



Lean Government

EPA Region 7 and 4 States National Pollutant Discharge Elimination System (NPDES) Kaizen Event Case Study

Summary

In August 2008, participants from EPA headquarters, EPA Region 7, and the four States in EPA Region 7 (Iowa, Kansas, Missouri, and Nebraska) conducted a Lean business process improvement event (kaizen event) on the permitting and enforcement processes of the National Pollutant Discharge Elimination System (NPDES) program.

The objective of the week-long event was to improve the effectiveness and efficiency with which all parties implement the NPDES program, and to learn how best to work together and resolve issues quickly. The event resulted in redesigned processes that clarified how to address critical technical issues, plan and conduct inspections, and collaborate between EPA and the state agencies.

Results

The event yielded a process design that will result in:

- An 82% decrease in processing time to resolve technical issues that delay permits (from 5.5 months to 1 month).
- A 67% decrease in the number of steps for EPA to review a state wastewater program (from 39 steps to 13 steps).
- A 75–68% decrease in processing time for EPA to review a state wastewater program (from 4–19 months to 1–6 months).
- Increased collaboration between EPA and States to improve planning and quickly address problems.

Scope of the Lean Project

Project Scope: Region 7 EPA-State NPDES program implementation process

Goals of the Lean Event

- Program review and follow-up processes are unified and clearly defined.
- 100% of state wastewater programs exceed the minimum level of performance established by EPA in the annual planning process.
- Zero permits merit objection or significant comments from EPA.
- 100% of priority permits are completed, with excellence not perfection as a goal.
- 100% compliance for Significant Non Compliance is achieved.

Process Changes and Results

During the event, participants examined the “current state” of the process and designed new processes for three aspects of the implementation process: (1) annual strategic planning, (2) resolution of technical issues, and (3) EPA oversight. Key process changes are identified below.

- **Annual Planning.** During the planning process, performance criteria and measures for evaluating state wastewater enforcement programs are established. Participants decided to add steps to the new process after realizing that good planning and communication up front could help to create performance criteria and measures that better reflect state and EPA priorities and could save time in the long run.
- **Resolution of Technical Issues.** In the old process, technical issues delayed permits. In the new process, technical issues are identified before a permit comes in and the right people are brought in to deal with them before the permit application is submitted.
- **Oversight.** Oversight refers to EPA performance reviews of state wastewater programs. Previously the permit and enforcement reviews were conducted separately, which led to communication gaps surrounding the reviews. The new process will coordinate permit and enforcement reviews and eliminate non-value added process steps.

Implementation

Participants developed implementation plans for the three new processes. Key implementation actions included:

- Prepare earlier and have broader stakeholder participation in the yearly planning and follow-up meetings.
- Have active participation by EPA in stakeholder meetings when States request it.
- Reduce data reporting requirements for state programs.

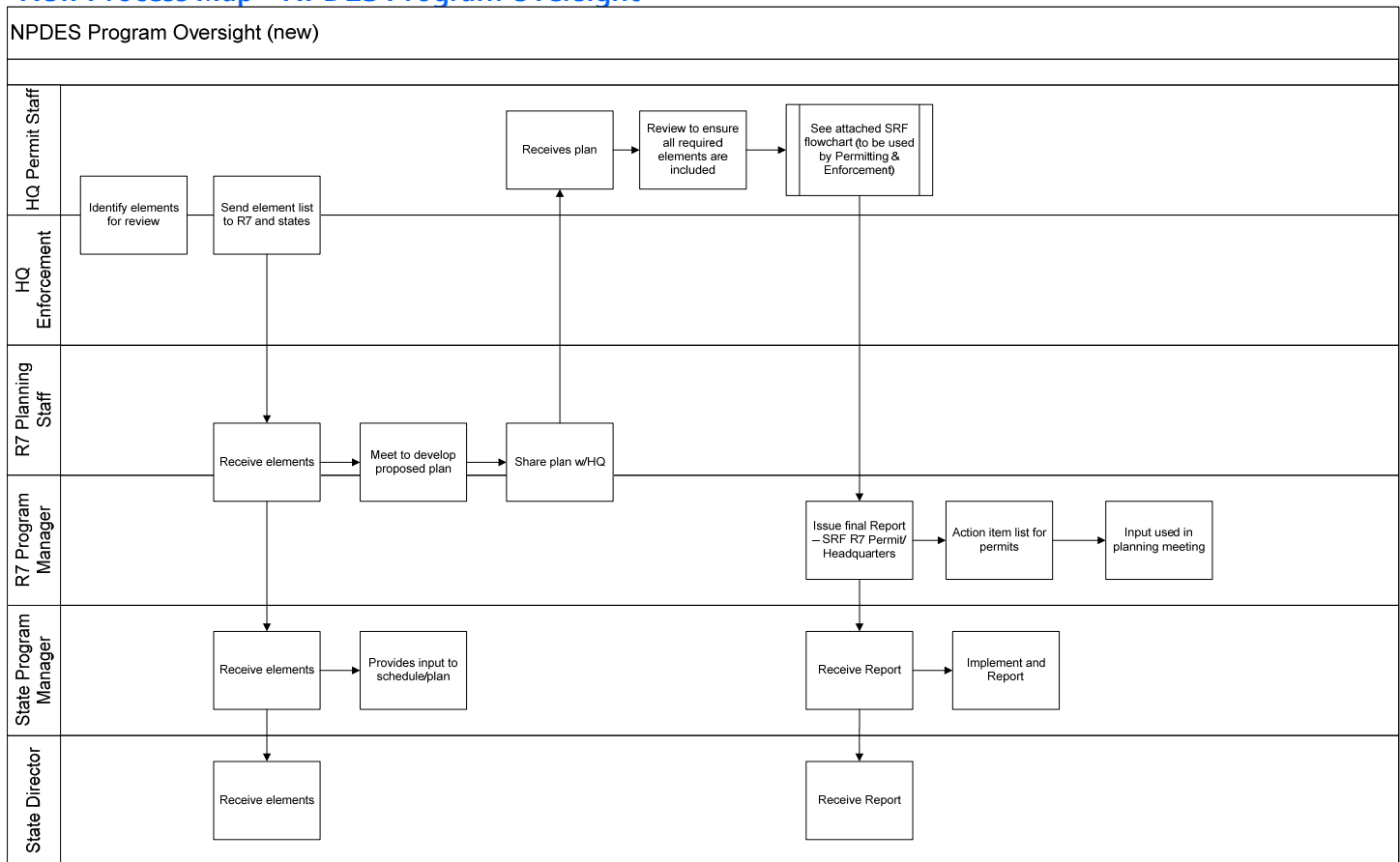
Current State Map



- Automate data reporting by facilities.
- Conduct a training needs assessment and develop a training implementation plan.
- Create a checklist for permit development and review.
- Hold workshops on important NPDES issues.

Since the event, participants have been working on these and other implementation actions. Iowa and Nebraska plan to conduct smaller spin-off events on the NPDES permit-rider process. Region 7 is sharing the results of the event and considering whether some of the outcomes are transferrable on a national scale for the NPDES program.

New Process Map – NPDES Program Oversight



For More Information:

Glenn Curtis, EPA Region 7, (913) 551-7726, curtis.glenn@epa.gov
 Jamie Burnett, EPA NCEI, (202) 566-2305, burnett.jamie@epa.gov
<http://www.epa.gov/lean/leangovernment.htm>