

**FIELD DRAIN TILE PERMIT CHECKLIST**  
**(Attach to permit application)**

Landowner name: \_\_\_\_\_

Designer / Installer name: \_\_\_\_\_

Contact phone number/address: \_\_\_\_\_

The channel or stream the tile system will discharge to: \_\_\_\_\_

(Twp-County-State road ditch / coulee / river / legal ditch / other-explain)

Size of immediate upstream culvert(s) from tile outlet (if any): \_\_\_\_\_

Size of immediate downstream culvert(s) from tile outlet (if any): \_\_\_\_\_

Is the land to be tiled already irrigated or is irrigation planned:  Yes or  No

Does the proposed tile outlet course drain to a public, legal ditch system:  Yes or  No

Total number of acres to be tiled: \_\_\_\_\_

Tile system drainage coefficient: \_\_\_\_\_

Tile spacings in field: \_\_\_\_\_

Will the tile system have surface water inlets:  Yes or  No

Maximum rate of discharge (gallons per minute): \_\_\_\_\_

Is a discharge pipe or tile line to be installed thru a road or spoil bank:  Yes, Size: \_\_\_\_\_ or  N

Type of Outlet:  Gravity or Natural Outlet  Lift Station or Pump  Other \_\_\_\_\_

For tile pumps:

List total number of pumps and pump sizes in horsepower: \_\_\_\_\_

Is the pump a Variable Frequency Drive (VFD):  Yes or  No

**All drain tile permit applications must include a detailed map showing the proposed drain tile course & outlet course. An operating plan must be included with this form if a pump, control structure, or shutoff gate are to be utilized. The applicant must inform and attempt to obtain affirming signatures from the neighboring downstream landowners. (A signature from an affected landowner is preferred, but not necessary for the Managers to review the permit application.)**

- Unless otherwise permitted, a **3" separation is required** between the pump outlet pipe and the underground horizontal outlet pipe, to prevent forced pumping of water into the ditch.
- The inlet for the underground horizontal outlet **pipe cannot be higher than 6" above natural ground**. This elevation must be measured in the field, away from a road or ditch spoil bank.
- Tile outlet must be protected from erosion (rip rapped or other mechanical means).
- Tile outlet must be visibly marked to facilitate Right of Way mowing and safety.
- Tile outlet installed thru a spoil bank or road must be reviewed and approved by the District.
- Outlet pumps must be turned off during downstream flood events or during freezing conditions.
- All tile structures and equipment must be located outside of public road and/or ditch Right of Way.
- **Permits from other agencies may be required.**

**Signature of Permit Applicant:** \_\_\_\_\_

# Drain Tile Pump Operating Plan Template

Name: \_\_\_\_\_  Landowner  Renter

Address: \_\_\_\_\_

Phone Number:

Home: \_\_\_\_\_ Cell: \_\_\_\_\_

Location of Pump/outlet: \_\_\_\_\_

Type of pump / outlet setup:  On/Off Control  Remote Monitoring  Gap Design

Other \_\_\_\_\_

Tiled water will outlet into:

Twp Ditch  County Ditch  State Highway Ditch  Legal Ditch

Coulee  River  Other

Name of ditch/coulee/river: \_\_\_\_\_

In cases of emergency when a tile pump's flow capacity needs to be reduced or turned off and the owner of the pump is unable to be reached, the following will be contacted in order to adjust the pump's settings.

**1<sup>st</sup> contact: Landowner/Renter:**

Name: \_\_\_\_\_

Phone Number:

Home: \_\_\_\_\_ Cell: \_\_\_\_\_

**2<sup>nd</sup> Contact:**

Name: \_\_\_\_\_

Phone Number:

Home: \_\_\_\_\_ Cell: \_\_\_\_\_

**3<sup>rd</sup> Contact:**

Name: \_\_\_\_\_

Phone Number:

Home: \_\_\_\_\_ Cell: \_\_\_\_\_

In the event none of the above contacts can be reached, may the tile contractor be contacted to shut off the pump or reduce the pump's rate of discharge?  Yes  No

Contact:

Tile Contractor: \_\_\_\_\_

Phone Number:

Office: \_\_\_\_\_ Cell: \_\_\_\_\_

Installer/Designer Name: \_\_\_\_\_

Address: \_\_\_\_\_

**MSTRWD Amended Rules, adopted September 7, 2021**

**Procedures/Guidance**

- A. As used in this specific Section, reducing the speed of a variable speed pump (VFD) to its lowest setting or to the “idle” setting shall be deemed equivalent to “no pumping.”
- B. If none of the persons listed in the plan can be reached, Watershed staff or a Watershed designated third party may be contacted to shut off the pump or to reduce the pump’s rate of discharge. Landowner will be charged costs.
- C. Landowner shall be responsible for monitoring weather conditions.
- D. No pumping is allowed during freezing conditions or when the downstream culverts could be plugged with snow or ice. Freezing conditions are defined as when the drainageways, culverts, bridges, etc. have ice building up. Subsurface tile drainage that close in the winter shall remain closed until spring floodwater conditions recede below Flood Stage at the closest downstream Prediction Site.
- E. The landowner shall be responsible to monitor National Weather Service Flood Probability for the Red River for the closest downstream Prediction Sites to their property.
- F. **No tile pumping during flooding conditions.** Flooding conditions shall be defined as a condition in which the immediate downstream tile outlet is at its full capacity or has exceeded its full capacity. In addition, flooding conditions include:
  - I. When the downstream system or the outlet of a system is experiencing flooding.
  - II. When the National Weather Service Flood Probability Prediction reaches **Major Flood Stage** at the closest downstream Prediction Site. **Tile pumps must be shutoff when the nearest gaging site is at or above major flood stage.**
  - III. When the National Weather Service Flood Probability Prediction reaches **Moderate Flood Stage** at the closest downstream-Prediction Site. **Tile pumps should be shutoff when water at the nearest gaging site is at or above moderate flood stage. Idle or reduced pumping is allowed.**
  - IV. In Table 1, the prediction sites that are of importance to the MSTRWD are listed along with their **Moderate Flood Stage** and **Major Flood Stage** measurements. Landowners should be aware of the closest downstream prediction site and operate pumps accordingly to decrease impacts on the Red River.

<b>Prediction Site</b>	<b>“Moderate” Flood Stage (ft)</b>	<b>“Major Flood Stage” (ft)</b>
<b>@ East Grand Forks</b>	<b>40.0</b>	<b>46.0</b>
<b>@ Oslo</b>	<b>30.0</b>	<b>36.0</b>
<b>@ Drayton</b>	<b>38.0</b>	<b>42.0</b>

**In addition to the above thresholds, the following local flooding conditions will govern (i.e. when the nearest downstream culvert or field drain is at capacity):**

---

---

**I have read and understand the procedure above and my responsibilities.**

Signature: \_\_\_\_\_

Date: \_\_\_\_\_