Defusing the Toxics Threat: Controlling Pesticides and Industrial Waste // 1987 // Worldwatch Institute, 1987 // Sandra Postel // 69 pages // 9780916468804

Defusing the Toxics Threat: Controlling Pesticides and Industrial Waste. September 1987. By PostelSandra.Â The pesticide NuvanÂ® and its active component dichlorvos were examined for toxicity to photosynthetic CO2 fixation by natural assemblages of phytoplankton and by five unialgal cultures. NuvanÂ® was toxic to all organisms at concentrations which contained 1.0 ppm dichlorvos or higher. Aqueous stock solutions of NuvanÂ® stored at room temperature for more than 3 weeks retained their activity. Avoiding and Controlling Toxics. Preventing exposure to toxic pollution begins with the precautionary principle (see page 32), which is thinking about the harm an action or product might cause before doing it or using it.Â Control toxics by planning a community solid waste program (see page 396), protecting water sources (see page 75), and by working to move toxic businesses or activities away from where food is grown and public areas like parks. Make sure toxic materials are not stored, used, or released in or close to where people live.Â When business owners and workers understand how chemicals and industrial waste can harm them and everyone in the community, they are often willing to make changes in production materials and methods to reduce harm. Pesticides are toxic by design - they are BIOCIDES, designed to kill, reduce or repel insects, weeds, rodents, fungi or other organisms that can threaten public health and the economy. Their mode of action is by targeting systems or enzymes in the pests which may be identical or very similar to systems or enzymes in human beings and therefore, they pose risks to human health and the environment.Â Two broad classes of pesticides are used in forests: insecticides to control insect pests, and herbicides used to suppress the growth of shrubs during the regeneration process.Â Some pesticides can bioacumulate, or build up to toxic levels in the bodies of organisms that consume them over time, a phenomenon that impacts species high on the food chain especially hard [3]. from agrochemicals and industrial products that generally biodegrade very poorly and most of which will bioaccumulate in tissues of organisms. Some pesticides are POPs, as are Polychlorinated dibenzodioxins (PCDDs), Polychlorinated dibenzofurans (PCDFs), Polychlorinated biphenyls (PCBs), and Polycyclic aromatic hydrocarbons (PAHs). Soil: the upper layer of the Earthâ€™s crust transformed by weathering and physical/. chemical and biological processes. S. Postel, Defusing the Toxics Threat: Controlling Pesticides and Industrial Waste (Worldwatch Institute, Washington, DC, 1987).Google Scholar. 40. United Nations Environment Program (UNEP), Saving Our Planetâ€”Challenges and Hopes (UNEP, Nairobi, 1992).Google Scholar.