



# Asociación Interamericana para la Defensa del Ambiente

Interamerican Association for  
Environmental Defense

Associação Interamericana para a  
Defesa do Meio Ambiente

Association Interaméricaine pour  
la Défense de l'Environnement

FEBRUARY 26, 2004

## THE PLAN COLOMBIA AERIAL ERADICATION PROGRAM FOR ILLICIT CROPS – AN ANALYSIS OF THE 2003 DEPARTMENT OF STATE CERTIFICATION TO CONGRESS

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The Andean Counterdrug Initiative section of the Foreign Operations, Export Financing, and Related Programs Appropriations Act, Division E, Consolidated Appropriations Resolution, 2003, (P.L. 108-7) (“FOAA”), requires that funds for the procurement of chemicals for use in aerial eradication of illicit crops in Colombia only be made available if the Department of State (“DoS”) certifies to the Committees on Appropriations that certain conditions are being met.<sup>1</sup> In December 2003, DoS released a *Report on Issues Related to the Aerial Eradication of Illicit Coca in Colombia* (“DoS Report”), in which it asserted that those conditions have been met. This analysis describes the deficiencies of the DoS Report, and outlines some critical concerns with the Plan Colombia aerial eradication program.<sup>2</sup>

A thorough look at the DoS report demonstrates that the FOAA conditions have not been satisfied. For example, DoS fails to demonstrate that the spraying does not pose unreasonable risks of adverse effects on the environment, or that complaints of harm to health or legal crops are appropriately evaluated and fair compensation provided. We therefore urge the Committee on Appropriations to withhold funding for the chemical eradication program until DoS demonstrates full compliance with the conditions.

The lack of evidence of region-wide decreases in coca production, the displacement of coca crops, and the harm caused to national parks and local economies, raise concerns regarding the long-term value and appropriateness of the spraying program. At the same time, personnel changes within Colombian agencies previously opposed to the spraying, a lack of compliance with Colombian court decisions, and intimidation of human rights and environmental advocates suggest an anti-democratic trend in Colombian governance associated with the spraying program. We

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<sup>1</sup> See Appendix A.

<sup>2</sup> See Appendix B for background and further information on the Aerial Eradication Program in Colombia, including communications between Earthjustice or AIDA with DoS and EPA.

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therefore request that Congress conduct an in-depth independent review to assess the impacts of the US drug-eradication efforts in Colombia on sensitive and protected natural areas and ecosystems, socio-economic trends in rural Colombia, and democratic institutions and processes within Colombia.

In addition to the specific shortcomings of the DoS certification described below, there are several general concerns listed at the end of this analysis. These include concerns about the lack of public participation in decision-making related to this program, the inappropriate role of the DoS in forcing changes to Colombian laws and regulations that weaken environmental and human health protections, and the suppression of Colombian governmental and civil society opinion in opposition to the program.

One general observation in particular deserves brief mention at the outset of this analysis. The FOAA requires that DoS consult with the U.S. Environmental Protection Agency (“EPA”) prior to making its certification to Congress, and DoS did so in June of 2003. However, the EPA 2003 Consultation Report to DoS (“EPA report”) shows that DoS has not provided the Agency with sufficient information for the Agency to fully evaluate the environmental or health impacts of the spraying program.<sup>3</sup> With no presence in Colombia, EPA does not have access to this information on its own. Furthermore, EPA staff believe that EPA cannot consider information provided by sources other than DoS, that EPA must accept as fact all statements made by DoS related to the program, and that the consultation is limited to issues related to potential impacts of the herbicide used.<sup>4</sup> As a result, the EPA consultation is limited in scope and is not an independent or complete EPA assessment of the spraying program.

## **ENVIRONMENTAL AND HEALTH THREATS**

### ***1. The failure to conduct an appropriate environmental assessment***

The Plan Colombia eradication spraying has never been subject to a comprehensive environmental impact assessment. Nevertheless, the State Department purports to certify that “the herbicide mixture, in the manner it is being used, does not pose unreasonable risks of adverse effects to humans or the environment.” This is problematic for a number of reasons.

The use of Roundup herbicides for the eradication program in Colombia is not comparable to the use of such herbicides in the United States. This is evident from the description of such US use

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<sup>3</sup> According to the EPA Consultation Report, the only new information EPA received from DoS in 2003 was a) the brief “Updated Report on Chemicals used in the Colombian Aerial Eradication Program” documenting the DoS response to EPA’s 2002 recommendations, and b) the results of the acute toxicity tests requested in 2002. No documentation that verifies DoS assertions regarding application conditions or exposure routes was provided. Similarly, though EPA identified these as lacking in 2002, EPA considered no new scientific studies regarding impacts of the herbicide mixture on Colombian species or ecosystems. Finally, because EPA’s consultation ended in June, the EPA report does not consider the substantial modifications to the Environmental Management Plan for the spraying program approved on September 30, 2003.

<sup>4</sup> Telephone conference September 2002, statement made by Jay Ellenberger, Associate Director of the EPA Office of Pesticide Programs to the effect that EPA could not consider information provided by other organizations, including the Colombian Ombudsman and Comptroller’s Offices.

in the EPA Report. “Based on EPA data for 1999, an estimated 1-2 million pounds of glyphosate was applied to [US] forest acres, with more than 650,000 acres treated,”<sup>5</sup> (an average dose 1.5 to 3 lbs active ingredient (“a.i.”) per acre). “Although application may be made at up to 10 lbs a.i./year per acre in the US, the typical use rate per application is much lower, averaging less than one pound per acre on major agricultural sites.”<sup>6</sup> “Agricultural use of glyphosate is common at rates lower than 0.5 lb a.i./acre. In contrast, product labels for the use of glyphosate for forestry sites start at rates of 2 lbs a.i./acre.”<sup>7</sup>

By comparison, in Colombia, DoS is spraying 4.4 lb a.i./acre two times per year.<sup>8</sup> This Colombian dose of 8.8 lb a.i./acre/year far exceeds the application rates commonly sprayed on either forest or agricultural areas in the United States.

For widespread spraying campaigns to eliminate pests in the United States, the responsible agency would conduct a comprehensive environmental impact assessments that goes far beyond the limited studies performed in Colombia.<sup>9</sup> Such US assessments evaluate potential long-term ecological impact, and consider risks to wildlife and sensitive flora in national parks; bystanders and school children who might be affected by drift; non-target organisms such as fish; and consumers of sprayed crops, among others. To adequately assess whether or not the herbicide use for the spraying program in Colombia poses unreasonable risks of adverse effects to humans or the environment, EPA would need to study all these issues. This is especially true given the large quantities of Roundup herbicide applied in Colombia.

Recent changes to the protocol for aerial application of the herbicide make the absence of comprehensive environmental assessment even more problematic. For example, at the beginning of the Plan Colombia spraying, only industrial coca fields spanning at least five hectares were to be sprayed.<sup>10</sup> By contrast, most of the land sprayed in Colombia today consists of small family farms where coca crops are intermingled with food crops, and there are no longer any size limits as to what fields can be sprayed.<sup>11</sup> Similarly, noting the absence of a complete environmental assessment, the Ministry of Environment initially ordered the protection of sizable buffer zones around potentially sensitive areas such as human settlements, legal crop fields, surface waters and national parks. These buffer zones have now been drastically reduced, and DoS and the Government of Colombia (“GoC”) have even proposed spraying Colombia’s National Parks. Given the extensive areas covered and the significant risk related to spraying in environmentally

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<sup>5</sup> EPA 2003 Consultation Report, p.1.

<sup>6</sup> EPA 2003 Consultation Report, p.2.

<sup>7</sup> In spite of citing this 1999 data, EPA claims to have no data on average application rate to forest sites. EPA 2003 Consultation Report, p.3.

