The Tragedy of Tauccamarca:

A Human Rights Perspective on the Pesticide Poisoning Deaths of 24 Children in the Peruvian Andes

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The pesticide poisoning deaths of 24 children in an isolated Peruvian village make a compelling case that corporate accountability for pesticide poisonings in the developing south should be examined from a human rights perspective. Highly toxic pesticides cannot be used safely under prevailing socioeconomic conditions. The industry asserts that the deaths of these children were accidental, blaming misuse. Tragedies such as these poisonings are not accidents, but foreseeable, and therefore preventable. Sales of highly toxic pesticides that cause repeated and predictable poisonings violate the fundamental human rights to life, health, and security of person. The Tauccamarca tragedy is a clear example of the urgency of applying a precautionary, human rights approach to pesticide issues in the developing south. Key words: pesticide poisoning; foreseeable misuse; human rights

INT J OCCUP ENVIRON HEALTH 2003;9:53-58

auccamarca is a remote village in the windswept Andean highlands of Peru, three hours by foot from the nearest road. On October 22, 1999, 24 of the village's 48 children were poisoned and killed when they drank a powdered milk substitute, part of their school lunch, that had been contaminated by an organophosphate pesticide. When the children began to foam at the mouth and writhe in pain, their parents ran carrying them down them down the mountain to the nearest village with a health post. Most of the children died en route in their parents' arms. Eighteen other children were poisoned but survived. Preliminary evaluations indicate that they may suffer significant long-term developmental consequences of organophosphate poisoning. 2

Interviews conducted by the press, the police, and the local Peruvian rights ombudsman's office give a fairly clear picture of what happened. A village woman mixed a white powdered pesticide into a bag of powdered milk substitute that is served as part of the children's school breakfast, and left it by her doorway to

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kill or sicken a dog that had been chasing her chickens. A child walked by, noticed the bag of powdered milk, and brought it to school, where it was mixed with several other bags of powdered milk the next day and fed to the children, with devastating results. The woman, like almost everyone else in her village, speaks only Quechua, not Spanish (the language on the label) and is illiterate. She had no idea of the extreme toxicity of the pesticide.

The pesticide in question appears to be methyl parathion, which is imported, formulated, and sold in Peru by Bayer S.A., a wholly owned subsidiary of the German chemical company. Although Bayer denies that methyl parathion was responsible for the poisonings, a Peruvian Congressional Investigative Subcommittee report concluded that there is significant evidence of responsibility on the part of the agrochemical company Bayer and on the part of Ministry of Agriculture.³ The report recommends that the government and Bayer indemnify the families of the dead children, and recommends significant reforms to remedy Peru's lax and ineffective pesticide control policy.

Methyl parathion is a category Ia, or "extremely hazardous," pesticide according to the World Health Organization.⁴ Nonetheless, in Peru methyl parathion—a white powdered pesticide with no strong chemical odor—was sold in one-kilogram plastic bags, with pictures of vegetables above the label, and no pictogram indicating the acute danger of the product to human health.

On paper, Peruvian pesticide regulations⁵ direct that WHO Category Ia pesticides such as methyl parathion must be registered as "restricted use" products, which can legally be sold to only a buyer who has received a "technical prescription" from a licensed agronomist, accredited by the Ministry of Agriculture.⁶

In practice, though, the Peruvian ministry charged with enforcing pesticide regulations—like those of most developing southern countries—simply doesn't have the human or financial resources to carry out its mandate. Post-registration enforcement of pesticide regulations is practically nonexistent. According to the villagers, no licensed agronomist has ever visited Tauccamarca, and methyl parathion is freely available for sale without a technical prescription in the nearby markets.⁷

When questioned by the Congressional Investigative Committee, SENASA, the department of the Peruvian Ministry of Agriculture responsible for pesticide regulation, openly stated that it is impossible for them to guarantee regulatory control over of the way these pesticide products are sold and used.⁸ The Congress report concluded that SENASA didn't carry out its mandate to enforce the country's pesticide laws, allowing the free circulation of dangerous products and putting the health of farmers and the population in general at risk.⁹

