

# Village of Elk Rapids Time of Transfer Ordinance

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2019 Annual Report



## INTRODUCTION

On February 20, 2018, the Village of Elk Rapids passed the Septic Inspection and Property Transfer Ordinance (commonly referred to as time-of-transfer (TOT)), with an implementation date of August 20, 2018. The purpose of the Ordinance is to protect the public health and to prevent or minimize the degradation of groundwater and surface water quality by malfunctioning sewage treatment and disposal systems (STDS) and to assure safe water supplies by the evaluation of the STDS and private water supply systems at the time of transfer of the property (Section 11-92 (B)).

This is accomplished through evaluations of residential and commercial on-site water supply systems and STDS by trained Environmental Health staff of the Health Department of Northwest Michigan. The resulting evaluation report includes a detailed assessment of the condition and functionality of water and wastewater facilities serving the property, a determination of compliance with relevant regulations, any recommendations to improve existing systems and, where threats to environmental or human health exist, require corrections to mitigate environmental and public health impacts.

To assure consistency of inspections and compliance with the federal, state, and local regulations, the Village of Elk Rapids entered into an intergovernmental agreement (IGA) with the Health Department of Northwest Michigan (HDNW). The IGA establishes a relationship between the two governmental entities and clearly defines the roles of each in executing the Ordinance. Outside of inspection activities, HDNW has an ongoing obligation to provide the village with a report of its finding on an annual basis. Annual reporting is intended to keep the village informed on the outcomes of the evaluation process, and to discuss where improvements can be made to the program.

Section I, Subsection A (2.) of the intergovernmental agreement states that HDNW is responsible for:

*“providing the Village with an annual report, at no cost to the Village, regarding the number of evaluations conducted in the Village the preceding year and the number of evaluations that failed to meet the standards of Section 5 and 7 of the Ordinance.”*

Section five of the Ordinance describes both required STDS evaluations, and exemptions to the requirement. Section seven covers the evaluation application and fee.

This document serves as the 2019 annual report for the Village of Elk Rapids TOT Ordinance, satisfying Section I of the IGA. This document also provides information beyond that required under the Ordinance in an effort to offer a more comprehensive understanding of the program, and its outcomes and recommendations for enhancement of data collection and program improvement.

## METHODS

In 2019, the second year since the enactment of the Ordinance, two (2) properties were evaluated. A total of four (4) properties have been evaluated since program inception in February 2018. Prior to sale or transfer, all village properties utilizing on-site wastewater and water supply systems must have an evaluation of system(s) performed unless one of the following conditions is met:

- A new STDS has been installed within the past 10 years
- The STDS has been evaluated within the past five years and was found to be functioning properly at that time
- The seller meets the requirement for an exemption under Section 5

When conducting evaluations, Environmental Health staff inspect the water supply system(s) and wastewater system(s) serving the property. Water supply systems are evaluated by determining compliance with Michigan’s Water Well Construction and Pump Installation Code (*Part 127 of Act 368, PA 1978*), the District Sanitary Code serving Antrim, Charlevoix, Emmet, and Otsego counties, and Michigan’s Safe Drinking Water Act (*Act 399 of Act 368, PA 1978*).

If an on-site water supply is present, water samples are collected from a tap used for drinking water purposes and analytical results are compared against the Environmental Protection Agency’s drinking water quality standards. Items of non-compliance are identified and required to be upgraded if the deficiency poses an imminent public health threat to those using the water supply system for potable use.

The sewage treatment and disposal system evaluation consists of determining the location, size, and condition of the existing septic tank(s) and pump chamber(s), location of the existing drainfield and documenting the design, size, and functional status, conducting a soil analysis, determining the seasonal high groundwater elevation, isolation to surface water(s), and future replacement options. These data, along with other requirements under the District Sanitary Code, are used to determine the property’s existing and future compliance with the Code with respect to on-site (and possible off-site) systems.

Together, the information gathered for the water supply and wastewater systems is used to develop a comprehensive report and site plan, document existing facilities, and indicate compliance status of these systems. Additionally, all reports are concluded with marking the following categories (if applicable):

**Required Action:** Where items of non-compliance pose a direct threat to the environment and/or public health

**Recommended Action:** Where the enhancement of existing systems could bring systems into compliance, extend the life expectancy of systems, enhance the ability to maintain systems, increase the safety of systems, or reduce impacts to the environment

**Restricted Future Use:** Where the site is non-conforming with respect to the District Sanitary Code, and any future improvement of the property would require the use of an off-site drainfield location

## DISCUSSION

When reviewing results of the water and wastewater inspections, it is important to note that the District Sanitary Code has undergone several revisions since the initial code in 1964. Sanitary code changes impact regulatory approval criteria for properties, design, and construction requirements, and can change the compliance status of water and wastewater systems. This is important to understand as many systems were installed lawfully under previous codes and regulations; non-compliance with current regulations does not imply that these systems are creating public health threats or environmental impairments. The strength of the

evaluation process is to determine the functional status of existing systems and the potential future use of the property. Where existing systems are found to meet the definition of failure, a replacement septic permit will be required. If a replacement septic permit is not applied for, HDNW will enter into enforcement actions until the system has been replaced or an alternative solution has been identified.

