

# UPDATED ALTERNATIVE REPORT ON COLOMBIA PRESENTED TO THE COMMITTEE ON THE RIGHTS OF THE CHILD (2014)

Colombia, 2014

*This report was constructed by the Minnesota-Antioquia Human Rights Partnership, consisting of\*:*

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## Updated Alternate Report on Colombia presented to the Committee on the Rights of the Child (2014)

This is an update of the alternate report presented previously (March 2014) by the Minnesota-Antioquia Human Rights Partnership to the Committee on the Rights of the Child on the occasion of the review to be conducted by Colombia in January 2015. This update also aims to provide additional considerations to the CRC regarding the State's response to the list of issues that were raised.

### 1. Implementation of the Code on Childhood and Adolescence. *Question 1.*

In the response given by the Colombian Government regarding guarantees of implementation of the Code on Childhood and Adolescence, the government points to institutional advances,<sup>1</sup> which attempt to articulate and coordinate policies, plans, programs and projects related to comprehensive care in early childhood.

The Colombian State lists various rules for implementation which refer only to early childhood, a pilot strategy of the present government which has led to some progress, but which is not enough to guarantee the comprehensive care referred to by the Code on Childhood and Adolescence.

In terms of the number of civil servants in the system for protecting children's rights, in Eastern Antioquia,<sup>2</sup> only the municipality of Rionegro<sup>3</sup> has two Family Commissions (*Comisariías de Familia*).<sup>4</sup> Other municipalities, among them Argelia de María<sup>5</sup> and Sonsón,<sup>6</sup> have only one Family Advocate. The inhabitants of these municipalities require more assertive support from the State, since they occupy an extensive zone of territory; they live in mountainous areas that create problems of accessibility in rural sectors, often involving journeys of up to 14 hours on the part of government officials. There has been a wave of forced displacements to these municipalities by groups outside the law. There is poverty and limited access to education.

Overall, Eastern Antioquia has only six Family Advocates dealing with the comprehensive care of children in 23 municipalities.<sup>7</sup>

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<sup>1</sup> Reorganization of the *Sistema Nacional de Bienestar Familiar* (National Family Welfare System, referred to hereafter as SNBF) in 2013, and creation of the *Comisión Intersectorial para la Atención Integral de la Primera Infancia* (Intersectorial Commission for Comprehensive Early Childhood Care) in 2011.

<sup>2</sup> This is the second most highly populated sub-region of the department of Antioquia, with 23 municipalities, after Valle de Aburrá, and next to it in economic importance.

<sup>3</sup> A town located 45 km from the city of Medellín, with an area of 198 km<sup>2</sup> and a population of 110,329 inhabitants according to the 2005 census (urban population: 71,761 / rural population: 38,568, as projected for 2010).

<sup>4</sup> Field work conducted by clinic students established that with the exception of the municipality of Rionegro, other territorial entities function with a single commission carrying out the work of prevention, guarantee, re-establishment and reparation of the rights of family members.

<sup>5</sup> A municipality located 146 km from the city of Medellín, with an area of 257 km<sup>2</sup> and a population of 9,382 inhabitants (urban population: 15,367 / rural population: 6,665, as projected for 2010).

<sup>6</sup> A municipality located 113 km from the city of Medellín, with an area of 1,323 km<sup>2</sup> and a population of 37,116 inhabitants (urban population: 15,367 / rural population: 21, 749, as projected for 2010).

<sup>7</sup> According to the territorial distribution outlined in annex 1, they are distributed in two (2) Regional Centers (*Centros Zonales*) : Regional Center 12 East which covers 16 municipalities and possesses five (5) Family Advocates, two of whom are assigned to criminal liability; and Center 17, which covers the remaining seven municipalities and has just one Family Advocate to comply with the provisions enshrined in article 79 and beyond in Law 1098 of 2006. (See Annex 1)

In order to try to remedy the lack of institutions responsible for re-establishing children's rights, the Code on Childhood and Adolescence encouraged the creation of plans, programs, and projects for children and adolescents, emphasizing in particular the creation and implementation of public policies in each of the municipalities.

Thus it was discovered that there are currently three municipalities in Eastern Antioquia<sup>8</sup> that do not have any public policy on children and adolescents, and four municipalities<sup>9</sup> in which policy is only now being developed, despite the fact that the Code on Children and Adolescence has been in force for eight years.

There are some cases, like that of Argelia, whose public policy<sup>10</sup> makes it impossible to deal with the municipality's main problems as listed by the Family Commission itself,<sup>11</sup> which describes violations of the rights of children and adolescents in cases which unfortunately have not been reported to the police, such as forced displacement due to threats of forcible recruitment of children by groups outside the law, sexual abuse, rape of a minor under fourteen years of age, intra-family violence, child prostitution, and drug use, among others. This is in addition to the serious political and social problems that the municipality faces,<sup>12</sup> which have diminished the credibility of state institutions in the eyes of the inhabitants. This requires urgent monitoring by municipal institutions, social policy committees, and other key actors in sectoral policy platforms so that community participation is included in current public policies concerning children and adolescents.

Merely having each territorial body put in place public policy ostensibly focused on differential territorial rights with the support of some networks and inter-institutional round tables<sup>13</sup> does not guarantee protection and comprehensive care for children. Action to oversee and monitor these policies is urgently needed in order to guarantee their efficacy.<sup>14</sup>

## 2. The mining sector and corporate and state responsibility for the rights of children and adolescents. *Questions 5 and 16.*

In order to understand the impact of mining activities on the rights of children and adolescents, it is important to bear in mind that the effects depend on three different scenarios in terms of children's involvement: legal mining, informal mining and illegal mining. Legal mining is practiced by formally registered companies who are covered by a mining license (*título minero*), that is to say a

<sup>8</sup> Concepción, Granada and Guarne.

<sup>9</sup> El Peñol, Nariño, El Carmen de Viboral and El Santuario.

<sup>10</sup> Although in the preamble of this public policy reference is made to the entire transformation approach to childhood Colombian law and it establishes basic concepts and principles of action, it does not mention nor does it account for its development the most relevant problems the context of the municipality.

<sup>11</sup> Student interview on 06 October 2014 with Commissioner Miriam Cielo. E-mail: [comisaria@argelia-antioquia.gov.co](mailto:comisaria@argelia-antioquia.gov.co) / [Myriam\\_cielo@hotmail.com](mailto:Myriam_cielo@hotmail.com).

<sup>12</sup> The elected mayor was forced to step down after charges that she violated conflict of interest regulations (*régimen de inhabilidades e incompatibilidades*), and was replaced by a delegate, who claims there are no resources available.

<sup>13</sup> Towns like Rionegro, San Luis, Concepción and Sonsón have inter-institutional round tables. Although there have been some advice and training to members of the tables in partnership with various entities according to the Mayor of turn, there has been no continuity or accompaniment from public institutions, since in most cases the processes are led from private organizations.

<sup>14</sup> Although the processes of construction and implementation of public policies require the involvement of the community, where children, family and other actors responsible for ensuring the protection and promotion of the rights are included, is a constant in the different municipalities that population does not know about the contents, benefits and guarantees to be provided for children and adolescents through different public policies, since diffusion processes thereof are insufficient, hindering empowerment and defense of this participatory mechanism.

written administrative document that grants the right to explore and exploit the soil and the subsoil belonging to the nation for mining purposes. These companies are listed on the National Mining Registry and are thus subject to oversight by state institutions and agencies. Informal mining activities, on the other hand, are not registered or covered by any mining license. Activities such as traditional mining, subsistence mining and panning fall in this category. Illegal mining, which has been included in this category in opposition to legal mining, involves activities practiced by illegal agents or groups whose economic interests differ from mere subsistence. Culturally and socially the practices of informal and illegal mining are very different and should not be confused.<sup>15</sup>

Although the Colombian State has been implementing the National Strategy for preventing and eradicating the worst forms of child labor and protecting youth workers since 2008, this policy is aimed at state and private entities, leaving aside the phenomenon of illegal and informal mining.<sup>16</sup> Thus, even though there is state oversight of formally registered companies, i.e., those engaging in legal mining activities, the same is not true of illegal mining. This has been rising due to the state's lack of oversight and surveillance, as the Constitutional Court recently declared: "*Illegal mining activity has been tacitly tolerated by the state, which has permitted it to function and operate.*"<sup>17</sup>

Complaints have been filed by state agencies about the effects of illegal mining on the rights of children and adolescents. Thus, the Office of the Procurator General of the Nation (*Procuraduría General de la Nación*)<sup>18</sup> has warned that children and adolescents are actively engaged in illegal mining, since the state has failed to establish a series of measures to mitigate, compensate, remedy and correct the impact caused by mining activities. The lack of any state registries of illegal mining activities prevents oversight bodies of various types from developing prevention, inspection and surveillance schemes that would allow them to assess the involvement of children and adolescents and intervene where necessary.

