

## **ENVIRONMENTAL GEOINDICATORS**

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The Regional System of Potable Water Supply for the industrial city of Monterrey and the metropolitan area is made up of surface and ground water sources. The surface sources are the reservoirs El Cuchillo, La Boca and Cerro Prieto; the ground sources are Pozos de Mina, Cañon La Huasteca (Buenos Aires aquifer), Socavones Cola de Caballo and San Francisco, and the Monterrey Well Camp. This research describes the geoindicators of environmental impact in the surface and ground water sources. The surface sources are contaminated by industrial waste (heavy metals), city contamination (oxidation lagoons), household contamination (garbage disposals), seepage, slope instability. The ground sources (fracture aquifers and karstics) are contaminated by city waste dumps (San Bernabe), confinement of dangerous waste (Mina), industrial waste deposited on river beds and capture basins (Cañon La Huasteca), hydrocarbon spills from gas stations (Monterrey Aquifer), as well as all types of industrial waste clandestinely poured into the city sewage system. As a result of this investigation countless indicators of environmental impact were identified in the water supply sources that directly impact the supply of potable water, reducing the amount of water supply and adding to the water deficit that the great industrial city of Monterrey has with the more than four million inhabitants.