DEPARTMENT OF PLANNING AND COMMUNITY DEVELOPMENT



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June 7, 2010

MEMO TO: Agricultural Advisory Board (AAB)

FROM: Javier Camarena, Assistant Planner

Department of Planning and Community Development

SUBJECT: USE PERMIT APPLICATION NO. 2010-08 - RAMOS HULLER

ALTERNATIVE AGRICULTURAL BUFFER

The Stanislaus County Department of Planning and Community Development has received an application to develop a huller/dryer on a 40' x 60' slab for a private walnut operation. The site is located on 14433 Claribel Road in the north Waterford area. The site is comprised of a single family home, shop building, and existing walnut orchard. The site is surrounded by walnut orchards to the west, south and east, and grazing land to the north. The site is remote with the closest home almost a mile away.

The applicant has proposed an alternative to the Agricultural buffer standards which requests a reduced setback and alternative vegetative screen. The applicant's proposal and the County's Buffer and Setback Guidelines are outlined below:

Stanislaus County Buffer & Setback Guidelines Requirements

- All new non-agricultural uses shall incorporate a minimum 150-foot buffer (300-foot wide buffer for people-intensive outdoor activities) from all property lines.
- The buffer shall incorporate a solid wall and a vegetative screen consisting of two staggered rows of trees and shrubs along any portion of a buffer where the project site and the adjoining agricultural operation share a common parcel line.
- General alternatives approved by the AAB for Tier 1 and Tier 2 uses include:
 - When trespassing onto neighboring property is determined not to be an issue, the fencing requirement may be waived.
 - provided an overall distance of 150 feet or grater exists between the proposed use and the property line, no vegetative screening shall be required.

Applicant's Proposal

Setbacks

North: Approximately 400 feet
East: Approximately 1,800 feet
South: Approximately 30 feet
West: Approximately 820 feet

The southern setback is less than the required 150-foot buffer, however the applicant would like to place the huller/dryer in this location due to the topography of the property.

Vegetative Screen

Existing trees (not evergreen) along the southern portion of the huller/dryer (see slideshow photos)