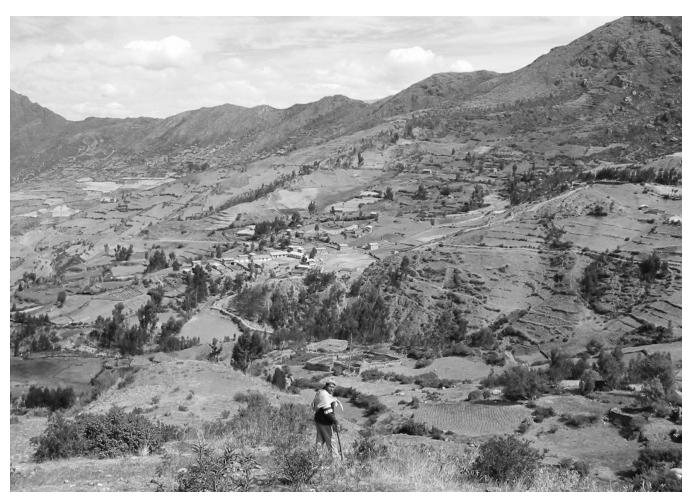
Bayer has responded, both in the press and in court documents, that the company complies with all legal and technical requirements of Peruvian law, and that they operate under a policy of "Responsible Care" in Peru. 10 Moreover, Bayer asserts that the deaths of the children were caused not by uncontrolled availability of a restricted-use pesticide in the countryside per se, but by the misuse of the product by the village women, which cut off any legal responsibility that might adhere to the company. In other words, because a pesticide, which could reasonably be predicted to be misused, was in fact misused, the deaths of the children become just an unfortunate accident.

UNFORTUNATE ACCIDENTS OR A SYSTEMATIC PATTERN OF HUMAN RIGHTS ABUSES IGNORED?

Although only a small percentage of global pesticide use is in the developing south, the great majority of pesticide poisonings occur there.

This fact has been a staple of international public health investigation and regulatory hand wringing for decades. In 1990 the World Health Organization estimated 3 million pesticide poisonings per year, causing 220,000 deaths,¹¹ and in 1994 estimated of between 3 and 5 million occupational poisonings annually.¹² And a recent study conducted with support of the Pan-American Health Organization in the seven Central American countries estimates that when underreporting of pesticide poisonings is factored into the equation there are 400,000 poisonings per year in Central America alone.¹³ This suggests that the global dimensions of the pesticide problem may be much greater than previously projected.

The pesticide industry, and Bayer itself, have acknowledged the danger posed by highly toxic pesticides, especially those such as methyl parathion that are



The isolated village of Tauccamarca, high in the Peruvian Andes.

classified as the most acutely toxic, or category Ia and Ib, by the World Health Organization. Bayer was pressured to stop selling methyl parathion¹⁴ in Germany as of 1989 due the product's extreme toxicity, but continues to market the product internationally. Bayer had even published a statement proclaiming its goal of phasing out sale of its products in the WHO Toxicity Class 1 in the developing south. 15 And the high number of methyl parathion poisoning incidents in Central America, as shown in a Danish video in 1997, caused the major Danish manufacturer, Cheminova, to withdraw its methyl parathion product from Nicaragua.¹⁶

In the United States, responding to numerous incidents of severe health harm caused by methyl parathion, the Environmental Protection Agency in 1997 instituted some of the strictest restrictions ever applied to a pesticide. These included a requirement to add an odorant, or "stenching" agent, to the pesticide to discourage home use, and the use of tamper resistant containers that require special equipment for removal of the product.¹⁷ Most uses of methyl parathion were subsequently banned in 1999.

Given these facts, it's safe to assume that Bayer was well aware of the public health risk posed by methyl parathion, especially under the socioeconomic conditions prevalent in the developing south, where pesticide users are often poorly educated or illiterate; don't speak or read the language of the pesticide label; and have no access to protective equipment. 18 Compounding the danger, most southern governments lack the regulatory and enforcement infrastructure necessary to control sale and use of these pesticides. Even where a pesticide is registered as a restricted-use product, as methyl parathion was in Peru, the reality in the countryside, as noted by the Peruvian Ministry of Agriculture, is that there is no control.

