BEFORE THE

UNITED STATES ENVIRONMENTAL PROTECTION AGENCY

Hazardous Waste Management System; Identification and Listing of Hazardous Waste; Revision of Toxicity Characteristic	)	Docket No. F-87-TCN-FFFFF

Comments of the Vinyl Institute, a Division of The Society of the Plastics Industry, Inc.

The Vinyl Institute, a division of The Society of the Plastics Industry, Inc. (SPI)1/, appreciates the opportunity to comment on the modifications to the toxicity characteristic proposed by the Environmental Protection Agency (EPA or Agency) under the Resource Conservation and Recovery Act (RCRA). 52 Fed. Reg. 18,583 (May 18, 1987). EPA's June 1986 proposed revisions of the toxicity characteristic would have a dramatic

1/ The Vinyl Institute is comprised of the major manufacturers of vinyl chloride and polyvinyl chloride (PVC). SPI, the major national trade associaton of the plastics industry, is a corporation organized under the Not-For-Profit Corporation Law of the State of New York. Its 1,800 member companies and individuals in 49 operating units include those who supply raw materials, process and manufacture plastics or plastic products, and engineer or construct molds for similar accessory equipment for the plastics industry. The majority of SPI members are the processors and converters of plastic resins into end products which represent 75% of the dollar volume sales of plastics in this country.

and costly impact without any corresponding societal benefits. 51 Fed. Reg. 21,648 (June 13, 1986). Therefore, we endorse EPA's efforts to carefully consider the application of its June 1986 proposal to wastewater. While we endorse the Agency's inquiry here, there are several significant areas in the June 1986 proposal, such as the threshold levels and the landfill scenario, not mentioned in EPA's supplemental notice that merit reconsideration and revision. See, SPI Comments of September 26, 1986 in this docket. There is no record evidence or real-life experience that factually supports application of EPA's 1986 proposal to the vinyl chloride/polyvinyl chloride industry. Promulgation of the proposal without significant revision would be arbitrary, capricious and scientifically unsupported.

A. Criteria for Separate Mismanagement Scenario

We agree that it is inappropriate to apply the mismanagement scenario found in EPA's June 1986 proposal to wastewater. Industrial waste is not typically co-disposed with municipal waste in landfills; rather, wastewater is normally handled in a wastewater treatment facility. These treatment facilities may include surface impoundments or tanks, the discharges of which are typically regulated under the Clean Water Act.

In its supplemental notice, the Agency presents three alternatives for determining when a different scenario should apply to wastewater. First, under the "management based" approach, the surface impoundment scenario would be applicable only to wastes actually managed in impoundments. Second, under the "physical property based" approach, the surface impoundment scenario would apply to wastes having specified physical properties such as wastes containing less than 5% solids. Third, under the "definition based" approach, the surface impoundment scenario would apply to waste managed in treatment/disposal units, the discharges of which are subject to regulation under Section 402 or 307(b) of the Clean Water Act.

For the vinyl chloride (VC) and polyvinyl chloride (PVC) industry, the selection among these three approaches is not particularly significant because the wastewater is managed in surface impoundments, has less than 5% solids, and is subject to regulation under sections 402 or 307(b) of the Clean Water Act when discharged. Rather, the most important factor is the sampling point for evaluating the contents of the impoundment. We submit that the discharge from a surface impoundment will adequately represent the wastewater in the impoundment as related to its potential for groundwater

contamination. See, Comments of the Chemical Manufacturers Association (CMA) in this docket.

B. Actual Measurements Are Vastly Preferred to Predictive Models

EPA's proposal will cover a broad variety of industries and different operations. It is not possible to develop a single theoretical model which will accurately and easily predict the potential for groundwater contamination. Accordingly, we strongly oppose the use of predictive models or measuring the concentration at the inlet to the surface impoundment and applying attenuation factors to predict typical contents.

