Smelter skelter

Residents of Peruvian mountain town live and breathe in a cloud of poisons

by Alexa Smith

LA ORROYA, Peru — Sitting alone at a table in her empty café, Rosa Amora worries.

The cook has the day off. The only background noise is the scratching of a fat, new puppy stowed in a side room. He is clawing at the door that separates the restaurant from the house.

The unpainted plank walls are hung with placards — for Cristal beer, Peruvian-brewed, and Inca Cola, a drink that looks like Mountain Dew, tastes like bubble gum and is said to pack twice the caffeine of a Coca-Cola. Amora's eatery is on the ground floor of a house she inherited from her grandfather.

Rosa Amora

Photos by Alexa Smith

A tapestry on a rear wall, of gigantic looming smokestacks, almost overwhelms the room — just as the real stack overwhelms this impoverished hillside neighborhood.

The smokestack spews waste from one of the few multi-metal smelters in the world, where rubble is processed to extricate lead, zinc, copper, gold and silver. Every day, it spews about 1,000 tons of sulfur dioxide and other toxins into the air over this high-altitude Andean town — more than four times the legal limit under Peruvian law.

Some mornings, Amora's neighbors say, vapor from the plant falls like a pale orange-gray fog over the streets outside, seeping into houses through cracks around ill-fitted windows and doors.

On those days, Amora and the other mothers keep their children inside.

What else can a mother do?

Amora can make her 12-year-old son, Moises, wash his hands. She can nag him about putting his dirty fingers into his mouth. Sometimes she can afford to give him milk to strengthen his bones, eggs to buttress his immune system. She can order him to leave his dusty shoes outside, as suggested by Doe Run-Peru, the U.S. company that runs the smelter.

But she can't keep him from breathing.

"The problem is the environment," she says. "There are too many emissions coming down into the town."

Amora says most residents of La Orroya took a long time to realize that their coughing and chronic illnesses might be related to the air they breathe.

The Doe Run smelter, a linchpin of the economy of La Orroya, envelops the area in a fog of chemicals.

Theoretically, Moises is already irreversibly lead-poisoned

The consequences of low-level exposure can range from reduced intelligence and stunted growth to attention deficit disorders and kidney damage. At levels above 70 micrograms per deciliter (70 millionths of a gram per half-cup of blood), it can cause mental retardation, coma or even death.

The National Institute of Environmental Health Science says kids with readings over 10 micrograms per deciliter are at high risk.

Amora says Moises was tested in 1999 and had a reading of 58.3. He was part of a study conducted by Doe Run and the Peruvian government of high-risk groups such as pregnant women and children under 6 — people whose bodies contain developing neurological systems.

Of the 788 kids tested, 92 percent had blood-lead levels over 10, according to doctors at a clinic that is operating jointly by the Peruvian Health Ministry and Doe Run. The company, headquartered in St. Louis, MO, pays the bulk of the clinic's operating cost of about $500,000 per year.

Five children tested at 70 or higher. Only one subject was under 10. That means about 99.9 percent of La Orroya's children aged 6 or younger have blood-lead levels two to four times higher than the World Health Organization considers acceptable.

The clinic is monitoring the subjects and reporting a 13 percent drop in blood-lead concentrations, which it attributes to improved nutrition and hygiene, and to alleviation of other problems of poverty like parasites. The children with the highest readings are bused out of town once a day for a breath of fresh air.

Several reportedly have gone to Lima for more intensive treatment.

Amora and her neighbors are awaiting the results of independent testing done in September. Amora, 52, is a leader in the local health movement, a grassroots campaign that lobbied for broader testing and now wants to help inform local residents about contamination and to lobby the government to deny Doe Run a four-year extension of its deadline for reducing sulfur dioxide emissions.

As a first step, new data were collected in September by the U.S. Center for Disease Control and St. Louis University's Environmental Health Study Teams, which randomly tested children and adults for 15 toxins, including lead, arsenic and cadmium, that are byproducts of the smelting process. Researchers also measured soil and water contamination.

Decades of metal smelting has changed the color of the Andes Mountains and the sky above them.

