An introduction to the

Health Product DECLARATION™

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The truth is rarely pure, and never simple.

- OSCAR WILDE

CONTEXT
THE MATERIALS ECOSYSTEM

CONTEXT
A RANGE OF PRODUCT SELECTION CRITERIA

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the
Health Product DECLARATION is...

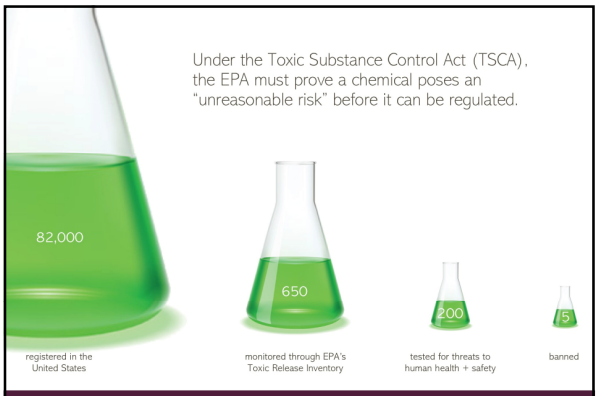
a consistent language
for product content reporting

an inventory tool

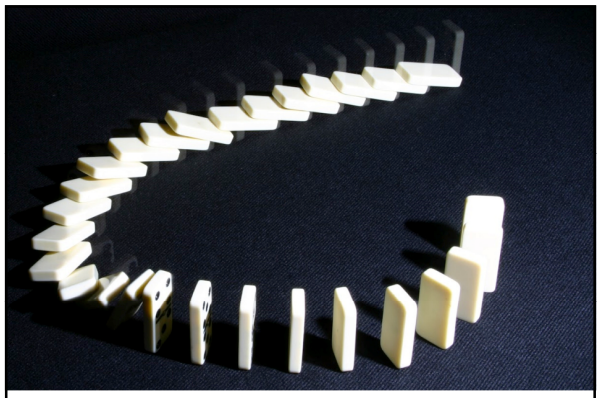
a format for screening content
health hazards

AN OVERVIEW

CONTEXT
PRODUCT COMPLEXITY – GOING DOWN THE RABBIT HOLE...