Although a series of authorities belonging to the National Family Welfare System and the Ministry of Work are involved in the National Strategy for preventing and eradicating the worst forms of child labor, there are no agencies at a national level devoted especially and above all to addressing the

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<sup>15</sup> Traditional mining is that which has been practiced since before Law 685 of 2001 was passed, in a specific area either continuously or sporadically by individuals or groups of individuals or associations without a mining license on file with the National Mining Registered, in mineral deposits belonging to the state; due to these individuals' socioeconomic profile and the location of the deposit, it constitutes the principal source of maintenance and income, as well as a regional source for the minerals extracted. This type of mining is also informal and may be subject to formalization procedures as referred to in articles 31 and 257 of Law 685 of 2001, as well as the programs covered in Chapter XXIV of Law 685 of 2001, the Mining Code. Thus it can be seen that traditional mining is a type of informal mining.

Subsistence mining is that practiced by individuals who devote themselves to extracting a mineral via rudimentary methods and who, in association with a family member or other individuals, generate subsistence income. The small-scale exploitation of alluvial mining, more commonly known as panning, and the occasional extraction of different forms of clay and construction materials, are also termed subsistence mining.

*Barequeo*, a popular activity among current inhabitants of alluvial terrain, is permitted, with the following restrictions. It is understood that this activity involves washing sandy materials by manual means with no help from machinery or mechanical means, in order to separate and collect precious metals present in the sands. *Barequeo* for precious and semi-precious stones by similar means to those described in the present article is also permitted. Source: definition of panning in Law 685 of 2011, article 155.

<sup>16</sup> Senator Germán Villegas Villegas claimed that "a high percentage of mining in Colombia is illegal. Out of 14,000 mining activities, less than 37% have mining licenses." Sourced from: <http://senado.gov.co/sala-de-prensa/opinion-de-senadores/item/16562-la-mineria-en-colombia-en-un-alto-porcentaje-es-ilegal>

<sup>17</sup> Ruling T-204 of 2014. Paragraph 97. At <http://www.corteconstitucional.gov.co/relatoria/2014/T-204-14.htm>.

<sup>18</sup> Procuraduría General de la Nación. "Minería ilegal en Colombia. Informe Preventivo" (Illegal mining in Colombia. Preventive Report). Bogotá. 2012. En: <http://www.procuraduria.gov.co/portal/media/file/MINERIA%20ILEGAL%20EN%20COLOMBIA%20%20DOCUMENTO.pdf>

highly detrimental effects of mining on the rights of children and adolescents. In the latest administrative reforms, a series of agencies were created to boost competitiveness in the mining sector, such as the National Mining Agency or the Mining and Energy Planning Unit).<sup>19</sup> However, these organizations perform administrative functions that are not directly linked to promoting or restoring the rights of children and adolescents.

As regards existing legal measures on this issue, it should be pointed out that in the Mining Code (Law 685 of 2001), there are no regulations establishing prohibitions or sanctions for companies or protecting children in the face of these activities. Law 1382 of 2010, which modifies this Code, stipulated revocation of mining licenses as a possible sanction in cases where children were found working. However, this law was ruled unconstitutional by the Constitutional Court (C-366 of 2011), so that in Colombian legislation there are currently no legal mechanisms for sanctions penalizing mining activities that involve children and adolescents.

Regulatory, deterrent and legal measures remain weak in addressing mining issues that affect children and adolescents. Finding and documenting the worst forms of child labor is not sufficient to mitigate the phenomenon. This is demonstrated by the data provided by the *Sistema de Información Integrado para la Identificación, Registro y Caracterización del Trabajo Infantil y sus Peores Formas* (Comprehensive Information System for Identifying, Documenting and Describing Child Labor and its Worst Forms, hereafter SIRITI), which points to a rise in the participation of children and adolescents in the worst forms of child labor in 2014 in comparison to the previous year. This is shown by the following figures from the Department of Antioquia:<sup>20</sup>

Year	Children registered with SIRITI	Children involved in mining activities	Children at risk for the worst forms of child labor
2013*	17,677	205	12,618
2014**	64,444	3,470	13,799
Increase compared to 2013	265%	1,593%	9.4%

Furthermore, mining presents serious environmental and health risks. The Mining and Energy Planning Unit established in one of its reports that gold mining in the department of Antioquia causes mercury poisoning and other toxic effects that lead to neurological damage due to the inadequacy of systems for eliminating mining waste products.<sup>21</sup> The Comptroller General of the Nation (*Contraloría General de la Nación*) has stated that coal mining is associated with respiratory

<sup>19</sup> The National Mining Agency was created by the president using his special powers via executive decree 4134 of 2011. The Mining and Energy Planning Unit (*Unidad de Planeación Minero Energética*) was restructured via decree 1258 of 2013 in order to modify its functions so as to strengthen the mining sector.

<sup>20</sup>\*Gobernación de Antioquia. Gerencia de Infancia, Adolescencia y Juventud. “La erradicación del trabajo infantil es una prioridad para Antioquia la más educada” (The eradication of child labor is a priority for a more educated Antioquia). At <http://antioquia.gov.co/index.php/infancia-y-adolescencia/14700-la-erradicacion-del-trabajo-infantil-es-una-prioridad-para-antioquia-la-mas-educada>. Consulted 14 September 2014.

\*\*Data obtained directly from SIRITI.

This department contains the largest area of territory for which mining licenses have been issued, with a total of 1,530 mining licenses covering 1,160,334.311 hectares, which corresponds to 25.54% of the total percentage of territory for which mining licenses have been granted in Colombia.

<sup>21</sup> UPME. Olivero Verbel, Jesús. In [http://www1.upme.gov.co/sites/default/files/forum\\_topic/3655/files/efectos\\_mineria\\_colombia\\_sobre\\_salud\\_humana.pdf](http://www1.upme.gov.co/sites/default/files/forum_topic/3655/files/efectos_mineria_colombia_sobre_salud_humana.pdf). Consulted 20 October 2014.

problems due to particulate matter suspended in the air.<sup>22</sup> Also, a study carried out by the Government of Antioquia lists other risks of child labor in activities associated with mining: the consumption and sale of psychoactive substances; exploitation, sexual abuse, violence, teenage pregnancy and forced recruitment by armed groups engaged in small-scale narcotics trafficking.<sup>23</sup>

The state needs to have solid and specific data on the full spectrum of mining activities, not only those carried out by formally constituted companies. This will allow it to provide effective, ongoing monitoring of the participation of children and adolescents in this activity and create more accessible mechanisms for guaranteeing the prevention and resolution of violations of their rights, without ignoring the social and cultural issues involved, specifically in the case of informal mining.

### **3. The right of children and adolescents to remain with their family of origin, and the adoption process. *Question 10.***

Children should only be separated from their families as a last resort, and if this is done, it should be based on objective, identifiable criteria using reasoned decisions to protect the child's best interests.

However, in Colombia critical and significant problems persist in terms of child adoption due to the lack of common internationally-approved criteria on how to interpret and apply the principle of the child's best interest in these cases, lack of knowledge about the children's cultural identity at the time of selecting the adoptive home, and lack of an independent body to oversee adoption processes handled by the *Instituto Colombiano de Bienestar Familiar* (Colombian Family Welfare Institute, referred to hereafter as ICBF).

#### ***Lack of guidelines for adoption processes***

While the Colombian state claims that adoption declaration processes are scrupulously handled by both the legal and social services, these efforts have not been sufficient, since there are no clear regulatory criteria for applying the principles of overall protection and best interests of the child.

