

C.A.S.E.
AIR CARRIER SECTION
POLICIES AND PROCEDURES

FUEL STORAGE AUDIT CHECKLIST

Audit Date: _____ **Allocation #:** _____

Station Code: _____

City: _____

Vendor Name: _____

Address: _____

Primary Contact: _____ **Title:** _____

Phone: _____

E-mail: _____

Auditor: _____

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NOTE: This checklist is based on the requirements stated on the ATA 103 for Jet Fuel Quality Control at Airports and the C.A.S.E. 2-A standard, chapter 4-3-0 of this manual. The reference numbers enclosed in parenthesis () that appear throughout this document refer to the applicable paragraph(s) in the standard. The reference numbers enclosed in brackets [] that appear throughout this document refer to applicable paragraph(s) in the ATA 103.

NOTE: When a checklist item is unable to be observed, enter “N/O” in the N/A column. Retain justification for the N/O entry with the audit records.

CONDITION CODES TO BE USED:

- ✓ = Satisfactory
- C = See Comments
- N/A = Not Applicable
- N/O = Not Observed

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| 1. Policy. | <u>YES</u> | <u>NO</u> | <u>N/A</u> |
|--|------------|-----------|------------|
| A. Are the latest revisions of the ATA 103 and C.A.S.E. 2-A standards available? (1.H) | _____ | _____ | _____ |
| B. Does the vendor maintain on-site, for a minimum of 36 calendar months, a file(s) of audit findings, corrective actions, and a copy of the signed VEL from audits for which a VEL was signed? Is (are) the file(s) accessible to the auditor? (1.G) | _____ | _____ | _____ |
| C. If a person's initials or employee number is (are) used for signing off paperwork, is there a roster showing name, number, and/or initials? [2.1.2.] | _____ | _____ | _____ |
| NOTE: If another person has accepted responsibility for accomplishment of the tasks, supporting documentation, completed by the person actually performing the tasks and containing their signature, initials, or identification number shall be available. | | | |
| D. Does the vendor ensure employees are trained, qualifying them to properly perform their assigned tasks? [2.1.10] | _____ | _____ | _____ |
| 1) Do vendor employees receive Human Factors training initially and every two years recurrent? [2.1.10] | _____ | _____ | _____ |
| E. Is defueled product, for purposes other than contamination, returned to the same air carrier or do all users unanimously approve a joint use procedure? Is the product sampled in accordance with ATA 103 requirements? [2.1.8] | _____ | _____ | _____ |
| F. Does the vendor have documented procedures for the reporting of deficiencies or safety hazards by its employees to their supervisors? [2.1.10.] | _____ | _____ | _____ |
| G. Does the vendor have a written procedure for notifying affected air carriers when new, additional, replacement, or modified equipment is placed in operations? [2.1.3] | _____ | _____ | _____ |
| H. Does the vendor have a documented procedure have a documented procedure for preventing the mis-additization of jet fuel? [2.1.6] | _____ | _____ | _____ |
| I. Does the vendor have a written policy for notifying affected air carriers when contaminated fuel is detected or when any fueling system becomes inoperative that might affect an air carrier's operations? [2.1.5. & 2.1.9] | _____ | _____ | _____ |

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| 1. | Policy. | YES | NO | N/A |
|-----------|--|-------|-------|-------|
| J. | Are master gauges, multi-meters, torque wrenches, and master hydrometers / thermometers calibrated? Are calibrations certificates available? [2.1.12] | _____ | _____ | _____ |
| K. | Is laboratory/field test equipment used to verify conformance to applicable specifications are required to be calibrated annually or at the frequency mandated by the applicable test method or manufacturer specifications, whichever is less? [2.1.12] | _____ | _____ | _____ |
| L. | Are calibrations performed by a company that uses standards whose accuracies are traceable to the National Institute of Standards and Technology (NIST) and in compliance with ANSI/ISO/IEC 17025:207, or equivalent? [2.1.12] | _____ | _____ | _____ |
| 2. | Alternate Means of Compliance. | | | |
| A. | If the vendor has issued any requests for variance or waivers, have they been accepted by the applicable air carrier(s) being serviced? [2.1.4] | _____ | _____ | _____ |
| B. | If the vendor has issued any requests for variance or waivers, have they been accepted by the applicable air carrier(s) being serviced? [5.2] | _____ | _____ | _____ |
| C. | When a waiver is no longer required, are written notifications of waiver termination submitted to all affected airlines? [2.1.4] | _____ | _____ | _____ |
| 3. | Fuel Receipts into Airport Storage. | | | |
| A. | Are there signatures, initials, or employee numbers on all receipt records? [2.1.2.] | _____ | _____ | _____ |
| B. | Are fuel receiving results recorded and retained for a minimum of twelve (12) months? [2.1.2] | _____ | _____ | _____ |
| C. | Where API gravity differences are greater than 1° due to stratification variances are the following provided: [2.3.1.] | | | |
| | 1) API gravity, initial boiling point, flash point, and end boiling point for upper, middle, and lower samples? | _____ | _____ | _____ |
| | 2) Do results show that the specification limits are not exceeded? | _____ | _____ | _____ |
| | 3) Is the CoA with the gravity stratification for U/M/L provided? | _____ | _____ | _____ |

