

## NEW YORK CITY DEPARTMENT OF ENVIRONMENTAL PROTECTION

### Notice of Public Hearing and Opportunity to Comment on Proposed Rules

**What are we proposing?** The Department of Environmental Protection (“Department” or “DEP”) is proposing to amend 15 RCNY Chapter 19, Section 19-01 to define “food waste liquefier,” and Section 19-03(b) to prohibit the use of devices that break down food waste for the purpose of discharging it into the sewer system, except for food waste disposers within dwelling units. The proposed amendment will protect the sewer system, the public health, and the waterways from a new potential cause of sewer backups and overflows, while ensuring that those who have already invested in the banned devices will not lose their investment.

**When and where is the hearing?** DEP will hold a public hearing on the proposed rule online. The public hearing will take place at 11 am on May 28, 2021. To participate in the public hearing, please follow these instructions:

Microsoft Teams meeting

**Join on your computer or mobile app**

[Click here to join the meeting](#)

**Or call in (audio only)**

[+1 347-921-5612,,191584291#](#)

Phone Conference ID: 191 584 291#

**How do I comment on the proposed rules?** Anyone can comment on the proposed rules by:

- **Website.** You can submit comments to the Department through the NYC rules web site at <http://rules.cityofnewyork.us>.
- **Email.** You can email written comments to [nycrules@dep.nyc.gov](mailto:nycrules@dep.nyc.gov).
- **Mail.** You can mail written comments to the Department, Bureau of Legal Affairs, 59-17 Junction Boulevard, 19<sup>th</sup> Floor, Flushing, NY 11373.
- **Fax.** You can fax written comments to the Department, Bureau of Legal Affairs, at 718-595-6543.
- **By speaking at the hearing.** Anyone who wants to comment on the proposed rule at the public hearing must sign up to speak. You can sign up before the hearing by calling 718-595-6531. You can also sign up in the hearing room before the hearing begins on May 28, 2021. You can speak for up to three minutes.

**Is there a deadline to submit written comments?** Yes, you must submit written comments by May 28, 2021.

**What if I need assistance to participate in the hearing?** You must tell the Department's Bureau of Legal Affairs if you need a reasonable accommodation of a disability at the hearing. You must tell us if you need a sign language interpreter. You can tell us by postal mail or email to the addresses given above. You may also tell us by telephone at 718-595-6531. You must tell us by May 21, 2021.

**This location has the following accessibility option(s) available:** wheelchair accessible.

**Can I review the comments made on the proposed rules?** You can review the comments made online on the proposed rules by going to the website at <http://rules.cityofnewyork.us/>. A few days after the hearing, a transcript of the hearing and copies of the written comments will be available to the public at the Bureau of Legal Affairs.

**What authorizes the Department to make these rules?** Section 1043(a) of the New York City Charter ("City Charter") and section 24-523(e) of the Administrative Code of the City of New York authorize the Department to make these proposed rules, which were included in the Department's regulatory agenda for fiscal year 2021.

**Where can I find the Department's rules?** The Department's rules are in Title 15 of the Rules of the City of New York.

**What laws govern the rulemaking process?** The Department must meet the requirements of Section 1043 of the City Charter when creating or changing rules. This notice is made according to the requirements of Section 1043(b) of the City Charter.

#### Statement of Basis and Purpose

The New York City Department of Environmental Protection ("DEP" or "Department") proposes to amend Title 15, Chapter 19 of the Rules of the City of New York ("RCNY") to prohibit the use of devices that break down food waste for the purpose of discharging it into the sewer system, except for food waste disposers within dwelling units. Food waste liquefiers can cause backups of sewage into homes and businesses, creating hazardous and unsanitary conditions, which can jeopardize health and wellbeing and cause property damage. Such blockages could also threaten the health of the general public, wildlife, and the environment by leading to combined or sanitary sewer overflows into water bodies.

