



CALIFORNIA DEPARTMENT OF
FOOD & AGRICULTURE

Karen Ross, Secretary

February 11, 2022

DMS NOTICE
WM - 22 – 01
DISCARD: RETAIN

TO: WEIGHTS AND MEASURES OFFICIALS

SUBJECT: Weighmaster Survey – Rock, Sand, and Gravel Businesses and
Predetermined Tares

The California Department of Food and Agriculture, Division of Measurement Standards (CDFA DMS) Weighmaster Program (Program) completed a statewide survey of licensed weighmasters who are listed as a Rock, Sand, and Gravel business. The survey was conducted from October 12, 2021 through December 6, 2021.

Data was collected at one hundred twenty-five (125) randomly selected Rock, Sand, and Gravel weighmaster locations of the 454 listed in the CDFA DMS Weighmaster Licensing Database, or 27.5 % of available locations. All participating businesses answered a series of questions related to weighmaster practices, had records inspected, and Program staff completed Weighmaster Inspection Forms documenting business practices. In addition, Program staff verified the predetermined tare weights of 256 vehicles hauling materials and using recorded tare weights.

Program staff audited over 3,986 records and observed 325 individual violations. Violations were observed at 110 of the 125 weighmaster locations visited. Perfect compliance was achieved by only 12.0 % of the weighmaster locations and non-compliant locations had approximately three (3) documented violations each. Compliance with tare regulations for vehicles hauling materials was 76.6 %. The following attachment provides detailed results of the survey.

If you have any questions regarding this notice, please contact CDFA DMS by email at dms@cdfa.ca.gov or phone at (916) 229-3000.

Sincerely,

Kristin J. Macey
Director

cc: Hyrum Eastman, County/State Liaison, CDFA

Attachment



DIVISION OF MEASUREMENT STANDARDS 2021 WEIGHMASTER SURVEY

PREDETERMINED VEHICLE TARE WEIGHTS AT EARTH, STONE, ROCK, SAND, AND GRAVEL LOCATIONS

February 11, 2021

A statewide survey of licensed weighmasters who use predetermined vehicle tares at earth, stone, rock, sand, and gravel locations was performed by the California Department of Food and Agriculture, Division of Measurement Standards (CDFA DMS) Weighmaster Enforcement Program to determine compliance levels with applicable state weighmaster laws¹ and regulations². Statewide surveys allow CDFA DMS to investigate the conditions of the marketplace as required in California Business and Professions Code (BPC) § 12101.

SCOPE OF THE SURVEY

The survey included only licensed weighmasters who are listed as a “rock, sand, and gravel” business. Asphalt locations were not part of this survey since they do not use predetermined tares. The survey was conducted by CDFA DMS Weighmaster Enforcement Program’s investigative staff (Special Investigators). The survey was conducted between October 12, 2021 to December 6, 2021. The purpose of the survey was to determine industry compliance with weighmaster laws and regulations and verify how familiar deputy weighmasters are with the legal requirements for their operation. This was done through interviewing business representatives, observing weighing operations, and performing records audits (reviewing current weighmaster license information, issued weighmaster certificates, and worksheets). In addition, drivers of vehicles for which predetermined tares were being used, were directed to drive their empty trucks and trailers onto the vehicle scale to verify the recorded tare weight. Predetermined vehicle tare weights that exceeded the recorded tare weights were identified as being non-compliant with Business and Professions Code § 12722(b).

LOCATION SELECTIONS

Using the CDFA DMS Weighmaster License Database, 454 licensed weighmasters were identified in the business classification of “Rock, Sand, and Gravel.” A total of 125 businesses were randomly selected from this group.