It is the most thorough study ever conducted in the area, residents say.

The new study was paid for by a coalition of churches and non-governmental agencies, including the Roman Catholic Archdiocese of Huancayo and the Presbyterian Church (U.S.A.)'s Joining Hands Against Hunger Program-Peru (JHAHP).

"Our idea … is to provide people with more information … so they can make the best choices in an extremely difficult situation," says the Rev. Hunter Farrell, the PC(USA)'s liaison to JHAHP in Lima. "It's a shame that no one has gone to the trouble to do such a study (until now). … There are families living in ignorance, knowing that something is wrong, but with no terms of reference. What does acid rain do to your lungs?

"No one has been connecting the dots. Shamefully."

At the request of La Orroya's health activists, medical teams collected blood and urine samples in random sweeps of houses last fall. The researchers encountered angry mobs of Doe Run supporters who spat on them, threw rocks and eggs, and shouted threats

Doe Run announced in mid-November that blood-lead levels in its workers had dropped by 30 percent because of better workplace controls and the use of new respirators.

Community tensions are high because many fear that Doe Run will pull out of La Orroya — crippling the already struggling economy — unless the Peruvian government sets back the deadline for construction of a sulfuric acid facility that will reduce toxic smokestack emissions.

When Doe Run bought the smelter in 1997 — inheriting environmental problems from

previous owners — it agreed to finish the project by 2007. Now it says it needs four more years.

A spokesperson for the company told the *Presbyterian News Service* that its officials have "never publicly said" that it will pull out of Peru should the extension be denied. However, *El Comercio,* a Lima daily newspaper, reported in its Oct. 9 issue that Jose Mogrovejo, Doe Run Peru's vice president for environmental affairs, had said: "If the Ministry of Energy and Mines doesn't extend our PAMA (the environmental agreement), we will have to close down our operation in La Orroya."

A report Doe Run filed in 2004 with the U.S. Security and Exchange Commission says it may have to shut down the plant if it is found to be "out of compliance" because its outstanding loans would come due and it could not obtain new credit.

Doe Run hasn't begun construction on the new facility, which will cost more than $100 million and is the largest of nine environmental projects it has agreed to undertake. Eight of them are under way. A Doe Run spokesperson said parts of the new plant will be operational before 2010.

The health movement opposes any extension of the deadline; it considers Doe Run's warnings that it might be forced to close the smelter amounts to economic "blackmail."

There is no question that the smelter is an important factor in the economy here. La Orroya is a poor town of 30,000 people. According to the mayor's office, about 500 residents are among the 2,900 people who work for Doe Run, and countless others work in mining-related ventures or depend on income from miners.

Most people can't afford health insurance. Most mothers can't afford to have their children tested for toxins. They can't just go to the clinic run by the Health Ministry and Doe Run; physicians there say they must work with populations at the highest risk, although they do plan to move into other demographic sectors eventually.

"Most kids here have no access to testing," says Dr. Hugo Villa, a neurologist who has worked in La Orroya for 26 years. "The biggest part of the population here is without (access to information). Without the non-governmental organizations, we couldn't do it. Even with that, we're not covering everybody here."

Villa notes that the symptoms of lead poisoning — headaches, aching bones, kidney trouble, for example — can also be signs of other conditions. When a patient is known to live in a polluted area, he says, chemical poisoning ought to be ruled out first. But such testing isn't routinely done.

Hygiene, good nutrition and fresh-air breaks won't solve the problem, he says: "You have to control the emissions, else the other measures are nothing."

Amora, too, thinks that controlling emissions is the key. So she and other parents are speaking up, despite community tensions.

When her son asks her why the gases "come down," she tells him that the smokestack is like the family's woodstove. "We cook food. They smelt metals," she says with a shrug.

But she can't shrug away her worries about her boys. She frets about Moises' coughs, his allergies, the sores that occasionally pop up on his skin. Her younger son, who is deaf, lives at his school; she wonders whether she'll be able to scrape up enough money to buy hearing aids for him.

When she was a girl, Amora says, La Orroya residents thought the white dust they brushed off their skin and clothing was a mere nuisance.

Now they know better.