Best Practices in Fostering Compliance and Supporting Enforcement through Effective Licensing and Permitting

Davis Jones,
Senior Environmental Consultant,
Environmental and Social Safeguards Unit,
Inter-American Development Bank

Abstract: There is a global recognition that poorly drafted licensing and permitting requirements often lead to non-compliance, environmental problems and difficult enforcement in programs designed to control pollutant releases to the environment. Governments are increasingly recognizing the importance of better connecting permitting and enforcement and many efforts such as the US Environmental Protection Agency's "Next Gen Enforcement" and other regulatory reforms efforts seek to address the shortcomings. Several recommendations are presented to better design control requirements, integrate advanced technology, require self-monitoring and reporting, utilize third party verification, and provide public access to both draft permits and to compliance data so communities can be part of the regulatory design. Valuable, yet low cost efforts to bring together permitting and enforcement agencies can have real, tangible results in environmental improvements.

Article:

There is a global recognition that poorly drafted licensing and permitting requirements often lead to non-compliance, environmental problems and difficult enforcement in programs designed to control pollutant releases to the environment. These types of violations may directly impact ecosystems and the health and well-being of people impacted by those releases. Incidences such as the release of toxic wastes from the Formosa Plastics steel plant in Vietnam demonstrate the importance of compliance with limits as set out in the discharge permit. Inadequate permit language can make the demonstration of compliance difficult and inefficient for the regulated facility, complicates inspections and compliance determinations and can make assignment of liability for environmental harm and responsibility for remediation problematic.

Globally, countries are increasingly recognizing the importance of better connecting permitting and enforcement. As early as 2015, the Asian Environmental Compliance and Enforcement Network (AECEN) held a Regional Forum on the issue, and more recently, the International Network for Environmental Compliance and Enforcement (INECE) hosted a series of webinars to discuss the issue. Other networks such as the Latin American and Caribbean Regional Policy Dialogue and other regional networks are addressing the issue.

Chile provides an example of national efforts to address the issue through legislative reform. In 2010, Chile created a new Superintendent of the Environment who quickly recognized shortcoming in their EIA and licensing system as they began to inspect and enforce the old regulatory scheme. The new environmental compliance agency, with modern technology and broader inspection powers, had problems related to poorly drafted licenses: ambiguous conditions, confusing wording and lack of concrete performance indicators. One example comes from a large copper mine that had 53 different permits for different production units at the mine, often with different standards for similar units. These permits do not expire and cannot be amended or consolidated to incorporate new technology or changes

in scientific understanding of impacts. This makes it very difficult for the company to verify and demonstrate compliance and to incorporate new monitoring and control technologies. It also makes the governmental inspections complex and inefficient. This and other problems prompted Chile to create a Presidential Commission, integrating the public sector, the private sector, NGOs and consultants, tasked with amending the environmental assessment and licensing conditions to improve the system. The Commission made 25 concrete proposals for amending the Chilean environmental impact assessment system, including better provisions for enforcement and compliance. The Chilean Congress is currently discussing a Bill to amend the EIA system, including amendments for fostering compliance and enforcement.

The United States Environmental Protection Agency began to realize failures in the permitting system under the Clean Water Act through a careful analysis of the discharge monitoring reports submitted by facilities with a wastewater discharge permit. In 2008, EPA found that 46% of the facilities listed as being in significant non-compliance had actual effluent violations that needed to be addressed through enforcement. Another 41% were listed in significant violation because EPA had not received the monitoring information on their discharge, either because of the facility's failure to appropriately monitor and report, or because the information had been properly submitted, but the information was not incorporated into the federal data system.[1] Without the ability to differentiate actual monitoring and reporting violations from data quality problems, the Agency was unable to determine the effectiveness of the regulatory system. Problems with the reporting and record keeping system can make it impossible for a permit agency to determine risks and set consequential effluent limits, and for the enforcement agency to set priorities and target their efforts.

This led to EPA's Next Generation Compliance Strategy[2] where EPA began to work on designing rules and permits "with compliance built in," and to accelerate the testing and use of advanced monitoring technologies for emission compliance determination, reporting, and agency investigations. EPA also made significant changes to the discharge monitoring and reporting system to allow direct, on-line reporting into both state and national systems.[3] Other countries have adopted similar tools in their own systems creating good practices to improve regulatory and enforcement efficiency. Some general recommendations include:

- Requirements should be clear with easy compliance determination. When possible, conditions should be created in ways that non-compliance is physically impossible, e.g. gasoline nozzles that only fit in cars designed to use that type of fuel.
- Advanced monitoring technologies can be written into permit requirements in a flexible, yet clearly defined manner that may be more efficient while yielding sufficient accuracy and precision.

---

[1] Clean Water Act Action Plan, United States Environmental Protection Agency, Office of Enforcement and Compliance Assurance, 2008. https://www.epa.gov/sites/production/files/documents/actionplan101409.pdf, accessed October 21, 2018.

[2] Next Generation Compliance, Giles, Cynthia, The Environmental Forum, 2013, https://www.epa.gov/sites/production/files/2014-09/documents/giles-next-gen-article-forum-eli-sept-oct-2013.pdf, accessed October 21, 2018.

[3] Final NPDES Electronic Reporting Rule Fact Sheet, United States Environmental Protection Agency, Office of Enforcement and Compliance Assurance, September 2015, https://www.epa.gov/sites/production/files/2015-09/documents/finalnpdeselectronicreportingrulefactsheet.pdf, accessed October 23, 2018.

For example, infrared video cameras can be very effective at finding leaks avoiding the need for more precise, yet costly, measurements to stop the leaks.

- Permit systems usually require sources to monitor their own emission, but if the results are not reported through a modern data system, the authorities cannot use the information to identify violations or to determine risks to communities.
- Third party verification from outside auditors can be required in a permit as a way to shift the burden on compliance monitoring from the enforcement agency to the regulated entity while maintaining integrity in reported information.
- Public access to compliance data should be required of permittees to provide transparency to the community about potential harm stemming from non-compliance, and to allow citizens to oversee the activities of the enforcement authorities within their governments. Public pressure can be a significant motivator for changes in behavior at local, national, and international businesses and governments.

There are also simple, bureaucratic efforts that can lead to innovation and process improvements within the environmental governance structure. While most permitting and enforcement agencies are separated for functional reasons, they should maintain close ties to avoid divergent priorities, interpretation, and a transversal understanding of the impacts each function can have on the other. Cross-training among agency officials can help each side learn from the other and creates informal connections between staff that can greatly facilitate resolution of issues and questions. Another tool is to offer the enforcement authorities and the public stakeholders the opportunity to review and comment on draft permit language. Permits should also have a finite life-span offering an opportunity at each renewal to incorporate input from inspectors and the public, add new technology, incorporate changes in scientific conclusions on health or environmental risks, and to consider changes that have occurred in the environmental and/or social conditions.

Environmental obligations, whether housed in the law, regulations, a permit or a license, will not achieve their expected results if there is widespread failure to comply. Compliance should not be an undue burden and rules must be written in a clear, simply form with clearly defined expectations. Finally, when compliance gaps occur, the full range of enforcement responses will return the violators to compliance and serve as additional deterrence for others.