

# Transforming Regulatory Enforcement through New Technology, or Technological Innovation, Dynamic Governance, and Better Regulation

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# Traditional and Emerging Compliance and Enforcement Challenges

- \* Traditional challenges
  - Gaps in understanding who is covered by regulatory duties
  - Gaps in understanding concerning status of regulatory compliance
  - Too much significant noncompliance
  - Failure to address significant noncompliance in a timely and appropriate way
  - Difficulty in understanding the impact of enforcement choices on environmental conditions
- \* Recent strains on governance capacity
  - Declining resources at both the federal and state levels
  - Increased regulatory responsibilities through expanded regulated communities
  - Movement away from uniform regulatory treatment to differentiated responsibilities
  - Increased focus on threats posed by small sources

# Next Generation Compliance

- \* EPA's "Next Gen" website:

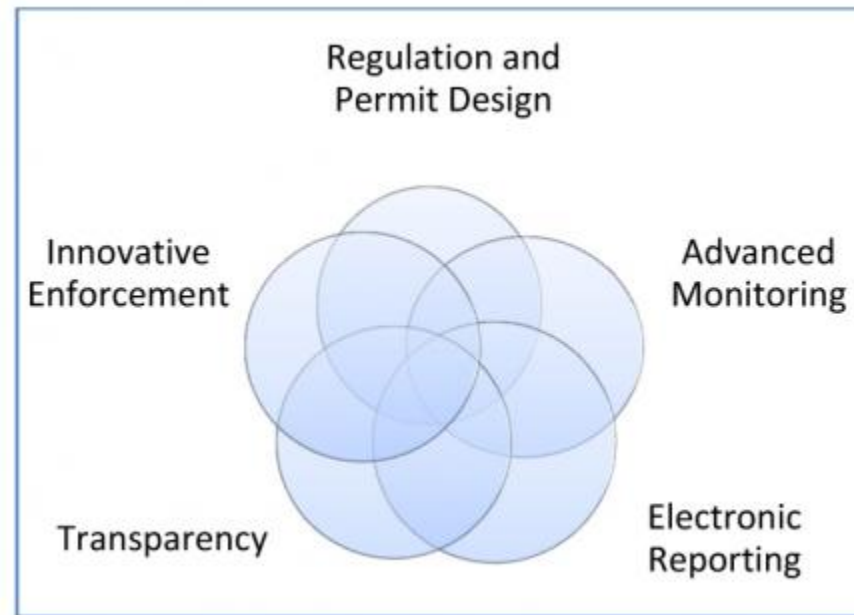
“Today’s pollution challenges require a modern approach to compliance, taking advantage of new tools and approaches while strengthening vigorous enforcement of environmental laws. Next Generation Compliance is EPA’s integrated strategy to do that, designed to bring together the best thinking from inside and outside EPA.”

- \* Cynthia Giles, assistant Administrator of the Office of Enforcement and Compliance Assistance at EPA:

