

New York City Department of Sanitation

NOTICE OF ADOPTION OF FINAL RULE ESTABLISHING SAFETY REQUIREMENTS FOR CARTERS OPERATING IN COMMERCIAL WASTE ZONES

NOTICE IS HEREBY GIVEN in accordance with the requirements of Section 1043 of the New York City Charter and pursuant to the authority vested in the Commissioner of the Department of Sanitation by sections 753 of the New York City Charter and Title 16-B of the New York City Administrative Code that the Department adopts the following rule establishing safety requirements for carters operating in commercial waste zones. The Department published a Notice of Public Hearing and Opportunity to Comment on the proposed rule in the *City Record* on March 12, 2021. On April 13, 2021 the Department held a public hearing on the proposed rule.

Statement of Basis and Purpose of Final Rule

DSNY is establishing safety requirements for commercial waste zone carters that will be implemented under the forthcoming commercial waste zones program. The proposed rules were published in the *City Record* on March 12, 2021. The Department held a joint hearing with Business Integrity Commission (BIC) on these rules on April 13, 2021. BIC is also promulgating safety requirements for trade waste licensees and registrants.

The Commercial Waste Zones Program

Each year in New York City, more than 100,000 commercial establishments generate more than 3 million tons of refuse and recyclables. Approximately 90 private carters collect this waste from commercial establishments across the City. The current system for collecting commercial waste from the City's businesses has been plagued by dangerous driving and insufficient attention to public safety, harmful environmental impacts, and poor customer service.

In some parts of the city, more than 50 carters service a single neighborhood, and an individual commercial block may see dozens of different private waste collection trucks on a given night. This has resulted in millions of excess truck miles driven every year that harm the City's air quality, increase greenhouse gas emissions, create noise pollution and negatively impact public health. Additionally, the industry has lacked strong customer service standards, and pricing has remained unclear and confusing to most customers, putting small businesses at a significant disadvantage.

In response to these documented problems in the commercial waste collection industry, the Department released a comprehensive plan for reforming the private carting industry in November 2018 ("the Plan"), available at <http://www.nyc.gov/commercialwaste>. The Plan

proposed the establishment of commercial waste zones - a safe and efficient collection system to provide high quality, low cost service to New York City businesses while advancing the City's zero waste and sustainability goals. The Department developed this plan after years of extensive public outreach and engagement with a wide variety of stakeholders.

On November 20, 2019, Local Law number 199 for the year 2019 was enacted, which authorizes the Department to create a commercial waste zones system. Under Local Law 199, codified in Title 16-b of the New York City Administrative Code, the Sanitation Commissioner has divided the geographic area of New York City into 20 "commercial waste zones."

The Department will use a competitive Request for Proposals (RFP) process to select up to three private carters to service businesses within each commercial waste zone. The competitive solicitation process will also be used to select up to five carters to provide containerized commercial waste collection services citywide. This process will identify the carters that can provide high quality service at low prices. The resulting contracts will include standards for pricing, customer service, safety, environmental health, and requirements to promote the City's commitment to recycling and sustainability. The RFP will be issued in two parts. Part 1 was issued on November 19, 2020, and responses were due on February 19, 2021. Part 2 of the RFP is being issued at the same time as this final rule.

Commercial waste zones will apply to the collection of commercial refuse, recyclables, and source-separated organic waste. It will exclude specialized or intermittent waste streams, such as construction and demolition debris, medical waste, hazardous waste and other types of waste that will continue to be collected and managed under existing City and State regulations.

Under the new commercial waste zones system, instead of dozens of different carters operating in a City neighborhood on a given night, only a few carters will operate in each area. With fewer trucks on the streets and shorter routes, zoned collection will also mean improved traffic and air quality and less unsafe driving behavior and worker fatigue. Citywide, the adoption of the commercial waste zones system will dramatically reduce truck traffic associated with this industry by more than 50 percent. This system will improve the quality of life of all New Yorkers, serve the needs of the City's local businesses, and support the City's short and long-term goals for a cleaner, safer, and more sustainable city.