¹ California Business and Professions Code, Division 5, Chapter 7:

https://leginfo.legislature.ca.gov/faces/codes_displayText.xhtml?lawCode=BPC&division=5.&title=&part=&chapter=7.&article=

² California Code of Regulations, Title 4, Division 9, Chapter 9:

[https://govt.westlaw.com/calregs/Browse/Home/California/CaliforniaCodeofRegulations?guid=IB08A8720D45911DEA95CA4428EC25FA0&originationContext=documenttoc&transitionType=Default&contextData=\(sc.Default\)](https://govt.westlaw.com/calregs/Browse/Home/California/CaliforniaCodeofRegulations?guid=IB08A8720D45911DEA95CA4428EC25FA0&originationContext=documenttoc&transitionType=Default&contextData=(sc.Default))

INSPECTION PROCEDURE

Locations were assigned to CDFA DMS Weighmaster Enforcement Program's Special Investigators who went to each business during the survey period. Special Investigators interviewed the weighmaster or one of their deputy weighmasters using a survey questionnaire. The questionnaire verified the participant's ability to explain the duties of a weighmaster; knowledge of records retention, where records were stored, basic weighing terminology, understanding of the weighing process; and knowledge of the procedures to follow if an incorrect weighmaster certificate is issued.

Once the questionnaire was completed, the CDFA DMS Special Investigator conducted additional inspections to further determine compliance and ensure correct application of the law. This included an audit of weighmaster records (issued weighmaster certificates and worksheets) and observation of the weighing process coupled with verifying predetermined tare weights of vehicles with an established predetermined tare weight. Staff were instructed to reweigh up to five (5) vehicles at each location where predetermined tares were used.

Findings that are documented on a Weighmaster Inspection Report Form include the following:

1. Businesses have an active/current weighmaster license.
2. Deputies performing the weighing are on the weighmaster license.
3. Device(s) registration and county approval seal(s) is/are current.
4. Device(s) has/have approved software.
5. Weighmaster records have been properly completed.
6. Tare weights established are still acceptable for use and vehicle's current tare is not greater than previously established tare weight.
7. Required records are retained and available for inspection.

SURVEY RESULTS

Of the 454 licensed weighmasters listed as Rock, Sand, and Gravel businesses identified throughout California, survey results were collected from 125 randomly selected businesses (27.5 %). Records audits were completed at all locations, however, only 123 survey questionnaires were completed as two (2) locations chose not to provide responses. Eighty-five (85) locations used predetermined tares on the date visited, and 256 vehicles were reweighed. Forty (40) locations did not use predetermined tares or had no trucks coming through the day staff visited.

SURVEY QUESTIONNAIRE/INTERVIEW AND PERCENT RESPONDING CORRECTLY

The survey questions given to participants of the 2021 Rock, Sand, and Gravel Survey are listed below, along with the number of respondents answering correctly and the corresponding percentage. These questions demonstrate understanding of the duties of a weighmaster, recordkeeping requirements, basic weighing concepts (definitions), how to do a correction certificate, and questions related to tare. Warm-up questions used to get respondents comfortable and talking are not listed. Not all respondents answered every question.

1. What is your understanding of a Weighmaster's duties?
 - One-hundred twelve (112) could explain the basic duties of a weighmaster (91.1 %).
2. How many years do you keep your (weighmaster) certificates and worksheets?
 - One-hundred twenty (120) knew records must be kept at least four years (97.6 %).
3. Define "Gross Weight."
 - One-hundred twenty-two (122) were able to define this term (99.2 %).
4. Define "Tare Weight."
 - One-hundred twenty-three (123) were able to define this term (100 %).
5. Define "Net Weight."
 - One-hundred twenty (120) were able to define this term (97.6 %).
6. Define "Commodity."
 - One-hundred ten (110) were able to define this term (89.4 %).
7. Explain how to fix an error on a weighmaster certificate that has already been issued/issue a correction certificate.
 - Eighteen (18) could explain how to correct a certificate (14.6 %). Note: Of the deputies that knew how to correct a certificate, in most cases it was because their computer software had a "Correct" button on the screen. When probed, many struggled to explain how to do a correction certificate or explain the difference between a Void or Correction certificate.
8. Describe training received/completed to perform the duties of a weighmaster and the source:
 - One-hundred eleven (111) stated they received on-the-job training only (90.3 %).

- Eleven (11) stated they received on-the-job training and access to manuals (8.9%).
- One (1) stated they received training from the County Weights and Measures (0.8 %).

GENERAL DEVICE INFORMATION

As part of the survey, Special Investigators documented how the 125 weighmasters enter the weights to create a weighmaster certificate. Device-related violations are listed in the *Weighmaster Records Audit Results*.

