STANISLAUS COUNTY PLANNING COMMISSION

January 21, 2016

STAFF REPORT

USE PERMIT APPLICATION NO. PLN2014-0111
6-X Dairy

REQUEST: REQUEST TO BRING THE 6-X DAIRY FACILITY BACK UP TO ITS OPERATING CAPACITY OF 2,280 MATURE COWS, BY ADDING 1,015 MILK/DRY COWS TO AN EXISTING HERD COUNT OF 1,265, ON A 397± ACRE SITE.

APPLICATION INFORMATION

Applicant/Owner:	Gary Osmundson, 6-X Dairy
Agent:	Vince Furtado
Location:	9848 Milnes Road, on the south side of Milnes Road, east of Albers Road, west of Oakdale-Waterford Highway, north of Dusty Lane, in the Waterford area.
Section, Township, Range:	13-3-10, 24-3-10, & 18-3-11
Supervisorial District:	One (Supervisor O'Brien)
Assessor's Parcel:	014-036-003, 014-047-008, & 015-003-016
Referrals:	See Exhibit H Environmental Review Referrals
Area of Parcel(s):	396.77± acres
Water Supply:	Well
Sewage Disposal:	Septic
Existing Zoning:	A-2-40 (General Agriculture)
General Plan Designation:	Agriculture
Sphere of Influence:	N/A
Community Plan Designation:	N/A
Williamson Act Contract No.:	71-0180
Environmental Review:	Negative Declaration
Present Land Use:	Heifer facility, two single-family residences (one under construction), and cropland
Surrounding Land Use:	Orchards to the north and east; cropland and livestock operation to the south; cropland to the west; and with scattered single-family dwellings in each direction; Dry Creek 2 miles to the south.

RECOMMENDATION

Staff recommends the Planning Commission approve this request based on the discussion below and on the whole of the record provided to the Planning Commission. If the Planning Commission chooses to approve the project, Exhibit A provides an overview of all of the findings required for project approval which include use permit findings.

PROJECT DESCRIPTION

This project is a request to bring the 6-X dairy facility back up to its operating capacity of 2,280 mature cows, by adding 1,015 milk/dry cows to an existing herd count of 1,265, on a 397± acre site. The dairy included a total of 2,280 mature cows from the time it was constructed in 1991, and the site remains unmodified from its original construction design. In 2005 dairies regulated by the Central Valley Regional Water Quality Control Board (CVRWQCB) were required to submit their current herd population on their dairy facility regardless of actual facility capacity. At the time of reporting, previous owners were under financial distress and a portion of the herd had to be liquidated to remove some financial pressure. Consequently, the General Order Permit issued by the CVRWQCB reflected the lower figure of 1,265 mature cows. This use permit application is being requested to formally recognize the historical use of the facility with the CVRWQCB. If approved, the dairy will be removed from the Dairy General Order permit and will be issued an Individual Waste Discharge Permit through the CVRWQCB. There will be an estimated increase of one (1) milk truck per day, two (2) commodity truck trips per day, and one (1) cattle truck trip every two days. Employee trips will increase by three (3) per day. The operation has seven (7) employees on a maximum shift. The project does not propose any new buildings.

SITE DESCRIPTION

The project site is located at 9848 Milnes Road, on the south side of Milnes Road. The subject property is surrounded by parcels generally 20 to 850 acres in size which contain almond orchards, cropland, and scattered single-family dwellings. A few scattered parcels under 10 acres in size surround the site. Dry Creek is located south of the project site.

The existing dairy has been in operation since 1991. The project site currently contains approximately 202,000 square-feet of buildings and 109,000 square-feet of paved surface. Buildings existing on the northern end of the property (APN: 014-036-003 and 015-003-016) include; corrals, free-stall shade buildings, a dairy barn, a mobile home, hay barns and commodity barn. The project site also includes a settling basin with a surface area of approximately 10,500 square feet, and two wastewater storage ponds with approximate surface areas of 76,000 and 235,000 square feet. A single-family dwelling is also in the process of construction on the southern end of the parcel (APN: 014-047-008).

