

## Environmental Compliance News

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### **EPA Enforcement: 'Next-Generation Compliance'**



by [Jim Drago, P.E.](#)

Enforcement of environmental regulations is entering a new era with the realization that comprehensive monitoring of all industrial sites is not realistic. Indeed Cynthia Giles, assistant administrator for the U.S. Environmental Protection Agency's Office of Enforcement and Compliance Assurance, said, "The most effective way to achieve compliance with the law is to make it easier to comply than to violate. EPA is using new technologies and lessons learned about what drives compliance to reduce pollution and improve results."<sup>(1)</sup>

Through EPA's Next Generation Compliance (Next Gen) Initiative, the Agency is moving away from reactionary enforcement to a comprehensive and modern approach to achieving compliance with the nation's environmental regulations.

In fact, "Next Generation Compliance," was the title of a landmark conference in December 2012 at George Washington University. The conference was co-sponsored by the George Washington University School of Law; University of California Berkeley Center for Law, Energy & the Environment; University of California Berkeley, Goldman School of Public Policy Center for Environmental Public Policy; the Environmental Law Institute; and the EPA's Office of Enforcement and Compliance Assurance.

Giles's introduction at the conference set the tone and agenda for two days of presentations and discussion:

"The U.S. Environmental Protection Agency is facing challenges from budgets, increasing environmental problems, and non-compliance.

Next Generation Compliance can move EPA toward high compliance using technology, better design of regulations, and other strategies. EPA has identified five components of Next Generation Compliance -- all designed to improve compliance: more effective rules, advanced monitoring technology, electronic reporting, increased transparency, and innovative enforcement. Improved compliance allows the nation to realize more of the benefits intended from environmental regulations.”

The EPA recognizes there is widespread non-compliance with existing regulations and no plans to expand its ranks of enforcers; technology is expected to close this gap. Like engineers developing new products within the limitations of available human, financial and material resources, regulators are formulating policies that work effectively within current legislation to save time, money and the effort of creating new laws.

The Next Generation Compliance conference participants came from academia, federal and state agencies, environmental law and policy development. They shared ideas on a number of ways to implement the five elements of EPA’s Next Gen initiative.

### **More effective rules**

To be effective, rules need to be simple, and the most effective ones make compliance a default. Hybrid regulations(2) that link enforcement agencies can achieve multiple objectives. For example, consider the requirements of the EPA’s fuel efficiency and vehicle emission regulations and the National Highway Traffic Safety Administration’s fuel economy requirements. The NHTSA targets miles-per-gallon fuel consumption, while the EPA focuses on energy optimization and air quality. Improved fuel economy invariably results in lower emissions, so only one rule needs to be enforced, rather than having two agencies enforcing two separate rules.

### **Advanced technology**

Laws typically lag advances in technology. As in the private sector, policymakers need to factor continuous innovation and new technologies into their regulatory structures. This requires trusted intermediaries to interpret the underlying science and apply these technologies. Today’s technologies are capable of acquiring and transmitting data for real-time compliance reporting. For environmental monitoring, both passive and active optical instruments are available to detect, identify and quantify air pollutants. This is done using hand-held devices resembling video-recorders and stationary instruments for monitoring the fence-lines of sites engaged in oil refining, chemical production, gas transmission and other potential sources of pollution.(3)

The Alternative Work Practice permits the use of infrared instruments in place of Method 21 monitoring, but this technology has not yet been used for compliance purposes.

Another way to make monitoring and enforcement more effective is through citizen engagement in communities affected by pollution. For example, YouTube® and other social media sites can be used to broadcast violations, bringing them to the attention of the EPA and state and local regulatory agencies. In addition, a mobile phone application for timely reporting of environmental incidents would effectively deputize citizens to assist with monitoring and enforcement

## **Innovative enforcement**

Even with reduced budgets, the EPA will not pull back on enforcement, since it serves both as a deterrent to violation and motivator for compliance. Direct enforcement of offending sites is particularly effective.

A simple, cost-effective method of motivating compliance is to expand the EPA's enforcement base by soliciting citizens, agencies and the media to report violators. One example of such grass roots activity is the award-winning Schoharie River Center in Esperance, N.Y., whose Environmental Study Team has established a citizen watch-force. With the assistance of volunteer environmental professionals, this team has trained young people and their parents to perform, document and present rapid bio-assessments of their area's rivers, streams and ponds, according to EPA protocols.

Innovative policies and regulations can have their genesis in studying the behaviors of both violators and those that meet or exceed the requirements of compliance. Violators often think they will not be caught. Conversely, those that over-comply may feel they warrant a free pass for their good deeds. Individual companies, indeed entire industries, can be motivated to pursue sustainable practices by the most powerful motivator of all – money.