Many negative decisions about children's adoptability are based on the family's poverty, the parents' low educational level, unemployment, lack of proper housing, and the advanced age of the children's relatives. These criteria have led to a clear tendency to feminize and infantilize poverty as measured by income.<sup>24</sup>

<sup>22</sup> The effects of these suspended particles can be seen in a disease called pneumoconiosis. Contraloría General de la Nación. "Minería en Colombia: Institucionalidad y territorio, paradojas y conflictos" (Mining in Colombia: Institutions and territory, paradoxes and conflicts). In <http://www.contraloriagen.gov.co/documents/10136/182119332/MineriaEnColombia-Vol2.pdf/6cc33e0c-29e9-4a65-8561-1215fa8d07a0>. Consulted 20 October 2014.

<sup>23</sup> Gobernación de Antioquia. "Estudio sobre vulneraciones a la dignidad e integridad en los niños, niñas y adolescentes, y las restricciones para el disfrute de sus derechos y libertades en Antioquia" ("Study on violations of the dignity and integrity of children and adolescents and restrictions on the enjoyment of their rights and liberties in Antioquia"). February 2013. At [http://www.antioquiadigital.edu.co/index.php?option=com\\_content&view=article&id=2305](http://www.antioquiadigital.edu.co/index.php?option=com_content&view=article&id=2305) :estudio-sobre-vulneraciones-a-la-dignidad-e-integridad-en-los-ninos-ninas-adolescentes-y-jovenes-de-antioquia-y-las-restricciones-para-el-disfrute-de-sus-derechos-y-libertades&catid=191:noticias-prevenir-es-mejor. Consulted 7 Octubre 2014.

<sup>24</sup> CEPAL 2010. "Pobreza Infantil en América Latina y el Caribe," at <http://www.cepal.org/publicaciones/sml/6/42796/Libro-pobreza-infantil-America-Latina-2010.pdf>.

In this sense, it is not enough to have a public policy which offers an alternative to families lacking economic resources. Instead, there are certain minimum parameters for interpreting and applying the principle that most favors the protection of children's rights, namely the principle of best interest.

***Loss of the child or adolescent's culture of origin, not seen as relevant at the time of choosing the type of adoptive home***

Although the *Código de la Infancia y de la Adolescencia* (Code on Childhood and Adolescence) sets out a process for declaring the adoptability of an indigenous child, and there are administrative guidelines mandating differential care for ethnic groups,<sup>25</sup> the competent authority at the time of assessing suitability of placements does not take into account children's cultural identity at the time of assigning adoptive families. The same is true of other children, such as those from rural backgrounds, children of Afro-Colombian descent, and those belonging to certain ethnic groups.

While the state claims that it is taking measures for adoptive placements to work in accordance with international standards, it cannot ignore cultural suitability issues during the administrative process for determining what home the child is placed in, since these are an intrinsic part of the child's identity and are directly related to the principle of best interest.

Article 8 of the Convention on the Rights of the Child establishes the state's obligation to preserve the child's identity: including nationality, name, and family relations. Ignoring these factors in the temporary placement process for children can cause irreparable damage in the lives of children from indigenous and peasant backgrounds and children of Afro-Colombian descent, among other vulnerable groups present in Colombian territory.

***Lack of a supervisory body for adoption processes conducted under the auspices of the ICBF***

The ICBF, as a public entity, has internal monitoring of its procedures. Nevertheless, in the ICBF's administrative procedure for re-establishing rights there is little oversight of the resolution declaring adoptability. Even though adoption decisions may be reviewed by requesting referral to a judge (*recurso de homologación*), usually the parties do not request this because they are unaware that such a review is available.<sup>26</sup> The Procurator General's Office (*Procuraduría*), the entity in charge of external oversight, is completely absent in this process.

In this situation it is necessary to follow the Recommendation of the Committee for the Rights of the Child to establish independent human rights bodies to ensure the promotion and protection of the rights of the child in these instances.<sup>27</sup>

Likewise, in most enforcement actions to protect legal rights (*acciones de tutela*) filed during adoption processes (rulings T-510 of 2003, T-844 of 2011, T-094 of 2013 and T-044 of 2014), it has been argued that the fundamental rights of the child and his or her family were violated during the administrative phase of the process, which is carried out before the Family Attorney (*Defensor de*

<sup>25</sup> State's response to the list of questions, number 10.2.

<sup>26</sup> It is not necessary to have a lawyer to undertake this process.

<sup>27</sup> Committee on the Rights of the Child. CRC/GC/2002/2, 15 December 2002. General observation no. 2 (2002), "The role of independent national human rights institutions in the promotion and protection of the rights of the child."

*Familia*). In this sense, the Constitutional Court established in ruling T-044 of 2014 that poverty or the educational level of biological family members should not be used as criteria when the decision to separate the child from his or her family of origin is being made.<sup>28</sup>

The Court also established that subjective judgments like bad character cannot be used as an argument against the family (as long as no abuse or other kind of behavior constituting intra-family violence has been committed), and neither can instances when the biological family has lied to authorities in order to get the child back.<sup>29</sup>

#### 4. The measures adopted by the state are not sufficient to protect the rights of children and adolescents who have been displaced. *Questions 10 and 15*

Forced displacement in Colombia is a phenomenon affecting a large part of the Colombian population, and children are the most seriously impacted. According to official figures from the *Unidad Administrativa Especial para la Atención y Reparación Integral a las Víctimas* (Special Administrative Unit for the Care of and Comprehensive Reparation for Victims, hereafter UARIV),<sup>30</sup> by September 1, 2014, there were 5,897,435 reported victims of forced displacement in Colombia, of whom 2,136,464 (36%) were children and adolescents. Of those, 14% are registered in Antioquia,<sup>31</sup> including 154,231 boys and 145,155 girls.

According to official figures, the following numbers of victims of forced displacement were reported from 2011-2014:

Source	Age group	Year 2011	Year 2012	Year 2013	Year 2014
Medellín Municipal Representative's Office ( <i>Personería</i> )	Declarations are not recorded by age group	2,210	2,546	1,853	1,198
UARIV	Children and adolescents	18,580	16,604	13,264	4,013

These statistics demonstrate that even though figures for victims of forced displacement have gone down, the measures adopted by the state to prevent it have not been effective, since a considerable number of victims reported displacement between 2011 and 2014, and children and adolescents continue to be severely affected. While it is impossible to determine the number of victims from 0-17 years of age, most of the family groups contain children and adolescents, as the Medellín Municipal Representative's Office has shown.<sup>32</sup>

<sup>28</sup> Ruling T-044 of 2014.

<sup>29</sup> Ibid.

<sup>30</sup> [www.unidadvictimas.gov.co](http://www.unidadvictimas.gov.co). Consulted: September 2014.

<sup>31</sup> Analysis of information from the department of Antioquia on file with UARIV shows that girls represent 34% of the women and boys 40% of the men who have been reported in the department.

<sup>32</sup> The Medellín Municipal Representative's Office reports that while there is no record of victims by age group, "(...) the majority of family groups are made up of children and adolescents, a fact which shows the permanent risk to which they are exposed in relation to this issue."



***Ineffectiveness of internal legislation measures: humanitarian aid and the lack of Family Advocates for children and adolescents who are victims of the armed conflict***

Forced displacement has a massive impact on victims' rights, especially their fundamental rights to human dignity and minimal subsistence aid and benefits to meet their basic needs [a right referred to in Colombian law as *mínimo vital*], since the minimum food intake required by family groups is compromised. In order to protect this right, the Colombian state relies on a social services provision called Humanitarian Aid<sup>33</sup> in an attempt to comply with the UN's Guiding Principles on Internal Displacement, especially principle 4, which refers to the special needs of certain internally displaced persons such as children, especially unaccompanied minors, expectant mothers, mothers with young children, female heads of household, persons with disabilities, and elderly persons.<sup>34</sup>

The Constitutional Court has declared that “*Emergency humanitarian aid is one of the necessary social service components of subsistence benefits for persons who are victims of forced displacement, which the state must provide for this population. Thus, the Court has defined the rights that must be guaranteed for the displaced population, among which is the right to minimal subsistence aid and benefits ('mínimo vital')*.” Ruling T-182 of 2012.

