

**Public Meeting Comments of The Vinyl Institute
on
The Occupational Exposure Banding Process:
Guidance for the Evaluation of Chemical Hazards,
Docket ID: CDC-2017-0028-0001**

**The Vinyl Institute
May 23, 2017**



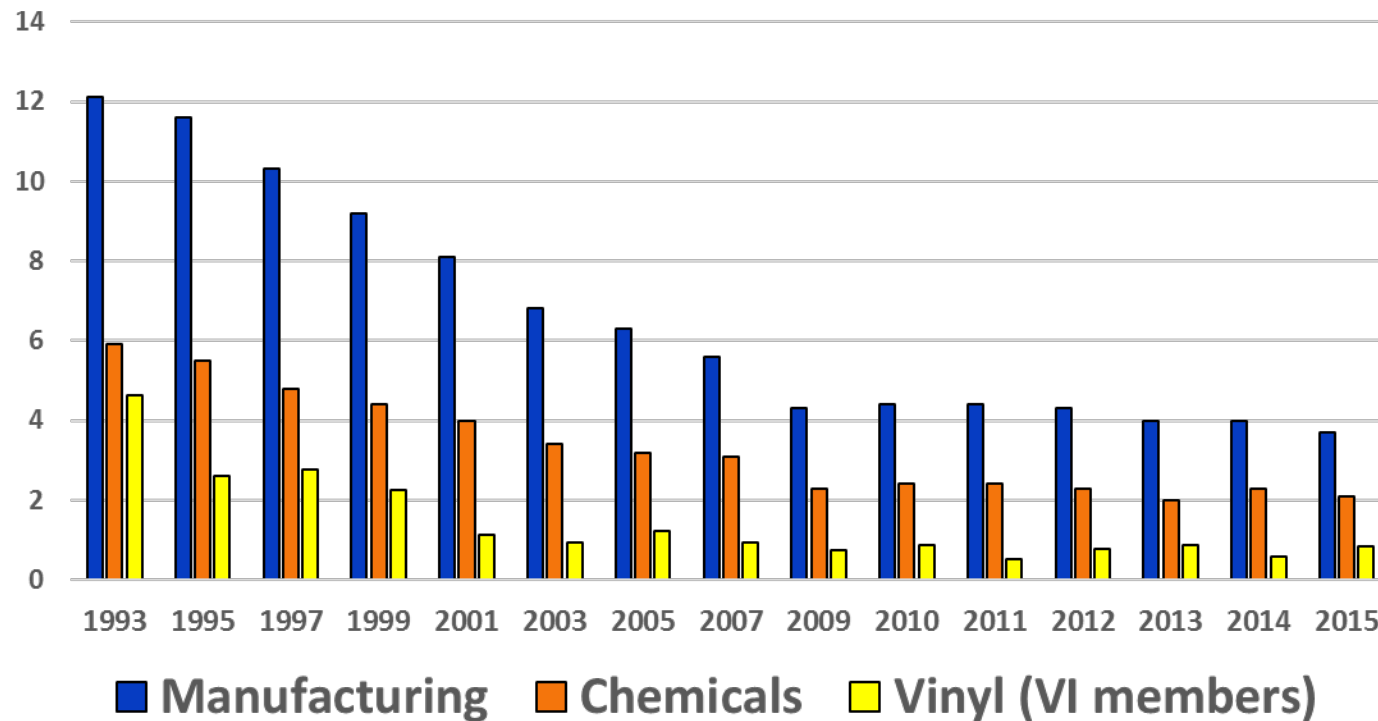
VI Commitment to EHS Programs

- Workplace Safety Achievements
 - VI members
 - ½ the chemical sector rate for OSHA recordables
 - ¼ the manufacturing sector rate for OSHA recordables
- Workplace and Environmental Achievements
 - Reduced VCM emissions by 83% per pound produced
- VI applauds goal of NIOSH's OEB Process Initiative

