



Instructions for Completing Forms 1155A, 1155B and 1155C

To comply with Rule 1155 requirements, operators of equipment subject to this rule are required to conduct and record visible emission (VE) observations, routine maintenance and inspections on control devices, and alarm investigations related to Baghouse Leak Detection systems (BLDS). AQMD has created three recordkeeping forms to help operators comply with applicable recordkeeping requirements:

- Form 1155A - Particulate Matter Control Devices Summary
- Form 1155B - Particulate Matter Control Device Records
- Form 1155C - Baghouse Leak Detection System Records

All operators conducting VE observations are required to complete Forms 1155A and 1155B or equivalent (operators may develop their own forms provided each document created includes all data elements found in these AQMD Rule 1155 recordkeeping forms).

Form 1155A is designed to capture and encode basic facility information. Codes from this form are used to complete Forms 1155B and 1155C. Form 1155A must always be used in conjunction with Forms 1155B and 1155C to ensure accurate recordkeeping; all Rule 1155 recordkeeping forms must be made available to AQMD upon request for purposes of verifying compliance with the requirements of Rule 1155.

Instructions for completing Forms 1155A, 1155B and 1155C are provided below.

Instructions for Completing Form 1155A - Particulate Matter Control Devices Summary

This form captures information about facility operations and VE observers subject to the requirements of Rule 1155, and must be completed prior to completing Form 1155B and Form 1155C. Enter the facility information required at the top of the form, then complete each section as instructed below.

- **Section 1 - Baghouse Information**

Enter the following information for each permitted control device (**Process Unit**) subject to Rule 1155:

Column #	Item	Instructions
(1)	Process Unit	The numeric entries in this column serve as labels for the Process Units shown in <i>Section 4 - Source Layout Sketch</i> .
(2)	AQMD Permit No.	Enter the six-digit Permit to Operate number listed on the AQMD Permit.
(3)	Type of Operation	Check the appropriate box to indicate the location of the operation effluent and where the VE observations will be conducted. If the control device and process equipment are located indoors and the process outlet is vented outdoors, check the Outdoor box.
(4)	Tier	Enter the appropriate Tier designation based on the size of the baghouse: <ul style="list-style-type: none"> • Tier 1 - ≤ 500 square feet • Tier 2 - > 500 – 7,500 square feet • Tier 3 - > 7,500 square feet
(5)	Equipped with BLDS	Check the appropriate box to indicate whether the control device is equipped with a Baghouse Leak Detection System (BLDS).
(6)	Equipped with VFP	Check the appropriate box to indicate whether the control device is equipped with Verified Filtration Products (VFP) verified under the U.S. EPA Environmental Technology Verification (ETV) program at the time of purchase of the product.
(7)	Required Observation Frequency	Check the appropriate box to indicate the required frequency for conducting Method 22 VE observations for each Process Unit listed.

- **Section 2 - Observation Information**

Enter the following information for each Method 22 VE observer:

Column #	Item	Instructions
(8)	Observer No.	The numeric entries in this column (S1 – S10) serve as labels for Method 22 VE observers.
(9)	Observer Name	Enter the first and last name of the observer.
(10)	Observer Affiliation	Enter the name of the company or employer of the named observer.
(11)	Observer Phone	Enter the area code and telephone number of the named observer.

- **Section 3 – Observation Point Summary**

Enter the following information about each observation point:

Column #	Item	Instructions
(12)	O/P Designation (P1-P3)	The alphanumeric entries in this column serve as labels for the observation points shown in <i>Section 4 - Source Layout Sketch</i> .
(13)	Type of Observation	Check the appropriate box to indicate whether this observation point is for indoor or outdoor observations.
(14)	Description of Observation Point	Provide a brief description of the location of the observation point and any landmarks that may help to pinpoint this location.
(15)	Distance from Sources	Enter the distance (measured in feet) from the observation point to the source(s) being observed.
(16)	O/P Designation (P4-P6)	The alphanumeric entries in this column serve as labels for the observation points shown in <i>Section 4 - Source Layout Sketch</i> .
(17)	Type of Observation	Check the appropriate box to indicate whether this observation point is for indoor or outdoor observations.
(18)	Description of Observation Point	Provide a brief description of the location of the observation point and any landmarks that may help to pinpoint this location.
(19)	Distance from Sources	Enter the distance (measured in feet) from the observation point to the source(s) being observed.

