



San Joaquin Valley

AIR POLLUTION CONTROL DISTRICT

MAR - 1 2010

Dale Van Groningen
Van Groningen Orchards
21003 Jack Tone Road
Ripon, CA 95366

Re: Notice of Preliminary Decision - Emission Reduction Credits
Project Number: N-1070929

Dear Mr. Van Groningen:

Enclosed for your review and comment is the District's analysis of Van Groningen Orchards's application for Emission Reduction Credits (ERCs) resulting from the removal of almond receiving, precleaning, and hulling equipment, at 21003 S. Jack Tone Road in Ripon, CA. The quantity of ERCs proposed for banking is 3,633 pounds of PM10.

The notice of preliminary decision for this project will be published approximately three days from the date of this letter. Please submit your written comments on this project within the 30-day public comment period which begins on the date of publication of the public notice.

Thank you for your cooperation in this matter. If you have any questions regarding this matter, please contact Mr. Kai Chan of Permit Services at (209) 557-6451.

Sincerely,

David Warner
Director of Permit Services

DW: KC/cm

Enclosures

Seyed Sadredin

Executive Director/Air Pollution Control Officer

Northern Region

4800 Enterprise Way
Modesto, CA 95356-8718
Tel: (209) 557-6400 FAX: (209) 557-6475

Central Region (Main Office)

1990 E. Gettysburg Avenue
Fresno, CA 93726-0244
Tel: (559) 230-6000 FAX: (559) 230-6061
www.valleyair.org

Southern Region

34946 Flyover Court
Bakersfield, CA 93308-9725
Tel: (661) 392-5500 FAX: (661) 392-5585



San Joaquin Valley

AIR POLLUTION CONTROL DISTRICT

MAR - 1 2010

Mike Tollstrup, Chief
Project Assessment Branch
Stationary Source Division
California Air Resources Board
PO Box 2815
Sacramento, CA 95812-2815

Re: Notice of Preliminary Decision - Emission Reduction Credits
Project Number: N-1070929

Dear Mr. Tollstrup:

Enclosed for your review and comment is the District's analysis of Van Groningen Orchards's application for Emission Reduction Credits (ERCs) resulting from the removal of almond receiving, precleaning, and hulling equipment, at 21003 S. Jack Tone Road in Ripon, CA. The quantity of ERCs proposed for banking is 3,633 pounds of PM10.

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San Joaquin Valley

AIR POLLUTION CONTROL DISTRICT

MAR - 1 2010

Gerardo C. Rios (AIR 3)
Chief, Permits Office
Air Division
U.S. E.P.A. - Region IX
75 Hawthorne Street
San Francisco, CA 94105

**Re: Notice of Preliminary Decision - Emission Reduction Credits
Project Number: N-1070929**

Dear Mr. Rios:

Enclosed for your review and comment is the District's analysis of Van Groningen Orchards's application for Emission Reduction Credits (ERCs) resulting from the removal of almond receiving, precleaning, and hulling equipment, at 21003 S. Jack Tone Road in Ripon, CA. The quantity of ERCs proposed for banking is 3,633 pounds of PM10.

The notice of preliminary decision for this project will be published approximately three days from the date of this letter. Please submit your written comments on this project within the 30-day public comment period which begins on the date of publication of the public notice.

Thank you for your cooperation in this matter. If you have any questions regarding this matter, please contact Mr. Kai Chan of Permit Services at (209) 557-6451.

Sincerely,

David Warner
Director of Permit Services

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Modesto Bee
Modesto Bee

**NOTICE OF PRELIMINARY DECISION
FOR THE PROPOSED ISSUANCE OF
EMISSION REDUCTION CREDITS**

NOTICE IS HEREBY GIVEN that the San Joaquin Valley Unified Air Pollution Control District solicits public comment on the proposed issuance of Emission Reduction Credits to Van Groningen Orchards for the removal of almond receiving, precleaning, and hulling equipment, at 21003 S. Jack Tone Road in Ripon, CA. The quantity of ERCs proposed for banking is 3,633 pounds of PM10.

The analysis of the regulatory basis for this proposed action, Project #N-1070929, is available for public inspection at http://www.valleyair.org/notices/public_notices_idx.htm and the District office at the address below. Written comments on this project must be submitted within 30 days of the publication date of this notice to **DAVID WARNER, DIRECTOR OF PERMIT SERVICES, SAN JOAQUIN VALLEY UNIFIED AIR POLLUTION CONTROL DISTRICT, 4800 ENTERPRISE WAY, MODESTO, CA 95356.**

San Joaquin Valley Air Pollution Control District ERC Banking Application Review

Facility Name: Van Groningen Orchards
 Mailing Address: 21003 S. Jack Tone Road
 Ripon, CA 95366

Date: February 24, 2010
 Engineer: John Fowler
 Kai Chan
 Lead Engineer: Rupi Gill

Contact Person: Dale Van Groningen
 Telephone: (209) 599-4944
 Fax: (209) 599-3406
 Facility ID: N-374
 Project #: N-1070929
 Deemed Complete: May 1, 2007

I. PROPOSAL:

Van Groningen Orchards is applying to bank Emission Reduction Credits (ERCs) for the shutdown of their almond receiving/pre-cleaning operation (Permit Unit N-374-2-0) and hulling operation (Permit Unit N-374-1-1). The facility did not operate any almond shelling equipment onsite and the hulled in-shell almonds were transported offsite to another facility for almond shelling. Van Groningen Orchards only used their almond receiving, pre-cleaning and hulling facility to process their own field-harvested almonds. With the shutdown of their almond processing operation, the ownership of Van Groningen Orchards has now entered into a partnership with Van Ruler Shelling where their field-harvested almonds will be pre-cleaned, hulled, and shelled by Van Ruler Shelling under permit units N-925-1-2 and N-925-2-1. Since Van Groningen Orchards did not perform any almond shelling at their facility, they are not applying for emission reductions from the shelling of their almonds as a result of moving their almond processing operations to Van Ruler Shelling. In addition, the almond receiving, pre-cleaning, and hulling operations at Van Groningen Orchards did not utilize control equipment, which were as efficient in controlling PM₁₀ emissions then the control equipment utilized at Van Ruler Shelling. Therefore, the bankable emission reduction credits will be calculated based on the difference between the control efficiency of the Van Groningen Orchards pre-cleaning and hulling operations, and the Van Ruler Almond Shelling pre-cleaning and hulling operations.

The following table provides the summary of bankable emission reductions on a quarterly basis.

Bankable Emission Reductions lb/quarter				
Pollutant	1 st Quarter	2 nd Quarter	3 rd Quarter	4 th Quarter
PM ₁₀	0	0	2,306	1,327

II. APPLICABLE RULES:

District Rule 2201: New and Modified Stationary Source Review (09/21/06)
District Rule 2301: Emission Reduction Credit Banking (12/17/92)

III. LOCATION OF REDUCTIONS:

The facility is located at 21003 S. Jack Tone Road in Ripon, California.

IV. METHOD OF GENERATING REDUCTIONS:

Van Groningen Orchards has shutdown their almond receiving, pre-cleaning, and hulling operations, and is now processing their field-harvested almonds at Van Ruler Shelling with more efficiency PM₁₀ control equipment.

V. EMISSIONS CALCULATIONS:

A. Assumptions:

1. Particulate matter is the only pollutant emitted from almond receiving, pre-cleaning, and hulling operations.
2. Other assumptions will be stated as they are made.