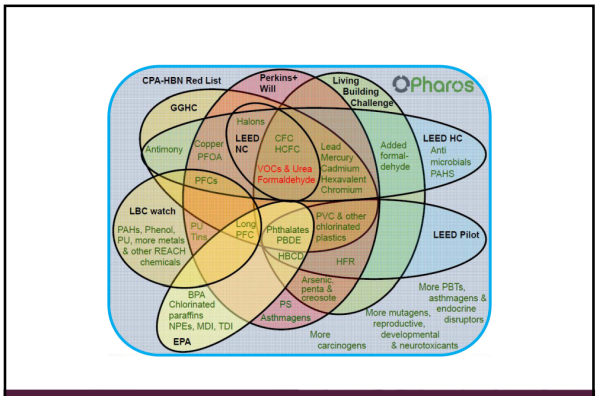
CONTEXT
LACK OF REGULATORY INCENTIVE



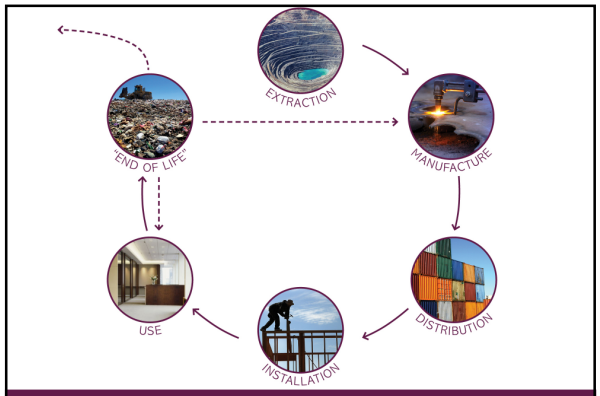
CONTEXT
LACK OF STANDARD TRACKING PROCESS FOR BILL OF MATERIALS

CONTEXT
DIVERSE PRODUCT INVENTORY AND EVALUATION CRITERIA

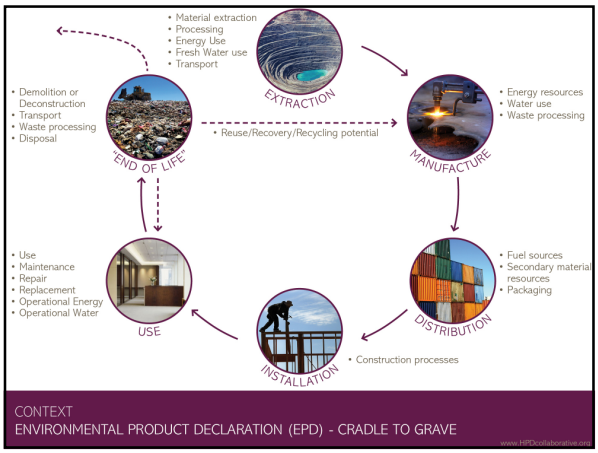
CONTEXT
POOR COMMUNICATION ABOUT EXPECTATIONS



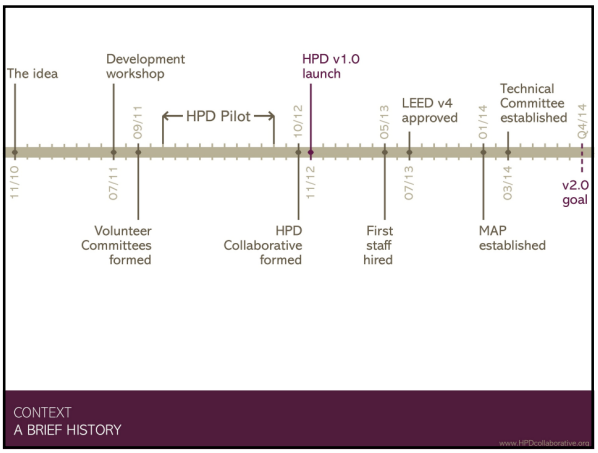
CONTEXT
DIVERSE EVALUATION SYSTEMS



CONTEXT
LIFE CYCLE ASSESSMENT (LCA)



CONTEXT
ENVIRONMENTAL PRODUCT DECLARATION (EPD) - CRADLE TO GRAVE



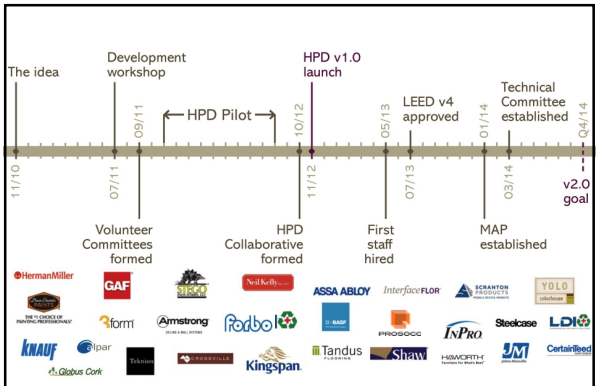
CONTEXT
A BRIEF HISTORY

based on
Product Category Rules (PCR) produced by Program Operator (PO)

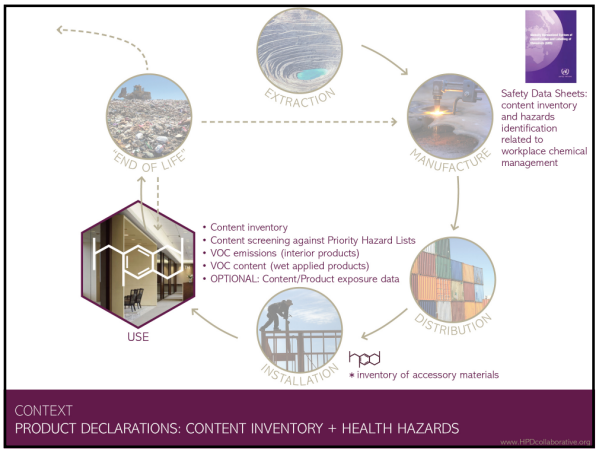
Required
- Resource consumption (e.g., energy, water)
- Emissions to air, water, soil
- Climate change
- Ozone depletion
- Acidification of land and water
- Eutrophication
- Photochemical oxidants formation
- Depletion of Abiotic Resources
  - Fossil energy
  - Minerals

