

# **Communication: The Foundation of Increasing Data Accuracy and Improving Reports**

**2016 TRI National Training Conference  
Washington DC**

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ERA Environmental Management Solutions**



# Presentation Goals

- Shine some light on the **importance of the relationship** between material vendor and end TRI reporter as a key factor of quality TRI reports.
- Discuss how **digitization of data** across the supply chain affects accuracy of TRI reports.
- Delve into how **NextGen Compliance** prioritizes digital data management over traditional techniques.
- Share insight and experience into **improving the accuracy of TRI reports** and meeting the demands of NextGen Compliance.

# The Challenge

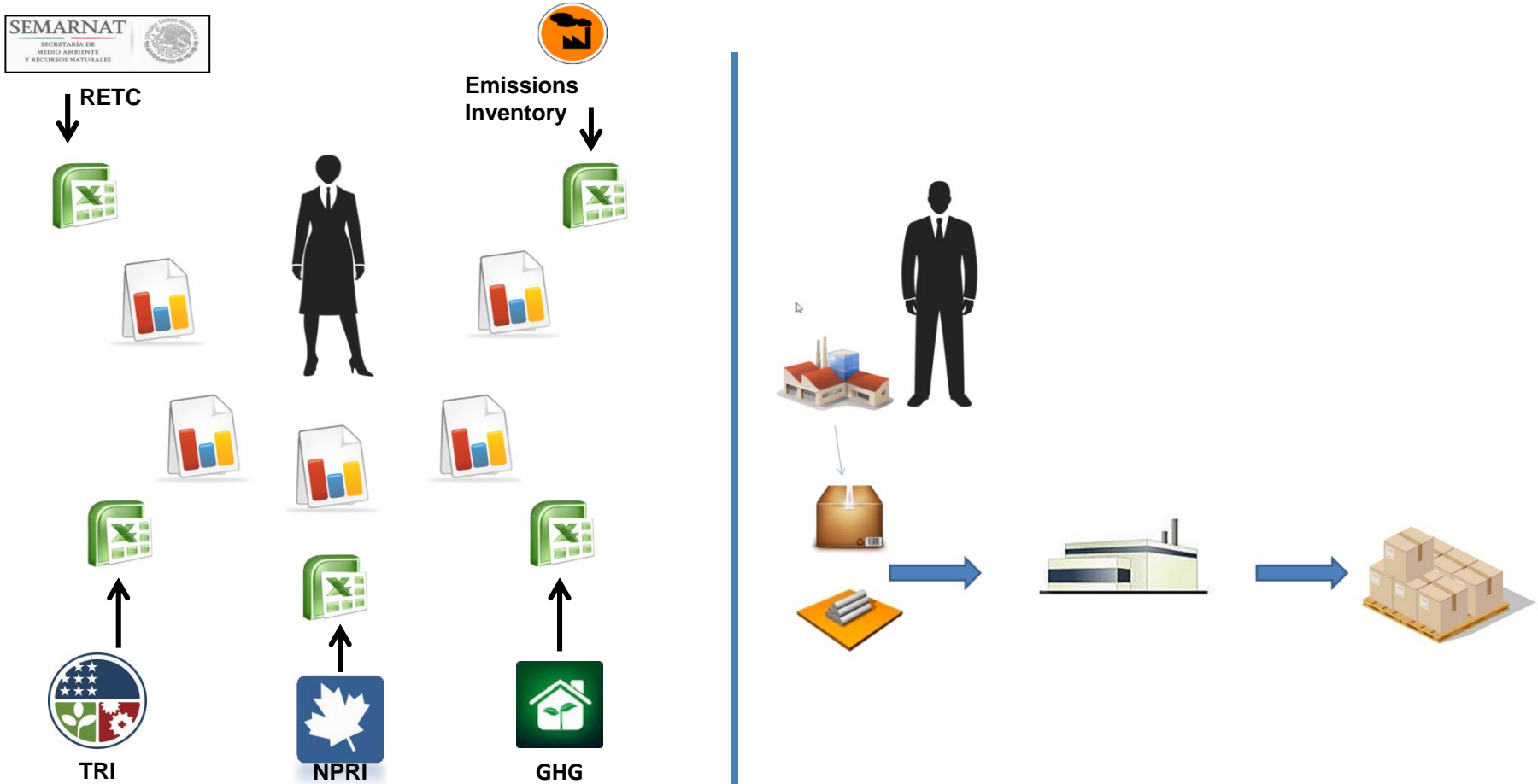
- Facilities completing TRI reports often rush to find, roll up, and format **a year's worth of emission calculations in a few weeks**.
- The challenge: Data **quality is compromised** over time, as EHS manager can forget or overlook important data.
- The material data needed for calculations is available more frequently throughout the year but can **take time to fetch regularly**.
- The solution: Collect data on **a regular schedule throughout the year** and store in a database for reporting. This is easier if **material data is shared and stored digitally**, taking only a few minutes a month.