<sup>8</sup> While we are aware that DoS is not the only entity involved in Plan Colombia, the DoS has a significant role in and influence over the program. This role includes financing, purchasing of spray chemicals, identifying US military contractors to undertake the spraying, providing security, environmental and health monitoring, and many other functions. The following quote illustrates the significant involvement of DoS in this program. “The Department of State worked with the program’s glyphosate supplier to identify and to register for sale and use in Colombia a formulation of glyphosate.... As soon as that product could be registered for sale and use in Colombia, the Department of State began to purchase it for use in the spray program and it remains the formulation used today.”

<sup>9</sup> Conversation with EPA staff involved in the DoS consultation process, February 2004.

<sup>10</sup> CNE Resolution 0001, 1994.

<sup>11</sup> CNE Resolution 13, 2003.

sensitive areas, it is unacceptable that there has still been no thorough assessment of environmental impacts.

Considering the large US role in the aerial eradication program, Congress should require that DoS collaborate with EPA to complete a comprehensive environmental impact assessment for the spraying program, and that EPA independently report to Congress whether the aerial eradication program poses unreasonable risks or adverse effects to the environment. In the interim, a precautionary approach would dictate vastly reducing the quantity of glyphosate herbicide sprayed in Colombia and insuring that eradication in National Parks occurs via manual means only. As is, DoS is conducting an experiment with the Colombian environment, hoping that the uncertain benefits of crop-eradication will outweigh any environmental and health harms caused by the program.

## **2. *Specific Herbicide-Label Violations***

In contrast to the DoS certification to Congress, the EPA report did not affirm that “the herbicide mixture is being used in accordance with EPA label requirements for comparable use in the United States.” Rather, EPA simply stated “application rates for both coca and poppy eradication in Colombia are within the parameters listed on US labels.” Obviously, compliance with the application rates does not necessarily constitute full compliance with all label requirements.

In fact, the label for the Roundup Ultra product registered for comparable uses in the United States contains instructions that the DoS clearly violates in Colombia.<sup>12</sup> A discussion of those violations follows.

### Label prohibition on the spraying of surface waters

The product label for the herbicide DoS uses in Colombia states: “Do not apply directly to water, to areas where surface water is present....”<sup>13</sup> EPA has defined this prohibition, clarifying that “water” means “natural or man-made bodies of water such as lakes, streams, rivers, canals, ponds, reservoirs, bays, oceans, etc.” and “areas where surface water is present” means “such areas as swamps, bogs, potholes and marshes where water is present on the soil surface.”<sup>14</sup> Thus, the label’s prohibition on spraying waters is quite broad. The Colombian EMP also contains a strict prohibition on spraying water bodies.<sup>15</sup>

The prohibition on spraying surface waters exists in part because the main surfactant in the formulated herbicide product can harm fish and amphibians. Though EPA concluded that the spraying of large water bodies would likely not pose significant risk to aquatic species, the agency further noted that “[i]t is possible that much greater exposure could occur from direct

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<sup>12</sup> August 2, 2002 Roundup Ultra label for “Gly-41 Herbicide” for uses to “remove undesirable vegetation in non-agricultural sites.”

<sup>13</sup> August 2002 EPA-approved label for Gly-41 Herbicide, one of the trade names for “Roundup Ultra” produced by Monsanto.

<sup>14</sup> Office of Prevention, Pesticides and Toxic Substances, March 9, 1993. Available at <http://www.ceris.purdue.edu/info/prnotice/pr93-3.txt> Last visited on February 4, 2004.

<sup>15</sup> The EMP requires compliance with Decree 1843, Article 97, which provides that “pesticides in rural areas may not be applied less than 10 meters (for land application) or 100 meters (for aerial application) from water bodies....”

overspray of water bodies much smaller than a 1-acre, 6-foot deep pond... it is possible that some ecologically important water bodies too small or ephemeral to appear on maps could be sprayed directly in a project as large as the coca eradication program.”<sup>16</sup>

Such spraying has indeed occurred, with potentially grave environmental implications. A November 27, 2003, letter from the former Director of National Parks Office stated that watersheds close to national parks, including rivers and wetlands, had been sprayed.<sup>17</sup> Local populations in coca cultivating areas depend on small rivers, fishponds, springs and lakes for drinking, washing, and irrigation water. These water bodies are almost certainly too small to be reliably excluded from spraying activities, and reports from the affected populations in rural Colombia indicate that the spraying of such water sources is common.<sup>18</sup>

Colombian counter-narcotics authorities have for years been required to submit “environmental characterization studies” for the regions to be sprayed.<sup>19</sup> DoS should thus be able to provide detailed hydrological information for all areas sprayed. A careful review of flight records would indicate to what extent water sources are being sprayed. If it is impossible to guarantee that surface waters are excluded from spraying, one of the Roundup formulations with lesser toxicity toward aquatic organisms should be used.

#### Label prohibition on the spraying of marketable crops

The product label for the herbicide DoS uses in Colombia specifies that “[t]his product is for use on plants in non-crop and non-timber areas only. Not for use on crops, timber or other plants being grown for sale or other commercial use, or for commercial seed production or for research purposes.” In Colombia, marketable food crops interspersed with coca crops are sprayed. Similarly, though it is not legal to do so, coca plants are harvested and the leaves are sold. Thus, the spraying program violates the prohibition on spraying crops. This is significant because of the large doses of herbicide sprayed and the potential exposure to workers.

Before the Plan Colombia eradication program began in 2000, Colombian authorities determined that no plantations of less than five hectares would be sprayed.<sup>20</sup> This was later reduced to two hectares,<sup>21</sup> and Resolution 13 of June 26, 2003, finally eliminated the restriction altogether, announcing that “areas where illicit crop cultivation is fractionated and/or mixed with legal crops... will also be subject to the Program [spraying].”<sup>22</sup> Thus, there are no longer any fixed limits to determine when the density of coca plants warrants intervention via aerial eradication. This means that small farms where only a few coca plants are cultivated may now be subject to crop eradication. It also means that DoS may spray entire forests and fields if coca plants were to be dispersed individually or in small plots throughout the area.

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<sup>16</sup> EPA 2003 Consultation Report, p.7.

<sup>17</sup> November 27, 2003, letter from Juan Carlos Riascos de la Peña, Director of the Special Administrative Unit of the National Park Service (Unidad de Parques Nacionales ) to the Colectivo de Abogados. (On file with AIDA)

<sup>18</sup> Colombian Ombudsman Office, Resolution No. 028, 21 May 2003, par. 109, c.

<sup>19</sup> Ministry of Environment Resolution 341, 2001, Resolution 1065, 2001, and Resolution 108, 2002.

<sup>20</sup> CNE Resolution 0001, February 11, 1994.

<sup>21</sup> CNE Resolution 0005, August 11, 2000.

<sup>22</sup> CNE Resolution 0013, June 26, 2003, Art. 1.

Just as it was predictable that the spraying program would displace coca cultivation to more remote areas such as Colombia's National Parks, it is also predictable that the spraying will cause coca to be farmed less intensively over greater areas. When coca fields are destroyed, farmers will likely respond by dispersing their plants in the hope of hiding their crops. To continue the eradication program as currently conceived, DoS will have to spray a very high percentage of land in areas where coca is grown. Given the large doses of Roundup herbicide used and the sensitivity of most plants to these herbicides, the ecological consequences of such spraying would be devastating. It would also become even more difficult to safeguard food and other marketable crops, as required by the herbicide label.