B. Emission Factors (EF):

No source test was ever conducted at the facility. Therefore, emission factors from EPA document AP-42, Table 9.10.2.1-1 (1/95) will be used to determine actual emissions. These emission factors are discussed in detail in Appendix B of this evaluation. The summary of these surplus emission factors in pounds per meat weight tons (lb/MWT) are presented in the following section:

1. Shutdown Facility Emission Factors (EF1):

a. Receiving/Precleaning (N-374-2-0):

Operation/Unit	EF1 _{PM10} (lb/MWT)
Receiving	0.23
Pre-cleaning	4.10
Total	4.33

b. Hulling/Separating (N-374-1-1):

Operation/Unit	EF1 _{PM10} (lb/MWT)
Hulling/Separating and Air Legs	4.13
Total	4.13

c. Total EF1_{PM10} (N-374):

$$\begin{aligned} \text{Total EF1}_{\text{PM10}} &= \text{EF1}_{\text{PM10/Total Receiving/Precleaning}} + \text{EF1}_{\text{PM10/Total Hulling/Separating}} \\ &= 4.33 \text{ lb-PM}_{10}\text{/MWT} + 4.13 \text{ lb-PM}_{10}\text{/MWT} \\ &= 8.46 \text{ lb-PM}_{10}\text{/MWT} \end{aligned}$$

$$\text{EF1}_{\text{PM10/Total}} = 8.46 \text{ lb-PM}_{10}\text{/MWT}$$

2. New Facility Emission Factors (EF2):

a. Receiving/Precleaning (N-925-1-2):

Operation/Unit	EF2 _{PM10} (lb/MWT)
Receiving	0.003
Pre-cleaning	0.075
Total	0.078

b. Hulling/Separating (N-925-2-1):

Operation/Unit	EF2 _{PM10} (lb/MWT)
Hulling/Separating	0.065
Air Legs	0.077
Total	0.142

c. Total EF2_{PM10} (N-925):

$$\begin{aligned} \text{Total EF2}_{\text{PM10}} &= \text{EF2}_{\text{PM10/Total Receiving/Precleaning}} + \text{EF2}_{\text{PM10/Total Hulling/Separating}} \\ &= 0.078 \text{ lb-PM}_{10}\text{/MWT} + 0.142 \text{ lb-PM}_{10}\text{/MWT} \\ &= 0.22 \text{ lb-PM}_{10}\text{/MWT} \end{aligned}$$

$$\text{EF2}_{\text{PM10/Total}} = 0.22 \text{ lb-PM}_{10}\text{/MWT}$$

C. Baseline Period:

Section 3.8 of District Rule 2201 defines the baseline period as a period of time equal to either the two consecutive years of operation immediately prior to the submission date of the complete application; or at least two consecutive years within the five years immediately prior to the submission of the complete application if it is more representative of normal source operations.

The baseline period for this project are the 8 consecutive calendar quarters immediately preceding the application date (calendar years 2005 and 2006).

D. Historical Actual Emissions:

Historical Actual Emissions (HAEs) are emissions that actually occurred, and are calculated from actual production records and established emission factors per Rule 2201, Section 6.2.1.

The quarterly baseline production data in meat weight tons (MWT) is given in the following table.

Quarterly MWT Data				
Year	Q1	Q2	Q3	Q4
2005	0	0	351.5	205.9
2006	0	0	367.7	256.0
Average	0	0	359.6	231.0

The HAEs will be calculated by multiplying the average quarterly throughput of each quarter for year 2005 and year 2006 with the total emission factor summarized in Section V.B. of this evaluation.

$$\text{HAE} = \text{Average Process throughput (MWT/qtr)} \times \text{EF}_{1\text{PM}_{10}/\text{Total}} \text{ (lb/MWT)}$$

Quarterly HAEs			
Quarter	Average Process Throughput (MWT/qtr)	EF _{1PM₁₀/Total} (lb/MWT)	HAEs (lb/qtr)
1	0	8.46	0
2	0		0
3	359.6		3,042
4	231.0		1,954

E. Actual Emissions Reductions:

Per Rule 2201, Section 4.12:

$$\text{AERs} = \text{HAE} - \text{Post Project Potential to Emit (PE2)}$$

Since Van Groningen Orchards will have their field harvested almonds processed at Van Ruler Shelling, PE2 will need to be calculated to determine the AERs resulting from the shut down of the Van Groningen Orchards hulling operations.

$$\text{PE2} = \text{Maximum Permitted Process Rate} \times \text{EF}_{2\text{PM}_{10}/\text{Total}} \text{ (lb/MWT)}$$

Van Ruler Shelling processes field harvested almonds for several growers and will have a maximum daily process rate large enough to accommodate field-harvested almonds from other growers. Permit Unit N-374-1-1 limited the process rate for the hulling operation to no more than 24 MWT per day. According to the production data provided in Appendix D of this application, the facility has never processed more than 4.04 MWT/day (367.7 MWT/qtr ÷ 91 days/qtr) of almonds in year 2005 or in year 2006. Since the overall orchard acreage will determine the maximum quantity of almonds that will be produced by an orchard, it will be assumed that the maximum process rate for the Van Groningen Orchard's field harvested almonds will not exceed 24 MWT per day at Van Ruler Shelling.

Quarterly PE2			
Quarter	Maximum Process Rate (MWT/qtr)	EF2 _{PM10/Total} (lb/MWT)	PE2 (lb/qtr)
1	0	0.22	0
2	0		0
3 ⁽¹⁾	2,184		480
4 ⁽¹⁾	2,184		480

AERs			
Quarter	HAEs (lb/qtr)	PE2 (lb/qtr)	AERs (lb/qtr)
1	0	0	0
2	0	0	0
3	3,042	480	2,562
4	1,954	480	1,474

F. Air Quality Improvement Reduction:

The air quality improvement deduction, per Rule 2201, Section 4.12.1, is 10% of the AERs. Therefore, the Air Quality Improvement Deduction will be calculated utilizing the following formula:

$$\text{Air Quality Improvement Deduction} = \text{AER} \times 0.10$$

Air Quality Improvement Deduction		
Quarter	AERs (lb/qtr)	10% Deduction
1	0	0
2	0	0
3	2,562	256
4	1,474	147

G. Increases in Permitted Emissions:

There is no increase in permitted emissions due to this project.

H. Bankable Emission Reductions:

The bankable ERCs presented below are determined by subtraction of the Air Quality Improvement Deductions from the AERs. Therefore:

¹ Average process rate = 24 MWT/day × 91 day/qtr = 2,184 lb/qtr.

Bankable Emission Reductions = AER – Air Quality Improvement Deductions

Bankable Emission Reductions	
Quarter	PM ₁₀
1	0
2	0
3	2,306
4	1,327
Total	3,633

VI. COMPLIANCE:

To comply with the definition of Actual Emission Reductions (Rule 2201, Section 3.2.1 and Rule 2301, Sections 3.6 and 4.2.1), the reductions must be:

A. Real:

The emission reductions were generated by the shutdown and removal of all almond receiving, precleaning, and hulling equipment at the facility. In addition, the processing of their field harvested almonds will now occur at a facility (Van Ruler Shelling/N-925) utilizing more efficient emission control equipment. If the shutdown and transfer of the almond processing operation had not been done the emissions could have otherwise occurred. The District is satisfied that emissions in the amounts calculated did indeed occur. Therefore, the emission reductions are real.

B. Enforceable:

The reductions are enforceable since the Permits to Operate (PTOs) have been surrendered for Van Groningen Orchards almond receiving, precleaning, and hulling operations and further operation would subject the owner to enforcement actions. In addition, the processing of their field harvested almonds will occur at Van Ruler Shelling (Facility N-925), which operates with District permitted equipment subject to emission limits on their PTOs.

C. Quantifiable:

The reductions are quantifiable since they were calculated from historic throughput data, established EPA AP-42 emission factors, and methods according to District Rule 2201.

D. Permanent:

Van Groningen Orchard's almond receiving, precleaning, and hulling operations have been shutdown and the corresponding PTOs have been surrendered. The emissions at Van Ruler Shelling are limited by an New Source Review (NSR) action and the quantity of almonds produced by Van Groningen Orchards are limited by the number of acres used to grow their almonds. Therefore, the reductions are permanent.

