RESOLUTION 668 OF 2016

(April 28)

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Ministry of Environment and Sustainable Development

Regulation of the rational use of plastic bags and adopting other provisions.

The Minister of Environment and Sustainable Development, in the exercise of its legal functions, especially those established in numerals 10 and 14 of article 5 of Law 99 of 1993 and in development of the provisions of Law 1753 of 2015 - National Plan of Development 2014-2018, and

## **CONSIDERING:**

That according to article 8 of the Political Constitution, it is the duty of the State and those particular individuals to protect the natural wealth of the nation.

That Articles 79 and 80 of the Political Constitution enshrine the collective right to enjoy a healthy environment and the duty of the State to protect the diversity and integrity of the environment, plan the management and use of natural resources in order to guarantee their sustainable development. , its conservation, restoration or replacement and prevent environmental deterioration factors.

That according to the literals a), j) and l) of article 8 of Decree-Law 2811 of 1974, are factors that deteriorate the environment, pollution of water, soil and other renewable natural resources, the inadequate accumulation of waste and harmful or unsightly alteration of natural landscapes.

That numerals 10 and 14 of article 5 of Law 99 of 1993 establish as functions of the Ministry of Environment and Sustainable Development, respectively: define and regulate the administrative instruments and mechanisms necessary for the prevention and control of environmental deterioration factors, determine the criteria for evaluation, monitoring and environmental management of economic activities; and determine the minimum environmental standards and regulations of a general nature on the environment to which urban centers and human settlements must be subject and in general any service or activity that can directly or indirectly generate environmental damage.

That the Policy for Integral Waste Management issued in 1998 by the Ministry of the Environment, establishes among its principles the Integrated Waste Management (GIRS), which

contemplates the following hierarchically defined stages: reduction in origin; use and recovery; treatment and transformation and controlled final disposal.

That according to section 3.2.1 of the previous Policy it is a specific objective to minimize the amount of waste that is generated, and according to section 4.1 it is a strategy for its achievement to develop waste minimization programs at its source.

That the National Policy of Sustainable Production and Consumption establishes as its main objective "To guide the change of the patterns of production and consumption of Colombian society towards environmental sustainability, contributing to the competitiveness of companies and the well-being of the population", in order to which defined a series of strategies and lines of action, among which the strengthening of the regulation stands out, with emphasis on the establishment of obligations aimed at the regulation of the use and the restriction of materials and products.

That according to the Basis of Law 1753 of 2015 - National Development Plan 2014-2018, green growth [1] is an approach that aims for sustainable development that guarantees the economic and social well-being of the population in the long term, ensuring that the resource base provides the ecosystem goods and services that the country needs and the natural environment is able to recover from the impacts of productive activities.

That additionally in the mentioned bases, it is indicated in the matter of "Reduction of consumption and post-consumption" that it will seek to reduce the generation of waste and increase the rates of recycling and recovery, from an exercise of articulation of the Policies of Production and Consumption Sustainable and Integrated Waste Management, which will lead to the following actions:

- 1. Execution of programs aimed at modifying production and consumption patterns towards sustainability.
- 2. Implementation of programs to promote responsible consumption.

That the uncontrolled distribution of plastic bags at the payment points of Chain Stores, Large Commercial Areas, Chain Supermarkets and Chain Pharmacies, and the improper use of them by consumers, generates environmental deterioration factors highlighting the following:

- 1. Due to its chemical structure, the decomposition of plastic bags can take hundreds of years [2], in addition, a large number of plastic bags are arranged inadequately, generating pollution of water, soil, flora and fauna (aquatic animals confuse them with food that, when ingested, causes their death).
- 2. Problems in the operation of landfills because they are difficult materials to treat and stabilize geotechnically.
- 3. Landscape impact when abandoned in the open.

That according to quantification and characterization studies of potentially recyclable materials present in solid waste in Bogotá, the highest amount corresponds to High Density Polyethylene

(HDPE), followed by Low Density Polyethylene (PEBD) and PET (polyethylene terephtalate) used in the manufacture of short-lived products, such as plastic bags and bottles [3].