Under these conditions, pesticide users will predictably misuse the pesticide, often with devastating results. As the poisoning data and tragedies such as Tauccamarca indicate, "safe use" of toxic pesticides is simply not possible under the prevailing unsafe conditions in these countries.

Yet Bayer widely promoted its methyl parathion formulation throughout Peru, targeting marketing on use in Andean crops cultivated primarily by small farmers, most of whom are illiterate. Bayer packaged a white powdered pesticide that resembles powdered milk and has no strong chemical odor in one-kilogram bags, labeled in Spanish and displaying a picture of vegetables. The labels provided no usable safety information, such as pictograms, for the majority of users in these remote villages, and little indication of the danger of the product.

It's hard to argue that Bayer could not foresee the misuse of the product in a country with a large population of illiterate, Quechua-speaking users. 19 Moreover, for a very small investment, Bayer and other pes-



The father of two of the deceased children at their grave. (Photo by Luis Gomero O., RAAA)

ticide companies could have adequately packaged their product in special containers, with labels that included pictograms to help to convey the danger of the product to illiterate users, and added a stenching agent to discourage off-label home use as was required in the United States. They did nothing. Their failure to take protective action, or alternatively to take precautionary measures and withdraw the product from the market, should not be accepted as business as usual, but rather should be understood as systematic disrespect for fundamental human rights.

A HUMAN RIGHTS ANALYSIS

Until the global community begins to talk about pesticide poisonings in the language of rights, the industry will continue to sell the idea that pesticide poisonings are just the unfortunate consequences of global commerce in "economic poisons," rather than abuses against victims worldwide, cloaked in business imperatives and legitimized by poorly enforced national regulations.

While most human rights instruments officially bind sovereign states only, the principles they embody should be compelling for the conduct of non-state actors such as transnational corporations as well. Moreover, the fundamental rights to life, health, and a healthy environment that are the cornerstone of international human rights conventions are also found in the constitutions of many countries, including Peru.²⁰

The right to life is the most fundamental human rights doctrine, and is found in all the basic international human rights instruments. For example, the Universal Declaration of Human Rights²¹ states, "Everyone has the right to life, liberty and security of person."

The right to health and well-being is also widely accepted. For example, the International Covenant on Economic, Social and Cultural Rights²² recognizes "... the right of everyone to the enjoyment of the highest attainable standard of physical and mental health[,]" and

states that "The steps to be taken by the States Parties . . . to achieve the full realization of this right shall include those necessary for . . . [b] the improvement of all aspects of environmental and industrial hygiene. . . . "²³

The Universal Declaration of Human Rights also includes the right to "security of person" and the right to protection against "arbitrary interferences with . . . privacy, family, home or correspondence." A key case that applied the right to security of person in the context of toxic contamination is *Lopez Ostra v. Spain*, in which the European Court unanimously ruled that siting a waste-treatment facility near a residential area violated the right to privacy and security of person of a family that lived near the facility. The Court found the Spanish government had violated this right because it had failed to take measures to protect the petitioner and her family from the toxic pollution emitted by the facility.

The parallel with permitting sales of extremely toxic chemicals that are likely to cause harm is clear. "Security of person" should also be understood to embrace the right not to be poisoned by dangerous products entered into the stream of commerce, where the responsible industry can easily foresee that they will cause a significant number of poisonings and health harm in poor nations of the south.

Finally, the Draft Declaration of Principles on Human Rights and the Environment²⁶ lays out a framework for a human-rights-based approach to environmental protection. Its principle 5 states, "All persons have the right to freedom from pollution, environmental degradation and activities that adversely affect the

environment, threaten life, health, livelihood, wellbeing or sustainable development...."

Why aren't business practices such as the marketing of a pesticide where the probability of foreseeable misuse and injury is so high as to be a virtual certainty considered human rights violations? Why don't agrochemical companies take steps to prevent the foreseeable misuse of extremely toxic products, given the severe health risks presented and the well known socioeconomic conditions throughout the developing south?

The agrochemical industry wields significant political and economic influence throughout the world, and mounts well-funded campaigns to persuade governments that its products are economic necessities, that "safe use" of extremely toxic pesticides is possible, and that pesticide poisonings are just unfortunate accidents, the sad outcome of user error.

