

July 24, 1974

"The delegation of the U.S.A. indicated that they fully supported the objectives of the Codex Alimentarius Commission. Therefore, the U. S. would strive to give 'full acceptance' to as many as possible of the proposed maximum limits recommended by the Commission.

"The Commission was further informed that it was U. S. policy that, where Codex maximum limits differed from established U. S. limits, the U.S.A. would review each proposal from the standpoint of determining whether changes could be made to the U. S. Pesticide Residue Regulations. In all cases where possible, action would be initiated to make the U. S. Pesticide Residue Regulations consistent with the Codex proposals. Where the U.S.A. could not accept the Codex proposals for reasons of Good Agricultural Practice or for human health reasons, the reasons for their nonacceptance and data on which such decisions were based would be fully set forth."

The Codex Commission agreed that a Conference on Pesticides should be convened by FAO and WHO. Such a conference was recommended by the Codex Committee on Pesticide Residues, and it was strongly endorsed at the Commission meeting by the Canadian delegation.

The U. S. is assisting the Pesticide Residues Committee to draw up a classification of foods on the basis of pesticide residue potential. This may be used for possible limits on residues for groups of commodities rather than for each specific commodity.

In considering some of the pesticide limits at Step 8 of the Codex acceptance procedure, some objections were voiced at the Commission meeting to some of the recommended levels for chlordane, carbaryl, methyl-parathion, diazinon, dioxathion, fenchlorvos, and quintozone.

The Netherlands delegation expressed the opinion that hexachlorobenzene should not be advanced to Step 9 for acceptance of limits by governments because the Joint Meeting of the FAO Working Party of Experts on Pesticide Residues and the WHO Expert Committee on Pesticide Residues had withdrawn a temporary Acceptable Daily Intake (See July 17, Page 5). However, it was noted that the Joint Meeting recommended a daily intake which appeared to be below any dosage rate known to be harmful.

VINYL CHLORIDE RESEARCH PLANS DISCUSSED BY SEVEN AGENCIES

Vinyl chloride research, in progress and planned, was discussed at a meeting held last week by representatives of seven federal agencies concerned with the substance (See July 17, Page 12).

The July 18 meeting was attended by representatives of the Environmental Protection Agency, Food and Drug Administration, Transportation Department, National Bureau of

Standards, Center for Disease Control, Consumer Product Safety Commission, and Occupational Safety and Health Administration.

EPA has planned a vinyl chloride inhalation toxicity study in pregnant rats. The study is to be done by the University of Cincinnati. The agency plans to conduct tissue culture screens, and studies of the interaction, if any, of vinyl chloride with selected other chemicals. The EPA's Office of Toxic Substances also plans to investigate the incidence of diseases among populations in the neighborhood of vinyl chloride and polyvinyl chloride plants.

FDA representatives reported that the agency has no future vinyl chloride studies funded, according to an EPA official. And, the Transportation Department representative reportedly told the July 18 meeting that the agency was not doing any work on vinyl chloride because the Department does not yet have an exposure level standard from the Health, Education and Welfare Department.

CDC plans to start a national surveillance registry for angiosarcoma. The Center plans to review death certificates for unidentified liver malignancies. So far, a 1965-1970 CDC review of 3,000 death certificates revealed 17 cases of angiosarcoma of the liver, an EPA official said. For the 17 identified cases, CDC hopes to get tissue to confirm the cancer type, the official added. A California registry turned up 20 cancer cases, four in children, which may or may not be related to vinyl chloride, the EPA-er stated.

CPSC is considering a rat and mice study to determine the mutagenic and other long term effects, if any, of household use of vinyl chloride. The agency is thinking about testing the animals with short bursts of vinyl chloride aerosol at a rate of one to ten seconds for one hour for 10 days at a level between 5,000 and 5,500 p.p.m. vinyl chloride. The animals would be held for two years and three generations would be studied if the agency's research plan were adopted.

EPA is now reviewing requested air emission reports from vinyl chloride and polyvinyl chloride manufacturers (See June 5, Page 3 and June 26, Page 10). The review is part of the agency's effort leading to an anticipated vinyl chloride air emission standard.

No Known Technology to Remove VCM from Air Streams, Firm Says

Firestone Plastics Company's report to EPA on the PVC Production Plant, Pottstown, Pa., stated that "at this time there is no known technology for removing vinyl chloride monomer from air streams." And, the firm said there was no known method to estimate fugitive vinyl chloride emissions from the many valve stems, relief valves, compressor shafts, pump seals, storage tanks, pumpout screens, etc.

Recovery equipment in the Firestone plant cost \$719,346; tank farm control equipment cost \$116,570; and dust collectors equipment, \$1,039,386, according to the report.

