

## CARLOS DRUMMOND DE ANDRADE

If I were a congressman, I would be feeling very anxious. And if I were a state legislator for São Paulo, my apprehension would border dread. That is because I have been sent a most terrible document, a document to make one lose sleep and put our awareness in a state of war.

The document is signed by the Movimento em Defesa da Vida [Movement in Defense of Life], formed by men and women from all walks of life, under the guidance of reputable geneticists and no less authoritative nuclear physicists from the University of São Paulo.

It is not, therefore, one of those numberless papers that circulate here and there, bearing no definite authorship and with a political agenda that is either highly conspicuous or a barely concealed. This document's source is quite respectable and its background frightening.

The document invites congressmen and legislators to reflect on the effects of nuclear radiation upon the community, that is, the people who elected them to represent and champion Brazilian social interests.

The contents are made even more somber if we consider that it coincides with the shockingly unexpected news (for, until the last moment, nothing transpired of the negotiations that led to this decision of utmost importance for the fate of our people – a decision made by a small group of government men and technobureaucrats) that two nuclear power plants will be built on São Paulo's seaboard – in an area that, ironically, houses a government ecological station.

The Movimento em Defesa da Vida focuses on only one of the numerous lethal consequences of this kind of power plant. And, grounded on solid facts and reliable research on radioactive contamination of the human organism, it asks:

“Does Your Excellency know that the composition of our children's milk might be adversely affected by radiation

## The Testimony of the Poet-Citizen

In 1980, in the declining moments of the dictatorship, the forests of Juréia, between the seacoast cities of Peruíbe and Iguape, were suddenly threatened by a project to build a nuclear power plant, in keeping with an agreement between Brazil and Germany.

The local population reacted swiftly, fearing a nuclear accident might poison their habitat. The memory of what had happened in Three Mile Island in 1979 was still vivid in the world's ecological mind. Environmental organizations and some eminent scientists joined forces and appealed to the country's greatest living poet, Carlos Drummond de Andrade, to write an essay in support of the joint struggle.

The scientist provided the poet with basic information on the human and environmental risks posed by the plant and he published the following article in the *Jornal do Brasil*.

The editors found the essay highly relevant and decided to reprint it, recognizing two undeniable merits:

- 1 It is an expression of true citizenship, whereas the citizens' voice is rarely listened to by the technocracy;
- 2 It speaks of the dangers of disease and death for the population in the case of an eventual accident.

It should be noted that the poet could not imagine that, six years later (1986), a terrible leakage accident would occur in Chernobyl, Ukraine, whose pathogenic effects are still felt today.

The struggle against the Juréia Project was not in vain. The government gave up the idea. Today, Juréia is a beautiful forest reserve.

The editor

from nuclear power plants? In England, in 1957, human error caused radioactive leakage from a reactor, equal to one-tenth the radioactivity released by the bomb on Hiroshima, forcing the government to throw out all milk produced within 500 kilometers from the reactor. In terms of comparison, Rio de Janeiro is 133 kilometers from Angra dos Reis. Cesium 137, a radioactive element, was found in the milk and it can pass into the human body through the soil-grass-cow-milk cycle. Cesium emits very penetrating and very powerful gamma rays that induce cancerous formations in various organs.”

The document then enumerates a series of facts, which I will summarize.

It has been scientifically verified that the average concentration of carcinogenic elements in milk increases as pro-nuclear political activity intensifies, and diminishes when such policies subside.

Strontium 90 permeates the human food chain with horrendous effectiveness, infiltrating the soil and water and causing pathogenic effects on the population. Similar to calcium in structure, it is retained in the developing bones of children, where it replaces the former even as it remains radioactive, producing leukemia and cancer. Strontium 90 is absorbed by inhalation and ingestion of contaminated food, and takes 30 years to lose half of its radioactive potency.

Between 1966 and 1971, the reprocessing plant of Westvalley let 45% of its total supply of iodine 129 escape into the atmosphere, causing a 10,000-fold increase in radioactivity 7 kilometers away. And our Brazilian plants will be similar to Westvalley’s.

Such irradiation disrupts the reproductive code, that is, the genetic programming of each cell, unbalancing the laws of life. In 1969, a minor accident in a Colorado reactor caused the leakage of radioactive particles; four years later, the birth of numerous deformed animals in the region’s farms was reported to the Department of Health.

Plutonium, rare in nature, is produced from uranium in nuclear reactors. It is one of the most carcinogenic substances on the face of Earth. Inhaled along with air, it lodges in the bronchia and lungs, emitting alpha rays to neighboring tissue. As happens with iron, it combines with the proteins that carry this element through the bloodstream, and eventually settles in the liver, in iron-storing cells and in the bone marrow. The result? Liver and bone cancer, and leukemia. And bear in mind that each reactor produces 250 kilograms of plutonium per year, with a half-life of 500,000 years!

Another issue: where and how can atomic waste be kept forever?

For these and others reasons, the United States and even Germany (who is selling us the nuclear plants) have decided against new reactors in their territory. England and Sweden have completely paralyzed their nuclear programs. How about us?

Known accidents have demoralized the myth of infallibility of nuclear power plants. As the future is uncertain and as science cannot guarantee a level of safety that would set our mind at ease, building these plants is an undisputable threat to us. To allege experimentation in the name of progress is unjustifiable at the cost of human lives, as was tragically proved during the Nazi period.

If I were a congressman, I would be losing sleep thinking about the risks imposed upon our country by these haughty endeavors that promote so-called progress, but decimate our life. However, must one be a congressman to feel the excruciating weight of such a threat? I, a common man and public scribe, share this same horror. I believe the Legislature has the obligation to demand accountability for this frightening program, developed without our consent or approval, and totally unbeknownst to the people.

Jornal do Brasil, June 21, 1980

– This text has been translated by Carlos Malferrari. The original in Portuguese – “Se eu fosse deputado” – is available at [www.scielo.br/scielo.php?script=sci\\_issuetoc&pid=0103-401420070001&lng=pt&nrm=iso](http://www.scielo.br/scielo.php?script=sci_issuetoc&pid=0103-401420070001&lng=pt&nrm=iso)