That according to the Regulatory Impact Analysis developed by the Ministry of Environment and Sustainable Development in coordination with the Organization for Economic Cooperation and Development (OECD) and the National Planning Department (DNP) in 2015, it was evidenced that approximately 30% of municipal solid waste corresponds to containers and packaging, and it is pertinent for the Ministry to adopt determinations in the matter.

That the Ministry of Industry and Commerce as well as the Superintendence of Industry and Commerce (filed number 16-106914-2 of April 27, 2016) yielded the corresponding concepts.

That in this context, it is necessary to create the Program of Rational Use of Plastic Bags, as an instrument aimed at minimizing the amount of waste from plastic bags that are generated, establishing obligations aimed at the rational use of plastic bags, modifying production patterns and consumption towards sustainability as well as stimulating adequate consumer behavior, to protect the environment and human health, and adopt other provisions.

In merit of the above, RESOLVES:

## CHAPTER I

Purpose, scope and definitions

Article 1 Object and scope. Establish the obligation to formulate, implement and keep updated a Program of Rational Use of Plastic Bags, distributed at the points of payment throughout the national territory, in charge of the distributors of plastic bags referred to in this standard.

For the purposes of the provisions of this resolution, a distributor is understood as chain stores, large commercial areas, chain stores and chain pharmacies that distribute plastic bags at the point of payment in the course of their commercial activity.

Article 2 Definitions. For the purposes of applying this resolution, the following definitions are adopted:

Chain stores: Establishment of trade area greater than 400 m2 located in an enclosed area, which have two (2) or more branches and where retail products are sold.

Biodegradable bags: Bags made of materials that allow the transformation, mainly in organic matter, water and carbon dioxide, of the total material in which they are manufactured, by the action of microorganisms such as bacteria, fungi and algae, within a maximum period of six (6) months, which facilitates the development of stabilization processes of organic matter, together with other biodegradable waste.

Expendable plastic bag: Plastic bag distributed at payment points to transport products or merchandise and that meets any of the following conditions:

a) Plastic bags whose area is less than 30 cm x 30 cm, or b) Plastic bags whose caliber is less than 0.9 thousandths of an inch or that the caliber of the bag is not sufficient to meet the carrying capacity indicated on the bag.

Plastic bags: Bags distributed at the points of payment, used to transport goods and that are manufactured from plastic resins, as the main structural component of the bag.

Recyclable bags: Bags made of materials that can be separated from the waste stream, collected, processed and re-incorporated as raw materials or products.

Reusable bags: Bags whose technical and mechanical characteristics allow to be used several times, without requiring transformation processes.

Consumer: Person who, at the time of paying for the products purchased, receives plastic bags at the points of payment for the packing and transport of goods.

Chain pharmacies: Commercial establishments that mainly sell medicines for human consumption, located in a closed area and that have two (2) or more branches.

Large commercial areas: Commercial establishments with an area greater than 400 m2 located in an enclosed area, where retail products are sold.

Program for the Rational Use of Plastic Bags: Management instrument that contains the objectives, indicators, goals, guidelines and strategies regarding prevention, reuse, recycling, communication, awareness and training regarding the consumption of plastic bags distributed at payment points .

Superetes of chain: Commercial establishments that sell different products in self-service system, and have an area between 50 m2 and 400 m2, located in an enclosed area that has two (2) or more branches.

#### **CHAPTER II**

Rational use programs for plastic bags

Article 3 Program of Rational Use of Plastic Bags. The distributors of plastic bags, must formulate, implement and keep updated the Program of Rational Use of Plastic Bags and submit an annual report on their compliance.

Paragraph. For the formulation and implementation of the Program, distributors may take into account the guidance contained in the technical annex that is an integral part of this resolution. Article 4 Progress reports. The annual progress reports shall contain at least the achievements of the Rational Use of Plastic Bags Program, measured in terms of the

Indicators referred to in Article 9, which demonstrates the fulfillment of the goals and the description of the strategies developed for their implementation.

