

# Directive

9180.48

April 8, 2009

## STOWAGE EXAMINATION SERVICES

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## 1. PURPOSE

This directive establishes the policies and procedures for requesting, performing, and certificating stowage examination services under the U.S. Grain Standards Act (USGSA), and the Agricultural Marketing Act of 1946, as amended (AMA).

## 2. REPLACEMENT HIGHLIGHTS

This directive is revised to include information concerning the conditional dismissal/withholding of mandatory and service-on-request stowage examinations of land carriers and domestic barges and to include information on the use of closed-circuit television systems (CCTV) for hopper railcar stowage exams. This directive supersedes FGIS Directive 9180.48, dated 3-14-05, Program Notice 06-07, dated 6-12-06, and Program Notice 09-03, dated 2-2-09.

## 3. DEFINITION

A stowage examination is a service performed by official personnel or licensed cooperators who visually inspect an identified carrier or container and determine if the stowage areas are clean; dry; free of infestation, rodents, toxic substances, and foreign odor; and suitable to store or carry bulk or sacked grain, rice, beans, peas, lentils, or processed commodities.

## 4. POLICY

### a. USGSA.

- (1) Sections 800.75(f) and (j) of the regulations under the USGSA require that a prior-to-loading stowage examination be performed when an export or outbound domestic lot of grain is officially sampled and inspected at the time of loading, when an outbound lot of grain in a land carrier is officially weighed, or when an official checkloading service is requested.
- (2) Section 800.75(f) also provides for the performance of a service-on-request stowage examination, upon request, by an interested party.
- (3) When a stowage examination is required by the USGSA (prior-to-loading stowage examination), official personnel will withhold official inspection, weighing, or checkloading service until the stowage area has been examined and declared fit.

b. AMA.

- (1) Section 868.31(g) of the regulations under the AMA requires that a prior-to-loading stowage examination be performed when an official checkloading service is requested.
- (2) Section 868.31(m) of the regulations also provides for the performance of a service-on-request stowage examination, upon request, by an interested party.
- (3) FGIS instructions (e.g., Rice Inspection Handbook) require that a prior-to-loading stowage examination be performed when an export or outbound domestic lot of a commodity is officially sampled and inspected at the time of loading.
- (4) When an applicant for official checkloading service requests that a stowage examination not be performed, or when the carrier is partially loaded before official personnel can perform a stowage examination, the request for an official checkloading service will be considered as a request for an official observation of loading service and certificated as such.

c. Prior-to-Loading (Mandatory) Stowage Examinations.

- (1) Prior-to-loading stowage examinations required by the USGSA, the AMA, FGIS instructions, or a purchase agreement must be conducted at the loading site before loading begins.
- (2) Once the stowage area is examined and declared fit, loading must commence within 24 hours or another stowage examination must be performed. Loading a small amount of a commodity into a stowage area to circumvent this requirement does not preclude the performance of another stowage examination.
- (3) If official personnel believe that the condition of the stowage area has deteriorated since it was last examined and declared fit, another stowage examination will be performed.

d. Service-On-Request (Permissive) Stowage Examinations.

- (1) Service-on-request stowage examinations may be performed at any location.
- (2) Service-on-request stowage examinations are performed as a separate service, independent of any other service.
- (3) Performance of a service-on-request stowage examination does not preclude the need for a prior-to-loading stowage examination at a later date or time.

- e. Conditional Dismissal/Withholding of Mandatory and Service-On-Request Stowage Examinations of Land Carriers and Domestic Barges. Section 800.49 (a) of the regulations under the USGSA and FGIS authorizes official service to be withheld if an applicant fails to provide suitable conditions (non-hazardous) to perform the inspection service.
- (1) Prior to dismissing the stowage examination, official inspection personnel must immediately notify the applicant for service of the hazardous condition and provide the applicant an opportunity to correct the condition, if possible.
  - (2) If the hazardous condition (e.g. ice/snow on top of railcar) can not be eliminated then official inspection personnel must dismiss performing the stowage examination.
  - (3) If a stowage exam service is dismissed because of an existing unsafe condition, official personnel are permitted to perform other related services that typically require the examination and approval of the stowage space, provided that performing the other related service is considered safe by official inspection personnel.
  - (4) When the stowage area of a carrier is not examined because of hazardous condition, show in the remarks section of the Official Certificate and on the work records the statement "Stowage area not examined". However only show the reason on the work record.
- f. Stowage Examinations Waivers. Section 800.75(f)(2) of the regulations under the USGSA and FGIS instructions require stowage examinations of carriers when export and domestic grain shipments are officially sampled and inspected, or weighed, at the time of loading. However, due to trade requests and safety considerations, FGIS established the following stowage examination waiver requirements for all domestic shipments.

**NOTE: Waivers are not available for export shipments.**

- (1) Applicants for inspection and all interested persons must submit written statements attesting that a stowage examination is not needed and why.
  - (2) Official certificates must show the statement "Stowage area not examined."
- g. Special Insect Infestation Option. If bulk grain or rough rice in a partially-filled stowage area is found to be unfit because of insect infestation and the vessel is of a type approved by FGIS for in-transit fumigation, the applicant for the inspection service may, in lieu of correcting the infested condition prior to loading, elect to load the grain or rice into the unfit stowage area and then fumigate the grain or rice in the stowage area in accordance with the FGIS Fumigation Handbook. (The applicant may also elect to remove the infested grain or rice or apply a contact insecticide to the grain or rice, and then to request that the stowage area be reexamined.)

