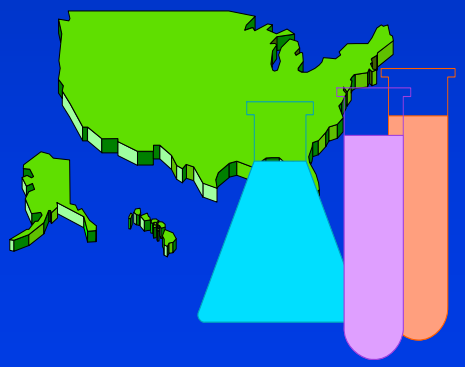
Discussion of the 2006 Inventory Update Reporting Data

December 12, 2006



Nhan Nguyen
U.S. EPA

Presentation Overview

- What is IUR?
- What data are collected?
- Who is required to report?
- Where can one find historical IUR information?
- How will IUR data be used?
- Your input/suggestions on uses of IUR data

The Inventory Update Reporting (IUR) Rule collects information from chemical manufacturers and importers to update the TSCA Inventory of Chemical Substances.

The IUR provides a "snapshot" of chemical manufacturing every 5 years.


The TSCA Inventory lists
industrial or commercial chemicals
in commerce in the United States.
Currently there are over 82,000
substances on the Inventory.

What chemical substances are included in the IUR?

- Organic and inorganic chemicals that are:
  - Currently listed on the Inventory; and
  - Manufactured or imported at volumes of at least 25,000 pounds at a single site.

- Exceptions include:
  - Polymers;
  - Microorganisms;
  - Naturally occurring substances;
  - Certain forms of natural gas; and
  - Substances produced as a byproduct or impurity

Manufacturing Data Collected

- Chemical identification information:
  - Chemical name
  - Numerical identification (i.e., CAS Registry Number)
- Manufacturing information:
  - Production volume
  - Site-limited status
  - Manufacturing or Import activity
  - Number of potentially exposed workers
  - Physical form, w/ associated percent production volume
  - Maximum concentration

Industrial Processing and Use Data

- Production Volume Threshold
  - 300,000 pounds per year or more

- Partially Exempt Chemical Categories:
  - Manufacturers & importers of these partially exempt chemicals/categories report only site and manufacturing data
  - Categories of chemicals include:
    - » *Inorganic chemicals (for 2006 reporting only);*
    - » *Multi-chemical petroleum process streams (specifically identified); and*
    - » *Specifically listed chemical substances for which there is a low current need for IUR processing and use information.*

Processing and Use Data Collected

- Up to 10 unique combinations of:
  - Type of processing or use
  - NAICS code
  - Industrial function category (bleaching agent, filler, lubricant, etc)
- For each unique combination:
  - Percent production volume (range)
  - Number of sites (range)
  - Number of potentially exposed workers (range)

Consumer and Commercial Use Data Collected

- Use category (automotive care product, lawn & garden product, soaps & detergents, etc)
- For each use category:
  - Indication of intention for use by children
  - Maximum chemical concentration
  - Percent of production volume

IUR Reporting Standards

- Source of information
  - Manufacturer of chemical substance
  - Importer of chemical substance
- Reporting Standards
  - Manufacturing data is “known to or reasonably ascertainable by”
  - Processing and use data is “readily obtainable”
  - Consumer and commercial use data is “readily obtainable”

Who submits IUR data?

- Sites that manufacture or import chemicals with:
  - Production volume of 25,000 lbs or greater (annual, per site) report site and manufacturing data.
  - Production volume of 300,000 lbs or greater (annual, per site) report additional processing and use data.
- Inorganic chemical manufacturers and importers:
  - Partial exemption for the first reporting cycle and only report site and manufacturing data.
  - After the first reporting cycle, required to report as described for chemical manufacturers and importers above.

Who submits IUR data?

