



**Fresh Produce  
Food Safety Training  
for  
Farm and Shed Managers**

Complied by:

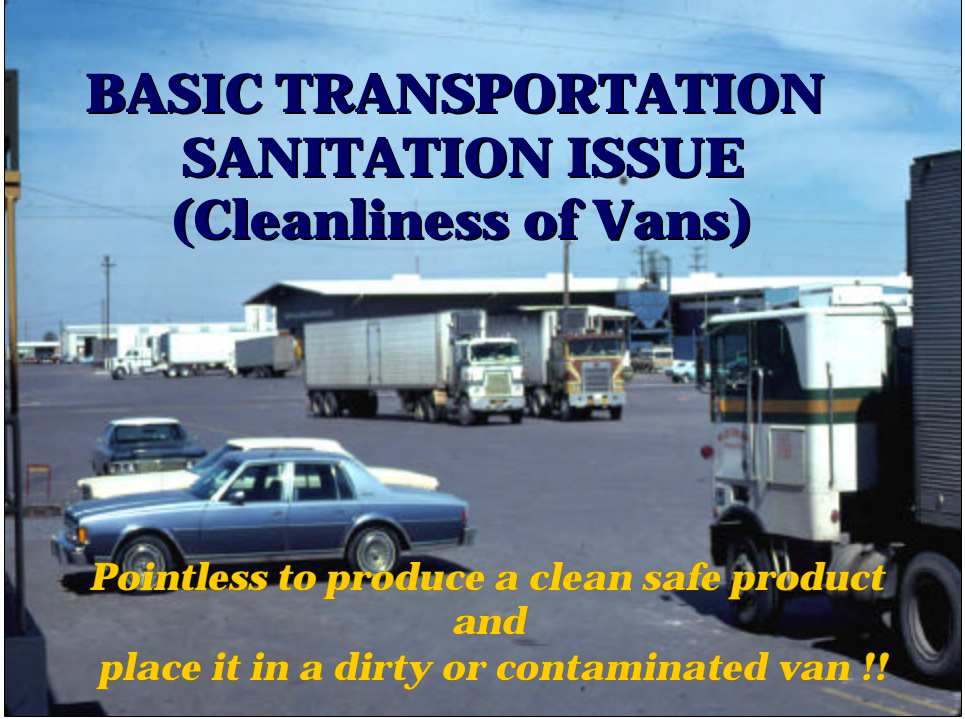
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TAMU AREC @ Weslaco, respectively



**TRANSPORTATION**



# **TRANSPORTATION**

A photograph of a truck yard or parking lot. In the foreground, a blue sedan is parked. In the background, several semi-trucks are parked, including a white one with a trailer and a yellow one. The sky is blue with some clouds.

**BASIC TRANSPORTATION  
SANITATION ISSUE  
(Cleanliness of Vans)**

*Pointless to produce a clean safe product  
and  
place it in a dirty or contaminated van !!*

## **LOAD PRODUCE ONLY IN CLEAN PRECOOLED VANS**

- **THE PRODUCE IS YOURS, YOUR WILL BE RESPONSIBLE FOR IT.**
- **INSPECT AND INSIST ON PRE COOLED WASHED VANS PRIOR TO LOADING**
- **MAY BE MONEY WELL SPENT TO INSTALL A POWER WASH STATION.**
- **CHECK PRIOR LOAD HAULED.**



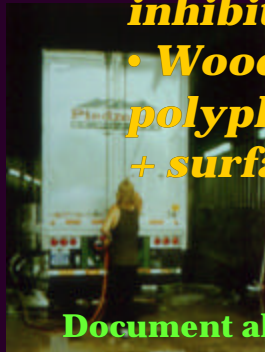
Remember it is your produce and your reputation that is riding in the van.

It is also your responsibility and right to ship in a clean and sanitized van.

You will be the one who will pay the consequences in and outbreak.

## **VAN WASHING PRIOR TO LOADING**

- ***Pre-clean & pre-rinse***
- ***Proper cleaner selection is needed***
- ***Use adequate contact time***
  - ***Aluminum panels & floors, utilize moderately alkaline + corrosion inhibitors***
  - ***Wood panels, utilize polyphosphates + surfactants***



**Document all activities followed !!**

There have been several outbreaks traced back to shipping produce in contaminated vans.

Therefore, determine what the prior load was and demand that the vans be high pressure washed and sanitized prior to loading

Select the most effective products needed to do the job.