- h. Original Inspections, Reinspections, and Appeal Inspections. For a reinspection or appeal inspection to be performed, the condition of the stowage area must not have changed. If the condition has changed (e.g., the stowage area was treated for infestation or swept clean), a reinspection or appeal inspection service may not be performed; however, a new original inspection may be performed if requested.

## 5. RESPONSIBILITIES

### a. Jurisdiction.

- (1) Original and reinspection stowage examinations under the USGSA will be performed by the agency or field office that has jurisdiction for original USGSA inspection or weighing services for the area where the stowage examination is to be performed.
- (2) Original stowage examinations under the AMA must be performed by the licensed cooperators or FGIS field office that has jurisdiction for original AMA inspection services for the area where the stowage examination is to be performed.
- (3) Appeal stowage examinations under either the USGSA or AMA will be performed by the FGIS field office that has jurisdiction for appeal inspection services for the area where the stowage examination is to be performed.

### b. Conduct of Official Personnel.

- (1) Stowage examinations will be performed only by official personnel who are trained and licensed for that function or authorized FGIS field office personnel and physically able to perform stowage examinations.
- (2) When a stowage area is declared unfit, official personnel must not offer advice on how to correct the unfit condition. Rather, the inspector will simply inform the applicant of the condition encountered. It is the applicant's sole responsibility to correct any unfit condition.
- (3) Official personnel must not act in such a manner that gives or may give the appearance of partiality or conflict of interest or which may adversely impact on the integrity or impartiality of the service.
- (4) Official personnel must not accept, take, or solicit gifts, gratuities, entertainment, and other items of tangible value, including certain favors, in conjunction with the performance of official duties.

## 6. SAFETY

The requirements in this section are mandatory for FGIS employees. All others are strongly encouraged to also follow these guidelines.

a. General. Official personnel will:

- (1) Comply with all pertinent Occupational Safety and Health Administration (OSHA) requirements; e.g., 29 CFR 1917-1918.
- (2) Obey all posted warning signs and wear appropriate protective equipment when conditions warrant; e.g., ear protection when the noise level in the stowage area is high and eye protection when working around flaking rust or paint.
- (3) Ensure that adequate first aid and rescue equipment is available and identify the individual responsible for maintaining this equipment so that quick access to the equipment can be made in case of an accident.

b. Visually-Monitoring. Official personnel will:

- (1) Not enter a stowage area unless they are being visually monitored by a person who is in a position to render prompt aid if necessary; e.g., when official personnel enter a ship hold, either other official personnel, elevator/mill personnel, longshoremen, stevedores, or representatives of the carrier must continually observe them from the main deck. Observers must be able to speak and understand English, have ready access to emergency communication equipment, and have a clear understanding of his/her role in an emergency.
- (2) When practical, carry a communication device to use in emergencies.

c. Life Vests. Official personnel must wear U.S. Coast Guard-approved Type I PFD, Type II PFD, Type III PFD, or Type V PDF life vests during midstream ship examinations and all barge stowage examinations (midstream and dockside).

**NOTE: Life vests must be international orange in color and contain retro reflective panels. If used at night, the vest must be equipped with a light and a whistle.**

d. Clothing.

- (1) Official personnel must wear hard hats that meet the American National Standards Institute (ANSI) Z89.1 or Z89.2 criteria.
- (2) Official personnel are recommended to wear shoes or boots that have nonslip soles and definite heels for good footing on ladders.
- (3) Official personnel are recommended to wear clothes that are reasonably close-fitting to reduce the possibility of becoming snagged on ladders or other structural elements of carrier stowage area.
- (4) Official personnel are recommended to wear close-fitting and pliable nylon-mesh gloves.

e. Gangways, Stairs and Ladders. Official personnel will:

- (1) Check the gangway before boarding barges and other vessels. If the gangway or other means of access is deemed to be unsafe, withhold the stowage examination until safe access is provided.
- (2) Use Australian ladders, when available, rather than ladders to enter and exit the stowage area.
- (3) Exercise extreme care when using ladders that are permanently affixed to the carrier wall. Such ladders can become bent, broken, twisted, corroded, or have missing rungs. If the ladder is deemed to be unsafe, withhold the stowage examination until safe access is provided.

f. Chemical Treatments. Official personnel will:

- (1) Remain alert to their physical condition when inside stowage areas. Stowage areas are often treated with chemicals, usually for the purpose of controlling insect infestation. Contact with toxic fumes or sprays from these chemicals can cause serious injury or death.

**NOTE: Shortness of breath, light-headedness, drowsiness, or a headache can be indicative of a dangerous atmosphere. When these symptoms are experienced, immediately leave the area and seek medical attention.**

- (2) Not enter any stowage area where use of a chemical respirator or self-contained breathing apparatus is required to protect them from toxic chemicals or oxygen deficiency.
- (3) Not examine the stowage area, if the stowage area has been treated with a contact agent, until the contact agent has been allowed ample time to eliminate the infestation (minimum 4 hours) and the stowage area has been adequately aerated.