In India those that comply receive preferred rates from lenders. Favor with insurance providers and a positive public image can further motivate compliance without the threat of penalties. Tseming Yang, professor of law at Santa Clara University, discussed China's petition system of "Letters and Visits," and how it has promoted an involved citizenry with regard to environmental issues.

Citizens of China have the right to petition the government on any issue with expectation of a response. Similarly, any citizen of India can bring legal action against corporate polluters.

Han Somsen, professor of European Union law at the Tilburg School of Law in the Netherlands, shared his thoughts on regulatory evolution(4). The current generation calls for the use of best available techniques, products and process standards, such as requiring the use of catalytic converters on cars or specifying certain refinery processes.

The next generation would institute monitoring and surveillance to detect and confront offenders. At this stage, would-be offenders will do the right thing because they fear the consequences of being caught. The third generation would preclude non-compliance as not in one's self-interest. And the fourth generation would involve controlling the consequences of pollution by technology, thereby rendering mitigation moot.

Anastasia Telesetsky, associate professor at the University of Idaho College of Law, proposed mandatory index insurance to motivate environmental compliance. Much like auto insurance, the premium would be based on performance. Policies could be written to cover general environmental liability, site-specific liability and remediation. For example, water pollution insurance is mandatory in Argentina.

To deal with fewer site inspections, the EPA could outsource environmental compliance to third-party inspectors. Indeed self-reporting and third-party reporting have been found to be generally accurate, according to studies referenced by Michael Toffel, associate professor at Harvard Business School; Jodi Short, associate professor at the University of California Hastings School of Law; and Jay Shimshack, associate professor of economics at Tulane University.(5) An industry of third-party inspection is already in place and together with electronic reporting could be easily implemented.

### **Social marketing**

The compliance community consists of three major groups: those requiring education; those requiring direction and desiring change; and those requiring enforcement. According to Nancy Lee, founder and president of Social Marketing Services, Inc., Mercer, Island, WA, the biggest improvement in compliance can be achieved by focusing on those requiring direction and desiring change with social marketing techniques.(6)

The conference concluded with emphasis on five actions for improving compliance.

First is to differentiate between large and small regulatory targets -- an oil refinery vs. the corner dry cleaner, if you will. Second is to engage private citizens to become involved and report non-compliance incidents via social media and phone apps. Third is to employ both traditional and digital media to raise awareness of compliance issues and communicate that the EPA is maintaining its vigilance and bringing enforcement actions against violators. Fourth is to research applicable technologies, both currently available and forthcoming. And fifth is to continue to keep pressure on violators and adapt regulations for consistent compliance.

### **References:**

(1) *The Environmental Forum*, September-October 2013, "Next Generation Compliance"

(2) "Federalism, Institutional Design, and Environmental Compliance: Possibilities for Hybrid Mechanisms," Hari Osofsky, Associate Professor, University of Minnesota Law School, Minneapolis, MN

(3) "Solving the Problem by Seeing It: Creative Legal Strategies to Promote the Use of Remote Sensing Technologies for Environmental Compliance," Glenn Sanford, Associate Professor of Philosophy, Sam Houston State University, Huntsville, TX, and Tracy Hester, Director, Environment, Energy and Natural Resource Center and Professor, University of Houston, TX

(4) "The Legitimacy of Effectiveness – preparing the stage for environmental technoregulation in the European Union," Han Somsen, Professor and Vice-Dean, Tilburg School of Law, the Netherlands; Editor, *Law, Innovation and Technology Journal* and Dr. Floor Fleurke, Professor, Tilburg School of Law, the Netherlands)

(5) "Coming Clean & Cleaning Up: Does Voluntary Self-Reporting Indicate Effective Self-Policing?" Michael Toffel, Associate Professor, Harvard Business School, Kennedy School of Government, Boston, MA. "Are Self-Reported Pollution Data Accurate? Evidence from the Clean Water Act," Jay Shimshack, Associate Professor, Department of Economics, Tulane University, New Orleans, LA. "From Compliance to Conformity

Assessment: Regulatory Agency Use of Private Third Parties,” Lesley McAllister, Stanley Legro Professor in Environmental Law, University of San Diego School of Law; Associate Adjunct Professor, School of International Relations and Pacific Studies, University of California San Diego, San Diego, CA

(6) “Increasing Compliance Using Social Marketing,” Nancy Lee, Founder and President, Social Marketing Services, Inc., Mercer Island, WA

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