PPG Industries, Inc., reporting on its Lake Charles VCM plant, stated that the plant had no continuous vinyl chloride emissions. Total intermittent VCM emissions from

July 24, 1974

the plant were estimated at 13 pounds per day. PPG's report said a new system planned for loading sites will prevent the emission of 156 tons of VCM per year. The new system will cost \$250,000, PPG noted.

Allied Chemical Corporation's report on its vinyl chloride plant at Baton Rouge, La., noted that a proposed VCM vapor recovery system is designed to recover more than 99%. This system, according to the report, will also halt fugitive losses from coupling disconnects and draining in the loading operation.

The General Tire & Rubber Company filed a report on its PVC production facility, Ashtabula, Ohio. The report to EPA stated:

"We consider our fugitive losses total to be 101 pounds per hour and controlled loss point to be the inert vent of the gasholder to be 2.0 pounds per hour.

"The losses from the dryers average 41.1 pounds per hour, so the total MVC loss from the plant appears to be approximately 144 pounds per hour."

Ambient air data reported by General Tire included results of downwind samples taken at the plant property line. These results ranged from 0-3 p.p.m. vinyl chloride.

Downwind, property line samples taken during a minor spill in the polymer area contained between 1 p.p.m. and 12 p.p.m. vinyl chloride, the report said.

The report stated "we have sampled numerous outside areas throughout the plant well within the fence line ... Results: 1.0 to 38 p.p.m. MVC. The majority in the 15 p.p.m. range."

Air Products and Chemicals Inc. filed reports on its Escambia PVC Plant, Pace, Fla., and its APCI resin plant, Calvert City, Ky. The report on the Florida plant noted that total unaccounted fugitive emission losses average 170 pounds per hour. At the Calvert City plant, these fugitive emissions totalled 286 pounds per hour, the report said.

The report covering the Calvert City plant said effluent water leaving the PVC plant averaged 6.26 p.p.m. vinyl chloride during the sampling period and that no vinyl chloride was discharged to the Tennessee River during the sampling period.

Union Carbide Corporation's report on the Dynel resin process at its plant at South Charleston, W.Va., noted that exhaust gas from two parallel flash drying systems contained 15-18 p.p.m. vinyl chloride. A vent on the top of the scrubber column releases inert gases containing 0.8 percent VCM, according to the report. The scrubbing system, installed in 1969, cost \$30 million, the report said. The system costs \$5,560 per year to operate and maintain and the value of the recovered VCM is \$40,000 or \$0.0016 per pound, the report noted.

The plant's solvent resin process results in an annual loss of 475,000 pounds of VCM per year. About 300,000 pounds of the 475,000 pounds are lost in the air as monomer, the report said.

To reduce emissions from this process, the firm plans to install mechanical seals on reactor agitators. The report said this should reduce fugitive losses by 80%. And, the report stated:

"A development program to discover superior stripping techniques is currently in progress. The goal for this effort is a 50% reduction in VCM content of stripped solution, and it is felt that this goal is attainable."

The estimated cost of operating and maintaining improved stripping is \$30,000 per year.

The plant's dispersion PVC resin process has losses of PVC and VCM totalling 901.9 pounds per hour, the report noted.

TOXAPHENE, DDT SECTION 18 EXEMPTIONS DRAW OBJECTIONS FROM EDF

Section 18 exemptions granted by the Environmental Protection Agency for use of toxaphene to control sod webworm (See June 12, Page 2) and DDT for rabid bat control (See June 19, Page 2) have drawn objections from the Environmental Defense Fund (EDF).

Maureen K. Hinkle, Pesticides, Monitor, EDF, has asked EPA to publish all Section 18 requests in the Federal Register for comment before the agency grants or denies them. In her letter to EPA, Hinkle said:

"We are very much concerned that adequate attention was not given by EPA independently to assess the need for and potential effects of granting these (toxaphene and DDT) requests. Our request constitutes a spot check based on our fear that requests for Section 18 exemptions are being routinely granted with a minimum of independent assessment of needs and with inadequate balancing of benefits and risks."

She asked EPA to provide EDF access to: the toxaphene Section 18 request and supporting data; information EPA used to decide that toxaphene was "the least potentially damaging to human health and the environment of all the available registered alternatives;" evidence that EPA confirmed the sod webworm emergency; EPA's assessment of the potential hazard of toxaphene to non-target species; and evidence that toxaphene would not reach watering sources for cattle.

EDF described the Section 18 for DDT to control rabid bats as an "unnecessary and even dangerous use of DDT." Hinkle said the exemption set an "unfortunate precedent."