

# Model Tanker Wash Guidelines For the Fruit Juice Industry

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**DISCLAIMER:** These Guidelines were developed by the Juice Products Association to assist the fruit juice industry in maintaining the sanitation and safety of its products and compliance with various laws and regulations applicable thereto. The Guidelines are not codes or standards, and although the Juice Products Association made reasonable efforts to obtain accurate available information for use in developing the Guidelines, not all such information has been verified. Juice Products Association makes no representation that compliance with any Guideline will ensure compliance with laws or regulations governing the subject matter thereof, and makes no effort to investigate or verify claims, including claims of compliance or noncompliance with any Guideline. Juice Products Association assumes no liability for the accuracy of the information contained in the Guidelines, for the information on which the Guidelines were based, or for any claims or losses resulting from the use of any such information. If legal advice or other expert assistance in the areas covered by the Guidelines is required, the services of a competent professional should be sought.

Juice Products Association, 1156 15th St. NW, Suite 900, Washington, DC 20005. www.juiceproducts.org

#### Juice Products Association Model Tanker Wash Guidelines for the Fruit Juice Industry

#### I. Purpose:

To provide minimum standard procedures and practices for the safe and sanitary transport of bulk fruit juice products. 21 Code of Federal Regulations Part 1 Subpart O –Sanitary Transportation of Human and Animal Food – requires the following:

1.906(a) - Vehicles and transportation equipment used in transportation operations must be so designed and of such material and workmanship as to be suitable and adequately cleanable for their intended use to prevent the food they transport from becoming unsafe (i.e., adulterated within the meaning of section 402(a)(1),(2) and (4) of the Federal Food, Drug and Cosmetic Act during transportation operations.

§1.906(b) – Vehicles and transportation equipment must be maintained in such sanitary condition for their intended use as to prevent the food they transport from becoming unsafe during transportation operations.

§1.906(c) – Vehicles and transportation equipment used in transportation operations for food requiring temperature control for safety must be designed, maintained, and equipped as necessary to provide adequate temperature control to prevent the food from becoming unsafe during transportation operations.

§1.906(d) – Vehicles and transportation equipment must be stored in a manner that prevents it from harboring pests or becoming contaminated in any other manner that could result in food for which it will be used becoming unsafe during transportation.

These Guidelines and the JPA Tanker Wash Facility Audit Checklist, accessible via the JPA Tanker Wash website (<u>www.tankerwash.org</u>), describe the minimum cleaning procedures for tankers hauling juice and juice products. While the Guidelines are more broad in scope, the Audit Checklist is prescriptive and defines the requirements. The Audit Checklist requirements are defined in five majors sections: I. Food Safety and Compliance, II. Security, III. Process Control, IV. GMP Compliance, and V. Documentation & Systems.

#### **II.** Definitions of terms used in this guideline and Audit Checklist:

- a. "Clean in Place" or "CIP system"- Cleaning and sanitizing equipment that automatically delivers rinses, cleaners, sanitizers at a given pressure, time, and concentration, that eliminates the need for manual cleaning and allows for consistent repeatable cleaning each time.
- b. "No-Rinse Food-Grade Sanitizer" A sanitizer that meets the requirements of 21 Code of Federal Regulations Part 170-189 and has been registered with the Environmental Protection Agency (EPA).
- c. "High Pressure Wash Equipment" or HPWE Wash equipment that can deliver solutions/water with sufficient force to provide impergement to the bulkheads of the tanker.
- d. "Potable" Potable water shall meet or exceed applicable State requirements, or recognized standards (e.g., World Health Organization (WHO), U.S. Environmental

Protection Agency (EPA), European Union standards). e. Circulate - The movement of water or cleaners through a CIP process during one cleaning cycle and then dumping to drain.

- f. "Recycled rinse water" Collected water that can be used as a rinse for a pre-cleaning step. It shall be limited to rinse water used in a maximum of three rinses.
- g. "Re-use"- Water or cleaners that are collected and used again.
- h. "Same Product"- Fruit juices of the same kind, variety or botanical designation (i.e., apple, orange, grape) and same form (i.e., concentrate, reconstituted, direct). Juices of different form or variety are not considered the "same product" for purposes of this guideline.
- i. "Tamper Evident Seal" Seal that is constructed in such a way that it can be used only once, not resealable, can be easily noticed if tampered with, is uniquely identified and fabricated from non-toxic, non-corrosive, cinchable, and appropriate materials.
- j. "Sealed" The proper application of seals to all openings to prevent the introduction of foreign materials or contaminants.
- k. "COP" Clean out of Place Process of removing components and food contact/ transfer equipment for cleaning in a separate wash tank following strict specific protocol. Tank has the ability to circulate and heat cleaning solutions to provide for adequate sanitation.
- 1. "Cleaners and Chemicals" Must be "food grade" and have been validated by a third party as meeting its advertised performance. This means if a product states it is effective against coliforms, data must be submitted that validates the claim.
- m. Preventive controls The risk-based reasonably appropriate procedures, practices, and processes that a person knowledgeable about the safe manufacturing, processing, packing or holding of food would employ to significantly minimize or prevent the hazards identified under the hazard analysis that are consistent with the current scientific understanding of safe food manufacturing, processing, packing, or holding at the time of the analysis.
- n. Spray ball or nozzle cycle The time required for the sprayball to cover the interior surface of the tanker. The spray ball has completed one full cycle when the spray pattern starts to repeat itself. It may take many rotations of the spray ball to complete one cycle.
- o. Rotation of the spray ball or nozzle One complete turn of the rotating device.