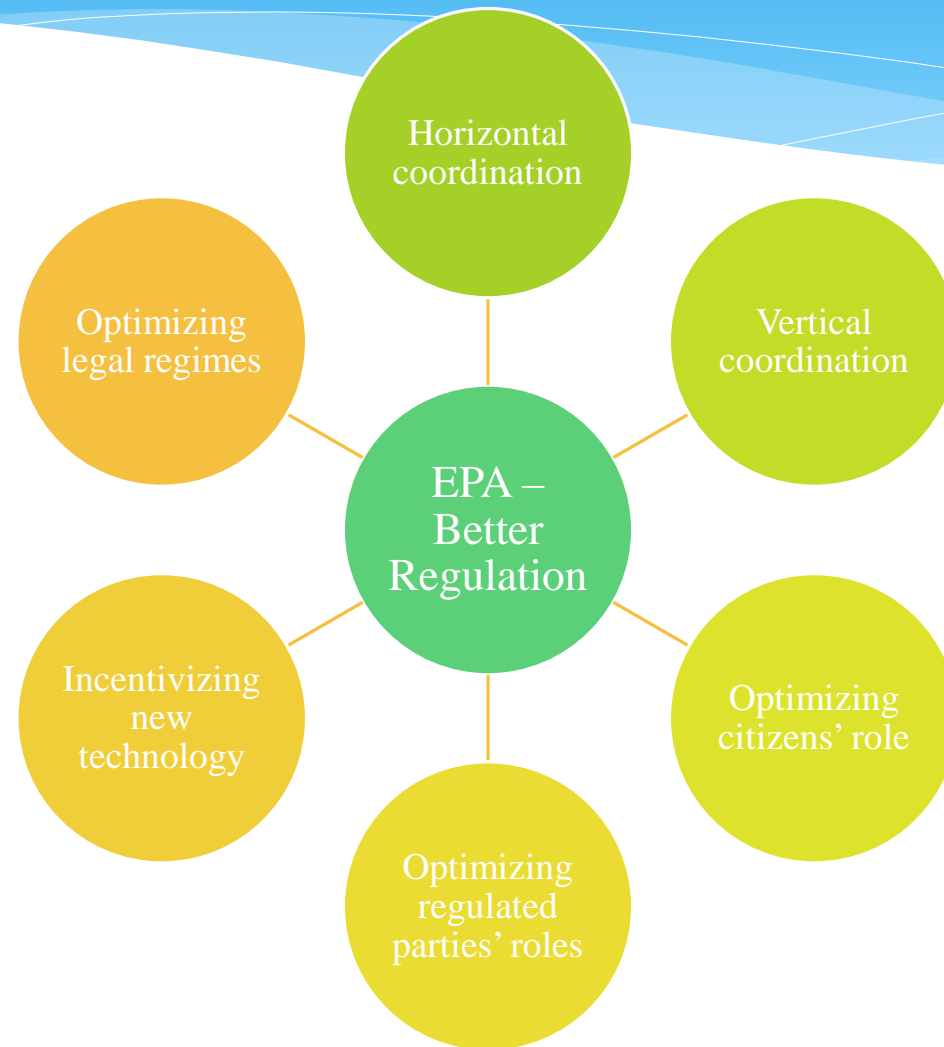
“We are moving toward a world in which states, EPA, citizens, and industry will have real-time electronic information regarding environmental conditions, emissions, and compliance, and we are using what we have learned about compliance to make it easier to comply than to violate. We call it Next Generation Compliance.”

“Regulators are not naturally inclined to simplicity, but people do better when things are clear. . . We are finding ways to make the enforcement dollar go further.”

# The Five Interconnected Components of Next Generation Compliance



# An Alternative Framework for Next Gen Compliance: 7 Key Elements



# A Brief Look at Four Opportunities to Promote Next Gen



# State/Federal Relations – the State Review Framework

EPA's National Strategy for Improving Oversight of State Enforcement Performance (Dec. 2013):

“EPA's current metrics are based on the activities the states perform and not on the level of compliance within regulated sectors.”

Bob Martineau, Commissioner, Tennessee Department of Environmental Conservation:

“[I]n the enforcement world, . . . the traditional measurement, if you're keeping score, is the number of penalties and notices of violation. . . . The recent dialogue concerns increasing compliance, and how the outcome is the goal. How many enforcement actions you take doesn't necessarily measure success. Sometimes it is a measurement of failure, that somewhere along the line somebody didn't communicate.”

EPA's National Strategy again: compliance is “difficult to assess with the information currently available.”