- **Section 4 - Source Layout Sketch**

Draw an indoor/outdoor source layout sketch to show the location of the **Process Unit** emission points and the **Observation Points** from which designated observers will conduct Method 22 VE observations. Facilities with multiple processes or observation points may attach additional plain paper pages showing each source layout sketch. Label each Process Unit emission point using the corresponding Process Unit number from *Section 1 – Baghouse Information*. Label each Observation Point using the corresponding O/P Designation from *Section 3 – Observation Information*.

- **Section 5 – Indoor Operation (Light/Meter Information)**

For indoor observations, provide the following information:

Column #	Item	Instructions
(20)	Indoor Light Type	Check the applicable type of lighting under which the observations are made.
(21)	Brand Light Meter	Enter the name of the manufacturer of the light meter to be used in conjunction with the indoor VE observations.
(22)	Model	Enter the model number of the light meter to be used in conjunction with the indoor VE observations.
(23)	Lux Range	Refer to the owner’s manual provided with the light meter and enter the lux range of the equipment. NOTE: Method 22 requires that a meter capable of measuring luminance in the 50 to 200 lux range be used for indoor observations.

Instructions for Completing Form 1155B - Particulate Matter Control Device Records

Form 1155B is used to record Method 22 visible emissions (VE) as required by Rule 1155 (e)(1) and (f)(1). Enter the facility information required at the top of the form, then enter the following information for each VE observation made:

Column #	Item	Instructions
(24)	Observation	Enter the following information in the appropriate cells: <ul style="list-style-type: none"> • Date: Enter the date (MM/DD/YY) each observation was made. • O/P (Observation Point) Designation: Enter the O/P Designation (refer to <i>Form 1155A, Section 3 - Observation Point Summary, Column 12 and/or 16</i>) for the observation point from which VE observations are made.
(25)	Process Units Observed	Check the box corresponding to the Process Unit number for each control device being observed (refer back to <i>Form 1155A, Section 1 - Baghouse Information, Column 1</i>) to identify the Process Unit number for each device.
(26)	Light Meter Reading	For indoor observations, record the reading of the light meter used to measure the illumination near the emission source prior to the observation. NOTE: A reading of at least 100 lux is required to make Method 22 VE observations.
(27)	Weather Conditions	For outdoor observations, enter the wind speed (mph) and direction, then check the appropriate box that best describes the weather conditions at the time of the observation.
(28)	Observation Time	Enter the following information measured by Stop Watch 1 in the appropriate cells: <ul style="list-style-type: none"> • Start Time: The hour and minute each observation started. • End Time: The hour and minute each observation concluded. • Total Time: The difference (expressed in minutes) between the end time and start time for each observation.
(29)	Emission Time	The total time (in minutes) measured by Stop Watch 2 during which emissions were observed.
(30)	Corrective Action Taken Upon Observing Emissions	When emissions are observed, enter the following information in the appropriate cells: <ul style="list-style-type: none"> • Date: The date (MM/DD/YY) the corrective action was taken. • Time: The hour and minute the corrective action was taken. • Actions: A brief description of the repairs made or actions taken to curtail emissions.
(31)	Equipment Shut Down	When corrective actions fail to curtail VE observed from a process unit, enter the following: <ul style="list-style-type: none"> • Date/Time: The date (MM/DD/YY), hour and minute the process unit was shut down after corrective action failed to curtail VE.
(32)	Observer Information	Enter the following in the appropriate cells: <ul style="list-style-type: none"> • Observer No.: The Observer No. (refer to <i>Form 1155A, Section 2 – Observer Information, Column 8</i>) identifying the person conducting the observation. • Observer’s Initials: The initials of the observer.

Instructions for Completing Form 1155C - Baghouse Leak Detection System Records

Enter the facility information required at the top of the form, then enter the information in each section as described below.

