

Update on DPR's Environmental Justice Initiatives

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Environmental Justice is defined in California Law as “The fair treatment of peoples of all races, cultures, and incomes with respect to the development, adoption, implementation, and enforcement of environmental laws and policies”. EPA created the State Environmental Justice Advisory Committee and Pilot Project Working Groups which will be used to shape the upcoming EJ pilot projects and future policies. The State Advisory Committee has agreed on some key definitions that will have to be integrated in all BDO's regulations. These definitions include “cumulative impacts” and “precautionary approaches”.

Cumulative Impacts Definition:

- *Cumulative impacts means exposures, public health or environmental effects from the combined emissions and discharges in a geographic area, including environmental pollution from all sources, whether single or multi-media, routinely, accidentally, or otherwise released. Impacts take into account sensitive populations and socioeconomic factors to the extent where data are available.*

Of interest is the incorporation of consideration for socio-economic factors into the evaluation of cumulative impacts. Socio-economic factors include stressors like; unemployment, access to health care, dietary choices, etc. How and what level of science will be utilized to incorporate these issues into an evaluation of pesticide exposure rates, is uncertain and of concern.

Precautionary Approach Definition:

- *Precautionary approach means taking anticipatory action to protect public health or the environment if a reasonable threat of serious harm exists based upon the best available science and other relevant information, even if absolute and undisputed scientific evidence is not available to assess the exact nature and extent of risk.*

The major area of discussion within this definition is what “the best available science and other relevant information” means. From an industry standpoint, it is accepted that “the best available science” would mean “peer reviewed” science conducted by accredited scientists, incorporating the use of risk-assessment. Environmental Justice Advocates maintain that this phrase should include the presumption of fact as determined by the local community. The acceptance of this agreed upon fact by the community should be considered by regulatory agencies with as much standing as any scientifically peer reviewed data.

Environmental Justice Updates

Parlier Pilot Project:

As part of its Environmental Justice Action Plan, Cal/EPA is developing and conducting four types of pilot projects that incorporate some of the themes in the Governor's Environmental Action Plan and focuses on environmental risk factors that impact children's health. The Department of Pesticide Regulation (DPR) will lead a pilot project in the Central Valley city of Parlier, focusing on pesticides in a rural, low-income, minority population farming community.

CPDR & ARB will be monitoring a combination of 40 pesticides, fumigants, and their breakdown material. They will have monitoring stations at 3 local Parlier schools and plan to sample for air quality 3 times a week for the life of the pilot project. The goal of the project is to determine: If residents of the community are exposed to pesticides in the air? Which pesticides are they being exposed to? Do measured pesticide air levels exceed levels of concern to human health, particularly children?

For this project, DPR and the Office of Environmental Health Hazard Assessment (OEHHA), developed health screen levels for each pesticide that to be monitored. They would help to determine when it would be prudent to further assess potential health effects of chemical exposure. A screen level does not indicate the presence or absence of a hazard, but detections **above** the screening level may point to the need for further evaluation.

Air monitoring began in January 2006 for the 40 pesticides and their compounds. DPR will review with LAG upon the release of data, the data that has not been analyzed or viewed in context of all other factors of the monitoring, and detections should not be considered indicative of a finding of harm. A comprehensive analysis will take place at the conclusion of the collection of all data gathered through December, 2006.

The report that was released in December is for data collected from January through August 16th, 2006. Overall, the results seem to indicate a high level of safety and protection to the community from the use of crop protection products.

Detailed findings indicate the following:

Of the 40 chemicals monitored, 22 pesticides or breakdown products were detected. Of those detected, 17 were believed to be detected because of use as a pesticide. The remaining 5 detections are believed to be from non-pesticidal sources (i.e., vehicle emissions, etc.).

Only two pesticides exceeded the acute screening level. Diazinon, which is used as a pesticide, exceeded the screening levels 1 day out of the 297 days monitored. Acrolein, the other chemical that exceeded the screening level, exceeded the acute screening level for almost all days monitored. Readings for acrolein were consistent with other monitoring being done around the state, and the detections & ascendances are believed to be from non-pesticidal sources like vehicle emissions.

The chemical with the highest concentration level, although still not exceeding the acute screening level was formaldehyde. These detections were at **less than 50%** of the screening levels set, and like acrolein, it is believed that the formaldehyde detections were from non-pesticidal usage.

The chemical with the highest concentration of a chemical that was from a pesticidal use was MITC. All detections were below health screening levels, with the highest concentration still 87% below that of the health screening level.

DPR is also conducting well water monitoring to determine the effects of pesticides entering water systems via drift. There has been no indication of increased findings in this area.

DPR Statewide Guidance Policy:

DPR's original guidance document was set aside last year by Cal-EPA for failure to adequately reach out to EJ communities. DPR is undertaking a new policy document by utilizing an Advisory Committee that will review DPR polices and procedures, and make recommendations to the Director for how DPR should revise its regulatory process to incorporate EJ principles.

The committee has been meeting since September, 2006. It is made up of environmental justice, anti-pesticide, and agricultural organization representatives, as well as representatives of regulatory agencies and university extension.

The advisory committee is looking at processes to allow for greater transparency within DPR's regulatory process. It is also looking for ways to improve access for public participation in the regulatory process, and to improve communication and education between DPR and the environmental justice communities. The committee is expected to make its recommendations by the end of April, 2007.