

Based on the foregoing analysis, the Commission finds that the VOSI standard is technically unsound, and thus would not result in the elimination or adequate reduction of the risk, and that substantial compliance with it is unlikely.

### 3. Precautionary Labeling

As discussed above in Section F. of this preamble, *Statutory Requirements*, the CPSC Human Factors staff analysis on this issue demonstrates that precautionary labeling of individual candles is not an acceptable strategy for protecting vulnerable populations from lead poisoning that may be caused by burning candles with lead-cored wicks.

## I. Regulatory Analysis

### 1. FHSA Requirement

The Commission is issuing a rule declaring a ban on metal-cored wicks containing more than 0.06 percent lead by weight in the metal and candles with such wicks. Section 3(i) of the FHSA requires that the Commission prepare a final regulatory analysis for this action. 15 U.S.C. 1262(i). The following discussion addresses this requirement.

### 2. Introduction

The Commission is amending the FHSA regulations to declare that metal-cored wicks containing more than 0.06 percent lead by weight in the metal and candles with such wicks are hazardous substances and to ban such wicks and candles. In February 2001, the Commission voted to issue an ANPR that could lead to such a declaration and ban. 66 FR 10863. In April 2002, the Commission issued proposed rules that would declare such wicks and candles with such wicks to be hazardous substances and would ban them. 67 FR 20062.

### 3. Required Content of the Regulatory Analysis

To issue the ban rule under the FHSA, the Commission must also publish a final regulatory analysis containing a discussion of various factors. These factors include a description of the potential benefits and potential costs of the rule, including any benefits and costs that cannot be quantified in monetary terms, and an identification of those most likely to receive the benefits and bear the costs. The FHSA also requires a description of any reasonable alternatives to the rule, together with a summary description of their costs and benefits, and a brief explanation of why such alternatives were not chosen. 15 U.S.C. 1262(i). In addition, the Commission must address the requirements of the Regulatory

Flexibility Act, which considers effects on small firms, and the requirement for review pursuant to the National Environmental Policy Act.

### 4. Analysis of Hazardous Substance Ban<sup>8</sup>

#### (a) Benefits

While the benefits to consumers of eliminating lead-cored candlewicks as a source of lead exposure are not quantifiable, they are likely to be small since few lead-cored candlewicks are now produced and/or sold in the U.S. The likely benefits are dependent on individual circumstances of candle use. Laboratory studies indicate that under certain conditions of use exposure to airborne lead from burning candles with lead-cored wicks presents a risk of lead poisoning. Therefore, a ban may result in positive health benefits in individual cases.

In the mid-1970s, the Commission chose to defer to the industry's voluntary agreement to eliminate lead from candlewicks. Since this agreement did not prevent companies from returning to the use of lead-cored wicks in the 1980s and 1990s, a ban on the use of lead in candlewicks will help ensure that lead will not be used in candlewicks in the future.

#### (b) Costs

The costs of replacing lead-cored candlewicks with non-lead wicks are expected to be small. The current use of lead in wicks is already small, since none of the NCA members use lead in their wicks beyond the acceptable trace levels found in zinc cores, and information obtained from an industry source indicates that the costs of substitutes for lead-cored wicks are not higher than costs of wicks made with lead.

There may be costs associated with labeling and ensuring conformance. Shipping carton labeling may be done by direct printing onto the carton or by affixing a pre-printed label, such as a sticker. On a per carton basis, direct printing is expected to be less costly than the use of a sticker. Labeling machines may cost as much as \$15,000 and individual labels may cost five to 10 cents each. Assuming that 15–20 percent of all candles produced would be affected, and that each shipping

carton holds 144 candles, valued at one dollar each, perhaps two to three million shipping cartons would require labeling annually. If labels cost five to 10 cents each, then annual costs would be about \$100,000 to \$300,000. The costs to candlewick manufacturers to label shipments of metal-cored candlewicks, expected to be substantially less than that of candles, are estimated to be about \$80 to \$320 per year.

Consistent with the Commission's lead in consumer products guidance policy at 16 CFR 1500.230, domestic producers, distributors, private labelers, importers, and retailers of metal-cored candlewicks and candles with such wicks may wish to test products to ensure compliance with the regulation. Alternatively, firms may wish to obtain assurances from suppliers that the lead content of the metal does not exceed 0.06 percent by weight. This should be relatively straightforward because candlewick manufacturers generally receive chemical analyses from the suppliers of the metal used in their candlewick production.

Finally, there may be costs associated with inventories of non-complying candlewicks held by manufacturers. The rule would apply to candlewicks or candles manufactured on and after the rule's effective date. Therefore, non-complying candlewicks would have to be scrapped under the regulation since they would no longer be usable in candle manufacturing on and after the effective date. It is not anticipated, however, that a large amount of candlewick inventory would be affected.

In summary, while the benefits of a ban of lead in candlewicks are likely to be small, the costs of the ban to the industry are small, and thus bear a reasonable relationship to the benefits. The action will contribute to the gradual reduction in lead exposure in the U.S. population.

### 5. Alternatives to the Rule

The Commission has considered several other alternatives, including: no action, product labeling, recordkeeping for wick/candle shipments and deferral to a voluntary standard. See discussions above at section G., Response to Comments on the NPR, and section H., Alternatives to Proposed Ban.

## J. Paperwork Reduction Act

The ban regulation as proposed would have required manufacturers and importers of metal-cored candlewicks and candles with such wicks to perform testing or obtain records of testing, maintain records, and label shipping

<sup>8</sup> The following discussion of costs and benefits is extracted from Memorandum from Mary F. Donaldson, CPSC Directorate for Economic Analysis to Kristina Hatlelid, CPSC Directorate for Health Sciences, "Final Regulatory Analysis of a Proposed Ban of Lead in Candlewicks," March 10, 2003. See footnote 2 for information on the availability of this and other related documents for this rulemaking.