

COPY

ORDINANCE NO. 1581

**AN ORDINANCE REGULATING THE STORAGE AND HANDLING
OF DEICING MATERIALS IN THE CITY OF CREST HILL**

WHEREAS, the removal of snow and ice from roadways is essential to both public safety and to the local economy and that in order to protect the public safety, during winter storm events, the use of pavement deicing chemicals is a widely accepted means of keeping roadways passable; and

WHEREAS, pavement deicing is typically accomplished through the use of road salts which can be corrosive to vehicles, roadway surfaces, and bridges and has been found to have adverse effects on the ground water and to environmentally sensitive areas; and

WHEREAS, the restoration of ground water quality and ecosystems in such areas can be very difficult and costly, if not impossible to rehabilitate, once the events of contamination occur; and

WHEREAS, proper utilization and management of deicing materials is critical to ensure that the environmental impacts of related practices are reduced to the maximum extent possible; and

WHEREAS, negative environmental impacts may occur when salt is not properly stored or transported, and there is precipitation from storm events causing salt-laden runoff resulting in the disbursement of chloride and sodium ions causing a negative impact on the adjacent environment and water resources; and

WHEREAS, a primary source of salt entering the ground water is salt spillage that is either plowed or washed from maintenance yard, unloading, and loading areas and that it is necessary to regulate all persons engaged in such businesses in order that they comply with the specifications contained herein regulating the storing and use of bulk deicing materials on their property and elsewhere in order to reduce the costly impacts of such use to the surrounding vegetation, service water and ground water; and

WHEREAS, the Mayor and members of the City Council believe that it is in the best interest of the City of Crest Hill ("Crest Hill") to regulate and require the permitting of such business under the terms and provisions as established herein.

NOW THEREFORE, BE IT ORDAINED BY THE CITY COUNCIL OF THE CITY OF CREST HILL, WILL COUNTY, ILLINOIS, AS FOLLOWS:

SECTION 1: The preamble of this Resolution is declared to be true and correct and is incorporated by reference herein.

SECTION 2: No person shall engage in the operation of a business for the private operation of a snowplowing service or the storage of salt or other deicing materials, or to assist others in the same for the purpose of alleviating ice and snow from private roadways, parking areas and sidewalks and on commercial, industrial, institutional, office, multi-family and private single family residential dwellings without being in compliance with the terms and provisions of this ordinance.

SECTION 3: Storage. The following sections apply to all indoor and outdoor facilities, (temporary and permanent) including salt piles, salt bag storage, sand piles and other storage of deicing materials:

a. Bulk storage, as regulated by this Ordinance, is defined as storage of any material used for deicing and/or traction during winter conditions that is more than 5 tons in solid form (or 1,000 gallons in liquid form). Commercially bagged salt or salt used for manufacturing is specifically excluded from this definition.

b. Storage of bulk deicing materials as an accessory use shall only be permitted in zoning districts B-2, B-3, M-1 and M-2. Storage of deicing materials shall not be permitted in any other zoning districts.

c. Indoor operations for the storage of deicing materials shall be provided wherever possible in order to prevent such materials from being affected by rain, snow and melt water.

d. Deicing materials, subject to the regulation of this ordinance, shall not be utilized for any purpose other than as discussed herein.

e. Although not a primary consideration, aesthetics should be considered in the design of storage facilities, especially when the location of such storage facilities is in close proximity to residential buildings or is highly visible to members of the general public. The location of the storage facilities shall be reviewed by the Building Commissioner, or his designee, prior to the commencement of the operation of such storage facilities and in conformity with this ordinance.

3.1. Facility Location. The following factors shall be considered by the Building Commissioner in determining whether such storage facility shall be approved:

a. The facility shall be in close proximity to the area in which the deicing materials are to be used, if practical.

b. Each facility shall be located outside of floodplains and away from lakes, rivers, streams, ditches, storm drains, manholes, catch basins, wetlands and agricultural properties and any other areas likely absorb runoff as determined by the Building Commissioner. A facility shall not be located in close proximity to surface water features, water supplies, wells or drywells.

c. A facility shall be located on impermeable surfaces on top of relatively improved impermeable soil.

