

ENVIRONMENTAL HEALTH RESEARCH FOUNDATION

A NONPROFIT RESEARCH FOUNDATION SPECIALIZING IN HEALTH AND ENVIRONMENTAL SCIENCE

Update and Summary:

Lack of Scientific Basis for the Center for Health, Environment and Justice (CHEJ) Claims Regarding PVC

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Update and Summary Report

The Environmental Health Research Foundation (EHRF) was asked to examine the scientific basis for statements regarding the health and environmental properties of PVC, also known as vinyl plastic, made in the Center for Health, Environment and Justice (CHEJ) brochure “Way off Target, A Critical Assessment of Target’s PVC Products & Packaging.” These statements were found to be based primarily on claims made on the CHEJ website (<http://www.besafenet.com/pvc/about.htm>) which have already been examined by EHRF (“Examination of the Scientific Basis for the Center for Health, Environment and Justice (CHEJ) Claims Regarding PVC,” January 24, 2007).

The January 2007 EHRF review of the CHEJ claims documented:

- 1) Scientific studies conducted over the past 10 years have provided considerable additional understanding of the health and environmental properties of PVC but have not confirmed any of the claims nor provided any evidence of actual impacts on human health or the environment from use of PVC.
- 2) Authoritative government reviews in the US and in Europe have confirmed the safety of PVC use in consumer and medical products.
- 3) Data provided to government agencies have documented that a) emissions of hazardous materials have been reduced, b) considerable volumes of PVC are being recycled and c) the PVC industry has a superior worker safety record.

The CHEJ brochure largely repeats the previous claims, and cites the same outdated information, as reviewed in the initial EHRF report. However, the brochure has restated three claims in ways that may unduly raise concerns among the public. These claims are examined below:

New CHEJ Claim 1: PVC “has come under intensive scrutiny for its harm to public health and the environment.”

Nowhere in the CHEJ report or the data cited is harm to public health or the environment demonstrated. PVC is a polymeric material or plastic, and based on a large body of research, these materials are known to be inert and non-toxic.

New CHEJ Claim 2: “PVC products and packaging pose significant and avoidable health and environmental hazards.”

There is considerable data available on the safety of PVC, which is approved for use in consumer products by relevant government agencies in the US and worldwide. Recent assessments include an in-depth review by the US Consumer Product Safety Commission (CPSC), which considered and rejected a petition to ban PVC toys and products intended for use by one of the most vulnerable segments of the consumer population, children under the age of 5 (<http://www.cpsc.gov/library/foia/foia03/petition/ageunder.PDF>).

New CHEJ Claim 3: “the most dangerous plastic to our health and environment from production to disposal.”

There is considerable data available on the safety of PVC production, use and disposal.

PVC Production: Data demonstrating the excellent worker safety record of the PVC industry is available from the U.S. Occupational Safety and Health Administration (<http://www.bls.gov/iif/oshwc/osh/os/ostb1244.pdf>) and the Centers for Disease Control and Prevention (<http://www.cdc.gov/epo/mmwr/preview/mmwrhtml/00046136.htm>).

PVC Use: The safety of PVC use in consumer products including toys – one of the product uses specifically mentioned by CHEJ - has been affirmed by the U.S. Consumer Product Safety Commission (<http://www.cpsc.gov/library/foia/foia03/petition/ageunder.PDF>) and the European Commission Scientific Committee on Health and Environmental Risks (<http://www.dinp-facts.com/upload/documents/document2.pdf>).

PVC Disposal: The available data do not support the CHEJ claims regarding PVC disposal. For solid waste incinerators, the U.S. Environmental Protection Agency determined that the design and operation, not the composition of the waste, were the controlling factors for rates of hazardous dioxin and furan stack emissions (<http://www.epa.gov/ncea/pdfs/dioxin/part1/volume2/volume2.pdf>). EPA regulations on the design and operation of municipal incinerators have reduced dioxin and furan emissions by 99.9% with similar reductions projected for medical incinerators when current standards are fully implemented (<http://cfpub.epa.gov/ncea/cfm/recordisplay.cfm?deid=20797>).

Regarding landfill disposal, the California Department of Housing and Community Development considered and rejected claims that PVC disposal in landfills would contribute to the release of dioxins from fires (http://www.bsc.ca.gov/documents/PR07-02_final_pics.pdf).

Conclusions

- The available scientific data do not support the new CHEJ claims
- Regulatory agencies in the US and worldwide have examined the safety data on PVC and approved its use for toys and other consumer products
- EPA and California data demonstrates that PVC content is not a concern for solid waste incineration or landfill disposal.

The activities reviewed above provide assurance to the public that - contrary to the CHEJ claims - human health and the environment are being adequately protected.

Further information on EHRF is available at www.ehrf.info.