On December 18, 2015, the New York City Department of Sanitation (DSNY) published in the City Record rules governing organic waste generated by designated commercial establishments. Under 16 RCNY § 1-11(b) such establishments must either hire a private carter to haul away their organic wastes for the purpose of beneficial organic waste use, transport their own organic wastes to an organic waste processing facility or authorized transfer station, or provide for a beneficial organic waste use on-site at their premises.

Having chosen the last option, a number of establishments have installed devices that manufacturers may call “digesters,” but which rely heavily on breaking down food waste into smaller solids by mechanical means and dilution with water, and then discharging it into the public sewer. This rule amendment would designate such devices as “food waste liquefiers” and “biological liquefaction systems,” because the terms “biodigesters” or “digesters” do not accurately represent the amount of digestion that takes place in the systems. While some aerobic digestion occurs in some of these devices, aided by the addition of enzymes or other additives, it is only partial digestion and is part of the process of liquefying the food waste, over the course of several hours to up to 48 hours for a full load, to discharge it into the sewer. (Northeastern University, 2013; California Department of Resources Recycling and Recovery, 2018; BioCycle Magazine, 2013).

Full digestion is a much longer process, which would require a minimum 15-day retention time, as shorter retention times are not conducive to proper digestion of food waste. (USEPA, 2008; Metcalf and Eddy, 1991). Properly digested food waste is also not suitable for discharge to the sewer, as the water drains out of it over the course of the digestion process, resulting in a solid waste product that must be removed from the digester for off-site uses or disposal, rather than put down the drain.

The waste stream discharged from food waste liquefiers is high in total suspended solids, oil and grease as revealed by DEP sampling. Discharging such substances is contrary to the prohibitions in 15 RCNY 19-03(a)(1) against, amongst other things, “fats, oils, grease, or any solids or viscous substances capable of causing obstruction to the flow in sewers or other interference with the proper operation of the sewerage system.” The DSNY rule at 16 RCNY § 1-11(b)(3)(iii) requires that establishments that install organic waste processing systems ensure that such systems are installed in accordance with “all applicable laws and rules governing the discharge of waste and waste water, including section 19-11 of title 15 of the rules of the city of New York governing the discharge of grease into the city sewer system, and any other applicable regulations enforced by the department of environmental protection or the New York state department of environmental conservation.”

DEP conducted sampling of the discharge from various devices that are claimed by their manufacturers to be digesters, and that have been installed to meet the requirements in 16 RCNY § 1-11(b). Most of the results revealed oil and grease concentrations in the hundreds of milligrams per liter, with several in the thousands. Eighty percent of the results were above the oil and grease limit of 300 mg/L that DEP applies in the Industrial Wastewater Discharge Permits it issues to industrial users of the public sewer. For total suspended solids (TSS), all of the results were above the 350 mg/L limit that DEP imposes in Industrial Wastewater Discharge Permits. Most of these results were in the thousands of milligrams per liter. A properly sized grease interceptor could theoretically handle the high fat, oil, and grease (FOG) component of the discharge, if the establishment frequently maintained the interceptor and if the TSS were low. However, the TSS numbers are so high that solids would very rapidly fill a grease interceptor and even a solids interceptor. It is not realistic to think that establishments would clean out the solids from the grease and/or solids interceptor as frequently as needed and incur the heavy costs of transporting them offsite on such a frequent basis.

The reason that the FOG and TSS numbers are so high is that these devices break down solids by mechanical means such as turning, agitation, maceration, shredding, or grinding. They commonly employ motor driven paddles that churn the food waste while water is added, until the waste is broken down into smaller particles that get discharged down the drain and into the sewer. Some manufacturers sell enzymes or other additives to add to the food waste for the stated purpose of accelerating the process of breaking down the food. All of the food waste is discharged into the sewer.

Both FOG and TSS can cause blockages in the sewer. Either of them can cause blockages on their own, but together the effect is even greater because FOG and TSS can adhere to each other, thereby increasing the size of the obstruction to the flow in the sewer. This obstruction can cause backups of sewage into homes and businesses, creating hazardous and unsanitary conditions, which can jeopardize health and wellbeing and cause property damage. Such blockages could also threaten the health of the general public, wildlife, and the environment by leading to combined or sanitary sewer overflows into water bodies.