d. The property slope shall be away from the facility's salt/sand storage area. The applicant shall identify the highest point on the property where the material will be stored. In the event that the applicant deems the highest point on the property as impractical or unreasonable for storage, he shall submit an explanation and documentation of the proposed location along with the permit application to the Building Commissioner for approval.

e. Salt vulnerable/intolerant natural areas should be avoided as storage facilities to the extent possible. Where they can not be avoided, specific measures should be instituted to protect vulnerable areas. Salt vulnerable/intolerable natural areas include, but are not limited to:

(i) areas with salt sensitive vegetation and agricultural operations;

(ii) areas with a source of drinking water (surface water and ground water);

(iii) areas with bodies of water with low dilution, low volume or salt sensitive species;

(iv) areas associated with ground water recharge zones or shallow water table, with medium to high permeable soils.

3.2 Base/Pad/Floor Specifications:

a. The base upon which deicing material is stored shall be constructed of low permeability waterproof materials capable of containing deicing agents (bituminous or high quality concrete; air-entrained and sealed). Materials must be capable of preventing leachate from entering adjacent soil, surface water or ground water.

b. The base shall slope between two (2%) percent and five (5%) percent to allow moisture to drain into the collection sump or run-off pond.

c. The base shall be inspected annually by the owner for cracks and repaired/resealed as required. The city may inspect the facilities periodically to ensure compliance.

d. In salt vulnerable/tolerate natural areas, a plastic liner must be installed beneath the storage and loading area to insure spilled salt does not migrate to nearby ground water.

e. Storage area should be bordered by a barrier on at least three (3) sides to insure the pile is contained and less likely to be impacted by surface runoff. The barrier shall be curb, concrete blocks with a liner, a double row of concrete blocks staggered to minimize gaps or other items as deemed appropriate.

3.3 Cover/roof Specifications:

a. All salt, sand and other deicing materials shall be covered at all times to prevent dispersion by runoff and to control wind dispersal.

b. When not using a permanent roof, a waterproof impermeable, flexible cover must be placed over all storage piles (to protect against precipitation and surface water runoff). The cover must prevent runoff and leachate from being generated by the outdoor storage piles. The cover must be secured to prevent removal by wind or other storm events. Piles must be formed in a conical shape and coverage as necessary to prevent leaching.

c. Any roof leaks, tears or damage should be temporarily repaired during winter to reduce the entrance of precipitation. Permanent repairs shall be completed prior to the next winter season.

3.4 Site Drainage.

a. In order to drain runoff away from storage facilities and to provide for the interception and management of salt impacted drainage, the site shall be graded to direct surface drainage away from the storage facilities and loading areas and to the extent possible, away from any ground water or salt vulnerable areas. In no case shall the surface drainage be allowed to flow through the base of the storage piles.

b. Drainage may be accomplished through the use of tile, ditches or pipes to a collection area, preferably a specially designed catch basin, sump area, holding tank or runoff storage pond with a liner if possible or a Best Management Practice ("BMP") with a controlled restrictor to control or restrict discharge downstream. This drainage area should be designed such that salt laden runoff is not directed to storm sewers, into salt vulnerable water courses, or directly to the ground through poorly sealed sumps.

c. Salt-laden water should be collected and properly managed. All residues left on the floor of the facility at the end of the season shall be rinsed into the drain where it will travel to the designated holding facility. When appropriate, the interception areas shall be emptied and material disposed of according to applicable federal, state and local regulations.

d. Snow plowed from the site shall be directed in such a manner that the melt water will drain away from the salt storage facilities and loading areas and to the extent possible, away from any ground water or salt vulnerable areas.

3.5 Liquid Chemicals.

a. Owners or applicants applying for an accessory use in which liquid chemicals are a component should provide information to the Building Commissioner at the time of the submission of an accessory use application regarding siting and containment requirements for storage facilities.

b. Determine the freezing point of the liquid chemical, which will determine whether it can be stored outside or if it must be stored inside.

c. All tanks containing liquid chemicals must be labeled indicating the contents thereof.

d. Where practical, provide the design plan for secondary containment through double-walled tanks or containment dikes.

e. Periodic inspection by the owner or designee of tanks, pumps, pipes and hoses is required so that any leaks should be repaired immediately.

3.6 Snow Piles.

a. Snow shall be located downslope from salt and sand storage to prevent the snow melt from flowing through salt and sand storage areas and carrying it to the nearest draining system.

b. Owners of accessory use permits for such facilities shall not push snow into lakes, ponds, wetlands, rivers or other natural areas to reduce chemical contamination and increase the amount of solids that can be recovered after the melt.

