## FUMIGATIONS WITH GLYPHOSATE IN INDIGENOUS TERRITORIES IN COLOMBIA

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#### **ABSTRACT**

This article seeks to demonstrate that the Colombian legal framework to deal whit drug trafficking thought the use of the glyphosate spraying (Round Up) has had serious consequences for the rights of indigenous communities. For this reason, the Constitutional Court has been protecting the rights of these minorities. The proposed methodology is based upon a general historical analysis of the main laws regarding "Round Up", so as to present an evolution of these laws. This will be followed by a case law study, which will demonstrate the means by which the Colombian Constitutional Court is redirecting the interpretation of these rules. These are the results of this research: 1. The legal guidelines regarding air fumigation with "Round Up" run contrary to indigenous rights; 2. The Constitutional Court has protected such fundamental rights of the indigenous peoples as self-determination, prior consultation, ethnic and cultural diversity, participation, and health in connection to life and the environment. In conclusion, it is clear that the court is not in agreement with governmental guidelines regarding the use of glyphosate and has modified their content so as to generate new public policies which end up prohibiting the use of this chemical and creating a strict procedure for the reauthorization of its use.

Keywords: Colombia; drugs; glyphosate; indigenous; trafficking.

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### LAS FUMIGACIONES CON GLIFOSATO ("ROUND UP") A LOS CULTIVOS DE DROGAS EN TERRITORIOS INDÍGENAS EN COLOMBIA

#### RESUMEN

Este artículo tiene por objetivo demostrar que el marco normativo colombiano de la lucha contra el narcotráfico con fumigaciones aéreas con glifosato ha desconocido gravemente los derechos de los pueblos indígenas, por lo que la Corte Constitucional ha tenido que tutelarlos. La metodología aplicada parte de un análisis histórico general de las principales normas sobre glifosato, con el fin de exponer su evolución y posteriormente, se realiza un estudio jurisprudencial que expone la manera en que la Corte Constitucional ha reconducido la interpretación normativa sobre el glifosato. De este modo, se han obtenido los resultados siguientes: 1. Los lineamientos jurídicos en materia de fumigaciones áreas con glifosato vulneran los derechos de los indígenas y 2. La Corte Constitucional ha tutelado derechos fundamentales de los indígenas como la libre determinación de los pueblos, la consulta previa, la diversidad étnica y cultural, la participación, la salud en conexión con la vida y al medio ambiente. En conclusión, se puede ver como la Corte Constitucional al no estar de acuerdo con los lineamientos sobre glifosato, ha modificado su contenido generando nuevas políticas públicas que desembocaron en la prohibición de las fumigaciones con este químico y colocaron un riguroso procedimiento para su futura autorización.

Palabras clave: Colombia; drogas; glifosato; indígenas; narcotráfico

#### **FOREWORD**

Concerns about expanding the narcotics business in Colombia began to strengthen during the 1980s, when it became clear there were strongly organized criminal groups<sup>2</sup> that entrenched themselves thanks to drug exports and made huge profits (forming or converging with new oligarchies)<sup>3</sup>, and sometimes worked against state institutions<sup>4</sup>.

In view of this, the Colombian government has developed a series of strategies to combat the drug trade, such as harassing the members of these cartels, creating new offenses, founding new institutions, prohibiting the entry of chemicals used in production, having more intensive border control, police operations, and the eradication of illegal crops.

One of the components of the "Illegal Crop Eradication Program" was glyphosate fumigation, carried out in the form of air (prohibited in 2015) or ground (currently being performed), spraying, including drone testings. As fumigations were carried out, different areas were affected, including indigenous territories that are under a special protection regime<sup>5</sup>.

This article demonstrates how indigenous communities who have suffered the impact of glyphosate fumigation to eradicate illegal crops

<sup>2 &</sup>quot;Along these lines, the basic structure of drug cartels and large pharmaceutical companies in Colombia in the 1980s and 1990s comprised a complex organizational framework. A business model was built that pointed to robust financial resources, common, unprofessional, but crime-related human talents that clandestinely conducted their activities, to highly visible head leaders identifiable by state authorities. An institutional challenge at its best" (NIÑO, 2016).

<sup>3 &</sup>quot;It was in this context that drug trafficking came in. Drug traffickers as new oligarchies funded politics and made use of private violence to the point of altering the institutions that, in practice, governed certain regions. Because not only did their properties, but also their own freedom and survival, depended on their impact on these institutions, drug traffickers had strong incentives to intervene in election campaigns. But by no means did the emergence of drug traffickers mean a complete dilution of the old oligarchies" (VELASCO; DUNCAN; LOPERA, 2018. p. 167-201).

<sup>4 &</sup>quot;Heads and leaders of organizations have incentives to "hide", to keep a low profile and minimize open confrontation with the police, but they can also make violence into a means of influencing whenever there is little state repression. 'Advising' and 'pushing' may not seem opposite to one another, but in practice they are mutually exclusive: there are advantages of violent escalation influencing state players, but its cost is a low profile that makes it possible to hide it, and vice versa" (ROAD; MOSCOW; ANDRADE, 2016, p. 12).

<sup>5 &</sup>quot;The conformation of indigenous territorial entities, manifestations of self-government and coordination relations with departmental authorities are projected onto assumption of ethnic homogeneity. The functions of indigenous councils are listed in Article 330 and, for their exercise, the usages and practices of their communities, as well as their jurisdictional activities, will be taken into account (Art. 246)" (VIDAL PERDOMO, 2009, p. 253).

on their territories<sup>6</sup> have thus been affected in their environment<sup>7</sup> and health<sup>8</sup>, and have had to resort to constitutional jurisdiction<sup>9</sup> to protect their rights and to have the government intercede so that fumigations were be carried out according to the law.

To achieve true protection of indigenous rights, the Constitutional Court has incorporated constitutional control<sup>10</sup> (including that of conventionality<sup>11</sup>), thereby broadening the frame of reference in its decisions, having to study the domestic and international regulations on the subject.

During the years when air fumigation was performed, scientific studies were introduced that stated that glyphosate was carcinogenic and seriously affected the environment, for example, by attacking fauna, flora, causing land to become unusable, posing a risk to insects (bees), and contaminating water resources. Therefore, the public environmental entities themselves decided to suspend air fumigation.

The applied methodology is based on an overall historical analysis of the main norms on glyphosate in order to show their evolution and,

<sup>6 &</sup>quot;The territory, as a social builder, is marked by cultural, social, political and economic relations throughout its history. These relationships may occur between players with different interests or within a social and cultural group with a certain homogeneity, but this does not imply full agreement on their interests; however, it is their constant interrelationships that will shape and appropriate various territories" (BURNEO MENDOZA, 2018, p. 50-51).

<sup>7 &</sup>quot;Affecting natural resources implies a violation of the right to the environment because it alters the system; that is, it makes the correct interrelationship of all the natural elements that make it up impossible, or puts it to question; consequently, the content that is being sought translates into the maintenance of ecological balance" (GIL BOTERO; RINCÓN CÓRDOBA, 2013, p. 17).

