



JUN 07 2012

Daniel Lee Paramount Farms International LLC 13646 Highway 33 Lost Hills, CA

Notice of Preliminary Decision - Authority to Construct

Project Number: C-1120254

Dear Mr. Lee:

Enclosed for your review and comment is the District's analysis of Paramount Farms International LLC's application for an Authority to Construct for the installation of a new pistachio hulling and drying operation, at the corner of Ave 6 & Chowchilla Canal Road approximately 8 miles east of Firebaugh, CA.

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. Richard Edgehill of Permit Services at (661) 392-5617.

Sincerely,

**Director of Permit Services** 

DW:RUE/bw

**Enclosures** 

Seyed Sadredin Executive Director/Air Pollution Control Officer





JUN 07 2012

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

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Enclosed for your review and comment is the District's analysis of Paramount Farms International LLC's application for an Authority to Construct for the installation of a new pistachio hulling and drying operation, at the corner of Ave 6 & Chowchilla Canal Road approximately 8 miles east of Firebaugh, CA.

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Sincerely,

David Warner

**Director of Permit Services** 

DW:RUE/bw

Enclosure

Seyed Sadredin

Executive Director/Air Pollution Control Officer

# NOTICE OF PRELIMINARY DECISION FOR THE PROPOSED ISSUANCE OF AN AUTHORITY TO CONSTRUCT

NOTICE IS HEREBY GIVEN that the San Joaquin Valley Unified Air Pollution Control District solicits public comment on the proposed issuance of Authority to Construct to Paramount Farms International LLC for the installation of a new pistachio hulling and drying operation, at the corner of Ave 6 & Chowchilla Canal Road approximately 8 miles east of Firebaugh, CA.

The analysis of the regulatory basis for this proposed action, Project #C-1120254, 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 AIR POLLUTION CONTROL DISTRICT, 1990 E. GETTYSBURG AVENUE, FRESNO, CA 93726.

# San Joaquin Valley Air Pollution Control District Authority to Construct Application Review

Pistachio Hulling and Drying Operation

Facility Name: Paramount Farms International LLC

Date: May 30, 2012

Mailing Address: 13646 Highway 33

Engineer: Richard Edgehill

Lost Hills, CA 93249

Lead Engineer: Allan Phillips

Contact Person: Daniel Lee

Telephone: (661) 797-6505

Fax: (661) 797-6542

E-Mail: <u>dlee@paramountfarms.com</u>

Application #(s): C-8347-1-0

Project #: 1120254

Deemed Complete: February 21, 2012

# I. PROPOSAL:

Paramount Farms International Inc. (PFI) is requesting an Authority to Construct authorizing the installation of a new pistachio hulling and drying operation. The proposed operation will consist of four receiving pits with conveyors served by 4 high efficiency 1D-3D cyclones, 20 GSI type dryers, and exempt equipment including 42 storage silos and wet process equipment.

Note that the facility is not a New Major Source as explained in Section VII below and therefore Rule 2520 is not applicable.

The project requires BACT, offsets, and public notice.

# II. APPLICABLE RULES:

| Rule 2201 | New and Modified Stationary | y Source Review Rule (4/21/11) |
|-----------|-----------------------------|--------------------------------|
|-----------|-----------------------------|--------------------------------|

Rule 4001 New Source Performance Standards (4/14/99)

Rule 4002 National Emissions Standards for Hazardous Air Pollutants

(5/20/04)

Rule 4101 Visible Emissions (2/17/05)

Rule 4102 Nuisance (12/17/92)

Rule 4201 Particulate Matter Concentration (12/17/92)
Rule 4202 Particulate Matter Emissions Rate (12/17/92)

Rule 4301 Fuel Burning Equipment (12/17/92)

Rule 4309 Dryers, Dehydrators, and Ovens (12/15/05)

Rule 4801 Sulfur Compounds (12/17/92) CH&SC 41700 Health Risk Assessment

CH&SC 42301.6 School Notice

Public Resources Code 21000-21177: California Environmental Quality Act (CEQA)

California Code of Regulations, Title 14, Division 6, Chapter 3, Sections 15000-15387; CEQA Guidelines

# III. PROJECT LOCATION:

The facility will be located the corner of Ave 6 & Chowchilla Canal Road approximately 8 miles east of Firebaugh, California. The facility is not within 1,000 feet of a K-12 school. A facility location map is shown in **Attachment I**. A facility plot plan is included as **Attachment I**.

| Table 1 - Facility Location              |  |  |  |  |  |
|--|--|--|--|--|--|
| Stationary Source Section Township Range |  |  |  |  |  |
| NE 03 13S 15E                            |  |  |  |  |  |

# IV. PROCESS DESCRIPTION:

Pistachios are harvested and hulled as rapidly as possible during the approximately 45 to 60 day season. Freshly harvested pistachios are extremely prone to damage; a delay in the hulling and drying of harvested pistachios not only results in stained pistachio shells, which makes the nuts much less valuable than unstained shells, but also results in the production of aflatoxin, a toxic byproduct of mold. Therefore, pistachios must be hulled and dried as soon as they are harvested.

After hulling the nuts are transferred to column dryers to reduce the moisture content from 30-40% to approximately 7%. After drying, the closed nuts are conveyed to gravity decks to further separate the blanks prior to storage. The good nuts are then conveyed to storage silos where moisture content may be further reduced or maintained at the desired level. After this initial processing, the pistachio nuts can be stored, without sustaining damage, while they wait for final processing. A product flow diagram of the hulling and drying operation is included as **Attachment III**.

The maximum heat input rating of the dryers is estimated at 20 MM Btu/hr based on anticipated operating conditions. If needed, warm air to the silos and sample dryers will be provided by permit exempt certified indirect fired air heaters with a heat input rating of less than 2.0 MM Btu/hr.

# V. **EQUIPMENT LISTING**:

### C-8347-1-0

PISTACHIO HULLING AND DRYING OPERATION WITH TWENTY 20 MM BTU/HR COLUMN DRYERS, OPERATION MAY BE EQUIPPED WITH THE FOLLOWING PERMIT EXEMPT WET PROCESSING EQUIPMENT: PISTACHIO HULLER/PEELER(S), WASH DECK(S), FLOAT TANK(S), WET ASPIRATOR(S) WITH CYCLONE(S) AND/OR EXPANSION BOXE(S), GRAVITY DECK(S) AND CLASSIFYING DECK(S) EACH WITH A HIGH

EFFICIENCY CYCLONE, ASSOCIATED ELEVATOR(S), HOPPER(S), AUGER(S), AND CONVEYOR(S)

# VI. EMISSION CONTROL TECHNOLOGY EVALUATION:

Pre-cleaner leaf blowers followed by an expansion box and then a high efficiency cyclone serving the pre-cleaning system have been demonstrated as the most efficient method of removing large pieces of debris such as leaves, twigs and blanks from the nuts prior to the wet hulling process.

Aspirators and cyclones used in conjunction with the pistachio dryers are designed to remove unwanted pieces of hull, shell, twigs, etc. that make it through the hulling process. As this material dries it can accumulate in the process equipment posing a fire hazard and potentially attracting rodents and insects.

The use of high efficiency cyclones represents the best method of collecting these large pieces of debris. The proposed cyclones are 42" 1D-3D

# **Drying Process**

The dryers are fired on commercial natural gas. The multiple small burners used in these units are thermostatically controlled to maintain drying chamber temperature usually in the 170°F to 230°F range. This relatively cool chamber temperature is achieved with a cool burner temperature, which inherently produces less NO<sub>X</sub> than other types of dryers. Please note that the NO<sub>X</sub> emissions factor for pistachio dryers, 0.083 lb NO<sub>X</sub>/MMBtu, was demonstrated through source testing and is the basis for BACT Guideline 1.6.8. No additional control equipment is proposed or required.

Manufacturer's information on proposed GSI dryers and 1D-3D cyclones are included in **Attachment IV**.

# VII. <u>CALCULATIONS</u>:

# A. Assumptions

- The hulling and drying operation typically operates 24 hours per day and up to 60 days (1440 hrs) per year.
- The daily fuel use limit for the column dryers will not exceed 9.6 MMscf/day
- The annual fuel use limit for the column dryers will not exceed 576 MM scf/yr.
- Pre-cleaner cyclones have an approved emission factor of 0.08 lb PM<sub>10</sub>/hr and an operating limit of 1,440 hours/yr.
- Gravity decks are not sources of PM<sub>10</sub> emissions.
- The approved dryer emission factors (lb/MM scf) are as follows:

| Source        | PM10 | SOx  | NOx  | VOC | CO   |
|---------------|------|------|------|-----|------|
| Column Dryers | 2.5  | 2.85 | 83.2 | 3.8 | 21.0 |

 Because the proposed dryers are designed to vent horizontally through perforated openings in the sides it is not possible to capture emissions through a stack and therefore <u>NOx, SOx, combustion PM10, CO, and VOC</u> <u>emissions are considered as fugitive emissions for Major Source, Federal and SB 288 Major Modification calculations.</u>

# 1. Pre-Project Potential to Emit (PE1)

# C-8347-1-0

Since this is a new permit unit, PE1 = 0 for all pollutants.

# 2. Post Project Potential to Emit (PE2)

Heat input limit = 9.6 MMscf/day, 576 MMscf/yr

NOx: 83.2 lb/MMscf x 9.6 MMscf/day = 798.7 lb/day SOx: 2.85 lb/MMBtu x 9.6 MMscf/day = 27.4 lb/day PM10: 2.5 lb/MMBtu x 9.6 MMscf/day = 24.0 lb/day CO: 21.0 lb/MMBtu x 9.6 MMscf/day = 201.6 lb/day VOC: 3.8 lb/MMBtu x 9.6 MMscf/day = 36.5 lb/day

Annual heat input limit: 245 MMscf/yr

NOx: 83.2 lb MMScf x 576 MMscf/yr = 47,923 lb/yr SOx: 2.85 lb/MMscf x 576 MMscf/yr = 1642 lb/yr PM10: 2.5 lb/MMscf x 576 MMscf/yr = 1440 lb/yr CO: 21.0 lb/MMscf x 576 MMscf/yr = 12,096 lb/yr VOC: 3.8 lb/MMscf x 576 MMscf/yr = 2,189 lb/yr

# Cyclone emissions

0.08 lb/hr/cyclone x 4 cyclones x 24 hr/day = 7.7 lb PM10/day x 60 days/yr = 461 lb PM10/yr

| Р  | Post-Project Potential to Emit (PE2) |                    |  |  |  |
|--|--------------------------------------|--------------------|--|--|--|
| Daily Emissions Annual Emission (lb/day) (lb/year) |                                      |                    |  |  |  |
| NO <sub>X</sub>                                    | 798.7                                | 47,923             |  |  |  |
| SO <sub>X</sub>                                    | 27.4                                 | 1,642              |  |  |  |
| PM <sub>10</sub>                                   | 24.0 + 7.7 = 31.7                    | 461 + 1440 = 1,901 |  |  |  |
| CO   | 201.6                                | 12,096             |  |  |  |
| VOC  | 36.5                                 | 2,189              |  |  |  |

Emissions Profiles are included in Attachment V.

# 3. Pre-Project Stationary Source Potential to Emit (SSPE1)

Pursuant to District Rule 2201, the SSPE1 is the Potential to Emit (PE) from all units with valid Authorities to Construct (ATC) or Permits to Operate (PTO) at the Stationary Source and the quantity of Emission Reduction Credits (ERC) which have been bariked since September 19, 1991 for Actual Emissions Reductions (AER) that have occurred at the source, and which have not been used on-site.

Since this is a new facility, there are no valid ATCs, PTOs, or ERCs at the Stationary Source; therefore, the SSPE1 is equal to zero.

# 4. Post Project Stationary Source Potential to Emit (SSPE2)

Pursuant to District Rule 2201, the SSPE2 is the PE from all units with valid ATCs or PTOs at the Stationary Source and the quantity of ERCs which have been banked since September 19, 1991 for AER that have occurred at the source, and which have not been used on-site.

| SSPE2 (lb/year) |                 |                 |                  |        |       |
|-----------------|-----------------|-----------------|------------------|--------|-------|
| Permit Unit     | NO <sub>X</sub> | SO <sub>X</sub> | PM <sub>10</sub> | СО     | VOC   |
| C-8347-1-0      | 47,923          | 1,642           | 1,901            | 12,096 | 2,189 |
| SSPE2           | 47,923          | 1,642           | 1,901            | 12,096 | 2,189 |

# 5. Major Source Determination

Pursuant to District Rule 2201, a Major Source is a stationary source with a SSPE2 equal to or exceeding one or more of the following threshold values. However, for the purposes of determining major source status, the SSPE2 shall not include the quantity of ERCs which have been banked since September 19, 1991 for AER that have occurred at the source, and which have not been used on-site."

| Major Source Determination (lb/year)                         |    |    |     |    |    |  |
|--|----|----|-----|----|----|--|
| NO <sub>X</sub> SO <sub>X</sub> PM <sub>10</sub> CO VOC      |    |    |     |    |    |  |
| SSPE1  | 0  | 0  | 0   | 0  | 0  |  |
| SSPE2*   | 0  | 0  | 461 | 0  | 0  |  |
| Major Source Threshold 20,000 140,000 140,000 200,000 20,000 |    |    |     |    |    |  |
| Major Source?  | No | No | No  | No | No |  |

<sup>\*</sup>Cyclone emissions only - District Rule 2201 Section 3.24.1 For determining major source status, fugitives shall only be included for calculating the air pollutant post-project emissions or SSPE2 if the source is included in the list of source categories identified in the major source definition in 40 CFR Part 70.2. The source is not included in source categories identified in the major source definition in 40 CFR Part 70.2.

As seen in the table above, the facility is not an existing Major Source for any pollutant and is not becoming a Major Source for  $NO_X$  emissions as a result of this project.

# 6. Baseline Emissions (BE)

The BE calculation (in lbs/year) is performed pollutant-by-pollutant for each unit within the project to calculate the QNEC, and if applicable, to determine the amount of offsets required.

Pursuant to District Rule 2201, BE = PE1 for:

- Any unit located at a non-Major Source,
- Any Highly-Utilized Emissions Unit, located at a Major Source,
- Any Fully-Offset Emissions Unit, located at a Major Source, or
- Any Clean Emissions Unit, located at a Major Source.

otherwise,

BE = Historic Actual Emissions (HAE), calculated pursuant to District Rule 2201.

# C-8347-1-0:

Since this is a new permit unit, BE = PE1 = 0 for all pollutants.

# 7. SB 288 Major Modification

SB 288 Major Modification is defined in 40 CFR Part 51.165 as "any physical change in or change in the method of operation of a major stationary source that would result in a significant net emissions increase of any pollutant subject to regulation under the Act."

As discussed in Section VII.C.5 above, the facility is not a Major Source for SOx and PM10; therefore, the project does not constitute a SB 288 Major Modification for these air contaminants.

The source is not included in the 28 specific source categories specified in 40 CFR 51.165. Therefore increases in NOx and VOC fugitive emissions (please see assumptions section) are not included in the SB 288 Major Modification calculation and the project is not a SB 288 Major Modification.

# 8. Federal Major Modification

District Rule 2201, Section 3.17 states that Federal Major Modifications are the same as "Major Modification" as defined in 40 CFR 51.165 and part D of Title I of the CAA. SB 288 Major Modifications are not Federal Major Modifications if they meet the criteria of the "Less-Than-Significant Emissions Increase" exclusion.

A Less-Than-Significant Emissions Increase exclusion is for an emissions increase for the project, or a Net Emissions Increase for the project (as defined in 40 CFR 51.165 (a)(2)(ii)(B) through (D), and (F)), that is not significant for a given regulated NSR pollutant, and therefore is not a Federal Major Modification for that pollutant.

- To determine the post-project projected actual emissions from existing units, the provisions of 40 CFR 51.165 (a)(1)(xxviii) shall be used.
- To determine the pre-project baseline actual emissions, the provisions of 40 CFR 51.165 (a)(1)(xxxv)(A) through (D) shall be used.
- If the project is determined not to be a Federal Major Modification pursuant to the provisions of 40 CFR 51.165 (a)(2)(ii)(B), but there is a reasonable possibility that the project may result in a significant emissions increase, the owner or operator shall comply with all of the provisions of 40 CFR 51.165 (a)(6) and (a)(7).
- Emissions increases calculated pursuant to this section are significant if they exceed the significance thresholds specified in the table below.

| Pollutant | Threshold (lb/year) |
|-----------|---------------------|
| VOC       | 0                   |
| NOx       | 0                   |
| PM10      | 30,000              |
| SOx       | 80,000              |

The Net Emissions Increases (NEIs) for purposes of determination of a "Less-Than-Significant Emissions Increase" exclusion will be calculated below to determine if this project qualifies for such an exclusion.

As discussed in Section VII.C.5 above, the facility is not a Major Source for SOx and PM10; therefore, the project does not constitute a Federal Major Modification for these air contaminants.

The source is not included in the 28 specific source categories specified in 40 CFR 51.165. Therefore increases in NOx and VOC fugitive emissions are not included in the Federal Major Modification calculation and the project is not a Federal Major Modification.

# 9. Quarterly Net Emissions Change (QNEC)

The Quarterly Net Emissions Change is used to complete the emission profile screen for the District's PAS database. The QNEC for each pollutant is shown in the table(s) below and reported in the PAS database emissions profile. The QNEC shall be calculated as follows:

QNEC = (PE2 - BE)/4, where:

QNEC = Quarterly Net Emissions Change for each emissions unit, lb/qtr.