Optional
- Biodiversity
- **Human and/or environmental toxicity**
- Geographical aspects
- Product environmental performance
- Use of Environmental Management System
- Other environmental certification program(s)
- Recycling or recovery activities
- Other LCA data
- Instructions and limits for efficient use
- **Human and/or environmental hazard and risk assessment**
- Environmentally significant material(s)
- Preferred waste management option
- Potential for incidents that can have impact(s) on the environment

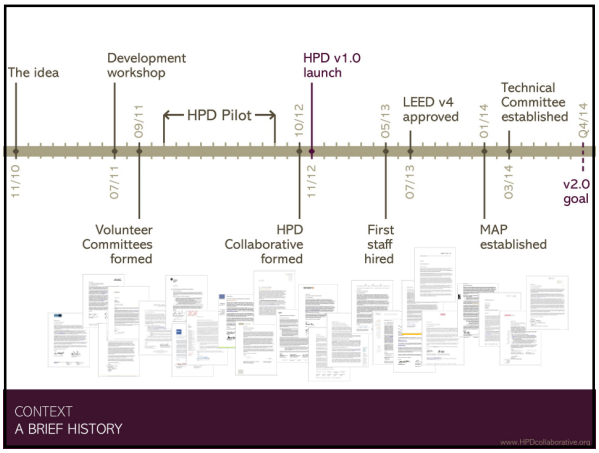
CONTEXT
ENVIRONMENTAL PRODUCT DECLARATION (EPD) - CRADLE TO GRAVE



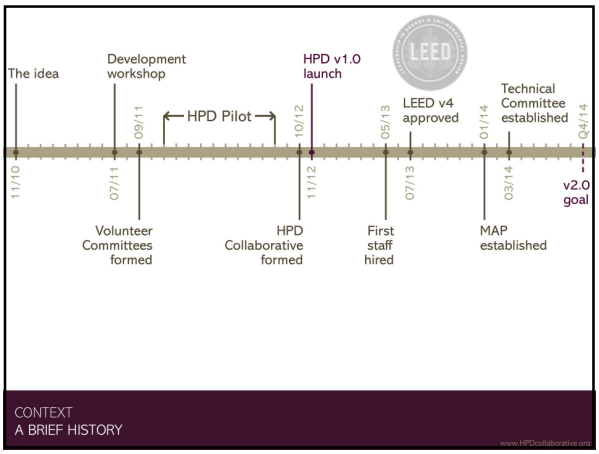
CONTEXT
A BRIEF HISTORY



CONTEXT
PRODUCT DECLARATIONS: CONTENT INVENTORY + HEALTH HAZARDS



CONTEXT
A BRIEF HISTORY



CONTEXT
A BRIEF HISTORY

Levels of Disclosure

Identify granularity of content inventory
Use Disclosure Notes to clarify

Intentional Ingredients

Each discrete substance added by manufacturer that exists in product as delivered for end use

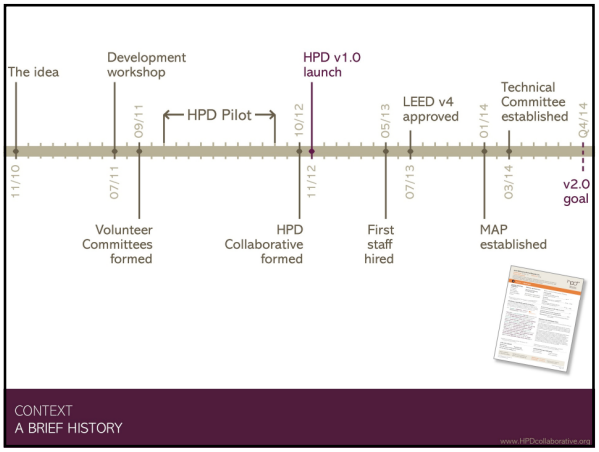
Residual Ingredients

Trace substances remaining from or created during manufacturing process; OR
Contaminants that come with raw materials

CONTENT LINE ITEM ENTRY OPTIONS:

- Specific name w/CAS RN
- Generic name
- "Undisclosed"
  hazard screening possible by manufacturer
- "Unknown"
  hazard screening possible by supplier

KEY TERMS
VARIABLE DISCLOSURE LEVELS



CONTEXT
A BRIEF HISTORY

an at-a-glance understanding of the information included

CONTENT INVENTORY THRESHOLD
- 100 ppm
- 1,000 ppm
- Per GHS SDS
- Per OSHA MSDS
- Other

RESIDUAL METHODOLOGY

Residuals considered in ## of ## materials
- see Section 2: Material Notes
- see Section 5: General Notes