<sup>8 &</sup>quot;What has been seen as a measure to control drug trafficking has now become an occupational health problem for the agricultural population. Glyphosate is a toxic compound that can kill unwanted plants but is also lethal to people exposed to it. The literature published in recent years has shown that handling of glyphosate by the peasant population is unsafe. Studies have shown the presence of this herbicide in the body in people exposed to it due to work or for involuntary reasons, even in children, due to poor storage conditions, and this is because this toxic agent is not only absorbed through the gastrointestinal tract, but also through mucous tissues, skin and by inhalation" (CAMPUZANO CORTINA et al., 2017, p. 127).

<sup>9 &</sup>quot;The purpose of this judgment is to preserve the supremacy and integrity of the Political Charter against lower-ranking texts within the hierarchical structure of norms that might violate it. It thus seeks to ensure the supremacy of the constitutional norms in the country" (YOUNES MORENO, 2017, p. 331).

<sup>10 &</sup>quot;In the instrumental sense, the control of constitutionality is the set of institutions and procedures designed to actualize the supremacy of the Constitution, to realize its normative character, and to guarantee the validity and effectiveness of the fundamental rights of persons in a State; and also, to allow for the actualization of the rules, principles, values and institutions of the democratic constitutional state" (QUINCHE RAMÍREZ, 2015, p. 595).

<sup>11 &</sup>quot;[...] Conventionality is understood mainly as a clear international law of a custom law nature, arising from the relations between the existence of nations themselves and their coexistence, as well as the recognition of the supreme value represented by human beings, regardless of the national context where they live, which we happen to belong to" (SANTOFIMIO GAMBOA, 2015, p. 188).

subsequently, a case law study was conducted to show the way the Constitutional Court redirected the normative interpretation of glyphosate.

To this end, we carried out a compilation of the main law theory on the subject, as present in scientific articles, book chapters and whole books. In this compilation, we analyzed the state of the art on glyphosate, and indigenous and fundamental rights. In addition, all existing regulations on the subject matter of the study in Colombia were collected and, finally, the Constitutional Court rapporteur office search mechanism had to be used.

The compiled information allowed us to establish that there are two sides strongly opposing each other: on the one hand, the government, with the military, the herbicide companies and dealers, the people who want to expand their land and – internationally – the companies that produce (or distribute) glyphosate and the influential US guidelines that they consider a valid mechanism for fighting against drugs in Colombia. On the other hand, indigenous groups, environmentalists, some state entities, some environmental organizations, and the majority of the civilian population. It is in this context that the Constitutional Court had to establish a position and supported indigenous groups, creating strong restrictions to prevent future glyphosate fumigation in the territories of these minorities.

Thus, the following results were obtained: (1) there are two clearly differentiable blocks that have conflicting interests in glyphosate spraying, and they represent domestic and international interests; (2) the legal guidelines on fumigation using this herbicide violate the rights of indigenous peoples, causing damage to health and the environment; and (3) the Constitutional Court, having to settle the conflicts that arise with respect to this public policy, has ensured the fundamental rights of indigenous peoples, such as the free will of peoples, prior consultation, ethnic and cultural diversity, participation, and health in connection with Life and environment.

In practice, one can see how the Constitutional Court, which disagrees with the glyphosate guidelines, changed their content, generating new public policies that led to a ban on fumigation using this chemical and adopted a strict procedure for future authorization.

Accordingly, it is necessary to present the current glyphosate regulations and the solutions provided by the Constitutional Court in order to avoid further damage to health and the environment arising from the use of this chemical. Therefore, this article has been divided into two parts: (1) Main regulations on glyphosate fumigation on illegal crops in Colombia; and

(2) Primary case law of the constitutional court on glyphosate fumigation issues on illegal crops.

## 1 MAIN REGULATIONS ON GLYPHOSATE SPRAYING ON UNLAWFUL CROPS IN COLOMBIA

The Colombian regime of glyphosate air spraying on illegal crops is an issue that has not been easily established, to the point that there is currently no law setting the parameters on the matter, and it is unclear whether its use will soon be banned or not.

This is due to the various points of view, which allowed us to determine two strong lines views, one for and one against its use. The first group is formed, for example, by the Colombian government, some members of the US government, right-wing thinkers, large supplier companies, large economic groups with interests in the territories, and representatives of the military; while in the second, the peasants, the natives, the social leaders, some illegal groups that may have their drug plantations affected and, in general, the inhabitants of the places where the fumigation takes place stand out.

To present the main regulations issued in Colombia related to fumigation, we need to refer to different levels of the legal system<sup>12</sup>, such as the Constitution, the law, decrees and administrative acts, and at the same time, the institutions created for the protection of the environment regarding the deployment of the glyphosate illegal crop eradication program.

Consequently, the following ten points are addressed: (1.1) National Statute on Narcotics (Law 30 from 1986); (1.2) The constitutionalization of environmental law in Colombia (1991 Political Constitution); (1.3) The administrative sector of the environment in Colombia (Law 99 from 1993); (1.4) The beginning of the air glyphosate fumigation program (Resolution 0001 from 1994); (1.5) On the eradication of illegal crops (Resolution 5 from 2000); (1.6) Procedure for addressing damage arising from air spraying of glyphosate (Resolution 17 from 2001); (1.7) New procedure for the eradication of illegal crops (Resolution 13 from 2003); (1.8) On the creation of the National Environmental Licensing Authority (Decree 3750 from 2011); (1.9) Suspension of air glyphosate fumigation (Resolution 6 from 2015); and (1.10) Authorization of the ground and drone glyphosate fumigation plan (Resolution 1524 from 2016).

<sup>12</sup> On the Colombian legal system, see Rivero and Arenas (2017).

#### 1.1 National Statue on Narcotics (Law 30 from 1986)

In the 1980s, the Colombian government recognized the issue of drug trafficking as a major problem in the country, as the illegal groups involved in this trade were strengthened to the point of establishing a direct war against the democratic government. Thus, in Colombia, the drug cartels deployed a policy of terror when confronted by the Colombian military by placing bombs in different parts of the country and killing people they considered contrary to their interests.

In this situation, the Colombian government had to devise policies to address the subversive individuals. From that, Law 30 from 1986, or the National Statute on Narcotics was created, which is made up of the following chapters: (I) General principles; (II) Prevention campaigns and educational programs; (III) Alcohol and tobacco prevention campaigns; (IV) Control of importation, manufacture and distribution of addictive substances; (V) Of the crimes; (VI) Of the misdemeanors; (VII) Procedure for the destruction of seized crops and substances; (VIII) Treatment and rehabilitation; and (IX) National Narcotics Council.

In this regard, four key points introduced by this norm in the fight against drug trafficking should be mentioned: (1) Introduction of the general notions on drug trafficking in Colombia; (2) Extension of the criminal regime on illegal substances; (3) Controlling of the manufacture and destruction of addiction-causing crops; and (4) Establishment of the National Narcotics Council<sup>13</sup> and other Sectional councils.

