

**Cullowhee Clean Air
(WheeCAIR)
Field Deployment Sheet**

Research Team & Sensor Information

Deployment Date: _____ Start Time: _____

Name(s): _____

Sensor Initials: _____ Sensor Build Date & Version: 2019-10-09, v1.0

Site Information

Coordinates: _____ Coordinate System: _____

Reference Datum: _____

Specific site description (provide enough detail for someone else to find your sensor): _____

Other notes (list things about the site that you think may influence your sensor's data): _____

Sensor Deployment Instructions

- You may secure your sensor to trees or fence posts around the Purchase area, including along the Cataloochee divide trail.
- Your sensor **CANNOT** be visible from a trail or walkway.
- You may **NOT** attach your sensor to any historic structures, artifacts, etc.
- Your sensor **CANNOT** interfere with the operation of the NCDEQ Air Quality instruments or the weather station at the site.
- At least two sensors should be installed in a location near the air quality shed/weather station.
- If possible, you should co-locate your sensor with another for comparison.
- Install your sensor with the partially covered opening (“rear opening”) at the top and the full opening at the bottom (“bottom opening”); this ensures rain won’t get into the sensors.
- Similarly, install your sensor angled *slightly* toward the rear opening to that rain is less likely to drip into the sensor.
- If possible, find a location that won’t be disturbed by wildlife.
- Complete the Sensor Installation Checklist and Field Deployment Sheet (attached).

Sensor Installation Checklist

- | | | |
|--------------------------|----|--|
| <input type="checkbox"/> | 1 | SD card installed |
| <input type="checkbox"/> | 2 | All wires/sensors connected correctly (check for broken wires) |
| <input type="checkbox"/> | 3 | PM sensor positioned correctly |
| <input type="checkbox"/> | 4 | Batteries connected (black to -, red to +) |
| <input type="checkbox"/> | 5 | Black reset button on PCB pressed |
| <input type="checkbox"/> | 6 | Boot sequence correct: 10 s pause, 5 short blinks (orange light), 5 s pause, 2 long blinks (orange light)*** |
| <input type="checkbox"/> | 7 | Case lid installed tightly (black seal should compress to keep out water). |
| <input type="checkbox"/> | 8 | Sensor securely fastened to tree. |
| <input type="checkbox"/> | 9 | Sensor field deployment sheet (on back) filled in completely, including location. |
| <input type="checkbox"/> | 10 | Photo of installed sensor/site sent to dfischer@wcu.edu . |

***Any other blink sequence indicates an error and you **MUST** troubleshoot and fix the issue before continuing!!

Sensor Installation Specification