# Data Management Issues

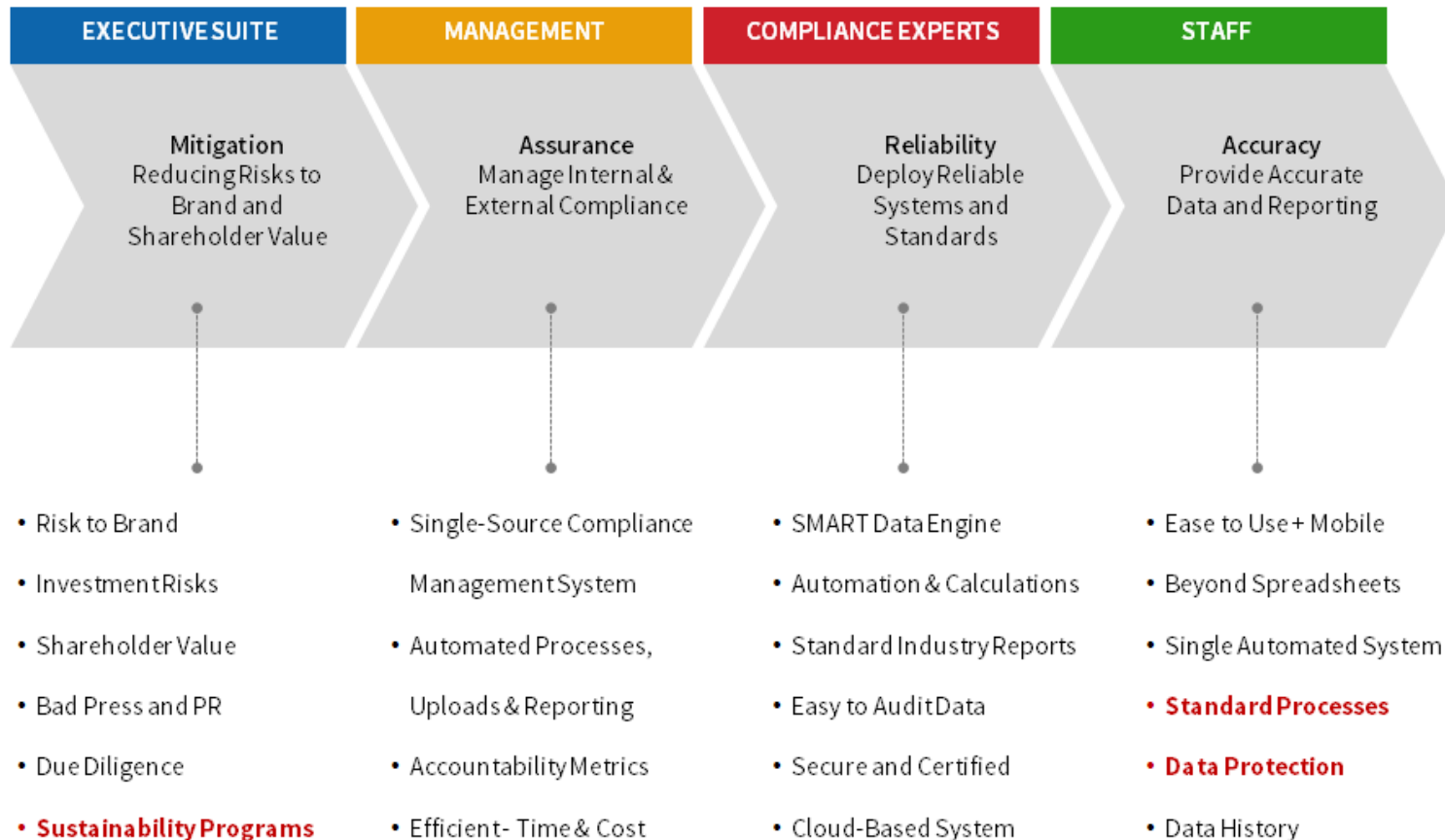


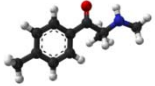


# Reporting vs. Facility Modeling

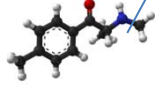


# Compliance Management Impact





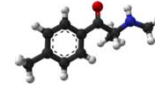
Henkel



valspar paint®



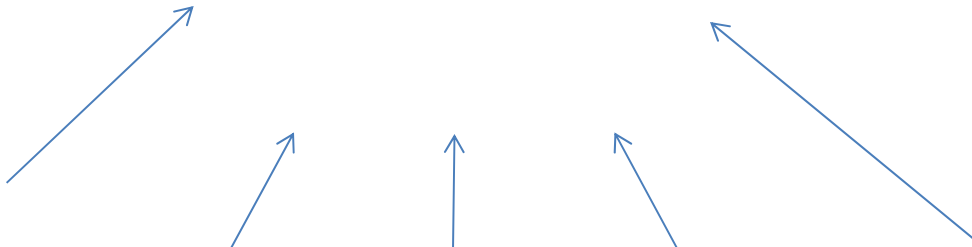
AkzoNobel



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ENVIRONMENTAL  
Management Solutions





- **Digital data transfers used for:**
  - **Toxic Release Inventory (TRI)**
  - Tier II
  - Emissions Inventory
  - Hazardous Waste
  - Water
  - ... by Department/Source



# Supply Chain Relationships

The screenshot shows a web application interface with a navigation menu on the left and a main content area. The navigation menu includes sections for 'Records', 'Materials', and 'Materials Management Tool'. The 'Vendor Import Product' option is highlighted in yellow. A red box and arrow point to a dropdown menu containing a list of vendors. The dropdown menu is currently open, showing a list of vendor names. The main content area contains search and import controls, and a list of radio button options for configuring the import process.

