



Capacity Compliance Inspection Form

Property address: _____ Date of evaluation: _____

System Capacity Status – Existing SSTS

Status as determined by this form: Pretreatment Capacity (Compliance Component #6) Compliant Noncompliant
 Dispersal System Capacity (Compliance Component #7) Compliant Noncompliant
 If applicable, MSTs Conformance (Compliance Component #8) Compliant Noncompliant

This form expires on (three years): _____; or, if compliance is conditional, then it expires sooner on failure to meet applicable approval criteria listed in items A through I below. **Noncompliant components must be upgraded within one year.**

Pretreatment Capacity – Compliance component #6 (Any asterisked answer indicates noncompliance)

Sewage Tank(s): For dwellings, does minimum tank capacity meet Minnesota Rules, 7080.1930?
 Or, for other establishments, does minimum tank capacity meet Minnesota Rules, 7081.0240? Yes No

➤ If “no”, then complete items A through E below.

Other: _____. Does capacity of pretreatment meet the minimum for the design flow and waste strengths? Not Applicable Yes No*

Conditional compliance approval criteria – for sewage tanks:

- A. Is there an outstanding or pending order to replace or upgrade a tank? Yes* No
- B. Does any tank fail to protect groundwater or constitute a structural safety hazard (from compliance component #2)? Yes* No
- C. Is total aggregate tank capacity at least two-thirds of the required minimum? Yes No*
- D. Are accumulated solids removed prior to reaching 25 percent of the volume in any individual tank? Yes No*
- E. Is there an approved management plan providing for upgrade of the tanks in the event that tank maintenance fails to keep the accumulated solids from reaching 25 percent of the volume in any individual tank? Yes No*

Dispersal System Capacity – Compliance component #7 (Any asterisked answer indicates noncompliance)

Does the minimum size of the absorption area meet Inver Grove Heights City Code, §8-5-6.02(A)? Yes No

➤ If “no”, then complete items F through I below.

Conditional compliance approval criteria – for dispersal system:

- F. Is there an outstanding or pending order to replace or upgrade the dispersal system? Yes* No
- G. Does the dispersal system fail to protect groundwater (from compliance component #4)? Yes* No
- H. Is flow measurement employed? If so, is daily flow averaged over 30 days not greater than 70 percent of daily design flow for size of existing soil absorption area when calculated using hydraulic loading rate of current rules? Yes No*
- I. Is there an approved management plan providing for the upgrade of the dispersal system in the event that measured daily flow averaged over periods of 30 days exceeds 70 percent of the daily design flow based on the hydraulic loading rate and size of the existing soil absorption area? Yes No*

Midsized System Conformance – Compliance component #8 (Asterisked answer indicates noncompliance)

Is system conforming under Minnesota Rules, 7081.0080, subpart 1? Not applicable (not a MSTs) Yes No*

Comments:

Certification

I hereby certify that I personally made the observations, interpretations, and conclusions reported on this form and that they are correct.

Name: _____ Certification number: _____

Licensed business name: _____ License number: _____

Signature: _____ Date: _____

Instructions

This form must be completed for all compliance inspections of existing Subsurface Sewage Treatment Systems within the City of Inver Grove Heights [IGH City Code §8-5-9.02(C)(2)]. Observations, interpretations, and conclusions must be completed by an MPCA certified inspector or designer.

- Attach this form to the MPCA's "Compliance Inspection Form: Existing Subsurface Sewage Treatment Systems".
- Check the box "Forms per local ordinance" under the heading "Required Attachments" on page 1 the MPCA Compliance Inspection Form.
- If applicable, write " Insufficient Capacity – Noncompliant (see attached form)" next to the heading "Reason(s) for noncompliance" on page 1 of the MPCA Compliance Inspection Form.
- Submit completed form to the City of Inver Grove Heights and system owner within 15 days.

Capacity Compliance Inspection Form (Compliance Components #6, #7, and #8)

Purpose and Intent. This form denotes compliance of an existing system's pretreatment and dispersal components with current capacity standards as for new systems, or compliance conditional on meeting city code §8-5-6.03(C) criteria for reduced capacity; or whether the capacity of the component(s) are noncompliant.