Given this ruling, the same court<sup>35</sup> has declared that children and adolescents and family groups headed by mothers/fathers who are victims of forced displacement are entitled to special protection due to their vulnerable situation, and thus treatment of them must take into account their special needs.<sup>36</sup>

However, it is clear that humanitarian aid to victims is not being provided properly, since, according to regulations and legislation, it should be provided every 3 months, but is being delayed from 8-12 months. This has obliged victims of forced displacement to resort to filing right to petition claims (*derecho de petición*),<sup>37</sup> to request legal injunctions to protect their rights (*acciones de tutela*),<sup>38</sup> and to claims of non-compliance with protection injunctions and neglect of rights (*incidentes de [in]cumplimiento y desacato*) in order to access that aid, since obstacles are increasingly being imposed by UARIV<sup>39</sup> and the ICBF.<sup>40</sup>

This is evidenced by the fact that, according to figures obtained by ÁNFORA,<sup>41</sup> from 2011 to 2014, 4,110 people were seen at the Center for Victims at the Universidad de Antioquia, and the majority of family groups included children and adolescents;<sup>42</sup> in that period 1,701 right to petition claims

<sup>33</sup> Humanitarian aid is one of the mechanisms for protecting victims of this scourge, as stated in articles 62-65 of law 1448 of 2011, as well as in articles 106-120 of decree 4800 of 2011, and specifically in terms of children and adolescents in edict (*auto*) 251 of 2008 and 099 of 2013.

<sup>34</sup> United Nations. Guiding Principles on Internal Displacements, E/CN.4/1998/53/Add.2 of 11 February 1998. Principle 4, paragraph 2. Available at: <http://www.un.org/es/comun/docs/?symbol=E/CN.4/1998/53/Add.2>

<sup>35</sup> Rulings T-160 of 2012, T-284 of 2012 y T-831A of 2013 of the Colombian Constitutional Court.

<sup>36</sup> Ruling T-182 de 2012, Colombian Constitutional Court.

<sup>37</sup> Article 23 of the Political Constitution of 1991, articles 13 and following of law 1437 of 2011.

<sup>38</sup> Article 86 of the Political Constitution of 1991, decree 2591 of 1991.

<sup>39</sup> According to article 113 of decree 4800 of 2011, it [UARIV] is in charge of providing housing.

<sup>40</sup> Colombian Family Welfare Institute. According to articles 113, 114, and 115 of decree 4800 of 2011 ICBF is in charge of providing food.

<sup>41</sup> The ÁNFORA system is a database for the Network of Legal Assistance Programs for the Population of Victims of Forced Displacement to which 14 universities in the country belong, and it records information on help provided by legal clinics (*consultorios jurídicos*).

<sup>42</sup> These figures are significant bearing in mind that an average of 160 people are seen monthly.

were filed, as well as 1,157 requests for injunction to protect rights (*acciones de tutela*),<sup>43</sup> and 429 claims of neglect of rights, all specifically related to this situation.

Since humanitarian aid is not being delivered appropriately, the children's right to minimal aid and benefits (*mínimo vital*) is not being protected and, despite the protection orders issued by the Constitutional Court, their plight is increasingly serious. Not only do they have to live with the consequences of this situation but they also have to contend with obstacles in the system in order to get their rights upheld. Humanitarian aid is a fundamental part of protecting the basic needs of children and adolescents, and it should be provided without extensive formalities; priority should be given to family groups containing children and adolescents so as to prevent their living conditions from worsening still further.

Furthermore, with respect to the protection of children orphaned during the conflict and others in a vulnerable position in the Department of Antioquia, it must be pointed out that the ICBF does not possess sufficient human resources to guarantee proper support in each specific case. This is clear from the following response to a right to petition claim (*derecho de petición*):<sup>44</sup>

*4. There are currently 1,882 children and adolescents undergoing Re-establishment of Rights by the Family Advocate and Family Commissioners in the whole department, divided into Hogar Gestor (Administrative Home) according to their reasons for placement: Victims of Antipersonnel Mines 16, Orphans 42, Unrelated to the Armed Conflict 17 and Disability and Forced Displacement 113. (...) The ICBF only possesses one Family Attorney in the department of Antioquia in charge of children and adolescents who are not related to the armed conflict and victims of antipersonnel mines, who are transferred to the city of Medellín. Due to the lack of economic resources, there is no Family Attorney assigned for each Regional Center; [cases] are handled on spontaneous request or demand or by referral from the entities that make up the SNARIV-Sistema Nacional de Atención y Reparación Integral a las Víctimas (National System for Comprehensive Care and Reparation for Victims) and the SNBF (National Family Welfare System)."*

For all these reasons, the Colombian state needs to eliminate administrative barriers so that family groups with children and adolescents can have straightforward and appropriate access to Humanitarian Aid, in such a way that they will not be compelled to resort to legal action against the UARIV and the ICBF to obtain assistance. In addition, the state must guarantee the presence of Family Attorneys at each Regional Center of the Department of Antioquia so as to guarantee the rights of children and adolescents who are victims of the armed conflict, specifically those who are orphaned.

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<sup>43</sup> According to the report "*Acción de tutela respecto al registro y las ayudas humanitarias de la población desplazada. ¿Garantías de derechos o barrera de acceso?*" ("Filing injunctions with regards to the registry and humanitarian aid to the displaced population. Guarantees of rights or barriers to access?") prepared by the Victims' Care Center at the University of Antioquia, between 2012 and 2013, there were 250 requests for injunction (*tutela*) filed, of which 92 cases involved single-parent households made up of children and adolescents. This research shows that the judges on these rights cases are not bearing in mind the differential focus for children and adolescents at the time of issuing their rulings and/or guaranteeing the protection of this populational group's rights.

<sup>44</sup> Response to the right to petition claim filed 21 October 2014.

## 5. The right to enjoy the highest attainable standard of health. *Question 12*

### *Water pollution, lack of access to drinking water, and sanitation in the city of Medellín*

In the city of Medellín, a significant fraction of children and adolescents has no access to drinking water and sanitation. The company in charge of providing the public service of drinking water and sanitation, Empresas Públicas de Medellín (EPM), does not provide service to over 13,000 people belonging to some 3,500 families living in the neighborhoods of Llanaditas, Las Golondrinas, El Faro, El Pacífico, and Altos de la Torre, even though the company is highly regarded and has a well-known policy of social responsibility.<sup>45</sup>

These neighborhoods are located in high risk, unregulated areas. Residents there are from the lowest social strata (0, 1 and 2) and the large majority moved there because of forced displacement. The community complains of having spent over 30 years requesting help from the local government.<sup>46</sup> Children are the most affected, suffering gastrointestinal and skin diseases due to ingesting contaminated water. There is no census of the child population in these neighborhoods that would indicate the magnitude of the population involved, their state of health, and the actions local government has undertaken to safeguard their fundamental rights.<sup>47</sup>

This situation shows that the measures adopted by the State<sup>48</sup> are not sufficient to protect and guarantee the rights of children and adolescents exposed to disaster and emergency situations when the children are also victims of forced displacement.

In addition, we wish to stress that the lack of guaranteed drinking water is not only caused by the problems of access in certain communities, but also by the lax quality standards regarding the quality required for human consumption adopted by Colombian law<sup>49</sup> -as opposed to the international recommendations of the WHO<sup>50</sup>- and the public sanitation company's failure to publish the basic parameters of measurement in their entirety.<sup>51</sup>

<sup>45</sup> EPM, *Informe de Sostenibilidad* (Sustainability Report) 2013, consulted 21 October 2014, at: <http://informedesostenibilidadepm.com.co/2013/gestion-social-y-ambiental/gestion/gestion-por-temas/acceso-y-comparabilidad-de-los-servicios-publicos/>

<sup>46</sup> This situation has been reported in local city newspapers. See: *Periódico El Mundo*. “Barrios de la Comuna 8 solicitan agua potable”. [http://www.elmundo.com/portal/pagina\\_general.impression.php?idx=85720](http://www.elmundo.com/portal/pagina_general.impression.php?idx=85720). *Periódico ADN*. “En la comuna 8, 3.500 familias piden el servicio de agua potable”. <http://diarioadn.co/medell%C3%ADn/mi-ciudad/familias-de-la-comuna-8-esperan-servicio-de-agua-potable-1.6983>. *Minuto 30.com*, “Cerca de 13 mil personas de la comuna 8 de Medellín siguen sin agua potable, denunció el concejal Jesús Aníbal Echeverri”, <http://www.minuto30.com/cerca-de-13-mil-personas-de-la-comuna-8-de-medellin-siguen-sin-agua-potable-denuncio-el-concejal-jesus-anibal-echeverri/279330/>

<sup>47</sup> The document “El Faro, Comuna 8. Diagnóstico y propuestas comunitarias para el mejoramiento integral del barrio” (“El Faro, Commune 8. Diagnosis and community proposals for improving the neighborhood as a whole”) prepared by the community itself, points out that in the neighborhood of El Faro alone there is a population of 705 children (2013, p. 8). Available at: <http://kavilando.org/images/stories/documentos/PropuestaMejoramientoIntegraldelBarrioElFaroComuna8.pdf>

<sup>48</sup> State response no. 15 to the list of questions proposed by the Committee on the Rights of the Child.

