

# Village of Elk Rapids Time of Transfer Ordinance

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2018 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 2018 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 2018, the first year since the enactment of the Ordinance, two (2) properties were evaluated. 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

Both properties evaluated in 2018 were 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/2018/10/2017-Water-Quality-Report.pdf>

### Wastewater Systems

In 2018, 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 1: Results of 2018 Wastewater Evaluation**

Finding	Number of Cases	Percentage of Total
Soils non-compliant with Code	2	100
Drainfield <4' to groundwater	1	50
Septic permit not available	1	50

Waterfront properties comprised one evaluations of the total two, or 50 percent. These properties have a greater chance of potentially contaminating surface water and generally have a higher seasonal groundwater level than non-waterfront properties. Overall, one property had a drainfield that was improperly isolated to groundwater, with four feet being the minimum separation distance. In many cases throughout the county, the groundwater elevation level noted on the original permit differs from what was measured on-site. Overall, HDNW has found that groundwater and surface water levels have been increasing in the past several years compared to the last decade.

Of the two wastewater systems evaluated in 2018, one (50%) was found to have no records of permitting or installation. Of the system where records exist, the age of system evaluated was 19 years. Assuming systems without records represent those that were installed prior to the first sanitary code in 1964, the continued operation of these systems would suggest that these systems are greater than 50 years old. Other potential explanations for the lack of information may be the result of poor record keeping or systems installed without permitting. In these cases, it is impossible to accurately determine the age of the system.

**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 2: Number of Required, Recommended, and Restricted Actions of 2018**

Finding	Number of Cases	Percentage of Total
Required	0	0
Recommended	1	50
Restricted	2	100

Overall, one (50%) of the homes evaluated had associated recommendations to extend the life expectancy of the water supply or wastewater systems. The recommendation included installing a high-water alarm and riser on the pump chamber. Specific recommendations were made for each home evaluated (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, both (100%) sites had restricted future use. In these cases, there were site factors that did not allow for additional bedrooms to the existing home or replacement of the home without a suitable off-site drainfield location. The site factors included soils non-compliant with the District Sanitary Code (historical fill) and high seasonal high groundwater. 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 2018, the average turnaround time of this service was 19 days.

## CONCLUSION

In the first year of the Ordinance, two properties were evaluated. Both properties were located on Mitchell Drive, with one being waterfront property. During the evaluation process, both sites were found to be non-compliant with the District Sanitary Code with respect to isolation to groundwater and the presence of fill material. Due to non-compliance of the properties, future uses of the home or property is limited.

Special Note: Based on information gathered during the TOT evaluations, coupled with knowledge and history of the area, Mitchell Drive residents would greatly benefit if municipal sewer was extended to the area. The Mitchell Drive neighborhood, consisting of over 20 “legacy” homes, was developed on an area that was filled with Elk Lake dredge fill material and is not suitable with respect to the minimum approval criteria of the District Sanitary Code. The area also presents very high groundwater and thus represents an enhanced risk of untreated or partially treated sewage effluent affecting ground and surface waters. The homes in this area will be restricted from further development, as described above, and there are no solutions under the Code for onsite system solutions to the existing site limitations. HDNW strongly recommends and advocates for the extension of municipal sewer as a long-term wastewater management solution for this area.

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