Wollongong steelworks pumps out dangerous dioxins

Report confirms Workers Inquiry findings

Peter Stavropoulos 10 February 1999

BHP's Wollongong steelworks has been identified as Australia's largest source of emissions of dioxins--highly toxic chemicals that have been linked to birth defects and cancer, including lymphoma and leukaemia. A report by the environmental group Greenpeace cites estimates by the state Environmental Protection Agency that the Port Kembla complex releases 29 grams of dioxins into the air each year, with the greatest concentration in the sinter plant. BHP's Newcastle plant is the second highest source--emitting 24 grams a year.

On the basis of World Health Organisation (WHO) standards, Greenpeace calculates that 20 grams is equivalent to the acceptable yearly dose for about 200 million people. Residents and workers in the Illawarra region, with a population of about a quarter of a million living on a coastal strip surrounded by an escarpment that traps pollution, are therefore possibly being exposed to levels about one thousand times the safe limit.

Dioxins, a shorthand expression for 210 by-product chemical compounds, attack the human immune system and make it susceptible to infectious diseases and some types of cancer. Experiments have shown that exposure to very low doses of dioxin during a critical short period of gestation is sufficient to cause detrimental health effects on the foetus.

The most potent form of dioxin, known as 2,3,7,8 tetrachlorodibenzo (TCDD) is recognised as the most cancercausing agent ever tested on animals. Workers exposed to TCDD have suffered increased rates of lung cancer and all cancers combined. The US EPA now estimates that as many as 3 percent of all cancer deaths are due to mere "background" or low-level exposure to dioxins.

Dioxins are generated as wastes and byproducts from combustion sources and certain chemical and industrial processes. They form a class of chemicals known as polychlorinated dibenzo-p-dioxins and polychlorinated dibenzofurans. Tests on people exposed to high doses and experiments with laboratory animals have shown health effects including pre-natal mortality, decreased growth, organ dysfunction, impairment of the nervous system and intellectual development and reproductive defects.

The US EPA has reduced the safe exposure limits to 0.006-0.01 picograms per day per kilo of bodyweight (a picogram is a million millionth of a gram). The WHO's safe daily exposure limits have been reduced from 10 pg. to 1 - 4 pg. The Australian standard of 10 pg, set by the National Health and Medical Research Council, is 1,666 times higher than the US EPA standard and up to 10 times higher than the WHO standard.

The dangers of dioxin poisoning are not restricted to Wollongong and Newcastle. Greenpeace identified 67 sites in Australia that are known or suspected sources of dioxins, with more than half operating above what it termed dangerous "hotspot" levels. Less than half are subjected to monitoring, with no monitoring conducted in the petroleum industry. Even where airborne emission controls are in place, the dioxins collected are often used as landfill, shifting the problem from the air into the soil, with the associated risks of land seepage.

The report has particular implications in Wollongong because young people living in the southern suburbs downwind of Port Kembla have been dying of leukaemia at a rate 14 times higher than the state average. Dioxins were recognised in the Workers Inquiry into the Wollongong Leukemia and Cancer Crisis as part of a cocktail of chemicals pumped out by the steelworks and other heavy industry that is responsible for widespread cancers and other serious ill health in the area.

The Workers Inquiry report, *Cancer and Industrial Pollution*, released in September 1997, warned that: "Dioxins have been linked to leukemia and lymphoma, heart disease, damage to childhood brain and immune system development and birth defects. BHP's sinter plants at Port Kembla and Newcastle are by far the greatest industrial sources of atmospheric dioxin pollution in NSW." It also pointed out, as does the latest Greenpeace report, that dioxins may interact with other known causes of cancer and leukaemia, such as benzene and polycyclic aromatic hydrocarbons (PAHs) with a synergistic or multiplying effect.

The Socialist Equality Party initiated the Workers Inquiry because of the persistent efforts of the state Labor government and health officials to cover-up the leukaemia crisis. An investigation by the government's Illawarra Public Health Unit concluded that the leukaemia deaths were simply a mystery and that no link could be found to BHP or any other industrial source.

The Workers Inquiry established a definite geographical connection between Port Kembla's industrial complex and the high rates of leukaemia and other cancers. Residents, workers and concerned health professionals also produced compelling anecdotal evidence of abnormal levels of child and teenage cancer, including rare brain tumours. In one case, of about 16 girls who went through Port Kembla High School together, seven gave birth to children with severe birth defects. Two babies were born without skullcaps or brains, two had Downs Syndrome, one had spina bifida, one cystic fibrosis and one suffered mini-strokes. Three of the students suffered cancer at a young age.

BHP's reaction to the latest Greenpeace report was contemptuous. It admitted being aware of the dioxin danger but, in an attempt to ridicule the health concerns, Geoff Todd, BHP's general manager for safety health and the environment, referred to the emissions as "slightly less than the weight of two 50c pieces". He said the company was searching worldwide for technology to reduce (not eliminate) the emissions--but that process could take until the year 2002.

BHP's 1997 Environmental Report reveals that the company has known of the dioxin problem since 1993 and confirmed the chemicals' presence in 1995. Despite the medical evidence that even minute exposure to dioxins can have severe effects, the management concluded that dioxin emissions were within US EPA limits and since no Australian standards then existed, nothing definite could be said about the risks.

The response of the New South Wales state EPA was equally revealing. A spokesman said: "The health risk assessment we did at BHP's Port Kembla plant in 1996 found there was no need for concern." This highlights the role of such EPA assessments and associated pollution reduction programs. Their purpose is not to enforce health standards set by scientific and medical investigation but to negotiate measures that will give the appearance of environmental concern without harming the profitability of major companies. The most dismissive reaction came from the Illawarra Public Health Unit. Its acting director, Dr Stephen Conaty, denied there was any "cause for alarm". He attacked the Greenpeace report, declaring: "I am not saying we don't have to worry about dioxin and can have a bath in the stuff, but I think the way it's been presented is overstating the case." The Health Unit made similar statements throughout its leukaemia investigation.

No less cynical was the response of the trade unions. Paul Matters, the secretary of the South Coast Labor Council, said: "This is the most serious occupational health and safety issue we have in the Illawarra since the coke ovens problem in the 1970s". But for the past two years, while public anger mounted over leukaemia and cancer deaths, and the Workers Inquiry carried out its investigations, Matters and his colleagues supported the official coverup.

Now Matters has proposed "a well-resourced Commonwealth-State inquiry into dioxin and other chemical exposures". This would place the issue back in the hands of the same government authorities.

Far from protecting the health and lives of working people, the Carr Labor government has closed down the Port Kembla hospital and proceeded with the re-opening of a copper smelter--another known source of dioxins and other carcinogens--in the heart of Port Kembla's residential area.

The Workers Inquiry demonstrated that the truth about industrial pollution will only be made known and measures taken to protect public health through an independent struggle, organised outside the structure of the government, the official agencies and the Labor and trade union apparatus. This requires a political movement that bases itself on the needs and concerns of the vast majority of ordinary people, irrespective of the impact on corporate balance sheets.



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