Environmental Health & Safety Compliance Training Inspection Documents SDS/MSDS Vendor Certis Reports

Home | Environmental | Air Emissions | Finishing & Chemical Coatings | Materials | Vendor Import Product

**Records**

- Product Usage
- Hours of Operation
- Import Product Usage
- Import Exceptions
- Forecasting
- Forecasting ESL
- CEM Parameter Values
- Thinner Calculator
- Product Usage Import - Production Records
- Upset Events

**Materials**

- Product Specifications
- Product Import
- Vendor Import Product**
- Processes/Jobs
- Product Import by BatchNo
- Product Import Template

**Materials Management Tool**

- Product Categories
- Product Category Template Items

Search

Clear

Import

Help

Export (CSV)

Vendor :

Facility :

Department :

Batch Start Date :

(no selection)

- AKZO NOBEL INDUSTRIAL
- BASF
- Blue Ridge Solvents & Coatings Inc.
- BRENNTAG
- CAROLINA SOLVENTS
- CHAIR CITY SUPPLY
- CHEMETALL
- CHEMSOLV
- CORAL CHEMICAL COMPANY
- CUSTOM COATINGS SOLUTIONS (CCS)
- DOW
- DuPont
- EFTEC
- FUCHS
- FUHR INDUSTRIAL
- HEMMELRATH
- HENKEL
- NALCO
- NEXEO SOLUTIONS, LLC
- NPA Coatings, Inc.
- PPG
- RPM INTERNATIONAL
- SHERWIN WILLIAMS
- SIKA
- SPECIALTY CHEMICALS
- SUPERIOR OIL
- VALSPAR
- VIGOR
- VISTA SUPPLY

