

**Porter Co. Department of Development & Storm Water Management
Engineering Services Group, Storm Water Division
Unmanned Aircraft System (UAS)/Drone Use Policy**

Introduction

In November 2017, the Department purchased a small Unmanned Aircraft System (sUAS), more commonly known as a drone, to expand the assessment, inspection, and data collection capabilities of Porter County's Storm Water Management Program.

Under Federal Aviation Administration (FAA) regulations, government entities have two options for flying UAS: (1) fly under the FAA's Small UAS Rule (14 CFR Part 107), and follow all requirements contained therein, including the aircraft, operations, and pilot requirements contained therein; or, (2) obtain and fly under a blanket public Certificate Waiver or Authorization (COA).

The Department has chosen to fly under the FAA's Small UAS Rule, and is in compliance with all of the aircraft, operations, and pilot requirements contained therein (https://www.faa.gov/uas/getting_started/part_107/#or).

In order to fly under the FAA's Small UAS Rule (14 CFR Part 107), the person operating the drone must either hold a remote pilot airman certificate or be operating under the direct supervision of a person who holds a remote pilot airman certificate. To qualify for a remote pilot airman certificate, a person must: demonstrate aeronautical knowledge by passing an aeronautical test at an FAA-approved testing center; be vetted by the Transportation Security Administration; and, be at least 16 years old. The Department has two staff holding remote pilot airman certificates: Rich Graeber and Michael Novotney.

In addition, in order to fly under the FAA's Small UAS Rule (14 CFR Part 107), the drone being operated must be registered with the FAA and labeled with the assigned registration number. The Department has registered its drone and has labeled it with its assigned registration number. The Department's drone is a DJI M210 RTK (<https://www.dji.com/matrice-200-series>). It has been assigned registration number is: #FA3M7E43EA by the FAA.

Anticipated Uses

The Department's drone will significantly expand the assessment, inspection, and data collection capabilities of Porter County's Storm Water Management Program. Anticipated uses include:

- Stream & Ditch (Open Drain) Assessments
- Storm Sewer & Tile (Closed Drain) Line Assessments
- 2D & 3D Imaging
- 2D & 3D Topographic Surveying
- Maintenance & Capital Improvement Project Design
- Drainage Complaint Investigations
- Flood Damage Assessments
- Site Inspections
- Bridge Inspections

In accordance with FAA regulations, all drone flights are logged and all photography and videography collected during drone flights are available to the public through the Freedom of Information Act (FOIA).

Use Policy

The Department has developed the internal policy presented below regarding the use of its drone. The policy addresses how the drone will be used, where it will be used, who has the authority to operate the drone, and when and how the public will be notified of the use of the drone. The policy was designed to

be consistent with the FAA's Small UAS Rule (14 CFR Part 107) as well as drone use-related privacy guidelines released by the FAA.

Policy

The Department has purchased a small Unmanned Aircraft System (sUAS), more commonly known as a drone, to expand the assessment, inspection, and data collection capabilities of Porter County's Storm Water Management Program. The following policy shall apply to and govern the use of the Department's drones.

1. The use of a Department drone for any purpose other than Department business is prohibited.
2. A Department drone shall only be operated by a Department staff member holding a remote pilot airman certificate (i.e., remote pilot in command) or by a person under the direct supervision of a Department staff member holding a remote pilot airman certificate (i.e., remote pilot in command).
3. During use, a Department drone must remain within the visual line of sight (VLOS) of the remote pilot in command and, if applicable, the person operating the drone under the direct supervision of the remote pilot in command. Alternatively, during use, a Department drone must remain within the VLOS of a visual observer, as designated by the remote pilot in command. This requires the drone to remain close enough during use to be seen by the remote pilot in command, operator, and/or visual observer unaided by any device other than corrective lenses.
4. A Department drone may be operated in Class G airspace without air traffic control (ATC) permission. Operation in Class B, C, D, and E airspace is allowed with the required ATC permission.
5. A Department drone shall not be operated more than 400 feet above ground level (AGL) unless within 400 feet of a structure.
6. To ensure that it remains within the VLOS of the remote pilot in command, operator, and/or visual observer during inclement weather, a Department drone shall be operated at a minimum of 500 feet vertically below a cloud or clouds and/or a minimum of 2,000 feet horizontally away from a cloud or clouds.
7. A Department drone shall not be operated at a groundspeed of more than 100 mph (87 knots).
8. A Department drone shall be operated in daylight only or in civil twilight (i.e., 30 minutes before official sunrise to 30 minutes after official sunset) with appropriate anti-collision lighting.
9. A Department drone shall not be operated over any persons not directly participating in the operation of the drone (i.e., remote pilot in command, operator, and/or visual observer), not under a covered structure, and not inside a covered stationary vehicle.
10. During use, a Department drone shall always avoid manned aircraft, shall yield the right-of-way to all other manned and unmanned aircraft, and shall never be operated in a careless or reckless manner.
11. A Department drone shall not be operated from a moving vehicle.
12. Prior to each flight, the remote pilot in command shall conduct a pre-flight inspection and determine that a Department drone is in a condition for safe operation. Should a pre-flight inspection reveal a condition that affects the safe operation of a drone, such drone shall not be operated until any necessary maintenance and/or repairs have been completed and such drone has been found in a condition for safe operation.
13. During use of a Department drone, the remote pilot airman certificate of the remote pilot in command, the drone registration, and any required ATC permissions associated with the use of such drone shall accompany the remote pilot in command and shall be available upon request.
14. The remote pilot in command is prohibited from beginning a flight with a Department drone unless, considering wind and other weather conditions, there is enough available power for such drone to complete the planned flight and to continue to fly for at least five minutes after completion of such planned flight.

15. In the event of an emergency during a flight with a Department drone, the remote pilot in command shall immediately abort such flight and immediately land such drone.
16. A Department drone shall only be operated over: public property; public rights-of-way, but not over any persons not directly participating in the operation of the drone (i.e., remote pilot in command, operator, and/or visual observer) and/or inside a moving vehicle; regulated drainage easements; drainage easements or other easements within which the Department has the right to enter to inspect; or, private property with written authorization from the property owner.