



Ocotlan grey water treatment plant



Water quality control



Community site visit



Community employment



Eco-friendly facility

SUSTAINABILITY CASE STUDY

COLLABORATING TO IMPROVE OUR ENVIRONMENT AND COMMUNITY

Modern mining is about collaboration, transparency, open communication and effective interaction with all stakeholders. The Ocotlan grey water treatment plant project serves as an excellent example of how corporate social responsibility, when integrated throughout an organization, can lead to long-term social, economic and environmental benefits for local communities.

OVERVIEW

When Fortuna started to plan construction of the San Jose mine in Oaxaca, Mexico, sourcing water for the 1,500 tonne per day underground operation presented a significant challenge. The mine is located in a semi-arid region that suffers from a long history of water scarcity.

THE CHALLENGE

The company recognized that sourcing water from traditional water wells, or the near-by Atoyac River, was not a sustainable option. In 2008 Fortuna identified a potential alternative water source, a grey water treatment plant in a poor state of repair, in the community of Ocotlan de Morelos, located 15 kilometers from the mine site. The plant had fallen into disrepair due to lack of investment and maintenance, causing serious environmental and public health problems in the community and surrounding areas.

The abandoned plant was inoperable and affected the daily lives of community members. The plant channeled raw sewage into the Atoyac River and polluted the local aquifer. In addition, farmers used the plant's overflow to irrigate crops, contaminating local produce and causing stomach infections in community residents. The rainy season exacerbated the problem flooding local roads with sewage, interrupting transit and polluting neighboring towns. School attendance was affected by the floods and sports teams were unable to practice year-round at the near-by athletics field. The plant emitted unbearable odors and excessive noise and served as the source for flies, rodents and disease-causing bacteria.

THE SOLUTION

In January 2010, Fortuna signed a 15-year renewable agreement with the Municipality of Ocotlan to refurbish and operate the sewage plant in exchange for residual grey water to use at the San Jose mine. Fortuna made the necessary investments to transform the plant into a modern facility and, in October 2010, the upgraded plant became fully operational.

The grey water treatment plant provides 20% of the water supply for the San Jose mine. The balance comes from rainwater collected at the tailings dam during the rainy season and from water recycled from the zero discharge operation.

THE BENEFITS

Community support for the San Jose mine has been enriched thanks to the significant environmental, health and social benefits generated by Fortuna's refurbishment of the grey water treatment plant. Today, the facility serves as a new source of employment, hosts community site visits and contributes to improving the surrounding landscape.

Sewage is fully contained and treated according to international standards and flooding has been eliminated. The plant no longer pollutes the environment and health hazards caused from sewage contamination no longer exist. The residents of Ocotlan can now use the athletic facility, attend school and enjoy public gardens surrounding the plant in an eco-friendly environment. The success of this joint project illustrates the positive impact companies can have when they engage in open dialogue with local communities. Fortuna works collaboratively with communities towards creating a sustainable, cleaner, healthier environment.



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