# 1.2 Constitutionalization<sup>14</sup> of environmental law<sup>15</sup> in Colombia (1991 Political Constitution)

Colombia's 1991 Political Constitution was a response to a very difficult historical time the country was going through. Since, in previous years, for example, with the assassination of four presidential candidates,

<sup>13 &</sup>quot;The Superior Councils of Administration, as advisory bodies or coordinators, are also part of the central sector for all or part of the administration and function permanently or temporarily, and also include contributions by various state bodies [...]" (YOUNES MORENO, 2016, p. 70-71).

<sup>14 &</sup>quot;[...] The constitutionalization of administrative law, as a phenomenon of its transformation, adaptation or modulation, thanks to the Constitution, operates differently in each State and to a different degree" (OSPINA, 2014, p. 12).

<sup>15 &</sup>quot;The importance of the environment as an administrative task, with a constitutional mandate, is increasingly made clear as the main task, on which other administration tasks will depend every day" (OSPINA GARZÓN, 2014, p. 659).

when the phenomenon of narcoterrorism became evident, the fighting between drug cartels continued, armed groups were strengthened outside the law, and the state military themselves were used to violate human rights.<sup>16</sup>

This new fundamental norm allowed for the participation of several marginalized sectors of the country, and incorporated a new vision on environmental issues, recognizing the environment as an asset that should be legally protected on a constitutional level.

It referred mainly to the environmental issue in the following articles: (1) Obligation to protect the environment (Art. 8); (2) Healthcare and environmental sanitation are public services provided by the State (Art. 49); (3) Limitations to the right to private property and its social and ecological functions (Art. 58); (4) Public use assets and natural parks (Art. 63); (5) The constitutional right to the environment (Art. 79); (6) The obligation of the State to plan the management and exploitation of natural resources (Art. 80); (7) The non-contractual property liability of the State for violation of the environment (Art. 90); (8) The incorporation of treaties and conventions ratified by the Human Rights Congress (Art. 93); (9) All persons must protect natural resources and contribute to the maintenance of a healthy environment (Art. 95); and (10) An objective of the State is providing for needs that have not been met, such as health, environmental sanitation or drinking water (Art. 366).

# 1.3 The administrative sector of the environment in Colombia (Law 99 from 1993)

As a result of the environmental guidelines contained in the Colombian Political Constitution of 1991 and the Rio Convention of 1992, Law 99 from 1993<sup>17</sup> was issued. This law aimed at organizing a true system capable of carrying out environmental protection, thus becoming one of the main norms in this field.

<sup>16 &</sup>quot;We were living a crisis. In 1990, the Government faced enormous difficulties both to maintain public order and to fulfill the minimum promises of welfare and respect for human rights that are typical of a liberal democracy. Violence seemed to overwhelm it, highlighting its weakness and lack of legitimacy: the government seemed to be trapped by the power of drug traffickers who used terrorism to push for non-extradition, strengthened guerrilla groups, and increased paramilitary violence" (LEMAITRE RIPOLL, 2016, p. 7).

<sup>17 &</sup>quot;With Law 99 from 1993, the function of 'environmental protection' in the Public Administration was established, either by updating existing legal instruments, or by introducing new tools (such as environmental compliance actions) in order to provide greater efficiency to the so-called efficacy of this obligation or protection burden" (BRICEÑO CHAVES, 2017. p. 649).

This law created a new organization for the Public Environmental Sector by means of bodies such as the Ministry of the Environment, the Regional Autonomous Corporations, the National Environment Council, other technical bodies and the SINA National Environmental System.

Likewise, it represented a major conceptual progress in relation to the environmental approach by introducing the term Sustainable Development and having as its objectives, for example, the preservation of biodiversity, the landscape, the assignment of special protection areas, the rights of people, the pursuit of development in harmony with nature, water protection, the principle of prevention of environmental damage, the use of the precautionary principle<sup>18</sup>, and environmental protection and recovery.

## 1.4 The beginning of the air glyphosate fumigation program (Resolution 0001 from 1994)

Resolution 001, of February 11, 1994, of the National Narcotics Council is the one that in practice initiated the air glyphosate fumigation program for illegal crops in the Colombian territory. The fundamentals of this administrative act include the prevention of the increase of drugs and the strengthening of illegal groups dedicated to drug trafficking, the need to reclaim these territories, the environmental impacts, and preventing the program from having any harmful effects.

In its operational part, it explains that it seeks to extend and specify authorizations for the destruction of illegal crops, having as operational parameters: (1) the recognition of cultivated areas; (2) origins of the controlled air fumigation method; (3) operational planning; (4) coordination with local authorities; (5) civil police action; (6) periodic assessment of results; and (7) the Environmental Audit (it also determines a special management area and nature reserves, and raises the need for rehabilitation, and social, economic and ecological projects).

### 1.5 On the eradication of illegal crops (Resolution 5 from 2000)

This resolution of the National Narcotics Council amended Resolution 0001 from 1994, addressing the destruction and eradication of illegal crops in the country. Among its considerations, it states that planting areas are 18 "[...] Precaution is fundamentally a procedural principle called upon to enable the assessment of uncertain risks and to allow measures to be taken against them, even when they are largely unknown" (EMBID TELLO, 2010, p. 1223).

dominated by illegal groups, so there is insecurity and land evacuation, and human health, the environment and agricultural activities are affected.

It is worth mentioning that, due to its motivation, this resolution recognizes the increase of complaints from citizens in various regions of the country, due to the alleged damage caused to the population, the environment and the agricultural activities resulting from glyphosate fumigation, which should be carried out adequately so as to ensure the protection of people's rights.

This administrative act is intended to trace the limits of the functions of bodies engaged in programs for the eradication of illegal crops, to determine procedures for local participation by those affected by the program, to combat new techniques by illegal groups to camouflage crops, to strengthen monitoring programs to avoid the impacts of fumigation, and to design more appropriate mechanisms to protect the rights of those affected. In addition, this resolution prohibits glyphosate air spraying on illegal crops in "Areas of the National System of Natural Parks" and other protected natural areas, except in exceptional circumstances, as assessed by the National Narcotics Council, which will require previous assessment by the Ministry of Environment.

# 1.6 Procedure for addressing damage arising from air spraying of glyphosate (Resolution 17 from 2001)

In response to the large number of requests sent to the authorities by people affected by glyphosate fumigations living in different prefectures of Colombia, the National Narcotics Council issued Resolution 0017 of October 4, 2001, which adopts a procedure for dealing with claims of alleged damage caused by air fumigation using glyphosate herbicide under the Illegal Crop Eradication Program.

This administrative act explains that those affected may file their complaints with the National Narcotics Council and the Police National Anti-Drug Department. Likewise, the requirements for their presentation set out the entire procedure performed and the possibility of receiving a corresponding payment.