Label restrictions intended to minimize the risk of human health harms

While glyphosate herbicides may be less toxic than many alternative pesticides, Roundup products are by no means harmless,<sup>23</sup> and the EPA-approved label includes restrictions to minimize exposure. In the case of the product DoS uses in Colombia, the label states that the applicator shall “[k]eep people and pets off treated areas until the spray solution has dried.” The DoS has recognized that in Colombia, in clear violation of this requirement, coca farmers often enter the fields immediately post-spraying to manually harvest the coca leaves. Thus, individuals are exposed in contravention of label requirements. In assessing post-application exposure, EPA specifically highlights this problem, mentioning that “[i]n general, glyphosate is not applied in the US to destroy or kill the raw agricultural commodity. The intended US uses are for undesired vegetation in and around crop fields, forests, industrial areas, and residential areas.”<sup>24</sup>

**3. *Because US law does not require most types of toxicological testing for ingredients other than the “active ingredient,” the health impacts of the herbicide mixture used in Colombia are not known***

In addition to glyphosate, the Roundup product sprayed in Colombia contains two surfactants. One of these is not disclosed because of patent protections, and the other belongs to the family of compounds referred to as Polyoxyethylene alkylamine (“POEA”). The EPA Report describes an array of toxicological tests that have not been conducted for POEA. For example, EPA emphasizes that developmental toxicity, reproduction, subchronic, chronic feeding, and carcinogenicity studies are only conducted on active ingredients in pesticide formulations. Without such information on POEA, EPA cannot predict the health impacts of the pesticide mixture being sprayed in Colombia with any certainty. The lack of toxicological testing for POEA was not addressed by the acute toxicity tests EPA required for the spray mixture, because these studies only considered short-term, acute effects. This absence of information on POEA is particular cause for concern given the very large quantities sprayed in the Colombian aerial eradication program.

Even if complete toxicological test results were available for POEA, EPA could not with certainty preclude potential health impacts stemming from the herbicide mixture used in Colombia. In terms of health impacts, exposure to a mixture is not necessarily the same as

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<sup>23</sup> The potential toxic effects of glyphosate herbicides were discussed in the 2002 EPA consultation report. Though these impacts would likely be reduced with the use of Roundup Ultra, the risk is not eliminated.

<sup>24</sup> EPA 2003 Consultation Report, p.20.

exposure to the sum of its parts. Thus, the overall toxicity or health impacts caused by a mixture of glyphosate, POEA, the undisclosed surfactant in Roundup Ultra, and the adjuvant Cosmoflux added in Colombia could be much greater than the impacts expected from exposure to only one or some of these substances. Without access to a complete set of toxicological studies for the actual spray mixture, EPA cannot preclude health impacts from the spraying.<sup>25</sup>

#### **4. *The failure to assess potential risks to directly sprayed individuals***

EPA did not assess the risks to individuals who may have been directly sprayed because “DoS states that pilots are instructed not to spray fields when people are present.”<sup>26</sup> Yet even one of the toxicological reports submitted by DoS for the 2003 certification contains the statement that “his spouse stated that while her husband was working in a coca field, an airplane flew overhead and sprayed the field.”<sup>27</sup> Another local resident stated, “I was standing in my corn fields when I saw the plane coming. Frantically I waved my arms, signaling them to not spray my crops...but soon I felt the poison running down me.”<sup>28</sup> Flight conditions (height and speed) in Colombia likely prevent pilots from determining with certainty whether anyone is in the fields at the time of spraying. Thus, accidental sprayings of individuals may occur frequently. Because rural Colombians have reported numerous instances of direct spraying, EPA should not rely solely on the information provided by DoS, and should assess the risk to directly sprayed individuals. Such direct dermal and inhalation exposure should be considered in combination with exposure from stripping the leaves off sprayed coca plants and consuming contaminated food crops and water, as a means to assess potential cumulative impacts.

## **MONITORING OF HEALTH IMPACTS**

### **1. *The US Embassy Medcap program***

In 2002, EPA recommended “[p]rospective tracking of reports of health complaints, documenting times of exposure and onset of symptoms... during future spray operations to evaluate any potential health effects and ameliorate or prevent occurrence.”<sup>29</sup>

DoS began the US Embassy “Medical Civil Action Program” (“Medcap”) to improve medical services in the areas where spraying occurs. While this program is certainly a positive initiative, the program cannot be considered adequate prospective tracking as recommended by EPA.

Reviewing the data presented by DoS, EPA highlighted weaknesses in the Medcap program and recommended improvements for the future. The EPA consultation report emphasizes that DoS should “further document the manner in which follow-up is performed.” EPA also stated that “[s]tandardized collection of data on patients and their symptoms is recommended, so that future

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<sup>25</sup> Personal Conversation with EPA staff that worked on the 2003 EPA Consultation report, February 2004.

<sup>26</sup> EPA 2003 Consultation Report, p.7.

<sup>27</sup> DoS 2003 Report, “Report on the Investigation of the Case of the Death of a Person Exposed to Spraying Using a Glyphosate Mixture, Dr. Jorge Hernán Botero Tobón, July 4, 2003.

<sup>28</sup> Mennonite Central Committee, Justapaz, “Aerial Coca Eradication in Southern Bolívar violates U.S. and Colombian rules for eradication,” July 18, 2003.

<sup>29</sup> EPA 2003 Consultation Report, p.9, quoting the conclusion from the 2002 report.

analysis can look for patterns across patients not only to identify related cases, but perhaps identify new effects previously unsuspected and that might be associated with low-level exposure to glyphosate spray drift.” Finally, EPA noted that the DoS appears to have no “clearly stated case definition for what would constitute a glyphosate related poisoning” and that “[a] case definition is required if the conclusion that they have ‘never fund an instance of spray-related harm to human health’ is to be supported.”<sup>30</sup>

The DoS reports that 1,029 patients have been examined via the Medcap program, and that in all cases that were claimed as spray-related, “events unrelated to eradication spraying” had caused the medical symptoms. However, the data presented by the DoS is insufficient to support that conclusion. Moreover, weaknesses in the design and data collection of the Medcap program suggest that medical problems caused by the spraying could be overlooked.

First, Medcap studies may not include the most affected population. All the studies to date appear to have been done in towns, and DoS provides no information to suggest that the individuals examined were actually exposed. Towns should not be sprayed, and many rural Colombians must travel hours to the nearest town. The studies therefore may not include a significant number of coca farmers or people living in the vicinity of sprayed areas. Additionally, it is unclear whether the Medcap studies included sensitive populations such as young children, the elderly, or persons with medical problems that could be aggravated by the spraying.

Second, with the exception of the April 2003 study in Caquetá, the DoS report provides no information as to how soon after spraying Medcap studies take place. Unless these studies occur during spray campaigns or within two or three days after spraying, medical personnel may miss short-term symptoms caused by the spraying.

Third, DoS provides no data on the types of medical problems that Medcap personnel classified as having been caused by factors other than the spraying. DoS should maintain and present clear records of the types of health harms that the population attributes to the spraying, along with a detailed justification for all determinations that such harms are not linked to the spraying. Without such standardized data collection, DoS will not recognize trends that could indicate spraying-related medical problems.

Finally, as emphasized by EPA in requiring that DoS develop a “case definition for what would constitute a glyphosate-related poisoning,” Medcap personnel are unlikely to find cases of spray-related intoxication if they do not know what to look for. If the epidemiological monitoring conducted by the Embassy and discussed below is any indication, it is possible that Medcap personnel look for a very narrow set of severe symptoms. If so, the studies may fail to recognize the existence of moderate and less acute medical impacts.

Without providing further data on the Medcap investigations, presenting detailed descriptions of the medical symptoms that could be caused by the spraying, and demonstrating that the Medcap personnel is appropriately trained, DoS cannot credibly assert that the Medcap program meets the requirement for prospective medical studies. Moreover, as recommended by EPA, it would

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<sup>30</sup> EPA 2003 Consultation Report, p. 32.



be advisable to conduct long-term and detailed health studies among the affected population, to insure that any long-term symptoms and effects will be detected.