Please choose how should the program handle:

- Do NOT create blend revisions based on
- Use only products revised in this import in the new blend revisions
- Use most recent active revision of ALL products when creating the new blend revision

Please choose what reference date should the program use for searching for blends

- Use revision date of the imported products (blends more recent than this date will not get new revisions)
- Search ALL blends for the most recent active revision (do not use revision date restrictions on search)

Environmental Health & Safety Compliance Training Inspection Documents MSDS Vendor Certis Reports

Home | Environmental | Reporting Services | FORM R (TRI) Reporting | TRI Projects

FORM R (TRI) Reporting

- TRI Projects
- TRI Reports
- EPA Tier II Inventor
- Tier II Projects
- Tier II Project Details
- DHS Facility Assess
- Emissions Inventory
- NPRI
- NESHAP
- NESHAP
- GHG Emissions
- GHG Emissions

Do you want to skip "Unassigned Chemicals"? -- Webpage Dialog

TRI Reports -- Webpage Dialog

https://www.era-env.com/era\_ehs/Forms/TRI/frmTRIReportsTemp.aspx ERA Environmental Consulting, Inc. [CA]

TRI ID :  
 Facility :  
 Year : 2011  
 Description : Sample TRI Project

Summary By Product  
 Save  
 Prev. year / cur. year  
 Details by Product  
 Details by Module  
 Details by Haz Waste  
 Help  
 Comments  
 Export to XLS

Final Chemical List :  ShowAll

<input checked="" type="checkbox"/>	0001330-20-7	XYLENE	153710.252945367	1071
<input checked="" type="checkbox"/>	0000108-88-3	TOLUENE	136697.938631716	123.0
<input checked="" type="checkbox"/>	0000071-36-3	N-BUTYL ALCOHOL	101520.638170184	4167
<input checked="" type="checkbox"/>	0001634-04-4	METHYL TERT-BUTYL ETHER	58584.9904998633	52.90
<input checked="" type="checkbox"/>	0000872-50-4	N-METHYL-2-PYRROLIDONE	37291.208442	2347
<input checked="" type="checkbox"/>	N982	ZINC COMPOUNDS	37083.3494962612	2.089
<input checked="" type="checkbox"/>	0007440-50-8	COPPER	27493.0835597494	329.9
<input checked="" type="checkbox"/>	0007440-47-3	CHROMIUM	26644.4794300545	0.099
<input checked="" type="checkbox"/>	0000095-63-6	1,2,4-TRIMETHYLBENZENE	19493.085939	968.0
<input checked="" type="checkbox"/>	0007632-00-0	SODIUM NITRITE	14679.425923	0
<input type="checkbox"/>	N495	NICKEL COMPOUNDS	6396.63616031891	0.140
<input type="checkbox"/>	0000071-43-2	BENZENE	4296.44243059235	4.020
<input type="checkbox"/>	0007440-62-2	VANADIUM	3728.79653495566	0.150
<input type="checkbox"/>	0007697-37-2	NITRIC ACID	2746.0125	0

User  
 3 adminv  
 3 adminv  
 2 adminv  
 2 adminv

Environmental Health & Safety Compliance Training Inspection Documents MSDS Vendor Certis Reports

Home | Environmental | Reporting Services | FORM R (TRI) Reporting | TRI Projects

FORM R (TRI) Reporting

TRI Projects

TRI Reports

EPA Tier II Inventor

Tier II Projects

Tier II Project Details

DHS Facility Assess

Emissions Inventory

NPRI

NESHAP

NESHAP

GHG Emissions

GHG Emissions

Do you want to skip "Unassigned Chemicals" ? -- Webpage Dialog

TRI Reports -- Webpage Dialog

https://www.era-env.com/era\_ehs/Forms/TRI/frmTRIReportsTemp.aspx ERA Environmental Consulting, Inc. [CA]