E. Surplus:

According to the analysis provided in Appendix C, the reductions are surplus of all permit and rule requirements.

F. Not used for the approval of an Authority to Construct or as Offsets:

The ERCs generated by the shutdown of the facility were not used for the approval of any Authority to Construct or as offsets.

G. Timely Submittal:

Section 5.5 of Rule 2301 states that ERC certificate applications for reductions shall be submitted within 180 days after shutdown (date of permanent cessation of emissions). The shutdown occurred on October 10, 2006, and the ERC application was received on March 8, 2007. Therefore, the application was submitted in a timely fashion since the application was received within 180 days of the shutdown date.

VII. RECOMMENDATION:

The District recommends that an ERC Certificate be issued to Van Groningen Orchards for the amount indicated in the following table.

Bankable Emission Reductions in lb/quarter				
Pollutant	1 st Quarter	2 nd Quarter	3 rd Quarter	4 th Quarter
PM ₁₀	0	0	2,306	1,327

APPENDICES:

- Appendix A Draft ERC Certificate
- Appendix B Emission Factors
- Appendix C Compliance with Permit Unit and Rule Requirements
- Appendix D Quarterly Process Rate Calculations
- Appendix E Permits N-374-1-1, N-374-2-0, N-925-1-2 and N-925-2-1

Appendix A

Draft ERC Certificate

San Joaquin Valley
Air Pollution Control District

Northern Regional Office • 4800 Enterprise Way • Modesto, CA 95356-8718

Emission Reduction Credit Certificate
N1070929-74-4

ISSUED TO: VAN GRONINGEN ORCHARDS
ISSUED DATE: <DRAFT>
LOCATION OF REDUCTION: 21003 S JACK TONE RD
RIPON, CA 95366

For PM10 Reduction In The Amount Of:

Quarter 1	Quarter 2	Quarter 3	Quarter 4
None	None	2,306 lbs	1,327 lbs

Conditions Attached

Method Of Reduction

- Shutdown of Entire Stationary Source
 Shutdown of Emissions Units
 Other

Shutdown of almond hulling plant & transfer of the hulling operations to Van Ruler Shelling (N-925).

Use of these credits outside the San Joaquin Valley Unified Air Pollution Control District (SJVUAPCD) is not allowed without express written authorization by the SJVUAPCD.

Seyed Sadredin, Executive Director / APCO

David Warner, Director of Permit Services

Appendix B

Emission Factors

Emission Factor Calculations

I. Emission Factors for the Shut Down of Van Groningen Orchards:

The emissions factor calculations and process information provided below were taken from the application review conducted under project N-1040982 that resulted in ATC permits N-374-1-1 and N-374-2-0. According to the referenced application review the emission factors provided here are taken from EPA document AP-42, Chapter 9, Section 10.2.1, for Almond Processing. Since Van Groningen Orchards only processed their own field harvested almonds, they did not weigh the field-harvested almonds prior to processing them and only have records provided by an offsite shelling operation in the form of the final meat weight tons (MWT). Therefore, emission factors given in field weight tons (FWT) will be converted to MWT.

The detailed derivation of each emission factor on ATC permits N-374-1-1 and N-374-2-0 is given in the following section. The following acronyms are used in this section:

TSP: Total Suspended Particulates

FWT: Field Weight Tons

MWT: Meat Weight Tons

A. Receiving/Precleaning (N-374-2-0):

1. Uncontrolled Receiving (Unloading):

The field harvested almond receiving operation is not served by any control equipment and the uncontrolled emission factor is the following:

TSP: 0.06 lb/FWT (AP-42, Table 9.10.2.1-1, 1/95)

For a typical almond processing facility, 25 tons of field harvested almonds will produce 5 tons of almond meats. AP-42 does not include a PM₁₀ emission factor for unloading. To estimate the PM₁₀ emissions, the ratio of the classifier PM₁₀ and TSP emission factors will be applied to the TSP emission factor. Therefore:

$$\begin{aligned} \text{TSP} &= (0.06 \text{ lb-TSP/FWT}) \times (25 \text{ FWT} \div 5 \text{ MWT}) = 0.30 \text{ lb-TSP/MWT} \\ \text{EF1}_{\text{TSP}} &= \mathbf{0.30 \text{ lb-TSP/MWT}} \end{aligned}$$

$$\begin{aligned} \text{PM}_{10} &= (0.06 \text{ lb-TSP/FWT}) \times (0.31 \text{ lb-PM}_{10}\text{/FWT} \div 0.40 \text{ lb-TSP/FWT}) \\ &\quad \times (25 \text{ FWT} \div 5 \text{ MWT}) \\ &= 0.23 \text{ lb-PM}_{10}\text{/MWT} \\ \text{EF1}_{\text{PM}_{10}} &= \mathbf{0.23 \text{ lb-PM}_{10}\text{/MWT}} \end{aligned}$$

2. Precleaning Equipment Controlled by a Cyclone:

The precleaning operation vented to a cyclone emission factors are the following:

TSP: 0.95 lb-TSP/FWT (AP-42, Table 9.10.2.1-1, 1/95)

PM₁₀: 0.82 lb-PM₁₀/FWT (AP-42, Table 9.10.2.1-1, 1/95)

TSP = (0.95 lb-TSP/FWT) × (25 FWT ÷ 5 MWT) = 4.75 lb-TSP/MWT

EF_{1TSP} = 4.75 lb-TSP/MWT

PM₁₀ = (0.82 lb-PM₁₀/FWT) × (25 FWT ÷ 5 MWT) = 4.10 lb-PM₁₀/MWT

EF_{1PM10} = 4.10 lb-PM₁₀/MWT

B. Hulling/Separating (N-374-1-1):

1. Hulling/Separating Equipment Controlled by a Cyclone:

The cyclone controlled hulling/separating equipment emission factors are the following:

TSP: 1.1 lb-TSP/FWT (AP-42, Table 9.10.2.1-1, 1/95)

PM₁₀: 0.81 lb-PM₁₀/FWT (AP-42, Table 9.10.2.1-1, 1/95)

As shown in Appendix C, Section II.A.2.b. of this document, a TSP emissions rate of 5.5 lb/MWT will cause this emissions unit to exceed the emissions limit of District Rule 4201. Therefore, a maximum allowable TSP emissions rate was determined that would be compliant with District Rule 4201. From Appendix C, Section II.A.1.b., the maximum allowable TSP emissions rate that would be compliant with District Rule 4201 is 2.14 lb-TSP/MWT. This emissions rate and a ratio of the PM₁₀ and TSP emissions rates from AP-42 will be used to determine the facility's surplus PM₁₀ emissions rate from this equipment as follows:

Maximum Allowable Surplus TSP Emissions Rate = 2.14 lb-TSP/MWT

Surplus EF_{1TSP} = 2.14 lb-TSP/MWT

PM₁₀ = (Surplus EF_{TSP}) × (PM₁₀ emission factor/TSP emission factor)

= (2.14 lb-TSP/MWT) × (0.81 lb-PM₁₀/FWT ÷ 1.1 lb-TSP/FWT)

= 1.58 lb-PM₁₀/MWT

Surplus EF_{1PM10} = 1.58 lb-PM₁₀/MWT

2. Hulling/Separating Equipment Controlled by a Baghouse:

The baghouse controlled hulling/separating equipment emission factors are the following:

TSP: 0.016 lb-TSP/FWT (AP-42, Table 9.10.2.1-1, 1/95)

PM₁₀: 0.013 lb-PM₁₀/FWT (AP-42, Table 9.10.2.1-1, 1/95)