#### III. Tanker Wash Facility Requirements:

- a. Wash facility must use Potable Water from a source certified annually. Certification must be available upon request.
- b. Wash facility must declare type of wash performed on wash tickets.
- c. Wash facility must be able to document chemical (detergent, degreaser and sanitizer) concentration, wash time and wash/rinse temperatures for each step performed and this documentation must be available upon request. Chemical testing is required for every tanker if the facility does not have an automated CIP monitoring system.

- d. Wash facility must be constructed and operated in a manner as to prevent contamination and to operate in compliance with 21 CFR 117.35 and 117.37, as applicable.
- e. Food Grade and non-food grade tankers must be washed using separate equipment in segregated wash bays.
- f. Wash facility must have incorporated into their process a Food Safety plan based on Hazard Analysis Critical Control Point (HACCP) principles.
- g. Wash facilities must have prerequisite programs implemented including employee training protocols.
- h. The tanker wash building must have a roof and two walls and should have doors that can close as a measure to avoid inadvertent contamination. Environmental conditions will dictate additional requirements.

## **IV.** Tanker Requirements:

- a. Only food grade tankers are to be used and are to be permanently dedicated and clearly identified "food grade."
- b. Only approved food products, ingredients, or potable water shall have been hauled in the tanker. (See VIII- Tanker Wash Type Based Upon Food Commodity Previously Hauled).
- c. Tanker interior and fittings are composed of food grade stainless steel and must be in good condition. If a tanker has been damaged to the extent that its function and integrity are compromised, then it should not be used.
- d. Only tankers (including valve systems) that are cleanable and sealable may be used.
- e. Tanker openings must be sealed, using tamper evident seals.
- f. Gasket material that will potentially come into contact with food must be of food contact approved material. All gaskets will be appropriately sized, will be intact with no visible tears, breaks or rips and be capable of being cleaned and sanitized.
- g. After unloading a tanker, if the tanker will not be reloaded or washed immediately, the tanker must be rinsed with potable water within 24 hours to reduce microbial spoilage, facilitate cleaning, and insure compliance with kosher rule. Failure to rinse within 24 hours may result in non-compliance with Kosher law.
- h. It is the recommendation of this Association that a carriers' pumps, fittings, and hoses not be used. Section VI "Tanker Accessory Cleaning Pumps, Hoses, Fittings" details cleaning practices recommended for these items. However, the sanitation of pumps, fittings & hoses should be the ultimate responsibility of the receiving facility.
- i. Aseptic tankers should be cleaned according to the JPA Model Tanker Wash Guidelines and followed with an aseptic sterilizing procedure. The tanker can be filled at any point after sterilization as long as the tanker integrity is maintained and confirmed. The tanker supplier and customer should agree on the terms.
- j. For those tanker wash facilities that have an automated CIP monitoring system (e.g. continuous recorders), a defined swab/ATP sampling plan must be developed, implemented and documented. For those tanker wash facilities that do not have an automated CIP monitoring system, the facility must swab every tanker after cleaning and prior to release.