Summary By Product

Save

Prev. year / crt. year

Details by Product

Details by Module

Details by Haz Waste

Help

Comments

Export to XLS

TRI ID :

Facility :

Year : 2011

Description : Sample TRI Project

Final Chemical List :  ShowAll

<input checked="" type="checkbox"/>	0001330-20-7	XYLENE	153710.252945367	1071
<input checked="" type="checkbox"/>	0000108-88-3	TOLUENE	136697.938631716	123.0
<input checked="" type="checkbox"/>	0000071-36-3	N-BUTYL ALCOHOL	101520.638170184	4167
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<input checked="" type="checkbox"/>	0000872-50-4	N-METHYL-2-PYRROLIDONE	37291.208442	2347
<input checked="" type="checkbox"/>	N982	ZINC COMPOUNDS	37083.3494962612	2.08
<input checked="" type="checkbox"/>	0007440-50-8	COPPER	27493.0835597494	329.8
<input checked="" type="checkbox"/>	0007440-47-3	CHROMIUM	26644.4794300545	0.09
<input checked="" type="checkbox"/>	0000095-63-6	1,2,4-TRIMETHYLBENZENE	19493.085939	968.0
<input checked="" type="checkbox"/>	0007632-00-0	SODIUM NITRITE	14679.425923	0
<input type="checkbox"/>	N495	NICKEL COMPOUNDS	6396.63616031891	0.14
<input type="checkbox"/>	0000071-43-2	BENZENE	4296.44243059235	4.02
<input type="checkbox"/>	0007440-62-2	VANADIUM	3728.79653495566	0.15
<input type="checkbox"/>	0007697-37-2	NITRIC ACID	2746.0125	0

User

3 adminv

3 adminv

2 adminv

2 adminv

Search  
Clear  
Edit  
Export to Excel  
Help

CAS : 0007440-47-3  
 Chemical Name : CHROMIUM  
 Chemical State :  
 Module : (no selection)  
 Product :


ModuleId	ProductId	InternalId	ProductType	Revision	Date	Density
Combustion Sources						
Combustion Sources						
Miscellaneous	TL4225		Manual	30/03/2011		1.000000000000
Miscellaneous	TL1550 220		Manual	30/03/2011		1.000000000000
Miscellaneous	HC660XD		Manual	30/03/2011		1.000000000000
Miscellaneous	HC450XD		Manual	30/03/2011		1.000000000000
Miscellaneous	HC450X		Manual	30/03/2011		1.000000000000
Miscellaneous						
TOTAL						