An alternative presented in the Federal Register notice is obtaining "a representative sample of the liquid portion at some location in the impoundment." 52 Fed. Reg. 18,584. While we urge EPA to use to impoundment effluent as the measure, representative sampling would be our distant second choice among the options presented.

C. Multiple Impoundments

If a waste water facility consists of multiple, sequential ponds, the effluent from the first pond can be

measured. This will adequately reflect the potential of the first pond and subsequent impoundments for groundwater contamination. In a series of impoundments, the concentration of a constituent in the effluent from one pond to the next should be used to determine whether the receiving pond is in hazardous waste service.

D. Use of Appropriate Scenario

The landfill scenario used by EPA in the June 1986 proposal assumes that all the waste disposed of in a landfill becomes an infinite source for migration into ground water. The inaccuracies in this scenario were reviewed in our prior submission. In this supplemental comment, we note that attenuation in surface impoundments is much greater than that of landfills. Clearly, different regulatory levels and scenarios for landfills and surface impoundments must be used.

Experience teaches that the landfill scenario proposed by EPA grossly exaggerates the potential for migration. One example is the disposal of wastewater treatment plant sludge and waste PVC in an on-site landfill for over 15 years. Groundwater monitoring data collected since 1984 from wells surrounding the landfill indicate the total absence of vinyl

chloride in the groundwater. About one-third of the materials landfilled were deposited prior to promulgation of the vinyl chloride NESHAP regulation when higher residual vinyl chloride levels were normal. This indicates that polyvinyl chloride with residual vinyl chloride levels around 100 ppm does not contribute any vinyl chloride to groundwater when land-disposed. See, Comments of Occidental Chemical Corporation in this docket (Sept. 22, 1986) (Burlington, NJ, facility). Indeed the Agency has acknowledged that vinyl chloride found in drinking water occurs only in tandem with other volatile organic compounds (VOCs) since the detected vinyl chloride is a degradation product of other VOCs. See, Inside EPA, vol. 8. no. 25, p. 2 (June 19, 1987) (report on forthcoming Safe Drinking Water Act standards).

There is no indication that waste or product from PVC facilities contributes to groundwater contamination. The exaggerative character of EPA's scenario assumptions, combined with industry's experience with wastes having significantly higher residual vinyl chloride monomer levels than the proposed thresholds would permit, as well as the Agency's own conclusions on the source of vinyl chloride in groundwater, all indicate that the threshold level should be increased at least an order of magnitude from 50 to 500 parts per billion (ppb) or higher.

If EPA retains the 50 ppb level it will be imposing an extreme cost burden without obtaining any environmental benefit. We estimate that for the PVC industry alone, the capital costs involved with lining surface impoundments and the construction of pretreatment facilities for wastewater prior to entry into impoundments will range from $60 to $100 million for the 23 existing PVC plants. The impact on vinyl chloride monomer production facilities will be even greater. The costs to other segments of industry subjected to these requirements will likely be similar, again without any certain benefit to society.

E. Low Level Volume Cut-Off

We are concerned with the lack of a volume cut-off for wastes covered by the organic toxicity characteristic. Very small amounts of wastes containing minute quantities of constituents could trigger extremely burdensome waste management activity. For example, PVC containing 5-10 ppm residual vinyl chloride sometimes exceeds the vinyl chloride regulatory level when subjected to the toxicity characteristic leaching procedure (TCLP). Loss of this PVC, whether to an impoundment or to the ground, could be considered disposal of hazardous waste regardless of how small the spill. EPA needs to establish a volume regulatory level for intermittent and incidental discharges.

F. Conclusion

For the reasons stated above, EPA should: (1) adopt a different scenarios for wastewater surface impoundments and landfills, (2) use the impoundment effluent as an adequate representation of the potential for groundwater contamination, (3) adjust the threshold for vinyl chloride to 500 ppb or more, and (4) establish a volume cut-off so that small amounts of waste do not improperly trigger burdensome waste management activity.

Sincerely,

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