

English version

THE OPENING OF THE AIFA GENERATES A QUESTION AMONG RESIDENTS: WHERE WILL THEY GET DRINKABLE WATER?

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View of the Felipe Ángeles International Airport - AIFA - State of Mexico / Photo Cuartoscuro, March 2022.

The federal government seeks to solve the water demand for the Felipe Angeles International Airport and the surrounding real estate development with an aqueduct that conducts the water from the Tula refinery, located in the heart of the Valley of Mezquital, a region with aquifer contamination due to the industrial corridor and the black waters of the Valley of Mexico.

By Edwing Solano and Aidé Cervantes Pineda*, photographer Miguel Mendoza / Limits between Hidalgo and State of Mexico, June 12, 2022.

Dressed in overalls and a cap, he waits on a masseter that he uses as a seat. He speaks very confidently, he greets people as he chats with us. Leonardo is a farmer and works seasonally in the factories of the industrial corridor of Atitalaquia, in the state of Hidalgo. He no longer drinks tap water, he prefers to buy bottled water; he believes that there is nothing more

dangerous than drinking tap water. "Your belly can burn, give you stomach pain or diarrhea," he tells us.

In the morning there is a smell similar to burnt beans. It is not a secret, the residents know that the companies discharge liquid waste in the drainage or in the ditches destined to irrigate the field. Approximately fifteen industrial plants operate in the area that use acids to clean their pipe system. "There is a pond with chemical waste, the workers say it is a treatment plant, but that fat has already been transferred to the drinkable water wells. The industry poisoned our water. What we harvest is not good for eating. I was born here, as a child I drank water from wells that had little worms, but nothing ever happened to me. Now not even worms can live in that water!", laughs Leonardo.

What we are telling seems like an apocalyptic story with desert soils and factories that pollute, but it is not. It is the reality of Leonardo and thousands of people who live in the center of the Valley of Mezquital. Chemical waste and liquid waste arriving from Mexico City are polluting the ecosystem environment in this region. Now, what does the polluted water from the Valley of Mezquital have to do with the Airport Felipe Angeles in Santa Lucía?

For construction of the new Felipe Ángeles International Airport the people do not know the origin and quality of the water that its operation will require, this has caused concern in the population of the north of the Cuenca de Mexico (Valley of Mexico Basin). Although the fact is relevant due to the international climate emergency, it is the inhabitants of this region who have organized themselves to defend their water threatened by rapid urbanization, they believe that this will consume a large amount of water. For its part, the federal government seeks to solve the demand for water resources through the channeling of aquifers, which is why it has planned the construction of an aqueduct that will carry water from the Tula refinery, located in the heart of the Mezquital. However, there is already a serious problem of water scarcity in both aquifers. "Where are they going to bring the water from?" the defenders ask themselves.

THE DRAMA OF THE MEZQUITAL: They want to bring contaminated water from another land.

Although the amount can vary, every second the Mezquital receives approximately sixty cubic meters of sewage, which is 5,184,000,000 liters per day, equivalent to filling a giant soccer stadium almost three times. The residual waters are mostly of domestic and industrial origin; they contain oils, feces and corpses. They reach the river and with them the fields are irrigated without receiving adequate treatment. The consumption of contaminants in vegetables has caused farmers, children and women to become ill; also the flora and fauna. Scientists say that wastewater has altered the composition of the soil, causing the land to present problems of salinity and alkalinity. Added to this, the water that filters is contaminated the aquifers.

"The water is not only contaminated by the canal, but also by the chemicals from the factories and the incineration of cement plants," explains Isabel Reyes, president of the Union of Ecologists of San Gerónimo Tlmaco. She relates that when the agrochemical factories arrived they had no drainage, there used "jagüeyes" (huge pits) and filled them with dirty water. These companies, she says, "signed an agreement that requires them to treat their wastewater; said agreement has not been fulfilled. Their waste goes to the Rio Salado".



The cement plants generate dust, clouds that make shadows. Unfortunately since they burn a lot of trash, residuals of paint, they produce dioxins that can cause cancer. Doña Isabel and Sebastián, Tlamaco, Hidalgo. Miguel Mendoza, photograph, 2021.

In areas of the Valley of Mezquital such as Atitalaquia, Tula and Apaxco, five cement plants and three limestone plants operate. The processes for the production of cement pollute the air and the subsoil. Residents comment that there are more places where cement is produced and limestone (rock) is extracted irregularly. Eber Martínez who is a geoinformatician invented a software with maps to know the relationship between deaths and cancer in communities near cement factories, he called it Web Viewer. He found that in a period of ten years, a total of five thousand nine hundred and seventeen deaths and six thousand one hundred and ninety-six cancers were registered in the inhabitants near the cement factories. In addition to the above, on April 7, 2013, in the municipality of Atitalaquia, the agrochemical company ATC exploded, generating a toxic cloud and causing the appearance of various ills, including cancer, respiratory and gastrointestinal diseases. Another company, a biological waste company, caught fire. In both cases there was no culprit. “We do not have the scientific data to be able to verify and demand sanctions from the companies that have affected the municipality; however, you can feel the contamination,” says Delia Rodríguez, a resident of Atotonilco and director of a special school. She thinks that as a result of this

contamination, the rate of people with disabilities has increased. How not to be upset, she says, if businessmen are becoming millionaires at the expense of our health.