ISSUES

This project was scheduled to be heard by the Planning Commission on August 6, 2015, but was continued to the September 3, 2015, Planning Commission meeting to allow the applicant and staff additional time to address comments received on the project from the San Joaquin Valley Air Pollution District (SJVAPCD). The concerns had still not been completely addressed at the time of the September 3, 2015, Planning Commission meeting, and as such, the project was continued indefinitely.

The SJVAPCD raised concerns regarding the projects potential impact on stationary source emissions from the proposed additional milk/dry cows (mature cows), which may potentially exceed the District's thresholds of significance (which includes an increase of NOx or VOC emissions in excess of 10.0 tons/year). Clarification has since been provided to the SJVAPCD that the project is not a request to expand, but to bring the facility back to its historic (2,280 mature cow) operating numbers, which is the same operating number for mature cows reflected in the Operation's Permit to Operate, issued by the SJVAPCD on April 3, 2012. With this clarification, SJVAPCD no longer considered the project to have a potentially significant impact to air quality and the project was

scheduled for Planning Commission's consideration. The project description for this project was also amended to make this distinction more clear.

Standard conditions of approval have been added to this project to address less than significant impacts associated with the proposed use. (See Exhibit C – Conditions of Approval.)

GENERAL PLAN CONSISTENCY

The site is currently designated as "Agriculture" in the Stanislaus County General Plan and this designation is consistent with an A-2 (General Agriculture) zoning district. The agricultural designation recognizes the value and importance of agriculture by acting to preclude incompatible urban development within agricultural areas.

The following goals, objectives, and policies of the County General Plan reflect the County's commitment to a strong agricultural economy.

Land Use Element

Goal Three - Foster stable economic growth through appropriate land use policies.

Policy Sixteen - Agriculture, as the primary industry of the County, shall be promoted and protected.

Agricultural Element

Goal One - Strengthen the agricultural sector of our economy.

Objective No. 1.3 - Minimizing Agricultural Conflicts.

Implementation Measure No 1 - The County shall continue to implement the Right-to-Farm ordinance.

Goal Two - Conserve our agricultural lands for agricultural uses.

Staff believes this project to be consistent with the General Plan. An expanded discussion about dairy facilities in terms of compatibility with agriculture is provided in the following Zoning Ordinance Consistency section.

ZONING ORDINANCE CONSISTENCY

The site is currently zoned A-2-40 (General Agriculture). It is the intent of the General Agriculture (A-2) zoning district to support and enhance agriculture as the predominant land use in the unincorporated areas of Stanislaus County. The procedures contained within the A-2 zoning district are specifically established to ensure that all land uses are compatible with agriculture.

Confined Animal Facilities (CAF), which include dairies, are considered to be permitted agricultural uses; however, a use permit is required for new or expanding CAFs requiring a new or modified permit waiver, order, or Waste Discharge Requirements (WDRs) from the Regional Water Quality Control Board (RWQCB), where the issuance of such permit, waiver, order, or WDR requires compliance with CEQA (Section 21.20.030 (F) of the Stanislaus County Zoning Code). The County adopted the use permit requirement in 2003 in order to allow the County to facilitate the environmental review (in accordance with CEQA) required for issuance of any permit, waiver, order, or WDR by the RWQCB.

The proposed project is only required to obtain a use permit because the RWQCB has determined that the proposed dairy is subject to issuance of WDRs requiring CEQA review. WDRs are State regulations pertaining to the treatment, storage, processing or disposal of solid waste. In this case, the operator is transitioning from operating under a General Permit to a WDR, to reflect the historic operating numbers of the facility.