For this reason, DEP is proposing to prohibit the use of devices that break down food waste for the purpose of discharging it into the sewer system, except for food waste disposers within dwelling units (which are permitted under Plumbing Code § 413.1 and Administrative Code § 24-518.1(b)). Under the proposed amendment, a definition for “food waste liquefier” would be added to the definition section at 15 RCNY § 19-01 because most of the devices that have been installed in the City that would fall under the ban can be properly identified as such. An entry for “biological liquefaction system” would also be inserted in the definition section which refers back to “food waste liquefier,” as both terms are synonymous.

Then at 15 RCNY § 19-03(b), a new subsection (2) would be added after the existing prohibition against food waste disposers that are not in dwelling units. The new subsection 15 RCNY § 19-03(b)(2) would prohibit any device that breaks down food waste (except for food waste disposers within dwelling units), by whatever means, for the purpose of discharging it into the sewer system, including but not limited to food waste liquefiers.

The same subsection also provides for the grandfathering of installations that before the effective date of the amendment have been registered with the Department of Sanitation, are connected to a grease interceptor as a result of an order issued by DEP, or appear on engineering plans approved by DEP. However, when any such device reaches the end of its useful life, if it is replaced, it may only be replaced with on-site processing methods that do not break down food waste for the purpose of discharging it into the sewer system, and which comply with all applicable federal, state, and local requirements. These provisions will ensure that establishments that have either obtained permission from the City to have these devices, or have expended money to connect them to grease interceptors by order of the City, will be able to keep them until they are no longer serviceable. After that time, they may not be replaced by another such device.

The addition of food waste from these devices to the already constrained wastewater conveyance and treatment system would require significant expenditures on system upgrades, and would

jeopardize water quality standards. The proposed amendment will protect the sewer system, the public health, and the waterways from a new potential cause of sewer backups and overflows, while ensuring that those who have already invested in the banned devices will not lose their investment.

A minor amendment to correct a typographical error in 15 RCNY § 19-11(o) is also being made by removing the last sentence in that subsection, which had been inadvertently left in, at the time of the 3/19/20 amendments, from an earlier draft.

## REFERENCES

Northeastern University (2013) “On-Site Systems for Processing Food Waste – A Report to the Massachusetts Department of Environmental Protection,” Isaac Griffith-Onnen, Zak Patten, and Jennifer Wong, Northeastern University, Boston, Mass.

California Department of Resources Recycling and Recovery – CalRecycle (2018)  
<https://www.calrecycle.ca.gov/Organics/food/commercial/Liquefiers/>

BioCycle Magazine (2013) “Analysis of Biodigesters and Dehydrators to Manage Organics On-Site,” Zoë Neale.

USEPA (2008) “Anaerobic Digestion of Food Waste” U.S. Environmental Protection Agency,” Prepared by East Bay Municipal Utility District.

Metcalf and Eddy (1991) “Wastewater Engineering Treatment, Disposal, and Reuse, Third Edition.”

**Material being deleted is shown below in [brackets] and material being added is underlined.**

Section 1. Section 19-01 of Chapter 19 of Title 15 of the Rules of the City of New York is amended by adding the following definitions in alphabetical order to read as follows:

**Biological liquefaction system.** See “food waste liquefier.”

**Food waste liquefier.** “Food waste liquefier” also known as “biological liquefaction system” means a device that breaks down food waste into liquefied form typically, but not exclusively, by mechanical turning, agitation, maceration, shredding, grinding, and/or aerobic digestion, as well as dilution with water, and may use additives such as microorganisms, enzymes, vitamins, and/or minerals. The resulting liquefied food waste is discharged into the drainage system.

Section 2. Subdivision (b) of Section 19-03 of Chapter 19 of Title 15 of the Rules of the City of New York is amended to read as follows:

(b) (1) Food waste disposers shall be permitted only within dwelling units. Under no circumstances will the discharge of garbage or refuse whether shredded or unshredded, other than ground putrescible food waste from food waste disposers in dwelling units, be permitted into a combined or sanitary sewer.