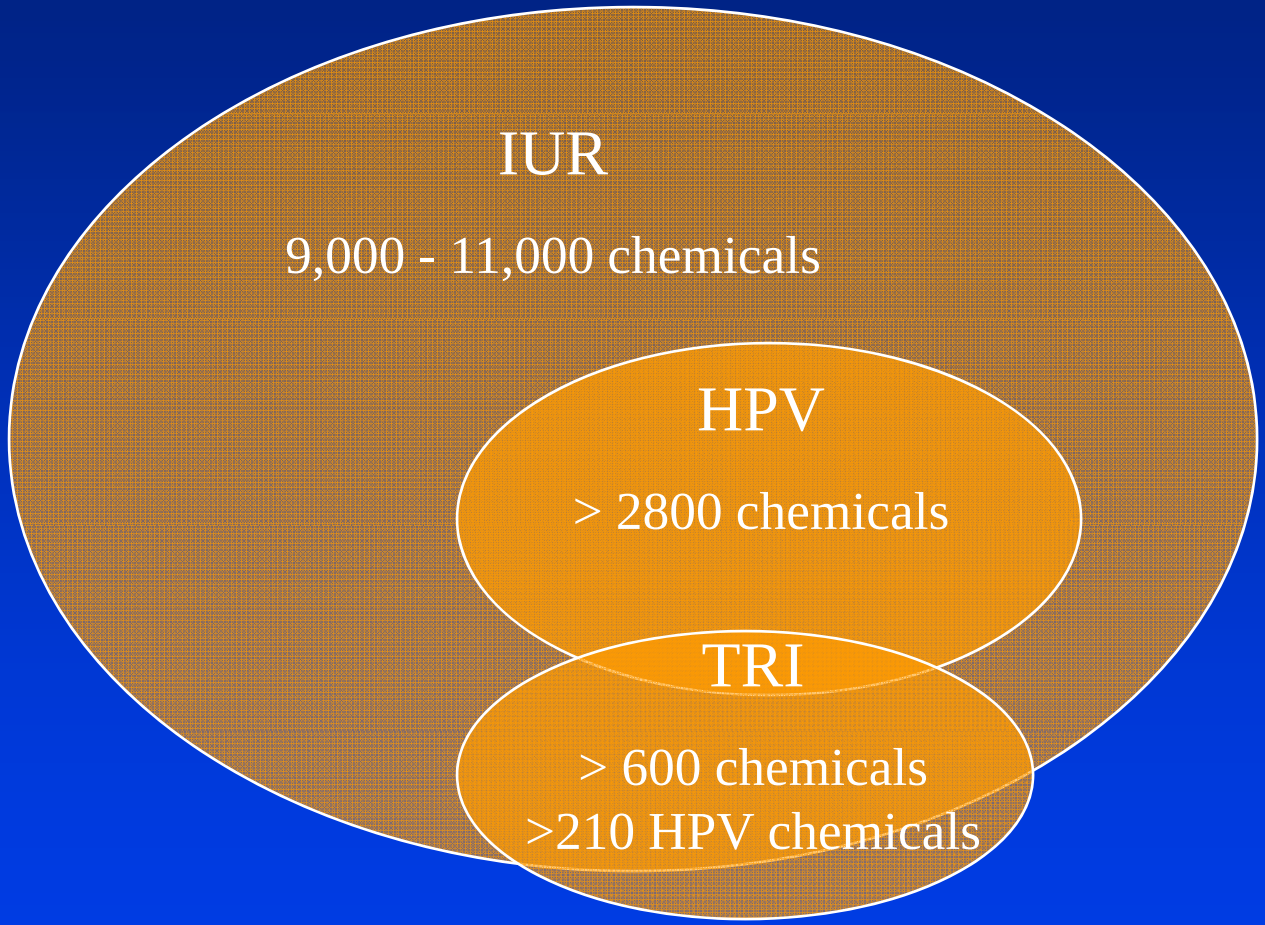
- Small businesses are exempt from reporting
  - TSCA Definition of Small Businesses
    - » *Total annual sales, including parent company, less than $40 million and annual site production volume less than 100,000 lbs OR*
    - » *Total annual sales, including parent company, less than $4 million.*

Historical Information is Available

- IUR data collection began in 1986 and occurred every four years.
- IUR data was limited to organic chemicals.
- IUR data was limited to chemical identity, production volume, and site-limited status.
- Non-confidential chemical records are available under “Past IUR Data” on our website:

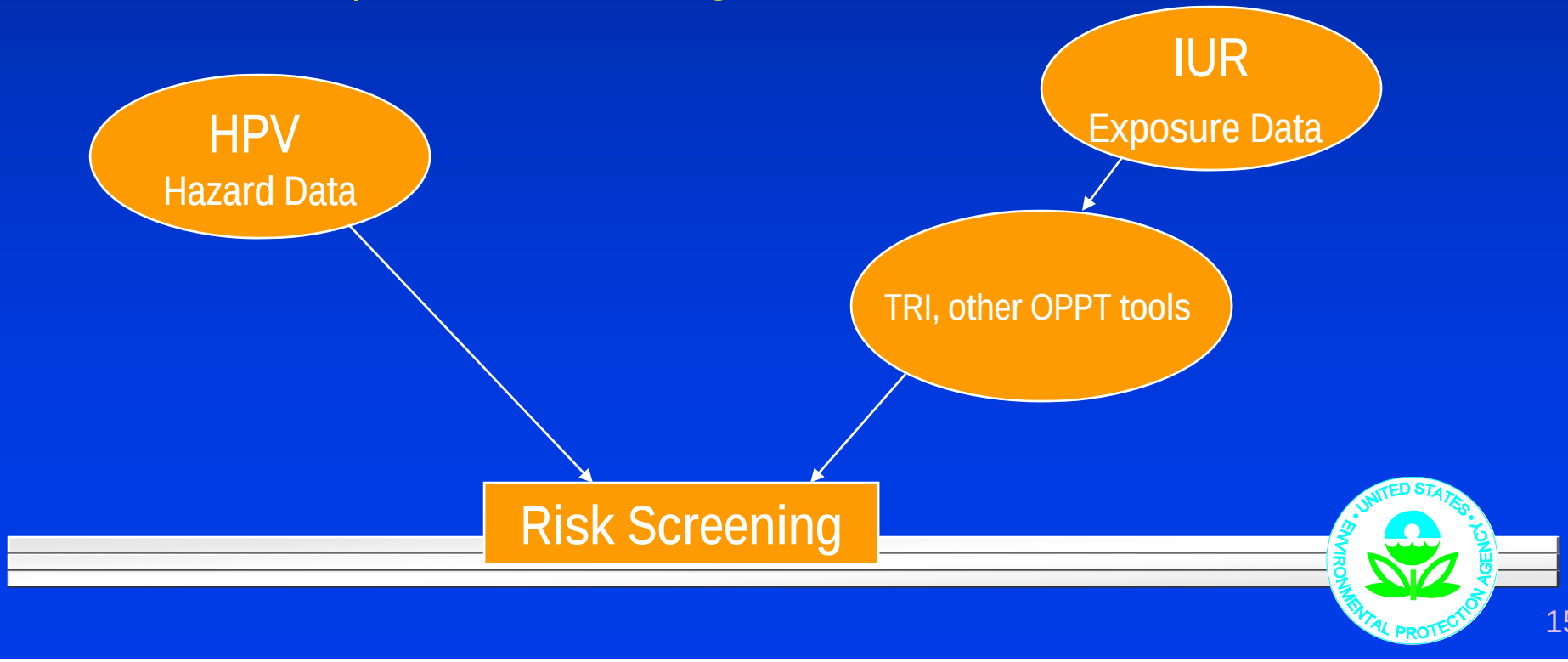
www.epa.gov/oppt/iur

How do HPV, and TRI chemicals relate to IUR?



IUR data may be used in Risk Screening: Risk = f (Hazard, Exposure)

- HPV data provides hazard information.
- IUR data provides exposure related information that may be used in combination with other models and data to:
  - Determine potential screening-level occupational/public risk.
  - Determine potential screening-level environmental risk.



Exposure Estimations Using IUR Data

- Some information provided by IUR:
  - Information on industrial function category, NAICS code and type of processing or use information
  - Production volume
  - Number of sites
  - Number of workers
  - Maximum concentration of chemical
  - Physical state of chemical
  - % PV used in commercial and consumer use categories
- The information, along with P/C properties from HPV Challenge Program, may be useful inputs to models (e.g. ChemSTEER) to determine potential environmental releases and exposures to workers
- Similarly, IUR and HPV data may be useful inputs to E-FAST model to determine potential exposures to consumers

Priority Setting/Occupational Risk Screening Using IUR Data

- Prioritize chemicals based on exposure related criteria (e.g. # of potentially exposed workers)
- In combination with HPV data, could prioritize chemicals based on both hazard and exposure related criteria
- Flag chemicals within certain industry sectors with high potential exposure for further follow-up activity.

Priority Setting / Consumer and/or Children Risk Screening Using IUR Data

- Prioritize chemicals based on exposure related criteria (e.g. use in consumer products, use in products intended for children)
- In combination with HPV data, could prioritize chemicals based on both hazard and exposure related criteria
- Flag chemicals within certain consumer product categories with high potential exposure for further follow-up activity.

Other Potential Uses of IUR Data

- Design for Environment (DfE)
  - Identify potential safer substitutes
  - IUR information on use category in combination with low concern in hazard screen (using HPV data) could provide list of possible safer substitutes
- Occupational Safety and Health Administration (OSHA)
  - Send alerts or outreach for specific chemicals based on number of sites and number of workers likely to be exposed.

Other Potential Uses of IUR Data

The IUR provides information that can be used as a starting point for basic exposure information. Some potential uses include:

- Enabling a “first look” at a chemical, industry, or use by providing needed information not otherwise available.
- Enabling a more proactive rather than reactive approach by providing information needed to identify trends and upcoming issues or concerns.
- Providing a starting point for more in-depth analyses and identifying where additional information may be needed.
- Placing hazard information into context, such as information collected through the HPV Challenge Program and similar programs.

2006 IUR Data Release Report

- Still in the planning stages
- Initial thoughts include tables such as:
  - National and state breakdowns
    - » ***Number of chemicals reported, total pounds***
    - » ***Number of reporting facilities***
    - » ***Number of manufacturers***
  - Number of importers
  - Number of high volume chemicals
    - » ***Chemical name and CAS numbers***
    - » ***Total production volumes***
  - Top 100 chemicals by physical state
  - Chemicals used in consumer products
  - Chemicals used in children's products
  - Worker information
    - » ***By chemical***
    - » ***By number of workers potentially exposed***

Your suggestions for other potential uses of IUR data