Any project required to obtain a use permit is subject to the following finding for approval:

1. *The establishment, maintenance, and operation of the proposed use or building applied for is consistent with the General Plan designation of "Agriculture" and will not, under the circumstances of the particular case, be detrimental to the health, safety, and general welfare of persons residing or working in the neighborhood of the use and that it will not be detrimental or injurious to property and improvements in the neighborhood or to the general welfare of the County.*

The RWQCB monitors dairies for compliance with their Nutrient Management Plan (NMP), WMP, and WDRs. A NMP and WMP are required by the RWQCB in order to determine the need for permits, waivers, or WDRs. The applicant has submitted both an NMP and Waste Management Plan (WMP) to RWQCB. Both were deemed complete and acceptable by the RWQCB (See Exhibit F – *Nutrient Management Plan & Waste Management Plan*). Conditions have been added to the project requiring that the project comply with the SJVAPCD's rules and conditions specified in the facilities Permit to Operate, which are designed to reduce a facility's impact to air quality. (See Exhibit C - *Conditions of Approval*.)

CAFs are agricultural uses protected by the County's Right-to-Farm Ordinance which was adopted in 1991. The ordinance states that:

> *The County of Stanislaus recognizes and supports the right-to-farm agricultural lands in a manner consistent with accepted customs and standards. Residents of property on or near agricultural land should be prepared to accept the inconveniences or discomforts associated with agricultural operations, including but not limited to noise, odors, flies, fumes, dust, the operation of machinery of any kind during any 24-hour period (including aircraft), the storage and disposal of manure, and the application by spraying or otherwise of chemical fertilizers, soil amendments, herbicides, and pesticides. Stanislaus County has determined that inconveniences or discomforts associated with such agricultural operations shall not be considered to be a nuisance if such operations are consistent with accepted customs and standards.*

Staff believes the necessary findings for approval of this project can be made. With conditions of approval in place, there is no indication that, under the circumstances of this particular case, the proposed project will be detrimental to the health, safety, and general welfare of persons residing or working in the neighborhood of the use or that it will be detrimental or injurious to property and improvements in the neighborhood or to the general welfare of the County. Dairy facilities are an important component of the agricultural economy in Stanislaus County. There is no indication this project will interfere or conflict with other agricultural uses in the area.

The project site is enrolled in Williamson Act Contract No. 71-0180. Section 21.20.045(A) of the A-2 zoning district requires that all uses requiring use permits that are approved on Williamson Act contracted lands shall be consistent with the following three principles of compatibility:

1. *The use will not significantly compromise the long-term productive agricultural capability of the subject contracted parcel or parcels or on other contracted lands in the A-2 zoning district;*

2. *The use will not significantly displace or impair current or reasonably foreseeable agricultural operations on the subject contracted parcel or parcels or on other contracted lands in the A-2 zoning district. Uses that significantly displace agricultural operations on the subject contracted parcel or parcels may be deemed compatible if they relate directly to the production of commercial agricultural products on the subject contracted parcel or parcels or neighboring lands, including activities such as harvesting, processing, or shipping; and*

3. *The use will not result in the significant removal of adjacent contracted land from agricultural or open-space use.*

Approval of this project will not significantly compromise the long-term productive agricultural capability of the subject property or of surrounding agricultural operations. Nor will the proposed project result in new facilities limiting the return of the property to agricultural production in the future, or in the removal of any adjacent contracted land from agricultural or open space use.

The project was referred to the State Department of Conservation during the Early Consultation and 30-day Initial Study reviews and no comments were received.

ENVIRONMENTAL REVIEW

Pursuant to the California Environmental Quality Act (CEQA), the proposed project was circulated to all interested parties and responsible agencies for review. (See Exhibit H - *Environmental Review Referrals*.) A Negative Declaration has been prepared for approval as the project will not have a significant effect on the environment. (See Exhibit E - *Negative Declaration*.) The applicant has obtained a "No Effect" determination for CEQA filing fee purposes from the California Department of Fish and Wildlife (CDFW). Conditions of approval reflecting referral responses have been placed on the project. (See Exhibit C - *Conditions of Approval*.)