## **2. *Epidemiological monitoring by Jorge Hernán Botero Tobón***<sup>31</sup>

In addition to the Medcap program, DoS makes an effort to investigate cases where human health harms have been attributed to the spraying program. The Embassy has hired Dr. Jorge Hernán Botero to investigate these claims and DoS included two of Dr. Botero's investigative reports in the 2003 certification. Although the reports submitted address cases that are unlikely to have been caused by DoS herbicide spraying, these reports demonstrate that the epidemiological monitoring program conducted by the US Embassy is severely flawed.

Dr. Botero's reports show that his toxicological investigations have been conducted on a basis of misinformation. The author has not taken the required scientific approach to the investigations. For example, Dr. Botero begins each report stating "[i]n the case of the sole agent used, N-phosphone-methylglycine or Glyphosate, there is a complete set of basic scientific research that supports its low toxicity for human beings, animals, and environment tracer species." He also refers repeatedly to the "glyphosate-water mixture" used for spraying. These comments demonstrate a lack of understanding of the spraying mixture and potential symptoms of Roundup exposure, including the extensive information provided by EPA in this and last year's consultation reports.<sup>32</sup> Dr. Botero appears to be unaware that the spraying mixture contains not only glyphosate but also surfactants that are more likely than glyphosate to cause health harms. He also appears uninformed as to the types of health harms that can be expected from Roundup exposure.<sup>33</sup> Dr. Botero's ignorance on this matter and the clear bias he displays is disturbing, and suggests that reliable data is not yet being obtained by the DoS toxicological monitoring program. Given that Dr. Botero wrote many of the materials used for training Medcap personnel, the accuracy of the Medcap studies is also questionable.

It is noteworthy that Dr. Botero appears to only have searched for cases of severe pesticide poisoning, discounting a series of other possible symptoms. For example, in the case of a young girl who suffered the onset of asthma in association with a spraying campaign, he states, "the girl's ailment is plainly restricted to the respiratory tract and does not fit any described clinical symptom of poisoning." Focused on whether poisoning occurs, Dr. Botero thus ignored the fact that inhalation of the pesticide can contribute to the onset of asthmatic attacks. Though in this instance the girl also exhibited symptoms of a common cold, it is possible that the cold and the pesticide spraying together catalyzed her first asthmatic attack.

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<sup>31</sup> Report on the Investigation of the Case of the Death of a Person Exposed to Spraying Using a Glyphosate Mixture, Jorge Hernán Botero Tobón, July 4, 2003 and Investigative Report on Cases of Possible Human Health Effects in Puerto Asis, Jorge Hernán Botero Tobón, September 19, 2002.

<sup>32</sup> In 2002, EPA provided substantial data regarding glyphosate herbicide use in California and the health symptoms associated with such exposure. These include systemic, eye, skin, and respiratory illnesses. EPA has also explained in detail that the spray mixture is not just glyphosate and water, but rather includes surfactants of unknown toxicity.

<sup>33</sup> The EPA 2002 consultation report stated that symptoms of glyphosate exposure can include "eye irritation (includes itching, pain, burning) conjunctivitis, rash, swelling, skin irritation (includes itching, blisters, pain, or numbness), throat irritation or burning, nasal congestion, headache, nausea, shortness of breath or breathing difficulty, and asthmatic reactions."

Dr. Botero's reports also lack appropriate follow up. For example, in the case of the investigation in Puerto Asis,<sup>34</sup> the doctor learned that the Putumayo Health Department was "carrying out an epidemiological study of cases suspected to be the result of aerial spraying with glyphosate in the towns of San Miguel, Puerto Asis, La Hormiga, and Villa Garzon," and that the hospital would define its position on the sprayings based on this study. Dr. Botero's report mentions nothing more about this important finding or what position the hospital eventually adopted on this matter.

### ***3. Lack of incident reports for coca cultivation areas***

As emphasized by civil society organizations, and reiterated by EPA after DoS confirmed to the Agency that poppy spraying occurs at much lower use rates and concentrations than coca spraying, incident reports from areas subject to poppy spraying are meaningless for assessing potential impacts in coca producing regions.<sup>35</sup> Poppy is sprayed at rates substantially similar to application rates used for agricultural crops in the United States. This is not true for coca crops, on which much more intense doses of herbicide are applied. Nevertheless, DoS last year provided EPA only with incident reports from poppy growing areas. These reports are discussed again in this year's EPA consultation report as if to support the argument that the spraying causes little human health impacts.<sup>36</sup> Health reports from poppy growing areas are irrelevant to concerns in coca growing regions, and should not be construed to support a general claim that the spraying program has a low impact on human health.

## **NON-COMPLIANCE WITH THE COLOMBIAN ENVIRONMENTAL MANAGEMENT PLAN**

### ***1. Certification made by the Colombian Ministry of Environment, Housing and Land Development***

Contrary to claims made in the DoS Report,<sup>37</sup> the letter from Vice-Minister Juan Pablo Bonilla does not certify "that the spray program is being carried out in compliance with the Government of Colombia's Environmental Management Plan." Rather, what the letter says is that the mixture is being used in compliance with the ICA (Instituto Colombiano Agropecuario, Colombian

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<sup>34</sup> Investigative Report on Cases of Possible Human Health Effects in Puerto Asis, Dr. Jorge Botero Tobón, September 19, 2002.

<sup>35</sup> EPA 2003 Consultation Report, p.24. "An exact comparison of the epidemiological data in Colombia (which is from aerial application to poppy) relative to the conditions of use presented at the April 18, 2002 briefing (for aerial application to coca) ... would have limitations and uncertainties. The briefing did not address the conditions of use for poppy. At that time DoS also did not provide human incident data for the coca eradication program. Subsequent to this briefing DoS did communicate that the application rate for poppy was lower than that for coca. According to the DoS, the use pattern of the glyphosate mixture on poppy also differs from the use on coca.... Therefore, generalized conclusions drawn from human incident data as a result of application to opium poppy, in comparison to conditions of use for the coca eradication program, should be made with caution."

<sup>36</sup> EPA 2003 Consultation Report, p.9.

<sup>37</sup> Department of State, Memorandum of Justification concerning the Aerial Eradication of coca and opium poppy in Colombia, December 2003 (DoS Memorandum of Justification), Section 1C.

Institute for Agriculture) concept referenced in the EMP.<sup>38</sup> This ICA concept refers only to the dose of glyphosate that is permitted, and does not mention compliance with other EMP requirements related to herbicide application and environmental protection. Indeed, the Vice-Minister would be unlikely to assert EMP compliance given that the Ministry of Environment as late as June 2003 fined DNE (National Narcotics Directorate, Dirección Nacional de Estupefacientes) for violations of conditions found in the EMP.<sup>39</sup> The Vice-Minister's letter and the subsequent DoS certification suggest that DoS interprets the requirement that "the herbicide mixture is being used in accordance . . . with the Colombian Environmental Management Plan for aerial fumigation;" means only that the program needs to comply with the EMP on the very specific point of herbicide application rates. Several other applicable requirements, such as the obligation to conduct environmental assessments of areas to be sprayed and to implement proper monitoring programs, have not been met, though these are also part of the EMP.<sup>40</sup>

## ***2. The Weakening of the Environmental Management Plan***

Prior to September 2003, the environmental management plan that applied to the spraying program imposed important environmental protections. When the Congress conditioned the spraying program for 2003 on compliance with the EMP, it probably did not intend DoS to achieve such compliance by working to remove or dilute the plan's strict environmental measures. Nevertheless, this is what DoS did. In September 2003, the Colombian government approved changes to the EMP that were negotiated by a commission composed of representatives of the US Embassy and various Colombian government agencies.

