



Health and
Human Services

Richard O. Brajer
Secretary

Dr. Randall Williams
*Deputy Secretary for Health Services
State Health Director*

March 1, 2016

The Honorable Marilyn Avila, Co-Chair
Joint Legislative Oversight Committee on
Health and Human Services
North Carolina General Assembly
2217 Legislative Building
Raleigh, NC 27601-2808

The Honorable Josh Dobson, Co-Chair
Joint Legislative Oversight Committee on
Health and Human Services
North Carolina General Assembly
301N Legislative Office Building
Raleigh, NC 27603-5925

The Honorable Louis Pate, Co-Chair
Joint Legislative Oversight Committee on
Health and Human Services
North Carolina General Assembly
1028 Legislative Building
Raleigh, NC 27601-2808

Dear Chairmen:

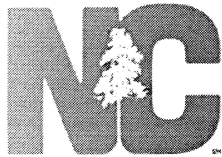
Per Session Law 2015-286, Section 4.14.(f), the Commission for Public Health is required to report to the Environmental Review Commission and the Joint Legislative Oversight Committee on Health and Human Services, its findings and recommendations from its study of minimum on-site wastewater system inspection frequency and evaluation of the feasibility and desirability of eliminating duplicative inspections of on-site wastewater systems.

Pursuant to the provisions of law, the Department of Health and Human Services, Division of Public Health, is pleased to provide the attached report on behalf of the Commission for Public Health.

If you have questions about the content of this report, please contact Nancy Deal, Branch Head, Division of Public Health, On-site Water Protection, at nancy.deal@dhhs.nc.gov, or 919-707-5874.



State of North Carolina | Department of Health and Human Services
101 Blair Drive, Adams Building | 2001 Mail Service Center | Raleigh, NC 27699-2001
919 855 4800 T | 919 715 4645



Health and
Human Services

Richard O. Brajer
Secretary

Dr. Randall Williams
*Deputy Secretary for Health Services
State Health Director*

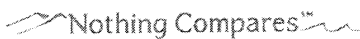
Sincerely,

Dr. Randall Williams
Deputy Secretary for Health Services
State Health Director

cc: Dr. Randall Williams
Kolt Ulm
Rod Davis
Susan Jacobs
Danny Staley

Denise Thomas
Andy Munn
Joyce Jones
Brian Perkins
reports@ncleg.net

Marjorie Donaldson
Theresa Matula
Pam Kilpatrick
Hannah Tedder



State of North Carolina | Department of Health and Human Services
101 Blair Drive, Adams Building | 2001 Mail Service Center | Raleigh, NC 27699-2001
919 855 4800 T | 919 715-4645



Health and
Human Services

Richard O. Brajer
Secretary

Dr. Randall Williams
*Deputy Secretary for Health Services
State Health Director*

March 1, 2016

The Honorable Jimmy Dixon, Co-Chair
Environmental Review Commission
North Carolina General Assembly
416B Legislative Office Building
Raleigh, NC 27603-5956

The Honorable Chuck McGrady, Co-Chair
Environmental Review Commission
North Carolina General Assembly
304 Legislative Office Building
Raleigh, NC 27603-5956

The Honorable Trudy Wade, Co-Chair
Environmental Review Commission
North Carolina General Assembly
521 Legislative Office Building
Raleigh, NC 27603-5956

Dear Chairmen:

Per Session Law 2015-286, Section 4.14.(f), the Commission for Public Health is required to report to the Environmental Review Commission and the Joint Legislative Oversight Committee on Health and Human Services, its findings and recommendations from its study of minimum on-site wastewater system inspection frequency and evaluation of the feasibility and desirability of eliminating duplicative inspections of on-site wastewater systems.

Pursuant to the provisions of law, the Department of Health and Human Services, Division of Public Health, is pleased to provide the attached report on behalf of the Commission for Public Health.

If you have questions about the content of this report, please contact Nancy Deal, Branch Head, Division of Public Health, On-site Water Protection, at nancy.deal@dhhs.nc.gov, or 919-707-5874.