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Note: Pursuant to California Fish and Game Code Section 711.4, California Department of Fish and Wildlife (formerly the Department of Fish and Game) has determined that this project has no potential effect on Fish and Wildlife and the project as described does not require payment of the CEQA filing fee.

Contact Person: Kristin Doud, Associate Planner, (209) 525-6330

Attachments:
Exhibit A - Findings and Actions Required for Project Approval
Exhibit B - Maps
Exhibit C - Conditions of Approval
Exhibit D - Initial Study
Exhibit E - Negative Declaration
Exhibit F - Nutrient Management Plan & Waste Management Plan
Exhibit G - August 6, 2015, and September 3, 2015, Planning Commission Memos
Exhibit H - Environmental Review Referral

Exhibit A
Findings and Actions Required for Project Approval

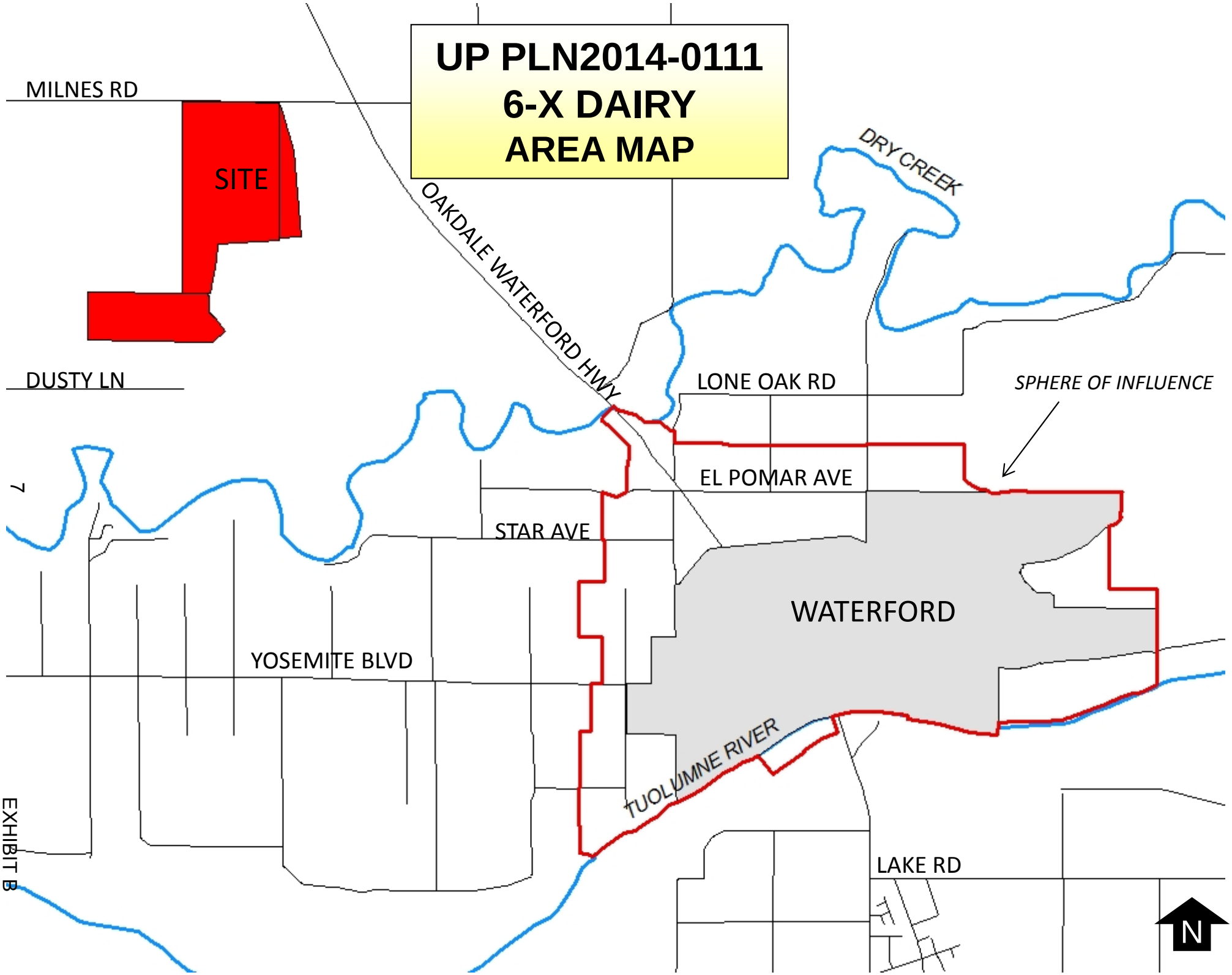
1. Adopt the Negative Declaration pursuant to CEQA Guidelines Section 15074(b), by finding that on the basis of the whole record, including the Initial Study and any comments received, that there is no substantial evidence the project will have a significant effect on the environment and that the Negative Declaration reflects Stanislaus County's independent judgment and analysis.