Related DSNY Commercial Waste Zones Rulemakings

On February 14, 2020, the Department published the final rules creating the 20 commercial waste zones. Per Administrative Code Section 16-1002(e)(3), the Department will set the implementation schedule for when the commercial waste zone system will take effect in each zone in a future rulemaking.

On December 18, 2020, DSNY published proposed rules addressing customer service requirements, requirements for collecting recyclable materials and source separated organics, and operations requirements for commercial waste carters, and held a hearing on those

proposed rules on January 26, 2021. The comment period for those proposed rules closed on February 9, 2021. DSNY is publishing the final customer service, recycling and operations rules in coordination with this final rule establishing safety requirements.

DSNY Rulemaking on Safety Requirements for Commercial Waste Zones

In this rulemaking, the Department is establishing requirements for carters selected to operate under the commercial waste zones program related to public safety. Specifically, these rules include provisions addressing:

- Definitions
- Safety records
- Safe vehicle operation
- Vehicle inspections
- Cross-over mirrors; obstructions to windshield
- Back-up cameras
- Auxiliary exterior lighting
- Telematics systems

After considering extensive testimony regarding the public safety risks presented by the commercial waste industry, the Council documented its concerns in its legislative findings in LL 199, stating “Since 2010, private waste collection trucks have killed dozens of people on New York City streets. Long, inefficient routes can take 12 hours or more to finish and can lead to driver fatigue and unsafe practices, endangering workers and the public.” The Council delegated authority to DSNY to promulgate rules related to public safety, including vehicle and traffic safety.

Since 2010, trucks operated by trade waste licensees and registrants have killed at least 51 individuals and injured at least 404 individuals on New York City streets. Some operators repeatedly violate even the most basic traffic safety rules, such as running red lights, speeding, and driving the wrong way.

These rules are designed to improve street safety for all street users by improving commercial waste vehicle safety, holding awardees accountable for their drivers’ repeated traffic safety violations, and ensuring that commercial waste vehicles are equipped with safety features that will mitigate or prevent the type of tragic collisions by private hauling vehicles that have plagued City streets.

Specifically, these rules contain specific requirements related to keeping safety records, requirements for safe vehicle operation and vehicle inspections, and requirements regarding cross-over mirrors and elimination of obstructions to the windshield. Such requirements track the requirements that BIC is proposing in its rules at this joint hearing. BIC’s requirements would

apply to apply to all trade waste licensees and registrants, beginning 30 days after final publication. At the time that the commercial waste zones program is implemented, DSNY's rules will simply carry over such requirements to commercial waste vehicles.

However, these rules also introduce additional requirements related to vehicle safety that will only apply to vehicles in the commercial waste zones program (e.g. *not* construction and demolition vehicles), and will take effect for the first time with the implementation of the commercial waste zones program, as described in more detail below.

First, these rules require that by January 1, 2026, all commercial waste vehicles be equipped with back-up cameras. After consulting with safety analysts and BIC, DSNY assessed prior collisions that resulted in fatalities and injuries by trade waste vehicles, based on data available to the City. From 2010-2020, there were 3 fatalities that resulted while a trade waste vehicle was backing up, and from 2019-2020, 12 injuries that resulted from backing up. Two of the fatalities involved crashes that occurred while the trade waste vehicle was backing up through an intersection (hitting a pedestrian and a motorcycle respectively). The remaining fatality involved a trade waste vehicle backing up from a construction site to a roadway and hitting a construction worker, where the driver indicated that prior to backing up, he put his windows down and checked his mirrors. After reviewing this available data, DSNY has determined that back-up cameras would have decreased the risk of several of the accidents caused by private carters.