PE2 = Post Project Potential to Emit for each emissions unit, lb/yr.

BE = Baseline Emissions (per Rule 2201) for each emissions unit, lb/yr.

| QNEC (lb/qtr) — C-8347-1-0  |        |       |       |       |       |  |
|---|--------|-------|-------|-------|-------|--|
| Pollutant NO <sub>X</sub> SO <sub>X</sub> PM <sub>10</sub> CO VOC |        |       |       |       |       |  |
| PE2 (lb/yr)   | 47,923 | 1,642 | 1,901 | 1,901 | 2,189 |  |
| <b>BE (lb/yr)</b> 0 0 0 0   |        |       |       |       |       |  |
| QNEC  | 11,981 | 411   | 475   | 475   | 547   |  |

# VIII. COMPLIANCE:

# A. Best Available Control Technology (BACT)

# 1. BACT Applicability

# a. New emissions units – PE > 2 lb/day

As seen in Section VII.C.2 of this evaluation, the applicant is proposing to install new column dryers with DELs equal to the following:

# **Combustion Emissions**

NOx: 83.2 lb/MMscf x 9.6 MMscf/day = 798.7 lb/day SOx: 2.85 lb/MMBtu x 9.6 MMscf/day = 27.4 lb/day PM10: 2.5 lb/MMBtu x 9.6 MMscf/day = 24.0 lb/day CO: 21.0 lb/MMBtu x 9.6 MMscf/day = 201.6 lb/day VOC: 3.8 lb/MMBtu x 9.6 MMscf/day = 36.5 lb/day

The PE is greater than 2 lb/day for NO<sub>X</sub>, SO<sub>X</sub>, PM<sub>10</sub>, CO, and VOC for the dryers and greater than 2 lb/day for PM10 from the cyclones. BACT is triggered for NO<sub>X</sub>, SO<sub>X</sub>, PM<sub>10</sub>, and VOC only for the dryers since the PEs are greater than 2 lbs/day; however BACT is not triggered for CO since the SSPE2 for CO is not greater than 200,000 lbs/year, as demonstrated in Section VII.C.5 of this document.

# Pre-Cleaner Cyclone Emissions

PM10: 7.7 lb/day

BACT is triggered for PM10 for the pre-cleaner operation as emissions exceed 2 lb/day.

# b. Relocation of emissions units – PE > 2 lb/day

As discussed in Section I above, there are no emissions units being relocated from one stationary source to another; therefore BACT is not triggered.

# c. Modification of emissions units - AIPE > 2 lb/day

As discussed in Section I above, there are no modified emissions units associated with this project; therefore BACT is not triggered.

# d. Major Modification

As discussed in Section VII.C.7 above, this project does not constitute a Major Modification; therefore BACT is not triggered.

# 2. BACT Guideline - Attachment VI

BACT Guideline 5.2.3 applies to the proposed Preleasing Operation.

BACT Guideline 1.6.8 applies to the proposed 20.0 MMBtu/hr column dryers.

# 3. Top-Down BACT Analysis

Per Permit Services Policies and Procedures for BACT, a Top-Down BACT analysis shall be performed as a part of the application review for each application subject to the BACT requirements pursuant to the District's NSR Rule.

Pursuant to the Top-Down BACT Analyses (Attachment VII) BACT has been satisfied with the following:

# Pre-cleaning Operation

PM10: 1D-3D cyclone

# Column Dryers

NOx: Low NOx burner @ 0.083 lb/MMBtu and natural gas fuel.

SOx, PM10, VOC: Natural gas with LPG a backup fuel.

# B. Offsets

# 1. Offset Applicability

Offset requirements shall be triggered on a pollutant by pollutant basis and shall be required if the SSPE2 equals to or exceeds the offset threshold levels in Table 4-1 of Rule 2201.

The SSPE2 is compared to the offset thresholds in the following table.

| Offset Determination (lb/year)                          |        |       |       |       |       |  |
|---|--------|-------|-------|-------|-------|--|
| NO <sub>X</sub> SO <sub>X</sub> PM <sub>10</sub> CO VOC |        |       |       |       |       |  |
| SSPE2   | 47,923 | 1,642 | 1,901 | 1,901 | 2,189 |  |
| Offset Thresholds 20,000 54,750 29,200 200,000 20,000   |        |       |       |       |       |  |
| Offsets triggered?                                      | Yes    | No    | Yes*  | No    | No    |  |

<sup>\*</sup>the project must be fully offset to mitigate impact of AAQA (please see **Attachment VIII**)

# 2. Quantity of Offsets Required

As seen above, the SSPE2 is greater than the offset thresholds for  $NO_X$  only. Therefore offset calculations will be required for this project.

The quantity of offsets in pounds per year for  $NO_X$  is calculated as follows for sources with an SSPE1 less than the offset threshold levels before implementing the project being evaluated.

Offsets Required (lb/year) = [(SSPE2 – ROT + ICCE) x DOR]

Where,

SSPE2 = Post Project Stationary Source Potential to Emit

ROT = Respective Offset Threshold, for the respective pollutant ICCE = Increase in Cargo Carrier Ernissions – not applicable

DOR = Distance Offset Ratio, determined pursuant to Section 4.8

SSPE2 (NO<sub>X</sub>) = 47,923 lb/year Offset threshold (NO<sub>X</sub>) = 20,000 lb/year ICCE = 0 lb/year

The applicant has stated that the facility plans to use ERC certificate C-1133-2 to offset the increases in  $NO_X$  emissions associated with this project. The reductions occurred at another stationary source greater than 15 miles from C-8347 (C-598 Guardian Industries Corporation, Kingsburg, CA). Therefore the correct DOR is 1.5:1. The amount of  $NO_X$  ERCs that need to be withdrawn is:

Please note that the entire amount of NOx must be offset to mitigate the impact of the project on the ambient air quality as reflected by the results of AAQA modeling (Attachment VIII).

Offsets Required (lb/year) =  $47,923 \times 1.5$ = 71,885 lb NO<sub>x</sub>/year

The following quantities have been reserved in PAS (71,885 lb NOx/4 per quarter).

<u>1<sup>st</sup> Quarter</u> <u>2<sup>nd</sup> Quarter</u> <u>3<sup>rd</sup> Quarter</u> <u>4<sup>th</sup> Quarter</u> 17.971 17.971 17.771 **PM10 DOR = 1.5.** Please note that the <u>entire amount of PM10</u> to must be offset to mitigate the impact of the project on the ambient air quality as reflected by the results of AAQA modeling (**Attachment VIII**). The PM10 reductions (ERCs used for offsets in this project) all occurred at facilities located greater than 15 miles from the proposed location.

Calculating the appropriate quarterly emissions to be offset is as follows:

| <u>DOR</u> | 1st Quarter | 2 <sup>nd</sup> Quarter | 3 <sup>rd</sup> Quarter | 4 <sup>th</sup> Quarter |
|------------|-------------|-------------------------|-------------------------|-------------------------|
| 1.5:1      | 713         | 713                     | 713                     | 713                     |

# Proposed Rule 2201 (offset) Conditions:

Prior to operating equipment under this Authority to Construct, permittee shall surrender emission reduction credits for the following quantities of emissions: NOx: 17,971 lb/qtr and PM10: 713 lb/qtr. Offsets include the applicable offset ratio specified in Section 4.8 of Rule 2201 (as amended 4/21/11). [District Rule 2201] Y

ERC Certificate Numbers C-1133-2, S-1267-4, C-499-4, and N-284-4 (or certificates split from theses certificates) shall be used to supply the required offsets, unless a revised offsetting proposal is received and approved by the District, upon which this Authority to Construct shall be reissued, administratively specifying the new offsetting proposal. Original public noticing requirements, if any, shall be duplicated prior to reissuance of this Authority to Construct. [District Rule 2201] Y

Reserved in PAS (proposed by applicant)

| ERC#     | 1 <sup>st</sup> Qtr | 2 <sup>nd</sup> Qtr | 3 <sup>rd</sup> Qtr | 4 <sup>th</sup> Qtr |
|----------|---------------------|---------------------|---------------------|---------------------|
| S-1267-4 | 350                 | 353                 | 508                 | 387                 |
| C-499-4  | 78                  | 249                 | 205                 | 326                 |
| N-284-4  | 285                 | 111                 | 0                   | 0                   |
| Total    | 713                 | 713                 | 713                 | 713                 |

# C. Public Notification

# 1. Applicability

Public noticing is required for:

- a. New Major Sources, Federal Major Modifications, and SB 288 Major Modifications,
- b. Any new emissions unit with a Potential to Emit greater than 100 pounds during any one day for any one pollutant,
- c. Any project which results in the offset thresholds being surpassed, and/or
- d. Any project with an SSIPE of greater than 20,000 lb/year for any pollutant.

# a. New Major Sources, Federal Major Modifications, and SB 288 Major Modifications

New Major Sources are new facilities, which are also Major Sources. As shown in Section VII.C.5 above, the SSPE2 is not greater than the Major Source threshold for any pollutant. Therefore, public noticing is not required for this project for new Major Source purposes.

As demonstrated in VII.C.7, this project does not constitute an SB 288 or Federal Major Modification; therefore, public noticing for SB 288 or Federal Major Modification purposes is not required.

# b. PE > 100 lb/day

Applications which include a new emissions unit with a PE greater than 100 pounds during any one day for any pollutant will trigger public noticing requirements. As seen in Section VII.C.2 above, this project does not include a new emissions unit which has daily emissions greater than 100 lb/day for any pollutant, therefore public noticing for PE > 100 lb/day purposes is not required.

The PE2 for this new unit is compared to the daily PE Public Notice thresholds in the following table:

| PE > 100 lb/day Public Notice Thresholds |                 |                            |                             |  |  |
|--|-----------------|----------------------------|-----------------------------|--|--|
| Pollutant                                | PE2<br>(lb/day) | Public Notice<br>Threshold | Public Notice<br>Triggered? |  |  |
| NO <sub>X</sub>                          | 798.7           | 100 lb/day                 | Yes                         |  |  |
| SO <sub>X</sub>                          | 27.4            | 100 lb/day                 | No                          |  |  |
| PM <sub>10</sub>                         | 31.7            | 100 lb/day                 | No                          |  |  |
| CO                                       | 201.6           | 100 lb/day                 | Yes                         |  |  |
| VOC                                      | 36.5            | 100 lb/day                 | No                          |  |  |

Therefore, public noticing for PE > 100 lb/day purposes is required.

# c. Offset Threshold

The SSPE1 and SSPE2 are compared to the offset thresholds in the following table.

| Offset Thresholds |           |           |                 |               |  |  |
|-------------------|-----------|-----------|-----------------|---------------|--|--|
| Pollutant         | SSPE1     | SSPE2     | Offset          | Public Notice |  |  |
|                   | (lb/year) | (lb/year) | Threshold       | Required?     |  |  |
| NO <sub>X</sub>   | 0         | 47,923    | 20,000 lb/year  | Yes           |  |  |
| SO <sub>X</sub>   | 0         | 1,642     | 54,750 lb/year  | No            |  |  |
| PM <sub>10</sub>  | 0         | 1,901     | 29,200 lb/year  | No            |  |  |
| CO                | 0         | 12,096    | 200,000 lb/year | No            |  |  |
| VOC               | 0         | 2,189     | 20,000 lb/year  | No            |  |  |

As detailed above, offset thresholds were surpassed for NO<sub>X</sub> with this project; therefore public noticing is required for offset purposes.

# d. SSIPE > 20,000 lb/year

Public notification is required for any permitting action that results in a SSIPE of more than 20,000 lb/year of any affected pollutant. According to District policy, the SSIPE = SSPE2 – SSPE1. The SSIPE is compared to the SSIPE Public Notice thresholds in the following table.

| SSIPE Public Notice Thresholds |           |           |                    |                  |               |  |
|--------------------------------|-----------|-----------|--------------------|------------------|---------------|--|
| Pollutant                      | SSPE2     | SSPE1     | SSIPE SSIPE Public |                  | Public Notice |  |
|                                | (lb/year) | (lb/year) | (lb/year)          | Notice Threshold | Required?     |  |
| NO <sub>x</sub>                | 47,923    | 0         | 47,923             | 20,000 lb/year   | Yes           |  |
| SO <sub>x</sub>                | 1,642     | 0         | 1,642              | 20,000 lb/year   | No            |  |
| PM <sub>10</sub>               | 1,901     | 0         | 1,901              | 20,000 lb/year   | No            |  |
| CO                             | 12,096    | 0         | 12,096             | 20,000 lb/year   | No            |  |
| VOC                            | 2,189     | 0         | 2,189              | 20,000 lb/year   | No            |  |

As demonstrated above, the SSIPEs for  $NO_X$  was greater than 20,000 lb/year; therefore public noticing for SSIPE purposes is required.

# 2. Public Notice Action

As discussed above, public noticing is required for this project for  $NO_X$  emissions in excess of 100 lb/day and 20,000 lb/yr. Therefore, public notice documents will be submitted to the California Air Resources Board (CARB) and a public notice will be published in a local newspaper of general circulation prior to the issuance of the ATC for this equipment.

# D. Daily Emission Limits (DELs)

Daily Emissions Limitations (DELs) and other enforceable conditions are required by Section 3.15 to restrict a unit's maximum daily emissions, to a level at or below the emissions associated with the maximum design capacity. Per Sections 3.15.1 and 3.15.2, the DEL must be contained in the latest ATC and contained in or enforced by the latest PTO and enforceable, in a practicable manner, on a daily basis. DELs are also required to enforce the applicability of BACT.

# Proposed Rule 2201 (DEL) Conditions:

Particulate matter emissions shall not exceed 0.1 grains/dscf in concentration. [District Rule 4201]

There shall be no visible emissions in excess of 5% opacity at receiving pits, stick reels, conveyors, conveyor transfer points or trash disposal operations. [District Rule 2201]

There shall be no visible emissions at dryers, conveyors, or aspirators cyclones exhausts. [District Rule 2201]

Daily natural gas consumption for twenty 20 MMBtu/hr column dryers shall not exceed 9.6 MMscf/day. [District Rule 2201] N

Annual natural gas consumption for twenty 20 MMBtu/hr column dryers shall not exceed 576 MMscf/year. [District NSR Rule] N

Emission rates from dryers listed above shall not exceed any of the following: PM10: 0.0025 lb/MMBtu, SOx (as SO2): 0.00285 lb/MMBtu, NOx (as NO2): 0.0832 lb/MMBtu, VOC: 0.0038 lb/MMBtu, or CO: 0.021 lb/MMBtu. [District NSR Rule] N

Maximum emission rate of PM10 from each of high-efficiency precleaning cyclones listed above shall not exceed 0.08 lb/hr. [District NSR Rule] N

Precleaning operation shall not operate more than 1440 hours per year. [District Rule 2201] N

# E. Compliance Assurance

Pursuant to District Policy APR 1705, source testing is not required to demonstrate compliance with Rule 2201.

# 1. Source Testing

Pursuant to District Policy APR 1705, source testing is required to demonstrate compliance with Rule 2201.

Source with non-combustion particulate emission sampling limit shall be demonstrated by District witnessed sample collection by independent testing laboratory if precleaner cyclones exhibit visible emissions in excess of 5% opacity. [District Rule 1081 & NSR Rule] N

Source testing for particulate emissions shall be performed within 60 days of District determination of excess visible emissions, test results shall be submitted to the District within 60 days thereafter. [District Rule 1081 & NSR Rule] N

Source testing to measure the concentration of particulate matters shall be conducted using EPA Method 5. [District NSR Rule & Rule 4201, 4.1] N

# 2. Monitoring

No monitoring is required to demonstrate compliance with Rule 2201.

Visible emissions at precleaner cyclones shall be inspected quarterly during operation. If visible emissions are observed to be in excess of 5% opacity, corrective action shall be taken to reduce opacity. [District Rule NSR Rule & 2520, 9.3.2] N

# 3. Record Keeping

Record keeping is required to demonstrate compliance with the offset, public notification and daily emission limit requirements of Rule 2201. The following condition(s) will appear on the permit to operate:

Permittee shall maintain records of the volume of fuel used each day and each year. [District Rules 1070 and 2201] N

Permittee shall maintain records of hours of operation of the precleaning cyclones. [District Rules 1070 and 22011 N

# 4. Reporting

No reporting is required to demonstrate compliance with Rule 2201.

# F. Ambient Air Quality Analysis (AAQA)

An AAQA shall be conducted for the purpose of determining whether a new or modified Stationary Source will cause or make worse a violation of an air quality The District's Technical Services Division conducted the required analysis. Refer to Attachment VIII of this document for the AAQA summary sheet.

The proposed location is in an attainment area for  $NO_X$ , CO, and  $SO_X$ . As shown by the AAQA summary sheet the proposed equipment will not cause a violation of an air quality standard for NO<sub>x</sub>, CO, or SO<sub>x</sub>.

The proposed location is in a non-attainment area for PM<sub>10</sub>. The increase in the ambient PM<sub>10</sub> concentration due to the proposed equipment is shown on the table titled Calculated Contribution. The levels of significance, from 40 CFR Part 51.165 (b)(2), are shown on the table titled Significance Levels.

