



# STABILIZATION ASSESSMENT FORM

## Non-Attainment Area Source Self-Compliance Assistance Form Drop Ball Test Method

### Equipment Needed

- ! One ball bearing with a diameter of 15.9 mm (0.625 inches) and a mass of 16-17 grams (0.56-.060 ounces)
- ! One metric ruler or pre-sized metering device to measure 30cm by 30 cm

### Project Information

Project Name: \_\_\_\_\_ Permit #: \_\_\_\_\_

Street Address/Location: \_\_\_\_\_ City/Area: \_\_\_\_\_

Brief description of Location being tested: \_\_\_\_\_

Location Type (Pick One):  Unpaved Road  Unpaved Parking Lot  Vacant Lot  Open Area  Other: \_\_\_\_\_

### Drop Ball Test Results

(S Stable U Unstable)

Drop 1 Result	Sample Area #1	Sample Area #2	Sample Area #3
Ball did not sink in = Stable	S <input type="checkbox"/> U <input type="checkbox"/>	S <input type="checkbox"/> U <input type="checkbox"/>	S <input type="checkbox"/> U <input type="checkbox"/>
Ball is partially or fully surrounded by loose grains = Unstable	S <input type="checkbox"/> U <input type="checkbox"/>	S <input type="checkbox"/> U <input type="checkbox"/>	S <input type="checkbox"/> U <input type="checkbox"/>
Loose grains visible in the depression = Unstable	S <input type="checkbox"/> U <input type="checkbox"/>	S <input type="checkbox"/> U <input type="checkbox"/>	S <input type="checkbox"/> U <input type="checkbox"/>
Drop 2 Result	Sample Area #1	Sample Area #2	Sample Area #3
Ball did not sink in = Stable	S <input type="checkbox"/> U <input type="checkbox"/>	S <input type="checkbox"/> U <input type="checkbox"/>	S <input type="checkbox"/> U <input type="checkbox"/>
Ball is partially or fully surrounded by loose grains = Unstable	S <input type="checkbox"/> U <input type="checkbox"/>	S <input type="checkbox"/> U <input type="checkbox"/>	S <input type="checkbox"/> U <input type="checkbox"/>
Loose grains visible in the depression = Unstable	S <input type="checkbox"/> U <input type="checkbox"/>	S <input type="checkbox"/> U <input type="checkbox"/>	S <input type="checkbox"/> U <input type="checkbox"/>
Drop 3 Result	Sample Area #1	Sample Area #2	Sample Area #3
Ball did not sink in = Stable	S <input type="checkbox"/> U <input type="checkbox"/>	S <input type="checkbox"/> U <input type="checkbox"/>	S <input type="checkbox"/> U <input type="checkbox"/>
Ball is partially or fully surrounded by loose grains = Unstable	S <input type="checkbox"/> U <input type="checkbox"/>	S <input type="checkbox"/> U <input type="checkbox"/>	S <input type="checkbox"/> U <input type="checkbox"/>
Loose grains visible in the depression = Unstable	S <input type="checkbox"/> U <input type="checkbox"/>	S <input type="checkbox"/> U <input type="checkbox"/>	S <input type="checkbox"/> U <input type="checkbox"/>

### Compliance Analysis

Do at least 2 out of 3 drops for each sample area show a stable surface? Y  N  Y  N  Y  N

Did you check Yes in each sample area of the above row? Y  N  (If **Yes** the area is stable. If **No** additional stabilization must be conducted)

### Test Observer/Conductor Information

Your signature on this form attest that you conducted the test in accordance with the testing methods outlined in §4-9-320.B.1 which can also be found on the back of this form.

Print Name: _____	Title: _____	Company: _____
Signature: _____		Date: _____

## Drop Ball Test Method

1. Visible Crust Determination [- The "Drop Ball Test"].
  - a. *[Appropriate Testing Conditions]* Where a visible crust exists, drop a steel ball with a diameter of 15.9 millimeters (0.625 inches) and a mass ranging from 16-17 grams (0.56-0.60 ounce) from a distance of **30 centimeters (one foot)** directly above (at a 90° angle perpendicular to) the soil surface. If blowsand is present, clear the blowsand from the surfaces on which Drop Ball Test is conducted. Blowsand is defined as thin deposits of loose uncombined grains covering less than 50% of a vacant lot which have not originated from the representative vacant lot surface being tested. If material covers a visible crust, which is not blowsand, apply the Threshold Friction Velocity determination of §B.2 of this rule to the loose material to determine whether the surface is stabilized.
  - b. *[Definition of Sufficient Crust]* A sufficient crust is defined under the following conditions: once a ball has been dropped according to the Appropriate Testing Conditions of §B.1.a, the ball does not sink into the surface, so that it is partially or fully surrounded by loose grains and, upon removing the ball, the surface upon which it fell has not been pulverized, so that loose grains are visible.
  - c. *[Characterization of Crust Across Entire Site]* Drop the ball three times within a survey area that measures 1 foot by 1 foot and that represents a random portion of the overall disturbed conditions at the site. The survey area shall be considered to have passed the Visible Crust Determination Test if at least two out of the three times that the ball was dropped, the results met the Definition of Sufficient Crust in §B.1.b. Select at least two other survey areas that represent a random portion of the overall disturbed conditions of the site, and repeat this procedure. If the results meet the Definition of Sufficient Crust in §B.1.b for all of the survey areas tested, then the site shall be considered to have passed the Visible Crust Determination Test and shall be considered sufficiently crusted.
  - d. *[Characterization of Crust Across Entire Site]* At any given site, the existence of a sufficient crust covering one portion of the site may not represent the existence or protectiveness of a crust on another portion of the site. Repeat the visible crust test as often as necessary on each random portion of the overall conditions of the site for an accurate measurement.