These rules also require auxiliary lighting on all commercial waste vehicles in the rear of the vehicle, and on the sides where work is being performed. This requirement will take effect January 1, 2026. Because the hauling of commercial waste occurs primarily at night, such additional lighting will provide added visibility for both commercial waste workers and for other vehicles on the road. This will further reduce the risk of injuries and fatalities, including harm to commercial waste workers as they perform their jobs.

By phasing in each of the above requirements, these rules strike an appropriate balance between ensuring that commercial waste carters have the necessary lead time to conform to these requirements, while also reflecting the imperative to take action to protect public safety. These requirements, on whole, will raise the safety standards in the industry and further the City's goals of safer streets.

Finally, these rules require that all commercial waste vehicles are equipped with a telematics system that allows real time transmission to DSNY of the vehicle's location and routing information. The telematics system requirements will ensure the integrity of the commercial waste zones program by allowing DSNY to monitor compliance with the requirement that carters collect only in their authorized zone or zones. In this way, customers, carters, and the general public can have confidence that the program is functioning as intended. The telematics systems also allow carters and DSNY to track critical safety information, such as hard stops, sudden accelerations and speeding. This data will enable DSNY and commercial waste carters to track

and improve safety performance in an objective, reliable and comprehensive way, with quantifiable tools to assess the success of the program.

These new DSNY rule requirements will take effect in each zone when the commercial waste zones system is introduced in that particular zone, according to the implementation schedule that the Department will publish in a future rulemaking.

Please note that additional safety requirements for commercial waste zone carters can be found in LL 199, such as requirements for workers safety training in Administrative Code Section 16-1008.

Timeline and Application of New BIC and DSNY Safety Rules

There is an intentional overlap between the requirements in BIC's new safety rules governing trade waste licensees and registrants and the requirements in these new DSNY rules governing commercial waste awardees. As further explained in the chart below, the requirements in BIC's rules apply to all trade licensees and took effect August 6, 2021. The requirements in BIC's rules will continue to apply to all licensees and registrants until the transition of the commercial waste zones program occurs in each zone, in accordance with the schedule and further details to be provided in an upcoming DSNY rule. Further details on the transition to commercial waste zones will be provided in a forthcoming rulemaking regarding the transition start and end dates.

After the transition to commercial waste zones occurs, BIC's requirements regarding the topics contained in these rules will not apply to commercial waste zone carters, but will continue to apply to licensees and registrants that are hauling forms of trade waste other than commercial waste, such as construction and demolition debris. Once the commercial waste zones program is implemented, commercial waste zone carters will be required to follow DSNY's applicable rules. Please note that the majority of BIC's new safety requirements are replicated in these DSNY rules for commercial waste zone carters. More details regarding the applicability of BIC rules to the commercial waste zones program will be provided in future rulemakings.

The following chart summarizes the new DSNY and BIC requirements related to public safety that were heard at the joint BIC-DSNY hearing on these rules. Please note that this chart is intended as a summary tool to assist readers in understanding the difference between the BIC and DSNY requirements and does not fully capture all rule requirements.

Safety provision	BIC rule	DSNY rule
Safety records	17 RCNY § 5-03(l) through (o), § 7-06(d) through (h)	16 RCNY § 20-50
Compliance with federal hours of service requirements	17 RCNY § 5-08(u), § 7-05	16 RCNY § 20-51(a)

Safe driving requirements	17 RCNY § 5-08(v), § 7-05	16 RCNY § 20-51(b)
Cross-over mirrors	17 RCNY § 5-10(c), § 7-03(c)	16 RCNY § 20-53(a)
Obstructions to windshield	17 RCNY § 5-10(d), § 7-03(d)	16 RCNY § 20-53(b)
6-month inspections by qualified inspectors	17 RCNY § 5-10(e), § 7-03(e)	16 RCNY § 20-52(a)
Driver inspections	17 RCNY § 5-10(f), § 7-03(f)	16 RCNY § 20-52(b)
Agency inspections	17 RCNY § 5-10(g), § 7-03(g)	16 RCNY § 20-52(c)
Worker training	17 RCNY § 5-14, § 7-08	N/A (see Admin Code § 16-1008)
Back-up cameras	N/A	16 RCNY § 20-54
Auxiliary exterior lighting	N/A	16 RCNY § 20-55
Telematics systems	N/A	16 RCNY § 20-56