#### V. Tanker Handling Types: Apply the tanker wash applicable to the situation. 1. Tanker Turnaround/Same Product

- a. Where a clean and sanitized tanker is used to haul the same product between facilities, the tanker can be loaded, used to transport such product and be subsequently unloaded and reloaded for a continuous series of cycles, so long as entrance into the tanker interior by any contaminant (i.e. employee entry) does not occur and all refills occur within 12 hours. To qualify for the Tanker Turnaround/ Handling, tankers must be sealed at each facility (both from and to) for each leg. New uniquely identified tamper evident seals must be applied and identities be recorded on the Bill of Lading or accompanying paperwork for each shipment.
- b. After 12 hours elapse between fills, the tanker must have a Type 2 wash prior to reloading, even if the same product is reloaded.
- c. It is recommended, from a quality standpoint, that tankers hauling high Brix concentrated juices have a Type 2 wash at a minimum every 7 days; for single strength thermally treated fruit juice apply a Type 2 wash at a minimum of every 72 hours; for raw fruit juice (not heat treated) apply a Type 2 wash at a minimum of every 24 hours. The time will be measured from the point the tanker is filled with juice, which will be verified by the time stamp on the paperwork accompanying the load.
- 2. Type 1: A customer specified potable water rinse between loads of same product.
- 3. **Type 2- Water Based Products**: Tankers previously hauling water based food products must have the following tanker wash: (See Section VIII- Tanker Wash Type Based Upon Food Commodity Previously Hauled)
  - a. All previous product must be drained from tanker interior. Tanker interior scraping or spraying with high-pressure potable water or reuse solutions should be performed as necessary. Drain thoroughly.
  - b. Perform visual inspection to assure effective removal of product from tanker.
  - c. Rinse tanker thoroughly with warm (75 110°F) potable water or re-use solutions. Drain thoroughly.
  - d. Remove, hand wash and sanitize all vents and vent tubes. Hand-wash and sanitize rear valve assembly and top hatch. If present, air vents located at the top of the tanker must also be hand washed and sanitized, regardless if vent was previously used.
  - e. Apply to the tanker a hot cleaning solution consisting of a cleaner (at prescribed level) or equivalent food grade cleanser under pressure through CIP system for a minimum of 15 continuous minutes. The cleaner must meet applicable food contact requirements for the intended use as established by a government agency or third-party (e.g., USDA, FDA, NSF International, United States Pharmacopeia (USP), 3-A Sanitary Standards, Inc.). The period of 15 minutes should commence only when the effluent at the outlet reaches a temperature of 160°F. A minimum effluent temperature of 160°F should be sustained for the duration of the rinse period. Temperatures below 160°F at drain outlet are never acceptable, unless cleaner is being used at the concentration, the temperature and times

recommended by the manufacturer. Cleaners can be "circulated" during this 15 minute cycle. Drain thoroughly. Cleansers used in this cleaning cycle should be single use cleansers and should not be re-cycled cleansers.

- f. Rinse tanker with potable water until no residual cleaning solution is detected. Do not use recycled rinse water. Drain thoroughly.
- g. As appropriate, perform visual inspection of tanker interior in a manner providing for safe and sanitary evaluation, <u>without</u> entering tanker. When tanker entry by a person takes place or is required, the cleaning process described in subparagraph (d), (e), and (f) must be repeated. If tanker entry is necessary, comply with confined space entry requirements.
- h. Sanitize tanker interior surfaces with a no-rinse food-grade chemical sanitizer solution applied in accordance with manufacturer's instruction. The sanitizer must contact all interior surfaces of the tanker based on equipment used. Drain Thoroughly. Apply seals to all openings immediately and before leaving wash area. Seals must be applied to insure all openings are inaccessible unless seals are broken.
- \*\* Cleaning solutions should be applied at concentrations and temperatures specified by the manufacturer to achieve proper cleaning.
- Type 3 Water and Oil Mixtures, Oil-Based Products & Allergens: Tankers previously hauling water/oil or oil based food products must have the following tanker wash. (See Section VII – Tanker Wash Type Based Upon Food Commodity
  - a. All previous product must be drained from tanker interior. Tanker interior scraping or spraying with high-pressure food grade degreaser solution should be performed as required.
  - b. Perform visual inspection to assure effective removal of product from tanker.
  - c. Rinse tanker thoroughly with warm (75 110°F) potable water or re-use solutions. For oil-based products only, hot potable water greater than 110°F is acceptable. Drain thoroughly.
  - d. Remove, hand wash, and sanitize all vents and vent tubes. Hand-wash and sanitize rear valve assembly and top hatch. If present, air vents located at the top of the tanker must also be hand washed and sanitized, regardless if vent was previously used.
  - e. Apply hot food grade degreaser solution (at prescribed manufacturers' recommended temperatures and concentrations) under pressure through CIP system for a minimum 15 minutes. Drain thoroughly. Temperatures below 160°F are never acceptable at exit unless a cleaner is used at the temperature and times recommended by the manufacturer.
  - f. If degreaser solution is not compatible with cleaning solution in next step, prior to applying cleaning solution, rinse tanker with warm (75 110°F) water for a minimum of ten minutes. Drain thoroughly.
  - g. Apply to the tanker a new, fresh, virgin (regardless of compatibility with degreaser in step f) hot cleaning solution consisting of a cleaner (at prescribed level) or equivalent food grade cleanser under pressure through CIP system for a