A broader study published by the National Water Commission in 2012 indicates that in this region there are wells and springs where the concentrations of sodium, arsenic, nitrates and sulfates in groundwater exceed the maximum permissible limits established in the official Mexican standard. Conagua has identified at least ten wells with radioactivity; some are for potable use and have not been officially declared contaminated.

In this way, a problem that gives off several other issues. On the other hand, government logistics that ignore civil demands, mainly interested in industrial and economic development; on the other hand, the problem of water scarcity, added to the null regulation that allows the industry to contaminate wells and subsoil.



On April 7, 2013, in the municipality of Atitalaquia, the agrochemical company ATC exploded, generating a toxic cloud and causing the appearance of various ills, including cancer, respiratory and gastrointestinal diseases. Miguel Mendoza, photograph 2021.

Get more water for the airport, from where if there is no more?

Every three years they change administration, now he was chosen. Jorge Ángeles takes care that the community well in his town does not stop providing water. Santa María Cuevas is north of the State of Mexico, not long ago people learned that they are not standing in the Cuenca de Mexico, but are on the neighboring Cuenca (basin) and take water from the aquifer of the Valley of Mezquital.

Jorge's situation changed "We found out when the military presented the 'Environmental Impact Statement of the International Airport in Santa Lucia', in Zumpango. We came to this event because it seemed illogical to us that they would build an airport on an aquifer that is overexploited. We are not going to take water away from anyone, they said, we are going to take water from the wells that are in Santa Lucía"; shortly after, the military changed their minds and assured to bring water from Tula, although this added water, would not only be for the airport, but for the industrial and housing development that the government projects in the region.

Like Jorge, don Arturo Hernández said NO to the Texcoco airport and NO to Santa Lucía. He knows that both territories are part of the same basin. Beneath there are no borders. If you extract water from a well, you will surely affect nearby communities, because they all share the same aquifer. Arturo Hernández is a member of the organization "The twelve original peoples of Tecamac". He believes that the airport will generate a migration of more than five hundred thousand inhabitants.

The Cuautitlán-Pachuca aquifer is a large tub that starts from the mountains of Cuautitlán Izcalli. It is made up of bodies of water found in the subsoil. Today the surface water is depleted and extracting it requires ever deeper excavations. This aquifer supplies Mexico City and its outskirts through a system of wells and aqueducts. The National Water Commission indicates that it has a deficit of one hundred and six million cubic meters of water per year, which is equivalent to filling twenty-nine thousand ten-thousand-liter tankers every day. Water that is not recovered.

Faced with this problem, an urbanization project such as the international airport will aggravate the shortage emergency. Taking water from one place to another place is called basin transfer, and it is what the federal government intends to do due to the overexploitation of aquifers in the Cuenca de Mexico (Valley of Mexico basin).

Water quality analysis, a tool for the defense of water

Since the announcement of the construction of the airport, Don Arturo, Jorge Ángeles and other inhabitants of the towns affected by the extraction of water have organized to collect water samples in towns in the south of the Valley of Mezquital. The objective? Know the quality of water in the communities. This group of people, made up of peasants, educators, anthropologists, historians, philosophers and women human rights defenders want to show that bringing water from the Mezquital aquifer to the airport is not an option and they demand that the damage caused to their environment be repaired.

Today they know that the government has a plan B. If it does not extract water from the heart of the Mezquital, it will do so from a micro-basin that is between the municipalities of Cuevas, Tequixquiac, Hueypoxtla and Apaxco. There, the company SIIMA (Engineering and Research Services of the Environment) plans to drill wells seven hundred meters deep. Don Arturo summarizes the situation in red alert, "extracting seven hundred and forty-five liters per second would generate a much greater problem, because it will reduce the aquifer level and cause contaminated water to travel from Tula to the wells of the surrounding communities." There is a risk of sickening the basin with contaminated water from other place, the center of the Mezquital.



The military's plan was 50 years of extraction, make 9 well's in the land that we share between Santa Maria Cuevas, Municipality Of Zumpango and Tlapanaloya, Municipality of Hueypoxtla. The local government has remained silent, we were not notified of the well's abuse. Jorge Ángeles, Hueypoxtla, State of Mexico, Miguel Mendoza, photograph 2021.

“For months my colleagues and I have collected water samples from wells and springs in the center and south of the Valle de Mezquital. We want to know the level of contamination that the waste industry is generating”.

They started this investigation because neither the 'Airport's Environmental Impact Statement' nor the 'Operational Territorial Program' (Documents approved by the government) have data that proves that the waters that will be channeled are suitable for consumption. This group has already collected the sample in fourteen water sources in the south of the Valley of Mezquital. Ten more sources remain to be studied.

Today the results show that the water from Santa Maria Cuevas, Loma Larga, Zapotlán and San Miguel, Tequixquiac is suitable for drinking, but in some wells in Tlamaco and Atitalaquia, which are close to Tula, the water is not of optimal quality, due to the altered indices of salts, hardness and alkalinity.

The water analysis was carried out in the Laboratory of Analysis and Research in Agricultural and Environmental Chemistry, of the National Autonomous University of Mexico.

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