

Overview of GC3 Project Group Activities

Facilitating Chemical Data Flow Along Supply Chains



Monica Becker

Monica Becker & Associates Sustainability Consultants

GC3 Chemical Data Project Group History

2007 Tools for chemical assessment

2008 Report on Restricted Substances
Lists (RSL)

GC3 Chemical Data Project Group History

2009 - Present

Focus: Facilitating the flow of chemical data along supply chains (B-2-B)

Types of Chemical data

1. Chemical identification
2. Chemical function/use
3. Human/Ecological hazard
4. Exposure potential

Data needed for:

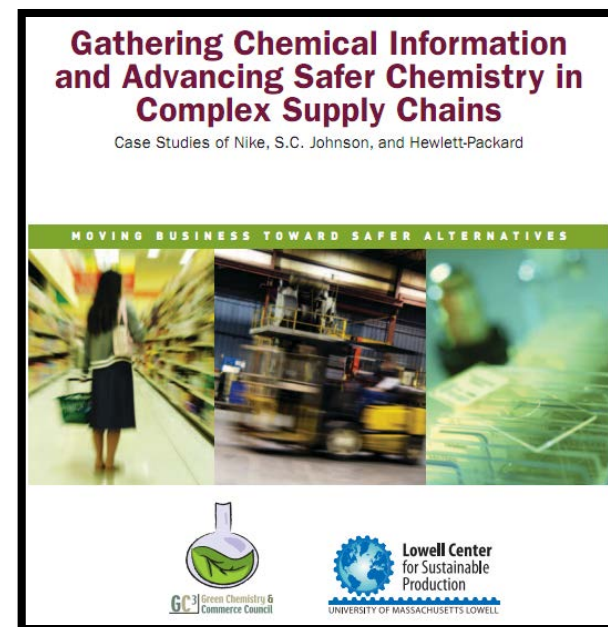
Regulatory compliance
Responding to customer requests
Alternatives Assessment
Green product design
Green product certification
Chemical transparency/disclosure initiatives