- (4) Not examine the stowage area, if the stowage area has been fumigated, until after the time period specified by the manufacturer for effective use of that type of fumigant (e.g., 72 hours) and the stowage area has been adequately aerated.
    - (a) For shipholds and barges, a gas-free certificate must be issued by a qualified marine chemist or licensed fumigator before official personnel may enter the stowage area.
    - (b) For railcars, trucks, and containers the EPA licensed applicator should certify the stowage area is safe to enter.
    - (c) Official personnel will not enter a treated stowage area until all pertinent Environmental Protection Agency requirements are complied with by the applicant for service; e.g., mandatory testing and certification for the presence of certain chemicals.
  - (5) Not examine the stowage area, if the stowage area has been treated to remove odor (deodorized), until the treatment has had an ample opportunity to remove the odor and the stowage area has been adequately aerated.
  - (6) Obtain the label from the chemical container used and follow the directions or call the agency, cooperator, or field office to determine proper safety precautions if unsure whether the chemical used to treat a stowage area is a contact agent or fumigant.
  - (7) Record the name of all chemical treatments used, date of application, hours of aeration, and other applicable information on the stowage examination worksheet.
  - (8) Require a gas-free certificate before entering the stowage area in question if there is any indication of flammable vapors or low oxygen content in holds or tanks.
- g. Lighting. Official personnel will not conduct stowage examinations unless the stowage area is adequately lighted.
- h. Transportation. Official personnel will:
- (1) Determine if weather and/or water conditions make it safe for water travel.
  - (2) Travel to and from barges at midstream and other vessels at anchor via U.S. Coast Guard-approved launch, tugboat, licensed water taxi, or air taxi; or by Federal Aviation Administration-approved helicopter.
  - (3) Not jump on or off a barge or other vessel. They must be able to step easily from the launch to the vessel without stretching or straining over water. Expect slippery or obstructed deck conditions when boarding a vessel.



- (4) Determine at the time of boarding if they can make a safe boarding. If boarding is deemed to be unsafe, withhold the stowage examination until safe boarding is possible.

i. Dock Areas. Official personnel will:

- (1) Remain alert for loose or rotting boards that may not support their weight while walking on a dock or wharf.
- (2) Learn the locations of life rings, emergency ladders, and telephones. Stay clear of cables whether slack or under tension.

j. Ships and Barges. Official personnel will:

- (1) Not conduct midstream ship or barge stowage examinations at night; except when the ship or barge is docked alongside a floating rig.
- (2) Require a gas-free certificate before entering an unventilated, enclosed stowage area; any stowage area known or suspected to have been fumigated (e.g., presence of fumigant canisters) or to contain inadequate oxygen; or any stowage area that has heavy concentrations of rust or very fresh paint.
- (3) Notify the captain, fleet foreman, or other responsible persons of their presence before examining a ship hold or barge. All activity must cease in the shiphold or barge where official personnel are working.
- (4) Use caution when walking on decks and barge tops, since they are uneven, slippery when wet, and have protruding cleats and latches. Stay clear of mooring ropes when they are being adjusted.
- (5) Not remain on barges while they are being moved and be aware of nearby barges, docks, or vessels which could collide with the barge they are working on; even a gentle bump can cause covers to roll.
- (6) Require rolltop covers to be locked in place with lock pins.

k. Railcars. Official personnel will:

- (1) Notify their immediate supervisor, the yardmaster or switch-crew foreman, and any other essential persons of their presence, before entering a railyard. Inquire about possible switching activities, cars carrying hazardous cargo, and any other unusual activity. All activity must cease on the track where official personnel are working.
- (2) Require the track to be locked-out, or derails installed at both ends of the string of cars, or other appropriate, locally-approved precautions; e.g., using blue flags with radio communication between official personnel and switch engine driver, using one or more additional employees as a safety observer to warn-off approaching railcars, or using blue flags on an elevator hold-track where no railcar or switch engine movement takes place during the performance of official functions.

- (3) Not walk on the rails. Walk parallel to the set of tracks, never between the two rails.
- (4) Not climb into hopper or tank cars. Examine such cars from the top, ensuring first that no power lines are close enough to present an electrical hazard.
- (5) Check for placarded railcars. If a car is not placarded and a fumigant odor is detected, withhold the inspection and notify their supervisor immediately.
- (6) Never crawl under railcars and avoid climbing through railcars and over couplings.
- (7) Not walk through a break in a string of railcars separated by only a few feet (20 feet is considered the minimum safe distance). Be alert to such hazards as moving railcars, cables, debris along tracks, metal strapping, or broken ladders hanging from railcars.
- (8) Be alert to seasonal conditions, such as icy walking surfaces in the winter and rodents or snakes in the warmer months.
- (9) Exercise caution when opening or closing car hatches or doors.
- (10) Not use their hands to break seals. Use a cutting tool or a pry bar.
- (11) Adhere to the safety rules in effect at a loading/unloading facility regarding fall protection and/or systems. Employees will use facility guardrails or fall arrest systems whenever appropriate and available, provided equipment and/or systems are in good repair, and employees have been thoroughly trained in the inspection and safety operation of the system.
- (12) Not ride on an engine or car being moved or switched. If a car starts to move while they are inside, they should assume a sitting or kneeling position on top of or in the car to avoid losing their balance and hold on. They should not attempt to descend the ladder or jump to the ground until the car has stopped and they can do so safely. Report all incidents of car movement to the yardmaster and their supervisor.
- (13) Notify the yardmaster (or foreman) when leaving the work area.
- (14) Report all "bad order cars" to car owner or railroad for repair.