Fencing

No fencing

Trespassing is not an issue due to the site being so far from any public roads

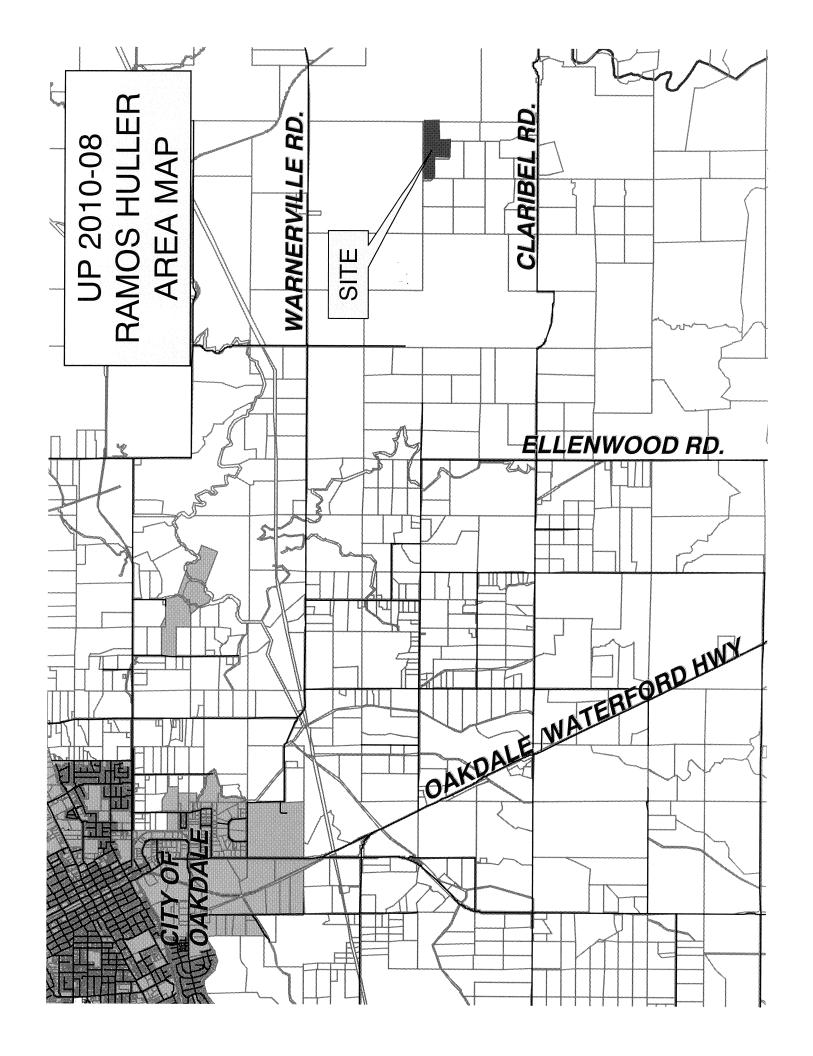
Other factors

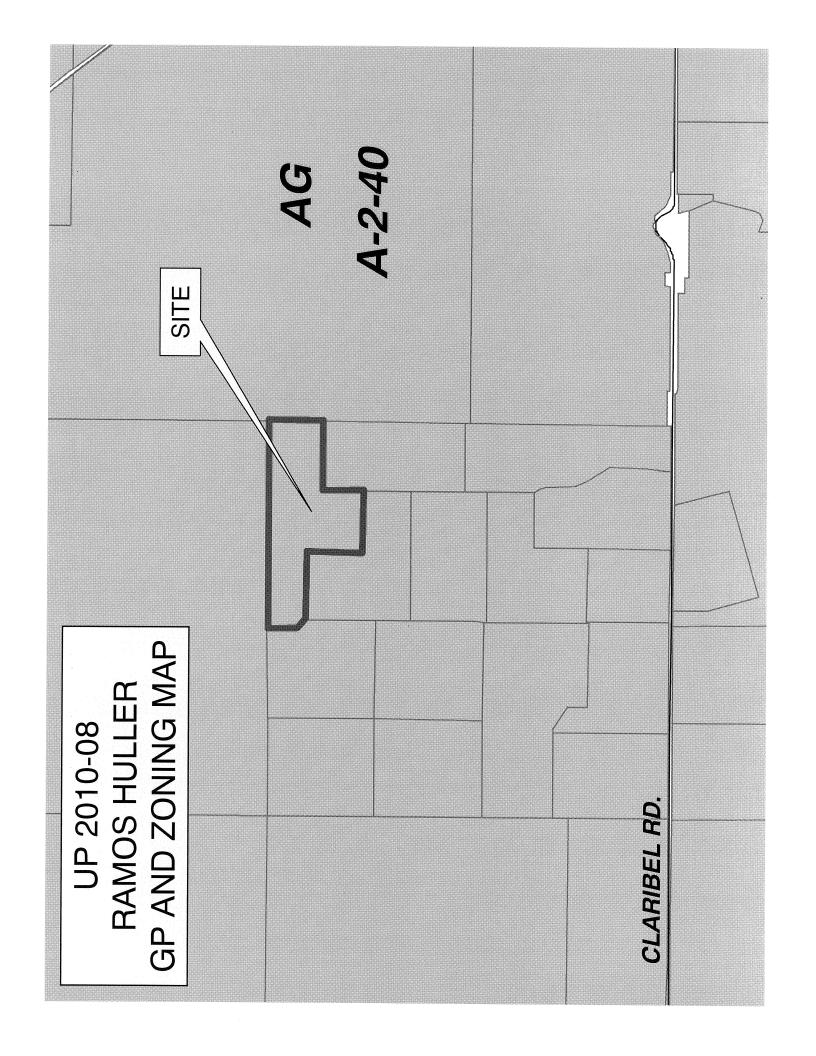
- The applicant has stated that typically there is no spraying during the harvest season which is when the huller/dryer will be in operation and the site is surrounded by the same crop (walnuts) that will be hulled and dried.
- The huller/dryer is proposed as a private operation, however, the project will not be restricted to private use.