<sup>49</sup> Decree 1575 of 2007, *Sistema para la Protección y Control de la Calidad del Agua para Consumo Humano* (System for the Protection and Monitoring of Water Quality Fit for Human Consumption). Resolution 2115 of 2007, *Características, instrumentos básicos y frecuencias del sistema de control y vigilancia para la calidad del agua para consumo humano* (Characteristics, basic instruments and frequency of monitoring and oversight system for water quality fit for human consumption).

<sup>50</sup> *Guidelines for drinking-water quality*, third edition, by the World Health Organization, 2008. Can be consulted at: [http://www.who.int/water\\_sanitation\\_health/dwq/gdwq3rev/es/](http://www.who.int/water_sanitation_health/dwq/gdwq3rev/es/)

<sup>51</sup> To illustrate this situation we attach a comparing table of the standards required by Colombian law, the standards published by the city sanitation company and the standards recommended by the WHO (Annex 2).

Given this alarming environmental outlook, it is surprising that the Colombian Government does not mention any concrete actions with a differential focus in its responses to the list of questions. This demonstrates the situation of neglect and indifference towards environmental hazards that violate children's and adolescents' right to health.

### ***Electromagnetic pollution and child health***

Environmental electromagnetic pollution is not a phenomenon identified by the Colombian State as having a major impact on the health of children and adolescents. Regulations are weak and there is no oversight or monitoring due to the specialized knowledge of electromagnetism that is required, the dizzying proliferation of this technology and the market for it, the lack of knowledge about its health implications, and the lack of scientific research on the topic.

The lack of consensus in the scientific community has made it impossible to establish with certainty whether there is a direct relationship between non-ionizing electromagnetic radiation and health.<sup>52</sup> International standards,<sup>53</sup> on which Colombian national regulations are based,<sup>54</sup> use the physical compression phenomenon in electromagnetism to establish a tolerance limit for emissions of this radiation, without bearing in mind important health research studies showing the risk of developing illnesses like leukemia, breast cancer, testicular cancer, brain tumors, etc., due to exposure to this type of wavelength.<sup>55</sup> This means that the Colombian State is failing to regulate precautionary measures or oversight and monitoring procedures from the point of rights that guarantee and protect children in particular.

Nevertheless, the Colombian Constitutional Court has upheld the fundamental right to health -and rights connected to it- for children, ruling that environmental hazards that could cause irreparable damage must be prevented, given the lack of scientific certainty about the possible adverse effects of non-ionizing waves on the health of the child population. The cases dealt with by the Court led to rulings based on the precautionary principle,<sup>56</sup> reinforced by the principle of best interests of the child and bearing in mind the prevalence of the rights of children in the Constitution (art. 44, C.P.).

Specifically, the Constitutional Court has ordered the Colombian state to carry out the following protection measures: (i) to analyze the recommendations of international bodies, especially those of

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<sup>52</sup> This type of radiation is emitted by radioelectronic services and systems such as radio, television, Internet, landlines and cellular telephones, radars, etc.

<sup>53</sup> International Telecommunication Union recommendation UIT T-K52, "Guidance on complying with limits for human exposure to electromagnetic fields." Council of the European Union recommendation 1999/519/EC, "On the limitation of exposure of the general public to electromagnetic fields (0 Hz to 300 GHz)," based on the recommendations of the International Committee on Non-Ionising Radiation Protection (ICNIRP) in their "Guidelines for Limiting Exposure to [...] Electro-magnetic Fields []."

<sup>54</sup> Decree 195 of 2005, *Límites de exposición de las personas a campos electromagnéticos* (Limiting human exposure to electromagnetic fields). Resolution 1645 of 2005, *Por la cual se reglamenta el Decreto 195 de 2005* (Which regulates Decree 195 of 2005).

<sup>55</sup> See OECD (2014) Resumen Ejecutivo in "*Estudios de la OCDE sobre políticas y regulación de las telecomunicaciones en Colombia*". Available at: [http://www.oecd-ilibrary.org/science-and-technology/estudio-de-la-ocde-sobre-politicas-y-regulacion-de-telecomunicaciones-en-colombia\\_9789264209558-es](http://www.oecd-ilibrary.org/science-and-technology/estudio-de-la-ocde-sobre-politicas-y-regulacion-de-telecomunicaciones-en-colombia_9789264209558-es) and the citation of various research studies on the health effects of electromagnetic radiation (Annex 3).

<sup>56</sup> The Constitutional Court has defined the following requirements for applying the precautionary principle: "(i) A risk of harm must exist; (ii) This harm must be serious and irreversible; (iii) There must be a principle of scientific certainty, even if it is not absolute; (iv) The decision adopted by the authorities must be intended to prevent environmental damage; (v) The act on which the decision is adopted must be reasoned." (Ruling T-397 of 2014, M.P. Jorge Iván Palacio). Likewise, the High Court has specified that applying the precautionary principle is indirectly intended to prevent potential health damage due to environmental hazards. (Ruling T-397 of 2014, M.P. Jorge Iván Palacio).

the WHO, concerning measures to prevent potential health damage due to exposure to electromagnetic waves;<sup>57</sup> (ii) to create information networks with the communities so that they can be informed about this issue;<sup>58</sup> and (iii) to regulate a prudent distance for situating cellular phone towers from educational institutions, homes, hospitals, and old people's homes.<sup>59</sup>

Similarly, the Constitutional Court has ordered private and public entities responsible for installing parabolic antennas or mobile phone towers to remove them in order to protect the right to health of the children affected by them.<sup>60</sup>

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#### **Cases dealt with by the Colombian Constitutional Court**

- **Ruling T-1077 of 2012.** This upheld the right to health of a girl suffering a type of cancer whose doctors advised avoiding as far as possible any exposure to radio frequencies, after she was affected by the installation of a cellular phone antenna a few meters from her home.
  - **Ruling T-397 of 2014.** This upheld the right to health of a boy who presented adverse reactions such as nervousness and constant crying after the installation of a monopole antenna on land next to his home.
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However, the installation of cellular phone antennas in residential units and buildings is increasingly common in Colombia. This situation is aggravated by the current relationship between cellular phone companies and construction companies, who seek to install internal antennas or micro-cells, which are easy to camouflage on the inside of civil building works, thus avoiding any public protest since they are not visually associated with antennas.<sup>61</sup>

Thus, commercial negotiations do not follow the prerogative of informed prior consent, a fact which is of great concern given the lack of regulation and oversight by the Colombian state to demand that companies inform families about the risks that these antennas can represent.

The state needs to adopt the Committee's General Comment No. 7 on Implementing Child Rights in Early Childhood, which establishes that all law and policy development, judicial decision-making, and service provisions that affect children must take into account the best interests of children. The Committee established health care services and any actions related to the environment and transport as among the measures directly impacting young children.<sup>62</sup>

Thus, it is the duty of the competent authorities to obey judicial orders mandating the adoption of measures that would make the precautionary principle effective by revising internal regulations related to the exposure of electromagnetic wavelengths.

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<sup>57</sup> Ruling T-104 of 2012, M.P. Nilson Pinilla Pinilla.

<sup>58</sup> Ibid.

<sup>59</sup> Rulings T-360 of 2010, M.P. Nilson Pinilla Pinilla; T-1077 of 2012, M.P. Jorse Ignacio Pretelt Chaljub; T-397 of 2014, M.P. Jorge Iván Palacio Palacio.