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| 4. Pipeline / Marine Vessel Deliveries | <u>YES</u> | <u>NO</u> | <u>N/A</u> |
|--|------------|-----------|------------|
| A. Do shipping documents received prior to delivery certify that product delivered to the vendor meets all ASTM D1655 specification requirements and show: [2.3.2.2 and 2.3.5] | | | |
| 1) Visual Appearance? | | | |
| 2) Gravity, corrected to 60° F (15° C)? | | | |
| 3) Correct destination? | | | |
| 4) Batch number? | | | |
| 5) Fuel grade or type? | | | |
| 6) Quantity to be shipped? | | | |
| B. Are any failures of testing in accordance with [ASTM D1655] or [Table 2.3.1] immediately reported to all affected carriers? [2.3.2.] | | | |
| C. Is receiving tank gauged, recorded, and sumped before receipt? [2.3.2.1] | | | |
| D. Is the fuel receiving process monitored at all times by vendor personnel? [2.3.2.2] | | | |
| E. Are personnel able to communicate with the pipeline company during fuel receipt? [2.3.2.2] | | | |
| F. Are the receiving filter differential pressures, tank fill levels, and observations of any fuel leaks periodically monitored during fuel receipt? [2.3.2.2] | | | |
| G. Is it confirmed that fuel is not received and dispensed from the same tank at the same time? [2.3.2.2] | | | |
| H. Are the following tests being performed during fuel receipt (downstream of receiving filtration) and are results recorded: [2.3.2.2 and Table 2.3.1.] | | | |

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4. Pipeline / Marine Vessel Deliveries

| TEST | Multi-product Pipeline | Dedicated Pipeline | |
|--|-------------------------|-------------------------|-------------------------|
| | | No Certificate Received | Certificate Received |
| Visual Appearance (white bucket in U.S. only)? | Begin Mid* End _____ | Begin Mid* End _____ | Begin Mid* End _____ |
| Corrected API specific gravity? | _____ | _____ | _____ |
| Color membrane? | _____ | _____ | _____ |
| Free water? | _____ | _____ | _____ |
| Flash Point? | _____ | Yes No _____ | |
| Distillation? | Yes No _____ | _____ | |
| Freezing Point? | _____ | _____ | |
| Water Separation? (MSEP) | _____ | _____ | |
| Copper Strip Corrosion? | _____ | _____ | |
| Existent Gum? | _____ | _____ | |

* Midpoint testing only applies to shipments lasting more than four (4) hours.

5. Transport Truck / Railroad Car Deliveries

YES NO N/A

A. Are the following tests being performed **upstream** of airport receiving filtration and are results recorded: [2.2.2, 2.3.3.1 and Table 2.2.1.]

Test Property
APPEARANCE

Maximum Allowable
CLEAR and BRIGHT

Test Method
VISUAL

DENSITY
(API GRAVITY)

775-840 kg/m³ (37-51 °API)
Corrected to 15 °C (60 °F)

Ref. [Section 3.3]
[ASTM D1298]
Metric measurement shall be used in event of dispute (775-840 kg/m³).

B. Do shipping documents show: [2.3.3.1]

1) Correct destination?

2) Batch number?

3) Fuel grade or type?

4) Quantity to be shipped?