# New Governance and Citizens – An Initial Typology

- Creation of good neighbor or other formal arrangements between regulated parties and citizens – e.g., periodic meetings with nearby community arranged via settlements
- Provide data to citizens about releases already required to be reported
- Provide data to citizens about risks/exposure/ambient concentrations already required to be reported
- Develop new monitoring approaches and make data generated easily accessible to citizens
- Provide data to citizens about settlement/case implementation and remediation
- Empower citizens to monitor to inform themselves, regulated parties, and government actors
- Create other mechanisms for citizens to raise concerns effectively
- Empower citizens to bring actions to enforce or to participate more proactively in the litigation process if that proves necessary
- Other – identify \_\_\_\_\_



# New Governance and Regulated Parties – An Initial Typology

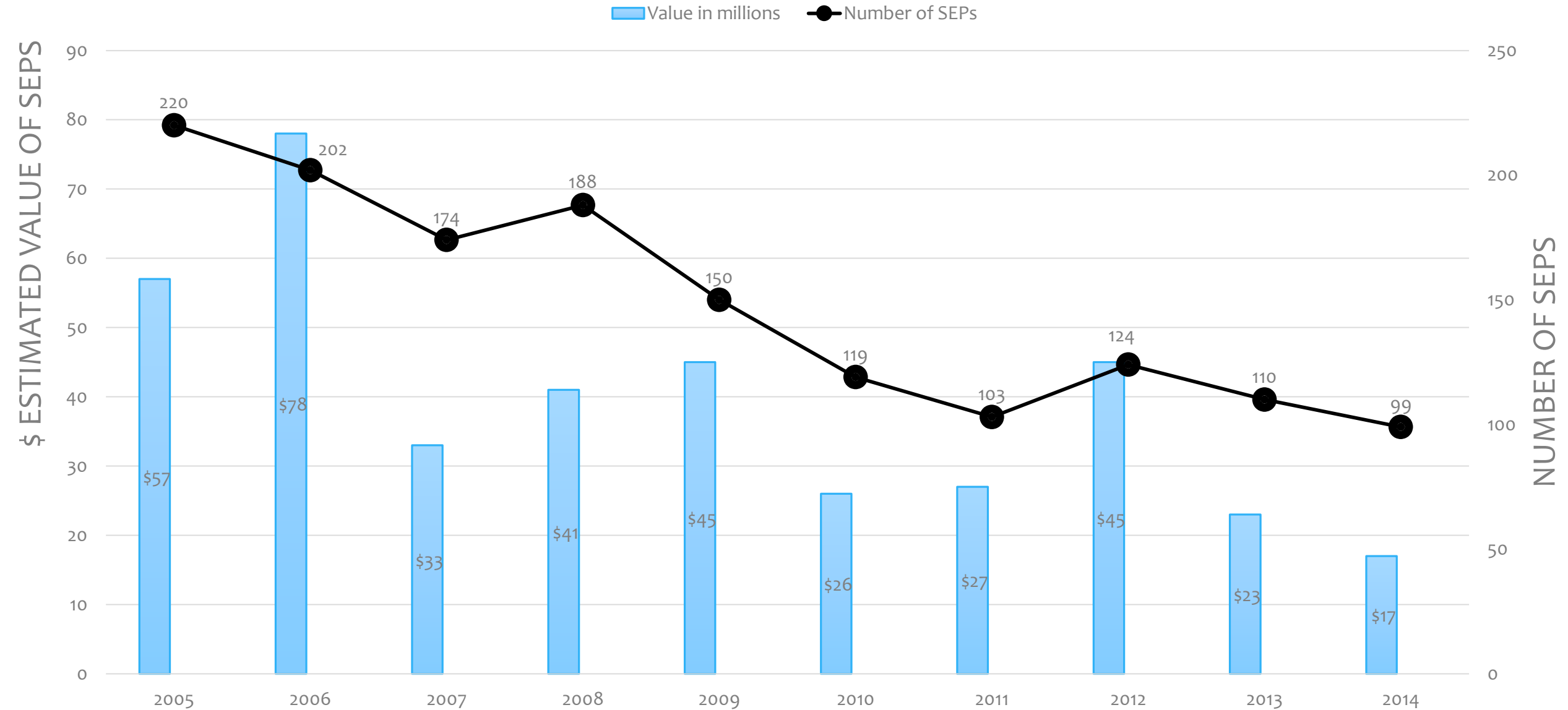
- \* Require new efforts to identify violations
- \* Require new actions to identify releases and/or exposure
- \* Require new actions to prevent violations, including preventing recurrence of violations [from Self Audit policy]
- \* Require new actions to prevent releases and/or exposure
- \* Require prompt disclosure of violations [from Self Audit policy]
- \* Require resolution of discovered violations [from Self Audit policy]
- \* Require remediation/mitigation of any discovered violation's impacts [from Self Audit policy]
- \* Require transparency measures to make information on compliance or environmental conditions available to the public
  - \* via the settling party's website
  - \* via an EPA database
  - \* via an EPA website
  - \* other
- \* Provide compliance assistance
- \* Require 3<sup>rd</sup> party environmental audit or compliance management system [from Self Audit policy]
- \* Opportunity for learning – e.g., testing new monitoring or communications technology or strategy