Article 5 Presentation of the Program for the Rational Use of Plastic Bags and the progress report. For the purposes of monitoring, distributors will present the Program for the Rational Use of Plastic Bags and their annual progress report on the fulfillment of the goals established in this resolution to the competent environmental authority, through the Comprehensive Window of Online Environmental Procedures (Vital) in the single national format created for this purpose.

Article 6 Dates of presentation of the program and the progress report. The deadlines for submitting the Rational Use of Plastic Bags Program and the first annual progress report correspond to those established in the following table:

Table 1. Presentation of the Rational Use of Plastic Bags Program and annual progress report Article 6 Dates of presentation of the program and the progress report. The deadlines for submitting the Rational Use of Plastic Bags Program and the first annual progress report correspond to those established in the following table:

Table 1. Presentation of the Rational Use of Plastic Bags Program and annual progress report

Start of Operation of		Deadline for	
commercial activities	Base year	Presentation of the	Deadline for
of the distributor		Rational Use of Bags	submission of the
		Program	first progress report
	Existing distributors		
Before 2 January	2015	December 30, 2016	March 1, 2018
2015			
	New distributors		
From January 2, 2015	2016	December 30, 2017	March 1, 2019
to January 1, 2016			
As of January 2, 2016		December 30 of the	March 1 of the year
	Period from January	year following the	following the
	1 to December 31	first period of	presentation of the
	following the year of	operation of	Program for the
	commencement of	commercial activities,	rational use of Plastic
	the commercial	counted from	Bags.
	activities of the	January 1 to	
	distributor.	December 31.	

Paragraph. The deadline for submission of annual progress reports following the first report will be March 1 of each year.

Article 7 Competition. The competent environmental authorities for monitoring the goals established in the Rational Use of Plastic Bags Program are:

- a) Regional and urban environmental authorities when plastic bag distributors have exclusive commercial coverage in the jurisdiction of said authorities.
- b) The National Environmental Licensing Authority (ANLA) in the event that plastic bag distributors have branches in the jurisdiction of two or more environmental authorities. CHAPTER III

Obligations, indicators and goals

Article 8 Obligations of plastic bag distributors. Under the Program of Rational Use of Plastic Bags, the following are obligations of distributors:

- 1. Formulate, present, implement and keep up to date the Program of Rational Use of Plastic Bags, for the follow-up of the goals.
- 2. Present the annual progress report of the Rational Use of Plastic Bags Program, in accordance with the provisions of this administrative act.
- 3. In plastic bags, incorporate information that guides the consumer about its use, including at least:
- a) An environmental message related to the rational use of bags in a minimum size of 10% of the area of one of its faces.
- b) The carrying capacity of the bag expressed in kilograms visibly.
- c) The caliber of the bag expressed in thousandths of an inch or in microns [4].
- d) Recommendations for the reuse of the bag.
- 4. Comply with the established goals.

Article 9 Indicators. The Rational Use of Plastic Bags Program must incorporate and report at least the following indicators:

Table 2. Indicators of the Program of Rational Use of Plastic Bags

[text from table inserted below]

Indicator

Indicator Name Indicator

one

Number of bags distributed at the payment points in the base year (baseline indicator):

Number of bags / year

2

Weight of bags distributed at payment points in the base year (baseline indicator):

Total weight (kilos) / year

3

Annual percentage of variation of the number of bags distributed at the payment points. Number of bags distributed at payment points year N # Number of bags distributed at payment points in the base year

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\* 100

4

Annual percentage by weight.

Kilos of bags distributed at the payment points in the year N # Kilos of bags distributed at the payment points in the base year.

5

Percentage Reduction of Distributed Bags with respect to the base year - PRB (%).

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\* 100 Where:

NBDVo: Number Bags distributed at the points of payment with respect to sales in millions of pesos in the base year

NBDVn: Number Bags distributed at the points of payment with respect to sales in millions of pesos in year n

Where:

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Where:

BD0 = Number of bags distributed at the payment points (thousands of units) in the base year.