OSHA Recordable Rates per 200,000 Employee Hours

Vinyl is 1/2 rate for chemicals and 1/4 rate for all manufacturing

Work Related Incident Rate

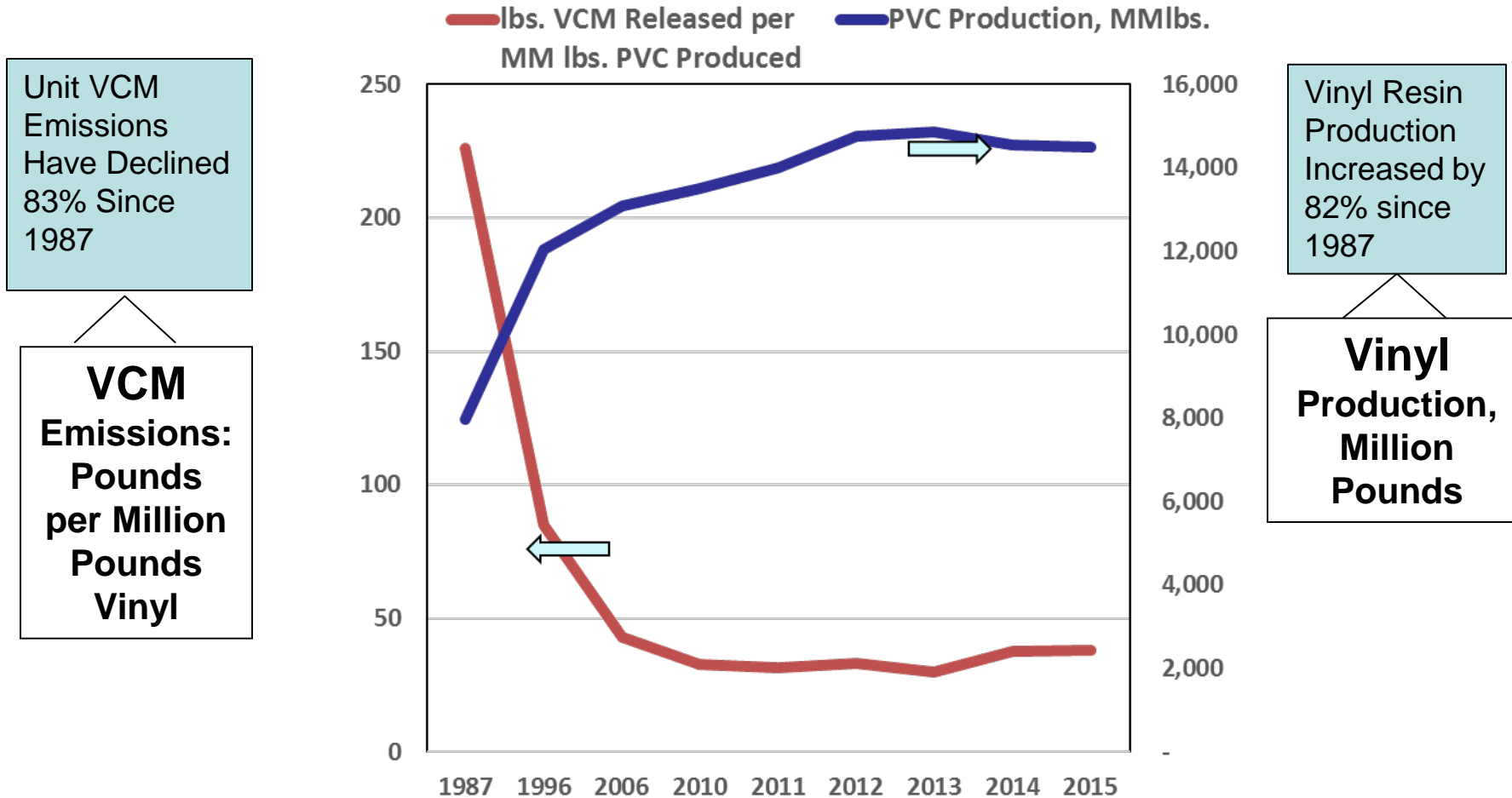


Source: VI Surveys, US BLS Data



US Vinyl Chloride Emissions

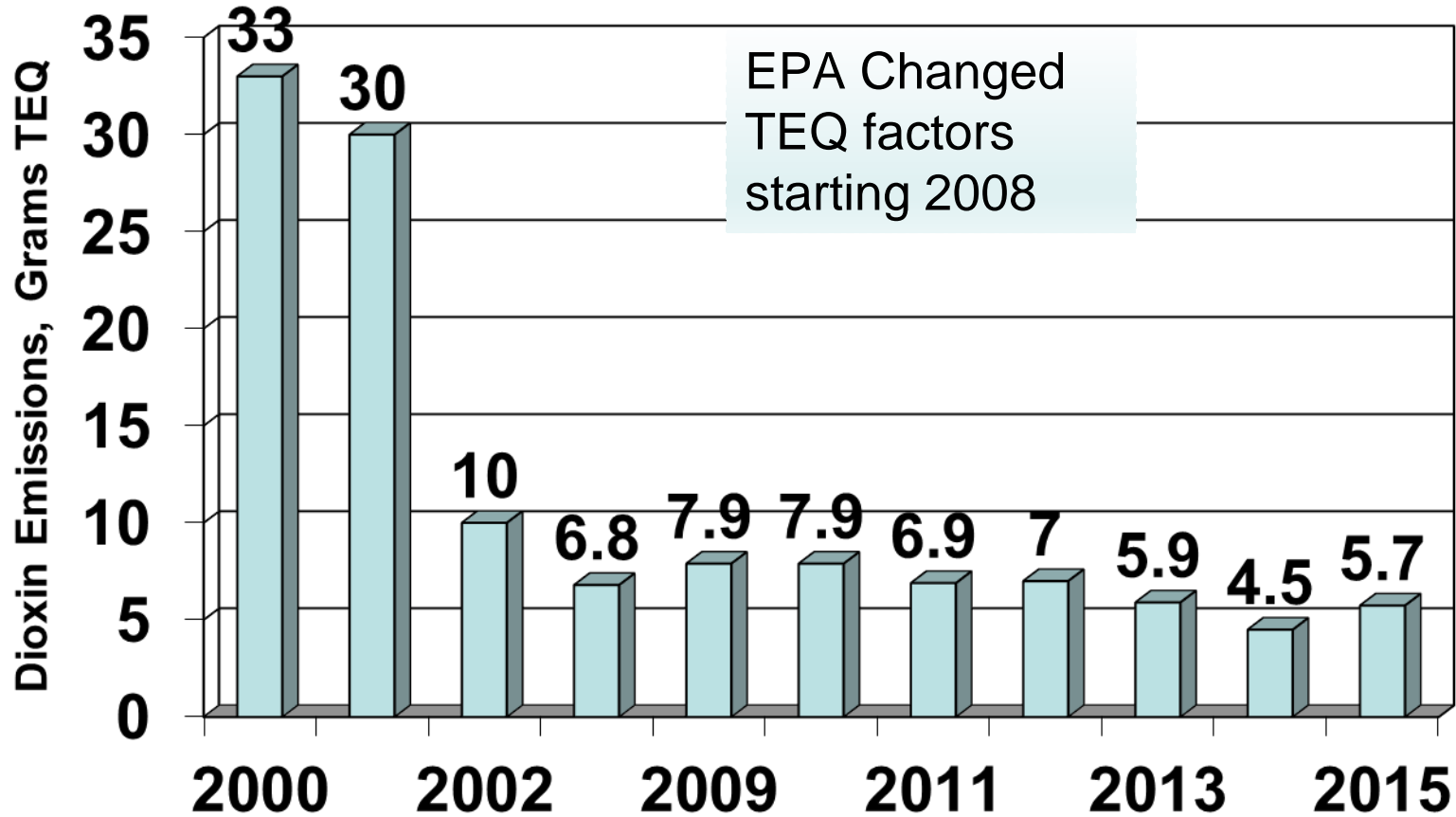
(On Unit Basis, Down 83% Per Lb. Produced Since 1987)



Source: USEPA TRI Data, Air and Water Data



U.S. Chlor-Vinyl Mfrg. Dioxin Ambient* Emissions Down 28% Since 2009



Source: EPA TRI Air and Water Data

*Ambient emissions exclude secure land disposal



Overview of OSHA PELs Process



- Well-established, conservative approach for developing PEL, requiring OSHA to:
 - Identify exposure level that would eliminate significant risk of material impairment
 - Demonstrate compliance with selected level is technically and economically feasible for all affected sectors, activities and tasks
 - Demonstrate exposures can be reliably measured at that level

Overview of OSHA PELs Process



- OSHA first identifies health-based limit based on weight of evidence analysis that requires:
 - identifying, assembling and assessing the available scientific studies;
 - selecting the studies appropriate for formulating a dose response relationship;
 - formulating a dose-response model to represent the available data and
 - extrapolating the dose-response curve to lower exposure levels for which data generally is not available.

