Report for the Third Cycle of the Universal Periodic Review of Venezuela, during the 40th Period of Sessions of the Human Rights Council
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FUNDACIÓN
MOVIMIENTO POR LA CALIDAD DEL AGUA

REPORT

SUSTAINED VIOLATION OF THE CITIZEN RIGHT TO ACCESS TO SAFE AND DRINKING WATER IN THE CENTRAL REGIONAL AQUEDUCT – VENEZUELA

The MOVIMIENTO POR LA QUALIDAD DEL AGUA Foundation is a non-profit NGO, dedicated since 2010 to manage before all instances of the national, regional and municipal powers as well as civil society organizations (CSOs), the risks to public health derived from the undrinkable condition of the water distributed by the public company CA HIDROCENTRO to a population estimated at more than 4 million people in the states of Carabobo and Aragua in the central zone of the country, emphasizing the harmful effects on health due to the presence of biochemical contamination given the total deterioration of the Pao Cachinche reservoirs and Pao La Balsa, main sources of water supply of the Central Regional Aqueduct System in its Stages I and II (SARC I and II).

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Introduction

1. The Movement for Water Quality Foundation submits this report to the Third Cycle of the Universal Periodic Exam of Venezuela as an SOS or signal of help given that the Ministry of Popular Power for Ecosocialism (MINEC) through the public company AC HIDROCENTRO operator of the Regional Aqueduct System of the Center in its Stages I and II (SARC I and II), despite having participated in the UPRs of 2012 and 2016, they have not produced any official change in attitude to solve the environmental health chaos and hydraulic that prevails in the Basin of the Lake of Valencia and Rio Pao. For more than 24 years, an estimated population of more than 4,000,000 people has been subjected to not having access to safe drinking water and environmental sanitation, as well as the individual and collective right to a good standard of living and a safe, healthy and ecologically balanced environment. Additionally, the sewage from the Naguanagua, Valencia and Libertador municipalities returns to the reservoir system that is the primary source of water for SARC I and II, which is why we are in the presence of a closed permanent wastewater recirculation circuit estimated at 4,600 L / sec. This circuit of recirculation of contaminated water is made up of: The Pao Cachinche Reservoir - The "Alejo Zuloaga" Water Treatment Plant - The water distribution network of the three municipal aqueducts - The sewage network and return to the Pao Cachinche reservoir via Rio Paíto. It is for this reason that we raise this SOS because the violation of the human right of access to drinking water and to a healthy and balanced environment has been committed for more than 24 years the violation of the human right of access to drinking water and to a healthy and balanced environment.

The water of the Regional Aqueduct System of the Center, a threat to public health.

2.- For administrative purposes, HIDROCENTRO manages the neighboring hydrographic basins of Lake Valencia and Rio Pao globally, since the latter basin contributes more than 90% of the water distributed by SARC I and II. The hydrological cycle in these two hydrographic basins has been severely altered by the lack of political will in making decisions to resolve the aforementioned hydraulic-sanitary chaos. Therefore, it is not possible to meet Sustainable Development Goals No. 6.

3.- Under this environmental sanitary chaos generated by official disinterest, the population supplied by the water supplied by SARC I and II is being subjected to permanent risk of contracting various diseases due to the prolonged time of exposure to microbiological agents, chemical agents and Biochemical agents that cause a wide spectrum of diseases in the digestive, nervous, lymphatic, urinary, muscular systems and in the organs of sight and skin that can only be uncovered using the tools of epidemiology that do not exist in practice in Venezuela. current.

4.- The water treatment plants of SARC I and II "Alejo Zuloaga" and "Lucio Baldó Soules" do not have the technology installed capable of removing from the water all the risk factors mentioned in point 3, especially the risk factors due to Toxic biochemical substances contributed to the water by algae of the cyanobacteria species, which is the dominant species in the Pao Cachinche and Pao La Balsa reservoirs. As a consequence of

profound failures of SARC I and II, users receive water with high concentrations of aluminum, cyanotoxins (neurotoxic, hepatoxins, dermotoxins and cytotoxins) and

trihalomethanes in their homes. The population served by this aqueduct system has been at risk for 24 years of contracting water-borne diseases such as cancer of the bladder, colon, rectum and liver, heart, respiratory and muscular system problems.

5.- The Pao-Cachinche reservoir was classified as hypereutrophic, according to the criteria of Salas and Martinó (1991), as mentioned in the limnological characterization study carried out by Ernesto J. González and other researchers from the Central University of Venezuela (UCV) for 17 months, between September 1997 and February 1999, which resulted, among others, in the following:

6.- The dense populations of algae and the dominance of cyanobacteria, in addition to having profound effects on the plankton community (Infante and Riehl, 1984; Infante, 1988), are frequently associated with undesirable conditions in water quality (Laws , 1993).

7.- Excess phytoplankton reduces the value of the body of water as a source of water supply to the population.