9records found

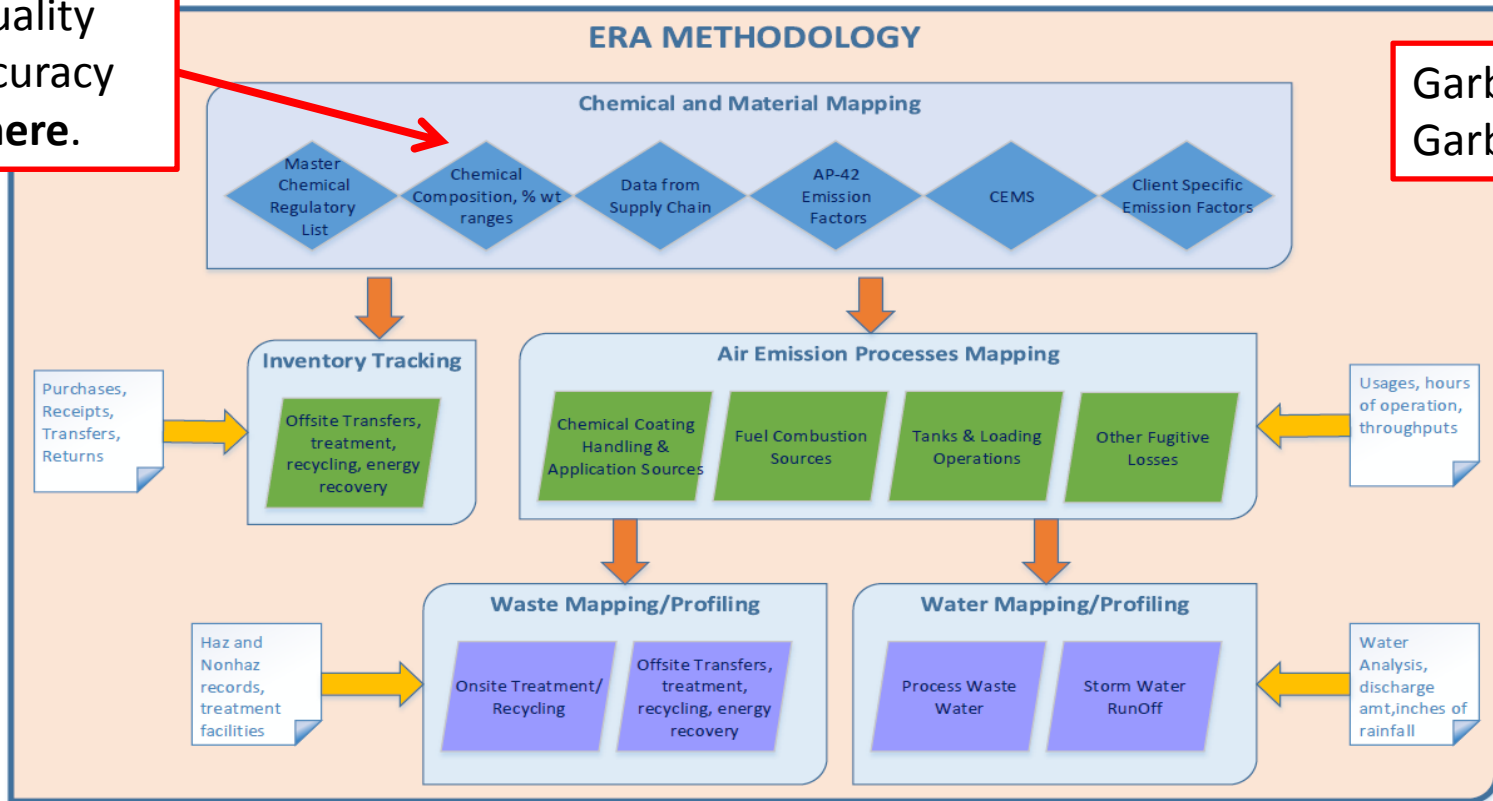
CAS : 0007440-47-3  
Chemical Name : CHROMIUM  
Chemical State :  
Module : (no selection)  
Product :

Unit	SourceId	SourceType	TransferEfficiency	VOCControlEff	PMControlEff
ion cu.ft	Boiler #1-Phase1			0.000000%	0.000000%
ion cu.ft	Boiler #2-Phase1			0.000000%	0.000000%
	Metal Alloys			0.0000%	0.0000%
	Metal Alloys			0.0000%	0.0000%
	Metal Alloys			0.0000%	0.0000%
	Metal Alloys			0.0000%	0.0000%
	Metal Alloys			0.0000%	0.0000%
	Metal Alloys			0.0000%	0.0000%

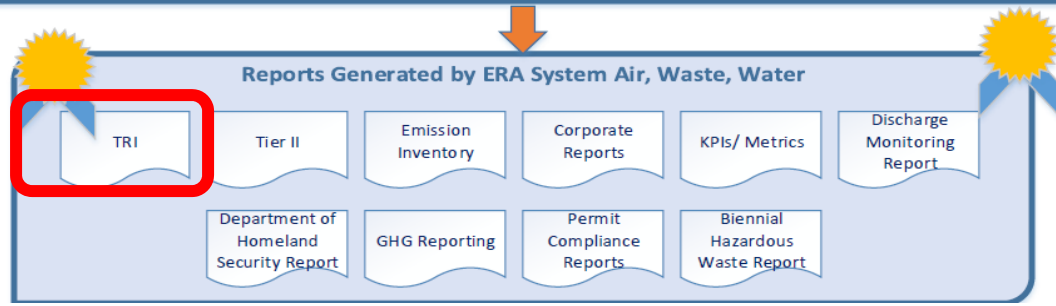
(IMPORTANT: Type or print; read instructions before completing form)