GC3 Chemical Data Project Group History

2009 In-depth case studies of **Nike, HP and SC Johnson** to illustrate challenges & best practices:

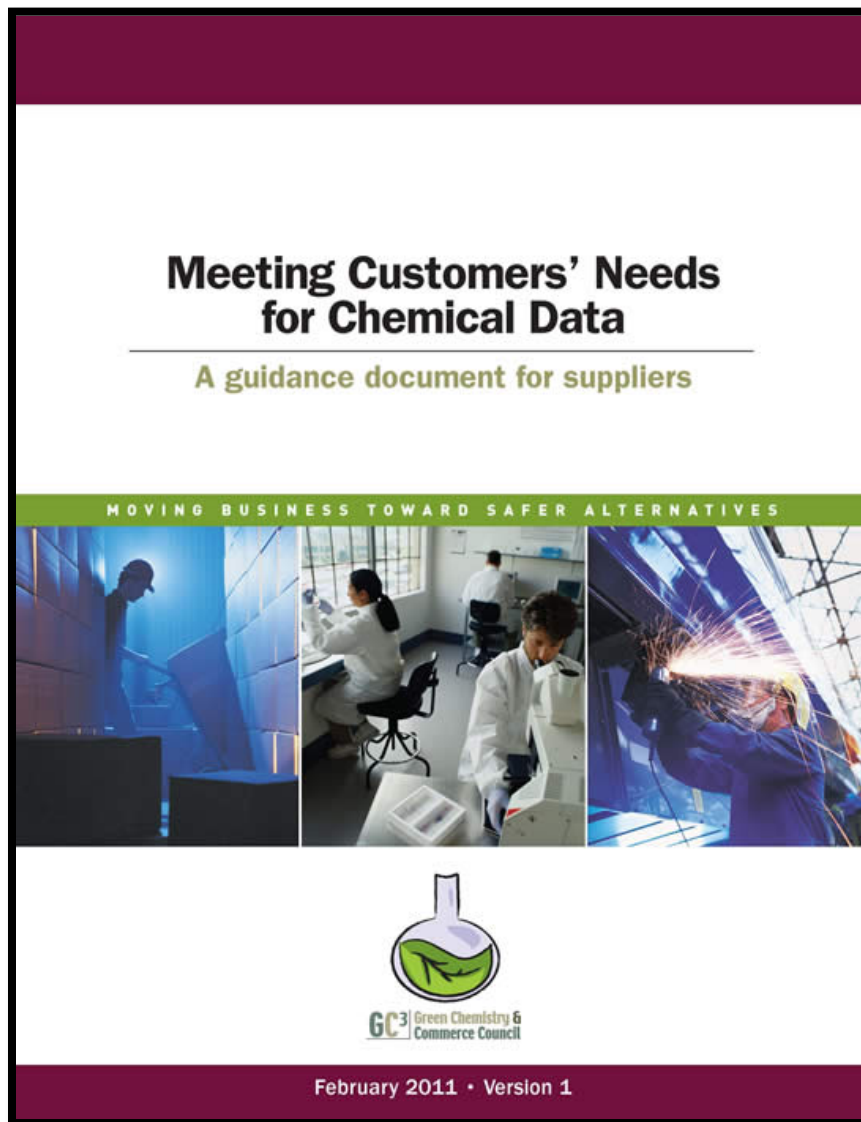


- Gathering chemical data from supply chains
- Use of chemical data to develop safer products



2010

“Meeting Customers’ Needs for Chemical Data: A guidance document for suppliers”

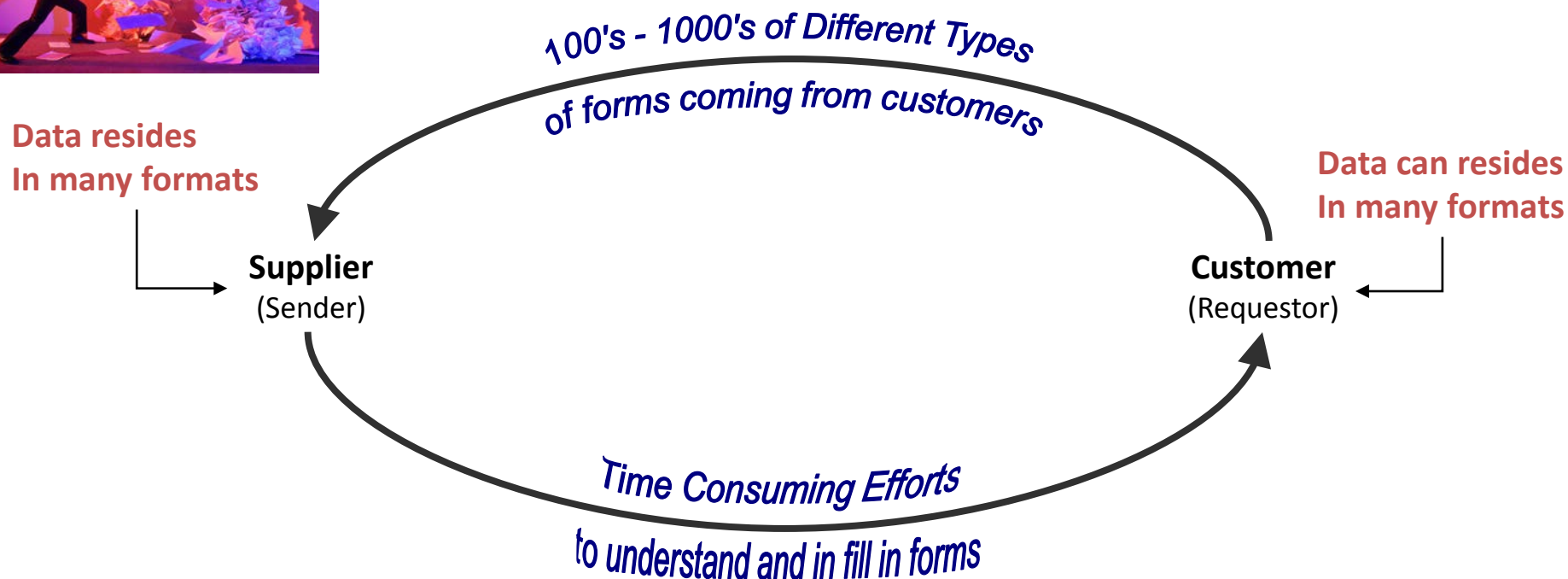


Project Year 2011/2012

GC3 Chemical Data Standardization Project



Barrier to Chemical Data Flow: Lack of Standardization in Data Transfer



*Adapted from
Mark Frimann, TI

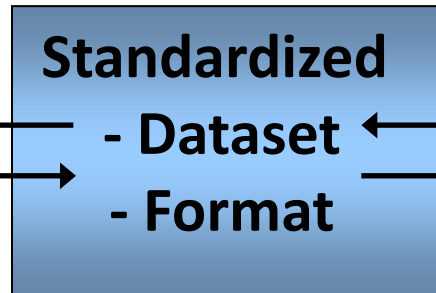
Current methods for data requests:

- There are almost as many different types of forms as there are customers needing data
- Works against efforts to communicate chemical data in supply chains

Solution: Standardization

Data can
reside
in ANY format

Supplier
(Sender)



Customer
(Requestor)