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| 5. Transport Truck / Railroad Car Deliveries | | <u>YES</u> | <u>NO</u> | <u>N/A</u> |
|--|--|------------|-----------|------------|
| C. | Is the certification document signed by the person(s) verifying the tests were performed? [2.3.3.1] | _____ | _____ | _____ |
| D. | Is the truck bonded during unloading from transport? | _____ | _____ | _____ |
| E. | Are the tank internal valves opened and is the ten (10) minute settling time met prior to fuel unloading? [2.3.3.1] | _____ | _____ | _____ |
| F. | Do shipping documents certify that product delivered to the vendor meets all ASTM D1655 specification requirements and show: [2.3.3.1 and Table 2.3.1] | | | |
| | 1) Visual Appearance? | _____ | _____ | _____ |
| | 2) Gravity, Corrected to 60°F (15°C)? | _____ | _____ | _____ |
| | 3) Distillation? | _____ | _____ | _____ |
| | 4) Flash Point? | _____ | _____ | _____ |
| | 5) Freezing Point? | _____ | _____ | _____ |
| | 6) Water Separation (MSEP)? | _____ | _____ | _____ |
| | 7) Copper Strip Corrosion? | _____ | _____ | _____ |
| | 8) Existent Gum? | _____ | _____ | _____ |
| G. | Are the truck unloading hoses and fittings inspected for deficiencies and cleanliness prior to use? [2.3.3.1] | _____ | _____ | _____ |
| H. | Is the fuel receiving process monitored at all times by vendor personnel? [2.3.3.2] | _____ | _____ | _____ |
| I. | Are the receiving filter differential pressure, tank fill levels, and observations of any fuel leaks periodically monitored during fuel receipt? [2.3.3.2] | _____ | _____ | _____ |
| J. | Is it confirmed that fuel is not received and dispensed from the same tank at the same time? [2.3.3.2] | _____ | _____ | _____ |

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| 5. Transport Truck / Railroad Car Deliveries | | YES | NO | N/A |
|--|--|-------|-------|-------|
| K. | Where FSII has been premixed into the fuel being delivered, has FSII concentration testing been conducted? [2.3.3.1] | _____ | _____ | _____ |
| L. | Upon completion of receipt are the following accomplished and recorded? [2.3.3.3] | | | |
| | 1) Inlet valves on receipt tanks are closed? | _____ | _____ | _____ |
| | 2) Receiving Filter Vessel Sump? | _____ | _____ | _____ |
| | 3) Receiving Tank Sump? | _____ | _____ | _____ |
| 6. Fuel Storage Facility Design Requirements | | | | |
| A. | Are all storage tanks equipped with the following? [2.4.2.] | | | |
| | 1) Floating suction with a means of verifying proper operation? | _____ | _____ | _____ |
| | 2) Inlet diffuser? | _____ | _____ | _____ |
| | 3) Access manway? (two are preferred) | _____ | _____ | _____ |
| | 4) Automatic high liquid level device(s) to prevent tank overflow? | _____ | _____ | _____ |
| | 5) Suitable secondary containment as applicable? | _____ | _____ | _____ |
| | 6) A placard, adjacent to tank sump drain(s), indicating the volume of tank drain piping? | _____ | _____ | _____ |
| B. | Are Above Ground Vertical Tanks also equipped with these additional required items? [2.4.2.1.] | | | |
| | 1) Fixed roof? | _____ | _____ | _____ |
| | 2) Light-color coated floors and sides up to the top of the first wall panel? | _____ | _____ | _____ |
| | NOTE: Newly constructed tanks require complete internal coating, including the tank roof. | | | |
| | 3) Cone down bottom to positive center sump with drain? | _____ | _____ | _____ |
| | 4) Slotted tube as means of proper sampling and manual gauging? | _____ | _____ | _____ |
| | 5) Is it confirmed that non-metallic materials are not used for tank construction? | _____ | _____ | _____ |

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6. Fuel Storage Facility Design Requirements

YES NO N/A

C. Are Above Ground Horizontal Tanks also equipped with these additional required items? [2.4.2.2.]

1) Complete internal light-colored coating (for carbon steel tanks?)

_____ | _____ | _____

2) Sloped bottom to positive sump with drain?

_____ | _____ | _____

3) Means for proper sampling and manual gauging?

_____ | _____ | _____

4) Is it confirmed that non-metallic materials are not used for tank construction?

_____ | _____ | _____

D. Are Underground Tanks also equipped with these additional required items? [2.4.2.3.]

1) Complete internal light-colored coating (for carbon steel tanks?)