The changes in the District Sanitary Code impact both on-site water supply and on-site sewage treatment and disposal systems. One of the code changes over time is an increase in absorption area required per bedroom. With this increase in absorption area, most of the systems installed prior to 2007 do not meet current Code requirements with respect to absorption area size. A water supply or wastewater system is only required to come into full compliance with the Code at the time changes of use are proposed to the home, most notably with living space additions or complete replacement and reconstruction activities.

## RESULTS

### Water Supply Systems

In 2019, one water supply system was evaluated; the second property was supplied by village water. Evaluations of on-site water supply consist of a file review to determine whether the systems were installed under a permit issued by the Health Department, if there is a well log detailing the installation of the well, if the well is properly isolated from potential sources of contamination, and if the construction of the well and pumping equipment meet state requirements. Evaluations also include the collection of a bacteriology and partial chemistry water quality sample from a drinking water tap. Table 1 shows the findings of the evaluation.

**Table 1: Results of 2019 Water Supply Evaluation**

| Finding        | Number of Cases | Percentage of Total |
|----------------|-----------------|---------------------|
| No well log    | 1               | 100                 |
| No well permit | 1               | 100                 |

When reviewing water sample results, it was determined that nitrates were detected at 2.18 mg/L (or parts per million). The Environmental Protection Agency has established a maximum contaminant level (MCL) of 10 mg/L for nitrates in drinking water. This MCL was not exceeded in 2019.

The other property evaluated was served by the Village municipal water supply and as such, water samples were not collected as part of the evaluation. A copy of the most recent Village’s water quality report can be found here: <http://www.elkrapids.org/wp-content/uploads/2019/06/Water-Quality-Report-2018.pdf>

### Wastewater Systems

In 2019, two (2) wastewater systems were evaluated. The evaluation includes a record search for any previous septic permits issued for the property, and an on-site assessment of the various components of the system. The on-site assessment includes the following: septic tank(s), pump chamber(s) and components, dry wells, block trenches, conventional trenches, drainbeds, elevated systems (mounds), off-site systems, or advanced treatment systems. Inspections include determination of horizontal and vertical isolation compliance with the

District Sanitary Code, evaluation of soil conditions, and the functional status of the system at the time of the inspection. Table 2 shows the findings of the evaluations.

**Table 2: Results of 2019 Wastewater Evaluation**

| Finding                                   | Number of Cases | Percentage of Total |
|---|-----------------|---------------------|
| Drainfield undersized due to Code changes | 1               | 50                  |

Of the two wastewater systems evaluated in 2019, both were found to have records of permitting and installation. One system was installed in 1994 and the other in 2006, for an average age of 20 years.

**Required, Recommended, and Restricted Actions**

As mentioned in the methods section, the report can include marking any required, recommended, or restricted actions, if applicable. Table 3 shows the findings of the evaluations.

**Table 3: Number of Required, Recommended, and Restricted Actions of 2018**

| Finding     | Number of Cases | Percentage of Total |
|-------------|-----------------|---------------------|
| Required    | 0               | 0                   |
| Recommended | 0               | 0                   |
| Restricted  | 0               | 0                   |

Specific recommendations are made for each property (if applicable), along with a general comment for all homes that HDNW recommends pumping the septic tank every three to five years. The recommended pump-out for STDS maintenance is not commonly known among buyers and sellers, and regular pump-outs can help maintain longevity of the system.

Of the two evaluations conducted, neither sites had restricted future use. The restricted future use of the site provides information for the buyer and seller and is only relevant when changes of use to the existing home are proposed (changes of use include remodeling greater than 50%, proposing additional bedrooms, and tear down/rebuild). Typically, this category is used when the existing home and STDS are operationally functional and there is no requirement to upgrade or replace the system at the time of the evaluation.

Additionally, HDNW frequently receives questions regarding the turn-around time of the evaluation. A three-week (15 working days) time frame is given to process the application, schedule and perform fieldwork, receive water sample results, and write the report. Note that due to weather conditions, staff vacation, water sample results, and scheduling the time frame cannot be guaranteed. In 2019, the average turnaround time of this service was approximately 15 working days. As this service can take an average of three weeks, closing dates should be scheduled accordingly.

In 2019, a Miss Dig policy was enacted by HDNW. The policy was created to comply with the requirements of Public Act 53 of 1974 by the Michigan State Legislature for the Protection of Underground Facilities and protect environmental health field staff from physical injury during routine site work. Following Act 53 also protects the property of our clients, utility companies and prevents unintended utility emergencies, necessitating first responder involvement. At the time an application for an evaluation is received, a Miss Dig ticket is entered by HDNW staff. The Miss Dig service takes four (4) working days to complete. The turnaround time mentioned in the preceding paragraph includes the four days allowed for Miss Dig to flag underground utilities.

## CONCLUSION

In the second year of the Ordinance, two properties were evaluated. While both properties evaluated in 2019 were compliant with the District Sanitary Code, the two properties evaluated in 2018 were non-compliant with respect to the code. By completing evaluations of on-site water and wastewater systems, not only can the functional status of the system(s) be determined, but also potential future use of the property. Both properties evaluated in 2019 had favorable future use outcomes.

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