Instead of complying with the extensive buffer zones that the Ministry of Environment had established in the EMP, DoS collaborated to reduce these zones by as much as a factor of 20 and lifted the EMP prohibition on spraying in National Parks. Instead of providing timely reports on the environmental assessment, scientific studies, and monitoring activities as required by the EMP in effect when the FOAA was passed, DoS helped modify the EMP to eliminate or postpone firm, enforceable deadlines for such reporting. The modified EMP also permits higher flight altitudes and removes flight speed limits during spraying. Both of these factors are important for limiting the amount of spray drift and making sure herbicide does not spread beyond the intended target areas. Even if the original EMP had needed some reorganization and clarification, the remarkable weakening of environmental protections that DoS brought about as part of that reorganization reflects poorly on the US role in the environmental management of the spraying program.

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<sup>38</sup> "On this particular subject, may I inform you that the Illicit Crops Aerial Eradication Program being executed in the Colombian national territory by the Antinarcotics National Police is using the glyphosate and surfactant mix in compliance with the Instituto Colombiano Agropecuario (ICA) (Laboratory of the Department of Agriculture) concept adopted by the Colombian Environmental Management Plan that was established for this activity." Letter from Juan Pablo Bonilla Arboleda, Colombian Vice-Minister of Environment to William B. Wood, US Ambassador to Colombia, November 5, 2003. (Available online at: <http://www.state.gov/g/inl/rls/rpt/aeicc/27414.htm>)

<sup>39</sup> Colombian Minister of the Environment, Resolution No. 670, June 19, 2003.

<sup>40</sup> See AIDA Memorandum, June 9, 2003, available at:

[http://www.aida-americas.org/aida.php?page=plancolombia\\_legaldocuments](http://www.aida-americas.org/aida.php?page=plancolombia_legaldocuments)

The elimination of the EMP prohibition on spraying in sensitive areas is particularly distressing. According to Colombia's former Minister of the Environment, Juan Mayr, the potential spraying of the National Parks is one of the gravest environmental threats to ever emerge in Colombia.<sup>41</sup> Under Juan Mayr, the Colombian Ministry of Environment specifically established larger buffer zones for the spraying program than is normal for agricultural crop dusting in Colombia, arguing that "special and broader buffer zones are needed for the aerial sprayings program of Plan Colombia, because of the particular severe environmental impacts that this program can cause."<sup>42</sup> For the same reason, the Ministry explicitly prohibited spraying in National Parks and a two-kilometer buffer zone around those parks.

For years, DoS and DNE have been violating these buffer zones,<sup>43</sup> and have been lobbying the Ministry of Environment to reduce them. Nevertheless, the Ministry repeatedly refused to do so out of concern for environmental resources. When the Uribe administration appointed the former Presidential Advisor on Plan Colombia to lead the Ministry of the Environment, the Ministry finally changed its stance, reducing the buffer zones and even tempering the prohibition on spraying in National Parks.

DoS has argued that the buffer zones were changed to make the spraying parameters consistent with those for agricultural spraying. If this were true, one might expect the Ministry to also reduce the flight speeds, altitudes, and herbicide concentrations permitted for the Plan Colombia eradication program to make these consistent with regular crop dusting parameters. No such changes have occurred.

### **3. *Proposed Spraying in Colombia's National Parks***

The Colombian aerial eradication program is forcing a relocation of coca and poppy crops. Destruction of crops in one place cause coca and poppy growers to move into new regions, and often into forested areas that they destroy to establish new plantations. As a result, illicit crop cultivation is on the rise in neighboring countries,<sup>44</sup> and in regions of Colombia that previously were not affected by the drug trade.<sup>45</sup> Because this includes National Parks, DoS and DNE now

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<sup>41</sup> Juan Mayr quoted by *El Tiempo*, December 6, 2003.

<sup>42</sup> Both Resolution 1065/2001 and Resolution 108/2002 by the Ministry of Environment specifically established the buffer zones for the eradication program to be much greater than those for normal crop dusting in Colombia. This was done because the risk of drift due to higher flight altitudes is much greater, and because the concentration and total annual dose of herbicide used is much greater than that for normal agricultural applications.

<sup>43</sup> A November 27, 2003 letter from the former Director of the Special Administrative Unit of the National Park System (Unidad de Parques Nacionales) to the Colectivo de Abogados in Bogota, stated that the buffer zones of the following parks were impacted: Munchique, Nevado del Huila, Puracé, Paramillo, Macarena, Reserva Nukak, La Paya, Tatamá, and Catatumbo.

<sup>44</sup> According to the 2003 United Nations Office on Drugs and Crime study "Global Illicit Drug Trends," coca cultivation in Bolivia increased from 21,800 hectares in 1999, to 24,400 in 2002, while production in Peru increased from 38,700 to 46,700 hectares over the last four years.

<sup>45</sup> Coca crops decreased in the Putumayo and Caquetá regions, which have been subject to massive spraying campaigns, but increased in Nariño and Guaviare, showing the displacement of illicit crops. (Colombia Coca Survey for 2002, UN Office on Drugs and Crime (UNODC), and Government of Colombia, September 2003). Of 169,000 hectares of coca crops in Colombia, 130,000 hectares were sprayed in 2002. This significant spraying (75% of acreage under cultivation) only reduced the acreage of active coca cultivation to 144,000 hectares a mere 15% decrease. Thus, either significant new areas are being planted, or the spraying program is only 20% effective. (Data taken from Department of State, Press Statement from the Executive Office of the President, Office of National

“need” to spray these sensitive areas as well. With the weakened EMP, there is a distinct possibility that the DoS will broaden the spraying program to include Colombia’s National Parks.

Rather than expanding the spraying, DoS should focus on strengthening the capacity of the National Parks Office and other Colombian authorities to protect these important ecological areas from the influx of settlers. For example, rather than spraying in the National Parks, the DoS should provide substantial support for the National Parks Office community development programs intended to support traditional and indigenous communities and promote participatory management of the parks. DoS should also reevaluate the emphasis on aerial eradication and shift resources from spraying to intensified interdiction efforts and sustained alternative development programs.

#### ***4. Changes to oversight and reporting requirements***

Whereas the EMP that was in effect when Congress issued the FOAA conditions contained numerous requirements for independent monitoring (auditing) of the program, as well as regular reporting by the DNE to the Ministry of Environment, the modified EMP is silent or vague on many of these points. Most importantly, the requirement for an independent audit has been removed from the EMP and thus is no longer a condition that DoS must comply with to make its certification to Congress.

The requirement for an independent, external audit was one of the central demands of the former Ministry of Environment, the Ombudsman’s office, and the National Controller’s Office, because these authorities considered that the monitoring conducted by the DNE was not sufficiently objective. While DoS may argue that DNE internally monitors eradication program implementation, auditors reporting to the DNE have evident conflicts of interest and are likely to err on the side of finding that the spraying is fully effective and that little harm can be attributed to the spraying program.

The requirement for an audit has not been completely eliminated, though it is no longer defined as an independent, external audit. Replacing the EMP requirement, the National Council on Narcotics (Consejo Nacional de Estupefacientes, CNE) in September 2003 issued Resolution 0031, ordering that the “operational activities of the spraying program” be monitored by an auditing team, that should “preferably be contracted using international resources.” The half-page resolution does not specify which experts should be on the team, what parts of the program the experts will review and whether this includes compliance with the EMP, which Colombian authority is responsible for contracting the team, and when the technical audits must begin. The US Congress should demand strict DoS compliance with this auditing requirement and ensure that the audit conducted is a complete review of the program carried out by qualified, independent experts, as required in the original EMP.