_____ | _____ | _____

2) Are manways and other tank appurtenances extended above ground?

_____ | _____ | _____

3) Sloped bottom to positive sump with drain?

_____ | _____ | _____

4) Means for proper sampling and manual gauging?

_____ | _____ | _____

E. Is fuel filtered while being received into and dispensed out of storage? [2.4.3.]

_____ | _____ | _____

F. Do filter/separators meet the following requirements? [2.4.3.]

1) Meet EI 1581 / EI 1582 Specifications?

_____ | _____ | _____

2) Have an automatic water defense system that will stop fuel flow or alert operating personnel when actuated by a high water level?

_____ | _____ | _____

3) Does the water defense system have a means of operational test?

_____ | _____ | _____

G. If micronic filters are in use, do they meet the latest edition of EI 1590? [2.4.3. NOTE 1]

_____ | _____ | _____

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| 6. Fuel Storage Facility Design Requirements | <u>YES</u> | <u>NO</u> | <u>N/A</u> |
|--|------------|-----------|------------|
| H. If additional filtration/treaters are in use, is a written Maintenance/test program in use to ensure proper operation? [2.4.3. NOTE 2] | _____ | _____ | _____ |
| I. Are all filter vessels equipped with the following? [2.4.3.] | | | |
| 1) Provisions for the elimination of air? | _____ | _____ | _____ |
| 2) Direct reading differential pressure gauges? | _____ | _____ | _____ |
| 3) Manual sump drains? | _____ | _____ | _____ |
| 4) Upstream and downstream sampling (Millipore) connections, including probes and dust caps or plugs, and placards indicating connections for sampling? Sampling probe shall have an arrow on the flat of the hex pointing in the direction of flow? | _____ | _____ | _____ |
| 5) Pressure relief valves? | _____ | _____ | _____ |
| 6) Placard indicating month and year of last filter change? | _____ | _____ | _____ |
| 7) Operational data plate that displays latest edition information? | _____ | _____ | _____ |
| J. Are filter coalescer elements replaced on the conditions described in [Section 3.14] , not to exceed 36 months? [2.4.3.] | _____ | _____ | _____ |
| K. Where more than one grade of fuel is stored, are physically segregated systems in place to prevent accidental mixing of products? [2.4.4.] | _____ | _____ | _____ |
| L. Are connections for receiving and dispensing different grades of fuel physically incompatible? [2.4.4.] | _____ | _____ | _____ |
| M. Are all emergency fuel shut-off valves and switches clearly marked and unobstructed? [2.4.5.] | _____ | _____ | _____ |
| N. Does “EMERGENCY FUEL SHUT-OFF” sign indicate method of operation? [NFPA 407] | _____ | _____ | _____ |
| O. Are fire extinguishers with inspection tags positioned in accordance with applicable safety requirements? [2.4.6.] | _____ | _____ | _____ |

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| 6. Fuel Storage Facility Design Requirements | <u>YES</u> | <u>NO</u> | <u>N/A</u> |
|---|------------|-----------|------------|
| P. Are loading hoses and couplings: [2.4.7.1 and 2.4.13] | | | |
| 1) EI 1529, Grade 2, Type C? | | | |
| 2) Installed within two (2) years of the date of the hose’s manufacture and have a maximum service life of ten (10) years from the date of manufacture? | | | |
| Q. Where re-usable couplings are installed on loading hoses: [2.4.7.1] | | | |
| 1) Do the hoses and couplings meet the requirements of EI 1529 and does the operator abide by the testing requirements of EI 1540? | | | |
| 2) Do operators choosing to reattach couplings undergo training from the manufacturer? | | | |
| R. Are dust covers or other protective devices in use to keep out dirt and water? [2.4.7.1] | | | |
| S. Are “NO SMOKING”, “FLAMMABLE”, and product identification signs prominently displayed? [2.4.8.] | | | |
| T. Is the storage facility properly identified and color coded in accordance with EI 1542? [2.4.9.] | | | |
| U. Are metal underground tanks and piping cathodically protected? [2.4.10.] | | | |
| V. Are relaxation chambers equipped with? [2.4.11.] | | | |
| 1) A provision for the elimination of air? | | | |
| 2) Protection by pressure relief valve? | | | |
| 3) Manual sump drain? | | | |
| W. Are bulk air eliminators equipped with: [2.4.12] | | | |
| 1) Protection by pressure relief valve? | | | |
| 2) Manual sump drain? | | | |

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6. Fuel Storage Facility Design Requirements

YES NO N/A

X. Is there an operable deadman control device for all truck loading operations? [2.4.13. and NFPA 407] _____

Y. Is static bonding available, established and remain in place throughout the loading operations for all truck and fill stands? [2.4.13.] _____

Note: Bottom loading control systems do not negate the need to bond with a separate bonding cable.

