on its own will not prevent snow forming. The most effective way of removing snow is by mechanical means or physical hard work using snow shovels.

3.2 Begin as early as possible as undisturbed snow is the easiest to remove before snow is compacted by pedestrians. Clearing the snow allows the sun to warm up the pavement surface temperature which aids the process of melting any remaining snow.

3.3 Once the area has been cleared of snow a very thin layer of salt should be spread to prevent any melted water from freezing on the pavement creating a risk of black ice or as it turns to ice, making it a lot more difficult to remove.

3.4 Ideally, when clearing a path you should aim to clear sufficient width to allow two pedestrians to pass and follow the most likely route taken by users. The cleared space should be widened at bus stops and areas where pedestrians congregate. The cleared snow should be deposited in verges or areas that are non-trafficked i.e. to the side of the pavement. It should not be deposited in the carriageway or drainage gullies as this will prevent melt water draining away, risking it refreezing and turning to black ice. Extra care should be taken to avoid blocking access to properties, fire exits, driveways and paths.

## 4. How to tackle compacted ice on the ground

4.1 If the snow has compacted and bonded to the pavement surface it may only be possible to remove it via mechanical means. However, this will be hard work and not very productive. Your main option is to spread a product over the ice which can become embedded into it and provide traction when people are walking over it.

4.2 When tackling compacted ice, it is better to purchase a cheaper and more effective product such as course graded or sharp sand (not builders' sand) as this will have more effect than salt. Spread this uniformly over the ice to provide traction.

4.3 As people walk over the ice and sand, the pressure will embed the sand providing a long term solution. If you do use sand, the only draw back is that the pavement will need sweeping once the thaw has taken place. Once swept up, this sand can be saved and used again.

## 5. Icicles

5.1 Icicles are dangerous and can even be fatal. If icicles are hanging over walkways consideration should be given to blocking off the area to prevent injury or damage.

5.2 The weight of icicles can cause gutters, awnings, and ornamental features to collapse and fall from the building.

5.3` It is recommended that large icicles are removed by contacting property services helpdesk 01495 766706.

## 6. How salt works

6.1 The most popular de-icing material is salt or sodium chloride. Torfaen County Borough Council use mined rock salt to treat its highways and this is the product used for filling grit bins and supplied to premises in 25kg bags.

6.2 Salt works by lowering the freezing point of water it dissolves in below normal 0°C. As a rule of thumb the salt will prevent any moisture freezing and causing ice at least until temperatures reach -7°C. Salt becomes less effective below this temperature but will still prevent ice forming up to -15°C if it can be spread in advance and have time to dissolve.

6.3 Salt can be used both before and after snow and ice has formed.

6.4 Salt alone will not prevent snow from settling or melt anything more than a very thin layer of snow and must be removed manually before applying salt;

6.5 Salt will prevent ice formation and melt ice that has already formed, but it will take time to remove thick ice.

## 7. How to use salt

7.1 Clearing the snow allows the sun to warm up the pavement surface temperature which aids the process of melting and evaporating any remaining snow and ice. Where salt is available it can be spread on to the cleared pavement. This will help prevent the melt water refreezing and turning to black ice.

7.2 The amount of salt required to treat an area is much less than you think. As a guide 20g/m² (about a very small hand full) should be sufficient to clear and protect a 1m (3ft) length of cleared surface. If the surface is cleared and uniformly treated it is possible to treat 400m of footway with a 20kg bag.

7.3 A method for spreading salt, if being done by hand, is to have the salt on a small trowel and gently shake it off as you walk along. A large shovel will be heavy to hold and one blade will contain sufficient salt to cover 80m. However, spreading salt from a shovel is very inefficient and wasteful.

7.4 One of the most successful methods for treating footways/car parks is using a bucket of salt spread with a gloved hand.

7.5 Remember, salt does not remove snow or compact ice and spreading salt in thick layers will only be wasteful, harmful to the environment and creates a mess if walked into properties.