The results from the Criteria Pollutant Modeling are as follows:

# Criteria Pollutant Modeling Results\* Values are in ug/m<sup>3</sup>

| Steam Generator   | 1 Hour            | 3 Hours | 8 Hours. | 24 Hours          | Annual            |
|-------------------|-------------------|---------|----------|-------------------|-------------------|
| СО                | Pass              | Х       | Pass     | Х                 | X                 |
| NO <sub>x</sub>   | Fail <sup>2</sup> | Х       | Х        | X                 | Fail <sup>2</sup> |
| SO <sub>x</sub>   | Pass <sup>1</sup> | Pass    | X        | Pass              | Pass              |
| PM <sub>10</sub>  | Х                 | Х       | Х        | Fail <sup>2</sup> | Fail <sup>2</sup> |
| PM <sub>2.5</sub> | X                 | Х       | Х        | Fail <sup>2</sup> | Fail <sup>2</sup> |

Results were taken from the attached PSD spreadsheet.

Please note that the entire amount of PM10 to must be offset to mitigate the impact of the project on the ambient air quality as reflected by the results of AAQA modeling.

<sup>&</sup>lt;sup>1</sup>The project was compared to the 1-hour SO2 National Ambient Air Quality Standard that became effective on August 23, 2010 using the District's approved procedures.

<sup>2</sup>Facility is fully offsetting the project PM and NOx emissions as per District Rule 2201.

### Rule 4101 Visible Emissions

Per Section 5.0, no person shall discharge into the atmosphere emissions of any air contaminant aggregating more than 3 minutes in any hour which is as dark as or darker than Ringelmann 1 (or 20% opacity).

The pre-cleaning lines proposed in this project will have PM<sub>10</sub> emissions of 0.08 lb/hr; therefore, visible emissions are not expected to exceed Ringelmann 1 or 20% opacity and continued compliance with the requirements of this rule is expected.

# Rule 4102 Nuisance

Rule 4102 prohibits discharge of air contaminants which could cause injury, detriment, nuisance or annoyance to the public. Public nuisance conditions are not expected as a result of these operations, provided the equipment is well maintained. Therefore, compliance with this rule is expected.

# California Health & Safety Code 41700 (Health Risk Assessment)

District Policy APR 1905 – *Risk Management Policy for Permitting New and Modified Sources* specifies that for an increase in emissions associated with a proposed new source or modification, the District perform an analysis to determine the possible impact to the nearest resident or worksite.

An HRA is not required for a project with a total facility prioritization score of less than or equal to one. According to the Technical Services Memo for this project (Attachment VIII), the total facility prioritization score including this project was less than or equal to one. Therefore, no future analysis is required to determine the impact from this project and compliance with the District's Risk Management Policy is expected.

# Rule 4201 Particulate Matter Concentration

Section 3.1 of this rule prohibits the discharge of dust, fumes, or total suspended particulate matter emission in excess of 0.1 grain per cubic foot of gas at dry standard conditions. Because the proposed cyclones are expected to be sources of non-combustion  $PM_{10}$  emissions with an emission rate of 0.08 lb/hr, continued compliance with the requirements of Rule 4201 is expected.

# Rule 4202 Particulate Matter Emission Rate

This proposal includes the installation of pre-cleaning lines that are handling nuts recently removed from the trees and they are not expected to have PM<sub>10</sub> emissions; therefore, continued compliance with the requirements of Rule 4202 is expected.

# Rule 4301 Fuel Burning Equipment

Section 3.1 defines Fuel Burning Equipment as any furnace, boiler, apparatus, stack, and all appurtenances thereto, used in the process of burning fuel for the primary purpose of producing heat or power by indirect heat transfer. The dryers associated with this process are direct heat transfer units; therefore, the requirements of this rule are not applicable to this permit unit.

# Rule 4309 Dryers, Dehydrators, and Ovens

Section 4.1.1 exempts column-type or tower dryers used to dry grains or tree nuts. The dryers to be installed at the Madera facility are column-type dryers used to dry pistachios; therefore, they are not subject to the requirements of this rule.

# Rule 4801 Sulfur Compounds

A person shall not discharge into the atmosphere sulfur compounds, which would exist as a liquid or gas at standard conditions, exceeding in concentration at the point of discharge: 0.2 % by volume calculated as SO<sub>2</sub>, on a dry basis averaged over 15 consecutive minutes.

Using the ideal gas equation and the emission factors presented in Section VII, the sulfur compound emissions are calculated as follows:

Volume 
$$SO_2 = \frac{n RT}{P}$$

Where:

 $n = moles SO_2$ 

R (Universal Gas Constant) = 
$$\frac{10.73 \,\text{psi} \cdot \text{ft}^3}{\text{lb} \cdot \text{mol} \cdot {}^{\circ}\text{R}}$$

T (Standard Temperature) = 60°F = 520°R

P (Standard Pressure) = 14.7 psi

EPA F-Factor for Natural Gas: 8.710 dscf/MMBtu at 68°F

$$Corrected \ F - factor = \left(\frac{8,710 dscf}{MMBtu}\right) \times \left(\frac{60^{\circ} F + 459.6}{68^{\circ} F + 459.6}\right) = 8,578 \frac{dscf}{MMBtu} \ at \ 60^{\circ} F$$

$$\frac{0.00285 lb - SOx}{MMBtu} \times \frac{MMBtu}{8,578 dscf} \times \frac{1 lb \cdot mol}{64 lb} \times \frac{10.73 \ psi \cdot ft^{3}}{lb \cdot mol \cdot {}^{\circ} R} \times \frac{520^{\circ} R}{14.7 \ psi} \times \frac{1,000,000 \cdot parts}{million} = 1.97 \frac{parts}{million}$$

$$SulfurConcentration = 1.97 \frac{parts}{million} < 2,000 \text{ ppmv (or 0.2\%)},$$

Therefore compliance with District Rule 4801 requirements is expected.

# California H&S Code, Section 41700

This project does not propose an increase in permitted emissions for the stationary source. The facility is not located near sensitive receptors; therefore, continued operation of the hulling and drying operation, as allowed, is not expected to cause injury, detriment,

nuisance, or annoyance to any considerable number of persons or to the public. In addition, this project will not endanger the comfort, repose, health, or safety of any such persons or the public, and it will not cause, or have a natural tendency to cause injury or damage to business or property. Therefore, continued compliance with this regulation is expected.

# California H&S Code, Section 42301.6

The equipment covered by this application is located more than 1,000 feet from any school; therefore, continued compliance with this regulation is expected.

# California Environmental Quality ACT (CEQA)

The California Environmental Quality Act (CEQA) requires each public agency to adopt objectives, criteria, and specific procedures consistent with CEQA Statutes and the CEQA Guidelines for administering its responsibilities under CEQA, including the orderly evaluation of projects and preparation of environmental documents. The San Joaquin Valley Unified Air Pollution Control District (District) adopted its *Environmental Review Guidelines* (ERG) in 2001. The basic purposes of CEQA are to:

- Inform governmental decision-makers and the public about the potential, significant environmental effects of proposed activities.
- Identify the ways that environmental damage can be avoided or significantly reduced.
- Prevent significant, avoidable damage to the environment by requiring changes in projects through the use of alternatives or mitigation measures when the governmental agency finds the changes to be feasible.
- Disclose to the public the reasons why a governmental agency approved the project in the manner the agency chose if significant environmental effects are involved.

The County of Madera (County) is the public agency having principal responsibility for approving the project. As such, the County served as the Lead Agency (CCR §15367). In approving the project, the Lead Agency prepared and adopted a Mitigated Negative Declaration. The Lead agency filed a Notice of Determination, stating that the environmental document was adopted pursuant to the provisions of CEQA and concluding that the project would not have a significant effect on the environment.

The District is a Responsible Agency for the project because of its discretionary approval power over the project via its Permits Rule (Rule 2010) and New Source Review Rule (Rule 2201), (CCR §15381). As a Responsible Agency the District complies with CEQA by considering the environmental document prepared by the Lead Agency, and by reaching its own conclusion on whether and how to approve the project (CCR §15096).

The District has considered the Lead Agency's environmental document. Furthermore, the District has conducted an engineering evaluation of the project, this document, which demonstrates that Stationary Source emissions from the project would be below the District's thresholds of significance for criteria pollutants. Thus, the District finds that

through a combination of project design elements, compliance with applicable District rules and regulations, and compliance with District air permit conditions, project specific stationary source emissions will have a less than significant impact on air quality. The District does not have authority over any of the other project impacts and has, therefore, determined that no additional findings are required (CEQA Guidelines §15096(h)).

# IX. Recommendation

Compliance with all applicable rules and regulations is expected. Pending a successful public comment period, issue Authority to Construct C-8347-1-0 subject to the permit conditions on the attached draft Authority to Construct in **Attachment IX**.

# X. Billing Information

| Annual Permit Fees |              |                 |            |  |  |
|--------------------|--------------|-----------------|------------|--|--|
| Permit Number      | Fee Schedule | Fee Description | Annual Fee |  |  |
| C-8347-1           | 3020-02-H    | 400 MMBtu/hr    | \$1030.00  |  |  |

### **Attachments**

I: Location Map

II: Facility Plot Plan

III: Product Flow Diagram

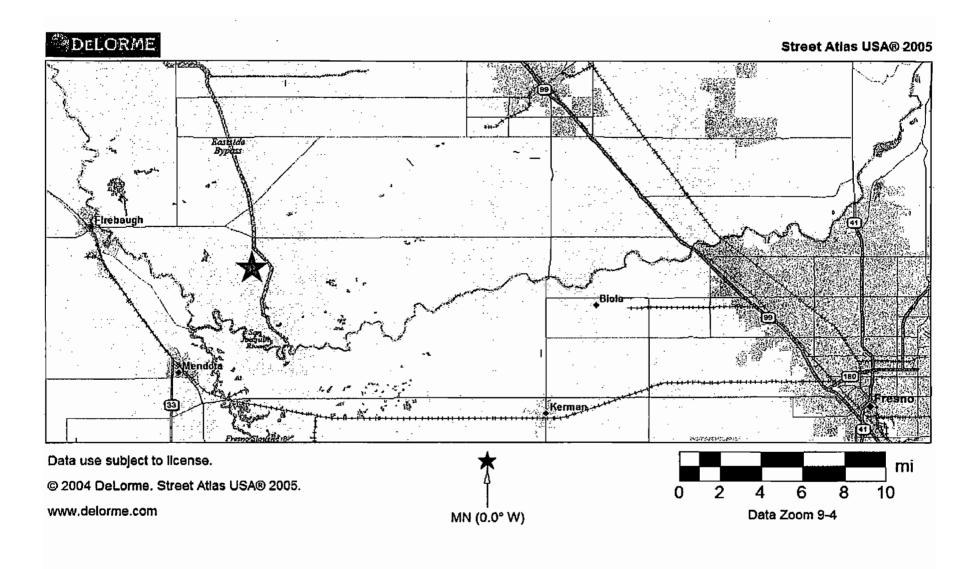
IV: Manufacturer's Information on GSI Dryers and cyclones

V: Emissions Profile
VI: BACT Guideline
VII: BACT Analysis

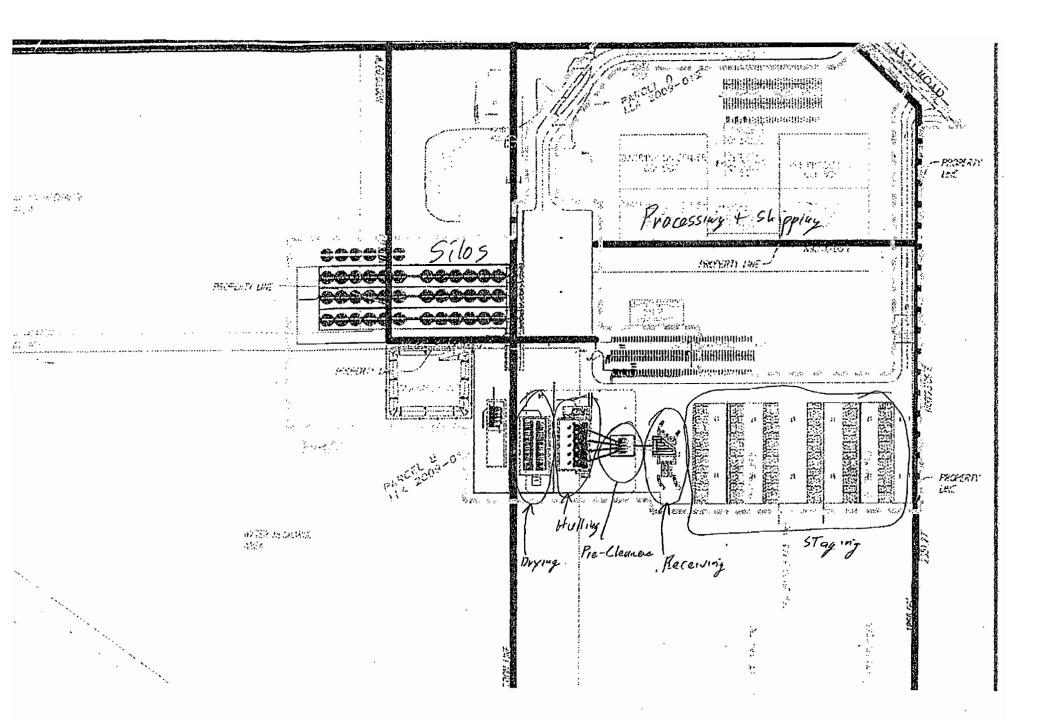
VIII: HRA and AAQA

IX: Draft ATC

# ATTACHMENT I Location Map

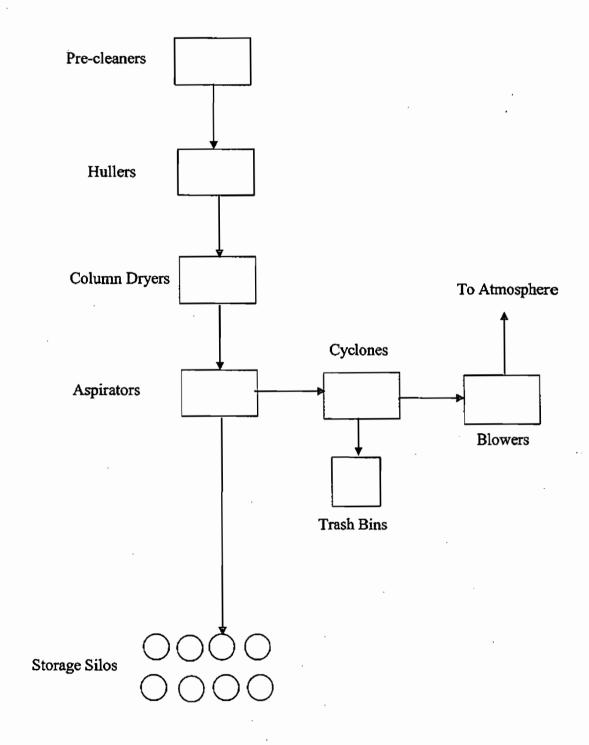


# ATTACHMENT II Facility Plot Plan

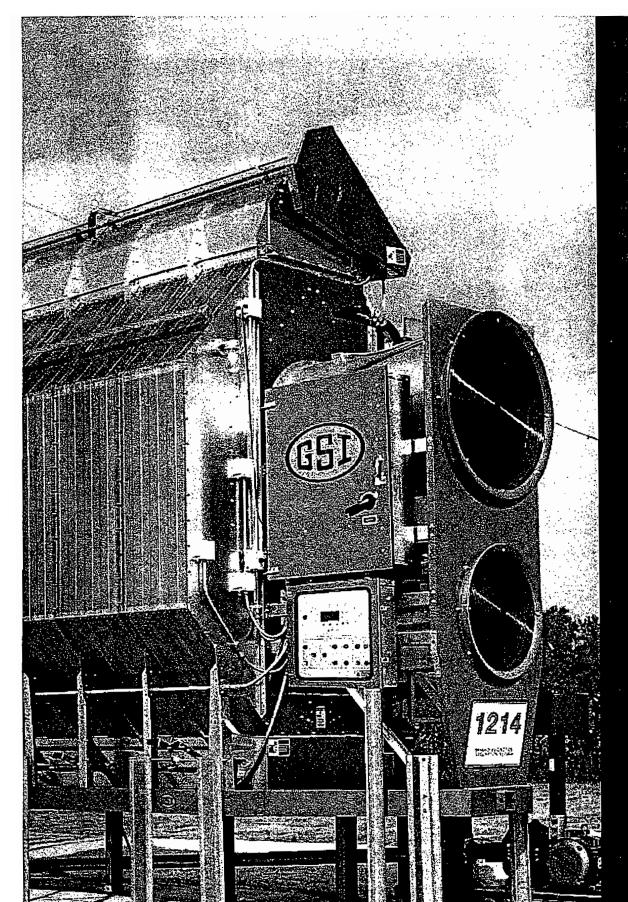


# ATTACHMENT III Product Flow Diagram

# **Product Flow Diagram**



# ATTACHMENT IV Manufacturer's Information of GSI Dryers and Cyclones



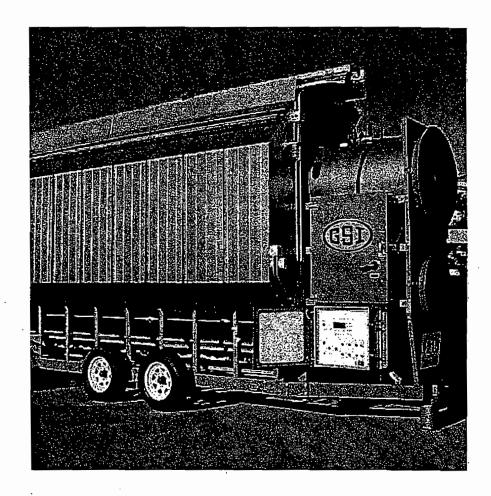
### Alberta Albert

Portable Grain Dryers



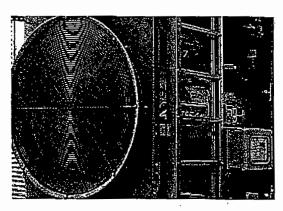
"Your Complete Systems Manufacturer." GSI products are manufactured throughout facilities located in Assumpti

The GSI division of The GSI Group, Inc. offers a expecomplete line of grain drying, conditioning and expensional for a variety of requirements.