Z. Are loading stations equipped with pressure control provisions necessary to prevent damage to the refueling truck during high level shutdown of truck mounted valves? [2.4.13.] _____

AA. Are bottom-loading nozzles and couplers equipped with 60 mesh or finer screens? [2.4.13.] _____

Note: Only jet fuel from the following are eligible for recovery in a reclaim tank:

Vehicle sumps, storage tank sumps, filter sumps, low point drains, high point vents, surge tanks, relief tanks, samples from fuel receipts, membrane filtration tests, gravity and density checks, equipment maintenance, filter change out, and draining tanks for inspection, cleaning and repair [2.4.14.1]

Note: Sump separators (sometimes referred to as quick flush systems) are vertical vessels with a sloped bottom and a small valve to remove contamination at the bottom.

Note: Vessels or tanks with greater than 50USG capacity cannot be considered sump separators.

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6. Fuel Storage Facility Design Requirements

YES NO N/A

BB. Does a reclaim tank have the following? [2.4.14.1.]

1) A means for proper sampling and manual gauging of the tank? _____

2) Means for access or visual inspection? _____

3) Means to prevent overfill? _____

4) Suitable secondary containment as applicable? _____

5) A placard, adjacent to tank sump drain(s), indicating the volume of tank drain piping? _____

6) Complete internal light-color coating for carbon steel tanks? _____

7) Sloped bottom to a positive sump with a drain or permanent pump? _____

8) Tank appurtenances, access entrances, vents, inspection ports, etc., that are extended above ground and are designed to prevent the ingress of contaminants? _____

9) A placard to identify it as “JET A RECLAIM TANK INTENDED FOR AVIAITON USE” or “JET A RECOVERY TANK INTENDED FOR AVIATION USE”? _____

CC. Is the following completed prior to returning reclaimed product to an off-line storage tank: [2.4.14.1]

1) Reclaim tank sumped until Clear & Bright? _____

Note: Sumped fuel that does not meet clear and bright requirements must be disposed of.

2) API Gravity of product verified to meet requirements of ASTM D1655? _____

3) Is reclaim product filtered prior to the return to the off line storage tank in a manner that meets the requirements in section 2.4.3? _____

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6. Fuel Storage Facility Design Requirements

YES NO N/A

DD. Where installed, are sump separators: [2.4.14.2.]

1) Has the fuel settled in the sump separator for a minimum of 10 minutes before returned to storage?

_____ | _____ | _____

2) Is the fuel visually confirmed to be clear & bright before returned to storage?

_____ | _____ | _____

3) Is the tank(s) constructed of stainless steel or mild steel that is internally lined with a light colored compatible with the type of aviation fuel intended to be used in the system?

_____ | _____ | _____

4) Equipped with spring loaded self-closing inlet valves?

_____ | _____ | _____

5) Equipped with sloped bottom of at least 30 degrees to a positive sump with drain?

_____ | _____ | _____

6) Equipped with a means of access for visual inspection, cleaning, and designed to avoid the ingress of water or Contaminants?

_____ | _____ | _____

7) Equipped with a placard, adjacent to tank sump drain(s), indicating the volume of tank drain piping?

_____ | _____ | _____

8) Equipped with a suitable pumping system (e.g., explosion proof) to return product back to storage?

_____ | _____ | _____

9) Equipped with an explosion-proof heating system and associated explosion-proof switch(s) and fixture(s), if necessary?

_____ | _____ | _____

10) Have a procedure to ensure vent remains operable, if fitted?

_____ | _____ | _____

11) Placarded as "Jet A"?

_____ | _____ | _____

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7. Fuel Storage Facility Checks.