The following chart explains when the BIC and DSNY requirements will take effect, and who they would apply to:

	Take effect	Applicability prior to commercial waste zones	Applicability after commercial waste zones
BIC safety rules	August 6, 2021	All trade waste licensees and registrants	--Do not apply to commercial waste zone activities --Do apply to non-commercial waste zone activities (e.g. construction and demolition activities)
DSNY safety rules	The rules take effect as the commercial waste zones program is implemented in each zone	N/A	Only apply to commercial waste zone activities (e.g., not construction and demolition activities)

Changes in Response to Public Comment

The Department carefully considered all written and oral comments received in relation to these rules and made the following changes to the final rule in response to comments received:

- In § 20-50, the final rule shortens the time periods that records must be retained in the vehicle and expressly allows for electronic storage of records, in response to comments from carters that the proposed requirements would have resulted in an excess of paper in the vehicle;
- In § 20-51(b)(1), the final rule does not contain a flat prohibition on a commercial waste vehicle backing up through or into an intersection, based on comments from carters that in some cases backing into an intersection may be the only way or the safest way to access a customer's property; and
- In § 20-53(b), the final rule clarifies that the prohibition on obstructions to the windshield of a commercial waste vehicle does not cover objects attached or installed in order to comply with local, state or federal law or otherwise authorized by the carter's agreement with the Department for purposes of promoting public safety.
- The proposed rule would have required a transition to cab-over truck design vehicles, beginning with purchases of new vehicles in 2024, and purchases of used vehicles in 2026. After a review of comments received in response to this proposed requirement, the Department has determined that further study is warranted before introducing this requirement for commercial waste vehicles. The Department is still considering such a requirement for the future.

DSNY's authority to promulgate these rules is found in New York City Charter §§ 753 and 1043, and Title 16-b of the Administrative Code.

New material is underlined.

[Deleted material is in brackets.]

"Shall" and "must" denote mandatory requirements and may be used interchangeably in the rules of this Department, unless otherwise specified or unless the context clearly indicates otherwise.

CWZ Safety Rules

Section 1. Subdivision (b) of section 20-01 of title 16 of the rules of the city of New York is amended by adding new definitions of “cab-over design vehicle,” “qualified inspector” and “telematics system” in alphabetical order as follows:

Cab-over design vehicle. The term “cab-over design vehicle” means a vehicle that is designed so that the driver cab is situated in relation to the vehicle engine such that the driver sits directly above or forward of the front axle of the vehicle.

Commercial waste vehicle: The term “commercial waste vehicle” means a vehicle that is used to collect, transport or remove commercial waste.

Qualified Inspector. The term “qualified inspector” means an individual who meets the qualifications set forth in Part 396.19 of Title 49 of the Code of Federal Regulations.

Telematics system. The term “telematics system” means an integrated system of hardware and software that is capable of monitoring and recording data from GPS devices, vehicle dynamics systems, and engine performance systems and that is installed in a commercial waste vehicle, as required pursuant to §20-56 of this chapter.

§ 2. Chapter 20 of title 16 of the rules of the city of New York is amended by adding a new subchapter D to read as follows:

Subchapter D. Safety Requirements

§ 20-50 Safety Records

a. An awardee must maintain accurate time records for each vehicle operator and worker who handles commercial waste. Such time records must identify the worker by name and job title, and for each day reflect the time the worker reported to work; the route, truck number or other information used to identify the worker’s daily work assignment; any off-duty breaks; the time the worker was released from duty; and the total number of hours worked per week.

b. An awardee must maintain copies of all inspection and certification of repair forms required by subdivision a of section 20-52 for at least five years, and copies of such forms (paper or electronic) must be available in the corresponding vehicles at all times for 6 months.

c. An awardee must maintain copies of all daily inspection reports required by subdivision b of section 20-52 for at least five years, and copies of such reports (paper or electronic) must be available in the corresponding vehicles at all times for 14 days.