 <b>EPA</b> United States Environmental Protection Agency		<h1>FORM R</h1> Section 313 of the Emergency Planning and Community Right-to-Know Act of 1986, also Known as Title III of the Superfund Amendments and Reauthorization Act		TRI Facility ID Number _____	
				Toxic Chemical, Category or Generic Name CHROMIUM	
<b>WHERE TO SEND COMPLETED FORMS:</b>		1. TRI Data Processing Center P.O. Box 10163 Fairfax, VA 22038 ATTN: TOXIC CHEMICAL RELEASE INVENTORY		2. APPROPRIATE STATE OFFICE (See instructions in Appendix E)	
This section only applies if you are revising or withdrawing a previously submitted form, otherwise leave blank.	<b>Revision (Enter up to two code(s))</b> [ ] [ ]		<b>Withdrawal (Enter up to two code(s))</b> [ ] [ ]		
<b>IMPORTANT: See instructions to determine when "Not Applicable (NA)" boxes should be checked.</b>					
<b>PART I. FACILITY IDENTIFICATION INFORMATION</b>					
<b>SECTION 1. REPORTING YEAR 2011</b>					
<b>SECTION 2. TRADE SECRET INFORMATION</b>					
2.1	Are you claiming the toxic chemical identified on page 2 trade secret? <input type="checkbox"/> Yes (Answer question 2.2; Attach substantiation forms)		<input checked="" type="checkbox"/> No (Do not answer 2.2; Go to Section 3)	2.2	Is this copy <input type="checkbox"/> Sanitized <input type="checkbox"/> Unsanitized (Answer only if "Yes" in 2.1)
<b>SECTION 3. CERTIFICATION (Important: read and sign after completing all form sections.)</b> I hereby certify that I have reviewed the attached documents and that, to the best of my knowledge and belief, the submitted information is true and complete and that the amounts and values in this report are accurate based on reasonable estimates using data available to the preparers of this report.					

Data quality and accuracy starts **here**.



Garbage in,  
Garbage out





# NextGen Compliance

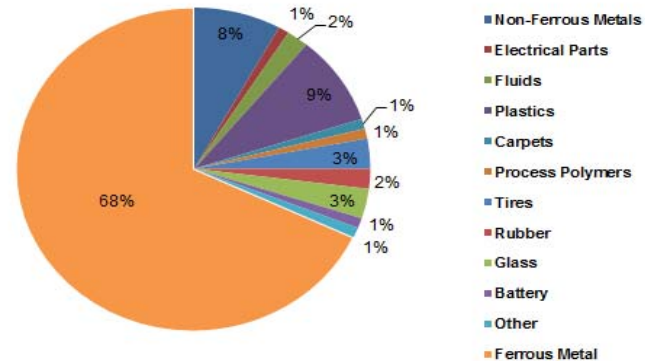
- NextGen **shifts the focus** on to transparency, e-reporting, and community involvement.
- As EPA moves to increasingly digital and online tools, **manufacturers needs to keep up**. This means **switching from pen and paper to digital recordkeeping**.
- NextGen also does a better job of **connecting the dots** between supply chain data and multiple types of emission reports – so **going back to the raw data is more efficient**.