SECTION 4: Bulk Deicing Chemical Storage. Designs of storage structures include domes, rectangular sheds, barns, high-arch structures and elevated silos. In addition to the criteria established in all sections of this Deicing Materials Ordinance, the following factors should be taken into consideration when storing pavement deicing chemicals indoors in bulk (whether they are existing or new facilities).

4.1 Facilities Specifications.

a. Prevailing winter wind direction (north-northwest) should be considered when positioning new buildings and doors with regard to sheltering loading operations, minimizing snow drifting around doorways, and keeping precipitation out of the storage area.

b. Door Location and Size:

(i) the entrance to the structure should have a door, curtain or other mechanism to prevent precipitation from entering the structure.

(ii) to the extent possible, the opening should be high enough to allow a transport trailer to end dump inside the structure.

c. Special equipment, such as a conveyor system, can be used in order to maximize storage due to its top-loading capacity. Such equipment is recommended to improve traffic flow by separating loading/unloading operations which can reduce the amount of salt waste from

unloading operations. The area where extra equipment is utilized for operations relating to deicing materials is subject to all other requirements in this ordinance.

d. Structured floors, loading pads and base pad inside the facility shall comply with Section 3.2. In addition:

- (i) Floor and base pad should be sloped away from the center of the storage area for drainage purposes;
- (ii) Floor material should be sealed to minimize infiltration.

e. Roof and exterior of the storage structure:

- (i) shall be constructed of materials which prevent precipitation and moisture from entering the building;
- (ii) shall be constructed of non-corrosive materials which will not interact with deicing agents placed in the facility;
- (iii) shall be free of gaps that would allow salt or salt impacted drainage to escape.
- (iv) shall be constructed to prevent dissolved deicing agents from entering soil, surface water or ground water.

SECTION 5: Handling. Those persons owning accessory use permits must establish procedures and processes to minimize spillage and to clean up spilled salt in order to reduce costly losses and impacts to the surrounding vegetation, surface water and ground water.

5.1 Facility Maintenance.

a. All areas surrounding the storage facility (including the loading/unloading pad) shall be routinely inspected by accessory use owner to determine whether there is a release of the deicing agents. Spilled and scattered materials shall be swept up and returned to the facility in a timely manner.

b. Following the completion of a storm event, storage facilities shall be inspected and remedied, if necessary, as soon as possible.

c. The integrity of the storage facility and loading pad shall be maintained.

5.2 Loading and Unloading.

a. Where practical to do so, spreaders should be loaded inside the storage structure. If inside loading is impossible, care should be taken to minimize spillage of salt on the loading

pad, and shall utilize other systems as may be needed to recover salt spills that occur during loading.

b. Promptly clean-up all spills and scattered salt and other materials after loading and unloading. The loading areas shall be swept back into piles in order to reduce leaching.

5.3 Pavement Deicing Transport Vehicles. Vehicles used for transporting deicing materials shall comply with the following standards:

a. Loading and Hauling:

- (i) set up and load on a level surface;
- (ii) loading areas shall be kept clear and smooth;
- (iii) do not overload vehicles, avoid spillage on units;
- (iv) remove loose materials from the exterior of the vehicle, fill in side gaps, tailgates or equipment with spill shields in order to prevent materials from escaping and spilling out of the vehicle.

b. Washing:

- (i) prior to washing, the trucks/spreaders shall be swept to remove residual solids, thereby minimizing the amount of dissolved salt and solids in the wash water;
- (ii) all trucks/spreaders shall be washed at a location where the wash water can be properly diluted, disposed and stored for reuse. Wash water may only be disposed of in accordance with the Clean Water Act, as amended.

5.4 Drainage:

a. In order to prevent toxicity to aquatic life in receiving waters, no accessory use owner shall unfreeze or melt open frozen storm drains with high doses of salt. Other methods shall be utilized in order to open such drains.

b. Procedures shall be utilized in order to capture any solids before they enter the storm drain systems.

