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Re Final risk Management Approach for C.I. Pigment Yellow 34, Chemical Abstracts Service Registry No. 1344-37-2, and C.I. Pigment Red 104 CAS Registry Number 12656-85-8

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in 2006 both lead-containing C.I. Pigment Yellow 34, and pigment Red 104 were reported to be manufactured in, and imported into, Canada. For pigment Yellow, after exports, the amount remaining for use in this country ranged between 1,000,000 and 10,000,000 kg. and from 100,000 – 1,000,000 kg. for Pigment Red. They are primarily used for plastic formulation for commercial applications and export; commercial, non-consumer paints and coatings; and commercial printing inks or coatings used for plastics and certain outdoor applications such as commercial identification decals.

The final SRA notes that exposure to the general population in Canada is expected to be predominantly from soils, although these exposures are expected to be low due to the primarily commercial use of the substance, very limited industrial releases, and the encapsulation and incorporation of the substance into a solid matrix. However, these exposures could not be quantified due to lack of measured concentrations.

There is a high level of uncertainty about their reproductive and developmental toxicity.

Bioaccumulation : the final screening assessment report concluded that Pigment Yellow 34 meets the criteria for persistence, but not bioaccumulation under CEPA criteria. These criteria may not be adequately protective. A study by Kelly et al. found that "lipid-water partitioning cannot serve as a universal model for identifying bioaccumulative substances in wildlife and humans"¹. Low K_{ow} , High K_{oa} chemicals and High K_{ow} High K_{oa} chemicals biomagnified in terrestrial and air-breathing mammals between 16 and 97 times that of aquatic species. The SRA reported that its presence in soil is expected to be low, even though there were no empirical data found for the presence of this substance in water, food or soil in Canada.

¹ Kelly BC et al. Food- Web specific biomagnification of persistent organic pollutants. Science, 317, 236-240, 2007.

Re the risk management final proposals

We agree with the decision to phase out the use of pavement marking paints containing C.I. Pigment Red 104, and C.I. Pigment Yellow after December 31, 2010 under the *Surface Coating Materials Regulations* of the Hazardous Products Act.

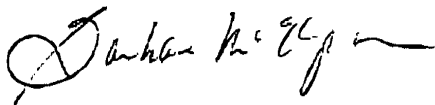
We would support the proposed SNAc on both these colours to prevent any new uses.

The need for environmental data – the Departments should have the capacity for research necessary to ensure public health – in this case **some data on their presence in environmental media, especially their ability to appear on the surfaces of plastic materials containing them over time and when exposed to sunlight.**

Preventing the use of these pigments in children's products for outdoor and indoor use The presence of lead and cadmium in plastics was brought to public attention when a child was found to have lead poisoning from dust collecting on PVC window blinds. This provided evidence that in sunlight some plastics break down, and these metals appear as surface dust. A study by Greenpeace and Health Canada found that several PVC products contained high levels of lead. It would seem that a risk management recommendation for Pigment Yellow and Pigment Red **should prevent their use as a colourant in children's large plastic toys, playground equipment, and furnishings, to prevent possible exposure to lead from deteriorating plastic.**

In cosmetics The SRA for Pigment Yellow and Pigment Red notes that the use of lead in cosmetic products is prohibited in cosmetics, so it is assumed that this chemical is covered via the Cosmetic Ingredients Hotlist. However this substance was not found on the Cosmetic Substances Hotlist. To ensure that manufacturers know what is not permitted it would seem that **Pigment Yellow 35 and Pigment Red 104 should be explicitly listed, and this should be required under the risk management approach.**

Respectfully submitted



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