Finally, it should be mentioned that Resolution 0017 of October 4, 2001 was declared null by the State Council in a ruling of July 25, 2013, since, for that Court, the National Narcotics Council did not had sufficient powers to regulate on this issue, explaining:

It can therefore be seen that this function does not imply any regulatory power, let alone with regard to the procedures for handling claims and compensation for glyphosate spraying damage. Even for its exercise, it requires prior consultation with other competent entities to decide on the effects that may be caused on human health or the environment by the eradication of illegal crops that is proposed to be carried out in C.N.N<sup>19</sup>.

## 1.7 New procedure for the eradication of illegal crops (Resolution 13 from 2003)

The National Narcotics Council Resolution 0013 of June 27, 2003 repeals Resolutions 001 from 1994 and 005 from 2001, adopting a new procedure for the program for the eradication of illegal crops.

With regard to the underlying considerations, it is noteworthy that the drug trafficking business has detrimental effects on democratic governance, that illegal cultures are maintained in the country, that the presence of groups in the affected areas has increased, that it is necessary to strengthen requirements for permits necessary for glyphosate fumigations through the air fumigation program that will be carried out in three integrated phases (detection, spraying and verification), and it is clear that traffickers have devised strategies to mix their illegal crops with other types of crops and animals to prevent fumigation.

In closing, the voiding of paragraph 2 of Resolution 0013 from 2003 should be mentioned, and the State Council, in a judgment of November 11, 2003, granted the claims: "It was found that the glyphosate air spraying activity in the National System of Natural Parks brings a potential risk to the environment, a risk on which there is no scientific uncertainty, as its potential has been scientifically assessed, so that it can be classified as serious and irreversible. In addition, when the proportionality test was performed, it was concluded that the measure was contrary to this principle"<sup>20</sup>.

## 1.8 On the creation of the National Environmental Licensing Authority (Decree 3750 from 2011)

The National Environmental Licensing Authority (ANLA) was created via President of the Republic Decree n. 3750 of September 27, 2011. This

<sup>19</sup> CONSEJO DE ESTADO DE COLOMBIA, Sección Primera, 25 de julio de 2013, M.P. Marco Velilla, Exp. 00129-0 (APN).

<sup>20</sup> CONSEJO DE ESTADO DE COLOMBIA, Sección Primera, 11 de diciembre de 2013, Exp. 00227-01(AN), M.P. Guillermo Vargas.

regulatory decree has 24 articles divided into three chapters: I. Creation, object, functions, resources and directions; II Structure and functions of the prefectures, and III. Final provisions.

ANLA is a Special Administrative Unit<sup>21</sup> of the national kind that is not a legal entity (YOUNES MORENO, 2016). It belongs to the central sector, and is linked to the Ministry of Environment and Sustainable Development (RODRÍGUEZ RODRÍGUEZ, 2017). It has administrative and financial autonomy and is responsible for projects, works or activities that require a license, permit or procedure complying with environmental regulations, so that they contribute to sustainable development in Colombia.

From this point on, the National Environmental Licensing Authority becomes one of the entities that will authorize new projects and verify whether the guidelines established for existing glyphosate fumigation programs are met.

### 1.9 Suspension of air glyphosate fumigation (Resolution 6 from 2015)

The National Narcotics Council, by Resolution 6 of May 29, 2015, orders the nationwide suspension of the use of glyphosate herbicide in air spraying eradication operations.

Among its considerations, the Resolution explains that the function of the National Narcotics Council is the destruction of illegal crops using the most appropriate means, given the favorable opinion of agencies responsible for ensuring the health of the population and the ecosystem of the country. But that, following the guidelines of the 1992 Rio Declaration and 1993 Law 99, the precautionary principle must be accepted.

Similarly, it refers to the case law of the Constitutional Court and the State Council, where it is considered advisable to suspend the program, as there is no complete knowledge of the effects of the herbicide use. Thus, they quote studies from the International Agency for Research on Cancer (IARC) and the Ministry of Health and Social Protection, where the danger of air spraying of glyphosate is recognized.

To sum up, the National Narcotics Council considers that alternatives to glyphosate air spraying should be studied on the basis of recommendations and the precautionary principle, without compromising national assets and drug safety.

<sup>21 &</sup>quot;On the other hand, special administrative units are organizations created by law, with administrative and financial autonomy appointed by the creation law, without legal status, and performing administrative functions to develop or execute programs of a ministry or administrative department" (SANTOFIMIO GAMBOA, 2017, p. 931).

## 1.10 Authorization of the land and drone glyphosate fumigation plan (Resolution 1524 from 2016)

In Resolution 1524 of December 12, 2016, the National Environmental Licensing Authority authorizes the land glyphosate spraying plan presented by the Executive Power. According to their views, the following points should be highlighted:

- 1. The Environmental Management Plan imposed by the Ministry of the Environment and Sustainable Development on the "Glyphosate Air Spraying Crop Eradication Program" (PECIG) is modified by authorizing the inclusion of the "Land Crop Spraying Eradication Program using Glyphosate" (PECAT) on a nationwide level and geared to the areas of Antioquia, Córdoba, Norte de Santander, Santander, Bolívar, Cesar, Caquetá, Putumayo, Vale do Cauca, Cauca, Nariño, Chocó, Guaviare, Meta and Vichada.
- 2. Handheld and permanent ground spraying are permitted. In addition, fumigation using a canopy-level low-altitude remote control spraying equipment (EATBAND), i.e. by drones, is permitted.
- 3. It determines what are the prefectures to be fumigated with glyphosate and the no-fly zones, namely: (1) a 100-meter strip along major roads; (2) isolated houses, villages, inhabited centers, urban centers, educational centers, healthcare centers, recreational and religious sites, with a protective range of 10 square meters; (3) indigenous reserves and legally recognized ethnic communities; (4) farming projects; (5) environmentally fragile areas (RAMSAR wetlands, mangroves, and swamps); and (6) areas protected by SINAP.
- 4. It explains that the authorization is restricted only to what is laid down in the supplement to the Environmental Impact Study and in the other plans submitted for study.
- 5. Prior to initiating fumigation, the National Policy must comply with certain requirements that must be submitted to the National Environmental Licensing Authority for their authorization, adjusting some points of the program, georeferencing each area, submitting reports, ensuring compliance with legal guidelines, including the requirements for drones and their operators. Also, they must work together with environmental bodies and, if possible, with the population, in order to suspend an activity in the event of damage, and to take appropriate preventive measures.

6. The National Environmental Licensing Authority has control and monitoring functions; therefore, at any time, it can check whether program obligations are being met.

## 2 PRIMORDIAL CASE LAW OF THE CONSTITUTIONAL COURT ON GLYPHOSATE FUMIGATION OF ILLEGAL CROPS

The Constitutional Court of Colombia is the highest body in the Judicial Branch, as it is responsible for defending the supremacy of the Constitution. In particular, it controls constitutionality and decides on wardship actions, so it had the opportunity to comment on glyphosate fumigations to combat the growing of illegal drugs in the country.