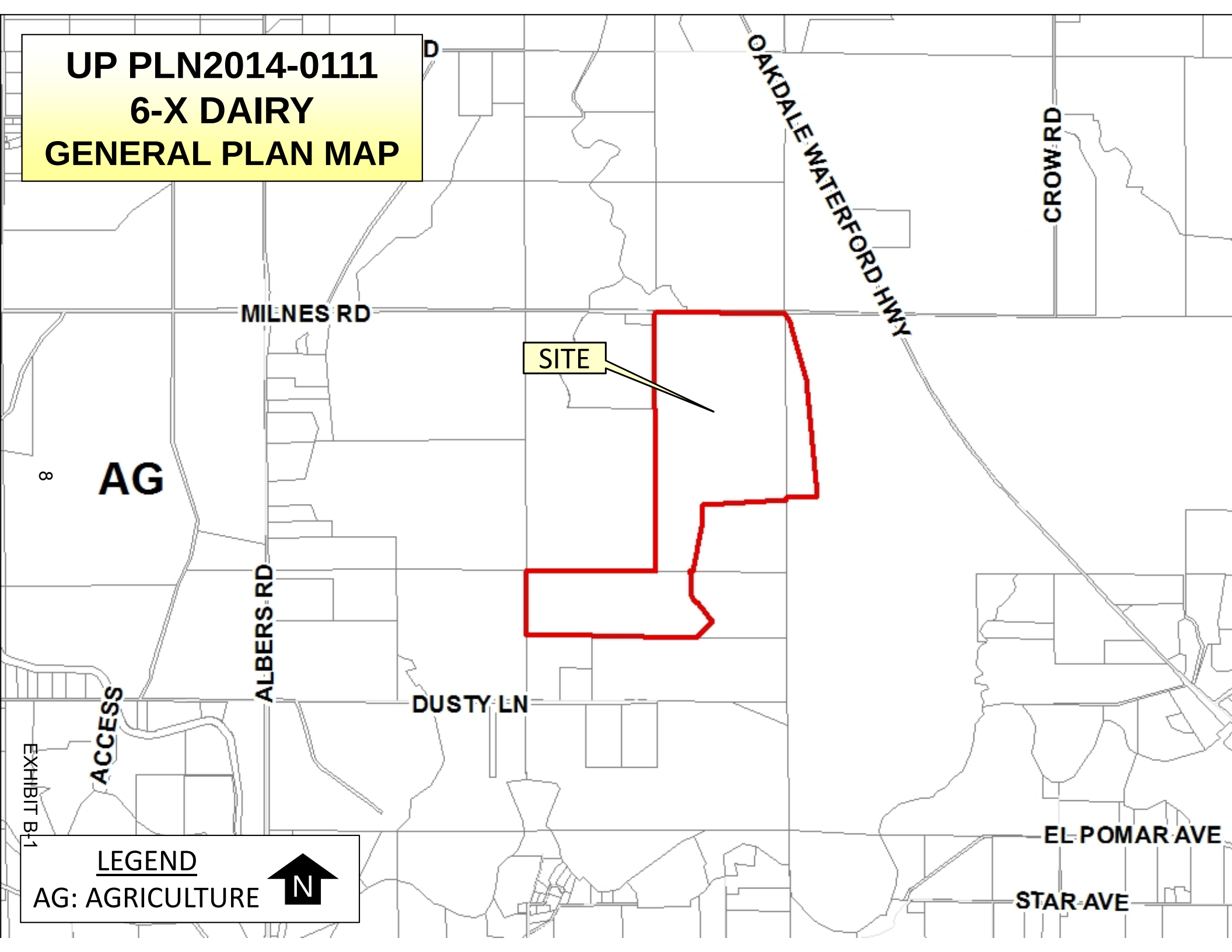
2. Order the filing of a Notice of Determination with the Stanislaus County Clerk-Recorder's Office pursuant to Public Resources Code Section 21152 and CEQA Guidelines Section 15075.