I. Trucks. Official personnel will:

- (1) Not walk through a break in a string of trucks separated by only a few feet.
- (2) Be alert to such hazards as moving trucks, cables, debris, metal strapping, or broken ladders.
- (3) Not climb into hopper or tank trucks. Examine such trucks from the top.

m. Containers. Official personnel will:

- (1) Notify the yardmaster or other essential persons before entering or leaving a container yard.
- (2) Be alert to such hazards as moving trucks, cables, cranes, and suspended containers. Do not walk under or near suspended containers.
- (3) Wear a high visibility traffic vest with retro reflective striping while they are in the container yard.

n. Emergency Procedures. Official personnel will:

- (1) Immediately notify a carrier representative (ship's officer), if someone falls from a ladder or collapses in a hold or tank. Emergency services, such as fire or police rescue squads and the Coast Guard, must be contacted immediately with a FGIS radio, the ship's radio, telephone, or other means.
- (2) Not enter the hold or tank, if the victim is unconscious and it cannot be determined if the accident was caused by low oxygen content or toxic atmosphere. Wait for trained personnel to rescue the victim.
- (3) Enter the hold or tank to provide emergency first aid, if it is determined that the accident was not caused by low oxygen content or toxic atmosphere. Wait for trained emergency personnel to move the victim.
- (4) If the victim is unconscious, obtain the label or an OSHA Form 20, Material Safety Data Sheet from the fumigant used, when applicable. If these cannot be obtained, obtain a sample of the victim's vomit, if available, and deliver it to the emergency room.
- (5) Familiarize themselves with the locations and the phone numbers of local fire, police, Coast Guard, and rescue service organizations. This information should be carried on a card as shown below.

EMERGENCY NOTIFICATION CARD

EMERGENCY TELEPHONE NUMBERS	
Coast Guard: XXX-XXXX ) Ch 16 on Ship Radio)	
Poison Control Center.....	XXX-XXXX
Police.....	XXX-XXXX
Fire.....	XXX-XXXX
Rescue Service.....	XXX-XXXX

## 7. STANDARDS OF FITNESS

### a. General.

- (1) A stowage area must comply with the standards of fitness established herein to be considered clean; dry; free of infestation, rodents, toxic substances, and foreign odor; and otherwise be suitable to store or carry bulk or sacked grain, rice, beans, peas, lentils, or processed commodities.
- (2) The standards of fitness established herein apply to all types and levels of stowage examinations, to both empty and partially-filled stowage areas, and, when applicable, to separations and commodities in partially-filled stowage areas.

### b. Standards for Cleanliness.

#### (1) Rust and Paint Scale.<sup>1</sup>

- (a) For ships and barges, a stowage area must not contain more than 25 square feet of loose rust scale or paint scale in a single area or more than 100 square feet of loose rust scale or paint scale in aggregate.
- (b) For railcars, trucks, and other containers, a stowage area must not contain more than 4 square feet of loose rust scale or paint scale in a single area or in aggregate.
- (c) For shipments of sacked commodities, plastic liners may be used instead of removing loose rust scale. If a liner is installed, verify that the rust scale is effectively covered, make a notation on the stowage examination worksheet, and show the following statement on the stowage examination certificate: "(Type of material) liner installed in stowage area in lieu of removing rust scale."

**NOTE: Loose scale will break when struck with the fist or when light pressure is applied with a knife blade under the edge of the scale. Do not confuse rust scale with oxidation rust which typically forms on exposed metal surfaces. Oxidation rust does not flake off when light pressure is applied.**

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<sup>1</sup> For carriers used to store or carry bulk commodities not requiring further processing before human consumption (e.g., milled rice, certain brown rice, flour and vegetable oil), the stowage area must not contain any loose rust or paint scale.

- (2) Previous Cargo. The stowage area must not contain fertilizer, old grain, loose cement, rust and paint chips, coal, oil residue, loose lime, dunnage, refuse, or other debris.

**NOTE: Rust and paint chips are broken pieces dislodged from the carrier wall. Rust and paint scale are those portions that remain loosely affixed to the carrier.**

- (3) Unsanitary Conditions. The stowage area must not contain animal filth, rodent excreta, bird excreta, decaying animal or vegetable matter, sewage, or any other unsanitary conditions.

- c. Standards for Dryness. The stowage area must not contain standing water, puddles, or any amount of leaking water.

**NOTE: Condensation, commonly called “sweating,” can form on bulkheads or lower decks. This is unavoidable and poses no threat to the commodity; however, official personnel should check this closely. A water leak will sometimes resemble condensation.**

- d. Standards for Free of Infestation, Rodents, Toxic Substances, and Foreign Odor.<sup>2</sup>

- (1) Insect Infestation.