1. How are weights entered (i.e., the method used to create weighmaster certificates)?
 - Seventy-five (75) weighmasters use an automated computer interfaced with scales (60.0 %)
 - Twenty-five (25) weighmasters enter weights by manually typing them into a computer system (20.3%).
 - Nineteen (19) weighmasters weights by handwriting them on the certificate (15.4 %).
 - Five (5) weighmasters used an impact printer and slip ticket (4.1 %).

WEIGHMASTER RECORDS AUDIT RESULTS

CDFR DMS Weighmaster staff audited over 3,986 records and observed 325 individual violations at the 125 Rock, Sand, and Gravel locations surveyed. The following lists the number of businesses with a violation and the corresponding compliance percentage.

1. One-hundred ten (110) businesses had at least one violation; compliance overall was 12.0 %.
2. Seventy-four (74) businesses failed to properly document the vehicle ID on a certificate; compliance overall was 40.8 %.
3. Forty-two (42) businesses failed to indicate on the certificate that the driver was on the vehicle for both the gross and tare weight, compliance overall was 66.4 %.
4. Thirty-one (31) businesses failed to maintain the predetermined vehicle tare weight within tolerance; compliance overall was 75.2 %.
5. Thirty-one (31) businesses failed to provide a correct LEGEND on the certificate; compliance was 75.2 %.

6. Twenty-seven (27) businesses failed to provide the nominal scale capacity marking on the scale indicator; compliance overall was 78.4 %.
7. Twenty-four (24) businesses (out of 75) failed to use approved (NTEP or CTEP) software when required; compliance overall was 68.0 %.
8. Nineteen (19) businesses failed to provide a correct deputy signature on the certificate; compliance overall was 84.8 %.
9. Fifteen (15) businesses failed to provide an address or description of the weighing location, or an incorrect address was listed on the certificate; compliance overall was 88.0 %.
10. Thirteen (13) businesses failed to provide the principal license name or had an incorrect principal license name on their weighmaster certificates; compliance overall was 89.6 %.
11. Nine (9) businesses failed to license a deputy issuing a weighmaster certificate; compliance overall was 92.8 %.
12. Seven (7) businesses failed to list the owner/agent/buyer's name on the weighmaster certificate; compliance overall was 94.4 %.
13. Five (5) businesses issued weighmaster certificates with altered or omitted weights; compliance overall was 96.0 %.
14. Five (5) businesses failed to provide a commodity description on a weighmaster certificate; compliance overall was 96.0 %.
15. Four (4) businesses failed to provide their weighmaster license upon request; compliance overall was 96.8 %.
16. Three (3) businesses failed to correctly issue a gross, a tare, or a net only weight on a weighmaster certificate; compliance overall was 97.6 %.

OTHER VIOLATIONS OBSERVED

Other violations observed during the survey included the following:

1. Two (2) businesses failed to properly issue a corrected certificate.
2. Two (2) businesses issued certificates for trucks loaded on-site, prior to entering the highway, that exceeded the load limits, i.e., greater than 80,000 lb or 82,000 lb for zero-emission vehicles.

3. Two (2) businesses failed to issue a certificate when required.
4. Two (2) businesses failed to indicate the unit of measure on a certificate.
5. Two (2) businesses failed to have their scales tested, approved, and sealed by the county department of weights and measures as required.
6. Two (2) businesses failed to provide consecutive numbering on their weighmaster certificates.
7. One (1) business failed to have scale at zero condition as required.
8. One (1) business failed to have a valid weighmaster license.
9. One (1) business failed to void a certificate properly.
10. One (1) business failed to document the gross, tare, or net weights properly on the certificate.

PREDETERMINED VEHICLE TARE WEIGHT VERIFICATION RESULTS

The predetermined tare weights of 256 vehicles and their trailers for hauling rock, sand, and gravel were verified during the survey. To comply with BPC § 12722 (b), the tare weight of the vehicle and its trailers cannot exceed the recorded tare being used by the weighmaster. The results of the reweighs are as follows:

1. Sixty (60) of 256 vehicles weighed more than the recorded tare being used by the weighmaster and were out of compliance; overall compliance was 76.5 %.
2. The range of vehicle weight errors was from -900 lb (underweight) to 1180 lb (overweight).

