

Responsible action needed in IBM's toxic waste cleanup

The State Water Resources Control Board has recently decided to hear an appeal of the International Business Machines Corp. cleanup order which was originally issued in December 1984 by the Bay Area Regional Water Quality Control Board. The case has the potential for setting groundwater pollution precedents that could ripple throughout the state. It also will be a major test for the Deukmejian administration and its controversially-plagued state Water Resources Control Board.

VIEWPOINT

Chemical releases at IBM's south San Jose plant have caused extensive groundwater contamination affecting about 25 public and private wells with organic solvents (such as 1,1,1 trichloroethane, 1,1-dichloroethylene, and freon 113) in the parts-per-billion range. The plume of contamination has spread from the Cottage Road plant up to the San Jose Water Company's well field at Tully Road, a distance of about five miles, making this the largest known underground contamination problem in the area. IBM has only partially defined and contained the pollution despite considerable effort. The regional water quality board in its December 1984 order ruled that IBM was not required to further define or decontaminate the polluted aquifers in the area north of Capitol and Monterey, despite the vigorous protests of the county, the City of San Jose, the Santa Clara Valley Water District, Citizens for a Better Environment, and the Silicon Valley Toxics Coalition. The State Department of Health Services has not required any remedial action to reduce exposure from the polluted wells because contaminant levels generally fall below regulatory standards. However, this policy is based on the premise that what we don't know about the toxicity of particular chemicals—due to inadequate testing—won't hurt us.

In response to the Regional Water Board's decision, the county, the city, the water district, Citizens for a Better Environment and the Toxics Coalition all appealed to the state water board, raising the following issues:

1. Does a groundwater polluter have a responsibility to investigate pollution and evaluate remedial action options when the contaminants in the ambient groundwater are present in water supply wells at levels below current drinking water standards or action levels?
2. Does a groundwater polluter have a responsibility to reduce public exposure to its contaminants when they are present in water supply wells at levels below current standards?
3. In the face of scientific uncertainty regarding health risks, should the polluter be required to use readily available and affordable technologies or management strategies to reduce public exposure to its chemical contaminants?

We have made detailed and strenuous arguments to the State Water board that all of the above questions should be answered in the affirmative. The fate of

icy—which creates a presumption that a maximum effort must be made to restore degraded water—hangs in the balance, awaiting the determination of these issues by the state water board.

In its draft order and supporting "Technical Report," the state water board staff is highly critical of IBM's cleanup operation and recommends a considerable amount of increased monitoring:

"The record does not support IBM's contention that data being generated by the monitoring network is representative of overall conditions in the basin. Nor does the record support the contention that the existing monitoring network is capable of monitoring threats to public health posed by contamination from Repon 1." (page 33)

The Technical Report also provides an analysis of wellhead treatment and concludes that "treatment using granular activated carbon would be technically effective in reducing concentrations of the chemicals of concern. Due to the low concentrations... the effectiveness of the GAC system should be determined by pilot studies prior to full scale design." This finding supports the legislative approach taken by state Sen. Dan McCorquedale in Senate Bill 1903 which would establish such a pilot treatment program and which would be funded by matching funds from government and private industry. This finding also supports the action taken by the San Jose City Council on Feb. 4, to reduce public exposure to toxic contaminants in its wells.

IBM has argued that the existing low concentrations of toxic pollutants in the public wells and the outer regions of the plume should not require them to take further remedial actions. But the toxicity debate hinges on rather tenuous and incomplete animal data that is subject to reinterpretation by regulatory agencies. In fact, the Environmental Protection Agency in its Integrated Environmental Management Project draft stage one report of October 1985 acknowledged that a significant portion of the scientific community believes that the chemical TCA will prove to be a carcinogen upon adequate testing. The federal agency has further stated, "If the preliminary National Toxicology Program report on the carcinogenicity of this compound is affirmed, the recommended maximum contamination level would be zero." (Federal Register, Vol. 49, No. 114, June 12, 1984.)

The bottom line is that residents are tired of being part of somebody else's experiment. There will never be complete, non-controversial data, yet policy decisions must be made. The Environmental Protection Agency does not have all the answers. Especially where there are significant data gaps on health effects information, the responsible course of action for governmental agencies to take is to require additional monitoring by IBM, to uphold the non-degradation policy, and to require a pilot program to evaluate wellhead treatment. In the face of scientific uncertainty, the burden of proof and responsibility must be on the polluter, not on the public. IBM, of all companies, can and should do better.

It is a member of the California Water Quality