TSP = (0.016 lb-TSP/FWT) × (25 FWT ÷ 5 MWT) = 0.08 lb-TSP/MWT

EF_{1TSP} = 0.08 lb-TSP/MWT

PM₁₀ = (0.013 lb-PM₁₀/FWT) × (25 FWT ÷ 5 MWT) = 0.07 lb-PM₁₀/MWT

EF_{1PM10} = 0.07 lb-PM₁₀/MWT

3. Uncontrolled Air Legs:

This facility uses three air legs for hull aspiration, which are not served by any control equipment. Therefore, the uncontrolled emission factor is the following:

TSP: 0.51 lb/FWT per air leg (AP-42, Table 9.10.2.1-1, 1/95)

AP-42 does not include a PM₁₀ emission factor for an air leg. To estimate the PM₁₀ emissions, the ratio of the classifier PM₁₀ and TSP emission factors will be applied to the TSP emission factor. Therefore, the uncontrolled emission factors are the following:

$$\begin{aligned} \text{TSP} &= (3 \text{ Air Legs}) \times (0.51 \text{ lb-TSP/FWT/air leg}) \times (25 \text{ FWT} \div 5 \text{ MWT}) \\ &= 7.65 \text{ lb-TSP/MWT} \end{aligned}$$

$$\text{EF1}_{\text{TSP}} = 7.65 \text{ lb-TSP/MWT}$$

$$\begin{aligned} \text{PM}_{10} &= (3 \text{ Air Legs}) \times (0.51 \text{ lb-TSP/FWT/air leg}) \\ &\quad \times (0.31 \text{ lb-PM}_{10}\text{/FWT} \div 0.40 \text{ lb-TSP/FWT}) \times (25 \text{ FWT} \div 5 \text{ MWT}) \\ &= 5.93 \text{ lb-PM}_{10}\text{/MWT} \end{aligned}$$

$$\text{EF1}_{\text{PM}_{10}} = 5.93 \text{ lb-PM}_{10}\text{/MWT}$$

C. Summary of Surplus Emission Factors for Van Groningen Orchards:

1. Receiving/Precleaning (N-374-2-0):

Unit	EF1 _{TSP} (lb-TSP/FWT)	EF1 _{PM10} (lb-PM ₁₀ /MWT)
Receiving (Uncontrolled)	0.30	0.23
Precleaning served by a Cyclone	4.75	4.10
Total	5.05	4.33

2. Hulling/Separating (N-374-1-1):

Unit	EF1 _{TSP} (lb-TSP/MWT)	EF1 _{PM10} (lb-PM ₁₀ /MWT)
Hulling/Separating served by a Cyclone	2.14	1.58
Hulling/Separating served by a Baghouse	0.08	0.07
Air Legs (Uncontrolled)	7.65	5.93
Total	9.87	7.58

As indicated above, the calculated PM₁₀ emission factor for the hulling and separating operation is 7.58 lb-PM₁₀/MWT. However, Permit to Operate N-374-1-1 for this operation contained a permit condition that limited this operation's emissions to 4.13 lb-PM₁₀/MWT. Since the hulling and separating operation was limited to an emissions rate of 4.13, any emissions exceeding this quantity would not be surplus. Therefore, the surplus emission factor utilized to calculate the emission reductions for this hulling and separating operation will be 4.13 lb-PM₁₀/MWT. Therefore:

$$\text{Surplus EF1}_{\text{PM}_{10}} = 4.13 \text{ lb-PM}_{10}\text{/MWT}$$

II. Emission Factors for Van Ruler Shelling:

This facility will process the field-harvested almonds that were previously hulled at Van Groningen Orchard's almond hulling facility. Van Ruler Hulling is an almond hulling and shelling operation. Since Van Groningen Orchards only hulled their almonds and sent the in-shell almonds offsite for further processing, emission factors for almond hulling and separating will be used to determine emissions from Van Ruler Shelling. This facility uses a baghouses to control emissions from the almond unloading and precleaning operations, and a baghouse for the hulling and separating operations.

A. Receiving/Precleaning (N-925-1-2):

1. Receiving Operation Controlled by a Baghouse:

The field harvested almond receiving (unloading) operation is controlled with a baghouse. AP-42 does not include a PM₁₀ emission factor for an almond receiving operation controlled with a baghouse. Based on District experience, it can be assumed that all emissions from a baghouse will be PM₁₀. Therefore, the uncontrolled emission factor for TSP will be used to determine the emission factor for PM₁₀ emissions for an almond receiving operation served by a baghouse as follows:

TSP: 0.06 lb-TSP/FWT (AP-42, Table 9.10.2.1-1, 1/95, for uncontrolled unloading)

$$\text{TSP} = (0.06 \text{ lb-TSP/FWT}) \times (25 \text{ FWT} \div 5 \text{ MWT}) \times (1-0.99) = 0.003 \text{ lb-TSP/MWT}$$

EF₂TSP = 0.003 lb-TSP/MWT

$$\text{PM}_{10} = (0.06 \text{ lb-TSP/FWT}) \times (1 \text{ lb-PM}_{10}\text{/lb-TSP}) \times (25 \text{ FWT} \div 5 \text{ MWT}) \times (1-0.99)$$
$$= 0.003 \text{ lb-PM}_{10}\text{/MWT}$$

EF₂PM₁₀ = 0.003 lb-PM₁₀/MWT

2. Precleaning Equipment Controlled by a Baghouse:

The baghouse controlled precleaning equipment emission factors are the following:

TSP: 0.017 lb/FW (AP-42 table 9.10.2.1-1, 1/95)

PM₁₀: 0.015 lb/FWT (AP-42 table 9.10.2.1-1, 1/95)

$$\text{TSP} = (0.017 \text{ lb-TSP/FWT}) \times (25 \text{ FWT} \div 5 \text{ MWT}) = 0.085 \text{ lb-TSP/MWT}$$

EF₂TSP = 0.085 lb-TSP/MWT

$$\text{PM}_{10} = (0.015 \text{ lb-PM}_{10}\text{/FWT}) \times (25 \text{ FWT} \div 5 \text{ MWT}) = 0.075 \text{ lb-PM}_{10}\text{/MWT}$$

EF₂PM₁₀ = 0.075 lb-PM₁₀/MWT

B. Hulling/Separating (N-925-2-1):

1. Hulling/Separating Equipment Controlled by a Baghouse:

The baghouse controlled hulling/separating equipment emission factors are the following:

TSP: 0.016 lb-TSP/FWT (AP-42, Table 9.10.2.1-1, 1/95)
 PM₁₀: 0.013 lb-PM₁₀/FWT (AP-42, Table 9.10.2.1-1, 1/95)

$$\text{TSP} = (0.016 \text{ lb-TSP/FWT}) \times (25 \text{ FWT} \div 5 \text{ MWT}) = 0.080 \text{ lb-TSP/MWT}$$

$$\text{EF2}_{\text{TSP}} = \mathbf{0.08 \text{ lb-TSP/MWT}}$$

$$\text{PM}_{10} = (0.013 \text{ lb-PM}_{10}\text{/FWT}) \times (25 \text{ FWT} \div 5 \text{ MWT}) = 0.065 \text{ lb-PM}_{10}\text{/MWT}$$

$$\text{EF2}_{\text{PM}_{10}} = \mathbf{0.065 \text{ lb-PM}_{10}\text{/MWT}}$$

2. Air Legs Vented to a Baghouse:

This facility uses three air legs for hull aspiration, which are controlled with a baghouse. AP-42 does not include a PM₁₀ emission factor for an air leg vented to a baghouse. Based on District experience, it can be assumed that all emissions from a baghouse will be PM₁₀. Therefore, the uncontrolled emission factor for TSP will be used to determine the emission factor for PM₁₀ emissions for an air leg served by a baghouse as follows:

TSP: 0.51 lb-TSP/FWT per air leg (AP-42, Table 9.10.2.1-1, 1/95)

$$\text{TSP} = (3 \text{ Air Legs}) \times (0.51 \text{ lb-TSP/FWT/air leg}) \times (25 \text{ FWT} \div 5 \text{ MWT}) \times (1-0.99)$$

$$= 0.077 \text{ lb-TSP/MWT}$$

$$\text{EF2}_{\text{TSP}} = \mathbf{0.077 \text{ lb-TSP/MWT}}$$

$$\text{PM}_{10} = (3 \text{ Air Legs}) \times (0.51 \text{ lb-TSP/FWT/air leg}) \times (1 \text{ lb-PM}_{10}\text{/lb-TSP})$$

$$\times (25 \text{ FWT} \div 5 \text{ MWT}) \times (1-0.99)$$

$$= 0.077 \text{ lb-PM}_{10}\text{/MWT}$$

$$\text{EF2}_{\text{PM}_{10}} = \mathbf{0.077 \text{ lb-PM}_{10}\text{/MWT}}$$

C. Summary of Surplus Emission Factors for Van Ruler Shelling:

1. Receiving/Precleaning (N-925-1-2):

Unit	EF2 _{TSP} (lb-TSP/FWT)	EF2 _{PM10} (lb-PM ₁₀ /MWT)
Receiving served by a Baghouse	0.003	0.003
Precleaning served by a Baghouse	0.085	0.075
Total	0.088	0.078

2. Hulling/Separating (N-925-2-1):

Unit	EF2 _{TSP} (lb-TSP/MWT)	EF2 _{PM10} (lb-PM ₁₀ /MWT)
Hulling/Separating served by a Baghouse	0.080	0.065
Air Legs served by a Baghouse	0.077	0.077
Total	0.157	0.142

Appendix C

Compliance with Permit Unit and Rule
Requirements

Compliance with Permit Unit and Rule Requirements

The following discussion shows that the equipment was in compliance with permit limits, and that all proposed emission rates were in compliance with the applicable rules.

I. Compliance with Permitted Limits:

ATC permits N-374-1-1 and N-374-2-0 were implemented in October of 2005. The following discussion shows compliance with the permitted limits for each permit unit.

A. N-374-1-1:

The permitted throughput limit is 24 meat weight tons per day (MWT/day).

According to the production data provided in Appendix D of this application, the facility has never processed more than 4.04 MWT/day (367.7 MWT/qtr ÷ 91 days/qtr) of almonds in year 2005 or in year 2006. Therefore, compliance is expected with the permitted daily throughput limit.

B. N-374-2-0:

This permit unit does not have a daily throughput limit.

II. Compliance with Rule Requirements:

A. Rule 4201 Particulate Matter Concentration:

This rule limits the total suspended particulate (TSP) matter concentration to 0.1 gr/dscf. For the operations at Van Groningen Orchards (Facility N-374), there are four sources of emissions that occur through a stack: (1). Cyclone serving the precleaning equipment; (2). Cyclone serving hulling/separating equipment; (3). Baghouse serving hulling/separating equipment; (4). Air legs. For the operations at Van Ruler shelling (Facility N-925), there are two sources of emissions that occur through a stack: (1). Baghouse serving the receiving and pre-cleaning equipment; (2). Baghouse serving the hulling and shelling equipment (including associated air legs).

1. For Permit Unit N-374-2-0:

Precleaning Equipment Vented to a Cyclone:

EF_{1TSP}: 4.75 lb-TSP/MWT (from Appendix B of this evaluation)

Throughput: 1 MWT/hr (from project N-1040982)

Exhaust flow: 8,000 cfm (provided by the applicant)

$$\begin{aligned} \text{TSP Concentration} &= (4.75 \text{ lb-TSP/MWT}) \times (1 \text{ MWT/hr}) \times (7,000 \text{ gr/lb}) \\ &\quad \times (1 \text{ hr/60 min}) \times (1 \text{ min/8,000 ft}^3) \\ &= \mathbf{0.069 \text{ gr/ft}^3} \end{aligned}$$

Since 0.069 gr/ft^3 is less than 0.1 gr/ft^3 , compliance was achieved and no emission factor adjustments are necessary.

2. For Permit Unit N-374-1-1:

a. Hulling/Separating Equipment Vented to a Cyclone:

TSP EF: 1.10 lb-TSP/FWT (AP-42, Table 9.10.2.1-1, 1/95)

The total TSP EF in MWT is determined as follows:

$$\begin{aligned} \text{TSP EF} &= (1.10 \text{ lb-TSP/FWT}) \times (25 \text{ FWT} \div 5 \text{ MWT}) = 5.5 \text{ lb-TSP/MWT} \\ \text{EF}_{\text{TSP}} &= \mathbf{5.5 \text{ lb-TSP/MWT}} \end{aligned}$$

Throughput: 1 MWT/hr (from project N1040982)
Exhaust flow: 2,500 cfm (provided by the applicant)

$$\begin{aligned} \text{TSP Concentration} &= (5.5 \text{ lb-TSP/MWT}) \times (1 \text{ MWT/hr}) \times (7,000 \text{ gr/lb}) \\ &\quad \times (1 \text{ hr/60 min}) \times (1 \text{ min/2,500 ft}^3) \\ &= \mathbf{0.26 \text{ gr/ft}^3} \end{aligned}$$

Since the calculated emissions rate for this equipment exceeds the allowable emissions rate of 0.1 gr/ft^3 for this rule. The maximum allowable emissions rate must be determined in order for the calculated emission reduction credits be surplus. The surplus emissions rate is determined as follows:

$$\begin{aligned} \text{Surplus TSP Emissions Rate} &= (0.1 \text{ gr/ft}^3) \times (2,500 \text{ ft}^3/\text{min}) \times (60 \text{ min/hr}) \\ &\quad \times (1 \text{ lb-TSP/7,000gr}) \times (1 \text{ hr/1 MWT}) \\ &= \mathbf{2.14 \text{ lb-TSP/MWT}} \end{aligned}$$

The use of the above surplus TSP emissions rate will result in compliance with this rule.

b. Hulling/Separating Equipment Vented to a Baghouse:

EF_{TSP}: 0.08 lb-TSP/MWT (from Appendix B of this evaluation)
Throughput: 1 MWT/hr (from project N-1040982)
Exhaust flow: 11,500 cfm (from project N1040982)

$$\begin{aligned} \text{TSP Concentration} &= (0.08 \text{ lb-TSP/MWT}) \times (1 \text{ MWT/hr}) \times (7,000 \text{ gr/lb}) \\ &\quad \times (1 \text{ hr/60 min}) \times (1 \text{ min/11,500 ft}^3) \\ &= \mathbf{0.0008 \text{ gr/ft}^3} \end{aligned}$$

Since 0.0008 gr/ft^3 is less than 0.1 gr/ft^3 , compliance was achieved and no emission factor adjustments are necessary.

c. Air Legs:

The emission factor for the air legs are the same at airflow rates of 5,500 cfm or 6,500 cfm.

For air legs with an airflow rate of 5,500 cfm:

TSP EF: 0.51 lb/MWT (from Appendix B of this evaluation)

Throughput: 1 MWT/hr (from project N-1040982)

Exhaust flow: 5,500 cfm (provided by the applicant)

$$\begin{aligned} \text{TSP Concentration} &= (0.51 \text{ lb/MWT}) \times (1 \text{ MWT/hr}) \times (7,000 \text{ gr/lb}) \\ &\quad \times (1 \text{ hr/60 min}) \times (1 \text{ min/5,500 ft}^3) \\ &= \mathbf{0.011 \text{ gr/ft}^3} \end{aligned}$$

Since 0.011 gr/ft³ is less than 0.1 gr/ft³, compliance was achieved and no emission factor adjustments are necessary.