<sup>60</sup> Ibid.

<sup>61</sup> This relationship between the cellular phone companies and the construction companies is so productive that it ends up being financed by the cellular phone company. *Revista Semana*, "Ojo con los amplificadores y bloqueadores de señal", 16 October 2014: <http://www.semana.com/tecnologia/articulo/ojo-con-los-amplificadores-bloqueadores-de-senal/406180-3>

<sup>62</sup> United Nations, Committee on the Rights of the Child. General Comment No. 7, *Implementing Child Rights in Early Childhood*. CRC/C/GC/7. Paragraph 13.

Furthermore, the right of children and adolescents to enjoy the highest attainable standard of health<sup>63</sup> leads to specific obligations on the part of the state in relation to the right of access to information<sup>64</sup> and education.<sup>65</sup> Likewise, it requires that the private sector respect and protect the rights of children, so that it falls to the Colombian state to establish measures of oversight for economic activities involved, in order to guarantee and protect all the rights of this population.<sup>66</sup>

## 6. Recommendations

The Partnership asks the Committee on the Rights of the Child to make the following recommendations to the State of Colombia:

### **In regard to the Implementation of the Code on Childhood and Adolescence:**

- Urge the Colombian State, through its agencies designated by the Code on Childhood and Adolescence and by the National Plan for Children and Adolescents (*Plan Nacional para la Niñez y la Adolescencia 2009-2019*), to take steps to review and oversee public policies related to children, to ensure that they are tailored to local realities and count with the participation of families and society at large, and are all in virtue of the principle of shared responsibility .
- Extend and ensure protections for children and adolescents between the ages of 5 and 18. Actions taken under the current National Plan for Children and Adolescents have been largely focused on early childhood (those under the age of five), thus limiting the guiding principles of public policy related to children, adolescents, and families, as provided in Article 203 of the Code on Childhood and Adolescence, for those who do not fall into the early childhood age bracket.

### **In regard to Mining:**

- In view of the current importance of mining to the Colombian State, it is essential that it gathers and systematizes information related to the different types of mining (legal, informal, and illegal) for having updated and consolidated data to address its duties in an effective way.
- Design, implement, disseminate, and promote national public policies with differentiated intervention strategies for high risk situations that deal with the rights of children and adolescents in the context of each of these types of mining activities.
- Exhort the Colombian State to consult and engage the participation of affected communities in the process of developing appropriate policies, including children and adolescents who have worked in mining. Future development plans must take these problems into consideration and develop different approaches to address issues relating to illegal and informal mining.

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<sup>63</sup> As specified in Article 24 of the Convention of the Rights of the Child.

<sup>64</sup> Article 17 of the Convention on the Rights of the Child.

<sup>65</sup> General Comment No. 1, *The Aims of Education*. Committee on the Rights of the Child. CRC/GC/2003/5. Paragraph 13.

<sup>66</sup> General Comment No. 5, *General Measures of Implementation of the Convention on the Rights of the Child*. Committee on the Rights of the Child. CRC/GC/2003/5. Paragraphs 42-44.

**In regard to Adoption:**

- Urge the Colombian State to promote a policy of respect for the rights of children who are in the stage of Declaration of Adoptability (*Declaratoria de Adoptabilidad*) so that this measure is established with the best interest of the child in mind, with respect to their rights. Poverty can never constitute an argument to separate a child from his or her family of origin. Cultural adaptation, as part of the right to identity of the child, should be taken into account when establishing the extent of foster care.

- Encourage the Colombian State to embrace the recommendation of this Committee, in General Comment No. 2, concerning the role of institutions in the promotion and protection of the rights of children. The State should establish independent human rights institutions responsible for the promotion and protection of the rights of children in all stages of administrative proceedings.

**In regard to Displacement:**

- Encourage the Colombian State to designate Family Attorneys in zonal centers who can guarantee the fundamental rights of those whom they assist, such as victims of conflict and especially orphan children.

- Establish expedited mechanisms for the identification of relatives of orphan children, so that they may receive humanitarian aid promptly and are not compelled to carry out burdensome legal actions before the Special Administrative Unit for the Care of and Comprehensive Reparation for Victims (*Unidad Administrativa Especial para la Atención y Reparación Integral a las Víctimas-UARIV*) and the Colombian Family Welfare Institute (*Instituto Colombiano de Bienestar Familiar-ICBF*) to receive aid.

**In regard to Environmental Health:**

- Encourage the local government of the Municipality of Medellín to take contingency measures to provide services for safe drinking water for families who still do not have access to this essential public service.

- Urge the reform of national environmental regulations to establish the levels recommended by the World Health Organization as the maximum allowable limits for concentrations of air and water pollutants/contaminants.

-Implement local policies with a differential focus, taking into account the consequences of the phenomenon of environmental pollution with respect to infants, so as to adopt the strategies for its prevention, corrections, and mitigation pursuant to the 10 Year Public Health Plan (*Plan Decenal de Salud Pública 2012-2021*).

- Invest more resources in the scientific study of the impacts of environmental pollution on the health of children. The result of these studies should serve as the basis for the design and formulation of suitable public policies for special conditions for child populations.

- Urge the Colombian State to comply with the orders of the Colombian Constitutional Court which direct the State to: (i) analyze the recommendations of international organization, especially the WHO, to take preventative measure against possible health effects that may result from exposure to electromagnetic waves; (ii) create information networks within communities so that they are aware of these problems, and (iii) regulate the safe distance of mobile telephone towers from education institutions, homes/neighborhoods, hospitals, and senior living facilities.
  
- Promote the regulation and implementation of control measures for private sector businesses that operate radio-electric stations in order to ensure the rights of children and adolescents to health and to a clean environment.
  
- Promote the implementation of the Guiding Principles on Human Rights and Business in the private sector that operates radio electric stations, in order to engage them in respecting the fundamental rights of children. The main measures would be related to allowing the free and open access to technical information related to their commercial operations, and to divulge information related to the health risks brought on by electromagnetic waves in the manufacturer directions of those devices that are used for emission.




## 7. Annexes




## ANEXO 1

*Mapa presencia de la Defensoría de Familia en el Oriente Antioqueño*

El Instituto Colombiano de Bienestar Familiar, hace presencia en el Territorio del Oriente Antioqueño, a través de dos centros zonales:

 CENTRO ZONAL N° 12 ORIENTE  
Con sede en el Municipio de Rionegro, Abarca los municipios de: Abejorral, Alejandría, Argelia, El Carmen de Viboral, Concepción, Guatapé, Guarne, La Ceja, La Unión, El Peñol, El Retiro, Marinilla, Nariño, San Vicente, Rionegro y Sonsón.

 CENTRO ZONAL N° 17 ORIENTE MEDIO  
Con sede en el Municipio de El Santuario. Abarca los municipios de: Cocorná, Granada, El Santuario, San Carlos, San Francisco, San Luis, San Rafael

**Annex 2 – Comparing Table of Water Standards required by Colombian law, Water standards published by the city sanitation company and standards recommended by the WHO.**