# **High Efficiency**

The high efficiency, onepiece fan and heater unit utilizes only low speed, low noise fans, while providing optimum heated air flow for every drying application. All units use fiberglass reinforced polypropylene fans that feature an extremely low starting load, high air flow across a wide static pressure range, pre-

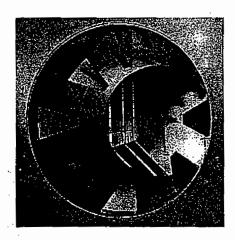


cise balance and quiet operation. There are ten different fan configurations to provide optimum air flow for all dryer models. An Electronic Ignition System is used to monitor the burner. A view window is used to observe burner operation. The Optimizer Blue Burn System is standard on all LP models. This assures energy efficient burner operation for all fuel mixes. The easy to adjust vaporizer; large service access door and oil filled gas gauges make the GSI fan and heater unit the best on the market.

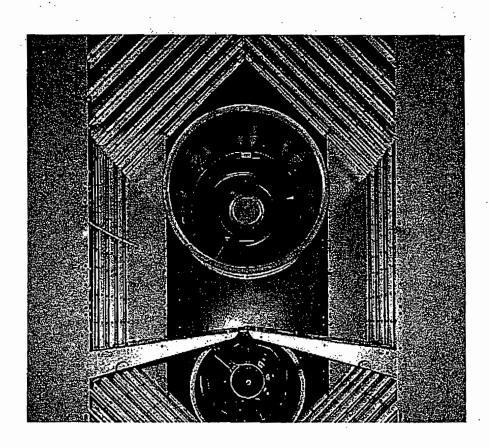
# **Basket Features**

The dryer offers several unique basket features. The wet bin is perforated to preheat the grain and to allow visual inspection of the grain flow. The 14'6" low profile, overall height permits easy set up into existing installations. Other features include:

- 3-piece outer screens, stainless steel optional
- Double galvanized steel dryer screens (G165, 2 ounce nominally applied galvanizing)



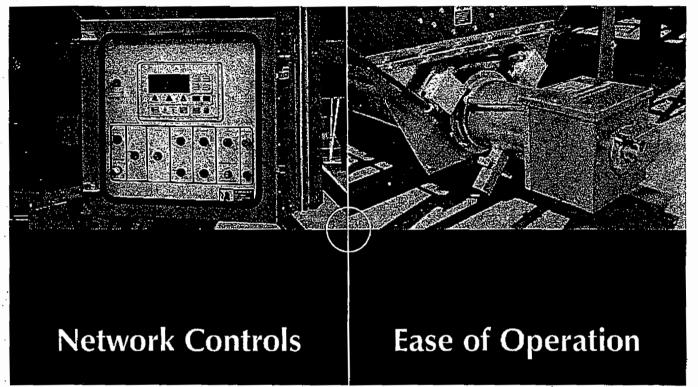
GSI dryers use 14" wide grain columns to hold the maximum amount of grain while assuring even, efficient drying from the inside to the outside of the column. Each plenum chamber also has an air mixing chamber to mix the air and heat, and to shield the grain columns from direct contact with the burner flame. Multiple heat zones in two-fan dryers and larger put the hottest air on the highest moisture grain.



# Callics

- Large square rear entry doors
- Adjustable metering roll gates
- Large hinged unload auger covers
- Solid column dividers every two feet
- Sliding bypass doors to empty columns past metering rolls
- Hinged access and cleanout doors out side of metering rolls
- Hardened extruded aluminum meter rolls
- Commercial SCR, gear driven, single chain metering roll drive
- Easy access unload auger cleanout doors
- All parts associated with the meter rolls are galvanized, not painted steel

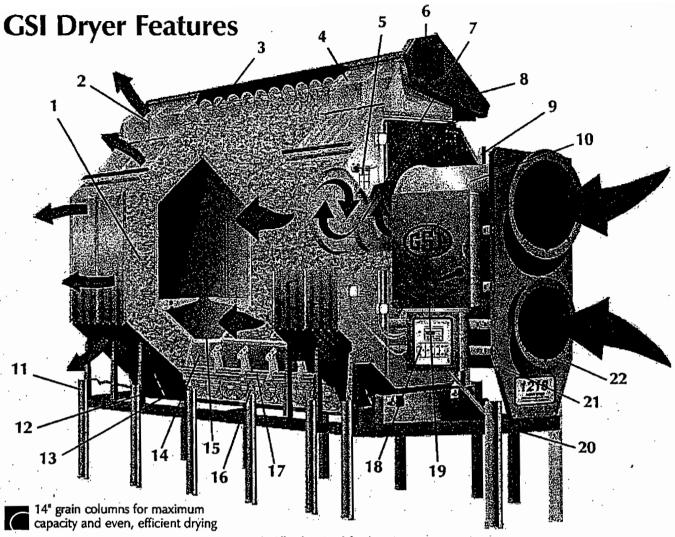
The rear discharge shutdown switch.



The patented Network Control System from GSI offers computerized control of all dryer functions. This "smart" system eliminates guesswork by relaying instant information to the operator via a large backlit LCD display. The memory features in the unit maintain a history of past dryer operation and a permanent service record. The Network Control System also calculates total dryer time, bushels per hour and total bushels dried. It eliminates 99% of all moving parts in the control box, such as troublesome timers, mechanical relays and time delays.

When stacking a dryer, the number of control wires has been greatly reduced to ease operation. GSI has reduced the number of control wires to connect from over 100 down to five.

The simplification of dryer operation provides a safe, trouble free dryer. GSI dryers feature totally computerized 12 volt DC safety system with the capability of monitoring a comprehensive set of safety controls. Each drying chamber is equipped with temperature high limit controls and air pressure sensors. Fan housing temperature limit, vaporizer temperature limit, metering roll rotation and flame detection are monitored as well. The dryer is equipped with a rear discharge shutdown switch. GSI's exclusive memory monitor allows the last 256 safety shutdowns to be recalled, along with time, date and cause of shutdown.



- Low profile wet bin allows dryer to fit in places others can't
- Level auger mounted on oil impregnated wood hanger bearings aids in long life and dependability
- Perforated wet bin enhances preheating and allows visual inspection of grain environment
- Work light, doubles as a shut down indicator
- The auger drive pulley is visible through the perforated cover, to verify operation
- Air mixing chambers thoroughly mix heat and air before it enters the drying chamber
- Turnbuckle belt tightener
- Ladder for easy access with toe clearance for easy climbing

- All galvanized fan housing eliminates rust and corrosion
- Exclusive, optional galvanized support legs
- Column access doors allow for easy, fast column unloading if necessary, and access to meter
- Clean out doors allow easy cleaning of bottom auger

On 2 fan models or larger, doors are perforated to eliminate pressure build up on lower auger chamber when pneumatic system is used

- Adjustable gates regulate grain flow, eliminate column plugging and allow manual column emptying
- Large 15" door for access to unload auger
- Heavy 8" auger with 1/4" flighting for fast unloading and longer life

- Full length, hardened, extruded aluminum meter rolls with over the top operation to ensure gentle, accurate grain flow and low horsepower
- State of the art network control system for trouble-free operation

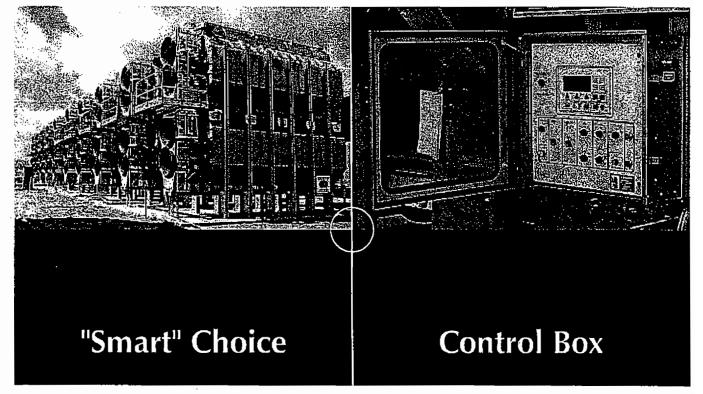
Can be easily remote mounted with only 7 small communication wires

"Watchdog" option may be added to enable monitoring of the dryer on a home computer

- Safety disconnect circuit breaker for safe, economical installation
- All painted items on the dryer are powder coated for a longer life
- Airswitch checks for air pressure
- All low speed fan blades for less noise

Pistachio Facility - California.

The computerized display of the networking control system



When you purchase a GSI portable dryer you can be assured you are getting the best product on the market. Not only because of quality, but the versatility. All models have the capability of expanding by stacking additional modules on the existing dryer. GSI products are sold and serviced by a network of dealers who are ready to answer any questions or to help if you need technical assistance. We think you'll agree, GSI dryers are the "smart" choice for grain drying efficiency.

The computerized controls are housed in an all galvanized control box that features double sealed doors and no-weld construction. All dryer operations can be viewed through UV protected safety glass. All electronics are extensively protected against electrical spikes and surges. There is also a main safety disconnect circuit breaker located on the outside of the main control box. All temperatures on the dryer can be monitored and adjusted from the ground at the main control box. Auxiliary load and unload connections are provided. It is designed to be the ultimate protection for computerized components in a rugged grain drying environment.

|                                 | 1108               | 1110                    | 1112             | 1114            | 1116            |
|---------------------------------|--------------------|-------------------------|------------------|-----------------|-----------------|
| DRYING CAPACITY, SHELLED CORN   |                    |                         |                  |                 |                 |
| Dry and Cool 25% to 15%         | 130 BPH            | 165 BPH                 | 220 BPH          | 260 BPH         | 280 BPH         |
| Dry and Cool 20% to 15%         | 170 BPH            | 220 BPH                 | 290 BPH          | 340 BPH         | 370 BPH         |
| Full Heat 30% to 15%            | 150 BPH            | 190 BPH                 | 255 BPH          | 300 BPH         | 320 BPH         |
| Full Heat 25% to 15%            | 205 BPH            | 260 BPH                 | 345 BPH          | 405 BPH         | 440 BPH         |
| Full Heat 20% to 15%            | 335 BPH            | 420 BPH                 | 560 BPH          | 650 BPH         | 710 BPH         |
|                                 |                    |                         |                  |                 |                 |
| Grain Columns                   | 14" x 8' Long      | 14" x 10" Long          | 14" x 12' Long   | 14" x 14' Long  | 14" x 16' Long  |
| Total Holding Capacity          | 190 BU             | 238 BU                  | 327 BU           | 381 BU          | 436 BU          |
| Grain Column Holding Capacity   | 160 BU             | 200 BU                  | 282 BU           | 329 BU          | 376 BU          |
|                                 |                    | NET THE PERSON NAMED IN |                  |                 |                 |
| Top Auger (Loading)             | 8", 1.5 HP         | 8°, 2 HP                | 8°, 2 HP         | 8", 3 HP        | 8", 5 HP        |
| Capacity                        | 2900 BPH           | 2900 BPH                | 2900 BPH         | 3800 BPH        | 3800 BPH        |
| Bottom Auger (Unloading)        | 8" x 10" Tube,     | 8" x 10" Tube,          | 8" x 10" Tube,   | 8" x 10" Tube,  | 8" x 10" Tube,  |
|                                 | 1 HP               | 1.5 HP                  | 1.5 HP           | 3 HP            | 5 HP            |
|                                 |                    |                         |                  |                 |                 |
| Meter Roll Drive                | SCR, 1/3 HP        | SCR, 1/3 HP             | SCR, 1/3 HP      | SCR, 3/4 HP     | SCR, 3/4 HP     |
| Maximum Capacity                | 1120 BPH           | 1400 BPH                | 1680 8PH         | 1960 BPH        | 2240 BPH ·      |
|                                 |                    |                         |                  |                 |                 |
| Transport Length                |                    |                         |                  |                 |                 |
| (Hitch to Discharge Auger)      | 17'-2'             | 19'-2"                  | 21'-2"           | 23'-2"          | 25-2"           |
| Transport Width                 | 8'                 | 8                       | 81               | 8'              | 8'              |
| Transport Height <sup>3</sup>   | 11'-11" (10'-3")   | 11'-11' (10'-3')        | 13'-5" (11'-9")  | 13'-5" (11'-9") | 13'-5"(11'-9")  |
| Transport Weight (approx.)      |                    |                         |                  |                 |                 |
| (Less Transport Kit)            | 4300 lbs.          | 5000 lbs.               | 6300 lbs.        | 7000 lbs.       | 7500 lbs.       |
|                                 |                    |                         |                  |                 |                 |
| Installed Length                | 15'-2"             | 17-2*                   | 19'-2"           | 21'-2"          | 23'-2"          |
| Installed Width                 | 8'                 | 8'                      | 8'               | 8'              | 8'              |
| Installed Height                |                    |                         |                  |                 |                 |
| (Excluding Foundation Supports) | 13'                | 13'                     | 14'-6"           | 14'-6"          | 14'-6"          |
|                                 |                    |                         |                  |                 |                 |
| Fans 1 PH                       | 10-12 HP, 28"      | 10-12 HP, 36"           | 15 HP, 36"       | 15 HP, 40°      | 15 HP, 40"      |
| 3 PH                            | 10-12 HP, 28"      | 10-12 HP, 36"           | 15 HP, 36"       | 15 HP, 42"      | 15 HP, 42*      |
|                                 |                    |                         | 4.5 Mil.btu/hr   | S.75 Mil.btu/hr | 5.75 Mil.btu/hr |
| Heaters (Max BTU)               | 3.0 Mil.btu/hr     | 3.5 Mil.btu/hr          | 4.5 Mil.DILI/III |                 | 3.75 Mil.Dul/hr |
| ELECTRIC LOAD                   |                    |                         |                  |                 |                 |
| (FAN, TOP AUG., BOT. AUG.)*     |                    |                         |                  |                 | 1               |
| Single Phase, 230 V.            | 63 Amps            | 71 Amps                 | 85 Amps          | 98 Amps         | 108 Amps        |
| Three Phase, 230 V.             |                    | 42 Amps                 | 50 Amps          | 56 Amps         | 65 Amps         |
| Three Phase, 380 V.             | 42 Amps<br>22 Amps | 23 Amps                 | 33 Amps          | 36 Amps         | 44 Amps         |
| Three Phase, 460 V.             | 21 Amps            | 23 Amps                 | 25 Amps          | 28 Amps         | 33 Amps         |
| Three Phase, 575 V.             |                    |                         | _                |                 | 27 Amps         |
| mee mase, 575 v.                | 18 Amps            | 16 Amps                 | 20 Amps          | 23 Amps         | 27 Amps         |



<sup>&</sup>lt;sup>1</sup> Capacities are wet bushels at input moisture content,
<sup>2</sup> Grain discharged hot from the dryer will result in a final moisture content of 15% after cooling in the bin,
<sup>3</sup> Shortest possible height in ( ),
<sup>4</sup> Maximum running load less auxiliary auger motors.