Sincerely,

Dr. Randall Williams
Deputy Secretary for Health Services
State Health Director





Health and
Human Services

Richard O. Brajer
Secretary

Dr. Randall Williams
*Deputy Secretary for Health Services
State Health Director*

cc: Dr. Randall Williams
Kolt Ulm
Rod Davis
Susan Jacobs
Danny Staley

Denise Thomas
Andy Munn
Joyce Jones
Brian Perkins
reports@ncleg.net

Marjorie Donaldson
Theresa Matula
Pam Kilpatrick
Hannah Tedder



State of North Carolina | Department of Health and Human Services
101 Blair Drive, Adams Building | 2001 Mail Service Center | Raleigh, NC 27699-2001
919 855 4800 T | 919 715-4645

On-Site Wastewater System Inspection Frequency

Session Law 2015-286, Section 4.14.(f)



Report to

The Environmental Review Commission

and

**The Joint Legislative Oversight Committee on Health and
Human Services**

by

North Carolina Department of Health and Human Services

On Behalf of the Commission for Public Health

March 1, 2016

BACKGROUND

Session Law 2015-286, Section 4.14.(f) requires the Commission for Public Health in consultation with the Department of Health and Human Services (DHHS), Local Health Departments (LHDs), and stakeholders representing the on-site wastewater system industry, to study the minimum on-site wastewater system inspection frequency established pursuant to Table V(a) in 15A NCAC 18A .1961 to evaluate the feasibility and desirability of eliminating duplicative inspections of on-site wastewater systems. In the conduct of its study, the Commission is directed to consider the following:

- (i) the compliance history of wastewater systems, including whether operators' reports and laboratory reports are in compliance with Article 11 of Chapter 130A of the General Statutes and the rules adopted pursuant to that Article;
- (ii) alternative inspection frequencies, including the use of remote Web-based monitoring for alarm and compliance notification;
- (iii) whether the required verification visit conducted by local health departments shows a statistically significant justification for duplicative costs to the owner of the wastewater system;
- (iv) methods for notifications of changes to and expirations of operations contracts; and
- (v) methods for local health departments to provide certified operator management for sites that are not under contract with a water pollution control system operator certified pursuant to Part 1 of Article 3 of Chapter 90A of the General Statutes.

This report provided by DHHS on behalf of the Commission for Public Health satisfies the legislative reporting requirement.

STUDY PROCESS AND FINDINGS

The On-Site Water Protection Branch of the DHHS Division of Public Health contacted Local Health Departments and on-site wastewater industry stakeholders for feedback on the study questions through an email survey and during stakeholder meetings. Survey questions were drafted to address the items identified in S.L. 2015-286 Section 4.14.(f). Some survey questions solicited open-ended comments. The survey questions were distributed to the following:

- Statewide Environmental Health Supervisors from Local Health Departments (LHDs).
- Subsurface system operators (Operators). This sampling included subsurface system operators (Operators) that work with Type IV, V and VI subsurface systems (the systems that are addressed through the questions required by the legislation). These types of subsurface systems are defined as:
 - Type IV system:
 - Drainfield that uses a low pressure pipe system;
 - More than one pump or siphon.
 - Type V systems
 - Sand filter or other advanced pretreatment;
 - Design flow greater than 3,000 gallons/day;
 - Aerobic treatment unit;
 - Mechanical, biological, or chemical systems with a design flow less than 3,000 gallons/day.

- Type VI systems
 - Mechanical, biological, or chemical systems other than those listed above with a design flow greater than 3,000 gallons/day;
 - Systems utilizing wastewater reuse/recycle.

In order to receive maximum input from Local Health Departments and on-site wastewater industry stakeholders, five stakeholder meetings were held in February 2016. Questions were posed to the audience and input was received from the group as a whole.