★ *Some content "Unknown" by the product manufacturer has been characterized and screened for hazards by material supplier(s)*

Based on selected Content Inventory Threshold,

Characterized:
Are the Percent Weight and Role provided for all contents? ..... Yes No

Screened:
Are all contents screened using Priority Hazard Lists with results disclosed? ..... Yes No

Identified:
Are all contents disclosed by Specific or Generic Name and Identifier? ..... Yes No

VERSION 2.0
SECTION 1: SUMMARY

the
Health Product DECLARATION is...

a consistent language for product content reporting

an inventory tool

a format for screening content health hazards

AN OVERVIEW

direct correlation between contents and hazard screening details

CONTENTS IN DESCENDING ORDER OF QUANTITY

Summary includes results from screening individual product contents against HPD Priority Hazard Lists and GreenScreen For Safer Chemicals. Screening based on best available information; "Not Found" is not equal to no hazard potential. The HPD does not assess exposure or risk.

KEY: MATERIAL | INGREDIENT | *RESIDUAL* GREENSCREEN SCORE | HAZARD ENDPOINT View Detailed Key

STEEL [LT-P1 NF]; P1001 ISOCYANATE [P-MDI [LT-U CAN | MAM | MUL | RES | SKE]; DIPHENYLMETHANE-4-4'-DIISOCYANATE [LT-U CAN | MAM | MUL | RES | SKE]; MDI MIXED ISOMERS [LT-U CAN | MAM | MUL | RES | SKE]]

INVENTORY AND SCREENING NOTES

Refer to Section 2 for detailed content information and explanatory notes, and to the last page for HPD scope.

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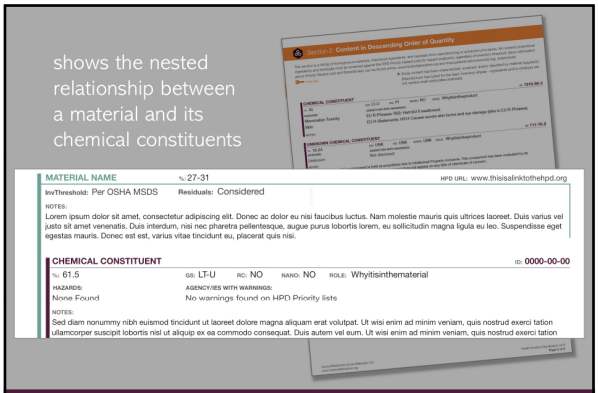
VERSION 2.0
SECTION 1: SUMMARY

shows the nested relationship between a material and its chemical constituents

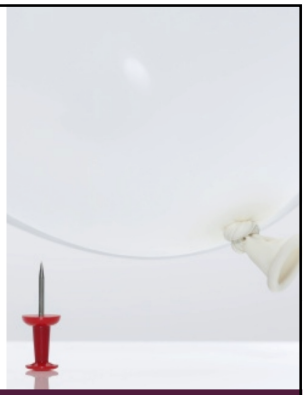


VERSION 2.0
SECTION 2: CONTENTS IN DESCENDING ORDER OF QUANTITY

Content Screenings Focus On Hazards, Not Risk

Hazard
Any *source* of potential damage or adverse health effects -- the intrinsic possibility of something causing harm

Risk
The *chance* or *probability* that there will be harm or an adverse health effect based on an exposure to a hazard



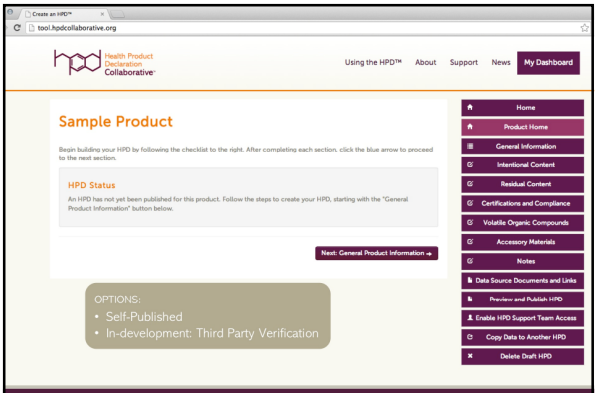
KEY TERMS
CONTENT INVENTORY

Material Content Inventory: an enhanced ability for suppliers to directly feed information into HPDs