YES NO N/A

A. Are the required checks documented as being complied with at the minimum intervals [2.5.] and within the required timelines of [2.1]?

| DAILY | WEEKLY | MONTHLY | QUARTERLY | ANNUALLY |
|--|---|--|---|--|
| General condition of tank yard | Bonding Cable / System Continuity | Filtration Color Membrane (Millipore) Results recorded on ATA 103.08 (or similar) | Emergency Shut-off System | Storage Tank Interiors. Results recorded on ATA 103.07A (or similar) |
| Security, Fire and Safety Deficiencies | Filter DP recorded at or Corrected to Max Achievable Flow | Free Water Test Results recorded on ATA 103.08 (or similar) | Water Defense System (External Checks) | Filter Differential Pressure Gauges |
| Storage Tank and Product Reclamation Tanks Sumps | | Nozzle Screens | Tank High Level Controls | Filter Elements Results recorded on ATA 103.09A or 103.09B (or similar) |
| Sump Separators | | Signs, Labels, and Placards | Product Reclaim Tanks and Sump Separators Results recorded on ATA 103.07C (or similar) | Filter/Separator Heaters |
| Filter Sumps | | Floating Suctions | | Tank Vents |
| Filter Differential Pressure | | Fire Extinguishers | SEMI-ANNUAL | Cathodic Protection |
| Hoses, Swivels, Nozzles and Couplers | | Clay Treaters | Hose Pressure Checks | Line Strainers |
| Static Reels, Cables and Clamps | | Fuel System Icing Inhibitors (FSII) (for premixed Jet-A with FSII only) | Static Stock Quality Check. NOTE: Transferring product from one to tank to another does not alleviate the static stock status. | Water Defense System Inspection and Test |
| Fire Extinguishers | | | | Single Stage Coalescers. (Haypacks) |
| Relaxation Chambers | | | | Filter Vessel Pressure Relief Devices |
| Bulk Air Eliminators | | | | |

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| 7. Fuel Storage Facility Checks. | <u>YES</u> | <u>NO</u> | <u>N/A</u> |
|---|------------|-----------|------------|
| B. Do the records, either paper or electronic, indicate when any equipment was not in use? [2.1.2] | _____ | _____ | _____ |
| C. Does all facility equipment, not in daily use, have all daily, weekly, monthly, quarterly, semi-annual and annual checks current prior to returning the equipment to service? [2.5.1] | _____ | _____ | _____ |
| D. Are legible signatures, initials or employee identification numbers used to identify the person performing the tasks or the person accepting responsibility for the performance of the task? [2.1.2 and 2.5.2] | _____ | _____ | _____ |
| E. Are records retained in local files as follows: [2.1.2 and 2.5.2] | | | |
| 1) Daily, Weekly, Monthly, Quarterly, Semi-Annual, Annual Fuel receipt and Fuel quality check records – 12 months? | _____ | _____ | _____ |
| 2) Filter Change/ Inspection Records – 36 months? | _____ | _____ | _____ |
| 3) Reclamation Tank Inspection and Cleaning records – 36 months? | _____ | _____ | _____ |
| 4) Sump Separator Tank Inspection and Cleaning Records – 36 months? | _____ | _____ | _____ |
| 5) Storage Tank Inspection and Cleaning Records – Indefinitely? | _____ | _____ | _____ |
| 6) Training records. – Indefinitely? | _____ | _____ | _____ |

F. Physical Fuel Storage Facility Checks:

Upon completion of the checks, record results using the following condition codes:

S = Indicates Satisfactory.

C = Indicates Comment. Comment required in remarks section.
Corrective action must be documented and dated.

N/U = Indicates unit Not Used.

N/A = Indicates Task Not Applicable.

N/S = Not in Service.

NOTE: Sumps to be rated according to [Section 3.1]

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7. Fuel Storage Facility Checks.

Condition Code

F. Physical Fuel Storage Facility Checks:

1) General Condition of Tank Yard? [2.5.3.1.]

2) Security, Fire and Safety Deficiencies? [2.5.3.2.]

3) Presence of Any Fuel Leaks? [2.5.3.2.]