V0 = Sales of the distributor in millions of pesos in the base year.

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BDn = Number of bags distributed at payment points (thousands of units) in year n.

Vn = Sales of the distributor in millions of pesos (Net Present Value VPN with respect to the base year) in year n.

n = year of monitoring the fulfillment of the goal

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Weight of the bags distributed at the points of payment with respect to sales in millions of pesos

Kilograms of material used per year in the manufacture of bags distributed at points of payment / Sales (millions of pesos net present value NPV per base year)

# [end table]

Paragraph. For the purposes of this standard, the base year will be understood as the one established in Table 1 of Article 6 of this resolution.

Article 10. Goals. All distributors must comply with the following goals: 1. As of December 30, 2016:

- a) Deliver at the payment points plastic bags that meet: a) dimensions whose area is equal to or greater than 30 cm x 30 cm, b) caliber equal to or greater than 0.9 thousandths of an inch or that the caliber of the bag is sufficient to meet the load capacity indicated on the bag.
- b) Plastic bags must include an environmental message related to the rational use of bags in a minimum size of 10% of the area of one of their faces.
- c) Include visible information on the carrying capacity of the bag expressed in kilograms.
- d) Make available to the consumer at least one alternative for the transport of goods such as reusable bags, market carts, baskets, backpacks, etc.
- 2. Existing distributors must comply with the following goals (table 1, article 6):
- a) As of December 31, 2017, reduce by 10% the number of plastic bags distributed at the payment points, measured in terms of the PRB indicator (%) referred to in Table 2 of Article 10 of this resolution. For the fulfillment of this goal, expendable plastic bags will be included.
- b) In subsequent years, they must guarantee minimum annual reductions of 5% of the PRB (%) until they reach a minimum of 60% reduction with respect to the base year.
- 3. New distributors must comply with the following goals (table 1, article 6): Start reducing the number of bags distributed at the points of payment, measured in terms of the PRB indicator (%), taking into account the year in which operations began and the baseline year.
- Article 11. Alternative to the presentation of the Program of Rational Use of Plastic Bags. Distributors who meet the following conditions will not be required to submit the Rational Use of Plastic Bags Program:
- a) Charge the minimum plastic bags at market prices explicitly to consumers.
- b) Comply with the provisions of literals a, b, c, numeral 1 of article 10 of this resolution.
- c) Submit an annual report to the competent environmental authority informing the amount of bags sold at the payment points, who in turn must send it to the Ministry of Environment and Sustainable Development for the purposes set forth in article 14. Paragraph. The first annual report will include the information corresponding to the period from January 1 to December 31, 2017 and will be presented no later than March 1, 2018, on the same date the reports corresponding to the following years will be presented. CHAPTER IV Final Provisions Article 12. Prohibitions. It's prohibited: a) Abandon, remove or bury uncontrollably, plastic bags or

fractions of same, in the national territory. b) Accumulate used open air bags. c) Distribute expendable bags at payment points as of December 30, 2016 Article 13. Duties of the Consumers. The duties of consumers are as follows: a) Do not require additional plastic bags to those required for the transport of purchased goods. b) Reuse plastic bags received from distributors. c) Follow the instructions provided by the plastic bag distributors on the handling of the plastic bags.

Article 14. Consolidation of information. The Ministry of Environment and Sustainable Development, through the Directorate of Sectorial and Urban Environmental Affairs or the direction that makes its time, will consolidate the information in order to measure the impact of this standard, based on the information reported by the distributors to the competent environmental authorities no later than August 1 of the corresponding year.

Article 15. Accuracy of information. The Distributor will be responsible for the information submitted, which must be truthful and accurate, and will be understood as presented under the gravity of the oath.

Article 16. Graduality. Distributors of plastic bags other than those referred to in the scope of this resolution will be subject to strategies aimed at the rational use of plastic bags in a second phase of implementation, as determined by the Ministry of Environment and Sustainable Development within a term of 12 months counted from the effective date of this resolution.