(2) Except for food waste disposers within dwelling units, any device that breaks down food waste by whatever means for the purpose of discharging it into the sewer system, including but not limited to food waste liquefiers, is prohibited in both residential and non-residential premises unless such device, prior to the effective date of this paragraph, either was connected to a grease interceptor as a result of an Order issued by the Department, appeared on engineering plans approved by the Department, or was registered with the New York City Department of Sanitation. When any such device reaches the end of its useful life, if it is replaced, it may only be replaced with on-site processing methods that do not break down food waste for the purpose of discharging it into the sewer system, and which comply with all applicable federal, state, and local requirements.

Section 3. Subdivision (o) of Section 19-11 of Chapter 19 of Title 15 of the Rules of the City of New York is amended to read as follows:

(o) Discharges from the cleaning of kitchen hoods which may extract grease from cooking operations must be made to receptacles or floor drains that are connected to a grease interceptor or automatic grease removal device. The minimum flow rate of the required grease interceptor or automatic grease removal device as per Table II for an automatic hood wash unit shall be equivalent to such unit's discharge rate in gallons per minute, as indicated on the manufacturer's specification sheet or based on the number of gallons of water the device uses per wash cycle, or based on the length of the hood system (0.7 gallons per minute per foot), whichever is greater. The minimum flow rate of the required grease interceptor or automatic grease removal device as per Table I for an electrostatic precipitator shall be equivalent to the precipitator's discharge rate in gallons per minute, as indicated on the manufacturer's specification sheet, or based on the number of gallons of water the precipitator uses per wash cycle, whichever is greater. [The minimum grease retention capacity in pounds shall be that which corresponds to such flow rate in Table II.]

**NEW YORK CITY LAW DEPARTMENT  
DIVISION OF LEGAL COUNSEL  
100 CHURCH STREET  
NEW YORK, NY 10007  
212-356-4028**

**CERTIFICATION PURSUANT TO  
CHARTER §1043(d)**

**RULE TITLE:** Amendment of Rules for Use of Sewer System with Regard to Food Waste Liquefiers

**REFERENCE NUMBER:** 2020 RG 104

**RULEMAKING AGENCY:** Department of Environmental Protection

I certify that this office has reviewed the above-referenced proposed rule as required by section 1043(d) of the New York City Charter, and that the above-referenced proposed rule:

- (i) is drafted so as to accomplish the purpose of the authorizing provisions of law;
- (ii) is not in conflict with other applicable rules;
- (iii) to the extent practicable and appropriate, is narrowly drawn to achieve its stated purpose; and
- (iv) to the extent practicable and appropriate, contains a statement of basis and purpose that provides a clear explanation of the rule and the requirements imposed by the rule.

/s/ STEVEN GOULDEN  
Acting Corporation Counsel

Date: March 26, 2021

**NEW YORK CITY MAYOR'S OFFICE OF OPERATIONS  
253 BROADWAY, 10<sup>th</sup> FLOOR  
NEW YORK, NY 10007  
212-788-1400**

**CERTIFICATION / ANALYSIS  
PURSUANT TO CHARTER SECTION 1043(d)**

**RULE TITLE: Amendment of Rules for Use of Sewer System with Regard to Food Waste Liquefiers**

**REFERENCE NUMBER: DEP-75**

**RULEMAKING AGENCY: Department of Environmental Protection**

I certify that this office has analyzed the proposed rule referenced above as required by Section 1043(d) of the New York City Charter, and that the proposed rule referenced above:

- (i) Is understandable and written in plain language for the discrete regulated community or communities;
- (ii) Minimizes compliance costs for the discrete regulated community or communities consistent with achieving the stated purpose of the rule; and
- (iii) Does not provide a cure period because it does not establish a violation, modification of a violation, or modification of the penalties associated with a violation.

/s/ Francisco X. Navarro  
Mayor's Office of Operations

March 29, 2021  
Date