

## **Litter Container and Litter Collection Policy**

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| Presented To:   | Operations Committee                         |
| Meeting Date:   | July 12, 2021                                |
| Type:           | Correspondence for Information Only          |
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| Recommended by: | General Manager of Growth and Infrastructure |

### **Report Summary**

This report provides information regarding the current roadside litter container and litter collection policies. It provides details of the existing resources for the installation and maintenance of roadside litter containers and describes litter abatement activities.

### **Relationship to the Strategic Plan, Health Impact Assessment and Community Energy & Emissions Plan (CEEP)**

This report refers to operational matters.

### **Financial Implications**

This report is for information only. There are no financial implications.

### **Background**

The Environmental Services Division is responsible for the purchase, installation, collection and maintenance of roadside litter containers as well as the collection of roadside litter from City owned roadways.

#### Roadside Litter Containers

There are currently 318 roadside litter containers installed across Greater Sudbury. A total of 226 litter containers are located at the roadside within the various communities excluding Downtown Sudbury. These containers are collected weekly by the Division's waste collection employees and the waste collection contractor. Table 1 shows the distribution of litter containers in each community. An additional 92 roadside litter containers are located in Downtown Sudbury and are collected by the waste collection contractor two (2) times per week on Tuesday and Friday evenings.

Table 1. Number of litter containers installed per community

| Community    | NUMBER OF LITTER CONTAINERS INSTALLED |
|--------------|---------------------------------------|
| AZILDA       | 9                                     |
| CAPREOL      | 7                                     |
| CHELMSFORD   | 22                                    |
| CONISTON     | 1                                     |
| COPPER CLIFF | 6                                     |
| DOWLING      | 2                                     |
| FALCONBRIDGE | 1                                     |
| GARSON       | 6                                     |
| HANMER       | 6                                     |
| LEVACK       | 4                                     |
| LIVELY       | 9                                     |
| ONAPING      | 2                                     |
| SUDBURY      | 143                                   |
| VAL CARON    | 8                                     |

City waste collection crews provide every other week collection of the garbage portion of litter containers in areas where they provide residential roadside collection of garbage and leaf & yard.

Contract waste collection crews provide every other week collection of the garbage portion of litter containers in areas where they are responsible for residential roadside garbage and leaf & yard collection. On weeks without regularly scheduled residential roadside garbage and leaf & yard collection, the waste collection contractor empties the garbage portion of all litter containers throughout Greater Sudbury.

The recycling portion of all litter containers throughout Greater Sudbury is collected weekly by the waste collection contractor. Twice weekly evening collection of garbage and recycling litter containers in Downtown Sudbury is also provided by the waste collection contractor.

There are three (3) types of litter containers used for roadside installations. The beige plastic 3-in-1 litter containers are installed at roadside locations primarily outside Downtown Sudbury. These containers are located along high pedestrian traffic roads and transit stops and shelters. This container offers two openings for recyclable materials and one opening for garbage. The sign on the front is intended to educate and guide users to place their items in the correct openings and reduce contamination in the recycling portion of the container.



Within Downtown Sudbury, concrete litter containers (Figure 1) were previously purchased and installed. However, in 2009, a “Downtown Sudbury Streetscape Study” identified the need to install new street furniture, including litter containers, using a consistent palette. In consultation with Downtown Sudbury, the black metal Maglin container (Figure 2) was selected for all future installations and replacements in Downtown Sudbury. As such, the concrete litter container is being phased out and gradually replaced with Maglin litter containers as funds become available. The long term strategy is to replace litter containers in all town centers with the Maglin litter container. Maps listing the town centers throughout Greater Sudbury can be found in Appendix 1.



Figure 1. Concrete container



Figure 2. Black metal Maglin container

The Division's waste collection staff installs and maintains roadside litter containers. Maintenance includes cleaning, sanitizing, graffiti removal, repair/replacement of signs and frames, replacement of liners, total refurbishing of containers and snow removal in the winter in order to ensure the containers are accessible. Maintenance is proactively scheduled to be completed on a regular basis in addition to being completed on an as needed basis from service requests received via 311 as well as from issues noted by the collectors and during routine field inspections.

#### Financial Resources and Costs

The annual budget for the purchase of roadside litter container equipment is \$9,500. This budget includes the purchase of new containers as well as replacement parts for maintenance such as signs, sign covers, frames, inner liners and opening covers. At the current pricing, the annual budget allows for the purchase of three (3) black metal Maglins containers or six (6) beige plastic 3 in 1 containers or a combination of the two. New containers may not necessarily be installed at additional locations due to the need to replace existing litter containers that are unrepairable.