Summary of Survey Responses

Local Health Department Responses:

- Eighty-five Local Health Departments were surveyed and 42 responded. Of the 42 that responded, 57% have active inspection programs for Type IV, V, and VI systems.
 - Of the Local Health Departments with active inspection programs, 95% report that “Sometimes” or “Always” problems are found with the Type IV, V, and VI systems when performing their compliance inspections.
 - Only two Local Health Departments reported “Rarely” or “Never” finding an issue during a Type IV, V, or VI system inspection.
- Eighty-six percent of the responding Local Health Departments receive operator reports and 60% receive effluent sampling results.
 - Of the Local Health Departments receiving operator reports, 97% indicate that the reporting frequency complies with the operation permit “Sometimes” or “Almost Always”, and that the operator reports indicate compliance with the operation permit 97% of the time (“Sometimes” or “Almost Always”).
- Laboratory reports (effluent sampling results) are received by the Local Health Department in compliance with 15A NCAC 18A .1970 rule requirements 88% of the time (“Sometimes” or “Almost Always”). Thirteen percent report receiving results “Rarely” or “Never”.
- Twenty-seven Local Health Departments reported the following regarding the compliance of laboratory reports with the applicable treatment standards in Rule .1970:
 - Never: 11%
 - Sometimes: 41%
 - Almost Always: 44%
 - Not applicable: 4%
- Of thirty-three Local Health Departments responding, 67% felt that access to a telemetry/web-based¹ operator reporting system could help reduce their inspection frequencies.
- Thirty-nine Local Health Departments reported the following regarding notification when an operator’s contract is modified, cancelled or expires:
 - Never or Rarely: 23%
 - Sometimes: 49%
 - Always: 28%

- Only one responding Local Health Department offers contractual services for system operation in lieu of a private Operator in Responsible Charge (ORC). Of 39 respondents, 87% responded they would not consider offering this service, citing staffing and liability concerns.

Operator Responses:

- Thirty-three Operators who perform operation and maintenance of on-site wastewater systems were contacted. Eleven responded.
- The majority of the Operators felt that the Local Health Department should perform compliance inspections, indicating that these are not duplicative of ORC activities. Most felt that the current inspection frequency is adequate.
- The majority of Operators felt that telemetry/web based operator reporting would not help reduce inspection frequency and that the systems must be visited on a regular basis. They indicated that telemetry could help with alarms and retrieving data, but the addition of telemetry would increase the cost to the homeowner.
- Web-based reporting would be an asset only for those ORCs skilled in use of computers.

Summary of all responses:

There is significant variability in implementing requirements of 15A NCAC 18A .1961, both in the degree of oversight and the nature of activities performed by LHDs. Some LHDs have no program since they lack the staff and the funding for implementation. Others perform cursory inspections with concurrent review of Operator reports. Those with robust compliance inspection programs report that they see improved Operator performance and system compliance coupled with increased owner compliance in maintaining contracts.

Although Operators indicate that the frequency of LHD inspections seems appropriate, the LHDs themselves indicate that web-based reporting and telemetry (with attention to the distinction between the two) might reduce the necessary inspection frequency. Concurrently, Operators reported that adding telemetry (alarm notification) to systems would add to cost and not reduce their need to visit.

RECOMMENDATIONS

The concept of LHDs providing these services *in lieu of* the private sector must be considered within the scope of addressing liability concerns and securing necessary funding. Certainly, the lack of LHD programs in implementing the provisions of 15A NCAC 18A .1961 appears to be directly related to local resources.

Further consideration of web-based reporting capability is warranted since the Department is currently pursuing this in conjunction with federal reporting requirements. Expanding that program to encompass Operator and Laboratory reporting as is done effectively in other states deserves additional attention, including the associated fiscal analysis. Despite the perception of Operators lacking the computer capability, the value of electronic submittal of reports is significant since it offers the ability to populate searchable databases concurrently. However, the

current availability of State-level resources with respect to such data collection and management would need to be considered.

The cost of requiring telemetry on individual systems (other than those for which this already applies) does not seem to be warranted since it would increase costs without reducing necessary inspection frequency.

The question of whether LHD inspection programs duplicate private sector services remains in light of the fact that the more robust programs appear to induce increased compliance. Further investigation into this fundamental point is important.

¹Telemetry essentially refers to an automated notification system for alarms or other problems. Web-based reporting is an electronic conduit for submitting reports and sampling results.