In practice, the international community has allowed the agrochemical industry's assertion of a right to enter a toxic product into the stream of commerce to trump fundamental human rights. The agrochemical industry's approach around the world is designed to maximize profits and minimize costs, while nominally fulfilling regulatory requirements that are known to be ineffective and insufficient.

Driven by short-term profit motives, industry will seek to continue production, discharges, or overseas sales of chemicals long after they are known to damage human health or the environment. When it comes to pesticides in the developing south, there are no unsafe uses per se; poisonings are not random accidents—but rather foreseeable events caused by introducing highly



Meeting of Tauccamarca parents at the school after the tragedy.

toxic products into unsafe conditions throughout the developing south. Just because these are daily acts of commerce doesn't mean they can't also be understood as continuing and systematic human rights violations.

CONCLUSION

Methyl parathion was banned in Peru in the wake of the poisonings in Tauccamarca. Yet to date, three years after the poisonings, the surviving children have received no medical monitoring or special education from either Bayer or the Peruvian government, and the community still doesn't have a functioning health post. The families have received no assistance, compensation, or even an apology from the company or the government. The families worry that no one will be held responsible for the deaths of their children, and that the regulatory reforms necessary to prevent the repeat of their tragedy in other communities will never materialize.

If governments cannot guarantee that they can protect their citizens from foreseeable, preventable human rights abuses such as the tragedy at Tauccamarca, they should take a precautionary, human rights approach to pesticides and ban the most toxic, WHO Category 1a and 1b, pesticides. Experience shows that their continued use in the developing south will lead to more preventable tragedies like Tauccamarca. We should no longer allow governments to accept the industry's tactic of blaming the victim and paper compliance with admittedly ineffective regulations to forestall preventive measures.

The world community should begin to frame corporate accountability issues in human rights terms, and not allow corporations to hide behind paper compliance with weak, unenforced national laws.

A human rights analysis can help achieve better national and international control of dangerous pesticides and better corporate accountability. If business practices such as the marketing of a pesticide where foreseeable misuse is expected were understood as human rights violations, it would require an immediate and serious reevaluation of international pesticide and toxic substance control regimes. The rights to life, health and security of person should be understood to include the right not to be poisoned by the agrochemical industry.

End Notes

- 1. Boyd S. Pesticide poisoning raises questions: the deaths of 24 children in a remote Andean village highlight the hazards of poor agrochemical controls. Latinamerica Press. 1999; 31, no. 42/Nov. 15.
- 2. Wesseling C, Boluarte A, Sánchez D. Efectos neuroconductuales y neuropsicológicos en niños intoxicados con el plaguicida organofosforado paratión. Tauccamarca, Cuzco, Perú: Informe Preliminar. 20 de octubre de 2001. [Unpublished].
- Peruvian Congress, Agrarian Commission, Final Report. Investigative Subcommittee on the Sad Events in Tauccamarca-Cusco, Relating to the Deaths of 24 Children and 18 Poisoned