Thus, since its inception in the 1991 Constitution, citizens have had to turn to the higher state body for the protection of their fundamental rights to life, health, a healthy environment, property, participation, existence as a city or town, and sometimes some groups also sought to protect their rights to prior consultation<sup>22</sup>.

To briefly present the decisions on the subject, four recent judgments were selected, in which case-law on the fumigation of illegal glyphosate crops in Colombia has been selected. Therefore, the following measures will be mentioned below: (2.1) Unification Judgment of the Constitutional Court of May 13, 2003; (2.2) Constitutional Court of Colombia, Judgment T-080 from 2017; (2.3) Constitutional Court of Colombia, Judgment T-236 from 2017; (2.4) Constitutional Court of Colombia, Judgment T-300 from 2017; and (2.5) Colombian Constitutional Court, Judgment T-690 from 2017.

### 2.1 Unification Judgment of the Constitutional Court of May 13, 2003<sup>23</sup>

The main decision on air fumigation of glyphosate crops is the 2003 SU 383 judgment, in which the Colombian Constitutional Court defines the main case law guidelines on the subject. It must be mentioned that two of the judges partially abstained from voting and one fully abstained.

At that time, the Constitutional Court was reviewing the decisions of

<sup>22 &</sup>quot;On the other hand, special administrative units are organizations created by law, with administrative and financial autonomy appointed by the creation law, without Body Corporate, and performing administrative functions to develop or execute programs of a ministry or administrative department" (RODRÍGUEZ, 2011, p. 57).

<sup>23</sup> CORTE CONSTITUCIONAL DE COLOMBIA, Sentencia SU 383 del 13 de mayo de 2003, M.P. Álvaro Tafur.

a wardship action filed by the OPIAC Organization of Indigenous Peoples of the Colombian Amazon against the Presidency of the Republic, the Ministry of Interior and Justice, the Ministry of Environment, Housing and Territorial Development, the National Narcotics Council and each of its members, the National Narcotics Board and the Director of the National Police.

The plaintiffs considered that the effects triggered by the ordering and authorization of illegal crop spraying on their territories were violating their fundamental rights to (1) life; (2) community existence; (3) a healthy environment; (4) free personality development; (5) due process; and (6) right to participate.

The following ideas should be highlighted from the decision of the Constitutional Court of Colombia: (1) Partially repeals the previous decision and protects the fundamental rights to ethnic and cultural diversity, participation and free development of the personality of the indigenous peoples of the Colombian Amazon; (2) Orders the Presidency of the Republic, the Ministries of Interior and Justice and the Environment, Housing and Territorial Development, the National Narcotics Council and each of its members, the National Narcotics Board and the National Police to effectively and efficiently consult with the indigenous and tribal peoples of the Colombian Amazon on decisions regarding the Program for the Eradication of Illegal Crops that said entities should advance in their territories; (3) The consultation procedure should be initiated and concluded within three months of notification of this ruling; (4) And other topics: (i) the procedure and terms under which the consultations will be held; (ii) their territorial scope; and (iii) determining the appropriate means to promote the eradication of illegal crops by air spraying or some other alternative method in the respective territorial area; and (5) the authorities should, as a result of consultations with indigenous and tribal peoples of the Colombian Amazon, consider and weigh the effective safeguarding of the protected fundamental rights, as well as the guarantee of the fundamental rights of members of indigenous peoples and other inhabitants of the respective territories.

The importance of this ruling is that it is a Unification Judgment, that is, a ruling that brings together all judges, which has general effects, and in which an issue is decided that can only be revised by another measure of the same category. In addition, it is the first to recognize the protection of indigenous rights against glyphosate fumigation, which will result in

case law of the State Council and will recognize state liability for damage caused to individuals by fumigation using this chemical. And finally, it recognizes the right of Prior Consultation of indigenous peoples, so that before fumigation is carried out on their territory, the government is required to have the approval of these minorities.

### 2.2 Constitutional Court of Colombia, Judgment T-080 from 2017<sup>24</sup>

The wardship was brought by Martín Narváez as captain of the Carijona Indigenous Guard (and others), against the Presidency of the Republic, the Ministry of Interior, the Ministry of Justice, the Ministry of the Environment, the Ministry of Defense and others. The Carijona people are located in the Guaviare Prefecture, near the Brazilian border, an area of difficult access, situated amidst mountains, forests and rivers. These geographical characteristics have allowed them to historically not have much contact with other populations and it is estimated that this people currently amount to 300 members, their culture being considered at risk of extinction.

The lawsuit was brought because the players considered their fundamental rights to prior consultation, life, physical and cultural existence, education, a healthy environment, due process of law, free development of personality, and right of indigenous peoples to having been violated regarding participation in decisions that affected them, due to fumigation of illegal crops using glyphosate in their territories without meeting the requirement of prior consultation. Similarly, they specify that this situation has been repeated in other nearby Indian reserves.

Among the facts, they report that, in the past ten years, their population has been reduced from 146 to 42 families, due to population displacement caused by glyphosate fumigation in their territory, carried out for over 20 years. These spraying runs, which are also not made taking into account the regulations on the subject, cause some detrimental effects to protection, such as damage to natural species of animals, plant damage, health problems for the natives (headaches, sight problems, stomach pains, diarrhea, dizziness, skin problems, and others); they also affect food security, cause family and social uprooting, school dropouting, uncertainty, population displacement, land pollution that makes it unproductive and affects the various springs, which are the only sources for supplying water in the region.

<sup>24</sup> CORTE CONSTITUCIONAL DE COLOMBIA, Sentencia T-080 del 7 de febrero de 2017, M.P. Jorge Palacio.

Thus, the plaintiffs requested the permanent suspension of glyphosate fumigation until prior consultation, but as court decisions continue, suspension of air spraying of the herbicide in their protected area and its surroundings has been preventively requested.

In hearing the case, the Constitutional Court acknowledged that the violation of the plaintiffs' fundamental rights urges the National Government to rethink its public policies for the eradication of illegal crops and recognized that the damage caused must be repaired. Specifically, the court decided to: (1) repeal the decision and grant protection of fundamental rights to prior and subsequent consultations, ethnic and cultural integrity, self-determination, life-related health issues, and a healthy environment, for the reasons stated in the motivational part of the provision; (2) declare members of the indigenous community subject to special constitutional protection; (3) order the Ministry of Interior, the Ministry of Justice, the Ministry of the Environment and the Ministry of Health, with the support of the Ombudsman Office and the Colombian Institute of Anthropology and History (ICANH) to, within five months of notification of that order, hold a consultation process with the authorities of the Carijona community with a view to adopting ethnic reparation and cultural compensation measures against the impacts and damages caused to that community in their territories by the illegal crop air glyphosate fumigation eradication program, so as to guarantee their physical, cultural, spiritual and economic survival; (4) entrust the direction of the above consultation process to the Ombudsman Office, which shall report actions taken pursuant to these orders; the Ombudsman Office shall report to the Court within two (2) months after the completion of the previously requested consultation process; (5) invite the Colombian Institute of Anthropology and History – ICANH – to monitor the consultation process that must be carried out with the Carijona community, so that said institution can help determine the degree of cultural involvement of the group as a result of the development of the illegal crop air glyphosate fumigation eradication program in order to design appropriate repair or compensation formulas, where appropriate; (6) urge the national government to consider regulating the program for the eradication of illegal crops by law, insofar as this policy has profound implications for the fundamental rights of the country's ethnic communities; (7) include civil society participation in a more socially-focused policy aimed at protecting the health of human populations and the environment; (8) ensure the participation of a representative of the country's ethnic communities in

the National Narcotics Council, so that it can include the perspective of the communities that have suffered the most from the deployment of policies to eradicate illegal crops.