minimum of 15 minutes. The cleaner must meet applicable food contact requirements for the intended use as established by a government agency or thirdparty (e.g., USDA, FDA, NSF International, United States Pharmacopeia (USP), 3-A Sanitary Standards, Inc.). The period of 15 minutes should commence only when the effluent at the outlet reaches a temperature of 160°F. A minimum effluent temperature of 160°F should be sustained for the duration of the rinse period. Temperatures below 160°F at drain outlet are never acceptable. (Note: Cleaner should be used at the concentration, temperature, and times recommended by the manufacturer.) Drain thoroughly. Cleansers used in this cleaning cycle should be single use cleansers and should not be re-cycled or re-used cleansers.

- h. Rinse tanker with potable water until no residual cleaning solution is detected. Do not use recycled rinse water. Drain thoroughly.
- i. As appropriate, perform visual inspection of tanker interior in a manner providing for safe and sanitary evaluation, <u>without</u> entering tanker. When tanker entry by a person takes place or is required, the cleaning process described subparagraph (d), (g), and (h) must be repeated. If tanker entry is necessary, comply with confined space entry requirements.
- j. Sanitize tanker interior surfaces with a no-rinse food-grade chemical sanitizer solution applied in accordance with manufacturer's instruction. The sanitizer must contact all interior surfaces of the tanker based on equipment used. Drain thoroughly.
- k. Apply seals to all openings immediately and before leaving wash area. Seals must be applied to insure all openings are inaccessible unless broken.
- \*\* Cleaning solutions should be applied at concentrations and temperatures specified by the manufacturer to achieve proper cleaning.
- \*\*\*The Type 4 Wash has been deleted from the Guidelines as the procedure was the same as the Type 3 Wash.
- 5. Type 5 Wash Special cleaning guidelines for certain ingredients. (Refer to the Food Commodity Table in Section VIII.)
  - a. Seek specific approval as to the appropriateness of this type wash based upon customer's requirements.
  - b. All previous product must be drained from tanker interior. Tanker interior scraping or spraying with high-pressure food grade degreaser solution should be performed as required.
  - c. Perform visual inspection to assure effective removal of product from tanker.
  - d. Rinse tanker thoroughly with warm (75 110°F) potable water or re-use solutions. For oil-based products, hot potable water greater than 110°F is acceptable. Drain thoroughly.
  - e. Remove, hand wash, and sanitize all vents and vent tubes. Hand-wash and sanitize rear valve assembly and top hatch. If present, air vents located at the top of the tanker must also be hand washed and sanitized, regardless if vent was previously used.
  - f. Apply hot food grade degreaser solution\*\* (at prescribed manufacturers'

recommended temperatures and concentrations) under pressure through CIP system for a minimum 15 minutes. Drain thoroughly. Temperatures below 160°F are never acceptable at exit unless cleaner is used at the temperature and times recommended by the manufacturer.

- g. If degreaser solution is not compatible with cleaning solution in next step, prior to applying cleaning solution, rinse tanker with warm (75 110°F) water for a minimum of ten minutes. Drain thoroughly.
- h. Apply to the tanker a new, fresh, virgin (regardless of compatibility with degreaser in step f) hot cleaning solution consisting of a cleaner (at prescribed level) or equivalent food grade cleanser under pressure through CIP system for a minimum of 15 minutes. The cleaner must meet applicable food contact requirements for the intended use as established by a government agency or third-party (e.g., USDA, FDA, NSF International, United States Pharmacopeia (USP), 3-A Sanitary Standards, Inc.). The period of 15 minutes should commence only when the effluent at the outlet reaches a temperature of 160°F. A minimum effluent temperature of 160°F should be sustained for the duration of the rinse period. Temperatures below 160°F at drain outlet are never acceptable unless cleaner is being used at the concentration, temperature, and times recommended by the manufacturer. Cleaners can be circulated during this step. Drain thoroughly. Cleansers used in this cleaning cycle should be single use cleansers and should not be recycled or reused cleansers.
- i. Rinse tanker with potable water at 208°F until no residual cleaning solution is detected. The potable water must meet 208°F as measured at some point in the system. Verify temperature and document. A cool down with potable ambient water is required. Drain thoroughly.
- j. As appropriate, perform visual inspection of tanker interior in a manner providing for safe and sanitary evaluation, <u>without</u> entering tanker. When tanker entry by a person takes place or is required, the cleaning process described subparagraph (e), (h), and (i) must be repeated. If tanker entry is necessary, comply with confined space entry requirements.
- k. Sanitize tanker interior surfaces with a no-rinse food-grade chemical sanitizer solution applied in accordance with manufacturer's instruction. The sanitizer must contact all interior surfaces of the tanker based on equipment used. Drain thoroughly.
- 1. Apply seals to all openings immediately and before leaving wash area. Seals must be applied so as to insure all openings are inaccessible unless seals are broken.
- \*\* Cleaning solutions should be applied at concentrations and temperatures specified by the manufacturer to achieve proper cleaning.