- (a) The stowage area must not contain three or more live insects injurious to the stored commodities.

- (b) The following is a partial list of insects considered injurious to stored commodities: granary weevils, rice weevils, maize weevils, coffee bean weevils, lesser grain borers, larger grain borers, Angoumois grain moths, rice moth, meal moth, flour moths, redhorned grain beetles, mealworms, dermestid beetles, spider beetles, miscellaneous beetles, silverfish, cockroaches, and flour or grain mites. (For reference, see Grain Inspection Handbook, Book 2, Chapter 1, General Information, Section 1.2, Visual Grading Aids.)

1 Official personnel should not try to identify larvae. All larvae are considered injurious.

2 Official personnel should be especially alert for the khapra beetle (*Trogoderma granarium*). The khapra beetle is a worldwide pest of grain products. (For reference, see Grain Inspection Handbook, Book 2, Chapter 1, General Information, Section 1.2, Visual Grading Aids.) The Animal and Plant Health Inspection Service (APHIS) has strict quarantine controls on khapra beetles. If a khapra beetle infestation is suspected, official personnel will notify the local office of APHIS, Plant Protection and Quarantine Program, immediately.

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<sup>2</sup> For carriers used to store or carry bulk commodities not requiring further processing before human consumption (e.g., milled rice, certain brown rice, flour and vegetable oil), the stowage area must not contain any insects.

- (2) Rodent Infestation. The stowage area must not contain any live rodents.
- (3) Toxic Substances. The stowage area must not contain toxic substances. Consider all unknown substances as toxic substances. Do not attempt to identify such substances onsite.
- (4) Foreign Odor. The stowage area must not be contaminated with the odor of petroleum, chemicals, paint, decaying animal or vegetable matter, or any other commercially objectionable foreign odor.

e. Standards for Other Conditions.

- (1) The stowage area, including hatch covers and other openings, must not have holes, cracks, or any other condition that could cause a change in the weight or condition of the commodity.
- (2) The stowage area must not have other conditions that would cause or allow the quality, quantity, or condition of the commodity to be affected; e.g., when sacked commodities are to be loaded into a stowage area, there should be no nails, screws, or other protruding objects that may puncture, cut, or damage the sacks.
- (3) The stowage area must not have the presence of wet, tacky, sticky, or uncured paint.

## 8. APPLICATION, WORK RECORDS, AND CERTIFICATES

a. Application for Service.

- (1) Application for stowage examination service may be made verbally, or in writing using form FGIS-907.
- (2) All applicants for stowage examination service on ships, including applicants for inspection or weighing services that require stowage examinations in conjunction with the requested service (regardless of whether their application for service was filed verbally or in writing), must attest to and sign a statement (attachment 1) that: informs official personnel of any hazardous conditions that may exist in the stowage area to be examined, and acknowledges understanding that it is illegal to attempt to influence official personnel.
  - (a) Once signed by the applicant, the statement need not be re-signed on subsequent stowage examinations of the same carrier unless deemed necessary by official personnel.
  - (b) Applicants for stowage examination service on carriers other than ships may be required to attest to and sign the aforementioned statement, when deemed necessary by the field office manager or official agency manager.

- b. Work Records. Official personnel will maintain a work record for each stowage examination performed.
- (1) Ships and Ocean-Going Barges. Official personnel will:
    - (a) Use form FGIS-921, "Inspection Log," as the work record for prior-to-loading examinations on vessels that will load grain. Show the inspection results in the designated block on the log. (Agencies should use a similar form.)
    - (b) Use form FGIS-991, "General Services Worksheet," or Form FGIS-992, "Services Performed Report," as the work record for prior-to-loading examinations on vessels that will load commodities other than grain. (Agencies should use a similar form.)
    - (c) Use the form FGIS-939, "Stowage Examination Worksheet," as the work record for service-on-request examinations. (Agencies should use a similar form.)
    - (d) Use the carbon copy of the certificate as the work record; a completed form FGIS-939 is not needed in cases where the stowage examination certificate is filled out directly aboard the vessel.
    - (e) Complete one worksheet for all areas that are fit and another for all areas that are unfit.
  - (2) Other Carriers. Show stowage examination results on the pan ticket; on the form FGIS-939 (or similar form for agencies); form FGIS-991; form FGIS-992; or directly on the stowage examination certificate - in which case the carbon copy serves as the work record.

**NOTE: The term "hopper car" refers to covered hopper bottomed railcars. When referring to open top hopper bottomed railcars, denote "Open Top" for proper identification.**

- c. Certificates.
- (1) Issue a form FGIS-915, "Official Stowage Examination Certificate," for all service-on-request stowage examinations and prior-to-loading stowage examinations when requested by the applicant or when deemed necessary by the agency or FGIS field office that performed the examination.
  - (2) Complete the certificate on the basis of the work record. Issue one certificate for all areas that are fit and another for all areas that are unfit.
  - (3) For outbound domestic grain inspections, show one of the following statements, as appropriate, on the official sample-lot inspection certificate to indicate whether the carrier's stowage area was examined before loading: "Stowage area examined" or "Stowage area not examined."