This wardship action is a strong demonstration of the value of prior consultation as a legal mechanism for indigenous peoples to avoid glyphosate fumigation, since drug fighting policy has forced them to leave their territories, causing their population to decline, displacing their members and causing diseases among them. Similarly, it follows the thesis that indigenous peoples are subject to special constitutional protection. Another major advance is that the Constitutional Court orders the government to look into the issue of glyphosate fumigation, requesting the matter to be regulated by law; to formulate a policy with a more social and inclusive view of the various civil society players that should focus on protecting the health of people and the environment, and to include indigenous communities as members of the National Narcotics Council, so they can assess policies for the eradication of illegal crops.

#### 2.3 Colombian Constitutional Court, Judgment T-236, 2017<sup>25</sup>

This ruling originates from a warship action filed by the Personero Municipal (Municipal Prosecutor) of Nóvita, a town located in the Chocó Prefecture, where he requested the protection of fundamental rights to prior consultation, health, cultural and ethnic identity, and free self-determination of indigenous peoples and African descendants inhabiting that municipality. It states that the suspension of glyphosate fumigation should be requested, and prior consultation carried out; also, the issuing of orders compensation for the victims of glyphosate spraying.

The defendants were the Presidency of the Republic, the Ministry of Interior, the National Council of Narcotics, the Ministry of Environment and Sustainable Development, the Ministry of Housing, the National Narcotics Board and the National Antinarcotics Board of the Police. These organizations are responsible for the development of the "illegal Crop Glyphosate Eradication Program".

It should also be noted that, on May 29, 2015, the National Narcotics Council decided to suspend the use of glyphosate in programs to eradicate illegal crops across the country, a decision subject to the National

<sup>25</sup> CORTE CONSTITUCIONAL DE COLOMBIA, Sentencia T-236 del 21 de abril de 2017, M.P. Aquiles Parra.

Environmental Licensing Authority revoking or suspending the plan; therefore, ANLA decided to suspend the activities. However, on June 29, 2016, the National Narcotics Council issued a resolution for execution of ground herbicide spraying, and on July 11, 2016, ANLA modified the plan to adapt it to a glyphosate ground spraying pilot plan, which focused on the areas of the departments of Nariño and Chocó.

In that ruling, the Constitutional Court explained that prior consultation is an indispensable requirement for granting an environmental license when it affects ethnic communities, and therefore its implementation is mandatory for the development of programs in which glyphosate is used in their territories. Similarly, by applying the precautionary principle, it decided to: (1) repeal the previous decision, grant the protection of fundamental rights to prior consultation of indigenous and Afro-descendant communities established in that municipality, as well as the right to health and a healthy environment for all people who inhabit it; and (2) order the national government to have the competent authorities carry out a consultation process with ethnic communities, and order the National Narcotics Council not to resume the Glyphosate Air Spraying Crop Eradication Program (PECIG)<sup>26</sup>.

The previous case law is important for four fundamental reasons: (1) maintaining the need for prior consultation of indigenous peoples in order to use glyphosate fumigation in their territories; (2) prior consultation is an indispensable element in granting any environmental license; (3) orders the government not to resume the fumigation program in Colombia; and (4) the use of the precautionary principle as the basis for his argument.

- 26 The judgment itself explains that, in order to resume PECIG, the following is required: "FOUR The National Narcotics Council may only modify the ruling not to resume PECIG after designing and implementing, through the relevant legal and regulatory measures, a decision process with the following minimum characteristics:
- 1. A set of regulations must be drafted and regulated by a body other than, and independent from the entities responsible for the deployment of the programs for the eradication of illegal crops.
- 2. The regulation should be derived from an assessment of health and other risks, such as environmental risks, through a participatory and technically sound process. This assessment process must be carried out on an ongoing basis.
- 3. The decision-making process should include an automatic review of decisions when warning about new risks. The relevant legislation or regulation must point out the entities capable of issuing those warnings, but they must at least include national entities and the territorial ordering of the healthcare sector, environmental authorities and the bodies making up the Public Prosecutor's Office.
- 4. Scientific research on the risks of the eradication activity to be taken into account in the decision-making must include rigor, quality and impartiality conditions matching the parameters set out in section 5.4.3.4 of this order.
- 5. Complaint procedures should be comprehensive, independent, impartial, and linked to risk assessment.
- 6. In any case, the decision made must be based on objective and conclusive evidence demonstrating the absence of harm to health and the environment."

### 2.4 Constitutional Court of Colombia, Judgment T-300 from 2017<sup>27</sup>

This ruling is a response to the warship action filed by the governors and representatives of the indigenous councils of the Kiwe Ukwe, Yu'Cxijme, Yu'kh Zxcxkwe, Nasa Kwuma Te'wesx, Nasa Kwe'sx Kiwe, Santa Rosa de Juanambu Indigenous Shelter, Campo Alegre, Alps Orientals, and La Floresta Alto Coqueto, all belonging to the Association of the Putumayo Kwe'x Ksxa'w NASA Regional Council, against the National Police Anti-Drug Board, the Ministry of Interior, the Ministry of Health and Social Protection, the Ministry of Justice and Law and the Ministry of Environment and Sustainable Development.

The plaintiffs requested that the fundamental rights to prior consultation, cultural and ethnic identity and the vital minimum be protected by asking that (1) aerial glyphosate fumigation carried out at the Putumayo Department is suspended until prior consultation; and (2) property compensation for damage to indigenous peoples.

The Constitutional Court, based on its own T-080 2017 and T-236 2017 judgments, reiterated its own constitutional parameters with respect to: (1) right to prior consultation; (2) the criteria for defining the impact of a measure on an ethnic community; (3) the right of participation of ethnic communities; (4) prior consultation as a requirement for environmental licensing when ethnic communities are affected; and (5) measures restricting the rights of ethnic communities in the general interest should be necessary and proportionate.

Consequently, it concluded that the plaintiffs should be consulted in order to perform glyphosate air spray runs in their respective territories and, in particular, states that (1) the judgment shall be revoked and the fundamental right to prior consultation shall be protected; (2) instruct the National Government, through the corresponding entities, to conduct a consultation process with the operational communities; (3) the Attorney General's Office and the Comptroller are requested to accompany the proceedings; and (4) a report will be prepared on how to comply with judgment and progress in this regard.