# Note: See the addendum, *Cleaning Guidelines for Tankers Hauling Kosher Juice and Juice Products*, for additional information.

#### VI. Tanker Accessory Cleaning – Pumps, Hoses, Fittings

a. Accessory cleaning must be performed on every food contact surface for every

component used for unloading.

- b. Cleaning protocol for these components must mimic those of the tanker (i.e., Type 1, Type 2) and are based on the food commodity previously hauled.
- c. Pumps, hoses, and fittings can be cleaned in place (CIP'd) provided a separate drive capable of turning the pump fast enough to completely fill the size of the hose and fittings used and provide a velocity of at least 5 feet per second.
- d. If a CIP drive is not available that meets the minimum flow requirements, all parts must be physically removed and washed in a "COP" (clean out of place) tank. Every step used for the tanker wash protocol based on wash type must be used on these parts. This includes all parameters for temperature, chemical concentration, duration etc. Each parameter will need to be recorded and documented using test kits, temperature-recording devices etc.
- e. All parts after complete cleaning must be closely inspected to insure proper cleaning. Parts should be reassembled and sanitized after assembly.
- f. Pumps and hoses must be capped and sealed using tamper evident seals to secure. All seal numbers used on these components must be documented on the wash ticket or accompanying paperwork.

#### VII. Seals

- a. Only tamper evident seals shall be used to secure tanker openings. The seal shall be constructed in such a way that it can be used only once, not resealable, can be easily noticed if tampered with and fabricated from non-toxic, non-corrosive and appropriate materials.
- b. Each seal must be legibly and uniquely identified.
- c. After Wash: Suitable seals for use after a tanker is washed but not loaded with food shall be constructed to preserve the cleanliness and security of the clean tanker. The seals used for this purpose may be characterized as temporary and may consist of plastic material.
- d. **After loading**: Seals used to secure openings after a tanker is filled with food must be secure and durable enough to withstand the stresses of handling and transportation. It is recommended that only locking metal cables are used for this purpose. Each seal must be uniquely identified using alpha-numeric codes, permanently affixed to or stamped into the seal, that can be easily recorded on wash tickets. An example of such a code would be: "CSE 0002349."
- e. **Broken Seals**: In any case where a seal has been breached or broken, except by reason of loading or unloading product, the breach must be reported, noted on records and appropriate corrective actions taken. Corrective action for a breached seal on a washed but empty tank would include rewashing. Corrective action for a breached seal on a filled tanker could include testing, treating, reworking or destroying the food. Resealing alone is never adequate as a corrective action.

#### VIII. Tanker Wash Type Based upon Food Commodity Previously Hauled

- 1. Listed below are various food commodities to be transported in food grade tankers. This is not to be considered a complete list but as a guide as to what food commodities require which type of tanker wash prior to transporting ingredients.
- 2. Indicated below under "Not Permitted" are foods that disqualify a tanker from hauling products without special arrangements and precautions.
- 3. Note: Tanker Wash Type 1 guidelines are used when more than one trip rotation (load, transport, and unload) for the same product is used from the same storage site to the same receiving facility. (See page 4.)
- 4. Tanker trucks transporting all fruit juices must have a Type 2 wash before use.
- 5. It is important that only food items listed on the Food Commodity Table are hauled. Fats/Oils - Unless the commodity is specifically listed, the product must be vegetablebased only and documentation from the manufacturer must show the commodity is vegetable-derived and food grade before the carrier accepts the load. All substances must be certified food grade.
- 6. If a commodity is being considered and is not on the Food Commodity table, hauling the commodity could be reason for tanker rejection. If unsure whether a commodity is permitted, consult with JPA prior to hauling.
- 7. ▲ Food commodities marked below with the symbol ▲ may have heightened allergenic risks and are thus subject to appropriate and necessary washing procedures where trucks haul such foods.
- 8. Any of the following "Not Permitted" loads will be cause for rejection if they are included as part of the 3 previous loads listed to the tanker wash ticket. Any commodity that is designated as "Not Permitted" and "Non-Food Grade" and listed on the wash ticket should be reported to JPA for investigation. If a "Not Permitted, Non-Food Grade" commodity is hauled, the carrier will be required to convert the tanker to food grade status by following the procedures in the "Food Industry Transport Coalition" guidelines. If the tanker is not converted back to food grade status, the tanker is no longer to be used to transport food grade commodities.