**NOTE: The statement “Stowage area not examined” is applicable even when a stowage waiver agreement exists between the shipper and receiver.**

- (4) For export grain inspections performed on lots loaded into land carriers that were not examined prior to loading, also show the statement, “Stowage area not examined,” on the official export inspection certificate.
- (5) For AMA inspections when a checkloading service is also requested, show the following statement on the inspection certificate if the commodity was loaded into an unfit stowage area: “Commodity in carrier (carrier identification) was not checkloaded because the carrier was considered to be unfit due to (cause for unfitness).”

## 9. PROCEDURES

a. General. Official personnel will:

- (1) Follow the same stowage examination procedures and check for all conditions listed in Section 7, Standards of Fitness, regardless of the type of examination, type of carrier, location of the carrier, or whether the stowage area is empty or partially-filled, unless otherwise noted.
- (2) Examine the entire stowage area (including separations); commodities already in the stowage area (partially-filled); and the inside of hatch covers, lids, doors, tarpaulins, and other types of coverings.
  - (a) Generally confine the examination of commodities (bulk or sacked) in partially-filled stowage areas to the top layer of sacks or the top-most layer of bulk grain.
  - (b) When a separation is placed over commodities previously loaded in a stowage area, check the separation for all conditions listed in Section 7, Standards of Fitness. Do not remove a separation. If the separation is constructed of easily damaged material, do not walk on it.
- (3) Verify that burlap, plastic, or other material used to cover bilge openings, bulkheads, or other structures, are clean and secure.
- (4) Point out any conditions that do not meet the standards of fitness if a crew member, elevator representative, or carrier agent’s representative is present during an examination.
  - (a) If a problem requires only minor action, allow the crew member or other person a few minutes to correct the unfit condition.
  - (b) If not immediately corrected, declare the affected stowage area to be unfit.



- (5) In cold weather when live insects often appear dead, collect insects in an envelope, vial, or some similar container and take them to an area where they can be thoroughly warmed to determine if they are alive or dead.
- (6) Carry and use, as appropriate, the following equipment when performing a stowage examination:
  - (a) An explosion-proof flashlight approved for use in Group I, Division I, and Group II, Division I, hazardous locations.
  - (b) A scraper or pocket knife to determine if rust scale is loose and to check in crevices for insect infestation. (Do not carry unprotected scrapers or knives in pockets while climbing ladders.)
  - (c) Envelopes, vials, or similar containers to hold insects or samples of unknown substances.

b. Ships, Ocean-Going Barges. Official personnel will:

- (1) Not board ships or oceangoing barges, in most cases, before the vessel has been cleared for entry by the Department of Homeland Security, U.S. Customs Service. In some cases, they may board with the Customs Officer or before the Customs Officer if the ship is not of interest. Additionally, do not attempt to board vessels that are flying a quarantine flag.
- (2) Once aboard the vessel, go directly to the captain, first mate, or ship's agent, identify themselves, and state their purpose for being on board. Ask if the stowage area has been chemically treated and what the previous ports of call and cargoes were. Review all previous stowage examination worksheets and the latest USDA-APHIS Examination Report (if available) for any other pertinent information necessary to safely and properly determine the fitness of the stowage area.
- (3) Record the vessel's last two foreign ports of call and cargoes on the stowage examination worksheet. This information is required for backup documentation, alerts official personnel as to what to expect in the holds, and may identify a potential safety or inspection problem.
- (4) After acquiring the necessary information, request that a crew member, preferably English-comprehending, accompany them during the stowage examination.

Additionally, someone (either a representative of the applicant or carrier, an elevator employee, or other official personnel) must stand on the deck and watch the official personnel perform the stowage examination. Do not enter a stowage area unless they are under constant visual observation by someone who is in a position to render aid if needed.

For certain bulk dry-cargo vessels (vessels that contain no interior bulkheads, structures, or decks which could impede the observation of the entire stowage area from the main deck) the observer may remain on the main deck. For other types of vessels (e.g., tankers and 'tween deckers), the observer will enter the vessel so as to maintain constant visual observation.

**NOTE: Official personnel, at their discretion and with the concurrence of their field office manager or official agency manager, may conduct prior-to-loading stowage examinations of certain bulk dry-cargo vessels by observing the stowage areas from the main deck with binoculars (minimum power - 7 X), provided that: (1) the entire stowage area is clearly visible from the main deck and (2) the stowage area was previously examined (service- on-request) and did not fail any previous examination because of insect infestation.**

- (5) Examine each hold or tank on an individual basis. Check for all conditions listed in Section 7, Standards of Fitness. When an opening (bleeder hole) connects two adjacent stowage areas and the opening is large enough to allow a commodity to flow from one area to the next, consider the two areas as one stowage area.
  - (a) Hatch covers which should be open to provide proper lighting and ventilation, are considered part of the hold and will be examined from the main deck when possible. (During periods of inclement weather, adequate artificial ventilation and lighting must be provided in lieu of opening the hatch covers).
  - (b) After examining the hatches covers and while still on the main deck, observe the hold below. Pay attention to beams, combing, and ledges, and look for items, such as rust scale and previous cargo.
  - (c) If fumigant canisters, heavy concentrations of rust, or very fresh paint are observed, a gas-free certificate must be required before entering the hold.
- (6) Allow the crew member to descend the ladder first and watch the crew member climb down and survey the ladder for any broken, missing, or twisted rungs. Do not begin descent into the hold until the crew member has reached the bottom of the ladder.
- (7) Not use visibly unsafe ladder. Ladders require both hands! Do not attempt to carry any equipment in your hands while on the ladder. When ascending or descending ladders, flashlights and other equipment must be secured by a holder, placed in a backpack, or attached to the belt or belt loops.
- (8) While climbing down, be alert for any possible fumigant or pesticide odors. Upon reaching the bottom of the hold, survey the area for insecticide and poison canisters or other indications of chemical treatment. If any indications are noted, exit the area and require a gas-free certificate before reentry.