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Drug Control Policy, 27 February 2003. Available at: <http://www.state.gov/g/inl/rls/prsr/ps/18425.htm>. Last visited on December 29, 2003.)

## **5. Reorganization of responsibilities**

The revisions to the EMP may be positive in that responsibilities for the EMP are now allotted to more appropriate ministries and agencies in Colombia. However, such reapportioning of responsibilities could also generate a significant problem if the resources and information necessary to participate effectively are not available to these agencies. In light of the modified EMP, the DoS and DNE should ensure that all the agencies have sufficient funds and personnel to meet these new functions. There should also be new guarantees to ensure transparency and information sharing between Colombian government agencies.

The redistribution of responsibilities provides further evidence that DoS and DNE have not yet fully complied with the EMP. For example, since 2001, the EMP has obliged DNE to conduct certain environmental studies. These studies still have not been completed, and the modified EMP shifts the responsibility for doing so to different agencies.<sup>46</sup> Meanwhile, the spraying program continues without a proper assessment of environmental harms.

It is important to note that the modified EMP no longer explicitly makes the DNE liable for potential human and environmental harms caused by the spraying program. Colombian EMPs typically state that all liability for harm falls on the entity implementing the program, and clarify that the existence of the EMP does not in any way diminish such liability. Though the modified EMP does not include this traditional language, the transfer of EMP responsibilities to other Colombian agencies should not be construed to mean that the DNE and DoS are absolved from responsibility for all harms caused.

## **COMPENSATION FOR HARMS CAUSED BY THE SPRAYING PROGRAM**

The DoS report explains that of 4,329 complaints received since 2001, DoS has investigated 2,740. Of these, 1,425 were dismissed because the date that the complainant cited as the day of the spraying did not fall within one day of when spraying actually occurred in that field. A further 1,200 complaints were dismissed because the “crop in question was found to be coca or interspersed with coca and thus ineligible for compensation.”<sup>47</sup> Another 89 complaints were dismissed because they were submitted more than two months after the date of the spraying. This leaves only five complaints that have been deemed to be valid. These statistics raise very serious concerns about the nature of the compensation program and the apparent lack of cultural understanding on the part of DoS.

Requiring that farmers identify the date on which spraying occurs is unreasonable. First, Colombians in rural areas and indigenous peoples do not live by the calendar and clock as urban inhabitants do. They may not even own a calendar, and there is no five-day workweek to help track time. Second, the impacts of the spraying may not become apparent until many days after the spraying occurs, and if the farmer was not present at the time, he or she may not know

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<sup>46</sup> For example, the responsibility for conducting soil and water studies to assess potential environmental impacts has now been shifted to the Instituto Geográfico Agustín Codazzi, (Agustin Codazzi Geographic Institute, IGAC in Spanish) and Instituto Nacional de Salud (National Health Institute) respectively.

<sup>47</sup> DoS Memorandum of Justification, Section 3 (A).

exactly when the spraying occurred. Third, because farmers may have to travel far to file a complaint, and because security risks often prevent travel in rural areas, farmers may have to wait before lodging a complaint. By the time they are able to access the authorities, they may well have forgotten when the spraying occurred. Thus, many of the 1,425 complaints immediately dismissed by DoS may in fact have been valid. It would be more appropriate for complaints to be investigated further whenever spraying has occurred in the area claimed within a month of the time cited, and DoS should reassess all complaints dismissed on this basis. Whether or not the farmer can accurately state the date of the spraying is irrelevant to whether or not legitimate harms occurred, and thus should not be used as an indicator for determining the viability of claims.

With regard to the 1,200 complaints dismissed because the crops were either coca or found together with coca, DoS provides no data on how many of these fields were 100% coca or what percentage of a farm has to be coca for DoS to consider that the crops were intermingled. DoS fails to acknowledge that many indigenous communities in Colombia have long cultivated coca because coca is a traditional Andean crop with deep-rooted and legitimate cultural uses such as making tea or chewing the leaves. Farming of coca for such cultural, small-scale uses in Colombia has traditionally been permitted,<sup>48</sup> and these people should be fairly compensated by DoS if food crops are destroyed. In light of this, DoS should provide complete statistics on the relative amounts of coca and food crops found in fields, and clear justification for the determinations made regarding whether to compensate farmers.

The approach taken to investigate and compensate claims regarding crop damages shows a substantial culture and information gap between the DoS and GoC on one hand, and rural Colombian farmers on the other. At best, the fact that only 0.2% of the complaints filed were deemed to be valid shows that DoS and the GoC have failed to instruct farmers as to requirements for filing complaints and the nature of harms that will be compensated. At worst, the data suggest that DoS and GoC have failed to inform the public about the changing rules of the eradication program. From the overwhelming numbers presented by DoS, it appears that claimants believed that small-scale coca plantations and food crops grown in conjunction with illicit crops were not subject to eradication spraying. Under such circumstances, it is inhumane to destroy both the livelihood and all food resources of poor, rural families. If used at all, eradication spraying should be a measure of last resort, to be employed only after manual eradication agreements and alternative development projects have been given a chance.

## **GENERAL OBSERVATIONS**

### ***1. DoS does not fully utilize EPA expertise on matters of environmental and human health protection.***

As discussed above, DoS has not provided the detailed information that would allow EPA to conduct a complete and independent assessment of the environmental and human health risks

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<sup>48</sup> United Nations Convention Against Illicit Traffic in Narcotic Drugs and Psychotropic Substances (Vienna, December, 1988), art. 14.2. This Convention was ratified by Colombia through Law 23, 1993 and specifically permits traditional uses of coca for indigenous communities.

associated with the spraying program. Because DoS has little internal experience with protection of health or the environment, DoS cannot accurately certify compliance with conditions related to these issues without much more active and informed participation by EPA. To effectively assist DoS, EPA experts should be provided the opportunity to travel to Colombia to obtain data from independent sources and Colombian government agencies, observe the spraying program first-hand, and provide in-country technical assistance. Only with complete access to relevant information can EPA accurately assess whether the spraying poses a risk of human or environmental harm, and help DoS and the GoC implement measures to reduce such harm.<sup>49</sup>

## ***2. DoS attempted to circumvent the Congressional requirement regarding compliance with the Colombian Environmental Management Plan***

Last year, Congress specifically changed the language of the FOAA to include a certification requirement that “the herbicide mixture is being used in accordance with... the Colombian Environmental Management Plan for aerial fumigation.” During the 2003 certification process, DoS received communications regarding the many ways in which the spraying program fails to achieve such compliance.<sup>50</sup> However, rather than responding to those communications and working to improve environmental controls for the program, DoS worked with the Colombian government to modify the EMP with the result that the specific EMP conditions being violated were either modified or eliminated as described above.<sup>51</sup> These modifications now permit DoS to certify compliance with the EMP.

Given the substantial changes made to the EMP in 2003, the DoS certification is disingenuous.<sup>52</sup> Congress likely incorporated the EMP in the FOAA with the expectation that DoS would strengthen environmental protections for the spraying program by complying with the EMP. Simply removing conditions from the EMP, instead of requiring that they be complied with, undermines Congress’ intent as well as environmental protections and the legislative and administrative process in Colombia. Moreover, when DoS consulted EPA regarding the potential environmental impacts of the spraying, the stricter EMP was in place. EPA’s consultation regarding the spraying program might have differed had the agency known, for example, that the DoS sought to spray in National Parks and with minimal buffer zones to surface waters and population centers.

After the Ministry of Environment, Housing and Land Development (“the Ministry”)<sup>53</sup> issued the Resolution approving the changes to the EMP, Colombian organizations were notified and

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<sup>49</sup> Complete access to information would include having the opportunity to interview Colombian government officials and US Embassy staff in Colombia, to meet with local medical personnel and Embassy-contracted toxicologists, and to review original documentation such as the environmental studies for regions to be sprayed, flight records, monitoring studies, and reports of damages.