For air legs with an airflow rate of 6,500 cfm:

TSP EF: 0.51 lb/MWT (from Appendix B of this evaluation)

Throughput: 1 MWT/hr (from project N-1040982)

Exhaust flow: 6,500 cfm (provided by the applicant)

$$\begin{aligned} \text{TSP Concentration} &= (0.51 \text{ lb/MWT}) \times (1 \text{ MWT/hr}) \times (7,000 \text{ gr/lb}) \\ &\quad \times (1 \text{ hr/60 min}) \times (1 \text{ min/6,500 ft}^3) \\ &= \mathbf{0.009 \text{ gr/ft}^3} \end{aligned}$$

Since 0.009 gr/ft³ is less than 0.1 gr/ft³, compliance was achieved and no emission factor adjustments are necessary.

3. For Permit Unit N-925-1-2^(C1):

Receiving/Precleaning Equipment Vented to a Baghouse:

Flow rate 29,900 cfm

TSP emissions: 20.78 lbs PM₁₀/day

Hours of Operation: 24 hr/day

$$\begin{aligned} \text{TSP Concentration} &= (20.78 \text{ lb-TSP/day}) \times (7,000 \text{ gr/lb}) \\ &\quad \times (1 \text{ day/1,440 min}) \times (1 \text{ min/29,900 ft}^3) \\ &= \mathbf{0.003 \text{ gr/ft}^3} \end{aligned}$$

Since 0.003 gr/ft³ is less than 0.1 gr/ft³, compliance was achieved and no emission factor adjustments are necessary.

C1

The emission rate and compliance calculations for this equipment were obtained from District Project #N-1063737 for the ATC for this equipment.

4. For Permit Unit N-925-2-1^(C1):

Hulling/Shelling Equipment Vented to a Baghouse:

Flow rate 91,500 cfm
TSP emissions: 128.78 lb-PM/day
Hours of Operation: 24 hr/day

$$\begin{aligned} \text{TSP Concentration} &= (128.78 \text{ lb-TSP/day}) \times (7,000 \text{ gr/lb}) \\ &\quad \times (1 \text{ day}/1,440 \text{ min}) \times (1 \text{ min}/91,500 \text{ ft}^3) \\ &= \mathbf{0.007 \text{ gr/ft}^3} \end{aligned}$$

Since 0.007 gr/ft³ is less than 0.1 gr/ft³, compliance was achieved and no emission factor adjustments are necessary.

B. Rule 4202 Particulate Matter – Emissions Rate:

This rule limits the TSP emissions to the result of the following applicable equations:

$$\begin{aligned} E_{\text{Max}} &= 3.59 \times (P)^{0.62} - \text{if } P \leq 30 \text{ tons/hr} \\ E_{\text{Max}} &= 17.31 \times (P)^{0.16} - \text{if } P > 30 \text{ tons/hr} \end{aligned}$$

Where, E_{Max} = Emissions in lb/hr
P = Process Weight Rate in tons/hr

1. For Permit Unit N-374-2-0:

The almond receiving/preclearing operation under permit unit N-374-2-0 does not have a throughput limit. However, the associated almond hulling/separating operation is limited by a permit condition to 24 MWT per day. Since there was only limited surge capacity between the receiving/preclearing equipment and the hulling/separating equipment, it can be assumed that the receiving and preclearing operation would also be limited to 24 MWT per day. According to the information project #N-1040982, this operation may operate 24 hours/day. Therefore, the hourly process rate is determined as follows:

$$\begin{aligned} \text{Maximum Process Rate (P)} &= (24 \text{ MWT/day}) \times (25 \text{ FWT} \div 5 \text{ MWT}) \times (1 \text{ day}/24 \text{ hr}) \\ &= 5 \text{ FWT/hr} \end{aligned}$$

a. Uncontrolled Receiving:

TSP EF: 0.06 lb/FWT (from Appendix B of this evaluation)
Max. Process Rate (P): 5 FWT/hr

$$\begin{aligned} E_{\text{Max}} &= 3.59 \times (5)^{0.62} = \mathbf{9.7 \text{ lb-TSP/hr}} \\ E_{\text{Potential/Receiving}} &= (5 \text{ FWT/hr}) \times (0.06 \text{ lb/FWT}) = \mathbf{0.3 \text{ lb-TSP/hr}} \end{aligned}$$

Since the potential emission rate of 0.3 lb-TSP/hr is less than the maximum allowable rule emission rate of 9.7 lb-TSP/hr, the almond receiving equipment operated in compliance with this rule and no emission factor adjustments are necessary.

b. Precleaning Equipment Vented to a Cyclone:

TSP EF: 0.95 lb/ton (from Appendix B of this evaluation)

Max. Process Rate (P): 5 FWT/hr

$$E_{\text{Max}} = 3.59 \times (5)^{0.62} = \mathbf{9.7 \text{ lb-TSP/hr}}$$

$$E_{\text{Potential/Precleaning}} = (5 \text{ FWT/hr}) \times (0.95 \text{ lb/FWT}) = \mathbf{4.8 \text{ lb-TSP/hr}}$$

Since the potential emission rate of 4.8 lb-TSP/hr is less than the maximum allowable rule emission rate of 9.7 lb-TSP/hr, the almond precleaning equipment operated in compliance with this rule and no emission factor adjustments are necessary.

2. For Permit Unit N-374-1-1:

As determined above for permit unit N-374-2-0, the field harvested almond receiving rate is 5 FWT/hr. However, after processing through the precleaning equipment approximately 7.5 tons of trash will be removed and remaining process rate of the almonds is the following:

$$\text{Max. Process Rate} = (5 \text{ FWT/hr}) \times ((25 \text{ tons} - 7.5 \text{ tons}) \div 25 \text{ tons}) = 3.5 \text{ FWT/hr}$$

a. Huller/Separating Equipment Vented to a Cyclone:

TSP EF: 1.1 lb-TSP/FWT (from Appendix B of this evaluation)

Max. Process Rate (P): 3.5 FWT/hr

$$E_{\text{Max}} = 3.59 \times (3.5)^{0.62} = \mathbf{7.8 \text{ lb-TSP/hr}}$$

$$E_{\text{Potential/Hulling \& Separating with a Cyclone}} = (3.5 \text{ FWT/hr}) \times (1.1 \text{ lb/FWT}) = \mathbf{5.5 \text{ lb-TSP/hr}}$$

Since the potential emission rate of 5.5 lb-TSP/hr is less than the maximum allowable rule emission rate of 7.8 lb-TSP/hr, the almond hulling/separating equipment served by a cyclone operated in compliance with this rule and no emission factor adjustments are necessary.

b. Hulling/Separating Equipment Vented to a Baghouse:

TSP EF: 0.016 lb-TSP/FWT (from Appendix B of this evaluation)

Max. Process Rate (P): 3.5 FWT/hr

$$E_{\text{Max}} = 3.59 \times (3.5)^{0.62} = \mathbf{7.8 \text{ lb-TSP/hr}}$$

$$E_{\text{Potential/Hulling \& Separating with a Baghouse}} = (3.5 \text{ FWT/hr}) \times (0.016 \text{ lb/FWT}) = \mathbf{0.08 \text{ lb-TSP/hr}}$$

Since the potential emission rate of 0.08 lb-TSP/hr is less than the maximum allowable rule emission rate of 7.8 lb-TSP/hr, the almond hulling/separating equipment served by a baghouse operated in compliance with this rule and no emission factor adjustments are necessary.

c. Uncontrolled Air Legs:

Emissions and process rates for all three air legs are the same. Therefore, one calculation will be performed to show compliance for all air legs.

TSP EF: 0.51 lb-TSP/FWT (from Appendix B of this evaluation)

Max. Process Rate (P): 3.5 FWT/hr

$$E_{\text{Max}} = 3.59 \times (3.5)^{0.62} = 7.8 \text{ lb-TSP/hr}$$

$$E_{\text{Potential/Air Legs}} = (5 \text{ FWT/hr}) \times (0.51 \text{ lb-TSP/FWT}) = 2.6 \text{ lb-TSP/hr}$$

Since the potential emission rate of 2.6 lb-TSP/hr is less than the maximum allowable rule emission rate of 7.8 lb-TSP/hr, each air leg operated in compliance with this rule and no emission factor adjustments are necessary.