	Parámetros Norma colombiana (Resolución 2115 de 2007)	Parámetros publicados por la empresa de Servicios Públicos de Medellín.	Valores de referencia*	Parámetros recomendados por la OMS	Valores de referencia
Características físicas	Color aparente	Color	15 UPC		
	Olor		Aceptable		
	sabor		Aceptable		
	Turbiedad	turbiedad	2 UNT		
	pH	pH.	6,5 - 9,0		
		temperatura			
	Conductividad	Conductividad	1000 $\mu$ S/cm	Conductividad	250 $\mu$ S/cm
Características químicas	Alcalinidad total	Alcalinidad	200		
	cloro residual	cloro residual	0,3 y 2,0 mg/l		
	Cloruros	Cloruros	250 mg/l	Cloruro	250 mg/l
	Dureza total	Dureza total	300 mg/l		
	Manganeso	Manganeso	0,1 mg/l	manganeso	0,4 mg/l
	Aluminio	Aluminio	0,2 mg/l	Aluminio	0,1mg/l
	hierro total	hierro	0,3 mg/l		
	Sulfatos	Sulfatos	250 mg/l		
	nitritos,	nitritos	0,1 mg/l	nitritos	3 mg/l y 0,2 mg/l
	nitratos	nitratos	10 mg/l	nitratos	50 mg/l
	hidrocarburos aromáticos policíclicos (PAH)	PAH's	0,01 mg/l		
		Trihalomentanos:		Trihalometanos:	
		Bromodiclorometano		Bromodiclorometano	0,6 mg/l
		Bromoformo		Bromoformo	0,1 mg/l
		Clorodibromometano		Dibromoclorometano	0,1 mg/l
		Cloroformo		Cloroformo	0,3 mg/l
	Trihalometanos totales	THM totales.	0,2 mg/l		
cianuro libre disociable		0,05 mg/l			
cobre		1 mg/l	cobre	2 mg/l	
cromo total		0,05 mg/l	Cromo total	0,05 mg/l	

	mercurio	0,001 mg/l	mercurio	0,006 mg/l **
	níquel	0,02 mg/l	níquel	0,07 mg/l
	plomo	0,01 mg/l	plomo	0,01 mg/l
	selenio	0,01 mg/l	selenio	0,01 mg/l
	antimonio	0,02 mg/l	antimonio	0,02 mg/l
	bario	0,7 mg/l	bario	0,07 mg/l
	cadmio	0,003mg/l	cadmio	0,03 mg/l
	carbono orgánico total	5 mg/l		
	fluoruros	1mg/l	fluoruro	1,5 mg/l
	calcio	60mg/l		
	magnesio	36mg/l		
	molibdenos	0,07mg/l	molibdeno	0,07 mg/l
	zinc	3mg/l		
	fosfatos	0,5mg/l		
	arsénico	0,01 mg/l	arsénico	0,01 mg/l
Otros considerados por la OMS			Boro	0,05 mg/l
			cianuro	0,07 mg/l
			Benceno	0,01 mg/l
			Tetracloruro de carbono	0,004 mg/l
			Di(2-etilhexil)ftalato	0,008 mg/l
			1,2-Diclorobenceno	1 mg/l
			1,4-Diclorobenceno	0,3 mg/l
			1,2-Dicloroetano	0,030 mg/l
			1,1-Dicloroetano	0,03 mg/l.
			1,2-Dicloroetano	0,05 mg/l
			Diclorometano	0,02 mg/l
			1,4-Dioxano	0,05 mg/l
			Ácido edético (EDTA)	0,6 mg/l
			Etilbenceno	0,3 mg/l
			Hexaclorobutadieno	0,6 µg/l
		Ácido nitrotriacético (ANT)	0,2 mg/l	

			Pentaclorofenol	0,009 mg/l
			Estireno	0,02 mg/l
			Tetracloroeteno	0,04 mg/l
			Tolueno	0,7 mg/l
			Tricloroeteno	0,02 mg/l
			Xilenos	0,5 mg/l
			Sustancias orgánicas de actividades agropecuarias:	
			Alacloro	0,02 mg/l
			Aldicarb	0,01 mg/l
			Aldrín y Dieldrín	0,03 µg/l
			Atrazina	0,002 mg/l
			Carbofurán	0,007 mg/l
			Clordano,	0,2 µg/l)
			Clorotolurón	0,03 mg/l
			Cianazina	0,6 µg/l)
			2,4-D	0,03 mg/l
			2,4-DB	0,09 mg/l
			1,2-Dibromo-3-cloropropano	0,001 mg/l
			1,2-Dibromoetano	0,4 µg/l)
			1,2-Dicloropropano	0,04 mg/l
			1,3-Dicloropropeno	0,02 mg/l
			Diclorprop (2,4-DP)	0,1 mg/l
			Dimetoato	0,006 mg/l
			Endrín	0,0006 mg/l (0,6 µg/l)
			Fenoprop	0,009 mg/l
			Isoproturón	0,009 mg/l
			Lindano	0,002 mg/l
			MCPA	0,002 mg/l
			Mecoprop	0,01 mg/l
			Metoxicloro	0,02 mg/l
			Metolacloro	0,01 mg/l
			Molinato	0,006 mg/l

			Pendimetalina	0,02 mg/l
			Simazina	0,002 mg/l
			2,4,5-T	0,009 mg/l
			Terbutilazina (TBA)	0,007 mg/l
			Trifluralina	0,02 mg/l
			Desinfectantes :	0,01 mg/l
			monocloramina	3 mg/l
			cloro	5 mg/l
			Subproductos de la desinfección:	
			Bromato	0,01 mg/l
			Hidrato de cloral (tricloroacetaldehído),	0,01 mg/l
			Clorato	0,7 mg/l
			Clorito	0,7 mg/l
			Cloruro de cianógeno	0,07 mg/l
			Dibromoacetato nitrilo	0,02 mg/l
			Dicloroacetato	0,02 mg/l
			Dicloroacetato nitrilo	0,02 mg/l
			Formaldehído	0,9 mg/l
			Monocloroacetato	0,02 mg/l
			Tricloroacetato	0,02 mg/l
			2,4,6-Triclorofenol	0,2 mg/l
			Contaminantes orgánicos procedentes de sustancias químicas utilizadas en la desinfección:	
			Acrilamida	0,5 µg/l
			Epilclorhidrina	0,0004 mg/l (0,4 µg/l)

			Contaminantes orgánicos procedentes de tuberías y accesorios: Benzo[a]pireno	
			Cloruro de vinilo	0,0003 mg/l (0,3 µg/l)
			Amoniaco	35 mg/l
			Bentazona	300 µg/l
			Clorofenoles (2-clorofenol, 2,4-diclorofenol, 2,4,6-triclorofenol)	0,2 mg/l
Características microbiológicas	Escherichia coli, coliformes totales, giardia y cryptosporidium.	Coliformes totales, Cryptosporidium sp, Escherichia coli, Giardia sp.	Bacterias: Burkholderia pseudomallei, Campylobacter jejuni, C. coli, <b>Escherichia coli patógena, E. coli enterohemorrágica</b> , Legionella spp., Micobacterias no tuberculosas, Pseudomonas aeruginosae, Salmonella typhi, Otras salmonelas, Shigella spp., Vibrio cholerae, Yersinia enterocolitica.	
			Virus: Adenovirus, Enterovirus, Virus de la hepatitis A, Virus de la hepatitis E, Norovirus y sapovirus, Rotavirus	

			Protozoos: Acanthamoeba spp., Cryptosporidium parvum, Cyclospora cayetanensis, Entamoeba histolytica, Giardia intestinalis, Naegleria fowleri, Toxoplasma gondii.	
			Helmintos: Dracunculus medinensis, Schistosoma spp.	
Radiológicos			Serie de desintegración natural del uranio: Uranio-238, Uranio-234, Torio-230, Radio-226, Plomo-210, Polonio-210.	
			Serie de desintegración natural del torio: Torio-232, Radio-228, Torio-228.	
			Productos de fisión: Cesio-134, Cesio-137, Estroncio-90, Yodo-131.	
			Otros radionúclidos: Tritio, Carbono-14, Plutonio-239, Americio-241.	

\* En la Resolución 2115 de 2008 este valor de referencia se estipula como valor máximo aceptable.

\*\* para el mercurio inorgánico.

Vinculos a las Guías de agua potable de la OMS.

<http://www.lenntech.es/tabla-comparativa-estandares-oms-ue.htm>

[http://www.who.int/water\\_sanitation\\_health/dwq/gdwq3rev/es/](http://www.who.int/water_sanitation_health/dwq/gdwq3rev/es/)

[http://www.who.int/water\\_sanitation\\_health/dwq/gdwq3\\_es\\_full\\_lowres.pdf?ua=1](http://www.who.int/water_sanitation_health/dwq/gdwq3_es_full_lowres.pdf?ua=1)

[http://www.who.int/water\\_sanitation\\_health/dwq/gdwq3\\_es\\_9\\_fig.pdf?ua=1](http://www.who.int/water_sanitation_health/dwq/gdwq3_es_9_fig.pdf?ua=1)

[http://www.who.int/water\\_sanitation\\_health/dwq/gdwq3\\_es\\_11.pdf?ua=1](http://www.who.int/water_sanitation_health/dwq/gdwq3_es_11.pdf?ua=1)

### Annex 3 – Research about electromagnetic radiation effects on health

En los últimos 30 años se ha investigado la contaminación electromagnética como causa de afectación a la salud. En las investigaciones desarrolladas no se han producido resultados que permitan identificar un proceso causa-efecto dado la naturaleza misma de la fuente contaminante, sin embargo, cada vez más se llega a un consenso sobre una posible relación, directa o indirecta según niveles de exposición.