8- The excess of phytoplankton favors the blocking of the filtration systems used in the drinking water supply and confer bad odors and flavors to the water (Harper, 1992; Yagi et al., 2002). This problem is aggravated if it is taken into account that some cyanobacteria can release neurotoxins and hepatotoxins into the water (Prosperi, 2000). Apart from these powerful toxins, cyanobacteria can also release cytotoxins and dermotoxins. None of these toxins can be removed from the water at the Alejo Zuloaga and Lucio Baldó Soules water treatment plants, as they do not have the necessary technology for these purposes, which is why they pass to the SARC I and II distribution system.

9- They identified in the Pao-Cachinche reservoir potentially toxic cyanobacteria such as: Microcystis aeruginosa Anabaena spp, Aphanocapsa, Cylindrospermopsis raciborskii, Gomphosphaeria aponina, Oscillatoria limosa, Synechococcus aquatilis bigranultus and Synechocystis aquatilis bigranultus.

10.- In March 2012 the “Network of Venezuelan Medical Scientific Societies” published in its Epidemiological News N ° 36, under the title “Risk due to cyanobacteria in water for human consumption”, the following:

11.- The occurrence of cyanobacterial blooms and their by-products in the Pao Cachinche and Pao La Balsa reservoirs directly interferes with the quality of the water, introducing negative effects on public health, due to the production of potentially toxic and carcinogenic compounds. Under certain environmental conditions of temperature and nutrients, particularly phosphorus and nitrogen, in summer the cyanobacteria can develop in large masses called blooms and more than 50% of these generate toxicity (Sevomen & James, 1999), and may contain powerful toxins , the most common being neurotoxins and hepatotoxins (Codd, 1995). Phosphorus has been associated with an important role both in

the development of the cyanobacterial population, as well as in toxins, as has been shown in work carried out in Anabaena with hepatotoxins (Rapala et al., 1997). Likewise, it has been established that high levels of nitrogen and phosphorus favor the growth of toxic

Microcystis strains over non-toxic ones (Vezie et al., 2002) apart from organoleptic effects, due to the production of color, odor and bad taste. It is important to point out that the lack of decision-making in sanitary sanitation of the rivers that flow into the Pao Cachinche and Pao La Balsa reservoirs means that every day greater amounts of phosphorus and nitrogen are concentrated, which are precursor elements of blooms. above. This situation caused by the abundance of phosphorus and nitrogen and its relationship with cyanobacteria in the reservoirs of SARC I and II were already mentioned in our 2012 and 2016 reports.

12.- The role of Microcystins as promoters of hepatomas (liver cancer) has been confirmed (Moreno I, Repetto G, Cameán A, 2003; Andrinolo D, 2006), and mutagenic capacity, embryonic death, malformations). In humans, a relationship has been found between chronic water consumption exposure to microcystins in the first trimester of pregnancy and an increase in congenital defects. (Moreno I, Repetto G, Cameán A, 2003).

13.- In 1998, the World Health Organization (WHO) established the maximum acceptable level for daily consumption of Microcystin LR at 1 µg / l (Ramírez García P, Martínez Romero E, Martínez Salgado MD, Eslava Campos, 2004; Burch MD, 2007) and this value is also the maximum acceptable concentration to prevent tumor induction (Roset J. Aguayo S, Muñoz MJ, 2001). Some authors propose a value of 0.01 µg / l in cases of chronic exposure, due to the possible correlation between primary liver cancer and the presence of Microcystins in water (Infante A, Riehl W (1984).

Recommendations:

14. In the reports sent to the two previous cycles of the Universal Periodic Review of Venezuela, our foundation Movement for Water Quality pointed out the great deterioration in human rights of access to water and sanitation, however, no recommendation from the The examining States considered the negative consequences of not reestablishing these rights, currently resulting in the serious structural health-hydraulic-environmental deterioration that puts the right to life at risk. We consider it vitally important that the following recommendations be taken into account in the 3rd cycle:

A) The sanitary-environmental sanitation in all the reservoirs of the country of the channels and bodies of water that feed reservoirs used as a source of water supply to the population.

B) The urgency of sanitary-environmental sanitation of all the rivers and water courses that feed the Pao Cachinche and Pao La Balsa reservoirs in order to eliminate the hydrological-sewage-urban cycle that keeps the SARC reservoirs contaminated. For this, the Movement for Water Quality Foundation has already prepared a solution proposal that was presented to the National Academy of Engineering and Habitat in 2020.

C) Plan and execute a campaign to characterize the water supplied by SARC I and II in order to quantify the concentration of the toxic chemical and biochemical elements

mentioned in this report, such as aluminum, trihalomethanes and the most common neurotoxins such as anatoxins, saxitoxins and hepatotoxins such as Microcystin LR. and Microcystin LA.

D) Implement a massive screening program for the diseases mentioned in this report.

E) Decentralize competition for water and sanitation to regional entities.

F) To implement the environmental agreements ratified by Venezuela, especially to fulfillment of the objective No. 6 of the millennium in the matter of Water and Sanitation.

G) Reestablish the institutional framework, the separation of powers and the rule of law in the country.

H) Review and implement the environmental legal regulations regarding the quality levels that the liquid waste effluents that discharge to tributaries of reservoirs used to supply water to the population must meet, starting with those tributaries to SARC I and II.

Movement for Water Quality Foundation