

Flouride Removal Technology Center Ribbon Cutting Ceremony Remarks by USAID Ethiopia Mission Director Dennis Weller April 14, 2016

Modjo, Oromia Region, Ethiopia

(as prepared for delivery)

Ladies and Gentlemen,

As we all know, water is a precious natural resource. Simply stated, water is life—and clean, safe water is absolutely essential for our health.

We know that drinking water naturally contains a variety of trace elements including calcium, zinc, sodium and fluoride. At the right levels, these elements are all beneficial for our bodies, but when there is too much of any of these elements in our water—there are adverse effects.

We're here today because, unfortunately, most ground water sources in the Ethiopian Rift Valley naturally contain excess concentrations of fluoride. Some fluoride in water is a good thing, helping to keep our teeth healthy, but too much fluoride, as is the case here, causes fluorosis.

According to various reports including the report from the Ethiopian National Fluorosis Mitigation Project Office, more than 14 million people are potentially exposed to excess fluoride from ground water sources. The fluorosis, which results, primarily affects our teeth and bones.

In additional to the physical problems this causes, like bad teeth, brittle bones and even skeletal deformation, flourosis can also have negative psychological and socio-economic impacts. Self-conscious children and adolescents are embarrassed by their teeth and reluctant to smile or struggle to make friends. Some children even go as far as to scrape their teeth with something abrasive in order to try to remove the discoloration. All of this can have a profound impact on the individual's personality.

Unfortunately, physical damage done by fluorosis cannot be reversed. The only way to mitigate fluorosis is to prevent the intake of excess fluoride. Hence, prevention strategies or fluorosis mitigation should focus on how to avoid exposure to excess fluoride from identified sources, such as water.

While there is no single solution to fully mitigate fluorosis, in support of Ethiopia's national fluorosis mitigation efforts, USAID provided a grant to the Oromo Self Help Organization, or OSHO, to implement a three-year Fluorosis Mitigation with Innovative Technologies activity. OSHO's approach includes using proven technology to create access to safe drinking water by filtering ground water through synthetic or bone char materials, which reduce fluoride concentration. OSHO is also educating the community and developing local capacity to manage the operations and finances of the fluoride filters in affected communities. OSHO's community managed fluoride filters provide safe water for communities and require only minimal support from OSHO and local woreda water offices.

The opening of this facility marks a major step in the introduction and potential scale up of innovative technologies which are both proven to work and feasible in Ethiopia. OSHO's plant is the first of its kind in Ethiopia to produce a high quality synthetic fluoride filter material in addition to the bone char.

Many people are forced to consume water with high fluoride content due to lack of other options. By locally producing a fluoride filter, OSHO is able to cost effectively treat water and reduce the level of fluoride contamination people consume. Through this USAID-funded project, OSHO has installed six community fluoride filters that serve approximately 10,000 people. By the end of 2016, 18,000 people in 12 communities in four woredas, who were once consuming water with more than five times the recommended levels of fluoride, will have access to better and safer water.

I would like to congratulate all partners and individuals involved in the successful expansion of OSHO's bone char production facility and the establishment of this production plant.

Safe water is vital for human health and well-being. USAID urges others in government and civil society to continue support for projects like OSHO's.

Thank You!