3. For Permit Unit N-925-1-2:

Receiving/Precleaning Operation Vented to a Baghouse:

The maximum permit limited process rate is 1,200 FWT/day. According to the information project #N-1063737, this operation may operate 24 hours/day. Therefore, the hourly process rate is determined as follows:

$$\begin{aligned} \text{Maximum Process Rate (P)} &= (1,200 \text{ FWT/day}) \times (1 \text{ day}/24 \text{ hr}) \\ &= 50 \text{ FWT/hr} \end{aligned}$$

TSP EF: 0.088 lb-TSP/FWT (from Appendix B of this evaluation)

$$E_{\text{Max}} = 17.31 \times (50)^{0.16} = 32.4 \text{ lb-TSP/hr}$$

$$\begin{aligned} E_{\text{Potential/Receiving \& Precleaning Baghouse}} &= (50 \text{ FWT/hr}) \times (0.088 \text{ lb-TSP/FWT}) \\ &= 4.4 \text{ lb-TSP/hr} \end{aligned}$$

Since the potential emission rate of 4.4 lb-TSP/hr is less than the maximum allowable rule emission rate of 32.4 lb-TSP/hr, the almond receiving and precleaning equipment served by a baghouse operated in compliance with this rule and no emission factor adjustments are necessary.

4. For Permit Unit N-925-2-1:

Hulling/Separating Operation Vented to a Baghouse:

As determined above for permit unit N-925-1-2, the field harvested almond receiving rate is 50 FWT/hr. However, after processing through the precleaning equipment approximately 7.5 tons of trash will be removed and remaining process rate of the almonds is the following:

$$\text{Max. Process Rate} = (50 \text{ FWT/hr}) \times ((25 \text{ tons} - 7.5 \text{ tons}) \div 25 \text{ tons}) = 35 \text{ FWT/hr}$$

TSP EF: 0.157 lb-TSP/FWT (from Appendix B of this evaluation)

$$E_{\text{Max}} = 17.31 \times (35)^{0.16} = \mathbf{30.6 \text{ lb-TSP/hr}}$$

$$\begin{aligned} E_{\text{Potential/Hulling \& Separating Baghouse}} &= (50 \text{ FWT/hr}) \times (0.157 \text{ lb-TSP/FWT}) \\ &= \mathbf{7.9 \text{ lb-TSP/hr}} \end{aligned}$$

Since the potential emission rate of 7.9 lb-TSP/hr is less than the maximum allowable rule emission rate of 30.6 lb-TSP/hr, the almond hulling and separating equipment served by a baghouse operated in compliance with this rule and no emission factor adjustments are necessary.

Appendix D

Quarterly Process Rate Calculations

Process Rate Determination

I. 3rd Quarter Process Rates:

3 rd Quarter Process Rates			
Year	Month	Period	Process Rate (MW)
2005	August	Week 3	30,145 lb
	August	Week 4	109,500 lb
	September	Week 1	129,200 lb
	September	Week 2	143,600 lb
	September	Week 3	150,100 lb
	September	Week 4	140,500 lb
2006	August	Week 3	45,100 lb
	August	Week 4	93,500 lb
	September	Week 1	136,100 lb
	September	Week 2	148,500 lb
	September	Week 3	157,100 lb
	September	Week 4	155,000 lb
Total			1,438,345 lb
Average			719,172.5 lb

II. 4th Quarter Process Rates:

4 th Quarter Process Rates			
Year	Month	Period	Process Rate (MW)
2005	October	Week 1	141,020 lb
	October	Week 2	135,000 lb
	October	Week 3	114,100 lb
	October	Week 4	21,630 lb
2006	October	Week 1	144,200 lb
	October	Week 2	135,600 lb
	October	Week 3	120,200 lb
	October	Week 4	111,989 lb
Total			923,739 lb
Average			461,869.5 lb

Appendix E

Permits N-374-1-1, N-374-2-0,
N-925-1-2 and N-925-2-1



San Joaquin Valley
Air Pollution Control District

COPY

Permit to Operate

FACILITY: N-374

EXPIRATION DATE: 10/31/2008

LEGAL OWNER OR OPERATOR:
MAILING ADDRESS:

VAN GRONINGEN ORCHARDS
21003 S JACK TONE RD
RIPON, CA 95366

FACILITY LOCATION:

21003 S JACK TONE RD
RIPON, CA 95366

FACILITY DESCRIPTION:

AGRICULTURAL PRODUCTS PROCESSING - ALMONDS

The Facility's Permit to Operate may include Facility-wide Requirements as well as requirements that apply to specific permit units.

This Permit to Operate remains valid through the permit expiration date listed above, subject to payment of annual permit fees and compliance with permit conditions and all applicable local, state, and federal regulations. This permit is valid only at the location specified above, and becomes void upon any transfer of ownership or location. Any modification of the equipment or operation, as defined in District Rule 2201, will require prior District approval. This permit shall be posted as prescribed in District Rule 2010.

Seyed Sadredin
Executive Director / APCO

David Warner
Director of Permit Services

COPY

San Joaquin Valley
Air Pollution Control District

PERMIT UNIT: N-374-1-1

EXPIRATION DATE: 10/31/2008

EQUIPMENT DESCRIPTION:

ALMOND HULLING OPERATION SERVED BY CYCLONES. LMC MODEL 36 PRE-HULLER AND LMC MODEL 24 SHEAR ROLL SERVED BY AN LMC MODEL 72-12 BAGHOUSE.

PERMIT UNIT REQUIREMENTS

1. No air contaminant shall be released into the atmosphere which causes a public nuisance. [District Rule 4102]
2. No air contaminant shall be discharged into the atmosphere for a period or periods aggregating more than three minutes in any one hour which is as dark as, or darker than, Ringelmann 1 or 20% opacity. [District Rule 4101]
3. Particulate matter emissions shall not exceed 0.1 grains/dscf in concentration. [District Rule 4201]
4. The almond hulling and pre-hulling operation consists of an LMC Model 24 pre-huller, a Mid-State shear roll, Model 36, a 60" Mid-state huller, a 60" Mid-State screen deck, two Mid-State cracking rolls, two Mid-State shear rolls, one LMC gravity separator, various airlegs, elevators and conveyors. [District Rule 2201]
5. Visible emissions from the baghouse serving the pre-huller and shear roll processes shall not equal or exceed 5% opacity for a period or periods aggregating more than three minutes in any one hour. [District Rule 2201]
6. The baghouse shall be equipped with a pressure differential gauge to indicate the pressure drop across the bags. The gauge shall be maintained in good working condition at all times and shall be located in an easily accessible location. [District Rule 2201]
7. Replacement bags numbering at least 10% of the total number of bags in the largest baghouse using each type of bag shall be maintained on the premises. [District NSR Rule]
8. The baghouse cleaning frequency and duration shall be adjusted to optimize the control efficiency. [District NSR Rule]
9. Material removed from dust collector(s) shall be disposed of in a manner preventing entrainment into the atmosphere. [District NSR Rule]
10. The quantity of almond meats processed through the almond hulling operation shall not exceed 24.0 meat tons in any one day. [District Rule 2201]
11. PM10 emissions shall not exceed 4.13 pounds per meat ton. [District Rule 2201]
12. The total days of operation of this almond hulling operation shall not exceed 358 days in any one calendar year. [District Rule 2201]
13. A daily log shall be maintained and shall include the date and quantity of almonds, in meat tons, processed through the almond hulling and pre-hulling processes. [District Rule 1070]

These terms and conditions are part of the Facility-wide Permit to Operate.