You may need to install a high pressure wash setup if none are in the immediate area.

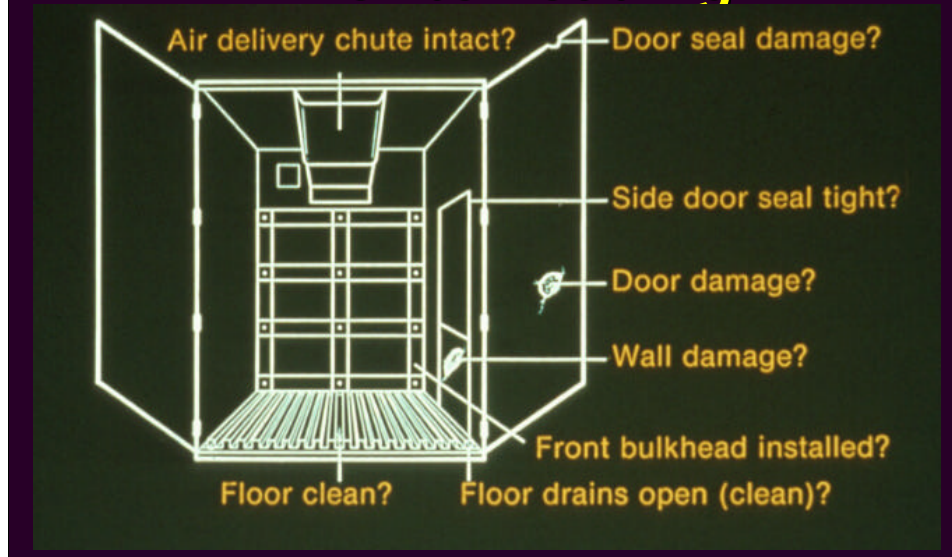
## Sanitation & Cleanliness

- **Adequate mechanical disinfecting**
  - **High Pressure Cleaning Equipment**
    - 650-850 psi & 130-150° F
  - **Clean water rinse utilize**
    - 60-80 psi & 130-150° F

High pressure washing equipment must have adequate force to insure proper cleaning

The above are good guidelines for washing and rinsing pressures.

## Truck Features to Check Prior to Loading



Damage or worn vans can cause problems for use.

Record all problems

Inspect them and demand that they are repaired.

A photograph of a pre-cooled dock area. The scene shows a person in a dark shirt and light pants working in a large, enclosed space filled with stacks of cardboard boxes. The floor is covered with a white protective material. The lighting is bright, and the overall environment appears clean and organized.

## **Load from an Enclosed, Pre-cooled Dock**

- **Enhances produce quality by maintaining optimum product temperature and reducing the potential for contamination**
- **Facilitates easier implementation of sanitation practices**

When loading, it eliminates some contamination potential by reducing the incidence of dust blowing onto the produce, bird and other animal entrance, and, it helps to control unwanted visitors.

Enclosed facilities also makes it easier to keep the facility clean

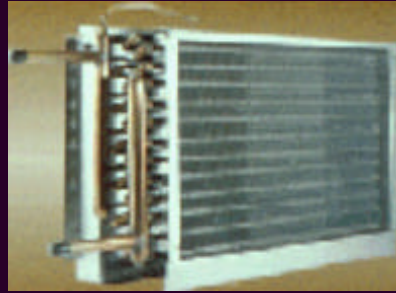


## **PRE-COOL VANS PRIOR TO LOADING**

- **Cool to temperature required by product**
  - *Maintains product quality*
  - *Reduces produce “sweating”*
  - *Reduces microbial development*

Reducing wetting helps reduce infection potential

## Dry Cleaning of Evaporator Coils and Fins



\*Vacuum

\*Gaseous oxidizers

Inspect and have cleaned van cooling equipment



This information will help in the event that a trace back or trace forward order is issued if an outbreak occurs.

