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Subject: Comments on Unfair Trade Practices Task Force

Dear Mr. Lorentzen

I saw your request for public comment on unfair trade practices posted on the Internet and decided to comment relative to an issue that I have been working on for the last three years. I am going to keep my comments brief. If you become interested in this topic, I would be happy to supply you with a great deal of technical detail on the subject.

A brief bit of background:

I am a Professor of Environmental Engineering at Case Western Reserve University. In 2001 and 2003 I led teams of students on brownfield sampling programs across the greater Cleveland area. The goal was to sample and analyze urban soils for a wide range of heavy metal contamination. During these sampling trips we observed several batteries (standard “consumer” AAA, AA, C, D, 9v power cells) that had been discarded on urban pavements and wondered if these would release enough heavy metals to impact our samples. This observation led to more detailed analysis of the number of batteries in urban litter. Further analysis has led us to discover that there can be surprisingly high numbers of consumer batteries in urban litter. In Cleveland, we found an average of approximately 20 batteries per survey based on over 50 parking lot surveys. Litter rates are also high on urban streets. At one location the annual litter rate is approximately 1 battery for every 6 feet of curb. These batteries can yield environmental problems because they decay rapidly and release heavy metals directly into parking lot stormwater runoff. This, in turn, often reaches small urban streams where its aquatic toxicity can do the most damage.

Discovering this problem of urban battery litter has led me to learn quite a bit about the consumer battery industry. We have collected thousands of batteries from urban pavements, and spent quite a bit of time characterizing them by their manufacturer, and chemical type. We have also done this for long enough to see shifting trends in the composition of urban consumer battery litter. We have also spent a great deal of time

examining (identifying and characterizing the environmentally-significant properties of) the wide variety of consumer batteries available in the retail market place. To date we have identified over 500 distinct types of AA cell batteries in use in the greater Cleveland area.

My fundamental comments are related to the profound impacts that poorly made imported batteries are having on the US consumer battery industry and on urban stormwater quality. I think this is relevant because the batteries of highest concern find their way to urban pavements because of unfair trade practices.

Comments

When we began collecting and identifying consumer batteries in urban litter, we found batteries from the “expected” sources (Duracell, Energizer, Eveready, Rayovac). These tend to be “alkaline” batteries with steel barrels. We also found reasonably well-made batteries from well known international companies (Sony, Panasonic, Varta, Fuji, Sanyo). Again, these tend to be reasonably well-made alkaline batteries although other chemistries are also used. However, we also found batteries that are less easily identified because they are not labeled by manufacturer, and are poorly constructed so they do not hold up as well as “alkaline” batteries under hostile environmental conditions. We often find these in highly deteriorated condition. My comments are intended to address this third class of “cheap” batteries.

There is currently a class of cheap, poorly constructed batteries being imported into the U.S. from Malaysia, Indonesia and China that should be examined very carefully for several reasons. Often these batteries can be found in discount stores (dollar stores) selling for 16/dollar (less than \$0.07 per battery). These batteries are problems because:

- (1) Often these batteries are made to look like typical U.S. products. Most often they use the Duracell color scheme and a name close to Duracell. We have identified over 30 Duracell “clones” in the Cleveland marketplace. However, there are also Energizer “clones” around, plus a whole host of other brands that are distinct but equally poorly made. I have attached example images of dollar 16 packs for your review (see Figs. 1 through 4) and additional individual examples of individual AA cells (see Fig. 9). However, this is only a small sample of the large number of such products currently being imported. **My first comment is that we should not allow the importation of products that are clearly cheap clones of U.S. products.** Companies like Duracell may be able to take action against individual products as they become aware of them, but they should not have to fight this battle in the retail outlets of the U.S. **We should erect an import barrier to this “clone” type of product. I know this is impacting the sale of U.S. products because we see a growing number of these “clone” batteries in urban litter and see them almost immediately after they are introduced in the dollar stores.**

- (2) Often these batteries contain what appear to be power check features (see Figs. 1 and 9). I have yet to find one of these power checks that work. I suspect they are nonfunctional images simply printed on the label. If this is correct, this is a consumer deception. **My second comment is that we should not allow the importation of products with non-functional components such as power checks that deceive the consumer into thinking that this is a higher value product.**
- (3) These cheap imported batteries have very high leakage rates. Often several are already leaking in their packages. I have attached example images of more of these products (see Fig. 5 through 8) but this is a very small sample of the number of such “non-clone” products currently being imported. They spontaneously eat through their zinc barrels and leak. They have very short shelf lives relative to alkaline batteries. If consumers are not unusually careful with these, they will do great damage to the products in which they are installed. **My third comment is that we should have some performance standards for consumer batteries and should not allow the importation of products with very high leakage rates. The leakage rates are high because of their poor construction, and this same poor construction leads to more rapid deterioration and higher concentration pollutant release when the batteries are discarded.**

I see this class of consumer batteries as being unusually problematic because they are reducing the viability of the U.S. battery industry and because they are leading to a greater release of stormwater pollution. The latter occurs because the batteries have relatively low capacity, so they must be exchanged more often, they are poorly made so they deteriorate more rapidly under hostile environmental conditions. Often they use cell chemistries (zinc chloride, zinc carbon), which release higher concentrations of pollutants when they are ruptured. Over the last three years we have seen a distinct increase in the numbers of these batteries in urban litter. **I ask you to consider taking action to control the import of this type of product.**

I would be happy to provide additional technical detail on any of the issues I have raised. I have enclosed an electronic version of this communication on CD, which includes all figures as color images, and have e-mailed an electronic copy to webmaster-support@ita.doc.gov.

Sincerely

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Please see attached
Figures #1 through 9

Dr. Aaron A. Jennings Comment Figures



Fig. 1 – DURASELL Super Extra Heavy Duty batteries (Duracell clone batteries – note non-functional power check feature) identified as “Made in PRC” on battery label.



Fig. 2 – Dinacell Super Extra batteries (Duracell clones) identified as “Made in China” on label.



Fig. 3 – Duraking Super Extra Heavy Duty batteries (Duracell clones) identified as “Made in China” on the packaging and battery label.



Fig. 4 – Extracell batteries (Energizer Clones) identified as “Made in China” on packaging



Fig. 5 - Q-Force Super Extra Heavy Duty batteries distributed by Deals Nothing Over A Dollar, Bridgeton, MO 63044 and identified as a “Product of China” on the packaging.



Fig. 6 – Okkaido Super Extra Heavy Duty batteries Distributed by Deals Nothing Over A Dollar, Bridgeton, MO 63044 and identified as a Product of China on the packaging



Fig. 7 – SuperCell General Purpose Battery identified as “Made in China” on label and packaging.



Fig. 8 – Multicell Super Extra Heavy Duty Batteries identified as “Made in China” on packaging



Fig. 9 – Additional examples of Duracell “clone” batteries all of which simulate Duracell battery label colors (note that several are leaking)