	Tanker Wash	
Food Commodity	Types	
Alcohol Products, All Types (i.e., Gin, Vodka, Rum, etc.) (food	2	
grade)		
Amino Acids (Vegetable-based Only)	3	
Aromatic Chemicals- Food Grade Only (GRAS, FCC Certified)	3	
Beverage Bases	2	
Blood	Not Permitted	
Canola Oil	3	
Caramel Color	2	
Chemicals and Cleaning Agents- Non-Food Grade	Not Permitted	
▲ Chocolate – with added ingredients (i.e., milk, sugar)	3	

Citric Acid Solution	2	
Citrisol- Non-food Grade Cleaning Solvent from Citrus Oils	Not Permitted	
Citrus Fruit Aroma and Essence- Aqueous	2	
Citrus Fruit Terpenes	3	
Cocoa (powdered)	Not Permitted	
Cocoa (chocolate liquor)	3	
▲ Coconut Oil	3	
Colors, Artificial and Vegetable Based- Food Grade Only	Not Permitted	
Corn Oil	3	
Cooking Oil, Used	Not Permitted	
Corn Sweeteners	2	
Corn Syrup	2	
Cottonseed Oil	3	
D-Limonene Oil, <u>Food Grade</u>	3	
D-Limonene Oil, Non-Food Grade	Not Permitted	
▲ Dairy Products, Pasteurized- Cream, Milk, Milk Balancer	3	
▲ Dairy Products, Unpasteurized- Cream, Milk, Milk Balancer	3	
Dyes, Inks and Pigments- Non-Food Grade	Not Permitted	
▲ Eggs and Egg Based Products	3	
Essential Oils	3	
Ethanol (Food Grade)	2	
Enzymes (Food Grade)	3	
Fats (e.g, vegetable fatty acids) – Product is solid at $70^{\circ}$ F (21°C) and	3	
other fats not listed	5	
To allow hauling of food grade vegetable fat, the tanker must be		
equipped with in-transit heaters to prevent solidification of the fat		
Fats, Rendered	Not Permitted	
Fish Oils	Not Permitted	
Flavors, Natural and Artificial	3	
Fruit Juice- Concentrates and single strength (including fresh)	2	
Fruit Punch and beverage bases	2	
Glycerin, Food Grade (Vegetable-based Only)	3	
Glycerin, Unpasteurized- Non-Food Grade	Not Permitted	
High Fructose Corn Syrup	2	
Honey	2	
Hydrogenated Vegetable Oils- Product is solid at 70°F (21°C)	Not Permitted	
Iso-sweet	2	
Lecithin (emulsifier)	Not Permitted	
	Not Permitted	
Lysine (recovered cooking oils) Malt		
	3 2	
Maltodextrin		
Mannitol	2	
Mineral Oil	3	

Mineral Salts (i.e.: Epsom Salt)	Not Permitted
Molasses (food grade)	2
Molasses (non food grade)	Not Permitted
Non-Citrus Fruit Aroma and Essence- Aqueous	2
▲ Nut Products	3
Orange Concentrate- OM	2
Palm Oil	3
Palm Kernel Oil	3
Paraffin Wax	Not Permitted
▲ Peanut Based Products (other than Oil)	3
A Peanut Oil	3
Pepper or Plant Mash	3
Preservatives	2
Pharmaceuticals (non food grade)	Not Permitted
Pharmaceuticals (food grade)	Not Permitted
Phosphoric acid (food grade)	2
Polysorbate 80	3
Potassium Acetate (food grade)	2
Propylene Glycol (food grade)	3
Rice Oil (food grade)	3
Sorbitol - Food Grade	2
Sorbitol, Non-food Grade	Not Permitted
▲ Soy based products	3
▲ Soybean Oil	3
Sugar Alcohols (i.e., Mannitol, Sorbitol, etc.)	2
Sugar, Liquid	2
Sunflower Oil	3
Sweeteners	2
Syrups	2
Tea Blend	3
Vegetable Juice	2
Vegetable Oils - Product is liquid at 70°F (21°C)	3
Vinegar (e.g., apple cider vinegar, distilled vinegar, etc.)	2
Wine Vinegar/Wine Alcohol (products made from grapes)	5
Water, Potable	2
Waxes	Not Permitted
▲ Whey, Pasteurized	3
▲ Whey, raw	3
Witch Hazel (food grade)	2
Worcestershire Sauce	3
▲ Yeast- Active and Inactive	3

**X**Includes all variety of juices

#### IX. Wash Ticket Documentation

All tankers used to transfer food ingredients must present their Wash Ticket(s) to the designated department of the receiving company upon arrival at the receiving facility.