Areas of Concern

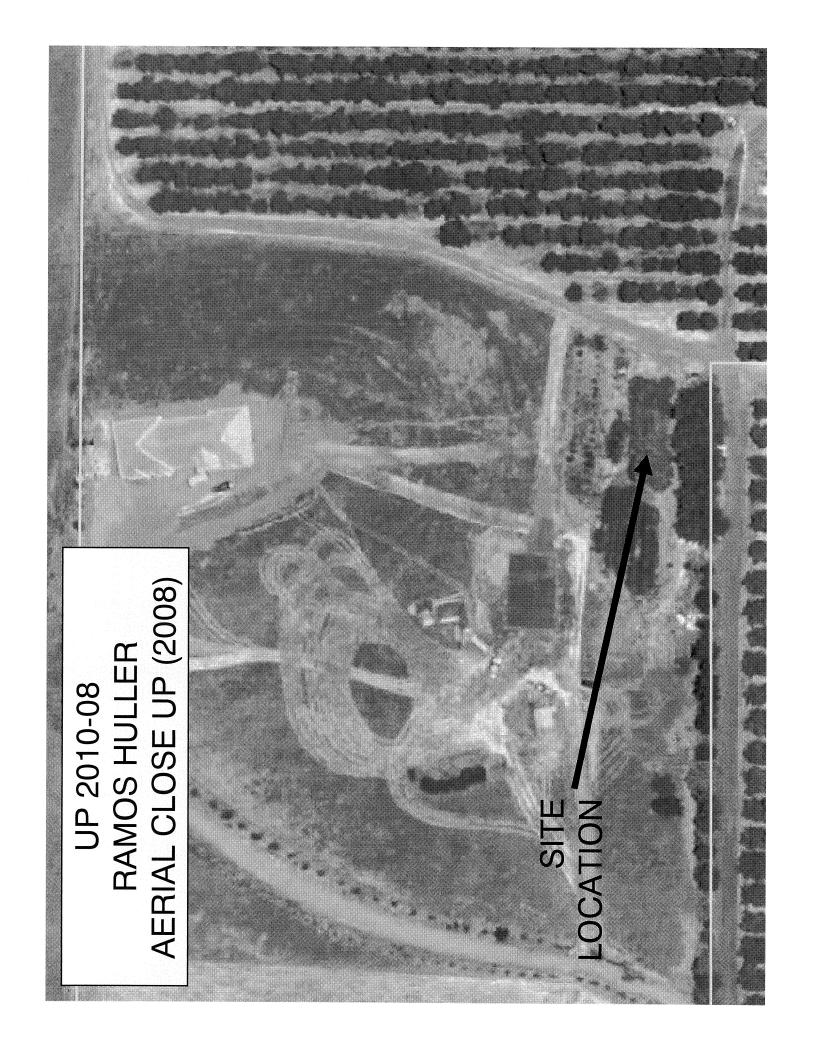
- Setbacks: The southern setback does not meet the required 150 feet, however the topography of the property makes it difficult to located it further from the southern property line.
- Vegetative Screen: Two staggered rows of trees and shrubs characterized by evergreen foliage are required because of their "filtering" characteristics to avoid spray drift conflicts.

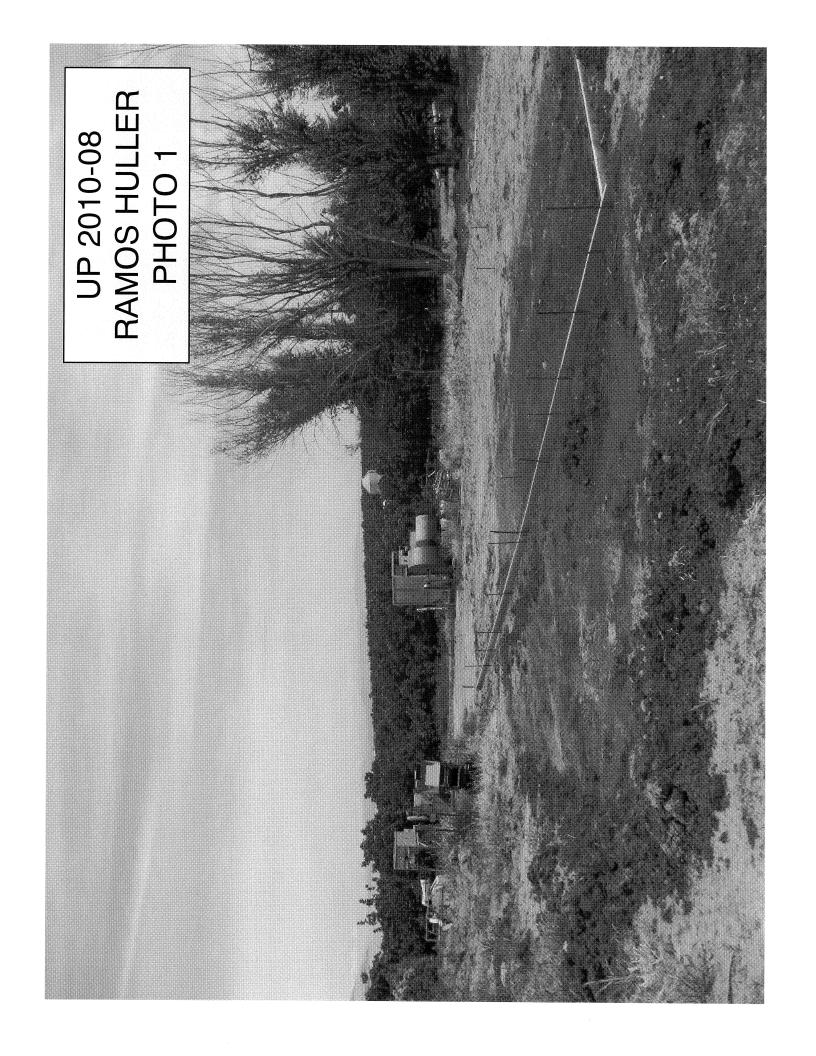
Attachments: Maps Project Description Buffer Alternative

