

Pecan Handling Procedures for Maintaining a Safe, Sanitary and Professional Workplace

Overall Process: At Comal Pecan Farm, pecans are grown, managed, harvested, processed and handled for sale using processes and procedures outlined in the Guide Good Agricultural Practices for Pecans in Texas, compiled by Larry A. Stein, Monte Nesbitt, Al Wagner, Bill Ree and George Ray McEachern of Texas AgriLife Extension Service. The following paragraphs provide more detail on handling, sanitation and cracking of the pecans.

Personnel: Employees are to wear food handling gloves while working with cracked or shelled pecans. Employees shall change gloves if they have become contaminated or damaged. Employees are to wash hands frequently at a minimum of each time before leaving the restroom and before glove application.

Pecan Sanitation Process:

Wash Bath:

1. Pecans shall be sanitized in-shell using ZEP FS FORMULA 4665, Technical Bulletin 2890.
2. Note: Concentration level to be 1000 PPM instead of recommended 200 PPM per bulletin.
3. Mix 32 fluid oz of ZEP FS FORMULA 4665 with 30 gallons of tap water.

Pre-wash:

1. Place pecans in large tub of tap water. Stir pecans around using stainless hand baskets to clean them.
2. Remove any bad or cracked pecans.
3. Stir until loose debris, dust and any trash is removed and the pecans are clean, then remove from pre-wash tub.

Sanitation:

1. Mix ZEP FS FORMULA 4665 with clean tap water in sanitizing container.
2. Mixture is then stirred using stainless hand baskets.
3. Once per month of regular sanitation, test concentration using the ZEP High Concentration Test Kit.

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4. The test shall indicate a concentration of at least 1000 PPM. Add ZEP FORMULA FS 4665 if needed to meet requirement.
5. Record date, starting concentration level (if tested) and number of mesh bags or lbs. of pecans and length of time pecans are in the solution (minimum 5 minutes) on **Pecan Sanitation Log**.

Pecan Cracking:

Comal Pecan Farm pecans:

1. Pecans to be cracked shall be clean and sanitized per above sanitation process.
2. To be cracked only on customer demand (see posted notice to customers, reproduced below)
3. Employees operating cracking machines shall wash hands before handling and cracking pecans. Minimize handling by using stainless steel scoops and clean containers to move the pecans to the crackers and the shell aspirator.
4. Containers to be lined with poly bags if required.
5. Fill clean containers with the cracked and aspirated pecans for delivery to the customer.
6. Pecan crackers and surrounding work area to be cleaned daily to maintain a clean, sanitary work area and cracking machines.

Customer pecans:

1. Customer pecans shall be free of leaves, debris, rocks, sticks and any animal matter or other contaminants.
2. Pecans shall be delivered in containers suitable to keep the pecans clean and for holding the cracked pecans for return to the customer.
3. Cracking procedure shall follow the steps outlined above for Comal Pecan Farm pecans.
4. Pecan crackers to be cleaned after cracking customer pecans if deemed necessary by the cracker operator.

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Pecan Sanitation Log

<u>Date</u>	<u>Variety</u>	<u>Lbs. Sanitized</u>	<u>Sanitation Procedure</u>	<u>Comments</u>
			ZEP FS FORMULA 4665	
			ZEP FS FORMULA 4665	
			ZEP FS FORMULA 4665	
			ZEP FS FORMULA 4665	
			ZEP FS FORMULA 4665	
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