**Fumigants vs. Healthy Soils Near Schools**

**Two essential takeaways I want to share with you: 1) In 2005, the American Rivers environmental group named the Pajaro River America's most endangered, due to its fragile levee system and farm chemical runoff. It's a known fact that pesticides negatively impact the health of farmworkers & neighboring communities, as well as watersheds & ecosystems; 2) Organic farming creates healthy soil. Healthy soil creates healthy food and a healthy environment. It also reduces GHGs by storing carbon in the soil.**

**In the Pajaro Valley Unified School District, our County Ag Commission has identified 67 farms within 1/4 mile of schools. 18 are organic, and that's a positive sign. 3 schools--Pajaro Middle, Ohlone Elementary, & Hall District--are in Monterey County & not counted on this list, but are in close proximity to massive chemical farming.**

**But for ALL conventional chemical farms within 1/4 mile of our schools in our valley, the key question is: How can we incentivize transitions to less toxic alternatives for our most vulnerable populations--farmworkers, children & seniors. And the short answer is: There are multiple local, state, & federal programs offering incentives to make this happen.**

**Every April, the County sends each school a map of farms within 1/4 mile of it and a "wish list" of potential chemicals that MAY be applied in a year. These slides are a sampling of farms near schools, both organic & conventional, just so we can recognize some patterns...**

**Zeroing-in on particular pesticides of concern, let's talk about fumigants. 1,3-D (trade name Telone) is a toxic air contaminant and carcinogen. It is the 2nd most used pesticide in SC County, yet it is banned in 34 countries. It was also banned in the U.S. from 1991-1995, but pressure from the ag industry, plus Dow Chemical's in-house "science," convinced the CA Dept. of Pesticide Regulation to bring it back. It is a toxic gas. A couple of years ago, 1,3-D drifted 7 miles from its application site in Kern County.**

**1,3-D is applied with various proportions of chloropicrin, a nerve gas, toxic air contaminant, and house fumigant which produces nitrous oxide gas, a greenhouse gas 300x more potent than CO2 that lasts 100 years in the atmosphere. Chloropicrin is under review as a possible carcinogen.**

**These two fumigants, 1,3-D & chloropicrin, are used to kill soil pathogens, but their unintended consequence is to damage the soil ecosystem by killing beneficial--as well as harmful--soil microbes Although these gases are applied beneath plastic tarps, 10 days later, when the tarps are cut, residual gases are released. Both 1,3-D & chloropicrin are listed as Toxic Air Contaminants in CA, adding to wildfire pollutants in wildfire in August & September. Again, we need to ask ourselves why 1,3-D being applied within 1/4 mile of our schools & neighborhoods while 34 countries have banned it altogether.**

**A few facts & figures:**

**In 2018 (according to our most recent comprehensive statewide database), 6,000 pounds of carcinogens were applied in the square mile which includes Nugent Ranch, next to MacQuiddy School. 31,400# of Toxic Air Contaminants were applied.**

**In the square mile adjacent to Ann Soldo Elementary--including our senior neighborhoods--9,500# of carcinogens & 33,000# of Toxic Air Contaminants were applied in 2018. 75 seniors live within 30 feet of those fields as well.**

**In Santa Cruz County (2018), over 200,000# of carcinogens were applied; 786,000 pounds of Toxic Air Contaminants were applied. 67% of all pesticides applied in our County that year (& the pattern holds through more recent years) were FUMIGANTS. NO OTHER COUNTY IN CA HAS SUCH A HIGH PROPORTION OF MOBILE FUMIGANT GASES TO OVERALL PESTICIDES APPLIED. THE STATEWIDE AVERAGE IS 20% FUMIGANTS BY COUNTY.**

**Our senior neighborhood with 1,000 residents in NE Watsonville was one focus of DPR's NOI pilot project. Tomorrow the grower adjacent to our neighborhood will begin applying 1,3-D and chloropicrin to begin another cycle of conventional chemical raspberry farming on 79 acres. As we have said for years, carcinogens and toxic air contaminants are inappropriate near seniors, schools, or communities in general--the potential risks to public health outweigh possible economic benefits. The state should adhere to OEHHA's 0.4 ppbillion "safe harbor" level rather than the 0.56 ppb level that DPR and the ag industry are promoting. When it comes to hazardous chemicals, we should apply the precautionary principle: "First, do no harm."**

**There's some promising news. With 7,000 organic acres of farm & ranchland in the County, using the USDA Comet Planner computer program, I figure this acreage is likely sequestering about 30,000 metric tons of carbon per year, assuming they made a one-time application of quality compost @ 8 tons per acre. This is almost 1/3 of the projected 100,000 metric ton shortfall of Watsonville reaching zero net emissions by 2030. And this GHG reduction results from applying just one healthy soils strategy. There are many more.**

**Transitioning to organic, healthy-soils farming near schools & neighborhoods makes sense to protect the health of our children, our ecosystems, and our communities. Healthy soils farming is Climate Smart farming that has the co-benefit of reducing greenhouse gases for a healthier planet. These co-benefits are quantifiable & should be factored into City & County Climate Action Plans. Thank you.**

**--Woody Rehanek, Safe Ag Safe Schools--Watsonville;**

 **CORA--Campaign for Organic & Regenerative Agriculture**