

Mall Concourse Salt Usage Report Winter 2017-18

The City of Madison is becoming increasingly aware of the impact of winter salt usage on drinking water and the environment. In November of 2017, key leaders from the Mall Concourse staff attended the “WI Salt-Wise” program. From this seminar, we learned strategies to reduce the amount of salt applied to our service area and still keep it safe for pedestrians. We expect the overall reduction in salt usage and targeted application techniques will also help reduce damage to historic infrastructure, which has previously been a concern. Throughout the 2017-18 winter season, Mall Concourse reduced salt usage by nearly half per event and by approximately 28% in total through staff awareness and by implementing practices learned from the seminar. Below is a summary regarding our recent changes to Mall Concourse winter salting maintenance.

Season	Average Use per Event	Total Applied
2016-17	7,700 Pounds	84.5 Tons
2017-18	4,000 Pounds	60.1 Tons

Practices prior to 2017:

- Only broadcast equipment was used for salt applications (ie. Toolcat, John Deere and One-Ton spreaders).
- Equipment was not calibrated
- No standard rate of application was specified. Operators used their discretion.
- Salt use was not tracked by storm, but in bulk quantities.

Steps taken/practices implemented 2017/2018 Season

- Key leadership team became certified through “WI Salt-Wise” program. (Chad Hughes, Supervisor; Mark Kiesow, Foreperson and Tom Grosse, Leadworker)
- Entire Mall Concourse staff was trained on the importance of salt reduction and strategies to be implemented to accomplish overall goals.
- Mall Concourse invested in one (1) drop spreader and limited the use of the large broadcast spreader.
- All salt spreaders were carefully calibrated and standard application rate was set.
- Collaborated with ULI to reduce duplicate efforts that had happened previously, resulting in over-salting.
- Invested in infrared thermometer to measure pavement temperature
- Began creating a winter maintenance plan and researching alternative equipment
- Tracked salt usage by 24 hour period

Plans for 2018-19 Season:

- Expand staff training and awareness
- Invest in alternative equipment to further reduce salt usage (ie. additional drop spreader and pre-wetting equipment)
- Complete winter maintenance plan
- Continue to track salt usage by 24 hour period