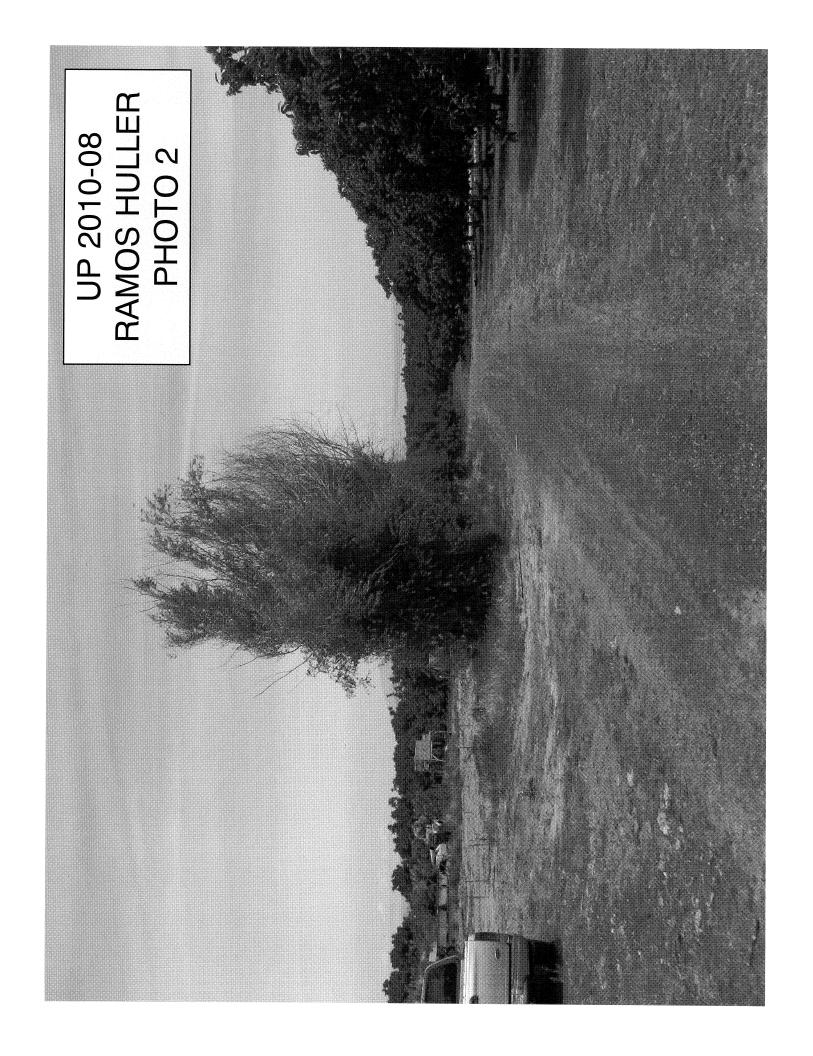


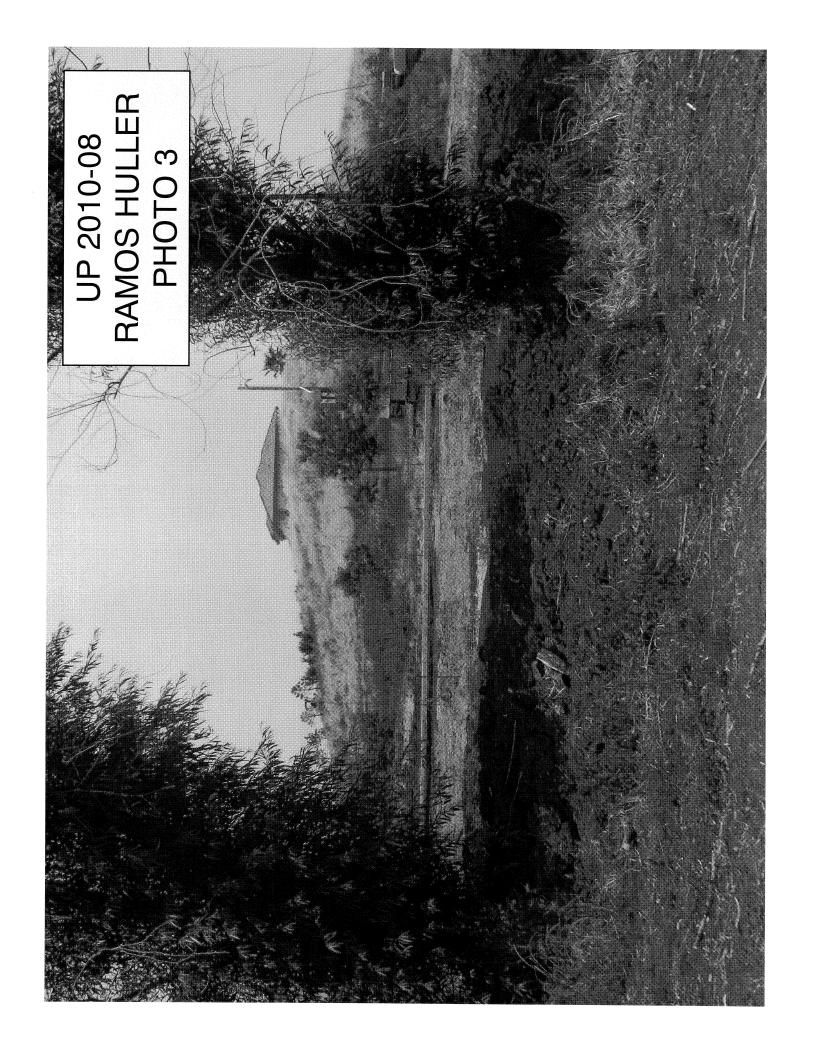


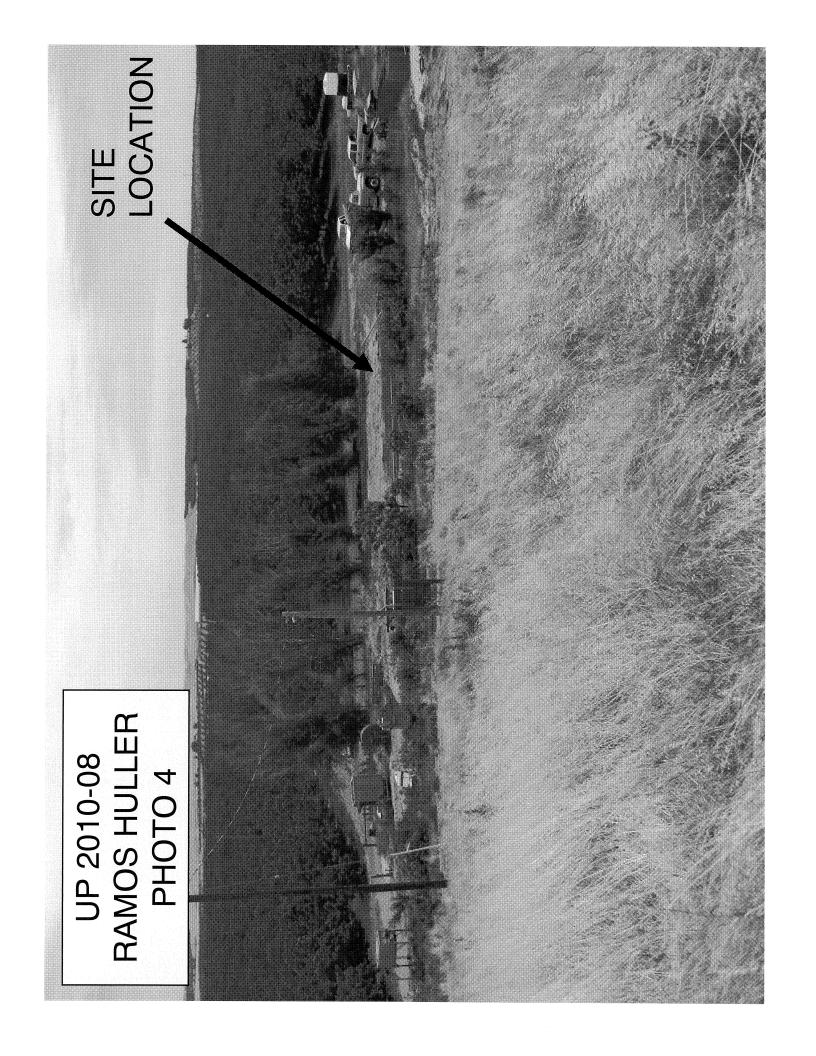
UP 2010-08 RAMOS HULLER AERIAL 2008











Ramos Family Huller

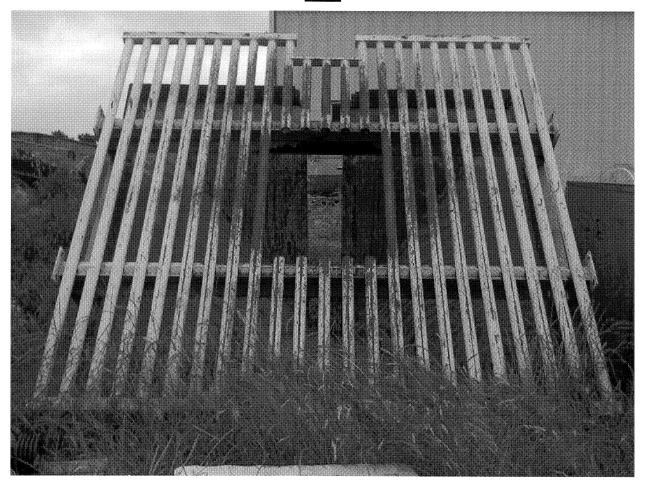
14433 Claribel Rd.

Waterford, Ca 95386

Attn: Hipolito Ramos

Tel. 209-543-4545

Trash Pit