COPY

San Joaquin Valley
Air Pollution Control District

PERMIT UNIT: N-374-2-0

EXPIRATION DATE: 10/31/2008

EQUIPMENT DESCRIPTION:

ALMOND RECEIVING & PRE-CLEANING OPERATION SERVED BY CYCLONES.

PERMIT UNIT REQUIREMENTS

1. No air contaminant shall be released into the atmosphere which causes a public nuisance. [District Rule 4102]
2. No air contaminant shall be discharged into the atmosphere for a period or periods aggregating more than three minutes in any one hour which is as dark as, or darker than, Ringelmann 1 or 20% opacity. [District Rule 4101]
3. Particulate matter emissions shall not exceed 0.1 grains/dscf in concentration. [District Rule 4201]
4. Material removed from the dust collector(s) shall be disposed of in a manner preventing entrainment into the atmosphere. [District NSR Rule]
5. All equipment shall be maintained in good operating condition and shall be operated in a manner to minimize emissions of air contaminants into the atmosphere. [District NSR Rule]

These terms and conditions are part of the Facility-wide Permit to Operate.

Facility Name: VAN GRONINGEN ORCHARDS
Location: 21003 S JACK TONE RD, RIPON, CA 95366
N-374-2-0 : Sep 8 2008 8:32AM - FOWLERJ



San Joaquin Valley
AIR POLLUTION CONTROL DISTRICT

Permit to Operate

FACILITY: N-925

EXPIRATION DATE: 08/31/2014

LEGAL OWNER OR OPERATOR:
MAILING ADDRESS:

VAN RULER SHELLING
22339 E RIVER RD
ESCALON, CA 95320

FACILITY LOCATION:

22339 E RIVER RD
ESCALON, CA 95320

FACILITY DESCRIPTION:

ALMOND HULLING OPERATION

The Facility's Permit to Operate may include Facility-wide Requirements as well as requirements that apply to specific permit units.

This Permit to Operate remains valid through the permit expiration date listed above, subject to payment of annual permit fees and compliance with permit conditions and all applicable local, state, and federal regulations. This permit is valid only at the location specified above, and becomes void upon any transfer of ownership or location. Any modification of the equipment or operation, as defined in District Rule 2201, will require prior District approval. This permit shall be posted as prescribed in District Rule 2010.

Seyed Sadredin
Executive Director / APCO

David Warner
Director of Permit Services

San Joaquin Valley Air Pollution Control District

PERMIT UNIT: N-925-1-2

EXPIRATION DATE: 08/31/2014

EQUIPMENT DESCRIPTION:

ALMOND RECEIVING & PRE-CLEANING OPERATION CONSISTING OF TWO RECEIVING PIT HOPPERS, PIT ELEVATOR, DETWIGGER, DESTONER AND ASSOCIATED CONVEYORS SERVED BY A LMC MODEL 378-LP-12 BAGHOUSE

PERMIT UNIT REQUIREMENTS

1. No air contaminant shall be released into the atmosphere which causes a public nuisance. [District Rule 4102]
2. Particulate matter emissions shall not exceed 0.1 grains/dscf in concentration. [District Rule 4201]
3. No air contaminant shall be discharged into the atmosphere for a period or periods aggregating more than three minutes in any one hour which is as dark as, or darker than, Ringelmann 1 or 20% opacity. [District Rule 4101]
4. Visible emissions from the baghouse serving the almond receiving and pre-cleaning operation shall not equal or exceed 5% opacity for a period or periods aggregating more than three minutes in any one hour. [District Rule 2201]
5. The baghouse shall be equipped with a pressure differential gauge to indicate the pressure drop across the bags. The gauge shall be maintained in good working condition at all times and shall be located in an easily accessible location. [District Rule 2201]
6. Replacement bags numbering at least 10% of the total number of bags in the largest baghouse using each type of bag shall be maintained on the premises. [District Rule 2201]
7. Material removed from the baghouse shall be disposed of in a manner preventing entrainment into the atmosphere. [District Rule 2201]
8. The baghouse cleaning frequencies and durations shall be adjusted to optimize the control efficiency. [District Rule 2201]
9. The quantity of almonds processed through the receiving and pre-cleaning operation shall not exceed 1200 field weight tons in any given day. [District Rule 2201]
10. PM10 emissions from the almond receiving and pre-cleaning operation shall not exceed 0.0156 pounds per field weight tons. [District Rule 2201]
11. The quantity of almonds processed through the receiving and pre-cleaning operation shall not exceed 144,000 field weight tons in any one calendar year. [District Rule 2201]
12. The permittee shall maintain a daily log that shall include the date and quantity, in field weight tons, of almonds processed through the receiving and pre-cleaning operation. [District Rule 2201]
13. The permittee shall maintain cumulative monthly and yearly records that shall include month, year, and quantity, in field weight tons, of almonds processed through the receiving and pre-cleaning operation. [District Rule 2201]
14. All records shall be retained on-site for a period of 5 years and be made available for District inspection upon request. [District Rules 2201 and 1070]

These terms and conditions are part of the Facility-wide Permit to Operate.

San Joaquin Valley Air Pollution Control District

PERMIT UNIT: N-925-2-1

EXPIRATION DATE: 08/31/2014

EQUIPMENT DESCRIPTION:

ALMOND HULLING/SHELLING/SEPARATING OPERATION CONSISTING OF HARDSHELL CRACKERS, SHEAR ROLLERS, CLASSIFIER DECKS, SCALPING DECKS AND ASSOCIATED AIR LEGS, CONVEYORS AND ELEVATORS SERVED BY A LMC MODEL 882-LP-12 BAGHOUSE

PERMIT UNIT REQUIREMENTS

1. No air contaminant shall be released into the atmosphere which causes a public nuisance. [District Rule 4102]
2. Particulate matter emissions shall not exceed 0.1 grains/dscf in concentration. [District Rule 4201]
3. No air contaminant shall be discharged into the atmosphere for a period or periods aggregating more than three minutes in any one hour which is as dark as, or darker than, Ringelmann 1 or 20% opacity. [District Rule 4101]
4. Visible emissions from the baghouse serving the almond hulling, shelling and separating operation shall not equal or exceed 5% opacity for a period or periods aggregating more than three minutes in any one hour. [District Rule 2201]
5. The baghouse shall be equipped with a pressure differential gauge to indicate the pressure drop across the bags. The gauge shall be maintained in good working condition at all times and shall be located in an easily accessible location. [District Rule 2201]
6. Replacement bags numbering at least 10% of the total number of bags in the largest baghouse using each type of bag shall be maintained on the premises. [District Rule 2201]
7. Material removed from the baghouse shall be disposed of in a manner preventing entrainment into the atmosphere. [District Rule 2201]
8. The baghouse cleaning frequencies and durations shall be adjusted to optimize the control efficiency. [District Rule 2201]
9. The quantity of almonds processed through the hulling, shelling and separating operation shall not exceed 1200 field-weight tons in any given day. [District Rule 2201]
10. PM10 emissions from the almond hulling, shelling and separating operation shall not exceed 0.0966 pounds per field-weight ton. [District Rule 2201]
11. The quantity of almonds processed through the hulling, shelling and separating operation shall not exceed 144,000 field-weight tons in any one calendar year. [District Rule 2201]
12. The permittee shall maintain a daily log that shall include the date and quantity, in field-weight tons, of almonds processed through the hulling, shelling and separating operation. [District Rule 2201]
13. The permittee shall maintain cumulative monthly and yearly records that shall include month, year, and quantity, in field-weight tons, of almonds processed through the hulling, shelling and separating operation. [District Rule 2201]
14. All records shall be retained on-site for a period of 5 years and be made available for District inspection upon request. [District Rules 2201 and 1070]

These terms and conditions are part of the Facility-wide Permit to Operate.