Article 17. Validity. This resolution is effective as of its publication in the Official Gazette. Publish and comply.

Given in Bogotá, D. C., on April 28, 2016.

The Minister of Environment and Sustainable Development, Gabriel Vallejo López.

**TECHNICAL ANNEX** 

GUIDELINES AND STRATEGIES FOR THE RATIONAL USE OF PLASTIC BAGS PROGRAM For the formulation of the Program of Rational Use of Plastic Bags, the following guidelines and strategies are presented below, which constitute an orientation for the distributor of plastic bags:

### Guidelines:

- 1. Establishment of the baseline, or current situation on the use of plastic bags in chain superetes, chain pharmacies, chain stores and large commercial areas, for which the characterization and quantification by type, size will be taken into account, caliber and its equivalent in total weight (kilos, tons) of the bags distributed in the base year and current distribution procedures.
- 2. Establishment of objectives aimed at reducing the number of bags distributed at payment points, implementing reusable or recyclable alternatives.
- 3. Indicators aimed at fulfilling the proposed objectives.

- 4. Setting goals consistent with the objectives and indicators.
- 5. Establishment of rational use strategies for plastic bags aimed at preventing the generation of waste, reuse, recycling in order to minimize the amount of waste available.

  Strategies:
- a) Prevention strategies:

Prevention strategies are aimed at distributing only those bags that consumers require to transport the purchased goods at the payment points.

Among the recommended actions are the following:

- i. Implementation of replacement processes for expendable bags with others that allow their reuse and / or recycling, or the use of other alternatives for the transport of goods.
- ii. Improvement of product packaging (ecological designs) distributed in chain stores or large commercial areas, which eliminate the need for the use of plastic bags.
- iii. Incorporation of sustainable merchandise mobilization alternatives.
- b) Reuse strategies
- i. Distribution of reusable bags.
- ii. Consumer information, promotion and incentives to reuse bags. c) Recycling strategies:
- i. Promotion of recycling used bags.
- i. Distribution and use of bags made from recycled material.
- ii. Incorporation of biodegradable bags to be distributed at the points of payment, with a final destination oriented to their real use.
- d) Transversal strategies:
- iii. Communication and consumer awareness strategy, in general and / or focused media and payment points, to inform and sensitize the consumer about the importance of proper use and final disposal of plastic bags delivered at point of payment, the foregoing, to avoid environmental impacts associated with the manufacture, use and disposal of bags, as well as the strategies established for their rational use and environmental benefits.
- iv. Training strategy for the personnel of the distributors, oriented to the rational consumption of bags at the payment points.
- 6. Internal audit program to fulfill the objectives, goals and indicators, including activities, managers and resources.
- 7. Periodic reports of the results obtained. \*\* \*
- 1. The OECD defines green growth as "The promotion of growth and economic development, while ensuring that natural assets continue to provide the environmental resources and services on which our well-being depends. To achieve this, it must catalyze investment and innovation that underpin sustained growth and give way to new economic opportunities."
- 2. The Green Paper "on a European strategy against plastics residues in the environment" published by the European Commission in Brussels in 2013, documented a study on plastics in the environment focused on marine environments. The Green Paper estimates that plastic waste (plastic bags) once in the environment and especially in the marine environment can last hundreds of years without degrading.

- Review of MgO-Related Uncertainties in thec Waste Isolation Pilot Plant ", official document signed and published by the United States Environmental Protection Agency (EPA), revealed in studies conducted at the Pilot Plant (WIPP) of waste isolation , waste disposal facility located in southeastern New Mexico and operated by the Department of Energy (DOE), under the supervision of the United States Environmental Protection Agency (EPA), that these CPR materials could be degraded by microbes during the WIPP 10,000 year period, producing carbon dioxide (CO2) and other gases.
- 3. "The complexity of the environmental problem of plastic waste: an approach to the narrative analysis of public policy in Bogotá" UAESP Universidad de los Andes 2005.
- 4. One thousandth of an inch equals 25.4 microns.