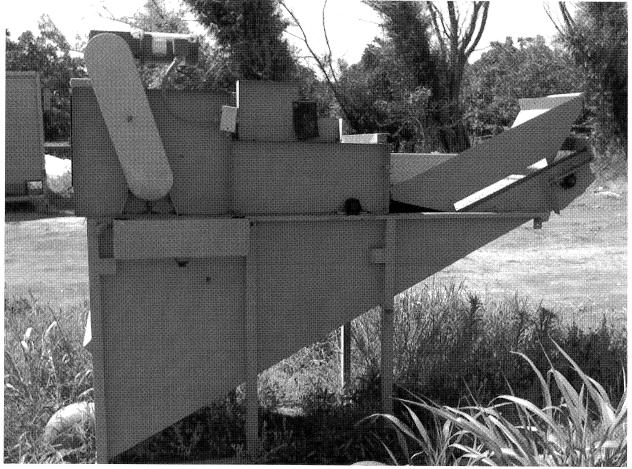
This is where the walnuts first enter the huller. Carts loaded with Walnuts are brought directly from the field and are dumped into the pit. A small conveyer belt located at the bottom of the pit transfers the Walnuts into the squirrel cage.

Squirrel Cage



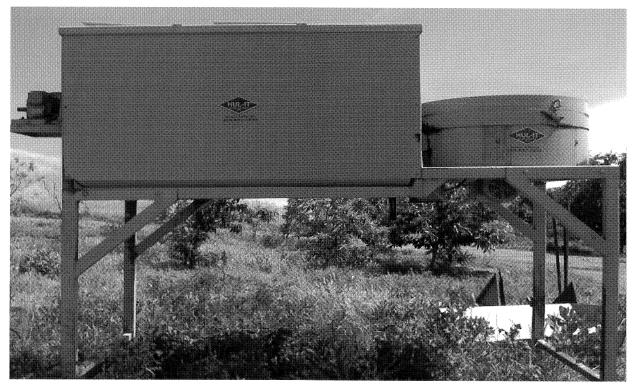
At the squirrel the Walnuts will pass through a spinning cylinder, while being sprayed with water. Here smaller pieces of debris like rocks, sticks, loose hulls, leafs and other organic garbage is separated form the Walnuts. This process allows the hulling mechanism to operate correctly and efficiently.