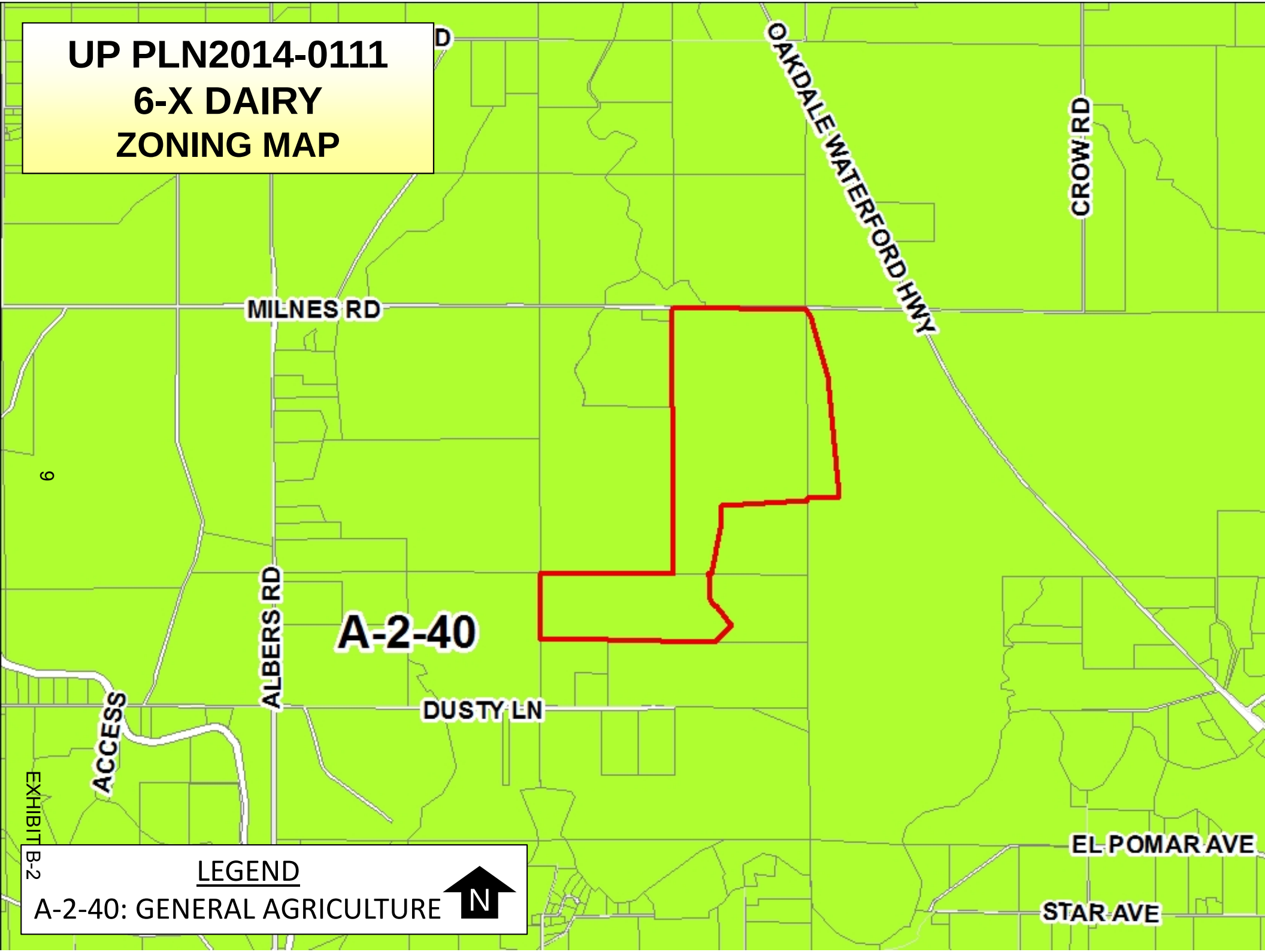
3. Find that:

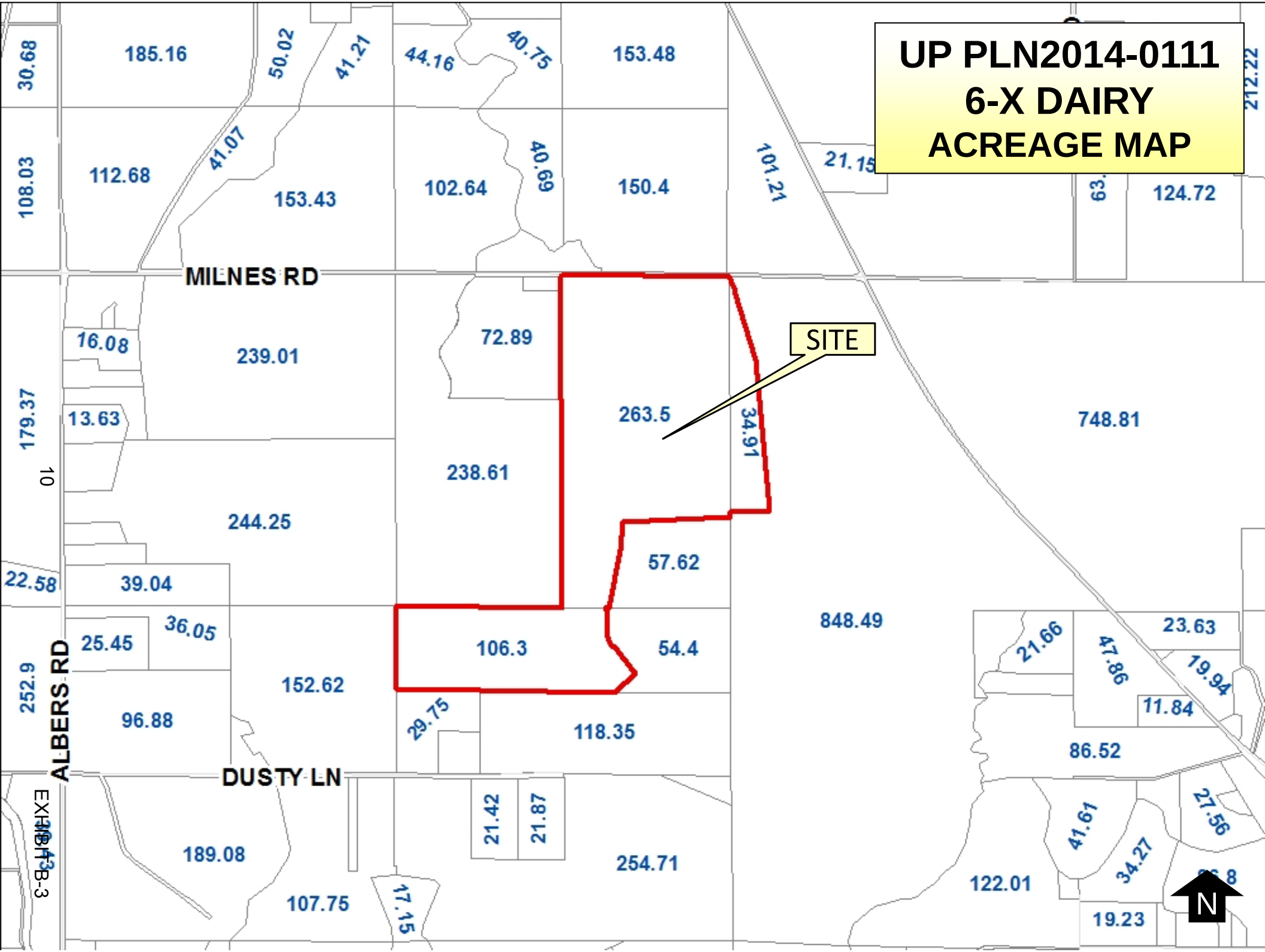
    (a) The establishment, maintenance, and operation of the proposed use or building applied for is consistent with the General Plan designation of "Agriculture" and will not, under the circumstances of the particular case, be detrimental to the health, safety, and general welfare of persons residing or working in the neighborhood of the use and that it will not be detrimental or injurious to property and improvements in the neighborhood or to the general welfare of the County;
    (b) The use will not significantly compromise the long-term productive agricultural capability of the subject contracted parcel or parcels or on other contracted lands in the A-2 zoning district;
    (c) The use will not significantly displace or impair current or reasonably foreseeable agricultural operations on the subject contracted parcel or parcels or on other contracted lands in the A-2 zoning district. Uses that significantly displace agricultural operations on the subject contracted parcel or parcels may be deemed compatible if they relate directly to the production of commercial agricultural products on the subject contracted parcel or parcels or neighboring lands, including activities such as harvesting, processing, or shipping; and
    (d) The use will not result in the significant removal of adjacent contracted land from agricultural or open-space use; and
    (e) The project will increase activities in and around the project area, and increase demands for roads and services, thereby requiring dedication and improvements.