Al respecto Tchernitchin AN, Riveros N. (2004). Efectos de la Radiación Electromagnética sobre la salud. Cuad Med. Soc (Chile). Disponible en: [http://www.colegiomedico.cl/Portals/0/files/biblioteca/publicaciones/cuadernos/44\\_4.pdf](http://www.colegiomedico.cl/Portals/0/files/biblioteca/publicaciones/cuadernos/44_4.pdf) (pág. 230) concluyen que:

... existen también trabajos epidemiológicos que no han demostrado ningún efecto adverso de las radiaciones electromagnéticas sobre la salud. Esta controversia se puede explicar por el número bajo de casos en los estudios con resultados negativos, o por la alta variabilidad en la población bajo estudio. La capacidad estadística para discriminar entre dos variables diferentes entre sí es directamente proporcional al número  $n$  de casos en cada una de las variables e inversamente proporcional a la variabilidad dentro de las poblaciones bajo estudio. Además, el desarrollo del cáncer por exposición a radiaciones electromagnéticas es un efecto diferido, es decir, se desarrolla después de un período de latencia que puede ser bastante largo.

Son entonces las dificultades estadísticas de una población variable, junto con la aparición de un fenómeno de forma longitudinal las que dificultan su asociación. Sin embargo, hemos encontrado investigaciones donde se han podido relacionar dichas variables, entre estas, la investigación realizada por Tchernitchin, Riveros (2004, pág. 229-230) donde se encontró que:

...Existen evidencias científicamente comprobadas que por un lado la exposición a campos electromagnéticos de frecuencia extremadamente baja (50 o 60 Hz), tales como los producidos por la corriente eléctrica domiciliar y los producidos por tendidos y transformadores de alta tensión, y por otro lado las radiaciones electromagnéticas de radiofrecuencias o de frecuencias de microondas, todas ellas constituyen un factor de riesgo para la salud humana. En especial, aumentan el riesgo para el desarrollo de diversos tipos de cáncer. Estos efectos son causados por intensidades menores que aquellas que causan efectos térmicos, en relación a la cual existe legislación.

Dichos autores también encontraron que:

... la exposición a radiación electromagnética, tanto ELF como de radiofrecuencia, aumenta el riesgo para desarrollar diversos tipos de tumores: leucemias y linfomas, cáncer de mama masculino y femenino, tumores cerebrales, cáncer de testículo, endometrio y colon, entre otros. La certeza de esta afirmación es variable de acuerdo al tipo de tumor y órgano del que se origina. Por ejemplo, se le ha asignado alta certeza (certeza mayor de un 50%) para la asociación de estas radiaciones con leucemia en niños y cáncer cerebral en adultos, mediana o baja certeza (entre un 10 y un 50%) para cáncer de mama masculino y para cáncer cerebral en niños, y muy baja o nula certeza para la clasificación de la radiación electromagnética como un carcinógeno universal (todos los cánceres) (certeza menor de un 10%). (Tchernitchin & Riveros, 2004: 226).



En esta investigación se recopilaron hallazgos de otras investigaciones acá citadas donde encontramos que existen probabilidades por asociación causa efecto entre la contaminación electromagnética no ionizante de baja intensidad y alteraciones a la salud<sup>67</sup>.

En investigaciones recopiladas por el Colectivo “Antenas No” de Vizcaya, se encontró que la población adulto mayor es más propensa a sufrir afectaciones por causas electromagnéticas (Santini, 2003):

- Friedman (2007) demostró que la radiación electromagnética producto de los celulares induce en la transcripción y otros procesos celulares como la activación de la cascada ERK.
- Obelenis (2007) encontró que la frecuencia electromagnética incide en el sistema cardiovascular y el sistema nervioso central produciendo lesiones neurohumorales.
- Abdel-Rassoul (2007) hallaron que las personas que habitan cerca de estaciones u antenas de transmisión de telefonía celular están más propensas a desarrollar problemas neuropsiquiátricos, cambios en el desempeño funcional y cambios en los procesos neuroconductuales, ya sea por realización o inhibición.
- Wiholm (2007) existen afectaciones cognitivas relacionadas con el electromagnetismo asociado a teléfonos celulares.
- Hung (2007) identificó alteraciones en el sueño frente a emisiones de 2, 8 y 217 Hz.
- Meral (2007) campos electromagnéticos emitidos por teléfonos celulares producen estrés oxidativo en tejido cerebral en estudios realizados en conejillos de indias.
- De Salles (2006) sugiere aplicar el principio de precaución y procurar la mínima exposición humana a campos electromagnéticos.
- Eger, H. et al (2004) por medio de estudio NAILA, establece un incremento de cáncer del 3,29 veces más en radios de 400 mts alrededor de antenas de telefonía móvil y en distancias de 350 mts una cifra de 4,15 veces mayor según Wolf, R. et Wolf, D (2004).
- Bonhomme-Faivrel (2003) identificó que la exposición de 0,2 a 6,6 microT incide en la disminución de parámetros inmunológicos.
- Roux, D. (2007) encontró una participación del metabolismo del calcio como respuesta a la exposición a campos electromagnéticos.
- Hillert, L. (2008) detectó mayor propensión a cefaleas después de exposiciones a radiofrecuencias.
- Wolf, M. (2006) encontró descensos significativos en el flujo sanguíneo cerebral y en el volumen sanguíneo cerebral dentro de los 20 segundos de exposición inicial expuesta en el hemisferio cerebral.
- Sadetzki (2008) encontró asociación entre el uso de celulares y la aparición de tumores benignos de glándula parótida.

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<sup>67</sup>Leucemia en adultos: probabilidad entre 10% y 50%. Davis G, Johnson G, Bontá DM (2001), Kheifets LI, Afifi AA, Buffler PA, Zhang ZW, Matkin CC (1997). Leucemia infantil: probabilidad del 50%. Davis G, Johnson G, Bontá DM (2001), Wartenberg D. (2001). Cáncer cerebral infantil: probabilidad entre 10% y 50%. Davis G, Johnson G, Bontá DM (2001), Kheifets LI, Afifi AA, Buffler PA, Zhang ZW (1995). Cáncer de mama femenino: probabilidad entre 10% y 90% y cáncer de mama masculino: probabilidad entre 10% y 50% Davis G, Johnson G, Bontá DM (2001). Aborto espontáneo: probabilidad de 40%. Lee GM, Neutra RR, Hristova L, Yost M, Hiatt RA (2000) y (2002), Li DK, Odouli R, Wi S, Janevic T, Golditch I, Bracken TD, Senior R, Rankin R, Iriye R. (2002). Efectos neuroconductuales: alteraciones al sistema nervioso central de diversos tipos según niveles de exposición a campos eléctricos con probabilidad de un 95%. Thomas JR, Burch LS, Yeandle (1979), Lai H, Horita A, Guy AW (1994), Lai, H (1996), Rojavin MA, Cowan A, Radzievsky A, Ziskin MC. (1998), Kelsh MS Jr. (1997), van Wijngaarden E, Savitz DA, Kleckner RC, Cai J, Loomis D. (2000). Esclerosis lateral amiotrofica: probabilidad de un 95%. Savitz DA, Loomis DP, Tse CK. (1998), Johansen C, Olsen JH. (1998), Ahlbom A. (2001). Enfermedades cardiovasculares: 95%. Tsuji H, Larson MG, Venditti FJ Jr, Manders ES, Evans JC, Feldman CL, Levy D. (1996), Silva H, Tchernitchin AN, Tchernitchin NN. (1997), Sastre A, Cook MR, Graham C. (1998), Savitz DA, Liao D, Sastre A, Kleckner RC, Kavet R. (1999). Enfermedad de Alzheimer: probabilidad de un 95%. Sobel E, Davanipour Z, Sulkava R, Erkinjuntti T, Wikstrom J, Henderson VW, Buckwalter G, Bowman JD, Lee PJ. (1995).