§ 20-51 Safe Vehicle Operation

a. An awardee must not permit or require any vehicle operator to drive a commercial waste vehicle unless the vehicle operator complies with the hours of service requirements set forth in Part 395.3 of Title 49 of the Code of Federal Regulations.

b. An awardee is responsible for ensuring that the commercial waste vehicles used to perform commercial waste collection, transport and removal services under its agreement with the City are not engaging in a pattern of unsafe practices. Each such pattern of unsafe practices is a violation of this subdivision. For purposes of this subdivision, “a pattern of unsafe practices” shall be defined as four instances of prohibited conduct set forth in paragraphs (1) through (6) of this subdivision within a six month period by the awardee’s commercial waste vehicles operators or the operators of the commercial waste vehicles of the awardee’s designated carters, in the aggregate:

1. A commercial waste vehicle must not back up unless such movement can be made safely and without interfering with traffic for the minimum distance to allow for the safe collection of trade waste.
2. A commercial waste vehicle must not make a U turn, except where legally permitted at marked center lines and from designated lanes.
3. A commercial waste vehicle must stop at all steady red lights until such light turns green. A trade waste vehicle must stop at all flashing red lights and stop signs before entering an intersection.
4. A commercial waste vehicle must be driven only in the direction designated for the roadway.
5. A commercial waste vehicle must not obstruct a bike lane, bus stop, sidewalk, crosswalk, or intersection.
6. Under no circumstances shall an individual ride on or cling to the outside of a commercial waste vehicle while the vehicle is operating on a roadway.

§ 20-52 Vehicle Inspections.

a. 1. A commercial waste vehicle must not be operated unless such vehicle is in safe operating condition and has passed an inspection conducted by a qualified inspector

demonstrating compliance with the terms of this section at least once during the preceding six months.

2. Each such inspection must be recorded on an inspection report form prescribed by the Department. Such inspection report must identify any safety defects discovered during the inspection and cover at a minimum, the following parts and accessories: service and parking brakes, steering mechanism, tires, wheels and rims, sideguards, coupling devices, mirrors, lighting devices and reflectors, horn, windshield wipers, and emergency equipment.

3. Following an inspection, such vehicle may not be operated unless a qualified inspector certifies on the inspection report that all necessary repairs have been made and that such vehicle has passed the inspection.

4. Copies of such inspection reports must be kept in the corresponding vehicle in accordance with the requirements of subdivision b of section 20-50.

b. A commercial waste vehicle must not be operated unless the operator of such vehicle is satisfied such vehicle is in safe operating condition. An awardee must require the operator of such vehicle to inspect such vehicle following each day's work and to prepare a daily inspection report that identifies such vehicle and any defect that would affect the safety of operation of such vehicle. Such daily inspection report must cover at a minimum the following parts and accessories: service and parking brakes, steering mechanism, tires, wheels and rims, sideguards, coupling devices, mirrors, lighting devices and reflectors, horn, windshield wipers, and emergency equipment. Copies of such daily inspection reports must be kept in the corresponding vehicle in accordance with the requirements of subdivision c of section 20-50. The operator of such vehicle must review the most recent daily inspection report and determine whether required repairs have been made when evaluating the condition of such vehicle.

c. The Department or a person designated by the Department may inspect commercial waste vehicles, equipment, licenses, registrations, inspection reports, and fleet records of each awardee and each designated carter at any time at its own discretion.