- Section A – Alarm Summary**

Column #	Item	Instructions
(33)	Alarm Date	The date (MM/DD/YY) the BLDS alarm was activated.
(34)	Process Unit	Using the process unit numbers associated with each control device listed in <i>Form 1155A, Section 1 – Baghouse Information, Column 1</i>) check the appropriate box for the process unit with the activated alarm.
(35)	Alarm Start Time	The hour and minute the alarm was activated.
(36)	Alarm End Time	The hour and minute the alarm stopped.
(37)	Duration of Alarm	The total time (in minutes) that the alarm was activated (i.e., the difference between the Alarm End Time and the Alarm Start Time).
(38)	Emissions Observed During Alarm?	Check the appropriate box to indicate whether emissions were observed while the alarm was activated.
(39)	Baghouse Corrective Action Needed?	Check the appropriate box to indicate whether corrective action to the baghouse was required as a result of alarm activation.
(40)	Count Alarm Time?	If the entries for Columns 38 and 39 are both checked “yes”, check “yes” in Column 40.
(41)	Counted Alarm Time	If the entry for Column 40 is checked “yes”, enter the value Duration of Alarm (<i>Column 37</i>); otherwise, enter 0.
(42)	Total Alarm Time (hrs)	Enter the sum of all Duration of Alarm entries for this baghouse (<i>Column 37</i>) from the past six months.
(43)	Total Operating Time (hrs)	For the baghouse with the activated alarm, enter the total number of hours of baghouse operation within the last six months.
(44)	Total Alarm Time/ Total Operating Time	Divide the Total Alarm Time (<i>Column 42</i>) by the Total Operating Time (<i>Column 43</i>) and enter the result in Column 44 to show Total Alarm Time as a percentage of Total Operating Time.
(45)	Equipment Shut Down Date	If the value in Column 44 is greater than 5%, the equipment venting to the baghouse must be shut down until necessary actions are taken to eliminate the excess emissions. Indicate the date (MM/DD/YY) the equipment was shut down.
(46)	Equipment Shut Down Time	Indicate the hour and minute the equipment was shut down.
(47)	Equipment Re-Start Date	Indicate the date (MM/DD/YY) the equipment was re-started after shutdown.
(48)	Equipment Re-Start Time	Indicate the hour and minute the equipment was re-started after shutdown.

- Section B – Cause and Corrective Action Summary**

For each entry in Section A there should be a matching entry in this section that explains the reason the alarm sounded and the corrective action taken to remedy the problem. Enter the following information for each alarm.

Box #	Item	Instructions
(49)	Alarm Date	The date (MM/DD/YY) the BLDS alarm was activated (copy entry from <i>Column 33</i>).
(50)	Process Unit	Using the process unit numbers associated with each control device (refer to <i>Form 1155A, Section 1 – Baghouse Information, Column 1</i>), check the appropriate box for the process unit with the activated alarm (copy from <i>Column 34</i>).
(51)	Alarm Start Time	The hour and minute the alarm was activated (copy from <i>Column 35</i>).
(52)	Cause of Alarm	Enter brief description of the cause of alarm activation, including any baghouse equipment failures or breakdowns.
(53)	Corrective Action Taken	Enter brief description of actions taken or repairs made to restore operating status of equipment and deactivate alarm.

- **Section C – Maintenance and Inspection Summary**

Enter the following information for each inspection/maintenance activity performed.

Box #	Item	Instructions
(54)	Date	Enter the date (MM/DD/YY) the control device inspection/maintenance activity took place.
(55)	Time	Enter the hour and minute the control device inspection/maintenance activity began.
(56)	Activity Type	Check the appropriate box to indicate whether the activity is an inspection or maintenance activity.
(57)	Process Unit	Using the process unit numbers associated with each control device listed in <i>Form 1155A, Section 1 – Baghouse Information, Column 1</i>), check the appropriate box for the process unit associated with the activity.
(58)	Party Conducting Activity - Name and Phone	Enter the first and last name and the area code and telephone number of the person conducting the activity. If the person is not an employee of the company operating the baghouse, indicate the name of the person's employer.
(59)	Status	Check the appropriate box.
(60)	Repairs Needed/Completed	Describe equipment malfunction and recommended repairs identified during inspection and/or any repairs completed as part of the maintenance activity.