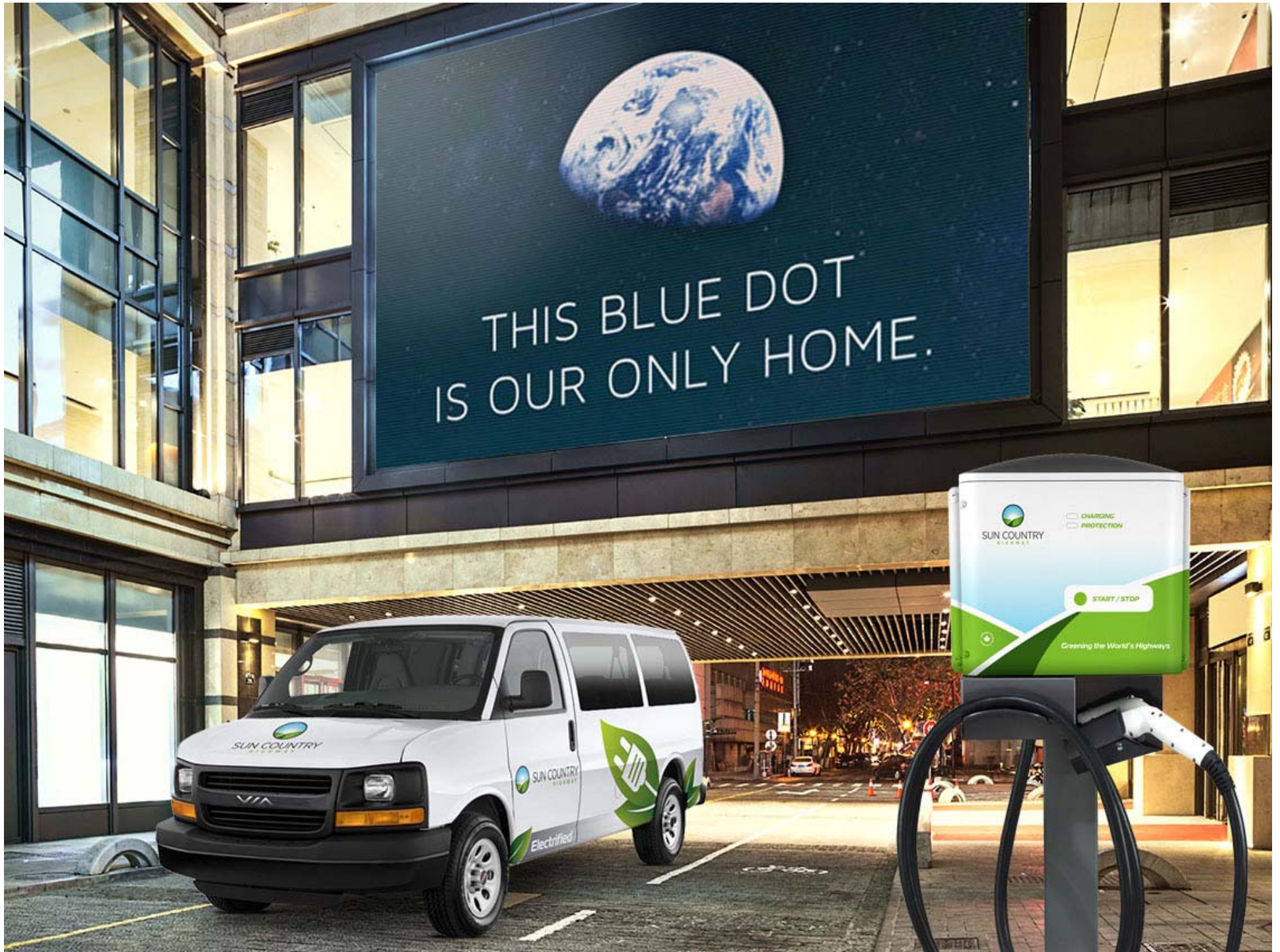
# What's Next?

The importance of the supply chain, Green Chemistry, Design for the Environment & Product End of Life



Vehicle Material Content





THIS BLUE DOT  
IS OUR ONLY HOME.



# Questions?

[gary.vegh@era-ehs.com](mailto:gary.vegh@era-ehs.com)

Visit <http://www.era-ehs.com>