The annual contract cost to collect litter containers on a weekly basis is approximately \$34,200 (2021). The cost to collect litter contains in Downtown Sudbury twice per week is approximately \$14,100 (2021). Any additional servicing requirements increases these costs. Collection and maintenance costs also increase whenever a new container is installed.

#### New Litter Container Installations

The Division receives requests for new litter container installations on a regular basis. New requests are investigated by the Waste Collection Foreperson to determine if the location meets the City's litter container installation criteria. Locations that are deemed suitable are either installed or added to the waiting list until a new litter container is available for installation. The waiting list is prioritized in order of highest to lowest need for a container to ensure containers are installed in areas were litter is most problematic. Requests that do not meet the installation criteria are typically handled by performing litter abatement in the problematic area.

Requests for new litter container installations outnumber the amount of new installations that can be fulfilled given the existing financial resources. Table 2 below shows the number of installation requests that are still pending dating beyond 2015. At the time of writing this report, sixty (60) outstanding requests remain pending due to the lack of availability of new containers. When a container becomes available for a new installation, the list of pending requests is reviewed and a location is selected based on the greatest need.

Table 2. Pending requests for new litter container installations

|                                   | 2021 | 2020 | 2019 | 2018 | 2017 | 2016 | 2015 | Prior to 2015 |
|-----------------------------------|------|------|------|------|------|------|------|---------------|
| <b>Roadside Litter Containers</b> |      |      |      |      |      |      |      |               |
| REQUESTS PENDING                  | 6    | 20   | 12   | 2    | 0    | 4    | 12   | 4             |

Suitable locations and criteria for roadside litter container installation are as follows:

- Containers should be located along an existing residential waste collection route
- Bus stops and shelters are considered highly suitable locations
- Target roadways with a high volume of pedestrian traffic flow
- Installed in an area that can be accessed safely by citizens and collection staff in all seasons

Installations may not:

- Be located on private property or abutting convenience stores
- Block sightlines (e.g. Corners, crosswalks, driveways, exits, etc.)
- Impede on the roadway or interfere with road or sidewalk maintenance
- Impede pedestrian traffic flow including accessibility for wheelchairs
- Obstruct fire hydrants, gas valves or water valves

Most locations in residential subdivisions are considered unsuitable due to the lower pedestrian traffic flow, unconformity with the installation criteria and misuse. Community mailboxes are also deemed unsuitable locations as detailed later in this report.

### Problematic Locations and Circumstances

Roadside litter containers are subject to a variety of recurring problems that warrant the removal of the container from a particular location.

#### Graffiti, Vandalism and Theft

Some containers are regularly marked with graffiti. The markings are esthetically unpleasing and some can be obscene. Containers marked with graffiti generate complaints and cause the need for additional maintenance resources as they must either be scrubbed in the field or temporarily removed to be cleansed. If the problem is on-going, the container is removed from the location altogether.

Some litter containers have either caught on fire accidentally or as a result of vandalism. Although there are occasions when the container can be cleaned and reused, some instances render the container completely unusable. If another container is not available to replace it, the location is left without a litter container until resources become available to replace it.

There are occasions when the protective plexiglass sign covers are stolen from containers. Typically, this does not result in the removal of the container but rather strains the limited financial resources by requiring the covers to be replaced.

#### Hazardous and Odorous Waste

Some container locations attract a high volume of syringe needles and dog feces. Both issues cause a safety hazard to waste collection and recycling processing staff by exposing them to injury, biological disease and dangerous waste.

When needles are found in a litter container, waste collection staff are required to remove and place them in a sharps container for safe disposal. Litter containers that are consistently found to contain high volumes of needles are removed and relocated to a more suitable location.



The dog feces causes an odorous nuisance for neighboring homes and pedestrians. This type of waste contains bacteria, viruses and parasites that can cause disease in humans and other animals. In addition, litter containers filled with dog feces, quickly become overweight rendering regular emptying of the container impossible. A separate crew and non-compacting vehicle must be dispatched to shovel out and clean the container. Compacting of large amounts of dog feces is avoided because it causes spay-back that can cover the collection staff and surrounding property, including nearby parked cars.



A pilot project was undertaken in an effort to curb dog feces issues and keep the containers in place. Additional signage was placed on five (5) containers in problematic areas. In one particular neighbourhood, an information mail-out blitz was also initiated. The information sheet is shown in Appendix 2. Despite best efforts, the problem persisted at this location and the container was removed.



### Illegal Dumping

Litter containers are sometimes misused. Deposits of larger items, shopping bags filled with waste or household garbage bags are deposited directly into the containers or dumped on the ground next to the containers. This causes the litter container to fill up before the scheduled weekly collection leaving no capacity for it to be used for its intended purpose of capturing litter and causes unsightly waste or messes around the containers.