G. Storage Tank Sumps: [2.5.3.3.]

NOTE: Containers must be bonded, regardless of container material. [3.1.1]

1) Do the sumps have a placard identifying the minimum amount of sample to displace capacity of piping? [2.4.2.] Tank #

Tank #

Tank #

Tank #

Tank #

H. Filter Sumps: [2.5.3.5]

NOTE: Containers must be bonded, regardless of container material. [3.1.1]

Filter #

Filter #

Filter #

I. Product Reclamation Tank Sump(s): [2.5.3.3]

NOTE: Containers must be bonded, regardless of container material. [3.1.1]

Tank #

Tank #

J. Are sump samples properly performed, recorded, and rated? [2.5.3.3. and 2.5.3.5]

K. Is the first sump sample read and being recorded? [2.5.3.3. and 2.5.3.5]

L. Check and record Filter Differential Pressure. [2.5.3.6]

Filter #

Filter #

Filter #

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| 7. Fuel Storage Facility Checks. | <u>Condition Code</u> |
|---|-----------------------|
| M. Condition of Hoses, Swivels, Nozzles and Couplers. [2.5.3.7] | ____ |
| N. Condition of Static Reels, Cables and Clamps. [2.5.3.8] | ____ |
| O. Location, accessibility, and serviceability of fire extinguishers. [2.5.3.9 and 2.5.5.5] | ____ |
| P. Perform sump of Relaxation Chamber. [2.5.3.10] | |
| 1) Record results. | ____ |
| 2) Are the test results acceptable? | ____ |
| Q. Perform sump of Bulk Air Eliminator. [2.5.3.10] | |
| 1) Record results. | ____ |
| 2) Are the test results acceptable? | ____ |
| R. Perform electrical continuity check on bonding cables and clamps. [2.5.4.1 and 3.10] | |
| 1) Is the test being performed correctly? | ____ |
| 2) Is the resistance 25 ohms or less? | ____ |
| S. Perform a Filtration (Millipore) test downstream of filtration. [2.5.3.1] | |
| 1) Is the test being performed correctly? | ____ |
| 2) Are the results acceptable? | ____ |
| 3) Are flow arrows pointed in the correct direction? | ____ |
| T. Perform a Free Water test downstream of filtration. [2.5.5.5, 3.3.3 and 2.2.2] | |
| 1) Is the shelf life of the free water kit within limits? | ____ |
| 2) Is the free water detection kit sensitive to thirty (30) parts per million? | ____ |
| 3) Is the operator performing the test correctly? | ____ |

C.A.S.E.

AIR CARRIER SECTION

POLICIES AND PROCEDURES

| 7. Fuel Storage Facility Checks. | <u>Condition Code</u> |
|--|-----------------------|
| U. On loading racks equipped with combined bonding and overfill protection (Scully system), is the resistance being checked between the system connection and facility ground? [2.5.4.1] | _ _ |
| V. Inspect nozzle screen(s) for particles or other solid contaminants, and inspect for damage. [2.5.5.2] | _ _ |
| W. All fueling equipment is properly marked and required placards, instructions, signs, etc. are in place and readable. [2.5.5.2] | _ _ |
| X. Check floating suction operation. [2.5.5.4] | Tank # _ _ _ _ |
| | Tank # _ _ _ _ |
| | Tank # _ _ _ _ |
| Y. Check operation of emergency fuel shut-off system <u>or verify by documented records.</u> [2.5.6.1] | _ _ |
| Z. Check operation of water defense system <u>or verify by documented records.</u> [2.5.6.2 and 2.5.8.8] | |
| 1) Is the test being performed correctly? | _ _ |
| 2) Are the results acceptable? | _ _ |
| AA. Check operation of high-level tank control system <u>or verify by documented records.</u> [2.5.6.3] | |
| 1) Is the test being performed correctly? | _ _ |
| 2) Are the results acceptable? | _ _ |
| BB. Check product reclamation tank and Sump Separators interiors <u>or verify by documented records.</u> [2.5.6.4] | _ _ |
| CC. Check storage tank interiors <u>or verify by documented records?</u> [2.5.8.1] | _ _ |
| DD. Check that filter vessels are opened annually to visually check condition of interior for cleanliness, and integrity of elements <u>or verify by documented records?</u> [2.5.8.3] | _ _ |

C.A.S.E.

AIR CARRIER SECTION

POLICIES AND PROCEDURES

7. Fuel Storage Facility Checks.

Condition Code

EE. Check operation of Filter Differential Pressure Gauge(s). [2.5.8.2]

1) Is the test being performed correctly?

2) Are the inlet filters being changed in accordance with manufacturer's recommendations?