| 100 |  |
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|  | 1118   | 1120  | 1122   | 1126  |
|--|--|---|--|---|
|  |  |   |  |   |
| DRYING CAPACITY, SHELLED CORN  |  |   |  |   |
| Dry and Cool 25% to 15%  | 320 8PH  | 360 BPH   | 390 BPH  | 455 BPH   |
| Dry and Cool 20% to 15%  | 430 <b>6</b> PH  | 475 BPH   | 520 BPH  | 605 BPH   |
| Full Heat 30% to 15% <sup>2</sup>  | 380 BPH  | 415 BPH   | 460 BPH  | 540 BPH   |
| Full Heat 25% to 15%   | 505 BPH  | 560 BPH   | 610 BPH  | 715 BPH   |
| Full Heat 20% to 15%   | 815 BPH  | 905 BPH ·   | 990 BPH  | 1155 BPH  |
| First Table 1978   | CASSAS DE LA COMPANSAS DE LA C | TO BE THE TANK OF THE PROPERTY OF THE PARTY.        | CONTROL OF THE PROPERTY OF THE |   |
| Grain Columns  | 14" x 18" Long   | 14" x 20' Long                                      | 14" x 22' Long   | 14° x 26' Long  |
| Total Holding Capacity   | 490 BU   | 544 BU  | 599 BU   | 708 BU  |
| Grain Column Holding Capacity  | 423 BU   | 470 BU  | 517 BU   | 611 BU  |
|  | 443 DU   | L   |  |   |
| Top Auger (Loading)  | 09 F HD  | 01.7.5.40   | 8", 7.5 HP   | 8°. 10 HP   |
|  | 84, 5 HP   | 8', 7.5 HP  |  | 3800 BPH  |
| Capacity   | 3800 BPH   | 3800 BPH  | 3800 BPH   | 0.000   |
| Bottom Auger (Unloading)   | 8" x 10" Tube,   | 8" x 10" Tube,                                      | 8" x 10" Tube,   | 8" x 10" Tube,  |
| AND COURT COMMERCIANTS OF HAVE BEEN AND AND AND AND AND AND AND AND AND AN   | 5 HP   | 7.5 HP  | 7.5 HP   | 10 HP   |
|  | 223242-236   |   |  | Charles and the second |
| Meter Roll Drive   | SCR, 3/4 HP  | SCR, 3/4 HP   | SCR, 3/4 HP  | SCR, 3/4 HP   |
| Maximum Capacity   | 2520 BPH   | 2800 BPH  | 3080 BPH   | 3640 BPH  |
|  |  |   |  |   |
| Transport Length   |  |   | 241.01   | 3-1-2   |
| (Hitch to Discharge Auger)   | 27-2*  | 29'-2"  | 31'-2"   | 35'-2"  |
| Transport Width  | 8'   | 8'  | 8'   | 8'  |
| Transport Height'  | 13'-5' (11'-9')  | 13'-5" (11'-9')                                     | 13'-5" (11'-9")  | 13'-5" (11'-9")   |
| Transport Weight (approx.)   |  |   |  | _   |
| (Less Transport Kit)   | 8000 lbs.  | 8700 lbs.   | 9000 lbs.  |   |
|  |  |   | 9000 IDS.  | 11000 lbs.  |
| Installed Length   |  |   |  |   |
|  | 25'-2"   | 27'-2*  | 29'-2"   | 33'-2"  |
| Installed Width  | 25'-2"<br>8'   | 27'-2°<br>8'  |  |   |
| Installed Width Installed Height   | 8'   | 8'  | 29'-2*<br>8'   | 33'-2*<br>8'  |
| Installed Width Installed Height (Excluding Foundation Supports)   |  |   | 29-2°<br>8'<br>14'-6'  | 33'-2"  |
| Installed Width Installed Height   | 8'<br>14'-6'   | 8'  | 29-2'<br>8'<br>14-6'   | 33'-2'<br>8'<br>14'-6'  |
| Installed Width Installed Height (Excluding Foundation Supports)   | 8'<br>14'-6'<br>N/A  | 8'<br>14'-6°  | 29-2'<br>8'<br>14'-6'  | 33'-2'<br>8'<br>14'-6'  |
| Installed Width Installed Height (Excluding Foundation Supports)  Fans 1 PH 3 PH   | 8'<br>14'-6'   | 8'<br>14'-6*  | 29-2'<br>8'<br>14'-6'<br>N/A<br>30 HP, 42"   | 33-2*<br>8'<br>14'-6*<br>N/A<br>40 HP, 42*  |
| Installed Width Installed Height (Excluding Foundation Supports) Fans 1 PH   | 8'<br>14'-6'<br>N/A  | 8'<br>14'-6*<br>N/A                                 | 29-2'<br>8'<br>14'-6'  | 33'-2'<br>8'<br>14'-6'  |
| Installed Width Installed Height (Excluding Foundation Supports)  Fans 1 PH 3 PH   | 8'<br>14'-6'<br>N/A  | 8'<br>14'-6*<br>N/A<br>25 HP, 42*                   | 29-2* 8* 14-6* N/A 30 HP, 42*  | 33-2*<br>8'<br>14'-6*<br>N/A<br>40 HP, 42*  |
| Installed Width Installed Height (Excluding Foundation Supports) Fars 1 PH 3 PH  | 8'<br>14'-6'<br>N/A<br>20 HP, 42'  | 8'<br>14'-6*<br>N/A<br>25 HP, 42*                   | 29-2'<br>8'<br>14'-6'<br>N/A<br>30 HP, 42"   | 33'-2'<br>8'<br>14'-6'<br>N/A<br>40 HP, 42'   |
| Installed Width Installed Height (Excluding Foundation Supports)  Fans 1 PH 3 PH  Heaters (Max BTU)  ELECTRIC LOAD   | 8'<br>14'-6'<br>N/A<br>20 HP, 42'  | 8'<br>14'-6*<br>N/A<br>25 HP, 42*                   | 29-2* 8* 14-6* N/A 30 HP, 42*  | 33'-2'<br>8'<br>14'-6'<br>N/A<br>40 HP, 42'   |
| Installed Width Installed Height (Excluding Foundation Supports) Fars 1 PH 3 PH Heaters (Max BTU)  | 8'<br>14'-6'<br>N/A<br>20 HP, 42'  | 8'<br>14'-6*<br>N/A<br>25 HP, 42*                   | 29-2* 8* 14-6* N/A 30 HP, 42*  | 33'-2'<br>8'<br>14'-6'<br>N/A<br>40 HP, 42'   |
| Installed Width Installed Height (Excluding Foundation Supports)  Fans 1 PH 3 PH  Heaters (Max BTU)  ELECTRIC LOAD   | 8'<br>14'-6'<br>N/A<br>20 HP, 42'  | 8'<br>14'-6*<br>N/A<br>25 HP, 42*                   | 29-2* 8* 14-6* N/A 30 HP, 42*  | 33'-2'<br>8'<br>14'-6'<br>N/A<br>40 HP, 42'   |
| Installed Width Installed Height (Excluding Foundation Supports)  Fans 1 PH  3 PH  Heaters (Max BTU)  ELECTRIC LOAD (FAN, TOP AUG., BOT. AUG.)*  | 8' 14'-6' N/A 20 HP, 42' 6.75 Mil.btu/hr   | 8' 14'-6* N/A 25 HP, 42* 7.5 MiLbtu/hr              | 29-2'<br>8'<br>14'-6'<br>N/A<br>30 HP, 42"<br>8.75 Mil.btu/hr  | 33'-2' 8' 14'-6' N/A 40 HP, 42' 10.25 MiLbtu/hr   |
| Installed Width Installed Height (Excluding Foundation Supports)  Fans 1 PH  3 PH  Heaters (Max BTU)  FLECTRIC LOAD (FAN, TOP AUG., BOT. AUG.)*  Single Phase, 230 V.                      | 8' 14'-6' N/A 20 HP, 42' 6.75 Mil.btu/hr   | 8' 14'-6* N/A 25 HP, 42* 7.5 MiLbts/hr              | 29-2' 8' 14'-6' N/A 30 HP, 42" 8.75 Mil.btu/hr   | 33-2* 8' 14-6* N/A 40 HP, 42*   |
| Installed Width Installed Height (Excluding Foundation Supports)  Fans 1 PH  3 PH  Heaters (Max BTU)  FLECTRIC LOAD (FAN, TOP AUG., BOT. AUG.)*  Single Phase, 230 V.  Three Phase, 230 V. | 8' 14'-6' N/A 20 HP, 42' 6.75 Mil.btu/hr N/A 80 Amps   | 8' 14'-6* N/A 25 HP, 42* 7.5 MiLbtu/hr N/A 104 Amps | 29-2* 8' 14'-6' N/A 30 HP, 42" 8.75 Mil.btu/hr N/A 114 Amps  | 33-2* 8' 14'-6* N/A 40 HP, 42*  10.25 Milbtu/hr  N/A 150 Amps   |



Capacities are wet bushels at input moisture content.
 Crain discharged hot from the dryer will result in a final moisture content of 15% after cooling in the bin.
 Shortest possible height in ().
 Maximum running load less auxiliary auger motors.

|                                 | 1214             | 1216             | 1218             | 1220             | 1222                     | 1226             |
|---------------------------------|------------------|------------------|------------------|------------------|--------------------------|------------------|
| DRYING CAPACITY, SHELLED CORN   | r                |                  |                  |                  |                          |                  |
| Dry and Cool 25% to 15%         | 250 BPH          | 290 BPH          | 315 8PH          | 345 BPH          | 395 8PH                  | 450 BPH          |
| Dry and Cool 20% to 15%         | 400 BPH          | 465 BPH          | 505 8PH          | 560 BPH          | 640 BPH                  | 725 BPH          |
| Full Heat 30% to 15%            | 335 8PH          | 380 BPH          | 415 BPH          | 436 BPH          | 485 BPH                  | 545 BPH          |
| Full Heat 25% to 15%            | 415 BPH          | 475 BPH          | 520 8PH          | 590 BPH          | 650 BPH                  | 730 BPH          |
| Full Heat 20% to 15%            | 680 BPH          | 765 BPH          | 840 8PH          | 950 BPH          | 1055 BPH                 | 1180 BPH         |
|                                 |                  |                  | OWNER STREET     |                  | AVERT STATE OF THE PARTY |                  |
| Grain Columns                   | . 14" x 14' Long | 14" x 16' Long   | 14" x 18' Long   | 14" x 20" Long   | 14" x 22" Long           | 14° x 26' Long   |
| Total Holding Capacity          | 381 BU           | 436 BU           | 490 BU           | 544 BU           | 599 BU                   | 708 BU           |
| Grain Column Holding Capacity   | 329 BU           | 376 BU           | 423 BU           | 470 BU           | 517 BU                   | 61 T BU          |
|                                 |                  |                  | eser verver      |                  |                          |                  |
| Top Auger (Loading)             | 8", 5 HP         | 8", 5 HP         | 8", 5 HP         | 8", 7.5 HP       | 8", 7.5 HP               | 8°, 10 HP        |
| Capacity                        | 3800 BPH                 | 3800 BPH         |
| Bottom Auger (Unloading)        | 5 HP             | 5 HP             | 5 HP             | 7.5 HP           | 7.5 HP                   | 10 HP            |
|                                 |                  |                  |                  |                  |                          |                  |
| Meter Roll Drive                | SCR, 3/4 HP              | SCR, 3/4 HP      |
| Maximum Capacity                | 1960 BPH         | 2240 BPH         | 2520 BPH         | 2800 BPH         | 3080 BPH                 | 3640 8PH         |
|                                 |                  |                  |                  |                  |                          |                  |
| Transport Length                |                  |                  |                  |                  |                          |                  |
| (Hitch to Discharge Auger)      | 23'-2"           | 25'-2"           | 27'-2"           | 29'-2"           | 31'-2"                   | 3 <u>5'</u> -2"  |
| Transport Width                 | 8                | 8                | 8'               | 8'               | 8'                       | 8'               |
| Transport Height'               | 13'-5" (11'-9")  | 13'-5" (11'-9")  | 13'-5" (11'-9")  | 13'-5" (11'-9")  | 13'-5"(11'-9")           | 13'-5" (11'-9')  |
| Transport Weight (approx.)      |                  |                  |                  |                  | 1                        |                  |
| (Less Transport Kit)            | 7600 lbs.        | 8200 lbs.        | 9000 lbs.        | 9800 lbs.        | 10500 lbs.               | 12000 lbs.       |
|                                 |                  |                  |                  |                  |                          |                  |
| Installed Length                | 21'-2"           | 23'-2"           | 25'-2"           | 27"-2"           | 29'-2"                   | 33'-2"           |
| Installed Width                 | 8'               | 8'               | 8'               | 8'               | 8'                       | 8'               |
| Installed Height                |                  |                  |                  |                  |                          |                  |
| (Excluding Foundation Supports) | 14'-6"           | 14'-6"           | 14'-6"           | 14'-6"           | 14'-6"                   | 14'-6"           |
|                                 |                  |                  |                  |                  |                          | 22.0             |
| Fans 1 PH                       | 1@10-12 HP, 36"  | 1@15 HP, 36"     | 1@15 HP, 36'     | 1@15 HP, 40°     | N/A                      | N/A              |
|                                 | 1@10-12 HP, 26"  | 1@10-12 HP, 26*  | 1@10-12 HP, 26   | 1@10-12 HP, 28"  | · N/A                    | N/A_             |
| 3 PH                            | 1@10-12 HP, 36°  | 1@15 HP, 36"     | 1@15 HP, 36      | 1@15 HP, 42*     | 1@20 HP, 42*             | 1@25 HP, 42*     |
|                                 | 1@10-12 HP, 26"  | 1@10-12 HP, 26   | 1@10-12 HP, 26"  | 1@10-12 HP, 28'  | 1@10-12 HP, 28"          | 1@10-12 HP, 28   |
|                                 |                  |                  |                  |                  |                          | one seemon       |
| Heaters (Max BTU)               | 1@3.5 Mil.btu/hr | 1@4.5 Mil.btu/hr | 1@4.5 Mil.btu/hr | 1@5.5 Mil.btu/hr | 1@6.75 Mil.btw/hr        | 1@7.5 Mil.btu/hr |
|                                 | 1@2.7 Mil.btu/hr | 1@2.7 Mil.btu/hr | 1@2.7 Mil.bu/hr  | 1@3.0 Mil.btu/hr | 1@3.0 Mil.btu/hr         | 1@3.0 MiLbtu/hr  |
| ELECTRIC LOAD                   |                  |                  |                  |                  |                          |                  |
| (FAN, TOP AUG., BOT. AUG.)      | <u> </u>         |                  |                  |                  |                          |                  |
| Single Phase, 230 V.            | 142 Amps         | 156 Amps         | 156 Amps         | 172 Amps         | N/A                      | N/A.             |
| Three Phase, 230 V.             | 92 Amps          | 99 Amps          | 99 Amps          | . 112 Amps       | 126 Amps                 | 150 Amps         |
| Three Phase, 380 V.             | 50 Amps          | 61 Amps          | 61 Amps          | 70 Amps          | 75 Amps                  | 90 Amps          |
| Three Phase, 460 V.             | 47 Amps          | 50 Amps          | 50 Amps          | 57 Amps          | 63 Amps                  | 75 Amps          |
| Three Phase, 575 V.             | 37 Amps          | 42 Amps ,        | 42 Amps          | 47 Amps          | 52 Amps                  | 61 Amps          |



<sup>&</sup>lt;sup>1</sup> Capacities are wet bushels at input moisture content.
<sup>2</sup> Grain discharged hot from the dryer will result in a final moisture content of 15% after cooling in the bin.
<sup>3</sup> Shortest possible height in ().
<sup>4</sup> Maximum running load less auxiliary auger motors.

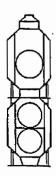
|                                      | 1214S   | 1218\$                             | 12208  | 12225  | 12268   |
|--------------------------------------|---|------------------------------------|--|--|---|
| DRYING CAPACITY, SHELLED CORN'       |   |                                    |  | ĺ  |   |
| Dry and Cool 25% to 15% Staged Batch | 260 BPH   | 345 BPH                            | 395 BPH  | 430 BPH  | 530 BPH   |
| Dry and Cool 20% to 15% Staged Batch | 360 BPH   | 450 BPH                            | 520 BPH  | 565 BPH  | 700 BPH   |
| Dry and Cool 25% to 15%              | 200 BPH   | 240 BPH                            | 280 BPH  | 300 BPH  | 375 BPH   |
| Dry and Cool 20% to 15%              | 325 BPH   | 385 BPH                            | 445 BPH  | 485 BPH  | 600 BPH   |
| Full Heat 30% to 15%                 | 305 BPH   | 395 BPH                            | 455 BPH  | 495 BPH  | 620 BPH   |
| Full Heat 25% to 15%2                | 450 BPH   | 535 BPH                            | 615 BPH  | 670 BPH  | 820 BPH   |
| Full Heat 20% to 15% <sup>2</sup>    | 725 BPH   | 860 BPH                            | 990 BPH  | 1080 BPH   | 1330 BPH  |
|                                      |   |                                    | <b>HATERIES</b>  |  |   |
| Basic Construction                   | 1 Module  | 1 Module                           | 1 Module   | 1 Module   | 1 Module  |
|                                      | 2 Stages  | 2 Stages                           | 2 Stages   | 2 Stages   | 2 Stages  |
| Grain Columns                        | 14" x 14" Long  | 14° x 18' Long                     | 14" x 20' Long   | 14° x 22' Long   | 14" x 26' Long  |
| Total Holding Capacity               | 381 BU  | 490 BU                             | 544 BU   | 599 BU   | 708 BU  |
| Grain Column Holding Capacity        | 329 BU  | 423 BU                             | 470 BU   | 517 BU   | 611 BU  |
|                                      |   |                                    |  |  |   |
| Top Auger (Loading)                  | 5 HP  | 5 HP                               | 7.5 HP   | 7.5 HP   | 10 HP   |
| Capacity                             | 3800 BPH  | 3800 BPH                           | 3800 BPH   | 3800 BPH   | 3800 BPH  |
| Bottom Auger (Unloading)             | 5 HP  | 5 HP                               | 7.5 HP   | 7.5 HP   | 10 HP   |
| Meter Roll Drive                     | SCR, 3/4 HP   | SCR, 3/4 HP                        | SCR, 3/4 HP  | SCR, 3/4 HP  | SCR, 3/4 HP   |
| Maximum Capacity                     | 1960 BPH  | 2520 BPH                           | 2800 BPH   | 3080 BPH   | 3640 BPH  |
|                                      | CHESHADICATA PROPERTY   |                                    | ASSESSED ASSESSED  |  |   |
| Transport Length                     |   |                                    |  | Control of the Contro | O THE OF THE PARTY OF THE PARTY OF  |
| (Hitch to Discharge Auger)           | 23'-2"  | 27'-2"                             | 29'-2"   | 31'-2"   | 35'-2"  |
| Transport Width                      | 8'  | 8'                                 | 8'   | 6'   | 8'  |
| Transport Height                     | 13'-5" (11'-9")   | 13'-5" (11'-9")                    | 13'-5" (11'- <del>9</del> ")   | 13'-5"(11'-9")   | 13'-5" (11'-9")   |
|                                      |   |                                    |  | Mary Week at   |   |
| Installed Length                     | 21'-2"  | 25'-2"                             | <u>27</u> '-2"   | 30'-2"   | 33'-2"  |
| Installed Width                      | 8'-8"   | 8'-8"                              | 8'-8"  | 8'-8"  | 8'-8"   |
| Installed Height                     | - 41  | a au                               | 4  |  |   |
| (Excluding Foundation Supports)      | 14'-6'  | 14'-6"                             | 14'-6"   | 14'-6"   | 14'-6"  |
| Fans 1 PH                            | 2010 12 10 20   | 1 2010 12 40 201                   |  |  |   |
| 3 PH                                 | 2@10-12 HP, 28*<br>2@10-12 HP, 28*  | 2@10-12 HP, 36*<br>2@10-12 HP, 36* | 2@15 HP, 36"<br>2@15 HP, 36"   | 2@15 HR 36*<br>2@15 HR 36*   | N/A<br>2@25 HP, 40"   |
|                                      | CERTIFICATION OF THE PROPERTY | Decreased in the                   | PERSONAL PROPERTY OF THE PROPE | TENNICATION CONTRACTOR   | CARCANICATION AND STATE OF THE |
| Heaters (Max BTU)                    | 2@3.0 Mil.btu/hr  | 2@3.5 Mil.btu/hr                   | 2@4.5 Mil.btu/hr   | 2@4.5 Mil.btu/hr   | 2@6.75 Mil.btu/hr   |
|                                      |   |                                    |  |  | 200.751/11.000/11   |
| ELECTRIC LOAD                        | over marie misser miles in the second   | Charles (March 1977)               | Constitution Total Constitution  | ANY CONTRACTOR STATE OF THE PARTY OF THE PAR | AND CONTRACTOR OF THE PARTY OF |
| (FAN, TOP AUG., BOT. AUG.)*          |   |                                    |  |  |   |
| Single Phase, 230 V.                 | 142 Amps  | 142 Amps                           | 186 Amps   | 186 Amps   | N/A   |
| Three Phase, 230 V.                  | 93 Amps   | 93 Amps                            | 118 Amps   | 118 Amps   | 180 Amps  |
| Three Phase, 380 V.                  | 50 Amps   | 50 Amps                            | 80 Amps  | 80 Amps  | 115 Amps  |
| Three Phase, 460 V.                  | 47 Amps   | 47 Amps                            | 60 Amps  | 60) Amps   | 90 Amps   |
| Three Phase, 575 V.                  | 40 Amps   | 33 Amps                            | 48 Amps  | 48 Amps  | 72 Amps   |



Capacities are wet bushels at input moisture content.
 Crain discharged not from the dryer will result in a final moisture content of 15% after cooling in the bin.
 Shortest possible height in ().
 Maximum running load less auxiliary auger motors.

