**The Service**
The Residuals Management Section of the Wastewater Engineering Bureau regulates the quality of wastewater and water treatment residuals (“sludge” and/or “biosolids”), permits the disposal or treatment of these, and enforces related regulations.

**The Problem**
The Residuals Management Section (RMS) wanted to make sure its permitting processes were as good as they could be before re-adopting its administrative rules. All State of NH Administrative Rules must be re-adopted every ten years. This gives a program the opportunity to revise its rules to reflect changes in conditions, and/or lessons learned. Lean methods allow for this re-examination to happen in a controlled and comprehensive manner, focusing on delivering services to the customer most efficiently.

**The Goal**
RMS wanted to work with stakeholders to ensure its various permitting processes were as good as they could be, and that these optimum processes were reflected in the rules. Considering that a major method of treatment/disposal of biosolids is land-spreading, the sometimes conflicting needs of many stakeholder groups have to be balanced.

**The Lean Process**
After attending DES’s internal Lean training, the RMS manager saw that Lean Tools offered a good way to check that its processes were as good as they could be and delivered the right value to the various stakeholders.

Some standard procedures existed, but they had not been reviewed in some time. A group of staff within the program, staff from other DES programs, and outside users of the program were gathered. Together with trained facilitators, they mapped (for the first time) the current state and a possible future state for these programs:

- Sludge Quality Certification
- Site Permits
- Facility Permits
- Sludge Hauler Permits

The work requirements and value gained for each step of each process was discussed. Testing requirements were assessed against the history of testing in NH, and places where redundant testing can be reduced safely were identified.

**The Results**
In general, the work processes were found to be fairly good, and only small changes were proposed. A proposal to reduce the scope and frequency of sludge testing will be incorporated into rules. Timelines and procedures for public hearings were changed so that time can be gained for the (common) case that no public hearing is requested. New information from the Soil Conservation Service was folded in to the RMS program.

The RMS program benefited by this time spent away from their office re-assessing their work. All parties benefited by the understanding gained of the “view from the other side.” An unexpected benefit was that new staff in the RMS program got a comprehensive overview of the work processes in a short time.

RMS has since sent their new rules into the rule-making process.

**Summary**
Going in to rule re-adoption, DES’s Residuals Management Section wanted to be sure that its processes were as good as they could be. Using Lean principles, a team produced the first process maps for RMS programs, and established where improvements could be made.

**Accomplishments**
- Redundant testing lessened
- Areas identified where procedures need to be improved or established
- Hearing procedures adjusted
- New staff trained

**Team**
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RMI: F. Morissette, S. Connelly
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“**The Lean Process was useful for rooting out inefficient internal processes that are only done because ‘that’s the way we do it.’”** Mike Rainey