FF. Check operation of filter/separator and drain line heaters for proper operation, if applicable. [2.5.8.4]

GG. Check tank vents for condition and operation. [2.5.8.5]

HH. Check line strainers for cleanliness or damage, if applicable. [2.5.8.7]

II. Check Filter Vessel Pressure Relief Devices to ensure they have not been painted over, that the data plate is visible, and that seals, if installed, are intact. [2.5.8.10]

8. Hydrant System Requirements.

YES NO N/A

A. Are the required checks documented as being complied with at the minimum intervals? [2.7.2]

| DAILY | MONTHLY | QUARTERLY | ANNUALLY |
|---------------------------------|---|---|---------------------|
| Hydrant Pit | Isolation Valve Pits and Control Vaults | Isolation Valve Pits and Control Vaults | Cathodic Protection |
| Emergency Fuel Shutoff Stations | Hydrant Valve Assembly | SEMI-ANNUAL | Pit Valves |
| | Low Point Drains | Piping Integrity | |
| | Emergency Fuel Shutoff | Surge Absorbers | |

B. Is there a means to drain fuel at low point drains and bleed the system of air at high point vents and are they clearly identified? [2.6.4.]

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AIR CARRIER SECTION

POLICIES AND PROCEDURES

Note: In accordance with 2.7.8 additional intervals may be required. See ATA103 form 103.05C

Physical Hydrant System Checks:

Upon completion of the checks, record results using the same condition codes listed in section 7.F.

| 9. Hydrant System Checks: | <u>Condition Code</u> |
|--|-----------------------|
| A. Check hydrant pits for the following: | |
| 1) Check pits for cleanliness and standing liquid and visually check hydrant pits and all components for deficiencies. | _ |
| NOTE: Daily accumulation of liquid can be present, between daily cleaning operations, provided the level is below the hydrant valve inlet flange. [2.7.3.1.] | |
| 2) Are dust covers on the hydrant flange present and installed when the pit is not in use refueling? [2.7.3.1.] | _ |
| 3) Is a hydrant outlet wear gauge used to check wear on the interface of hydrant pit couplers? [2.7.7.2] | _ |
| 4) Check all isolation valve pits for condition, fuel leaks, and standing liquid and debris. [2.7.4.1.] | _ |
| 5) Verify satisfactory operation of hydrant pit valve by Installing a suitable cover over the pit or pit valve that will contain spray and protect the operator and depressing the equalizing valve. [2.7.4.1.] | _ |
| NOTE: If a small release of fuel that quickly stops is observed, the valve is acceptable for continued service. However, if the initial release of fuel is followed by a steady flow, the pit valve assembly is unserviceable and shall be repaired prior to further use. | |
| 6) Check condition of hydrant pit valve and sense line connectors. [2.7.4.2.] | _ |
| B. Verify that all emergency fuel shutoff stations on the ramp have clear access and are placarded to identify the Emergency Fuel Shutoff location. [2.7.3.2.] | _ |
| C. Check emergency fuel shutoff stations for operation or verify by documented records. [2.7.4.4.] | _ |
| D. Does the operator have a documented procedure specific to actions required if the Emergency Fuel Shut Off System fails to stop the flow of fuel during activation? (2.6.1.0) | _ |

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AIR CARRIER SECTION

POLICIES AND PROCEDURES

E. Where installed, check general condition and operating pressure setting of surge absorber or verify by documented records. [2.7.6.2]

F. Where installed, check the satisfactory operation of the hydrant leak detection system or verify by documented records. [2.7.6.1.]

G. Check general condition of the low point assembly and all components. [2.7.4.3.]

NOTE: Bonding is not permitted when taking a low point drain sample.

1) Are they free from any apparent deficiencies?

2) Perform a running sample of the low point.

NOTE: Fully open all low point drain valves to ensure maximum practical flow into suitable equipment. The line flushing volume should be calculated based upon the diameter of the pipe to be flushed, and at least one (1) linear foot of line displacement or maintained at maximum practical flow for at least 5-seconds. After line displacement, flush a minimum of two (2) gallons at each low point. A running sample shall be taken into a suitable container and an appearance test (white bucket.)

See CACS-25:

10. Fueling Equipment Design Requirements See CACS-25

11. Fueling Equipment Checks See CACS-25

12. Tanker Vehicle Loading Facilities See CACS-25