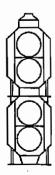
|                                 | 2314   | 2318   | 2320   | 2322   | 2326   |
|---------------------------------|--|--|--|--|--|
| DRYING CAPACITY, SHELLED CORN   |  |  |  |  |  |
| Dry and Cool 25% to 15%         | 615 BPH  | 770 BPH  | 850 BPH  | 930 BPH  | 1130 BPH   |
| Dry and Cool 20% to 15%         | 995 BPH  | 1235 BPH   | 1375 BPH   | 1500 BPH   | 1835 BPH   |
| Full Heat 30% to 15%            | 670 BPH  | 830 BPH  | 925 BPH  | 1010 BPH   | 1200 BPH   |
| Full Heat 25% to 15%            | 900 BPH  | 1120 BPH   | 1245 BPH   | 1355 BPH   | 1670 BPH   |
| Full Heat 20% to 15%            | 1455 BPH   | 1805 BPH   | 2010 BPH   | 2195 BPH   | 2700 BPI+  |
|                                 |  |  |  |  |  |
| Basic Construction              | 2 Madules  | 2 Modules  | 2 Modules  | 2 Modules  | 2 Modules  |
|                                 | 4 Stages   |
|                                 |  |  |  | THE STATE OF THE S |  |
| Grain Columns                   | 14" x 14' Long   | 14" x 18' Long   | 14" x 20' Long   | 14" x 22' Long   | 14° x 26' Long   |
| Total Holding Capacity          | 731 BU   | 940 BU   | 1044 BU  | 1149 BU  | 1304 BU  |
| Grain Column Holding Capacity   | 679 BU   | 873 BU   | 970 BU   | 1067 BU  | 1261 BU  |
|                                 |  | an contract national   |  |  |  |
| Top Auger (Loading)             | 5 HP   | 5 HP   | 7.5 HP   | 7.5 HP   | 10 HP  |
| Capacity                        | 3800 BPH   |
| Bottom Auger (Unloading)        | 5 HP   | 5 HP   | 7.5 HP   | 7.5 HP   | 10 HP  |
|                                 |  |  |  |  |  |
| Meter Roll Drive                | SCR, 3/4 HP  |
| Maximum Capacity                | 1960 BPH   | 2520 BPH   | 2800 BPH   | 3080 BPH   | 3640 BPH   |
|                                 |  |  |  |  |  |
| Transport Length                | and the state of t | The same of the sa | Total A. Michael Color State C |  | - Contraction Contraction  |
| (Hitch to Discharge Auger)      | 23'-2"   | 27-2   | 29'-2"   | 31'-2"   | 35'-2"   |
| Transport Width                 | 8'   | 8'   | 8'   | 8'   | 8'   |
| Transport Height'               | 13'-5" (11'-9")  | 13'-5" (11'-9")  | 13'-5" (11'-9")  | 13'-5"(11'-9")   | 13'-5" (11'-9")  |
|                                 |  |  |  |  |  |
| Installed Length                | 23'-10"  | 27'-10"  | 29'-10"  | 31'-10'  | 35'-10"  |
| Installed Width                 | 8'-8"  | 8'-8"  | 8'-8'  | 8'-8"  | 8'-8"  |
| Installed Height                |  |  |  |  | <del></del>  |
| (Excluding Foundation Supports) | 25'-11"  | 25'-11"  | 25'-11"  | 25'-11'  | 25'-11"  |
|                                 |  |  |  |  | AND THE PERSON NAMED IN THE  |
| Fans 1 PH                       | 2@15 HP, 40*   | N/A  | N/A  | N/A  | N/A  |
|                                 | 2@10-12 HP, 28*  | N/A  | N/A  | N/A  | N/A  |
| 3 PH :                          | 1@15 HP, 42*   | 1@20 HP, 42"   | 1@25 HP, 42"   | 1@30 HP, 42°   | 1@40 HP, 42"   |
|                                 | 2@10-12 HP, 28*  | 2@10-12 HP, 36*  | 2@15 HP, 36"   | 2@15 HP, 36"   | 2@25 HP, 40"   |
|                                 |  |  |  |  |  |
| Heaters (Max BTU)               | 1@5.5 Mil.btu/hr   | 1@6.75 Mil.btu/hr  | 1@7.5 Mil.btu/hr   | 1@8.75 Mil.btu/hr  | 1@10.75 Mil.btu/hr   |
|                                 | 2@3.0 Mil.btu/hr   | 2@3.5 Mil.btu/hr   | 2@4.5 Mil.btu/hr   | 2@4.5 Mil.btu/hr   | 2@6.75 Mil.btu/hr  |
|                                 | DAY SOLVER   | PERSONAL REPORT OF THE PERSONAL PROPERTY OF TH |  |  |  |
| ELECTRIC LOAD                   |  | The second secon | The second secon |  | The state of the s |
| (FAN, TOP AUG., 8OT. AUG.)*     |  |  |  |  |  |
| Single Phase, 230 V.            | 204 Amps   | N/A  | N/A  | N/A  | N/A  |
| Three Phase, 230 V.             | 132 Amps   | 146 Amps   | 182 Amps   | 192 Amps   | 278 Amps   |
| Three Phase, 380 V.             | 77 Amps  | 82 Amps  | 122 Amps   | 129 Amps   | 172 Amps   |
| Three Phase, 460 V.             | 66 Amps  | 73 Amps  | 91 Amps  | 96 Amps  | 139 Amps   |
| Three Phase, 575 V.             | 56 Amps  | 54 Amps  | 74 Amps  | 78 Amps  | 112 Amps   |
| •                               |  |  |  |  | 1  |

Capacities are wet bushels at input moisture content.
 Grain discharged hot from the dryer will result in a final moisture content of 15% after cooling in the bin.
 Shortest possible height in ().
 Maximum running load less auxiliary auger motors.

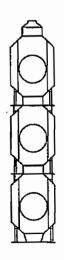


|  |                               |  | 2420                              | 2422   | 2426                             |
|--|-------------------------------|--|-----------------------------------|--|----------------------------------|
|  |                               |  | }                                 |  |                                  |
| DRYING CAPACITY, SHELLED CORN'             |                               |  |                                   |  |                                  |
| Dry and Cool 25% to 15%                    | 615 BPH                       | 770 BPH  | 850 BPH                           | 930 BPH  | 1130 BPH                         |
| Dry and Cool 20% to 15%                    | 995 BPH                       | 1235 BPH   | 1375 BPH                          | 1500 BPH   | 1835 BPH                         |
| Full Heat 30% to 15% <sup>2</sup>          | 670 BPH                       | 830 BPH  | 925 BPH                           | 1010 BPH   | 1200 BPH                         |
| Full Heat 25% to 15% <sup>2</sup>          | 900 BPH                       | 1120 BPH   | 1245 BPH                          | 1355 BPH   | 1670 BPH                         |
| Full Heat 20% to 15%2                      | 1455 BPH                      | 1805 BPH   | 2010 BPH                          | 2195 BPH   | 2700 BPH                         |
|  |                               |  |                                   |  |                                  |
| Basic Construction                         | 2 Modules                     | 2 Modules  | 2 Modules                         | 2 Modules  | 2 Modules                        |
|  | 4 Stages                      | 4 Stages   | 4 Stages                          | 4 Stages   | 4 Stages                         |
|  |                               |  |                                   |  |                                  |
| Grain Columns                              | 14" x 14' Long                | 14" x 18" Long   | 14° x 20' Long                    | 14" x 22" Long   | 14" x 26' Long                   |
| Total Holding Capacity                     | 731 BU                        | 940 BU   | 1044 BU                           | 1149 BU  | 1340 BU                          |
| Grain Column Holding Capacity              | 679 BU                        | 873 BU   | 970 BU                            | 1067 BU  | 1261 BU                          |
|  |                               |  |                                   |  |                                  |
| Top Auger (Loading)                        | 5 HP                          | S HP   | 7.5 HP                            | 7.5 HP   | 10 HP                            |
| Capacity                                   | 3800 BPH                      | 3800 BPH   | 3800 BPH                          | 3800 BPH   | 3800 BPH                         |
| Bottom Auger (Unloading)                   | 5 HP                          | 5 HP   | 7.5 HP                            | 7.5 HP   | 10 HP                            |
|  |                               |  |                                   | YE WEST DESIGNATION  | <b>的</b> 这些人                     |
| Meter Roll Drive                           | SCR, 3/4 HP                   | 5CR, 3/4 HP  | SCR, 3/4 HP                       | SCR, 3/4 HP  | 5CR, 3/4 HP                      |
| Maximum Capacity                           | 1960 BPH                      | 2520 BPH   | 2800 BPH                          | 3080 BPH   | 3640 BPH                         |
|  |                               |  |                                   | A STATE OF THE STA |                                  |
| Transport Length                           |                               |  |                                   |  |                                  |
| (Hitch to Discharge Auger) Transport Width | 23'-2"                        | 27'-2"   | 29'-2"                            | 31'-2"   | 35'-2"                           |
| Transport Width Transport Height           | 8'                            | 8'   | 8'                                | 8'   | 8                                |
| marsport Height                            | 13'-5" (11'-9")               | 13'-5" (11'-9")  | 13'-5" (11'-9")                   | 13'-5"(11'-9")   | 13'-5" (11'-9')                  |
| Installed Length                           |                               |  |                                   |  |                                  |
| Installed Width                            | 23'-10"<br>8'-8'              | 27-10°<br>8'-8°  | 29'-10"                           | 31'-10"  | 35'-10"                          |
| Installed Height                           | 8-8                           | 8-8  | 8'-8"                             | 8'-8"  | 8'-8"                            |
| (Excluding Foundation Supports)            | · 25'-11*                     | 25'-11"  | 25'-11"                           | 25'-11'  | 351.44                           |
| Codding Fundation Supports                 | 25-11<br>25-11                | 25-11<br>  | 23-11<br>23950:356/20099900039920 | 23-11  | 25-11                            |
| Fans 1 PH                                  | 4@10-12 HP, 28"               | 4@10-12 HP, 36"  | N/A                               | N/A  | N/A                              |
| 3 PH                                       | 4@10-12 HP, 28"               | 4@10-12 HP, 36"  | 4@15 HP, 36*                      | 4@15 HP, 36*   | 4@25 HP, 40°                     |
|  |                               |  |                                   |  | 702311,40                        |
| Heaters (Max 8TU)                          | 4@3.0 Mil.btu/hr              | 4@3.5 Mil.btu/hr   | 4@4.5 Mil.btu/hr                  | 4@4.5 Mil.btu/hr   | 4@6.75 Mil.btu/hr                |
|  |                               |  |                                   |  | THE SEPTEMBER                    |
| ELECTRIC LOAD                              | THE PROPERTY OF THE PROPERTY. | The Property of the Control of the C | ·                                 | C-72 point NV 712 in local and which have been selected  |                                  |
| (FAN, TOP AUG., BOT. AUG.)*                |                               |  |                                   |  |                                  |
| m 4 44                                     | 238 Amps                      | 238 Amps   | N/A                               | N/A  | N/A                              |
| Single Phase, 230 V.                       |                               |  |                                   |  |                                  |
| Single Phase, 230 V. Three Phase, 230 V.   | 160 Amps                      | 160 Amps   | 196 Amps                          | 196 Amps   | 308 Amps                         |
|  | 160 Amps<br>84 Amps           | 160 Amps<br>84 Amps  | 196 Amps<br>134 Amps              |  |                                  |
| Three Phase, 230 V.                        |                               |  |                                   | 196 Amps<br>134 Amps<br>98 Amps  | 308 Amps<br>199 Amps<br>154 Amps |

Capacities are wet bushels at input moisture content.
 Crain discharged hot from the dryer will result in a final moisture content of 15% after cooling in the bin.
 Shortest possible height in ().
 Maximum running load less auxiliary auger motors.



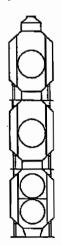
|   | 3312   | 3314             | 3318              | 3320            | 3322              | 3326   |
|---|--|------------------|-------------------|-----------------|-------------------|--|
| DRYING CAPACITY, SHELLED CORP   | N'   |                  |                   | ·               |                   |  |
| Dry and Cool 25% to 15%   | 640 BPH  | 840 BPH          | 1035 BPH          | 1120 BPH        | 1250 BPH          | 1520 BPH   |
| Dry and Cool 20% to 15%   | 1035 BPH   | 1340 BPH         | 1665 BPH          | 1800 BPH        | 2015 BPH          | 2445 BPH   |
| Full Heat 30% to 15%  | 775 BPH  | 1000 BPH         | 1250 BPH          | 1400 BPH        | 1515 8PH          | 1825 BPH   |
| Full Heat 25% to 15%2   | 1045 BPH   | 1355 BPH         | 1680 BPH          | 1825 BPH        | 2040 BPH          | 2475 BPH   |
| Full Heat 20% to 15%  | 1690 BPH   | 2190 BPH         | 2720 BPH          | 2950 BPH        | 3300 BPH          | 4000 BPH   |
|   |  |                  | VICTOR PROPERTY.  |                 |                   |  |
| Básic Construction  | 3 Modules  | 3 Modules        | 3 Modules         | 3 Modules       | 3 Modules         | 3 Modules  |
|   | 3 Stages   | 3 Stages         | 3 Stages          | 3 Stages        | 3 Stages          | 3 Stages   |
|   |  |                  |                   |                 |                   |  |
| Grain Columns   | 14" x 12" Long   | 14" x 14' Long   | 14" x 18' Long    | 14" x 20' Long  | 14" x 22" Long    | 14" x 26' Long                                   |
| Total Holding Capacity  | 921 BU   | 1074 BU          | 1381 BŲ           | 1534 BU         | 1688 BU           | 1995 BU  |
| Grain Column Holding Capacity   | 876 BU   | 1022 BU          | 1314 BU           | 1460 BU         | 1606 BU           | 1898 BU  |
| WAR TO THE TAX TO THE |  |                  |                   |                 |                   |  |
| Top Auger (Loading)   | 3 HP   | 5 HP             | 5 HP              | 7.5 HP          | 7.5 HP            | 10 HP  |
| Capacity  | 3800 BPH   | 3800 BPH         | 3800 BPH          | 3800 BPH        | 3800 BPH          | 3800 BPH   |
| Bottom Auger (Unloading)  | 3 HP   | 5 HP             | 5 HP              | 7.5 HP          | 7.5 HP            | 10 HP  |
|   |  |                  |                   |                 |                   | 263-2000   |
| Meter Roll Drive  | SCR, 1/3 HP  | SCR, 3/4 HP      | SCR, 3/4 HP       | SCR, 3/4 HP     | 5CR, 3/4 HP       | SCR, 3/4 HP                                      |
| Maximum Capacity  | 1680 BPH   | 1960 BPH         | 2520 BPH          | 2800 BPH        | 3080 BPH          | 3640 BPH   |
|   |  |                  |                   |                 |                   |  |
| Transport Length  |  |                  |                   |                 | 1                 | ļ  |
| (Hitch to Discharge Auger)  | 21'-2"   | 23'-2"           | 27'-2"            | 29'-2"          | 31'-2"            | 35'-2"   |
| Transport Width   | 8'   | 8'               | 8'                | 8'              | 8'                | 8'   |
| Transport Height <sup>3</sup>   | 13'-5" (11'-9")  | 13'-5" (11'-9")  | 13'-5" (11'-9")   | 13'-5" (11'-9") | 13'-5"(11'-9")    | 13'-5" (11'-9")                                  |
|   |  |                  |                   |                 |                   |  |
| Installed Length  | 21'-6"   | 23'-10"          | 27'-10"           | 29'-10"         | 31'-10"           | 35'-10'  |
| Installed Width   | 8:-8'  | 8'-8"            | 8'-6"             | 8'-8"           | <u>6'-8'</u>      | 8'-8"  |
| Installed Height  |  |                  | 1                 | i               |                   |  |
| (Excluding Foundation Supports)   | 37'-3"   | 37'-3"           | 37'-3"            | 37-3'           | 37'-3"            | 37'-3'   |
|   | A CAPACITA C |                  |                   |                 |                   |  |
| Fans 1 PH   | 3@15 HP, 361   | 3@15 HP, 40"     | N/A_              | N/A             | N/A_              | N/A  |
| 3 PH  | 3@15 HP, 36"   | 3@15 HP, 42"     | 3@20 HP, 42"      | 3@25 HP, 42*    | 3@30 HP, 42"      | 3@40 HP, 42*                                     |
|   |  |                  |                   |                 |                   |  |
| Heaters (Max BTU)   | 3@4.5 Mil.btu/hr   | 3@5.5 Mil.btu/hr | 3@6.75 Mil.btu/hr | 3@7.5 Milbtu/hr | 3@8.75 Mil.btu/hr | 3@10.25 Mil.btu/hr                               |
|   |  |                  |                   |                 |                   |  |
| ELECTRIC LOAD   |  |                  |                   |                 |                   |  |
| (FAN, TOP AUG., BOT. AUG.)  | 200.1  |                  |                   | 11/4            | N/A               | <del>                                     </del> |
| Single Phase, 230 V.  | 222 Amps   | 232 Amps         | N/A               | N/A             | N/A               | N/A .  |
| Three Phase, 230 V.   | 134 Amps   | 143 Amps         | 186 Amps          | 232 Amps        | 262 Amps          | 346 Amps   |
| Three Phase, 380 V.   | 90 Amps  | 98 Amps          | 113 Amps          | 152 Amps        | 173 Amps          | 202 Amps   |
| Three Phase, 460 V.   | 67 Amps  | 72 Amps          | 93 Amps           | 116 Amps        | 131 Amps          | 173 Amps   |
| Three Phase, 575 V.   | 55 Amps  | 59 Amps          | 73 Amps           | 93 Amps         | 106 Amps          | 141 Amps   |



