From: Larry Dunn
To: Makarow, Irina (ECY)
Subject: Re: Phthalate Action Plan 3-3-2022 Presentation Slides
Date: Thursday, March 17, 2022 8:43:05 AM

here is one more ;

Waste Management
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Recycling of plastic waste: Presence of phthalates in plastics from households and industry

Author links open overlay panel K.Pivnenko[a] M.K.Eriksen[a] J.A.Martín-Fernández[b] E.Eriksson[a] T.F.Astrup[a]

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Highlights

- Samples of waste, recycled and virgin plastics were obtained.
- Majority of the samples contained phthalates.
- Source of plastics significantly influenced the presence of phthalates.
- Phthalates were not removed in recycling of household plastics.

- DEHP could be used as indicator for monitoring phthalate contamination.

Abstract

Plastics recycling has the potential to substitute virgin plastics partially as a source of raw materials in plastic product manufacturing. Plastic as a material may contain a variety of chemicals, some potentially hazardous. Phthalates, for instance, are a group of chemicals produced in large volumes and are commonly used as plasticisers in plastics manufacturing. Potential impacts on human health require restricted use in selected applications and a need for the closer monitoring of potential sources of human exposure. Although the presence of phthalates in a variety of plastics has been recognised, the influence of plastic recycling on phthalate content has been hypothesised but not well documented. In the present work we analysed selected phthalates (DMP, DEP, DPP, DiBP, DBP, BBzP, DEHP, DCHP and DnOP) in samples of waste plastics as well as recycled and virgin plastics. DBP, DiBP and DEHP had the highest frequency of detection in the samples analysed, with 360 μg/g, 460 μg/g and 2700 μg/g as the maximum measured concentrations, respectively. Among other, statistical analysis of the analytical results suggested that phthalates were potentially added in the later stages of plastic product manufacturing (labelling, gluing, etc.) and were not removed following recycling of household waste plastics. Furthermore, DEHP was identified as a potential indicator for phthalate contamination of plastics. Close monitoring of plastics intended for phthalates-sensitive applications is recommended if recycled plastics are to be used as raw material in production.

From: Makarow, Irina (ECY) <Imak461@ECY.WA.GOV>
Sent: Thursday, March 3, 2022 4:44 PM
To: Larry Dunn <larrydunn360@hotmail.com>
Subject: RE: Phthalate Action Plan 3-3-2022 Presentation Slides

Hello Larry –

Thank you for this additional information. The comments were also posted on the online form for the project.

Irina

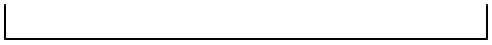
Irina Makarow (she/her)
WA State Department of Ecology
HWTR Chemical Action Planner
Cell: 360-584-3456
Office: 360-407-6250
irina.makarow@ecy.wa.gov

From: Larry Dunn <larrydunn360@hotmail.com>
Sent: Thursday, March 3, 2022 11:01 AM
To: ECY RE CHEM ACTION PLANS (HWTR) <ChemActionPlans@ECY.WA.GOV>
Subject: Re: Phthalate Action Plan 3-3-2022 Presentation Slides

Crosslinked Polyethylene (PEX)

Like HDPE and PP, there are few health hazards in the main content of the pipes themselves, but there is concern that chemicals can leach from the pipes or break down into other chemicals that leach from the pipes.[19] Water supplied from PEX pipes is also sometimes known to have taste and odor problems.[20] Some studies indicate that more chemicals can leach from PEX than from the plastics ranked higher in this Hazard Spectrum.[21] These pipes are installed using a variety of polymer and metal fittings. PEX is the only type of pipe on the Hazard Spectrum that cannot be recycled into new pipes, so its end-of-life options are limited.

Water Pipes Hazard Spectrum | HomeFree from HBN (healthybuilding.net)



Water Pipes Hazard Spectrum | HomeFree from HBN

Under typical conditions, copper pipes contain the fewest health hazards among the pipes included in this Hazard Spectrum. Solders and fluxes can contain lead, a persistent and bioaccumulative toxicant, and other

homefree.healthybuilding.net

From: ECY RE CHEM ACTION PLANS (HWTR) <ChemActionPlans@ECY.WA.GOV>
Sent: Thursday, March 3, 2022 8:12 AM
Cc: Tamboer, Lauren (ECY) <Ltam461@ECY.WA.GOV>; Fanning, Elinor W (DOH) <elinor.fanning@doh.wa.gov>; Niemi, Cheryl (ECY) <cnie461@ECY.WA.GOV>; Makarow, Irina (ECY) <Imak461@ECY.WA.GOV>
Subject: Phthalate Action Plan 3-3-2022 Presentation Slides

Hello Advisory Committee members –

Please find attached the agenda and slides for today's presentation starting at 9 AM PT.

These documents are also posted on the project web page:
https://www.ezview.wa.gov/site/alias__1962/37711/phthalates_action_plan.aspx

We look forward to our discussion later this morning.
Join Zoom Meeting
https://waecy-wa-gov.zoom.us/j/81693540072?pwd=M0RJbVdUYlJxODdYaW5aZXlsMS9zZz09
Meeting ID: 816 9354 0072
Passcode: Phthalates
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+1 312 626 6799 US (Chicago)
+1 929 205 6099 US (New York)
Meeting ID: 816 9354 0072
Passcode: 4743225855
Find your local number: https://waecy-wa-gov.zoom.us/u/kzPz6CLPl
Don't hesitate to contact our team if you have any questions.

E-mail: ChemActionPlans@ecy.wa.gov
Phone (Irina Makarow Cell): 360-584-3456

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Irina Makarow (she/her)
WA State Department of Ecology
HWTR Chemical Action Planner
Cell: 360-584-3456
Office: 360-407-6250
irina.makarow@ecy.wa.gov