Data can
reside
in ANY format

*Adapted from
Mark Frimann, TI

Potential benefits of standardization

- Increased data availability
- Reduced cost of data gathering/communication
- Improved quality of data

GC3 Data Standardization Project Objective:

To evaluate the feasibility & benefits of standardizing chemical data types & formats in supply chains

Approach Taken:

- Engage in dialogue with companies in an actual supply chain
- Chose the Electronics Sector
 - Significant experience with chemical data reporting in supply chains for RoHS, WEEE, REACH, etc.
 - Existing standard/data exchange protocol – IPC 1752 (U.S.)
 - New, improved international standard/data exchange protocol IEC 62474

Electronics Supply Chain Pilot



Pilot Team Members

Mark Frimann, Texas Instruments

Brian Martin & Bill Haas, Seagate

Lyndsey Ridgeway, HP

Roger McFadden, Staples

Chemical Data “Superset” Modules - Universe of Data that Will Satisfy the Needs of the Companies in Our Supply Chain

1. Requestor (Customer) Information

Company Unique ID (DUNS or equivalent)
Company Name
Company Address
Contact Name
Contact Title
Contact Email
Contact Phone Number
Division Name
Business Unit

2. Supplier (Sender) Information

Company Unique ID (DUNS or equivalent)
Company Name
Company Address
Contact Name
Contact Title
Contact Email
Contact Phone Number
Division Name
Business Unit

3. General Component Information

Request Date
Need Date
Requestor Component Name
Response Date
Supplier Component Name
Component Build Site
Component Mass
Unit of Measure (mg, gram)
Unit Type (each)

4. Component Compliance Declarations

Component/ Device Status - REACH
Component / Device REACH Availability Date
Component / Product Status - RoHS
EU RoHS Exemption (if applies)
Component / Product RoHS Availability Date

5. Chemical Substance Information

CAS Number or Other Unique Chemical ID No.
Substance Name
Amount in Component (mg, grams or kg)
Substance Concentration in component – ppm and/or %
Description of Chemical Use
Function of Chemical

6. Substance & Material Group Information*

EU RoHS Substance Category
From IPC 1752 Class B (when updated from IEC 62474)
Material Class ID (Number)
Material Class (Name)
IPC 1752 Class C
JIG 101 threshold for substance [taken from JIG]
Below threshold?
REACH
Substance on ECHA Substance List?
(released and proposed Candidate List)
JAMP**
Material Name
Material Group ID
Material Group
Use Category

**Staples is seeking
additional information**

Key Lessons Learned Include:

1. See strong benefit to standardizing. Standard is first step, then need software to enable automated data exchange - key for large companies with thousands of complex products. Third party software providers *are* jumping in to develop software.
2. Even with standard and software, still not easy for large companies to change over their IT systems to accommodate a new approach – time, cost, and organizational inertia.
3. Not interested in third party systems that “hold” their data. They don’t trust them.
4. Great value in talking within the supply chain about data needs, why things done the way they are, obstacles to change; etc. Dialogue has influenced data program design at some pilot companies.

Some Ideas for Continuing the work in 2012-2013

Idea:

Evaluating Tools for Data Exchange to Support Joint Roadmap Initiative in Apparel & Footwear Industry



NIKE, INC.

NOVEMBER 18, 2011

NIKE ROADMAP TOWARD ZERO DISCHARGE OF HAZARDOUS CHEMICALS

NIKE, Inc. outlines specific actions being taken as a Company toward the goal of zero discharge of hazardous chemicals.

ABOUT CAREERS RESPONSIBILITY INVESTORS

– November 2011

NIKE, Inc. Commitment
NIKE, Inc. (Nike) has long been to a more sustainable supply chain that are decoupled from construction process changes, we believe we renewable energy consumption

This roadmap outlines specific discharge of hazardous chemicals. These actions are in addition to toward Zero Discharge of Hazardous Chemicals (ZDHC) (2011) (Joint Roadmap). We recognize collaboration and change and Nike encourages of committed to work with brand



NOVEMBER 18, 2011

ADIDAS GROUP, C&A, H&M, LI NING, NIKE AND PUMA PARTNER TO REACH ZERO DISCHARGE BY 2020

<http://nikeinc.com/news/nike-roadmap-toward-zero-discharge-of-hazardous-chemicals>

Idea:

Project addressing confidential business information (CBI) as an obstacle to B-2-B chemical data communication

**A Green Chemistry & Commerce Council (GC3) Webinar
Tuesday, April 10, 2012**

**Meeting Increasing Demands for Greater
Transparency on Chemicals &
Protecting Intellectual Property**



***Mark Greenwood, Partner,
Ropes & Gray***



***Roger McFadden, VP,
Senior Scientist, Staples***