A) The wash ticket at a minimum must have the following information.

- 1) Date
- 2) Time
- 3) Name of Wash Station and location
- 4) Wash type

(i.e., "Type 1, 2, 3, or 5" or combination as described herein and whether any additional wash or treatment that was applied.

- 5) Original signature certifying information on wash ticket from authorized agent of wash facility. If an electronic wash ticket is generated, an electronic signature may be affixed to the wash ticket by an authorized agent of the wash facility in lieu of a handwritten signature. The facility must develop an electronic signature policy detailing when and how an electronic signature will be used. The policy must also describe security measures to ensure that only authorized personnel are able to access and affix an electronic signature to the ticket. Personnel authorized to affix an electronic signature to the wash ticket must have a unique ID, password, code or other measure to identify each authorized user. This ID, password or code must be confidential, known only to the user, and appropriately complex by security best practices.
- 6) Seal identifiers
- B) Additional Documentation:
  - 1. The Wash Ticket(s) must be presented prior to sampling and unloading
  - 2. Tanker driver is to obtain or confirm the presence of the tankers' Wash Ticket(s) prior to leaving the tanker wash site or accepting the shipment. This includes vendors who transport their own products.
  - 3. If the Wash Ticket(s) are lost during shipment, the destination site will provide a FAX number so the missing information can be sent; however, it is the responsibility of the tanker driver to have the Wash Ticket(s) sent.\*\*
  - 4. The carrier is required to show the tanker's previous three (3) loads, which must be indicated on the Wash Ticket(s) or on an accompanying document bearing the carriers letterhead, tanker number, and signed by a designated person. The most recent load being listed first, then the preceding two shipments in descending order.\*\*
  - 5. Accurate specific descriptions of the previous three (3) loads transported by the tanker are required. General descriptions such as "Oil", "Milk" and "Juice" are not acceptable.

Examples of correct descriptions include "Deodorized Soybean Oil", "Pasteurized Milk" and "Concentrated Orange Juice."

6. Tankers are to be filled within 72 hours of the cleaning time stamped on the Wash Ticket. If the 72-hour time period has elapsed before the tanker loading

commences, then the tanker must at a minimum be sanitized and documentation of this must be present.

7. Upon request, the carrier will furnish a copy of the tanker's load history for at least one year should the tankers previous load history become questioned.

\*\*The signature of the On Duty Dispatcher or Supervisor of the tanker carrier company must be included on all corrected documents that are transmitted to a site designated by the product owner. This procedure is required to confirm the authenticity of the information being provided.

#### X. Compliance/ Noncompliance with Tanker Wash Guidelines, Audit:

To the extent that these guidelines are incorporated into contract obligations, failure to comply with these guidelines may result in consequences including monetary damages, the rejection or destruction of product and/or termination of contract. To the extent that non-compliance may result in a violation of law, including laws prohibiting adulteration of foodstuffs, non-compliance may *indirectly* result in civil and criminal penalties.

Compliance will be determined as mutually agreed. Audits or other inspections may reveal compliance and/or deficiencies. Appendix I includes an acknowledgement.

**Disclaimer**: A function of the JPA is the compilation and distribution of information. In presenting this material, the JPA does not warrant or guarantee any of the information provided for any use whatsoever. JPA does not advocate use of any product, specifications, or information described herein, nor is JPA responsible for misuse of any information contained herein. JPA proposes that this code of practice may promote the safe and sanitary transfer of foods. However, it does not warrant that the code of practice, by itself will accomplish this. Since numerous factors can affect the efficacy of these practices and all equipment is different, validation testing by individual companies is strongly recommended. Although validation testing may be conducted by JPA, validation testing is the responsibility of each company. All such methods, model practices, specifications and guidelines contained herein are voluntary. This is the case irrespective of the use of terms that suggest a mandatory practice. Since JPA is not a governmental entity nor legislative body, JPA work is thus not entitled to the force and effect of law for any purpose.

JPA does not guarantee or warrant that use of JPA code of practice and guidelines will assure the user of compliance with applicable laws or that the use of these JPA practices and guidelines will result in safe or intended consequences. Persons who use JPA Guidelines do so at their own risk.

JPA does not recommend JPA practices or guidelines in any case where they may result in the user or product to be in violation of applicable laws. This is not an approved wash practice for specific commercial or religious purposes.