- Children Due to the Ingestion of Food Contaminated with Pesticides. May 2002, Lima, Peru.
- The WHO Recommended Classification of Pesticides by Hazard, International Programme on Chemical Safety, Geneva, Switzerland, 1996.
- Reglamento Sobre el Registro, Comercialización y Control de Plaguicidas Agrícolas y Sustancias Afines (Decreto Supremo No. 15-95-AG)
- A 1997 law, Ley de Promoción del Manejo Integrado para el Control de Plagas, (Ley No. 26744, 18 January 1997) reaffirms that the use of methyl parathion should be severely restricted.
- A civil lawsuit was filed on behalf of the parents of the deceased children on October 22, 2001. Less than 48 hours later (a landspeed record for the judicial system in Peru) the judge issued an order proclaiming the case inadmissible on various procedural grounds—lack of certain documents, such as marriage certificates, that the parents had lost—and also decide the underlying legal issue—of causation between Bayer's marketing of the pesticide in the region and the eventual poisoning of the children. The judge was not competent under the Peruvian Code of Civil Procedure to consider substantive issues at this stage of the proceedings. The families appealed the illegal decision and won, reinstating the case. As of November 2002, the court had yet to set the first hearing date.
- Peruvian Congress report, p. 61.
- Peruvian Congress report, p 51. "SENASA no cumplió con fiscalizar el cumplimiento de estas condiciones lo cual puso en estado de riesgo a los agricultores que utilizaban estos productos y a la población en general al permitir la libre circulación de productos peligrosos de esta naturaleza sin mayor restricción."
- Communiqué from Bayer, published in El Correo, 24 October 2001, Lima, Peru.
- Jeyaratnam J. Acute pesticide poisoning: a major global health problem. World Health Statist Q. 1990; 43:139-44.
- International Labour Organization. ILO warns on farm safety; agriculture mortality rates remain high; Pesticides pose major health risks to global workforce. Released simultaneously in Geneva, Switzerland, and Itasca, IL. 8usA. (ILO/97/23). October 22, 1997. http://www.ilo.org/public/english/bureau/inf/ pr/1997/23.htm>.
- Based on preliminary results from a multicentric study, based on 32,245 questionnaires in six countries, that indicated 98% underreporting of pesticide poisonings and 7,000 reported poisonings in 2000. Murray D, Wesseling C. Pesticide Illness Surveillance in the Developing World: Putting the Data to Work, 2002. To be published. The same epidemiologic surveillance program has identified methyl parathion as one of the 12 pesticides that cause the most acute pesticide poisonings in Central
- 14. Bayer's ceased sales of ethyl parathoin in Germany at the same time.
- Bayer, Responsible Care in the Crop Protection Business Group 2000. In: Dewa. Product Stewardship.
- Kirshner A. Methyl parathion in Central America: Cheminova responds. Global Pesticide Campaigner. 1997; 7(3, September).
- Specifically, the EPA required: a) the addition of an odorant or "stenching agent" in the powdered formulation to discourage indoor use; b) the use of tamper-resistant containers that require special equipment for removal of the product; c) the refillable containers are to be returned to the retailer when empty; and d) the placement of a unique ID number on each container so that the registrant (i.e., pesticide manufacturer) can track distribution down to the end user; retailers are to record the ID number at sale.
- Werner Wenning, the Chairman of the Board of Management of German parent company, Bayer AG, spent five years working at Bayer's Peruvian subsidiary, Bayer Industrial S.A.. http://www.bayer.com/en/bayer/wenning.php>.
- 19. In fact, Bayer's own guidelines for corporate responsibility and responsible care state that: "The purchaser of the product must be advised of any risks associated with its use, and every product must bear the necessary warning labels." Guidelines for Legal Compliance and Corporate Responsibility at Bayer. http://www.bayer.com/en/unternehmen/unternehmenspoli- tik/grundsaetze/verantwort.html#produkt>. Their guidelines for product stewardship state that: "Distributors and customers

- must be given the necessary information and advice to enable them to transport, store, handle, use and dispose of our products safely." Guidelines for Responsible Care in Environmental Protection and Safety. http://www.bayer.com/en/unternehmen/unternehmenspolitik/grundsaetze/umwelt.htm l#produktverantwortung>.
- Art. 2.1, 2.22 and 7 of the Constitución Política del Perú de 1993, actualizada hasta reformas introducidas por la Ley 27365, del 02.11.2000.
- Universal Declaration of Human Rights, Dec. 10, 1948, art. 29, U.N. GAOR, U.N. Doc. A/810.
- 22. International Covenant on Economic, Social and Cultural

- Rights, Dec. 16, 1966, U.N. Doc. A/6316 (1966).
- 23. The Protocol of San Salvador also declares that "Everyone shall have the right to health, understood to mean the enjoyment of the highest level of physical, mental and social well-being." Additional Protocol to the American Convention on Human Rights in the Area of Economic, Social and Cultural Rights "Protocol of San Salvador", Art.10, Organization of American States, 1988. http://www.Cidh.Oas.Org/Basicos/Basic5.Htm.
- 24. Universal Declaration of Human Rights, supra, Articles 3 and 12
- Case No. 41/1993/436/515, Judgment of Dec. 9, 1994. http://hudoc.echr.coe.int/Hudoc1doc/HEJUD/sift/490.txt.
- 26. Principle 5. E/CN.4/sub.2/1994/9/Annex 1.

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