- (9) Visually scan the entire stowage area; looking at the ship's hulls, the bulkheads, and any structures overhead. Rust scale, previous cargo, and water seepage are easily overlooked when present in the upper areas of the hold.
- (10) Look closely into corners, crevices, and other dark areas. Insect infestation can only be detected by a close examination. Also check the bilge covers and all wood and burlap covering materials. Check underneath these covers, if possible, but do not remove them if they are nailed, bolted, or cemented in place.
- (11) Confine your physical examination to readily accessible areas. Normally, this means that portion of the hold that is within reach from the floor. Use binoculars (minimum power - 7X) to visually check the upper portion of the shipholds.

c. Barges. Official personnel will:

- (1) Talk with the applicant or the applicant's representative and inquire as to whether the barge has been chemically treated before starting the examination.
- (2) Open the barge lids or hatch covers before starting the examination. For rolltop barges, this usually requires a cable hookup and power winch.
- (3) Conduct stowage examinations on river barges from the main deck prior to loading provided:
  - (a) That there is sufficient natural light available.
  - (b) That the stowage area is examined from enough locations (with lids and doors open) to make an accurate assessment of its condition.
  - (c) Any suspicious condition(s) is examined more closely by entering the stowage area before the barge is accepted or rejected.
- (4) If necessary to enter the barge, request that the applicant or the applicant's representative accompany and proceed with them down the ladder into the barge. Additionally, someone (either a representative of the applicant or carrier, an elevator employee, or other official personnel) must stand on the deck and watch official personnel perform the stowage examination. Official personnel must not perform the stowage examination unless they are under visual observation by someone who is in the position to render immediate aid if needed.
- (5) Ensure that extension ladders, when used, are secure and stable. When climbing down the ladder, look for signs of an unreported chemical treatment. If suspected, leave the barge and require a gas-free certificate.

- (6) Check closely for residue from previous cargoes and water seepage. Barges carry a variety of cargoes. Residue sometimes adheres to the barge walls. Be alert for rust scale on the undersides of barge lids and residue in the tracks of the lid covers; these are common problem areas. Check for all conditions listed in Section 7, Standards of Fitness.
- (7) Check for insects on the barge floor, closely examining all bilge covers, corners, and other dark areas. If previous cargo is lying around, check this for insects too.

d. Railcars, Trucks, and Containers.

(1) General.

- (a) Official personnel must inquire, before conducting the examination, as to whether the carrier has been chemically treated, transported toxic/hazardous materials in the previous shipment, or is known to have insufficient oxygen levels.
- (b) Someone (either a representative of the applicant or carrier, an elevator employee, or other official personnel) must watch official personnel perform the stowage examination. Official personnel must not perform the stowage examination unless they are under constant visual observation by someone who is in a position to render aid if needed.

(2) Hopper Cars. Official personnel must perform (a) or (b):

- (a) Climb to the top of the hopper car and open enough hatches to make a thorough examination by physically observing the stowage area from the hatch openings without descending into the hopper car. Check for all conditions listed in Section 7, Standards of Fitness. Look for holes, cracks, or anything else that would cause a change in cargo weight or quality; including hopper slides that are not fully closed, and broken or missing hopper covers.

- 1 If the hopper car is to carry grain, complete removal of previous cargo is not required before the hopper car will be declared fit. Previous cargo, particularly old grain stuck on the walls or lying on the hopper slides, is a common problem in hopper cars. Complete removal of all grain is impractical and may be unnecessary if only a small amount of residual grain is present. The hopper car will be considered fit, as far as remaining old grain is concerned, if there is approximately 2 to 3 inches of the same kind of grain to be loaded provided the grain does not appear to be heating, musty, sour, infested, or otherwise out of condition. If the old grain appears out of condition, or if fertilizer, coal, lime, or other substance is observed, declare the hopper car unfit.

