

**ARIZONA STATE UNIVERSITY**

**ATTACHMENT A**

**VISUAL MONITORING STANDARD OPERATING PROCEDURE**

**General Directions:**

At the completion of each outfall inspection, monitoring personnel are responsible for ensuring that the Visual Monitoring Form has been fully and correctly completed and that all data and remarks are legible. The completed form should be scanned to PDF or the data transferred to a Word version of the form and sent to FDM-Construction Support Services for annual reporting.

**Section 1: Background Data**

Field Screening Point ID: Enter the field screening point identification number from the stormwater field screening point inventory.

Date: Enter date including day month and year.

Time: Use a.m. or p.m. designation (for example - 8:30 a.m., or 1:30 p.m.).

Monitoring Personnel: Enter the name of the person or persons conducting the monitoring. Type of investigation: Check the appropriate box for the type of assessment being conducted:

dry weather monitoring, wet weather monitoring, investigation of a reported illicit discharge, or 3-day follow-up monitoring.

Photos? (Yes/No): Document observations with photographs whenever possible. ~~A~~utomatically dated and time-stamped photographs are preferred. Photographs should be attached to the final copy of the form.

Precipitation within last 72 hours: Note whether there has been measureable rainfall in the investigation area within the last 72 hours.

Weather: A concise description of the weather conditions at the time of the assessment including approximate temperature.

**Section 2: Physical Indicators**

This section provides a description of the condition of the field screening point. These physical indicators may provide evidence that illicit discharges have occurred when there is no flow at the time of the investigation. **This section is to be completed whether or not there is flow.**

Complete the table, adding comments when there are positive findings under the descriptions of physical indicators.

Field Screening Point Damage: Describe any field screening point damage observed or mark “None.”

Deposits/Stains: Describe any deposits or stains observed or mark “None.” Abnormal Vegetation: Describe any abnormal vegetation observed or mark “None.”

Flow Present (Yes/No): A *Yes* or *No* is entered here to indicate the presence or absence of dry-weather flow or illicit discharge. If the field screening point is submerged or inaccessible, “See Notes” is

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entered and an explanation provided in the “Notes” section.

Flow Chart Procedure:

* If *No* is entered for flow and physical indicators, close the investigation and complete Section 4 of the form.
* If *No* is entered for flow but physical indicators are present, schedule a 3-Day Follow- Up inspection and complete Section 4.
* If *Yes* is entered for flow, go to Section 3.

Do physical indicators suggest an illicit discharge has occurred? (Yes/No): Answer yes if there is physical evidence of past or current illicit discharges.

**Section 3: Discharge Description (Flowing Field Screening Points Only)**

Complete table describing field screening points characteristics (odor, color, turbidity, floatables). This section is filled out for flowing field screening points only.

Odor: The presence of an odor is assessed by fanning the hand toward the nose over a wide- mouth container of the sample, keeping the sample about 6 to 8 inches from the face. Be careful not to be distracted by odors in the air. Provide a description of the odor, if present.

Color: The presence of color in the discharge is to be assessed by filling a clean glass sample container with a portion of the grab sample and assessing the color, if color is present. If a color chart is used, the number corresponding to the color matching the sample is to be entered in this blank.

Turbidity: Turbidity is a measure of the clarity or cloudiness of water. Turbidity may be caused by many factors, including suspended matter such as clay, silt, or finely divided organic and inorganic matter.

Floatables: The presence of floating scum, foam, oil sheen, plant debris or other materials on the surface of the discharge are to be noted. Describe of any floatables present that are attributable to discharges from the field screening point.

After documenting the physical properties of the discharge, the field crew should attempt to trace the flow to its source. If the flow originates underground and access to manholes in roadways is required for tracking, the process may need to be delayed until proper safety procedures (traffic control, confined space entry, etc.) can be arranged.

**Section 4: Enforcement and Resolution**

Check the appropriate box for the resolution of the investigation: Source Identified, 3-Day Follow-up Inspection, or Investigation Closed.

Enforcement Action: Identify enforcement action taken. Describe the action Source/Resolution: Describe the source if found and final resolution. For example: “Source was

broken irrigation system. System repaired by Grounds Maintenance.”



**Section 1: Background Data**

**ARIZONA STATE UNIVERSITY VISUAL MONITORING FORM**

|  |  |  |
| --- | --- | --- |
| Field Screening Point ID: | Date: | Time: |
| Monitoring personnel: | | |
| * Dry Weather ☐ Wet Weather ☐ IDDE Investigation ☐ 3-Day Follow-up Inspection | | |
| Photos? ☐ Yes ☐ No If yes, append photos to this report. | | |
| Precipitation w/in last 72 hours? ☐ Yes ☐ No | Weather (approx. temp, etc.): | |

**Section 2: Physical Indicators**

|  |  |  |
| --- | --- | --- |
| **INDICATOR** | **DESCRIPTION** | **COMMENTS** |
| Field Screening Point Damage | * None ☐ Spalling, Cracking or Chipping ☐ Peeling Paint * Corrosion ☐Other: |  |
| Deposits / Stains | * None ☐ Oily ☐ Paint ☐ Other: |  |
| Abnormal Vegetation | * None ☐ Excessive ☐ Inhibited |  |
| Flow Present? | * Yes If yes, describe: ☐ Trickle ☐ Moderate ☐ Substantial And go to Section 3. * No If no flow and no physical indicators, skip to Section 4 and close investigation.   If no flow but physical indicators are present, complete Section 4 and schedule 3-Day Follow-Up. | |
| Pipe Algae Growth | * None ☐ Brown/Orange ☐ Green ☐ Other: |  |
| Do physical indicators suggest an illicit discharge has occurred? ☐ No ☐ Yes | | |

**Section 3: Discharge Description (flowing field screening points only)**

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| **INDICATOR** | **CHECK IF ABSENT** | **DESCRIPTION** | **RELATIVE SEVERITY INDEX (1-3)** | | |
| Odor | * ​   (No odor) | * Sewage ☐Rancid/Sour ☐Sulfide * Laundry ☐Petro/gas ☐Other: | * 1-Faint | * 2-Easily detected | * 3-noticeable from a distance |
| Color | * ​   (Colorless) | * Gray ☐Brown ☐ Yellow ☐ Green * Red/Orange ☐ Multicolor * Other: | * 1-Faint color visible in sample   bottle | * 2-Color clearly visible in sample bottle | * 3-Clearly visible in outfall   flow |
| Turbidity | * ​   (Clear) | See severity | * 1-Slightly cloudy | * 2-Cloudy | * 3-Opaque |
| Floatables – does not include trash! | * ​   (Clean) | * Sewage ☐ Suds/Foam ☐ Oil sheen * Plant Debris * Other: | * 1-Few/slight; origin not obvious | * 2-Some indications of   origin | * 3-Some; origin obvious |
| Do physical indicators suggest an illicit discharge is present? (Y/N) | | | | | |
| Able to trace flow to source? ☐ Yes ☐ No | | | | | |

**Section 4: Enforcement and Resolution**

|  |
| --- |
| * Source identified (describe below) ☐ 3-Day Follow-up Inspection required (describe reason why below) * No flow / no sign of illicit discharge – no investigation. |
| Enforcement action taken? ☐ Yes ☐ No If yes, describe: |
| Source/Resolution: |