1. The Department or a person designated by the Department may order the awardee to immediately remove any commercial waste vehicle or equipment from service and, where appropriate, to take corrective action within a prescribed period of time if the Department or such person designated by the Department determines the vehicle or equipment presents an imminent threat to public health or safety or to the environment due to an issue that may include, but need not be limited to, defective brakes, tires or lighting devices, or leaking or spilling of fluids and escaping of waste. The awardee shall comply with the order within the time prescribed in the order and shall notify the Department when compliance has been achieved.
2. Within the time specified for compliance in an order issued pursuant to this section, or as otherwise specified in such order, the awardee may submit a written statement appealing the order to the Commissioner in the manner specified in the order.

3. Submission of an appeal pursuant to paragraph (2) of this subdivision shall relieve the awardee's obligation to take any corrective action within the time prescribed in the order pending a final determination pursuant to paragraph (4) of this subdivision, provided, however, that in the event the Department determines that failure to take corrective action within the time prescribed in the order poses a significant risk of imminent harm to public health or safety or to the environment, the awardee will be notified and will be required to take such corrective action within the specified time, or within an alternative time specified by the Department. Notwithstanding the foregoing, submission of such an appeal shall not relieve the awardee's obligation to remove a commercial waste vehicle or equipment from service during the pendency of an appeal.
4. The Commissioner must review appeals and make a final written determination regarding the appeal within a reasonable period of time. The Commissioner will serve final determinations on the awardee by mailing the final determination to the awardee.
5. If the Commissioner sustains an appeal in whole or in part, then the stated terms of the final determination on appeal will replace the original requirements of the order.
6. If an appeal is denied, the final determination will specify a reasonable period of time for compliance with the order based on the circumstances, except in the case of an order where taking corrective action is required within an earlier time pursuant to paragraph (3) of this subdivision. The final determination by the Commissioner is subject to review pursuant to article 78 of the New York Civil Practice Laws and Rules.

§ 20-53 Cross-over mirrors; obstructions to windshield

a. Each commercial waste vehicle having a gross vehicle weight rating of 26,000 pounds or more and a conventional cab configuration in which the engine is mounted in front of the operator must be equipped with a convex mirror positioned on the front of such vehicle. When such vehicle is being operated, such mirror shall be adjusted so as to enable the operator thereof to see all points on an imaginary horizontal line which is three feet above the road, is one foot directly forward from the midpoint of the front of such motor vehicle, and extends the full width of the front of such vehicle or combination of vehicles.

b. Nothing may be placed or suspended in or on the vehicle or windshield so as to obstruct the operator's vision through the windshield or other windows. Nothing in this subdivision shall be construed to prohibit the placement or suspension of an object in or on the vehicle or windshield: (i) in order to comply with or as expressly permitted by federal, state or local law or (ii) authorized pursuant to the agreement between the awardee and the City for purposes of promoting public safety.

§ 20-54 Back-up Cameras

No later than January 1, 2026, every commercial waste vehicle must be equipped with a rear video system, rear object detection system, or other device which enables the driver of the vehicle to detect by means of a visual indicator, or visual and audible warning-indicator, persons and objects located directly behind the vehicle.

§ 20-55 Auxiliary exterior lighting

- a.
 1. On or before January 1, 2026, every commercial waste vehicle must be equipped with one or more auxiliary exterior lights on the back of the vehicle, positioned at a height and angle so as to illuminate: (i) the vehicle's hopper; (ii) any other equipment or machinery attached to the back exterior side of the vehicle; and (iii) a work staging area of at least 6 feet behind the vehicle.
 2. Such auxiliary exterior back lights must be sufficiently bright so as to: (i) allow any workers loading waste into the hopper or otherwise working in a staging area behind the vehicle to perform their duties and (ii) make such workers and such staging area visible to other vehicles on the road.