# **APPENDIX I**

# MODEL TANK WASH TICKET

Name of Wash Station				
Location				
Wash Type Type 1	Type 2	Type 3	Туре 5	
Other (Describe)				
Unit #				
Last Prod				
Wash Cycle#				
Dome Lid & Gskt				
Vent				
Pump				
Hoses #				
Valve & Plunger Gskts				
Time In		Time Out		AM PM
Date				
Seal ID's				
		ft Supervisor		
	0	nature iplicate)		

# Acknowledgement

Of

# [Company Name] – Tanker Wash Policy

On behalf of [Company Name] I certify the Tanker Washing Policy, [insert date] has been reviewed, understood, and will be complied to by my company:

		of
(Person Name- Printed)	(Title)	(Company Name)
(Signature)		(Date)
	•••	

## Addendum A

# **Cleaning Guidelines for Tankers Hauling Kosher Juice and Juice Products**

The Juice Products Association (JPA) has taken very seriously the importance of tanker sanitation and its impact on food safety. It has been well documented that an effective tanker wash sanitation program using sound Hazard Analysis and Critical Control Point (HACCP) principles will result in safe, quality food products during shipment. As a trade association of the majority of companies involved in the manufacture and shipment of juices, JPA is committed to developing programs and providing guidance to its members in this regard.

It is also of the utmost importance that while insuring the quality and safety of all products produced by our members, we are also evaluating ways to insure that these programs also comply with religious requirements, specifically, kosher law. This is critical as many of our members market kosher products. We are committed to insuring that we develop programs that support this important religious and marketing need!

In developing the JPA "Model Tanker Wash Guidelines for the Fruit Juice Industry" (Tanker Wash Code of Practice), kosher requirements were not considered during its development. Many of our members believe that JPA should include requirements that support both Food Safety and Kosher objectives.

It is the belief of JPA that the Type 2 and Type 3 wash outlined in the JPA Tanker Wash Code of Practice will all comply with kosher law and result in a tanker that meets the kosher requirements. The following is a brief description of the process.

- 1. Only products allowed by the JPA Tanker Wash Code of Practice are hauled by tanker companies hauling JPA member company products. This eliminates any animal based products, fats rendered, etc., except dairy. A copy of the JPA Tanker Wash Code of Practice is posted on the JPA Web site: www.juiceproducts.org.
- 2. Ambient or chilled (40 degrees Fahrenheit) product is filled into a previously washed and sealed tanker.
- 3. Product is hauled to the receiving site and unloaded without any heating of the product in the tanker prior to unloading.
- 4. Empty tanker is sealed and hauled to the tanker wash station.
- 5. In most cases, a person enters the tanker to ensure all heel (existing product) is removed via pressure washing with ambient potable water. This procedure is not mandatory and may not be performed by some companies due to safety concerns

and the verified ability of the clean-in-place (CIP) system to effectively remove all heel.

- 6. After washing, the empty tanker is carefully rinsed with ambient potable water and all prior product is assured removed. (Hot water is NOT acceptable at either of these stages as this can result in "baking on" of soils.)
- 7. Hot caustic is then applied to the tanker via a spray ball. Concentration will vary depending on the chemical used. The temperature is typically between 100 degrees Fahrenheit (F) and 160 degrees F (exit temperature) depending on the chemical cleaner used. (Manufacturer's recommendations should be followed.)
- 8. Tanker is rinsed with potable water.
- 9. Tanker is sanitized with a chemical sanitizer.

Typically, in a plant environment kosher approval is given by the Rabbi for a product filled in this manner between non-kosher and kosher products. This is due mostly to the fact that no heat step is involved in the process. As previously described, there is no heat step in loading and hauling tankers (see step 2 above). JPA believes this should satisfy all kosher agencies. If a nonkosher grape juice was loaded and hauled prior to a kosher orange juice, and the tanker was cleaned as prescribed above and outlined in the JPA Tanker Wash Code of Practice, washing in the manner described would render the tanker satisfactory for hauling a kosher load. We believe that this is true providing the wash station uses only chemicals that are approved and certified to be kosher. JPA realizes that hauling products for Passover is totally different, and we suggest that our membership consult with their rabbinical organization responsible for kosher approval of their products for requirements during these holy days.

JPA approved auditors note on the audit report if a wash station has kosher certification.

For those products in which a higher cleaning temperature is required (e.g., wine vinegar) by a kosher certification agency, a Type 5 wash will be used.

Note: These guidelines are not a substitute for on-site inspection and certification from kosher certification agencies. It is the responsibility of the tanker wash station to obtain kosher certification, if required from relevant authorities. At this time, we have confirmed with the following rabbinical organizations – Orthodox Union (OU), Chicago Rabbinical Council (CRC), The Organized Kashruth Laboratories (Circle K) and Triangle K and Associates - that juice and juice concentrates hauled using equipment cleaned under the JPA Tanker Wash Guidelines and certified as such by a rabbinic representative, will be kosher upon arrival at the plant.