Specific Instructions (for non self-evident queries)

System Status – The status of the pretreatment and dispersal components are denoted separately. The "Compliant" or "Noncompliant" section is based only on the criteria evaluated on this form, not based on criteria on other forms; except that Compliance Components #2 and #4 must be respectively considered under Items B and G if an approved reduction is used to conditionally meet capacity compliance. Midsized Sewage Treatment Systems (MSTS) with flows between 5,000 and 10,000 gpd must also meet the applicable requirements described in Minn. Rules, 7081.0080, subpart 1, in order to be considered compliant.

Pretreatment component – All pretreatment components must be evaluated. For most SSTS, compliance is determined by verifying that the total liquid capacity of the existing septic tank(s) meets or exceeds the minimum capacity required by state rule standards for new systems. In order to calculate the required capacity, the design flow must first be determined in accordance with state standards for new systems. For dwellings this involves an inspection to ascertain the actual number of bedrooms and water-use appliances.

Example 1. The inspection walk-through finds a four bedroom Class I dwelling with a garbage disposal. A visual inspection finds an effluent screen installed. The design flow for this SSTS is 600 gpd per 7080.1860. For this design flow, the manufacturer's test data shows that the screen is capable of lasting three years between cleanings and that it meets the additional criteria in city code §8-5-6.02(C). Calculated (1500 gal x 150%) per 7080.1930, the total tank liquid capacity must be a minimum of 2250 gallons. Examined as-built record drawings show a 1000 gallon tank followed by a 1500 gallon tank. The installed 2500 gallon aggregate capacity exceeds the 2250 gallon minimum. The first tank is not required to be larger or equal to the second tank for the purposes of this compliance inspection. Therefore, the capacities of the effluent screen and tanks are compliant.

Example 2. The inspection walk-through finds a 2800 square foot office building with a gravity sewer. The required total tank liquid capacity is 1500 gallons per calculations (2800 sf x .18 gal/sf x 300%) utilizing 7081.0130 for flow and 7081.0240 for tank size. Tank maintenance records indicate an existing tank capacity of 1000 gallons. Thus, the tank is undersized; but it can still be deemed compliant if it meets the criteria for reduced capacity under items A through E.

Dispersal component – Compliance is determined by verifying that the size of the existing system's soil adsorption area meets or exceeds the minimum infiltration area required by city code §8-5-6.02(A). The current state standards governing new systems must be used for determining the design flow and hydraulic loading rate when calculating the required infiltration area. Both the soil descriptions and percolation tests must be used to size the infiltration area, using the larger sizing factor of the two (from Tables IX and IXa) for the required area.

Example 3. No design or as-built record drawings exist for a SSTS serving a commercial establishment. The design flow was determined by measurement conducted per 7081.0130 subpart 1B and was found to be 2400 gpd. A soils evaluation was performed and the hydraulic loading rate was determined to be 0.6 gpd/sf. Field investigation found 3500 sf of trench bottom area with 12 inches of rock media below the distribution piping. The existing soils adsorption bottom area exceeds the calculated (2400 gal ÷ 0.6 gal/sf x 80% = 3200 sf) required area. Therefore, the dispersal system capacity is compliant.

Example 4. The inspection walk-through finds a five bedroom Class I dwelling. Examined as-built record drawings and the original design show a soil treatment system sized for a three bedroom Class II dwelling. Thus, the dispersal system is undersized; but it can still be deemed compliant if it meets the criteria for reduced capacity under items F through I.

Attach supporting documentation and/or use the worksheet below to record system capacity – do not include any §8-5-6.03(C) reductions.

Pretreatment (septic tanks)

Installed liquid capacity: _____ gallons. Verification method: _____

Required liquid capacity: _____ gallons. Calculations: _____

Dispersal (soil treatment system)

Required design flow: _____ gpd. Calculations: _____

Soil loading rate (most restrictive of current Table IX or IXa): _____ gpd/sf. Verification Method: _____

Installed sidewall adsorption area (below pipe): _____ inches. Verification method: _____

Installed adsorption bottom area: _____ sf. Verification method: _____

Required adsorption bottom area: _____ sf. Calculations: _____

required design flow in gpd ÷ soil loading rate in gpd/sf x reduction credit for sidewall