

GUIDELINES FOR VISIBLE EMISSION EVALUATION PERSONNEL

CERTIFICATION/RECERTIFICATION

The following guidelines are provided to clarify the needs of the host Air District and the California Air Resources Board (CARB) training staff, as well as creating a training environment that provides all participants equal opportunity to certify/recertify in Visible Emission Evaluation (VEE).

Note: The audience that participates in VEE certification/recertification may include local and regional Air District inspectors and engineers, as well as personnel from the private regulated industry. It is important that a professional demeanor is demonstrated by both participants and training staff, to insure a valid test process and test results. Talking during the testing process or looking at another's answer sheet may result in your being disqualified and your test scores not being graded. Additionally, proctors or observers from the Air Resources Board and participating Air Districts may be present during the certification/recertification process to monitor all participants.

Recommended Equipment for VEE Certification

1. Blue or Black ink pen (No Water Based Inks, please)
2. Clipboard
3. Straight edge
4. Small flashlight (for night certification)

Pre-Certification Guidelines

1. Legibly fill in the entire top portion of the scoring form before certification/recertification begins. Be sure to include use of sunglasses, weather conditions, wind speed, wind direction and direction and distance to stack. Don't forget your Student I.D. number. If your I.D. Number has less than 5 digits, put in leading zero(s) or leave the left column(s) blank.
2. The sun must be located within a 140-degree arc behind the observer's back. As the sun moves during the day you will also have to change your position to stay within the 140-degree arc.
3. When horn sounds, you have 2 options:
Option 1 – (Recommended) Make a dash over or under the numerical value of your choice. You may also use the left-hand column to make note of an answer you are not sure of. You do not need to fill in the ovals immediately after a reading. After every 5th reading, the operator will pause to allow you to fill in the ovals for your previous 5 answers.

Option 2 – Fill in the oval to the left of the value of your answer.
4. You must have only **one** filled-in oval for every line. Filling in more than one oval or otherwise mismarking your form will delay the processing of your form and the distribution of your certification card.
5. Be sure to fill in an oval for each answer before you remove the bottom sheet at the end of the run.
6. When the run is finished, turn in your **bottom sheet**. Once the bottom sheet is separated, you cannot reattach it or change an answer.

7. As the operator announces the correct answers, mark a small slash (/) through the correct answer value, not the filled-in oval.
8. To calculate your error, count the spaces between the correct answer and the value to the right of your filled-in oval. Each space is 1 point. **4 OR MORE POINTS ON ANY LINE IS A FAIL.**
9. Total your errors and enter the value in the appropriate area (White or Black) at the bottom of your form. **IF YOU'RE TOTAL ERROR IS 38 OR GREATER, IT IS A FAIL.**
10. Multiply your total error value by 0.2 to determine your deviation. Or double your total and move the decimal one place to the left. (A total score of 37 gives a deviation of 7.4).
- 11. IF THE TOTAL DEVIATION EXCEEDS 7.5 IT IS A FAIL.**
- 12. If you fail any run on a page, discard your paper and start over with a new form on the next run.**

Important Items to Remember

1. Press hard when entering your score. The scoring form is in triplicate and all three pages must show your marks.
2. Use a straightedge to help stay on the proper line.
3. Read the plume immediately after the sound of the horn. CARB staff will only hold this reading for about 5 seconds unless the plume is rolling over.
4. Read plume at the very top (exit) of the stack.
5. Look away from the plume between readings and during demonstration of values.
6. Read the plume at a right angle to its direction. You may need to change positions to maintain proper orientation.
7. Yell "hold" if you need the CARB staff to hold a particular reading because it is not readable. The operator will not "hold" because the reader will not (refuses to) change positions when the smoke is coming directly toward or away from them. The operator will "hold" if reader(s) is/are changing positions. The CARB proctor has the last say on what is readable.
8. After each set of 25 readings always turn in the bottom copy to CARB staff.
9. The 25 White and 25 Black readings must be consecutive to pass. Either White-Black or Black-White.
10. All three of the test sheets (pink, yellow & white) must be turned in to the VEE staff to receive credit.
11. Check to make sure the top of the form is completely filled in.
12. No smoking during the runs.
13. Put cell phones on quiet or turn them off.
14. Be courteous to our host site and pick up your trash.