In turn, this Court decision is necessary because it recognizes the rights of indigenous communities not only of the Amazon but also those recognized in the areas of the Putumayo Department, maintaining the requirement for prior consultation as a necessary mechanism for granting

<sup>27</sup> CORTE CONSTITUCIONAL DE COLOMBIA, Sentencia T-300 del 8 de mayo de 2017, M.P. Aquiles Parra.

environmental permits. Keep in mind that measures affecting indigenous minorities must be necessary and proportionate. It is very interesting to see how the Comptroller and the Attorney General's Office are required to follow up the procedure and, above all, to report on how the judgment is being executed.

### 2.5 Colombian Constitutional Court, Judgment T-690, 2017<sup>28</sup>

On July 19, 2012, the Putumayo Regional Ombudsman filed a wardship suit against the Presidency of the Republic, the National Narcotics Council, the Administrative Department of Social Prosperity, the Special Administrative Unit for Integral Assistance and Reparation, the Ministry of Interior, the National Police, the National Army, the Southern Amazon Sustainable Development Corporation, the Colombian Institute of Family Welfare, the Putumayo Governor's Office, and Municipal City Halls (San Miguel, Valle Guamez, Orito, Porto Leguízamo, Puerto Asís, Puerto Guzmán and Puerto Caicedo).

The constitutional action explained that the execution of the manual spraying program and air spraying of illegal crops using glyphosate violate the rights to life, integrity, security, equality, good name, peace, free movement in territory, health, education, a balanced diet, and the care and protection of children and adolescents.

It should be borne in mind that the decision does not allow air fumigation to be stopped, as it was suspended under the precautionary principle, and that the land fumigation eradication plan is being implemented under Resolution 01 from 2017 of the National Narcotics Council. So, it is not possible for the Court to acknowledge the existence of a current effect on the inhabitants of the area due to the short time fumigation has been carried out.

Along those lines, the Colombian Constitutional Court decided the following in that specific case: (1) to confirm the judgment in which the requested protection is denied; (2) to advise that the legal representatives of the affected municipalities of the Putumayo Prefecture should proceed as soon as possible to prepare or update the Contingency Plans for the Prevention and Protection of Human Rights and IHL, as mentioned in this provision; (3) to this end, the differential approach will be taken into

<sup>28</sup> CORTE CONSTITUCIONAL DE COLOMBIA, Sentencia T-690 del 23 de noviembre de 2017, M.P. Guillermo Guerrero.

account, considering the particularities of vulnerable population groups such as children and adolescents, women, the disabled population, the elderly, and indigenous and Afro-Colombian communities; (4) the plans must be prepared within 6 months of notification of the action; (5) to warn the legal representative of the Administrative Department of Social Prosperity, the National Army, and the National Police that they should strengthen training programs for members of the Mobile Eradication Groups and their accompanying Public Force personnel, particularly the victims of armed conflicts, emphasizing the differential treatment that should be adopted with respect to vulnerable population groups such as children and adolescents, women, people with disabilities, the elderly, indigenous people and Afro-Colombians, in order to avoid any stigmatization practices; (6) to advise the National Police Anti-Drug Board to strictly comply with the Environmental Management Plan for fumigation of illegal crops in the Putumayo Prefecture and any changes made in the future; and (7) to instruct the Ombudsman Office to monitor compliance with the ruling.

In this judgment, which was a historic opportunity to stop ground glyphosate fumigation, the Constitutional Court decided not to order the termination of that program, thus avoiding a substantive ruling on the matter and issuing an opinion on the use of drones. Nevertheless, it at least was able to set minimum guidelines for carrying out the ground plan to suppress illegal crops through fumigation with the herbicide.

#### CONCLUSIONS

- 1. One of the modalities that the Colombian government has established for the eradication of drug plantations since the 1980s was the fumigation of these crops using glyphosate, which could be done by air spraying with light aircrafts, or ground-based spraying (it recently included the possibility of using drones).
- 2. Glyphosate, or Round Up, is a powerful herbicide that causes serious damage to the places where it is applied, a damage that may be to the environment or human health. The natural environment affected has been shown to include aquatic resources, flora and fauna (also bees); whereas in humans, it can cause eye and skin disorders, and even cancer.
- 3. Based on these studies, the authorities responsible for regulating air glyphosate fumigation in 2015 suspended it in the Colombian territory,

- although ground fumigations were maintained.
- 4. Although the fumigation regime has very precise guidelines and requires that it should not be carried out in indigenous territories without prior consultation with these groups, fumigation with the chemist continued, prompting Colombian ancestral communities to go to the courts to seek protection of their rights.
- 5. Thus, the Constitutional Court, on learning of the actions, recognized the rights of indigenous peoples and, through its case law, established the guidelines for spraying in the territories of these communities. For example, it protected the rights of peoples to self-determination, prior consultation, ethnic and cultural diversity, participation, health in connection with healthy living and the environment, and the free development of the personality of indigenous people population from various Colombian prefectures, such as the Amazon and Putumayo.
- 6. The Superior Constitutional Court has ratified the ban on air spraying using glyphosate due to the strong effects it has have on the environment and people. As a basis for their rulings, they invoked the precautionary principle, which dictates that actual studies on the topic of glyphosate are carried out, without being very strict regarding its possible use.
- 7. Likewise, the Constitutional Court has ordered the National Narcotics Council to resume the air fumigation plan. But in addition to complying with the entire regulatory regime, it must have the following minimum characteristics:
  - 1. A set of regulations must be drafted and regulated by a body other than, and independent from, the entities responsible for the deployment of the programs for the eradication of illegal crops.
  - 2. The regulation should be derived from an assessment of health and other risks, such as environmental risks, within the structure of a participatory and technically sound process. This assessment process must be carried out on an ongoing basis.
  - 3. The decision-making process should include an automatic review of decisions when warning about new risks. The relevant legislation or regulation must point out the entities capable of issuing those warnings, but at a minimum they must include national entities and the territorial ordering of the healthcare sector, environmental authorities and the bodies making up the Public Prosecutor's Office.
  - 4. Scientific research on the risks of the eradication activity to be taken into account in the decision-making must include rigor, quality and impartiality conditions matching the parameters set out in section 5.4.3.4 of this order.
  - 5. Complaint procedures should be comprehensive, independent, impartial, and linked to risk assessment.