# Optimizing Legal Regimes

- \* Asking the “legal regimes question” – are existing legal regimes being used as effectively as possible if the goal is to improve enforcement and compliance by integrating new monitoring and other technologies?
- \* Revisiting the scope of injunctive relief authorities to optimize use of new monitoring and information technologies
- \* Taking a fresh look at Supplemental Environmental Projects (SEPs)

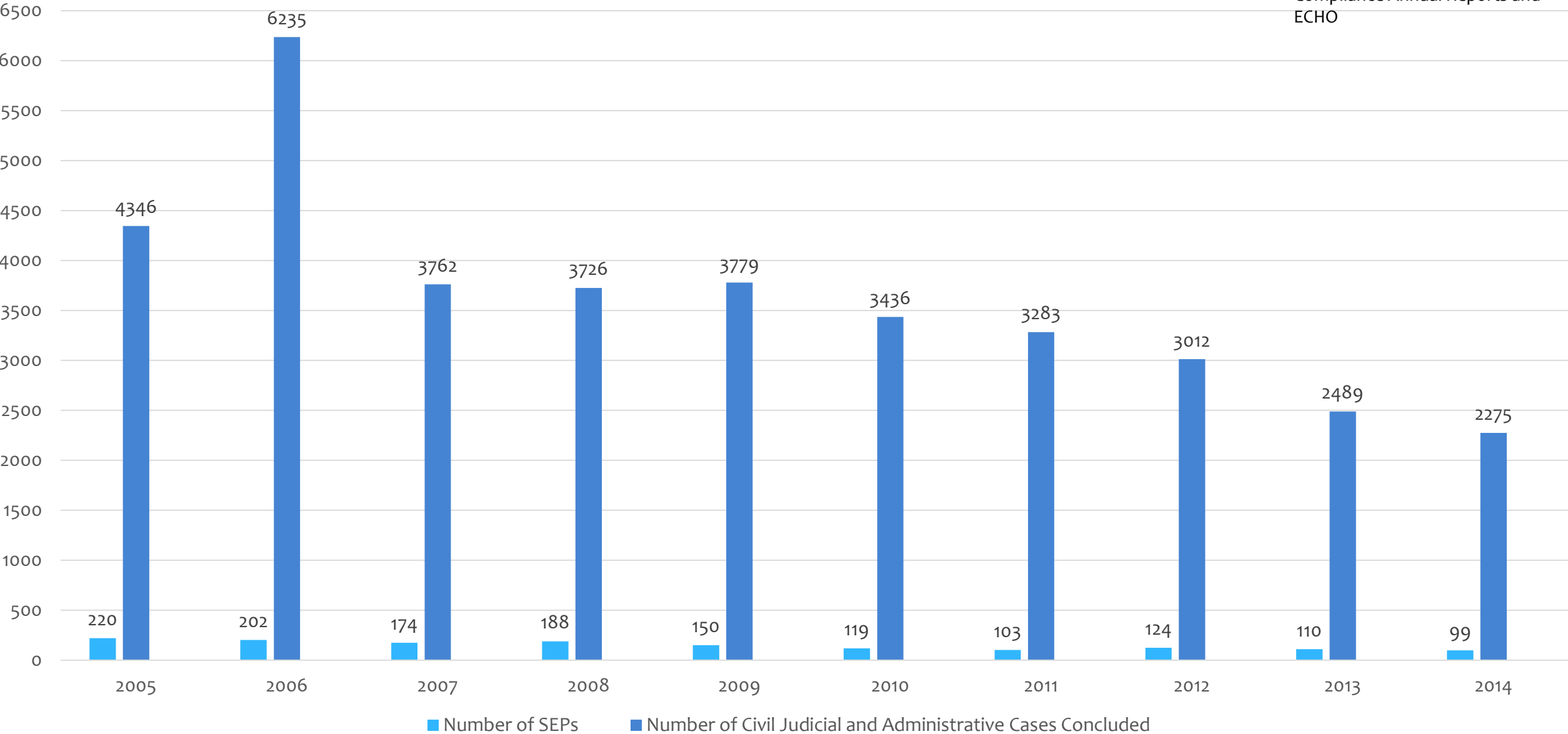
# Number & Value of SEPs 2005-2014

Data from Enforcement & Compliance Annual Reports and ECHO

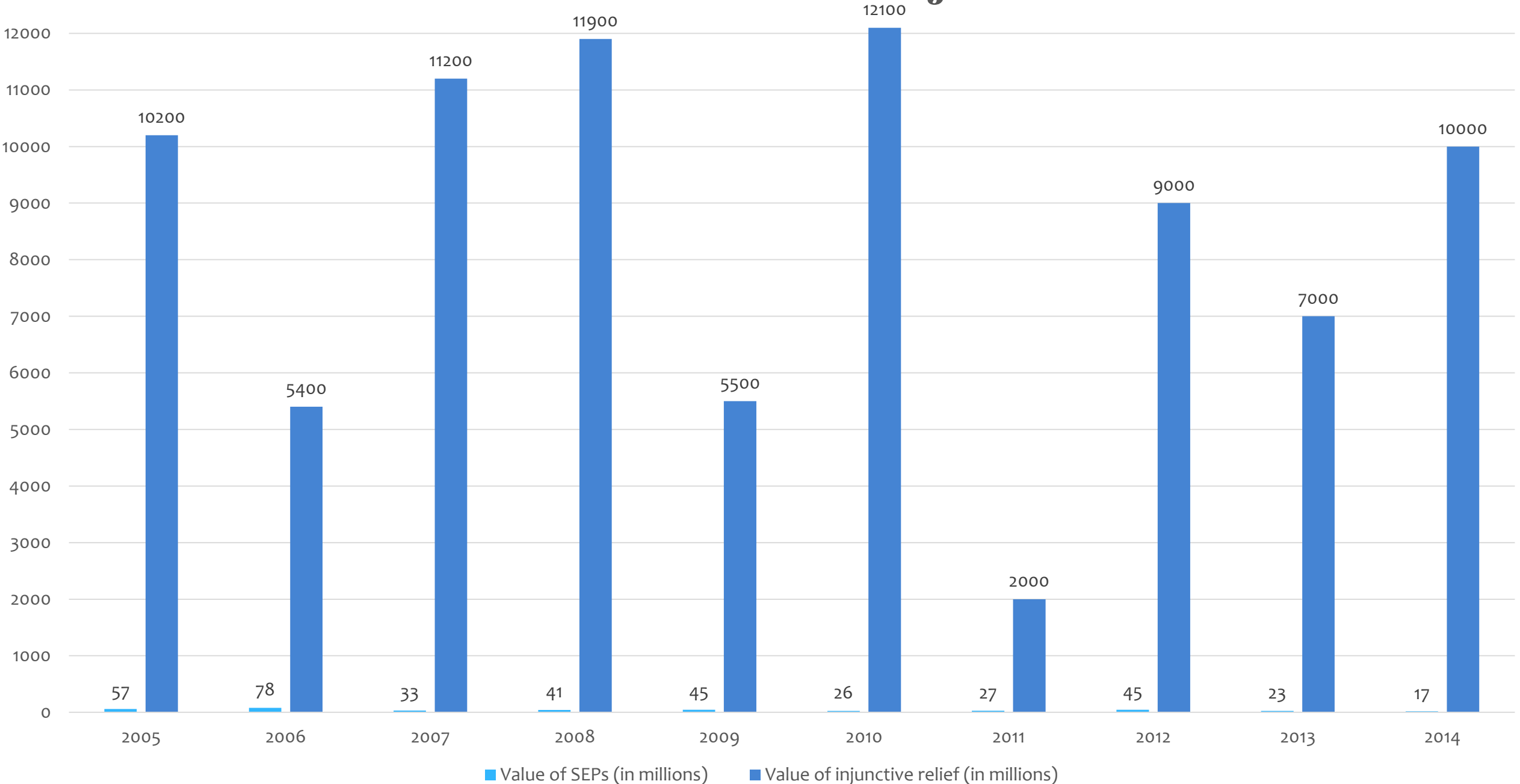


# Comparison of # of SEPs and # of Civil Cases Concluded 2005-2014

Data from Enforcement &  
Compliance Annual Reports and  
ECHO



# Value of SEPS vs. Value of Injunctive Relief



# Ten Enforcement Settlements that Address Noncompliance by Leveraging Next Gen Tools and Approaches

- \* *Titanium Metals Corp.* (Henderson, NY): Requires **electronic monitoring** of PCB management