<sup>50</sup> June 13 and October 7, 2003, letters from Earthjustice to DoS.

<sup>51</sup> DoS Memorandum of Justification, Section 1C.

<sup>52</sup> Substantive changes to the EMP include removal of the requirement for independent, external monitoring of the spraying program, elimination of the prohibition on spraying in Colombian National Parks, and drastic reductions in the buffer zones established to protect surface waters, population centers, and ecologically sensitive areas from adverse effects due to spray drift.

<sup>53</sup> The former Ministry of Environment was merged in 2002 with the Ministry of Development to form what is today the Ministry of Environment, Housing, and Land Development.



provided an opportunity to comment. However, the Ministry misinformed these groups as to the nature of those changes. Colombian NGOs and other authorities were incorrectly told that the modification was merely a “reorganization” of existing requirements, and that except for an increase in the spraying altitude, no substantive changes to the EMP had been made.<sup>54</sup>

### **3. *The silencing of the opposition in Colombia***

During the past year, President Uribe’s stance in favor of eradication spraying has hardened, with predictable consequences for those opposing the program. On June 29, 2003, in response to a Colombian court decision ordering the immediate suspension of the spraying, Uribe publicly stated, “let’s be honest, I will not stop the sprayings and as long as I am President, we will not agree on that issue.”<sup>55</sup> One month later, Eduardo Cifuentes – the Colombian Public Defender (“Ombudsman”) and an outspoken critic of the spraying – resigned. The interim Ombudsman replacing him, Volmar Perez Ortiz, was handpicked by President Uribe and is not subject to Congressional approval. With Perez Ortiz in charge, the Public Defender’s Office no longer speaks out against the human rights impacts of the spraying.

A few months later, the former Presidential Advisor on Plan Colombia, Sandra Suarez, was appointed Minister of the Environment, Housing and Land Development.<sup>56</sup> Though she has few environmental credentials, Suarez now holds final responsibility for environmental oversight and enforcement for the spraying program. There are also plans in Colombia to tighten the influence the Ministry of Environment has over the National Parks Office.<sup>57</sup>

Since 1993, the National Parks Office has been a “special administrative unit” that operates autonomously under the Ministry of Environment. This means that the National Parks Office has acted independently, and has had the ability to directly issue Regulations and Resolutions regarding the management of the National Parks. This may soon be changed as the new Minister of the Environment has announced intentions to “bring the Parks System back into the fold of the Ministry of Environment.”<sup>58</sup> The Director of the National Parks Office, an opponent of spraying in the National Parks for environmental reasons, resigned in January of 2004. His replacement has no prior experience with the National Natural Parks System or the management of natural protected areas.

The Colombian judiciary has traditionally been an independent government branch that serves as a check on the actions of the executive branch. However, it has been unable to play this role with respect to the spraying program. In June 2003, the Administrative Court of Cundinamarca ordered the government to suspend the Plan Colombia eradication spraying until adequate

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<sup>54</sup> Witness accounts, Bogotá, October 2003 meeting between Colombian Ministry of Environment, Housing and Land Development staff and civil society organizations.

<sup>55</sup> El País, Cali, June 30, 2003, “*I won’t suspend sprayings*”: Uribe, available at: <http://elpais-cali.terra.com.co/historico/jun302003/NAL/A430N1.html>. See also Asamblea Permanente por la Paz, Press Release, July 4, 2003, available at: <http://www.asambleaporlapaz.org/asamblea/documentos/FUMIGACIONES2.html>.

<sup>56</sup> Presidency of Colombia official website <http://www.presidencia.gov.co/ministerios/ambiente.htm>

<sup>57</sup> Communication from Nathaniel Christie with the US Bureau for International Narcotics and Law Enforcement Affairs (INL), Jan. 30, 2004.

<sup>58</sup> Nathaniel Christie with the US INL, Jan. 30, 2004.

environmental and health impact studies have been conducted.<sup>59</sup> Under Colombian law, this order would be effective during the time of the appeal. Nonetheless, the Uribe administration has announced that it will not stop spraying during the appeals process. This process could take years, especially given the strong executive branch pressure in favor of the spraying, and the government's refusal to comply with the interim injunction.<sup>60</sup>

In addition to spurring this government makeover, President Uribe has endangered Colombian human rights and environmental activists who speak out against Plan Colombia by equating them with terrorists. According to President Uribe, "[e]ach time that Colombia adopts a security policy for overthrowing terrorism, when the terrorists start to feel vulnerable, they immediately send their spokespeople to start speaking of human rights." In the same speech, the President also referred to NGOs as "*Politiqueros* in the service of terrorism, who cowardly wrap themselves in the flag of human rights, to try to restore terrorism in Colombia..."<sup>61</sup> By associating the opponents of his administration's policies with terrorists, President Uribe in effect labeled these organizations as fair targets for Colombia's paramilitary killing squads. Needless to say, many of these activists have become more reluctant to speak out, even when they perceive enormous human injustice and environmental risk in a program that has little proven impact on coca cultivation in Colombia.

#### **4. *The certification process and spraying program lack transparency and public participation***

DoS appears to be discounting the contribution that the Congress, civil-society organizations, and local communities can make in designing a more effective and less environmentally harmful eradication program for the long-term. DoS should engage diverse stakeholders in the United States and in Colombia, to help develop creative solutions. There has been no public participation in decisions related to the program since it was formulated in 1999 without any public debate in Colombia. To achieve increased public participation, DoS should provide much greater access to information about the program in both Colombia and the United States. Sadly, examples of DoS reluctance to share information abound.<sup>62</sup>

One particularly egregious example of DoS's failure to appropriately disseminate information relates to the September 2002 change in the herbicide formulation used. In 2002, DoS assured EPA that the department would begin using a less toxic formulation of the Roundup herbicide, and the DoS Reports certifies that the change has been made. However, in Colombia there is still no official public confirmation of the change in herbicide formulation used. This is

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<sup>59</sup> Administrative Court of Cundinamarca, June 13, 2003 Ruling. Reference number 01-0022

<sup>60</sup> The DoS involvement in matters related to Colombia judicial decisions is evident from a communication between the US Ambassador to Colombia, Anne Patterson, and the DoS regarding the July 2001 suspension of spraying ordered by the 15<sup>th</sup> Circuit Judge in Bogotá in response to a lawsuit filed by the Colombian Amazonia Indigenous Community. According to Ms. Patterson, "GOC Lawyers are evaluating the Judge's order and the Embassy engaged with GoC officials to press for a quick resumption of spray operations." Cable 06796 from Embassy Bogotá to Secretary of State, Washington DC, July 2001, on file with Earthjustice.

<sup>61</sup> President Uribe, September 8, 2003. Speech available at <http://www.presidencia.gov.co/discursos/framdis.htm>

<sup>62</sup> DoS finalized the 2003 certification process without giving public notice of doing so, and the DoS Report was not available to the public until December 30, 2003. Similarly, although the EPA consultation ended in June, 2003, DoS withheld the EPA Report from the public until after DoS completed its certification.

extremely disturbing for various reasons. First, it suggests that the DoS is not coordinating closely with the Colombian environmental authorities and requesting approval for all changes made to the spraying protocol. Second, without such confirmation, it is impossible to verify that DoS has in fact complied with the EPA recommendation. Third, public fears associated with human health impacts from the spray program might be alleviated if DoS were to provide full and accurate information regarding what products have been and are being used. Misinforming the public and Colombian authorities by claiming that no impacts are or ever were possible is counter-productive.