Need for Alternative to Way to Generate OEL



- The OSHA PELs process takes years to complete.
- Alternative needed when employers or other affected individuals:
 - are operating under time and/or resource constraints and
 - need to expeditiously assign a risk characterization to a chemical process or activity.

Need to Recognize Limits of OEB Process



- Uncertainty of OEB Process increases with magnitude of deviation from PELs process
- Creates concern that OEB Process will be overly conservative
- Concern best illustrated by comparing the highly effective OSHA PEL with OEL suggested by Tier 1 and Tier 2 of proposed OEB Process.
 - Highly effective PEL of 1 ppm
 - Tier 1 and Tier 2 of proposed OEB Process suggest ≤ 0.1 ppm
- Indicates that OEB process is overly conservative

VI Recommendations



- Any exposure banding process should be validated in a transparent manner based on a weight of evidence analysis.
 - It is not clear how a statistical showing that the recommended OELs are as protective as x% of the current PELs meets that burden
- Any assumptions or policy determinations relied upon by NIOSH in the formulation of the process should be explained.
- Assuming adequate validation, the process should be viewed and described as a useful, conservative, rule of thumb tool for adopting an internal OEL absent a PEL or comprehensive Tier 3 analysis.
- Given the inherent uncertainties, NIOSH should ensure that the OEB process focuses on the prevention of material impairments of health and not mild, transient and/or reversible conditions.

VI Recommendations



- NIOSH should be explicit that the OEB process does not consider the technical or economic feasibility of controlling exposures to the recommended OEB level or the feasibility of reliably measuring exposures at that level.
- NIOSH should explicitly acknowledge, consistent with the OSH Act principles for establishing health standards, that employers are not required to or expected to implement measures that are technically or economically infeasible.
- The List of Information Sources to be relied on for hazard classification should be limited by NIOSH to those that:
 - Make transparent determinations
 - Provide for effective stakeholder participation
 - Are based on a weight of evidence analysis.

VI Recommendations



- The OEB process should include caveats that acknowledge the uncertainties involved in relying on the hazard statements in safety data sheets (SDS) given:
 - The materially uneven level of compliance with the OSHA Hazard Communication Standard reflected in SDS ;
 - The general lack of health data on the effects of most mixtures as manufactured and shipped, and
 - The continued reliance on threshold default concentration levels in classifying mixtures

VI Recommendations



- Any OEB process must work in harmony with the OSHA Hazard Communication Standard (HCS).
 - We are concerned by the potentially misleading impact of the OEB process given the requirement in Appendix D of the OSHA Hazard Communication Standard that directs the chemical manufacturer to list an internal OEL on the SDS for the product.
 - We do not want a situation where the uninformed lead the uninformed
 - The OEL generated by the OEB process should be accompanied by a statement identifying the Tier that was utilized in adopting that OEL and the individual responsible for implementing the process (as is done with the creator of SDS)
 - A downstream reader (including OSHA compliance personnel) would have some basis for assessing the weight to be given to the OEL and contacting the person who developed it.

Conclusion



- VI Supports the goal of the OEB Process
- The OEB process should be scientifically validated; it is not clear how a statistical showing that the recommended OELs are as protective as x% of the current PELs meets that burden
- The OEB process should include caveats that acknowledge
 - It is not a substitute for a PEL
 - It is, at best, a useful rule of thumb approach for those operating under time and/or resource constraints
 - It is purely health based and does not consider technical or economic feasibility or the feasibility of reliably measuring exposures at the OEL.
- Any OEB process published by NIOSH must work in harmony with the OSHA Hazard Communication Standard (HCS).