### Junk Mail

Three (3) litter containers have been placed by community mailboxes and four (4) containers are currently installed in front of Canada Post locations. These containers fill up prior to the scheduled collection day with excessive amounts of junk mail and flyers. This generates complaints and strains limited resources making it difficult to keep up with the additional servicing requirements. Containers filled with junk mail easily become too heavy to empty manually by lifting the inner container out of the shell. In such cases, the litter container needs to be shoveled out to lighten the load.



Since containers placed at community mailboxes fill up quickly and are primarily used to discard of unwanted mail, the garbage portion of the containers tends to be used to discard of recyclable mail materials.



Often the junk mail is delivered in a plastic bag that is not removed prior to placing it in the recycling portion of the container, rendering the items garbage. Although both the bag and the newspaper are recyclable, the paper must be removed from the bag in order to be recycled. Due to the lack of ownership, it is difficult to educate individuals and change their habits. This is better accomplished where accountability and ownership is prevalent during the collection of residential Blue Boxes.



Residents using community mailboxes should bring their junk mail home where they can discard it in their residential Blue Boxes. If they do not desire to receive the junk mail, the best option would be to reduce waste by calling Canada Post and opting out of unaddressed mail.

Before a roadside litter container is removed, all the relevant factors relating to the container is taken into account in order to ensure the most effective approach is applied, both for remedying the problem and discouraging repeat problems. When a roadside litter container is removed from a location, it is refurbished and placed at one of the pending waiting list locations or used to replace an existing roadside litter container that is damaged and unrepairable.

## Roadside Litter Collection and Abatement

### City Crew Litter Collection and Abatement

Roadside litter collection and abatement is completed seasonally along roadsides of major arterial roadways owned by the City and along secondary roads with heavy traffic flow. Litter collection and abatement begins once the snow melts and concludes once the snow starts to accumulate again. Appendix 3 shows the litter collection maps for major arterial roads and secondary roads where litter collection is scheduled to be completed annually. Litter abatement is conducted several times per season in these areas. For the most part, one crew is assigned to the areas in Sudbury and one crew is assigned to the areas in outlying communities.

In addition to the scheduled areas, litter collection and abatement is also conducted based on service requests received via 311 and areas identified during proactive field inspections. The Division's waste collection staff are dispatched to complete litter collection and abatement as required. Various City departments own and maintain properties and are responsible for litter abatement on those properties.

Roadside litter abatement activities are conducted both manually and with mobile equipment. Manual collection is performed by the Division's Waste collection staff and a half tonne truck or utility vehicle. From the beginning of May until the end of August, a crew of three (3) summer students are typically hired to complement full time resources. The Division's mobile equipment consists of two (2) All Terrain Litter Vehicles (ATLV) that are used to collect litter from sidewalks and hard packed roadsides. The ATLV's are not capable of navigating soft ground or uneven terrain therefore, staff must disembark the units to collect litter manually from the ditches and inaccessible terrain using hand-held grapplers.



Litter abatement activities for center medians on divided highways such as Municipal Road 55 and the Maley Extension, require the additional resource of a blocker truck in order to complete abatement activities and meet the safety requirement of the Ministry of Transportations Book 7.

## Volunteer Litter Abatement Programs

Individuals, groups or businesses interested in volunteering to clean City roadsides, parks/properties or litter containers are encouraged to do so by registering for a Clean-Up Greater Sudbury program. Long term adoption programs promote clean-up initiatives, create litter awareness and provide advertising opportunities for participants. Participants receive garbage bags, gloves, safety tips and safety signs. Safety vests are loaned to participants and returned after completion of the clean-up. As the participants fill up garbage bags with litter, they leave them alongside the length of the road that is being clean up or at a specified location in the parks/properties to be collect by City waste collection staff on the following business day.



The Adopt-a-Road program involves collecting litter from a two kilometer section of roadway and the Adopt-a-Spot program involves collecting litter from public land, such as a City park, walkway, trail or near a waterway, at a minimum of once during the spring and once during the fall. The Adopt-a-Bin program involves removing excess garbage from a public litter bin and keeping the surrounding area litter free between regularly scheduled waste collection days. Table 3 presents the current program inscription (June 2021).

Table 3. Adoption Program Inscriptions

|                          | ADOPT- A -ROAD | ADOPT- A -SPOT | ADOPT- A -BIN |
|--------------------------|----------------|----------------|---------------|
| <b>ADOPTION PROGRAMS</b> |                |                |               |
| Number of Agreements     | 53             | 22             | 0             |

Some individuals would prefer to participate on a single occasion rather than make a long term commitment. The one-time clean-up program is available to fill this need and make volunteering accessible to personal preferences.