Select material category guidelines

Document simplification, language modifications

VERSION 2.0
OTHER KEY UPDATES

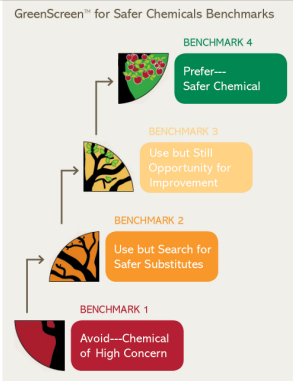


HPD BUILDER
HOW MANUFACTURERS PUBLISH HPDs – FREE ONLINE TOOL

Hazard Screening
- of individual product contents
- 15 health endpoints, use phase focused

Priority Hazard Lists
hpdcollaborative.org/use-the-hpd/priority-hazard-lists
- chemicals and their association to human health (or environmental) hazards
- based on expert assessment of scientific evidence by a recognized authoritative body

GreenScreen™
www.greenscreenchemicals.org
- developed by Clean Production Action
- ranks chemicals along 4-point scale from most toxic to most benign
- Full Assessment or List Translator
- can guide Alternative Assessment efforts



KEY TERMS
HAZARDS SUMMARY

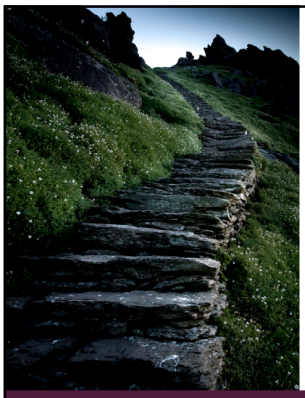
Published HPDs posted in manufacturers' technical libraries

Also can be posted to other databases, such as:

GPD The Source
Pharos
greenwizard
SPECSIMPLE.com
GreenSpec®

additional partners welcome!

PRODUCT DATABASES
HOW CONSUMERS LOCATE PUBLISHED HPDs



Technical Committee
- 13 subject matter experts, supported by informal group of additional advisors
- Preserves the integrity of HPD content
- Responsible for interpretation, revision and expansion of the standard

Manufacturers Advisory Panel
- Provides direct feedback + recommendations of individual companies or via work groups
- Open to any manufacturer with an HPD in-progress or published

Other programs
- Collaboration with complimentary product standards, labels, evaluation tools

LEARNING AS WE GO
HOW THE HPD EVOLVES OVER TIME

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MANUFACTURERS ADVISORY PANEL (MAP)
53 COMPANIES, AND COUNTING...

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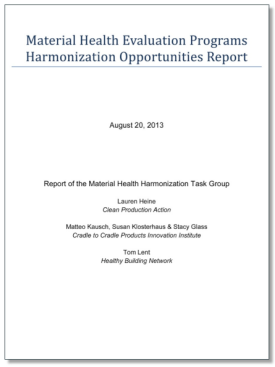
USGBC Funded Research

5 PROGRAMS:
- GreenScreen™ for Safer Chemicals
- Cradle to Cradle Certified℠ Products Program
- Pharos™
  - Chemical & Material Library
  - Building Product Library
- Health Product Declaration™
- Declare™



Material Health Evaluation Programs
Harmonization Opportunities Report

August 20, 2013

Report of the Material Health Harmonization Task Group

Lauren Heine
Clean Production Action

Matteo Kausch, Susan Klosterhaus & Stacy Glass
Cradle to Cradle Products Innovation Institute

Tom Lent
Healthy Building Network

HARMONIZATION
usgbc.org/resources/material-health-evaluation-programs-harmonization-opportunities

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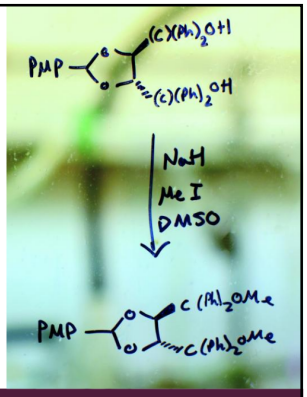
By disclosing hazardous chemicals, manufacturers will be motivated to clean up their products.



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PROMOTING A GREENER CHEMISTRY

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greenstar

GreenPointRATED
A PROGRAM OF BUILD IT GREEN

HARMONIZATION
HPD REFERENCED IN BUILDING RATING SYSTEMS

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Building knowledge.

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