- 2 If the hopper car is to carry rice, pulses, processed products or other commodities not requiring further processing before human consumption, complete removal of previous cargo is required before the hopper car will be declared fit. 3 Consider compartmented hopper cars as one unit. If one compartment does not meet the standards of fitness, declare the entire car unfit.
- (b) Conduct the railcar stowage exam as in section (a), but with an approved closed-circuit television system (CCTV). The CCTV system must meet the following requirements.
- 1 The official service provider (OSP) must approve the video system for use and notify the Grain Inspection Packers and Stockyard Administration's (GIPSA) Policy and Procedures Branch for their approval.
  - 2 The OSP must examine the system on-site. The OSP is responsible for determining if the video system provides an image sufficient enough to determine whether a railcar is fit to receive grain. If the system fails to deliver an adequate view of the stowage area or carrier identification (if needed), official personnel must physically inspect the railcar.
    - a) The video system must produce color images of acceptable quality of any materials (grain or non-grain) remaining in the carrier. Either a high resolution camera (1.3 megapixel or greater) or a remotely operated zoom lens is recommended.
    - b) Artificial lighting may need to be adjusted to adequately light the inspection view.
    - c) Image clarity is critical since dust and condensation may obstruct the camera view.
    - d) Cameras must be mounted so they do not create hazards or interfere with fall protection cables. The recommended mounting height is approximately 10 feet above the railcar.
    - e) At a minimum, the video system must view the entire bottom gate of a compartment and a portion of the sides, as well as the condition of the compartment covers. The OSP may determine the required view of the compartment slides. Cameras may require pan and tilt capabilities, or multiple cameras may need to be installed to achieve adequate images.

3 The OSP is responsible for determining if one person can perform both the stowage exam and the sampling/inspection functions, or if additional personnel are required. 4 Approval may be revoked if the system fails to perform adequately. Official personnel must physically inspect the railcars if this occurs. 5 If the system is modified, approval must be re-issued before the system is used for official purposes.

(3) Boxcars. Official personnel will:

- (a) Perform boxcar stowage examinations before the coopering is in place, whenever possible. Boxcars loading bulk grain are coopered with boards or cardboard across the bottom half of their doors to prevent grain from leaking from the doors and from door sills. Boxcars loading sacked commodities are sometimes coopered by placing paper on the floor and half way up the walls.
- (b) Remove coopering paper and examine under it if a problem is suspected. Some older boxcars have plywood liners on their inside container walls. Check the base of these liners for insects.
- (c) Climb into the boxcar's stowage area and examine it for all conditions listed in Section 7, Standards of Fitness. The applicant is responsible for providing the necessary ladders. If the stowage area is inaccessible, withhold the examination until the stowage area is safely accessible.
- (d) Look closely into corners and other dark areas for insect infestation.
- (e) Check the following areas for holes, cracks, or other potential leaks that would cause a loss in cargo weight: the door posts; the points of coopering attachment; and the corners, floors, and sides of the boxcar.
- (f) Recheck the boxcar prior-to-loading to ensure that the stowage area is free of dunnage when the boxcar is examined before the coopering is put into place. A visual check from the doorway is sufficient.

(4) Trucks. Official personnel will:

- (a) Climb inside the stowage area unless the truck has a hopper bottom or tank. (Examine hopper bottom and tank trucks from the top in the same manner that hopper cars are examined.) Most trucks have some type of ladder providing access to the stowage area. If this is inadequate, withhold the stowage examination until a safe means of access is provided.
- (b) Examine the stowage area for all conditions listed in Section 7, Standards of Fitness.
- (c) Examine the inside surface of canvas or rubberized tarpaulin coverings for insects. On older trucks that have plywood liners on their inside container walls, check the base of these liners for insects.

(5) Containers. Official personnel will:

- (a) Examine the inside and outside of the container for all conditions listed in Section 7, Standards of Fitness. Containers must be placed on the ground and positioned so that official personnel have sufficient space to walk between adjacent containers.

Use a safe, stable ladder to examine suspect conditions beyond the inspector's reach. **DO NOT CLIMB ONTO THE ROOF OF THE CONTAINER.** Applicants must offer containers in a manner that will accommodate full examination or the request for service will be denied.

- (b) Check for penetrating light to ensure that the container is free from small holes, cracks, separated floorboards, loose or missing fasteners, or other similar defects that could expose the product to damaging conditions (e.g., rain), when examining the inside of the container.

Cracks or holes in the roof, doors, or side panels must be satisfactorily repaired by welding or permanently affixing a patch of like material (e.g., steel, aluminum, and fiberglass) to the affected area. Temporary repairs, including the use of tar tape, are unacceptable.

- (c) Examine the door gaskets, panels, and hinges to ensure that the doors provide for a light/water tight seal when closed. Enter the container, close the doors, and then examine the closure from the inside to see if there is any penetrating light.

*/s/ John Giler*

John Giler, Director  
Field Management Division

Attachment

EXAMPLE: APPLICANT STATEMENT

In submitting this application, I have notified official personnel as to whether the stowage area to be examined has been fumigated, treated with toxic materials, or known to have had insufficient oxygen levels. I certify that appropriate action has been taken and the stowage area is free of any hazardous chemical or dangerous atmosphere.

Furthermore, I understand that any person who shall improperly influence or attempt to improperly influence any official personnel with respect to the performance of his/her duties; or shall forcibly assault, resist, oppose, impede, intimidate, or interfere with any official personnel on account of the performance of his/her duties, may upon conviction thereof be subject to imprisonment, fine, or both such imprisonment and fine; and I further understand that to offer official inspection personnel any gratuity will be deemed an attempt to improperly influence official personnel in the performance of their duties.

Signature: \_\_\_\_\_

Date: \_\_\_\_\_

Name of Vessel: \_\_\_\_\_

Name(s) of Inspectors: \_\_\_\_\_  
\_\_\_\_\_

Place of Inspection: \_\_\_\_\_