Every year in May, Environmental Services holds the annual Two Hour Clean-Up Blitz. The Clean-up Blitz encourages participants to show community pride by spending two hours picking up roadside litter. The program is scheduled to take place at the approximate time of the year when the snow melt has left behind litter that has been trapped in the snowbanks throughout the winter. This program is very popular and attracts a high number of volunteers. Although the program had to be canceled due to COVID-19 in 2020 and 2021.

## Litter Abatement Requirements for Operating Contractors

Landfill and transfer station operators as well as recycling centre operation contractors are required to complete litter abatement as part of their contract requirements. Untarpped loads in transit to these sites are a cause for roadside litter. Regular litter abatement is to be conducted by the operations contractors along the roadways leading up to these sites. Appendix 4 provides a map of the litter abatement areas that are maintained by these operation contractors.

## Cigarette Butt Container Pilot Project

Cigarette butts are a source of litter on the roadsides and at areas where people congregate such as bus stops and shelters. Cigarette butt collection containers are not provided or collected by Environmental Services. The collection of cigarette butt containers require special handling and cannot be completed with the regular waste collection packers. Cigarette butts that are not completely extinguished cause fires inside packer vehicles as well as at the landfill sites which are deemed highly flammable areas due to their release of flammable gases.

A cigarette butt collection pilot project was conducted between October 2019 to February 2020. The container was installed at a high volume bus shelter on Paris Street near the four corners. A separate crew was dispatched to collect the cigarette butts and ashes from the container and place them in a dedicated metal container. Prior to disposal at the landfill, collection crews had to ensure there were no burning embers. When embers were detectable, sand was added to extinguish them. In February 2020, the cigarette butt container was vandalized and damaged beyond repair. Subsequently, the installation was removed. Although the container was partially successful at capturing cigarette butts, this litter continues to be managed with current litter abatement methods (manually or with the ATLV).



## **Analysis**

Most high pedestrian traffic areas within the City are already equipped with roadside litter containers and the inventory continues to grow slowly. Requests for new installations are reviewed and if they meet the installation criteria, the request is placed on a waiting list until a container is available for installation. In order to meet all installation demands, additional financial resources would be required.

In previous years, Downtown Sudbury has contributed to the purchase of Maglin containers to speed up the replacement process. In order to complete the replacement in Downtown Sudbury, another 53 Maglin containers are required. Once completed, the focus will shift to replacement of containers in the town centers of outlying communities.

Installing litter containers in a suitable location that meets the installation criteria is important. Containers placed in unsuitable locations generate complaints, create nuisances and odours, can be a safety concern for staff and the public, increase maintenance costs and cause servicing issues that put additional pressure on available resources.

The current roadside litter container and litter collection policy has yielded positive success in keeping the roadsides of Greater Sudbury clean. The large geographical area of Greater Sudbury poses challenges keeping all areas clean at any one time. With only two litter abatement service crews, non-urgent complaints and service requests may have to wait an extended period of time in order to benefit from efficiencies of routing the work. Service requests are more frequent immediately after snow melt in the spring and tend to taper off once all areas have received a first pass of litter abatement. The subsequent passes of litter abatement that are conducted throughout the season are reasonably adequate to maintain the current level of service.

Litter abatement work conducted by volunteers through the Clean-Up Greater Sudbury programs as well as the litter abatement requirements for the landfills, transfer station and recycling centre operation contractors, assists and complements the work conducted by City litter abatement crews. Clean-up Greater Sudbury programs provide a valuable service to the community and will continue to be promoted.



## **Conclusion**

Environmental Services purchases, installs, collects and maintains roadside litter containers. Litter containers are installed following a set of criterias that ensures containers are well situated to capture litter without causing a nuisance. There are 318 litter containers installed at roadway locations throughout Greater Sudbury. Although requests for additional containers continue to be received, availability of resources limit the Division's ability to immediately fulfill all requests for new installations.

Seasonal roadside litter abatement work is conducted by Environmental Services, with a combination of waste service and student crews. Litter abatement is conducted both manually and using All Terrain Litter Vehicles with a concentration on City owned major arterial roadways. Other areas requiring litter abatement are completed when the need is determined through field inspections, issues noted by waste collection crews and from service requests received by citizens. Landfill, transfer station and recycling centre operation contractors are also required to conduct litter abatement on roads leading up to the sites they operate. Additionally, volunteers of the Greater Sudbury Clean-up programs provide a valuable service to the community and complement the work conducted by City crews.

## **Resources Cited**

2009 a Downtown Sudbury Streetscape Study

Accessed online: <https://pub-greatersudbury.escribemeetings.com/FileStream.ashx?DocumentId=28465>