- b.
 1. On or before January 1, 2026, every commercial waste vehicle must be equipped with one or more auxiliary exterior lights on both sides of the vehicle, positioned at a height and angle so as to illuminate: (i) any equipment or machinery attached to the side of the vehicle, and (ii) a work staging area running along the length of the vehicle and outward at least 3 feet from the side of the vehicle.
 2. Such auxiliary exterior side lights must be sufficiently bright so as to: (i) allow any workers working in a staging area next to the vehicle to perform their duties and (ii) make such workers and such staging area visible to other vehicles on the road.

- c. The auxiliary exterior lighting required by this section must be turned on when a worker from the vehicle is outside the vehicle performing work at night or during poor visibility conditions, including but not limited to rain, fog or snow.

- d. The auxiliary exterior lighting required by this section must be maintained in good working condition and must be functional at all times while the vehicle is in operation, regardless of the time of day.

§ 20-56 Telematics Systems in Commercial Waste Vehicles

- a. An awardee must ensure that each commercial waste vehicle is equipped with a telematics system that meets the requirements of this section and such other specifications as set forth in the awardee's agreement with the Department. Such system must be approved by the Department prior to the implementation start date of the zone in which such vehicle is authorized to operate pursuant to such agreement, or prior to the date that the vehicle is first used as a commercial waste vehicle, whichever is later. Such system must also be approved prior to the date the vehicle is returned to use as a commercial waste vehicle following any replacement of or material alterations to such system.
- b. The telematics system must transmit vehicle location information to both the awardee and the Department in real time, via cellular connection.
- c. The telematics system must transmit in real time via cellular connection the following information to the awardee:
 - 1. Vehicle speed;
 - 2. Each instance when the vehicle travels at a speed above the applicable speed limit;
 - 3. Each instance of sudden acceleration by the vehicle;
 - 4. Each instance when the vehicle engages in a hard stop; and
 - 5. Vehicle miles traveled.
- d. 1. On a monthly basis, the awardee must submit to the Department the information collected pursuant to paragraphs two through five of subdivision c of this section for each commercial waste vehicle, disaggregated by vehicle and, where applicable, by zone, for the previous month.

2. Data collected pursuant to paragraphs one through six of subdivision c of this section shall be made available to the Department for inspection upon request.

e. The awardee must ensure that the telematics system installed in each commercial waste vehicle is constantly maintained and is in good working order.

f. 1. If any material feature of the telematics system is not functioning, an incident report must be filed by the designated carter with the Department within two hours following the discovery of the malfunction or at such time as the designated carter reasonably should have known of the malfunction.

2. If any material feature of the telematics system of a commercial waste vehicle is not functioning, the commercial waste vehicle must not operate for more than 7 days following the start of the malfunction or the timely filing of an incident report, whichever is later, until the system is repaired. Any commercial waste vehicle in which there is a malfunction of a material feature of the telematics system more than once in a 30 day period shall be removed from service immediately until the system is repaired.

3. During the period the telematics system is malfunctioning and the commercial waste vehicle is permitted by this subdivision to operate, the vehicle operator or operators must record the following trip record information by hand at the end of each route:

i. Vehicle miles traveled;

ii. Route start and stop locations; and

iii. A list of stops on each route.

4. In the case of a partial malfunction of the telematics system, the information required pursuant to paragraph 3 of this subdivision need not be recorded by hand if the telematics system is capable of collecting and transmitting such data in real time in accordance with subdivision b of this section.

5. Trip records required pursuant to paragraph 3 of this subdivision must be submitted to the Department in the monthly report required pursuant to subdivision d of this section.

§ 3. This rule shall take effect as follows:

1. The rule shall take effect in each commercial waste zone on the implementation start date for such zone set by rule of the department of sanitation pursuant to paragraph 3 of subdivision e of section 16-1002 of the Administrative Code; and

2. The rule shall take effect with respect to citywide containerized commercial waste collection on the implementation start date for citywide containerized commercial waste collection set by rule of the department of sanitation.