<u>Float</u> <u>Tank</u>



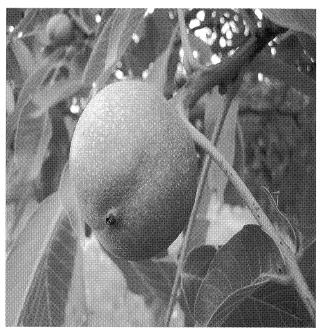
After the Walnuts pass through the Squirrel cage they are transferred into the float tank. Here larger size debris that couldn't be removed by the squirrel cage is segregated. As the walnuts float across the tanks, heavier objects such as rocks will sink to the bottom. A large valve at the bottom of the tank will be opened and the debris removed. Throughout this process water is being used to eliminate dust as a bi product as well as to soften the hull for removal.

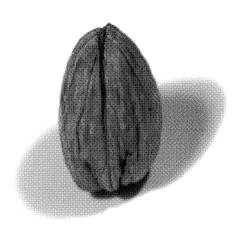
<u>Huller</u>



As the Walnuts exit the Float tank they are sent into the huller. This is the most important step to hulling process. The walnuts are run underneath two reciprocating wire brushes that scrub the hull away as they pass. These wire brushes are slightly adjusted as to not break the shell. This walnut huller is ideal for what we are doing here at our small operation.

Examples of Walnuts with and witout Hulls

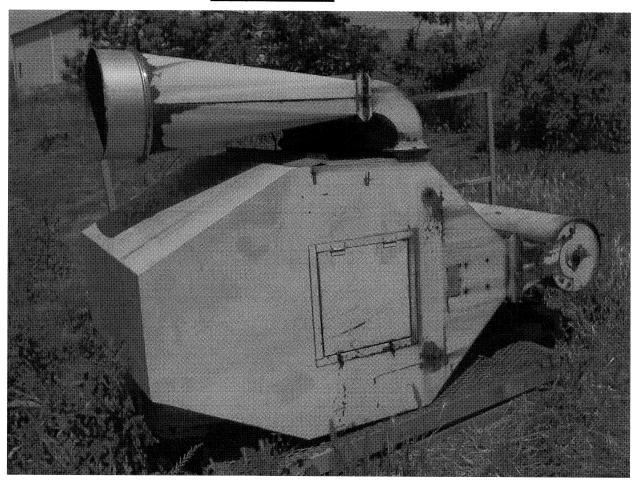




Before, walnut with hull.

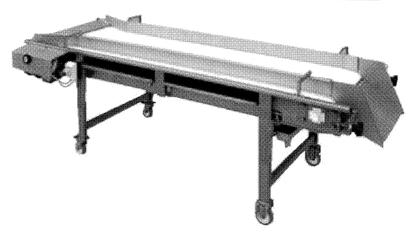
After, walnut de-hulled.

Aspirator



The machine is a fan system that sucks air in and is adjusted to only remove the hulls, "blank" walnuts and any other debris leafs or sticks not separated in the previous steps. This aspirator has ducting that will move the debris to another area of the huller and be properly disposed of.

Sorting table



The purpose of the sorting table is to allow us to inspect the quality of the Walnuts that have been hulled and to remove defective Walnut before being sent to the drying bins. We look for sun damaged walnuts, walnuts that have a mold film on them from the walnut hull, walnuts that might have ants or other insects on them and walnuts that were too green to have been de-hulled correctly.

Drying Bins



These bins are filled with the walnuts from the sorting table and they are put to dry. The drying bins are moved by fork lift and are placed on top of the burner tunnels.

Burners



The drying process consists of two burners and one electric fan; this is all built into one centralized unit. 2 tunnels are attached to the exhaust side and heat travels through these tunnels. There are a total of 12 doors where drying bin are placed each holding one bin of hulled Walnuts. The drying temperature is set between 110-120 F which in turn will dry a bin in approximately 8-10 hours. Field fresh walnuts have a high amount of moisture which is increased by the hulling process; our goal is to lower the moisture content in the walnuts down to 7%-8% before being shipped to the processor.