The lack of transparency surrounding the spraying program is inappropriate given the large-scale nature of the eradication effort and the fact that many organizations in the United States, Colombia, Latin America and Europe have expressed concerns regarding the program. As a first step, DoS should translate into Spanish important documents such as the certification materials, to facilitate review by US and Colombian officials and legislators, organizations, and citizens.

## **CONCLUSION**

The above discussion makes apparent that DoS has neither fully complied with the conditions established by Congress in the FOAA, nor appropriately considered the long-term impacts and viability of the spraying program in Colombia. Whereas DoS purports to have met the conditions established by Congress, the consultation with the EPA has been superficial at best. In addition, DoS fails to provide data or supporting documentation that upon close analysis actually supports the DoS conclusion that the eradication spraying does not “pose unreasonable risks of adverse effects to humans or the environment.” Moreover, the procedure and protocols used by DoS to evaluate and compensate claims for damages are culturally inappropriate for the region in which spraying occurs. While the adequacy of the DoS alternative development programs was not part of this analysis, the marked emphasis on eradication despite knowing that crops are shifting to new and remote areas, suggests that DoS is heavily invested in a shortsighted eradication policy that is simply perpetuating and expanding the need to spray Colombian farmlands, communities, and natural protected areas.

We urge the Congress to withhold funds for the aerial eradication program until DoS conclusively demonstrates compliance with the FOAA, Colombian laws, and recommendations made last year by EPA. To do so, DoS should:

- Conduct a full environmental impact assessment, in close collaboration with the EPA and the appropriate Colombian government authorities, to assess the long-term environmental impacts of the spraying program. This assessment should be substantially similar to environmental impact statements and assessments developed in the United States for large-scale pesticide spraying campaigns, including opportunities for public participation, although adjusted for environmental and socio-economic conditions specified to Colombia. The assessment should also consider the relocation and dispersal of coca plantations caused by the spraying, and the consequently expanded need to spray greater and more remote areas of Colombia and the Andean region.
- Conduct soil, water, and microbial studies to assess the potential impacts of spraying these quantities of Roundup herbicide and added surfactants in Colombian ecosystems.

- Refrain from spraying in National Parks, conducting eradication there by other means, and provide a detailed explanation and substantiating data to demonstrate that surface waters and sensitive ecosystems are not inadvertently sprayed.
- Conduct prospective medical studies to assess all health impacts that may be associated with the spraying, in accordance EPA's 2002 and 2003 recommendations. Ensure that such studies are thoroughly documented and meet US standards for epidemiological investigations.
- Work with the EPA and the Monsanto Company to conduct complete toxicological studies for all components of the spray mixture, not just the glyphosate active ingredient.
- Comply with all Colombian laws and regulations that were in place when the 2003 FOAA was passed, including the Environmental Management Plan. DoS should also provide a detailed explanation of the rationale for all changes that have been made to such laws and DoS involvement in effecting these changes.
- Comply with all Colombian court decisions related to the spraying program.

We also urge Congress to thoroughly consider the viability and long-term costs and benefits of the current US involvement in Colombia. In so doing, Congress should consider: trends in coca production and trafficking within Colombia and the greater Andean region; demographic and socioeconomic trends in the areas that have been sprayed; changes to Colombian laws and democratic processes that have occurred as a result of this program; the sustainability of any reductions in coca production or lessened internal conflict in Colombia; and the costs and benefits of this program in light of the significant commitment of US tax-dollars.

## **APPENDIX A**

The FOAA states:

“That not more than 20 percent of the funds appropriated by this Act that are used for the procurement of chemicals for aerial coca and poppy fumigation programs may be made available for such programs unless the Secretary of State, after consultation with the Administrator of the Environmental Protection Agency, certifies to the Committees on Appropriations that (1) the herbicide mixture is being used in accordance with EPA label requirements for comparable use in the United States and any additional controls recommended by EPA for this program, and with the Colombian Environmental Management Plan for aerial fumigation; (2) the herbicide mixture, in the manner it is being used, does not pose unreasonable risks of adverse effects to humans or the environment; (3) complaints of harm to health or licit crops caused by such fumigation are evaluated and fair compensation is being paid for meritorious claims; and such funds may not be made available for such purposes unless programs are being implemented by the United States Agency for International Development, the Government of Colombia, or other organizations, in consultation with local communities, to provide alternative sources of income in areas where security permits for small-acreage growers whose illicit crops are targeted for fumigation..”<sup>63</sup>

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<sup>63</sup> Consolidated Appropriations Res., Pub. L. No. 108-7 (Title II, Department of State, Andean Regional Initiative), 117 Stat. 11, 172-174 (2003).

## **APPENDIX B**

For background and further information on the Certification of the Aerial Eradication Program of Illicit Crops in Colombia, see:

1. Memorandum of AIDA to Members of US Congress on the Department of State report to Congress, September 23, 2002. Available online at: [http://www.aida-americas.org/aida.php?page=plancolombia\\_enviroandhhdamages](http://www.aida-americas.org/aida.php?page=plancolombia_enviroandhhdamages)
2. Scientist's Reviews of State Department Report on Aerial Eradication, September, 2002. Available online at: <http://www.amazonalliance.org/scientific/scientific1.htm>
3. Memorandum of AIDA regarding the "Compliance with the Environmental Management Plan for the Plan Colombia Aerial Herbicide Spraying Program, June 9, 2003. Available on line at: [http://www.aida-americas.org/templates/aida/uploads/docs/AIDA\\_MEMO\\_ON\\_EMP\\_CONDITIONS\\_\(dated\\_Jun\\_9\\_2003\).pdf](http://www.aida-americas.org/templates/aida/uploads/docs/AIDA_MEMO_ON_EMP_CONDITIONS_(dated_Jun_9_2003).pdf)
4. Letters from Earthjustice to Department of State and EPA regarding the Department of State Certification of Plan Colombia Aerial Fumigations and Consultation with EPA, June 13, 2003. Available online at: [http://www.aida-americas.org/aida.php?page=plancolombia\\_legaldocuments](http://www.aida-americas.org/aida.php?page=plancolombia_legaldocuments)
5. AIDA Press Release on Colombian Court order to suspend spraying, June 26, 2003. Available online at: [http://www.aida-americas.org/templates/aida/uploads/docs/Press\\_Release\\_06-03.pdf](http://www.aida-americas.org/templates/aida/uploads/docs/Press_Release_06-03.pdf)
6. Reply from EPA to Earthjustice regarding the Certification of the Aerial Spraying Program, July 11, 2003. Available online at: [http://www.earthjustice.org/urgent/documents/EPA\\_Letter\\_7-11-03.pdf](http://www.earthjustice.org/urgent/documents/EPA_Letter_7-11-03.pdf)
7. Response from the Department of State to Earthjustice regarding the Certification of the Aerial Eradication Program in Colombia, August 7, 2003. Available online at: [http://www.aida-americas.org/templates/aida/uploads/docs/REPLY\\_DOS.pdf](http://www.aida-americas.org/templates/aida/uploads/docs/REPLY_DOS.pdf)
8. Earthjustice response to EPA regarding EPA's consultation with the State Department on Plan Colombia Aerial Eradication Program, August 27, 2003. Available online at: [http://www.aida-americas.org/templates/aida/uploads/docs/RESPONSE\\_TO\\_EPA.pdf](http://www.aida-americas.org/templates/aida/uploads/docs/RESPONSE_TO_EPA.pdf)
9. AIDA Press Release on the US Congress conditions of the Aerial Spraying Program in Colombia, December 10, 2003. Available online at: [http://www.aida-americas.org/templates/aida/uploads/docs/Press\\_Release\\_12-03.pdf](http://www.aida-americas.org/templates/aida/uploads/docs/Press_Release_12-03.pdf)