<sup>&</sup>lt;sup>1</sup> Capacities are wet bushels at Input moisture content.
<sup>2</sup> Grain discharged hot from the dryer will result in a final moisture content of 15% after cooling in the bin.
<sup>3</sup> Shortest possible height in ( ).

Maximum running load less auxiliary auger motors.

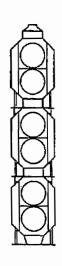
|                                   | 3414   | 3418                                | 3420   | 3422              | 3426                         |
|-----------------------------------|--|-------------------------------------|--|-------------------|------------------------------|
| DRYING CAPACITY, SHELLED CORN'    |  |                                     |  |                   |                              |
| Dry and Cool 25% to 15%           | * 840 BPH                                      | 1035 BPH                            | 1120 BPH                                       | 1250 BPH          | 1520 BPH                     |
| Dry and Cool 20% to 15%           | 1340 BPH                                       | 1665 BPH                            | 1800 BPH                                       | 2015 BPH          | 2445 BPH                     |
| Full Heat 30% to 15%              | 1000 BPH                                       | 1250 BPH                            | 1400 BPH                                       | 1515 BPH          | 1825 8PH                     |
| Full Heat 25% to 15% <sup>2</sup> | 1355 BPH                                       | 1680 BPH                            | 1825 BPH                                       | 2040 BPH          | 2475 BPH                     |
| Full Heat 20% to 15%              | 2190 BPH                                       | 2720 BPH                            | 2950 BPH                                       | 3300 BPH          | 4000 BPH                     |
|                                   |  |                                     |  |                   |                              |
| Basic Construction                | 3 Modules                                      | 3 Modules                           | 3 Modules                                      | 3 Modules         | 3 Modules                    |
|                                   | 6 Stages                                       | 6 Stages                            | 6 Stages                                       | 6 Stages          | 6 Stages                     |
|                                   |  |                                     | HENDELD FOR THE                                | KU MANAGA         | 11441200                     |
| Grain Columns                     | 14" x 14" Long                                 | 14" x 18' Long                      | 14" x 20" Long                                 | 14" x 22' Long    | 14" x 26' Long               |
| Total Holding Capacity            | 1074 BU  | 1381 BU                             | 1534 BU  | 1688 BU           | 1995 BU                      |
| Grain Column Holding Capacity     | 1022 BU  | 1314 BU                             | 1460 BU  | 1606 BU           | 1898 BU                      |
|                                   |  |                                     |  |                   |                              |
| Top Auger (Loading)               | 5 HP   | 5 HP                                | 7.5 HP   | 7.5 HP            | 10 HP                        |
| Capacity                          | 3800 BPH                                       | 3800 BPH                            | 3800 BPH                                       | 3800 BPH          | 3800 BPH                     |
| Bottom Auger (Unloading)          | 5 HP   | 5 HP                                | 7.5 HP   | 7.5 HP            | 10 HP                        |
|                                   |  |                                     |  |                   |                              |
| Meter Roll Drive                  | SCR, 3/4 HP                                    | SCR, 3/4 HP                         | SCR, 3/4 HP                                    | SCR, 3/4 HP       | SCR, 3/4 HP                  |
| Maximum Capacity                  | 1960 BPH                                       | 2520 BPH                            | 2800 BPH                                       | 3080 9PH          | 3640 BPH                     |
|                                   |  |                                     |  |                   |                              |
| Transport Length                  |  |                                     | Ì  |                   |                              |
| (Hitch to Discharge Auger)        | 23'-2"   | 27'-2"                              | 29'-2"   | 31'-2*            | 35'-2"                       |
| Transport Width                   | 8'   | 8'                                  | 8'   | 8'                | 8'                           |
| Transport Height                  | 13'-5" (11'-9")                                | 13'-5" (11'-9")                     | 13'-5" (11'-9")                                | 13'-5"(11'-9")    | 13'-5" (11'-9")              |
|                                   |  |                                     |  |                   |                              |
| Installed Length                  | 23'-10"  | 27-10*                              | 29'-10"  | 31'-10"           | 35'-10"                      |
| Installed Width                   | 8'-8 <b>'</b>                                  | 8'-8"                               | 8'-8'  | 8'-8"             | 8'-8"                        |
| Installed Height                  | a  |                                     | a=1.01   |                   |                              |
| (Excluding Foundation Supports)   | 37'-3"<br>************************************ | 37'-3"<br>327-7006-7-2000-800-900-8 | 37'-3"<br>************************************ | 37-3°             | 37-3°<br>2554925657425544    |
| Fans 1 PH                         |  |                                     |  |                   |                              |
| rais i m                          | 2@15 HP, 40*                                   | N/A<br>N/A                          | N/A<br>N/A                                     | N/A<br>N/A        | N/A<br>N/A                   |
| 3 PH                              | 2@10-12 HP, 28"                                |                                     | 2@25 HP, 42*                                   | 2@30 HP, 42"      |                              |
| <u> </u>                          | 2@15 HP, 42*                                   | 2@20 HP, 42"<br>2@10-12 HP, 36"     |  | 2@15 HP, 36"      | 2@40 HP, 42"<br>2@25 HP, 40" |
|                                   | 2@10-12 HP, 28"                                | 2@10-12 Hr, 36                      | 2@15 HP, 36*                                   | 1 2@15 Hr, 50     | 2@25 Hr, 40*                 |
| Heaters (Max BTU)                 | 2@5.5 Mil.btu/hr                               | 2@6.75 Mil.btu/hr                   | 2@7.5 Mil.btu/hr                               | 2@8.75 Mil.btu/hr | 2@10.25 Mil.btu/hr           |
|                                   | 2@3.0 Mil.btu/hr                               | 2@3.5 Mil.btu/hr                    | 2@4.5 Mil.btu/hr                               | 2@4.5 Mil.btu/hr  | 2@6.75 Mil.btu/hr            |
|                                   |  |                                     |  |                   |                              |
| ELECTRIC LOAD                     |  |                                     |  |                   | ł                            |
| (FAN, TOP AUG., BOT. AUG.)        |  |                                     |  |                   |                              |
| Single Phase, 230 V.              | 238 Amps                                       | 238 Amps                            | N/A  | N/A               | N/A                          |
| Three Phase, 230 V.               | 160 Amps                                       | 160 Amps                            | 196 Amps                                       | 196 Amps          | 308 Amps                     |
| Three Phase, 380 V.               | 84 Amps  | 84 Amps                             | 134 Amps                                       | 134 Amps          | 199 Amps                     |
| Three Phase, 460 V.               | 80 Amps  | 80 Amps                             | 98 Amps  | 98 Amps           | 154 Amps                     |
| Three Phase, 575 V.               | 69 Аттря                                       | 56 Amps                             | 80 Amps  | 80 Amps           | 124 Amps                     |



<sup>&</sup>lt;sup>1</sup> Capacities are wet bushels at input moisture content.
<sup>2</sup> Grain discharged hot from the dryer will result in a final moisture content of 15% after cooling in the bin.

Shortest possible height in ( ).
 Maximum running load less auxiliary auger motors.

|                                 | 3614             | 3618                  | 3620             | 3622   | 3626                         |
|---------------------------------|------------------|-----------------------|------------------|--|------------------------------|
| DRYING CAPACITY, SHELLED CORN   | ր                |                       | ·                |  |                              |
| Dry and Cool 25% to 15%         | 840 BPH          | 1035 BPH              | 1120 BPH         | 1250 BPH   | 1520 BPH                     |
| Dry and Cool 20% to 15%         | 1340 BPH         | 1665 BPH              | 1800 BPH         | 2015 BPH   | 2445 BPH                     |
| Full Heat 30% to 15%            | 1000 SPH         | 1250 BPH              | 1400 BPH         | 1515 BPH   | 1825 BPH                     |
| Full Heat 25% to 15%2           | 1355 BPH         | 1680 BPH              | 1825 BPH         | 2040 BPH   | 2475 BPH                     |
| Full Heat 20% to 15%            | 2190 BPH         | 2720 BPH              | 2950 BPH         | 3300 BPH   | 4000 BPH                     |
|                                 |                  |                       |                  |  |                              |
| Basic Construction              | 3 Modules        | 3 Modules             | 3 Modules        | 3 Modules  | 3 Modules                    |
|                                 | 6 Stages         | 6 Stages              | 6 Stages         | 6 Stages   | 6 Stages                     |
|                                 | THU SHAME IN     | CONTRACTOR CONTRACTOR |                  | ANNUAL SECTION |                              |
| Grain Columns                   | 14" x 14" Long   | 14" x 18' Long        | 14" x 20' Long   | 14" x 22' Long   | 14" x 26' Long               |
| Total Holding Capacity          | 1074 BU          | 1381 BU               | 1534 BU          | 1688 BU  | 1995 BU                      |
| Grain Column Holding Capacity   | 1022 BU          | 1314 BU               | 1460 BU          | 1606 BU  | 1898 BU                      |
|                                 |                  |                       |                  |  | 60254E464646                 |
| Top Auger (Loading)             | 5 HP             | 5 HP                  | 7.5 HP           | 7.5 HP   | 10 HP                        |
| Capacity                        | 3800 BPH         | 3800 BPH              | 3800 BPH         | 3800 BPH   | 3800 BPH                     |
| Bottom Auger (Unloading)        | 5 HP             | 5 HP                  | 7.5 HP           | 7.5 HP   | TO HP                        |
|                                 |                  |                       |                  |  |                              |
| Meter Roll Drive                | SCR, 3/4 HP      | SCR, 3/4 HP           | SCR, 3/4 HP      | 5CR, 3/4 HP  | SCR, 3/4 HP                  |
| Maximum Capacity                | 1960 BPH         | 2520 BPH              | 2800 BPH         | 3080 BPH   | 3640 BPH                     |
|                                 |                  |                       |                  |  | STATES AND SECOND            |
| Transport Length                |                  |                       |                  |  |                              |
| (Hitch to Discharge Auger)      | 23'-2"           | 27'-2"                | 29-2             | 31'-2"   | 35'-2"                       |
| Transport Width                 | 8'               | 8'                    | 8'               | 8'   | 8,                           |
| Transport Height'               | 13'-5" (11'-9")  | 13'-5" (11'-9")       | 13'-5" (11'-9")  | 13'-5"(11'-9")   | 13'-5" (11'- <del>9</del> ") |
|                                 |                  |                       |                  |  |                              |
| Installed Length                | 23'-10"          | 27'-10"               | 29'-10"          | 31'-10'  | 35'-10"                      |
| Installed Width                 | 8'-8'            | 8'-8"                 | 8'-8"            | 8'-8"  | 8'-8"                        |
| Installed Height                |                  |                       |                  |  |                              |
| (Excluding Foundation Supports) | 37'-3"           | 37'-3"                | 37'-3"           | 37'-3"   | 37'-3"                       |
|                                 |                  |                       |                  |  | Parometrice es               |
| Fans 1 PH                       | 6@10-12 HP, 28"  | 6@10-12 HP, 36'       | N/A              | N/A  | N/A                          |
| 3 PH                            | 6@10-12 HP, 28*  | 6@10-12 HP, 36°       | 6@15 HP, 36*     | 6@15 HP, 36°   | 6@25 HP, 40°                 |
|                                 |                  |                       |                  |  |                              |
| Heaters (Max BTU)               | 6@3.0 Mil.btu/hr | 6@3.5 Mil.btu/hr      | 6@4.5 Mil.btu/hr | 6@4.5 Mil.btu/hr   | 6@6.75 Mil.btu/hr            |
|                                 |                  | Distribution          |                  |  |                              |
| ELECTRIC LOAD                   |                  |                       |                  |  | l '                          |
| (FAN, TOP AUG., BOT. AUG.)*     | 221.4            | 224                   | N/4              | N/a  | A1/4                         |
| Single Phase, 230 V.            | 334 Amps         | . 334 Amps            | N/A              | N/A  | N/A                          |
| Three Phase, 230 V.             | 225 Amps         | 225 Amps              | 275 Amps         | 275 Amps   | 436 Amps                     |
| Three Phase, 380 V.             | 118 Amps         | 118 Amps              | 188 Amps         | 188 Amps   | 283 Amps                     |
| Three Phase, 460 V.             | 113 Amps         | 113 Amps              | 137 Amps         | 137 Amps   | 218 Amps                     |
| Three Phase, 575 V.             | 78 Amps          | 78 Amps               | 110 Amps         | 110 Amps   | 174 Amps                     |



Capacities are wet bushels at input moisture content.
 Crain discharged not from the dryer will result in a final moisture content of 15% after cooling in the bin.
 Shortust possible height In ().
 Maximum running load less auxiliary auger motors.

### State of the Art

With state-of-the-art controls and features, heavy-duty galvanized steel construction and industrial grade electrical components, GSI continues to offer the most reliable and technologically advanced dryers in the industry. GSI offers the widest selection of dryer models in the industry as well. With over 60 models from which to choose, GSI dryers feature long dryer retention times, producing high quality efficiently dried grain, and the flexible operation allows the operator a choice of continuous batch, staged auto or continuous flow with the flip of a switch. We invite you to tour our facilities and see for yourself what makes GSI the top choice for grain drying equipment worldwide.