- 6. In any case, the decision made must be based on objective and conclusive evidence demonstrating the absence of harm to health and the environment.
- 8. The obligation for prior consultation when glyphosate fumigations are performed in indigenous territories in order to explain the effects of these procedures, and the fact that ethnic groups can decide whether or not it will be performed in the area where they live.
- 9. The Constitutional Court of Colombia has requested that the national authorities accompany the execution of programs for the recovery of affected areas. Indigenous peoples are advised on the procedures to be carried out. They are instructed on previous consultations. Environmental and health damages are avoided, judgments of the court itself are applied and generally comply with the general guidelines set forth.
- 10. As can be seen, the Constitutional Court changed public policies to combat drug trafficking via the eradication of illegal crops in its decisions, including the inclusion of mechanisms such as prior consultation, monitoring of authorities, compliance with judgments, direct orders to the government, and recognition of rights of indigenous peoples as limits to the interests of the state.
- 11. The Constitutional Court needs to examine the issue of ground glyphosate spraying, including drone fumigation, which should be prohibited under the precautionary principle until the true impact of this technique on population health and the environment is learned.
- 12. The Constitutional Court must be strong enough to stand its ground and not allow the government to resume fumigation without the demanded requirements, and why not, in the near future, ban the use of glyphosate as a mechanism to combat illegal crops, explaining that alternative mechanisms should be sought.

#### BIBLIOGRAPHY REFERENCES

BRICEÑO CHAVES, A. M. *Responsabilidad y protección del ambiente:* la obligación positiva del Estado. Bogotá: Universidad Externado de Colombia, 2017.

BURNEO MENDOZA, R. Indigenous integral territory, an Awajún proposal. *Iztapalapa – Rev. Cienc. Soc. Humanid.*, v. 39, n. 85, p. 33-57, 2018

EMBID TELLO, A. E. El principio de precaución. In: *Los principios jurídicos del derecho administrativo*, Madrid: La Ley, 2010.

CAMPUZANO CORTINA, C. et al. Efectos de la intoxicación por glifosato en la población agrícola: revisión de tema. *Rev Ces Salud Pública*, v. 8, n. 1, p. 121-133, 2017.

ESTRADA, F.; MOSCOSO, F.; ANDRADE, N. A. Políticas de seguridad contra el narcotráfico: México, Brasil y Colombia. *Anal. Polit*, v. 29, n. 86, p. 3-34, 2016.

GIL BOTERO, E.; RINCÓN CÓRDOBA, J. Los presupuestos de la responsabilidad ambiental en Colombia. Bogotá: Universidad Externado de Colombia, 2013.

LEMAITRE RIPOLL, J. El origen de la Constitución de 1991: la reforma institucional como respuesta a la presente crisis. In: ALVIAR, H.; LEMAITRE, J.; PERAFÁN, B. (Eds.). *Constitución y democracia en movimiento*. Bogotá: Universidad de los Andes, 2016.

MONTAÑA, A. OSPINA, A. *La constitucionalización del Derecho Administrativo*. Bogotá: Universidad Externado de Colombia, 2014.

NIÑO, C. El narcotráfico mutante: nueva perspectiva de análisis del fenómeno en Colombia. *Rev. Cient. Gen. José María Córdova*, v. 14, n. 18, p. 113-124, Jul.-Dec. 2016.

OSPINA, A. Presentación. In: *La constitucionalización del Derecho Administrativo*. Bogotá: Universidad Externado de Colombia, 2014.

OSPINA GARZÓN, F. El medio ambiente como tarea por resolver. In: *La constitucionalización del Derecho Administrativo*. Bogotá: Universidad Externado de Colombia, 2014.

QUINCHE RAMÍREZ, M. F. *Derecho Constitucional colombiano*. 6. ed. Bogotá: Temis, 2015.

RIVERO, R.; ARENAS, H. *Derecho Administrativo General*, Bogotá: Editorial Ibáñez, 2017.

RODRÍGUEZ, G. Proyectos y conflictos en relación con la consulta previa. *Revista Opinión Jurídica*, n. spe, p. 57-72, 2011.

RODRÍGUEZ RODRÍGUEZ, L. *Derecho Administrativo Especial y colombiano*. 20. ed. t. I. Bogotá: Temis, 2017.

SANTOFIMIO GAMBOA, J. O. La cláusula constitucional de la responsabilidad del Estado: Estructura, régimen y el principio de convencionalidad como pilar de su construcción dogmática. In: *Estudios sobre el control de convencional*, Caracas: Editorial Jurídico Venezolana, 2015.

SANTOFIMIO GAMBOA, J. *Compendio de Derecho Administrativo*. Bogotá: Universidad Externado de Colombia, 2017.

VELASCO, J. D.; DUNCAN, G.; LOPERA, F. Oligarquía, poder político y narcotráfico en Colombia: los casos de Medellín, Santa Marta y Muzo. *Colombia Internacional*, n. 95, p. 167-201, 2018.

VIDAL PERDOMO, J. *Derecho Administrativo*. 13. ed. Bogotá: Temis, 2009.

YOUNES MORENO, D. *Derecho Constitucional colombiano*. 15. ed. Bogotá: Legis, 2017.

YOUNES MORENO, D. *Curso de Derecho Administrativo*. 10. ed. Bogotá: Legis, 2016.

YOUNES MORENO, D. Estructura del Estado y entidades descentralizadas. Bogotá: Ibáñez, 2016.

#### LEGAL REFERENCES

- Lei 30 de 1986.
- Constituição Política de 1991.
- Lei 99 de 1993.
- Resolução 0001 de 1994.
- Resolução 5 de 2000.
- Resolução 17 de 2001.
- Resolução 13 de 2003.
- Decreto 3750 de 2011.
- Resolução 6 de 2015.
- Resolução 1524 de 2016.

#### CASE LAW REFERENCES

 CONSEJO DE ESTADO DE COLOMBIA, Sección Primera, 25 de julio de 2013, M.P. Marco Velilla, Exp. 00129-0 (APN).

- CONSEJO DE ESTADO DE COLOMBIA, Sección Primera, 11 de diciembre de 2013, Exp. 00227-01(AN), M.P. Guillermo Vargas.
- CORTE CONSTITUCIONAL DE COLOMBIA, Sentencia SU 383 del 13 de mayo de 2003, M.P. Álvaro Tafur.
- CORTE CONSTITUCIONAL DE COLOMBIA, Sentencia T-080 del 7 de febrero de 2017, M.P. Jorge Palacio.
- CORTE CONSTITUCIONAL DE COLOMBIA, Sentencia T-236 del 21 de abril de 2017, M.P. Aquiles Parra.
- CORTE CONSTITUCIONAL DE COLOMBIA, Sentencia T-300 del 8 de mayo de 2017, M.P. Aquiles Parra.
- CORTE CONSTITUCIONAL DE COLOMBIA, Sentencia T-690 del 23 de noviembre de 2017, M.P. Guillermo Guerrero.

Article received on: 20-Feb-2019.

Article accepted on: 27-Sep-2019.

#### How to quote this article (ABNT):

ARENAS-MENDOZA, H. A. Fumigations with Glyphosate (Round Up) in Indigenous Territories in Colombia. *Veredas do Direito*, Belo Horizonte, v. 16, n. 36, p. 11-37, sep./dec. 2019. Available at: http://www.domhelder.edu.br/revista/index.php/veredas/article/view/1492. Access on: day month. year.