**SUMMARY**  
**SHIPPING AND TRANSPORTATION**  
(vulnerable contamination areas)

- **LOADING**
- **UNLOADING**
  - ***Fork lifts***
  - ***Pallets / totes***
  - ***Loading docks***
  - ***Truck vans***



**GOOD AGRICULTURAL PRACTICES**  
for  
**Production, Handling and Shipping**  
of  
**FRESH PRODUCE**

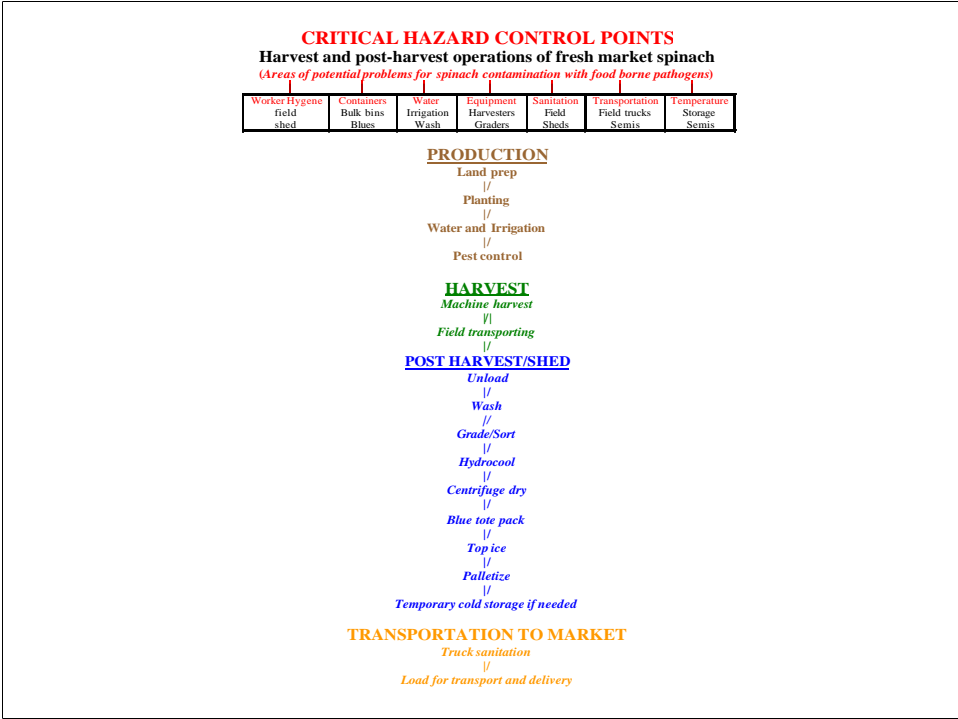


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Department of Horticultural Sciences

Sponsored by:  
The Wintergarden Spinach Producers Board



Growers and shippers should get a copy of this guide and follow it.  
The guide contains good agricultural practices and a check list to be followed to insure the GAPs are in place and their use documented.



The guide follows the above flow chart.

Across the top of this page is the main critical points where produce can become contaminated. Attention should be paid to these items to reduce the incidence of potential contamination.

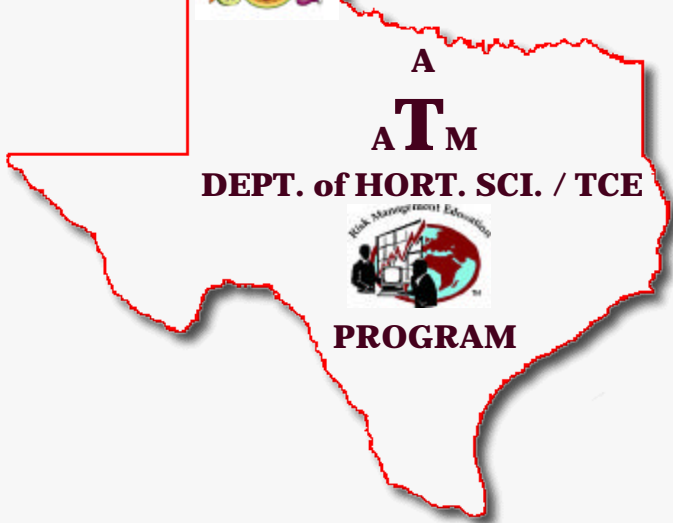
The items down the page represents all facets of the cultural practices normally employed in the production, handling and shipping of produce. Most of the hazard areas are important within each of the cultural facets.

The guide attempts to address each of these.

The check points outlined within the guide can be modified to reflect each individual operation. A computer spread sheet is helpful to document what and when these items have been affected.

## POSTED ON WEB (Coming soon!)

- This training
- GAPs for Fresh Produce Safety
  - Aggie Horticulture
    - Extension
      - Commercial Horticulture
        - Food Processing and Safety



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**DEPT. of HORT. SCI. / TCE**



**PROGRAM**