In addition to verifying that the tare weight was compliant, CDFM DMS Weighmaster staff asked how frequently the tare (weight of the vehicles with trailers) was reestablished to maintain weighing accuracy. The list below gives the relationship between how frequently the tares are reestablished and the percentage of compliance (vehicles weigh the same or less than the recorded tare being used by the weighmaster) for vehicles at these locations.

1. Tares are established daily at 42.1 % of the weighmasters using predetermined tares; compliance was 86.5 %.

2. Tares are established weekly at 29.5 % of the weighmasters using predetermined tares; compliance was 78.0 %.
3. Tares are established monthly at 22.1 % of the weighmasters using predetermined tares; compliance was 69.0 %.
4. Tares are established “as needed” or yearly at 6.4 % of the weighmasters using predetermined tares; compliance ranged from 46.7 % “as needed” to a low of 33.3 % yearly.
5. Twenty-seven (27) businesses, representing 22.1. % of all the businesses visited do not use a predetermined tare but weigh trucks when they arrive (empty) to determine the tare weight and again when they leave loaded; no predetermined tares are used.

CONCLUSION:

During the 2021 Survey, 325 individual violations were observed at 110 of the 125 weighmaster locations visited. Perfect compliance was achieved by only 12.0 % of the weighmaster locations and noncompliant locations had about three (3) documented violations each.

Of the 325 violations observed when auditing records during the 2021 Survey, 169 or 52.0 % were technical violations for issuing weighmaster certificates that had incorrect legends or business names, lacked required information such as the vehicle or container ID, no deputy signature, no Unit of Measure (e.g., pounds, lb), name of the owner/consignee missing, Container or Tare Code missing, and/or no commodity listed.

While survey respondents could verbalize basic weighmaster duties, define basic weighing terms, and knew where certificates were stored and how long they should be kept for, they still made errors when issuing certificates. The majority were unable to explain how to correct errors on certificates that have already been issued; only 14.6 % knew how to make corrections on an issued weighmaster certificate. While staff took time to provide outreach and education to weighmasters during the survey, additional outreach is needed.

A survey completed in May 2001, focused on licensed weighmasters who use predetermined vehicle tare weights in earth, stone, rock, sand, gravel, and asphalt business locations. The results are found in [DMS Notice W-01-4](#), “Statewide Baseline Survey – Predetermined Vehicle Tare Weights.” Neither a records audit nor questionnaire of weighmasters performing the work was performed. Additional Tare data taken during the 2021 survey demonstrated a relationship between compliance and frequency of reestablishment of recorded tares; Daily reweighs were compliant 86.5 % of the time, and compliance declined as time between reweighing vehicles was increased e.g., 69.0 % compliance when done monthly and 46.7 % compliance when done “as needed.”

The compliance rate for vehicle predetermined tares in 2001 was 87.8 % compared to 76.6 % in 2021, i.e., the noncompliance rate almost doubled from 12.2 % to 23.4 % in twenty years. The average error for the predetermined vehicle tares for both surveys was a negative number; the average error changed from -104 lb in 2001 to -49 lb in 2021. Note: It is acceptable for a vehicle to weigh lighter than the recorded tare weight used by the weighmaster.

Other data of interest when comparing survey results for the predetermined tare weights of vehicles verified include:

1. The predetermined tare with the greatest negative error (underweight vehicle, in compliance) was -1020 lb in 2001 and was -900 lb in 2021.
2. The predetermined tare with the greatest positive error (overweight vehicle, noncompliant) was +620 lb in 2001 and was +1180 lb in 2021 (nearly doubled).
3. The average negative error for predetermined tare weights (underweight vehicle, compliant) was -141 lb in 2001 and was -160 lb in 2021.
4. The average positive error for predetermined tare weights (overweight vehicle, noncompliant) was 168 lb in 2001 and was 311 lb in 2021 (nearly doubled).

All locations where predetermined tare weights were found to be non-compliant were required to re-establish the vehicle's predetermined tare weight. Notices of Violation were issued upon completion of the survey and deficiencies were brought to the attention of the weighmaster; follow-up inspections will be performed.