7.6 Premises should consider the purchase of a grit spreader/spinner, rather than spreading using a shovel, to reduce the manual handling involved if large areas are required to be cleared. The use of a spreader also avoids uneven spreading of salt

which may become a hazard itself and uses less salt Advice on the purchase of grit bins can be obtained by contacting Andrew Pritchard in Neighbourhood Services.

## 8. Health and Safety

8.1 Premises Managers must undertake a risk assessment for work activities including clearance of snow, ice and icicles in compliance with the risk assessment arrangements.

8.2 Premises Managers should also carry out an assessment of rock salt and alternatives to comply with the control of substance hazardous to health to identify other measures required for its use – available on the link below. Please contact the health and safety team for assistance if required.
http://www.rocksalt.co.uk/rock-salt-data-sheet.php

8.3 All accidents and near misses must be reported following the accident reporting arrangements.

## 9. Gritting Supplies and Storage

9.1 All sites must make provision for supply and storage of grit based on the assessment of needs.

9.2 All premises should have a grit bin on site which should be sited at a specific location which again can be based on the assessment in 2 above. If the premises are subject to misuse and vandalism, careful consideration must be given to the type of bin used and its location.

9.3 It is recommended that salt bins are locked (bins supplied by Neighbourhood Services have a hasp and staples) during summer to prevent children having access to it.

9.4 Advice on the purchase of grit bins can be obtained by contacting Dawn Pinney in Neighbourhood Services. The order can then be raised via Operational Services in the same way as the salt/grit supplies. The cost of this service is rechargeable.

9.5 Salt supplies held in the councils highways depot are for highway use only however supplies of salt in bags can be ordered via civica purchasing Neighbourhood Services/Winter Maintenance, supplier no 00820996. Please allow a few days for delivery.

9.6 The price for supply and delivery this year is £7.50 per 25kg bag.

9.7 New Grit Bins and Refills 2017- 2018 :

- 200litre, approx. 800mm long, 800mm wide, 800mm high, bin is £95, labour to deliver, site and fill £62.00 Total £157.00. Future refills £33.20
- 400litre, approx. 1.2m long, 800mm wide, 800mm high, bin is £135, labour to deliver, site and fill £95.00, Total £230.00 Future refills £66.40.

## 10. Salt/Grit Alternatives

10.1 The processes referred to in this guidance are preferred however premises may wish to stock up on an alternative salt/grit as a fall back.

10.2 Premises Managers ordering alternative product must refer to the material safety data sheet for the product and carry out a COSHH assessment for the use at their premises.

## 11. Looking after yourself

11.1 Clearing snow is hard physical work so make sure participants are physically fit enough and ensure they take plenty of breaks and stop if they become fatigued.

11.2 Appropriate clothing and footwear must be worn. Twenty five per cent of body heat is lost through the head and hands so wear gloves and a hat. When working, the body will build up a sweat so be prepared to shed layers as you work.

## 12. Preparing yourself for Snow Clearing

12.1 Before venturing outside make sure you are properly kitted out with warm clothing and suitable footwear.

12.2 If working near the road it is advisable to be as visible as possible and wear a reflective vest/jacket.

12.3 If working alone, ensure you have informed someone of where you are and how long you intend to be, have a charged mobile phone with you and remain in contact every 1-2hrs and inform Line Manager of any changes to location or estimated return time.

12.4 Make sure you are close to a suitable refuge (building or vehicle) so you can take shelter in case the weather turns inclement or you get too cold. You can also use the refuge to take plenty of rests as the work is very physical. Those not used to physical work will tire quickly so be very conservative with what you think you can achieve. As a guide, an experienced labourer could only be expected to clear and treat by hand 50m of footway per hour.

## 13. Suitable tools to use

13.1 Plastic light weight snow shovels are the most appropriate tools.

13.2 To spread the salt you could use a salt spreader.

13.3 A small plastic scoop to distribute the salt if doing it by hand.

13.4 A wheel barrow to move tools, carry salt or move snow.

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