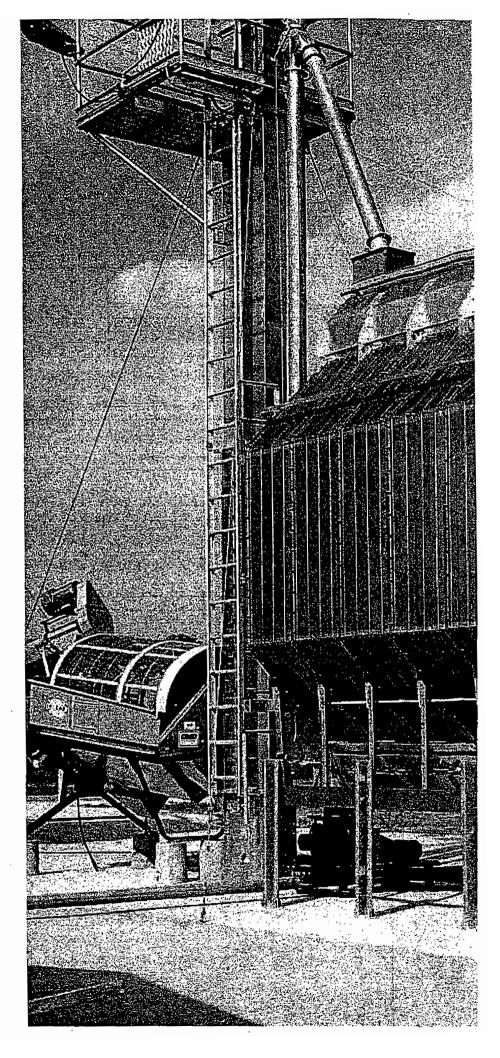


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## **ATTACHMENT V Emissions Profile**

Permit #: C-8347-1-0

Last Updated

05/30/2012 **EDGEHILR** 

Facility: PARAMOUNT FARMS INTERNATIONAL LLC

Fourinment Pre-Reselined: NO

| pment Pre-Baselined: NO                              | NOX     | <u>sox</u> | PM10   | co      | VOC    |
|--|---------|------------|--------|---------|--------|
| Potential to Emit (lb/Yr):                           | 47923.0 | 1642.0     | 1901.0 | 12096.0 | 2189.0 |
| Daily Emis. Limit (lb/Day)                           | 798.7   | 27.4       | 31.7   | 201.6   | 36.5   |
| Quarterly Net Emissions Change (lb/Qtr)              |         |            |        |         |        |
| Q1:  | 11980.0 | 410.0      | 475.0  | 3024.0  | 547.0  |
| Q2:  | 11981.0 | 410.0      | 475.0  | 3024.0  | 547.0  |
| Q3:  | 11981.0 | 411.0      | 475.0  | 3024.0  | 547.0  |
| Q4:  | 11981.0 | 411.0      | 476.0  | 3024.0  | 548.0  |
| Check if offsets are triggered but exemption applies | N       | N          | N      | N       | N      |
| Offset Ratio   | 1.5     | <u>-</u>   | 1.5    |         |        |
| Quarterly Offset Amounts (lb/Qtr)                    |         |            |        |         |        |
| Q1:  | 17971.0 |            | 713.0  |         |        |
| Q2:  | 17971.0 |            | 713.0  |         |        |
| Q3:  | 17971.0 |            | 713.0  |         |        |
| Q4:  | 17971.0 |            | 713.0  |         |        |

Paramount Farms Inc C-8347, 1120254

### ATTACHMENT VI BACT Guideline

## San Joaquin Valley Unified Air Pollution Control District

#### Best Available Control Technology (BACT) Guideline 1.6.8\*

Last Update 4/14/1995

#### **Pistachio Nut Dryer**

| Pollutant | Achieved in Practice or contained in the SIP               | Technologically<br>Feasible                     | Alternate Basic<br>Equipment |
|-----------|--|---|------------------------------|
| СО        |  | Natural gas with LPG as backup fuel             |                              |
| NOx       | Low NOx burner @ 0.083<br>lb/MMBtu and natural gas<br>fuel |   |                              |
| PM10      |  | Natural gas with LPG as backup fuel             |                              |
| SOx       |  | PUC quality natural gas with LPG as backup fuel |                              |
| voc       | _  | Natural gas with LPG as backup fuel             |                              |

BACT is the most stringent control technique for the emissions unit and class of source. Control techniques that are not achieved in practice or contained in s a state implementation plan must be cost effective as well as feasible. Economic analysis to demonstrate cost effectiveness is required for all determinations that are not achieved in practice or contained in an EPA approved State Implementation Plan.

\*This is a Summary Page for this Class of Source

### San Joaquin Valley Unified Air Pollution Control District

#### Best Available Control Technology (BACT) Guideline 5.2.3\*

Last Update 1/30/1995

#### Pistachio Nut Processing - Precleaning Operation, > or = 375 ton/day in-hull pistachios

| Poliutant | Achieved in Practice or contained in the SIP | Technologically<br>Feasible | Alternate Basic<br>Equipment |
|-----------|--|-----------------------------|------------------------------|
| PM10      | 1D-3D cyclone                                |                             | ·                            |

BACT is the most stringent control technique for the emissions unit and class of source. Control techniques that are not achieved in practice or contained in s a state implementation plan must be cost effective as well as feasible. Economic analysis to demonstrate cost effectiveness is required for all determinations that are not achieved in practice or contained in an EPA approved State Implementation Plan.

\*This is a Summary Page for this Class of Source

Paramount Farms Inc C-8347, 1120254

## ATTACHMENT VII BACT Analysis

### ATTACHMENT VII BACT Analysis

#### BACT Guideline 1.6.8 – Pistachio Dryers

#### **BACT Analysis for NOx Emissions;**

Oxides of nitrogen (NOx) are generated from the high temperature combustion of fuel. A majority of the NOx emissions' are formed from the high temperature reaction of nitrogen and oxygen in the inlet air: The rest of the NOx emissions are formed from the reaction of fuel-bound nitrogen with oxygen in the inlet air.

Step 1 - Identify All Possible NOx Control Technologies

Low NOx burner @ 0.083 lb/MM Btu and natural gas fuel - Achieved in Practice

Step 2 - Eliminate Technologically Infeasible Options

There are no technologically infeasible, options.

Step 3 - Rank Remaining Control Technologies by Control Effectiveness

Low NOx burner @ 0.083 lb/MMBtu and natural gas fuel - Achieved in Practice

Step 4 - Cost Effectiveness Analysis.

A cost effective analysis must be performed for all, control options in the list from Step 3 in the order of their ranking to determine the cost effective option with the lowest emissions.

The only control technology alternative in the ranking list from Step 3 has been achieved in practice. Therefore, per SJVUAPCD BACT policy, the cost effectiveness analysis is not required.

#### Step 5 - Select BACT

BACT for NOx emissions is a low NOx burner @ 0.083 lb/MMBtu and natural gas fuel. The facility has proposed a low NOx burner @ 0.083 lb/MMBtu and natural gas fuel; therefore, BACT is satisfied.

#### BACT Analysis for SOx, PM10, and VOC Emissions:

Step 1 - Identify All Possible Control Technologies

Natural gas with LPG a backup fuel - Technologically feasible

Step 2 - Eliminate Technologically Infeasible Options

There are no technologically infeasible, options.

Step 3 - Rank Remaining Control Technologies by Control Effectiveness

Natural gas with LPG a backup fuel - Technologically feasible

Step 4 - Cost Effectiveness Analysis

A cost effective analysis must be performed for all control options in the list from Step 3 in the order of their ranking to determine the cost effective option with the lowest emissions.

The only control technology alternative in the ranking list from Step 3 has been proposed. Therefore, per SJVUAPCD BACT policy, the cost effectiveness' analysis is not required.

Step 5 - Select BACT

BACT for SOx, PM10, and VOC emissions is natural gas with LPG a backup fuel - Technologically feasible. The facility has proposed combustion of natural gas only. Therefore, BACT is satisfied.

#### **BACT Guideline 5.2.3 – Pistachio Precleaning Operation**

#### **BACT Analysis for PM10 Emissions;**

Step 1 - Identify All Possible Control Technologies

1D-3D cyclone

Step 2 - Eliminate Technologically Infeasible Options

There are no technologically infeasible, options.

Step 3 - Rank Remaining Control Technologies by Control Effectiveness

1D-3D cyclone

Step 4 - Cost Effectiveness Analysis

A cost effective analysis must be performed for all control options in the list from Step 3 in the order of their ranking to determine the cost effective option with the lowest emissions.

The only control technology alternative in the ranking list from Step 3 has been proposed. Therefore, per SJVUAPCD BACT policy, the cost effectiveness' analysis is not required.

Step 5 - Select BACT

BACT for PM10 emissions is 1D-3D cyclone. Therefore, BACT is satisfied.

### ATTACHMENT VIII HRA AND AAQA

# San Joaquin Valley Air Pollution Control District Risk Management Review

To:

Richard Edgehill, AQE - Permit Services

From:

Trevor Joy, AQS - Technical Services

Date:

May 22, 2012

Facility Name:

Paramount Farms International

Location:

NE/4 Section 3 Township 13S, Range 15E in Firebaugh

Application #(s):

C-8347-1-0

Project #:

C-1120254

#### A. RMR SUMMARY

| Categories                            | NG Dryers for<br>Pistachio<br>Hulling and<br>Drying<br>(Unit 1-0) | Project<br>Totals | Facility<br>Totals |
|---------------------------------------|---|-------------------|--------------------|
| Prioritization Score                  | 0.01  | 0.01              | 0.01               |
| Acute Hazard Index                    | N/A <sup>1</sup>  | N/A <sup>1</sup>  | N/A <sup>1</sup>   |
| Chronic Hazard Index                  | N/A <sup>1</sup>  | N/A <sup>1</sup>  | N/A <sup>1</sup>   |
| Maximum Individual Cancer Risk (10-6) | N/A <sup>1</sup>  | N/A <sup>1</sup>  | N/A <sup>1</sup>   |
| T-BACT Required?                      | No  |                   |                    |
| Special Permit Conditions?            | · No  |                   |                    |

#### **Proposed Permit Conditions**

To ensure that human health risks will not exceed District allowable levels; the following permit conditions must be included for:

#### Unit 1-0

No special conditions are required.

The results from the Criteria Pollutant Modeling are as follows:

#### Criteria Pollutant Modeling Results\* Values are in µg/m³

| Steam Generator   | 1 Hour | 3 Hours | 8 Hours. | 24 Hours | Annual |
|-------------------|--------|---------|----------|----------|--------|
| CO                | Pass   | X       | Pass     | X        | Х      |
| NO <sub>x</sub>   | Fail   | X       | X        | X        | * Fail |
| SO <sub>x</sub>   | Pass   | Pass    | X        | Pass     | -≓Päss |
| PM <sub>10</sub>  | X      | X       | X        | Fail     | Fail   |
| PM <sub>2,5</sub> | Х      | Х       | X        | Fail     | Fail   |

<sup>\*</sup>Results were taken from the attached PSD spreadsheet.

#### III. Conclusion

The acute and chronic hazard indices were below 1.0; and the cancer risk is less than 1 in a million. In accordance with the District's Risk Management Policy, the project is approved without Toxic Best Available Control Technology (T-BACT).

To ensure that human health risks will not exceed District allowable levels; the permit conditions listed on page 1 of this report must be included for this proposed unit.

These conclusions are based on the data provided by the applicant and the project Therefore, this analysis is valid only as long as the proposed data and parameters do not change.

#### Attachments:

- A. RMR request from the project engineer
- B. Prioritization score with toxic emissions summary
- C. HEARTS Facility Summary
- D. HARP Risk Report
- E. AAQA spreadsheet

<sup>&</sup>lt;sup>1</sup>The project was compared to the 1-hour SO2 National Ambient Air Quality Standard that became effective on August 23, 2010 using the District's approved procedures.

<sup>2</sup>Facility is fully offsetting the project PM and NOx emissions as per District Rule 2201.

### ATTACHMENT IX Draft ATC

# San Joaquin Valley Air Pollution Control District

AUTHORITY TO CONSTRUCT

PERMIT NO: C-8347-1-0

**LEGAL OWNER OR OPERATOR:** PARAMOUNT FARMS INTERNATIONAL LLC

**MAILING ADDRESS:** 

13646 HIGHWAY 33

LOST HILL, CA 93249

LOCATION: CORNER OF AVENUE 6 & CHOWCHILLA CANAL ROAD

NE 1/4 SEC 3 TOWNSHIP 13 S RANGE 15E

FIREBAUGH, CA

#### **EQUIPMENT DESCRIPTION:**

PISTACHIO HULLING AND DRYING OPERATION WITH TWENTY 20.0 MMBTU/HR DRYERS, OPERATION MAY BE EQUIPPED WITH THE FOLLOWING PERMIT EXEMPT WET PROCESSING EQUIPMENT: PISTACHIO HULLER/PEELER(S), WASH DECK(S), FLOAT TANK(S), WET ASPIRATOR(S) WITH CYCLONE(S) AND/OR EXPANSION BOX(S), GRAVITY DECK(S) AND CLASSIFYING DECK(S) EACH WITH A HIGH EFFICIENCY CYCLONE, ASSOCIATED ELEVATOR(S), HOPPER(S), AUGER(S), AND CONVEYOR(S)

#### CONDITIONS

- 1. Particulate matter emissions shall not exceed 0.1 gr/dscf in concentration. [District Rule 4201]
- 2. There shall be no visible emissions in excess of 5% opacity at reciving pits, stickreels, conveyors, conveyot transfer points or trash disposal operations. [District Rule 2201]
- 3. There shall be no visible emissions at dryers, conveyors, or aspirators cyclones exhausts. [District Rule 2201]
- 4. Operation shall be equipped with four receiving pits, each with metering conveyors and precleaner feed conveyor.

  [District Rule 2201]
- 5. Operation shall be equipped with four precleaning leaf blowers, each with a 44" high-efficiency cyclone, trash discharge conveyor, sampler, and nut discharge conveyor. [District Rule 2201]
- 6. Maximum emission rate of PM10 from each of the 44" high-efficiency precleaning cyclones listed above shall not exceed 0.08 lb/hr. [District Rule 2201] Federally Enforceable Through Title V Permit
- Precleaning operation shall not operate more than 1440 hours per year. [District Rule 2201] Federally Enforceable Through Title V Permit

#### CONDITIONS CONTINUE ON NEXT PAGE

YOU MUST NOTIFY THE DISTRICT COMPLIANCE DIVISION AT (559) 230-5950 WHEN CONSTRUCTION IS COMPLETED AND PRIOR TO OPERATING THE EQUIPMENT OR MODIFICATIONS AUTHORIZED BY THIS AUTHORITY TO CONSTRUCT. This is NOT a PERMIT TO OPERATE. Approval or denial of a PERMIT TO OPERATE will be made after an Inspection to verify that the equipment has been constructed in accordance with the approved plans, specifications and conditions of this Authority to Construct, and to determine if the equipment can be operated in compliance with all Rules and Regulations of the San Joaquin Valley Unified Air Pollution Control District. Unless construction has commenced pursuant to Rule 2050, this Authority to Construct shall expire and application shall be cancelled two years from the date of issuance. The applicant is responsible for complying with all laws, ordinances and regulations of all-other governmental agencies which may pertain to the above equipment.

Seyed Sadredin, Executive Directory APCO

DAVID WARNER, Director of Permit Services

Central Regional Office • 1990 E. Gettysburg Ave. • Fresno, CA 93726 • (559) 230-5900 • Fax (559) 230-6061

- 8. Operation shall be equipped with twenty 20.0 MMBtu/hr natural gas-fired column type pistachio dryers. [District Rule 2201]
- 9. Dryers shall only be fired on PUC regulated natural gas. [District Rule 2201]
- 10. Dryers shall be equipped with an operational totalizing fuel flow meter. [District Rule 2201]
- 11. Daily natural gas consumption of dryers shall not exceed 9.6 MMscf/day. [District Rule 2201]
- 12. Annual natural gas consumption of dryers shall not exceed 576 MMscf/year. [District Rule 2201]
- 13. Emission rates from dryers shall not exceed any of the following: PM10: 0.0025 lb/MMBtu, SOx (as SO2): 0.00285 lb/MMBtu, NOx (as NO2): 0.0832 lb/MMBtu, VOC: 0.0038 lb/MMBtu, or CO: 0.021 lb/MMBtu. [District Rule 2201]
- 14. Disposal of solid and liquid wastes shall not result in odors nor constitute a nuisance. [District Rule 4102]
- 15. Source with non-combustion particulate emission sampling limit shall be demonstrated by District witnessed sample collection by independent testing laboratory if precleaner cyclones exhibit visible emissions in excess of 5% opacity. [District Rules 1081 and 2201]
- 16. Source testing for particulate emissions shall be performed within 60 days of District determination of excess visible emissions, test results shall be submitted to the District within 60 days thereafter. [District Rules 1081 and 2201]
- 17. Visible emissions at precleaner cyclones shall be inspected quarterly during operation. If visible emissions are observed to be in excess of 5% opacity, corrective action shall be taken to reduce opacity. [District Rules 1070 and 2201]
- 18. Source testing to measure the concentration of particulate matters shall be conducted using EPA Method 5. [District Rules 2201 and 4201]
- 19. Visible emissions at elevators, augers, conveyors, conveyor transfer points shall be inspected annually under material and environmental conditions, such as dry and windy, where high emissions are expected. [District Rules 1070 and 2201]
- 20. Particulate matter emissions shall not exceed the hourly rate as calculated in District Rule 4202 using the equation E=3.59xP^0.62 if P is less than or equal to 30 tons per hour, or E=17.31xP^0.16 if P is greater than 30 tons per hour. [District Rule 4202]
- 21. Operator shall maintain copies of fuel invoices and supplier certifications. [District Rule 2520, 9.3.2]
- 22. Permittee shall maintain records of the volume of fuel used each day and each year. [District Rules 1070 and 2201]
- 23. Permittee shall maintain records of hours of operation of the precleaning cyclones. [District Rules 1070 and 2201]
- 24. All records shall be maintained and retained on-site for a period of at least 5 years and shall be made available for District inspection upon request. [District Rules 1070 and 2201]
- 25. Prior to operating equipment under this Authority to Construct, permittee shall surrender emission reduction credits for the following quantities of emissions: NOx: 17,971 lb/qtr and PM10: 713 lb/qtr. Offsets include the applicable offset ratio specified in Section 4.8 of Rule 2201 (as amended 4/21/11). [District Rule 2201]
- 26. ERC Certificate Numbers C-1133-2, S-1267-4, C-499-4, and N-284-4 (or certificates split from theses certificates) shall be used to supply the required offsets, unless a revised offsetting proposal is received and approved by the District, upon which this Authority to Construct shall be reissued, administratively specifying the new offsetting proposal. Original public noticing requirements, if any, shall be duplicated prior to reissuance of this Authority to Construct. [District Rule 2201]