- \* *AL Solutions* (New Cumberland, W VA): Advanced monitoring technology (e.g., infrared cameras) to assess hazardous chemical storage areas to prevent fires and explosions
- \* *Sunoco* (Philadelphia): Requires **fenceline monitoring** upwind and downwind of petroleum refinery **and public posting** of results
- \* *Tyson Foods* (several facilities): Requires **3d-party audits** concerning accidental chemical releases
- \* *Roquette America* (Keokuk, IA): **Enhanced effluent monitoring and independent 3d-party audits** to be included in annual reports
- \* *BP Whiting* (Whiting, IN): **Requires reporting of continuous emissions monitoring data on public website**, fenceline monitoring, and **public consultation** on location of monitors
- \* *Metropolitan St. Louis Sewer Dist.* (St. Louis, MO): Requires **investments in green infrastructure** to address environmental justice problems and provide **public postings of CWA discharge locations**

# Ten Enforcement Settlements that Address Noncompliance by Leveraging Next Gen Tools and Approaches.

- \* *Chevron Puerto Rico*: Installation of **automatic leak detection systems and liquid sensors** on USTs, and centralized monitoring and record-keeping
- \* *BP Exploration* (North Slope, AK): Requires implementation of comprehensive system-wide oil **pipeline integrity management program**, which addresses corrosion and other threats **through GIS –based software**; all reports must be placed in a secure **web-based electronic portal accessible** to the U.S. and 3d-party oversight.
- \* *Murphy Oil USA* (LA and WI): Requires **ambient monitoring system** in nearby neighborhood, with information available on **publicly accessible website in “near-real time”**

# Conclusions

1. Enforcement and compliance face significant challenges.
2. The 5 elements of EPA's Next Gen Framework are a good start.
3. Our purpose here is to step back and ask if there are other ways to think about what a Next Gen framework might include. We've come up w/a framework that offers a somewhat different lens for thinking about how to do compliance and enforcement better – by looking systematically at key features of the enforcement and compliance arena.



Thank you! We welcome your bright ideas!