SECTION 6: Permit Required. A permit is required for bulk storage of deicing materials by commercial entities within the City of Crest Hill.

a. No person or business shall store bulk pavement deicing materials without first having obtained a Deicing Storage Permit from the Building Department. State, county and other governmental agencies are exempt from this ordinance.

b. An application for a Deicing Storage Permit shall be made by the owner of the property or his authorized agent to the office of the Building Commissioner on a form furnished for that purpose (a copy of the approved form is attached hereto as Exhibit "A"). Each application shall be complete and accompanied by a filing fee of three hundred (\$300.00) dollars. Each permit is valid for a three (3) year period. If the applicant terminates the permit within the three (3) year period, no refund will be issued to applicant.

c. Prior to issuance of an approved Deicing Storage Permit, the property owner shall reimburse the City for any and all consultant fees incurred for the review of the application and inspection of the facilities, which invoice shall reflect fees paid on an hourly basis, in an amount not to exceed one thousand (\$1,000.00) dollars per application.

d. Annual renewal of the Deicing Storage Permit is required. The form utilized for such purpose shall be a copy of the approved form attached hereto as Exhibit "A." There is no fee for the annual renewal for the Permit.

e. The Building Department may waive specific requirements for the content of submissions upon a finding that the information submitted is sufficient to show that the work will comply with the objectives and principles of this ordinance.

f. Each application for a Deicing Storage Permit will be reviewed within thirty (30) days by the office of the Building Commissioner.

6.1 Submittal Requirements: Each application for a Deicing Storage Permit shall be accompanied by the following information:

a. A vicinity map in sufficient detail to enable easy location in the field of the site for which the permit is sought, including the boundary line of the premises for which the permit is sought and the approximate location(s) of storage.

b. A development plan of the storage facility showing existing topography of the site, particularly in the vicinity of the storage area, and in sufficient detail to verify the proper location of the facility. Such development plan shall include flow arrows to designate the direction of runoff.

c. The location of existing buildings, structures, utilities, lakes, streams, floodplains, wetlands, and depressions, drainage facilities, vegetative cover, paved areas, and other significant natural or manmade features on the site and adjacent land.

d. A general description of the predominate soil types on the site, their location and their limitations for the proposed use.

e. The proposed storage facility and interception facility's location, size, configuration and orientation.

f. Cut sheets, details and/or specifications for materials for the storage facilities, including roofs, covers, barriers, walls, interception facilities and other items required in this ordinance.

g. These submissions shall be prepared in accordance with the requirements of this ordinance and the standards set forth by the Illinois Environmental Protection Agency.

SECTION 7: Violation and Penalties.

a. No person shall construct or enlarge any deicing storage facilities, or cause the same to be constructed or operated, contrary to or in violation to the terms of this Ordinance. Any person violating any of the provisions of this Ordinance shall be deemed guilty of a misdemeanor, and each day during which any violation of any of the provisions of this Ordinance is committed, continued or permitted shall constitute a separate offense. Upon conviction for any such violation, such person, partnership, corporation or other entity shall be punished by a fine of not more than seven hundred and fifty dollars (\$750.00) for each offense.

b. In addition to the penalties authorized by this Section:

- (i) any person, partnership or corporation convicted of violating any of the provisions of this ordinance shall be required to restore the site to the condition existing prior to the commission of the violation, or to bear the expense of such restoration.
- (ii) any person, partnership, corporation or other entity convicted of violating any of the provisions of this ordinance shall restore any and all downstream impacted properties to the condition existing prior to the commission of the violation, or to bear such expense of such restoration.

SECTION 8: Severability. If any Section, paragraph, clause or provision of this ordinance is held invalid, the invalidity of such section, paragraph, clause or provision shall not affect any other provision of this ordinance.

SECTION 9: Repealer. All ordinances, resolutions or orders or parts thereof, which conflict with the provisions of this ordinance, are to the extent of such conflict hereby repealed.

SECTION 10: Effective Date. This ordinance shall be in full force and effect from and after its passage, approval and publication in pamphlet form in the manner provided by law.

PASSED THIS 17th DAY OF October, 2011.

AYES: 6 Dyke, Vershay, Gazal, Oberlin, Sternisha and Convery


NAYS: 0

ABSENT: 2 Lelis and Inman



Christine Vershay-Hall, City Clerk

APPROVED THIS 17th DAY OF October, 2011.



Raymond R. Soliman, Mayor

ATTEST:



Christine Vershay-Hall, City Clerk