4. Approve Use Permit Application No. PLN2014-0111 – 6-X Dairy, subject to the attached Conditions of Approval.


UP PLN2014-0111
6-X DAIRY
AREA MAP
MILNES RD
SITE
DRY CREEK
OAKDALE WATERFORD HWY
DUSTY LN
LONE OAK RD
SPHERE OF INFLUENCE
EL POMAR AVE
STAR AVE
WATERFORD
YOSEMITE BLVD
TUOLUMNE RIVER
LAKE RD
N
EXHIBIT B


UP PLN2014-0111
6-X DAIRY
GENERAL PLAN MAP
D
OAKDALE WATERFORD HWY
CROW RD
MILNES RD
SITE
AG
8
ALBERS RD
ACCESS
DUSTY LN
EXHIBIT B-1
EL POMAR AVE
STAR AVE
LEGEND
AG: AGRICULTURE
N


UP PLN2014-0111
6-X DAIRY
ZONING MAP
D
OAKDALE WATERFORD HWY
CROW RD
MILNES RD
9
ALBERS RD
A-2-40
DUSTY LN
ACCESS
EXHIBIT B-2
EL POMAR AVE
STAR AVE
LEGEND
A-2-40: GENERAL AGRICULTURE
N


UP PLN2014-0111
6-X DAIRY
ACREAGE MAP
MILNES RD
DUSTY LN
ALBERS RD
SITE
N
30.68
185.16
50.02
41.21
44.16
40.75
153.48
212.22
108.03
112.68
41.07
153.43
102.64
40.69
150.4
101.21
21.15
63.
124.72
16.08
239.01
72.89
263.5
34.91
748.81
179.37
13.63
238.61
10
244.25
57.62
22.58
39.04
848.49
25.45
36.05
106.3
54.4
23.63
21.66
47.86
19.94
252.9
152.62
11.84
96.88
29.75
118.35
86.52
21.42
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34.27
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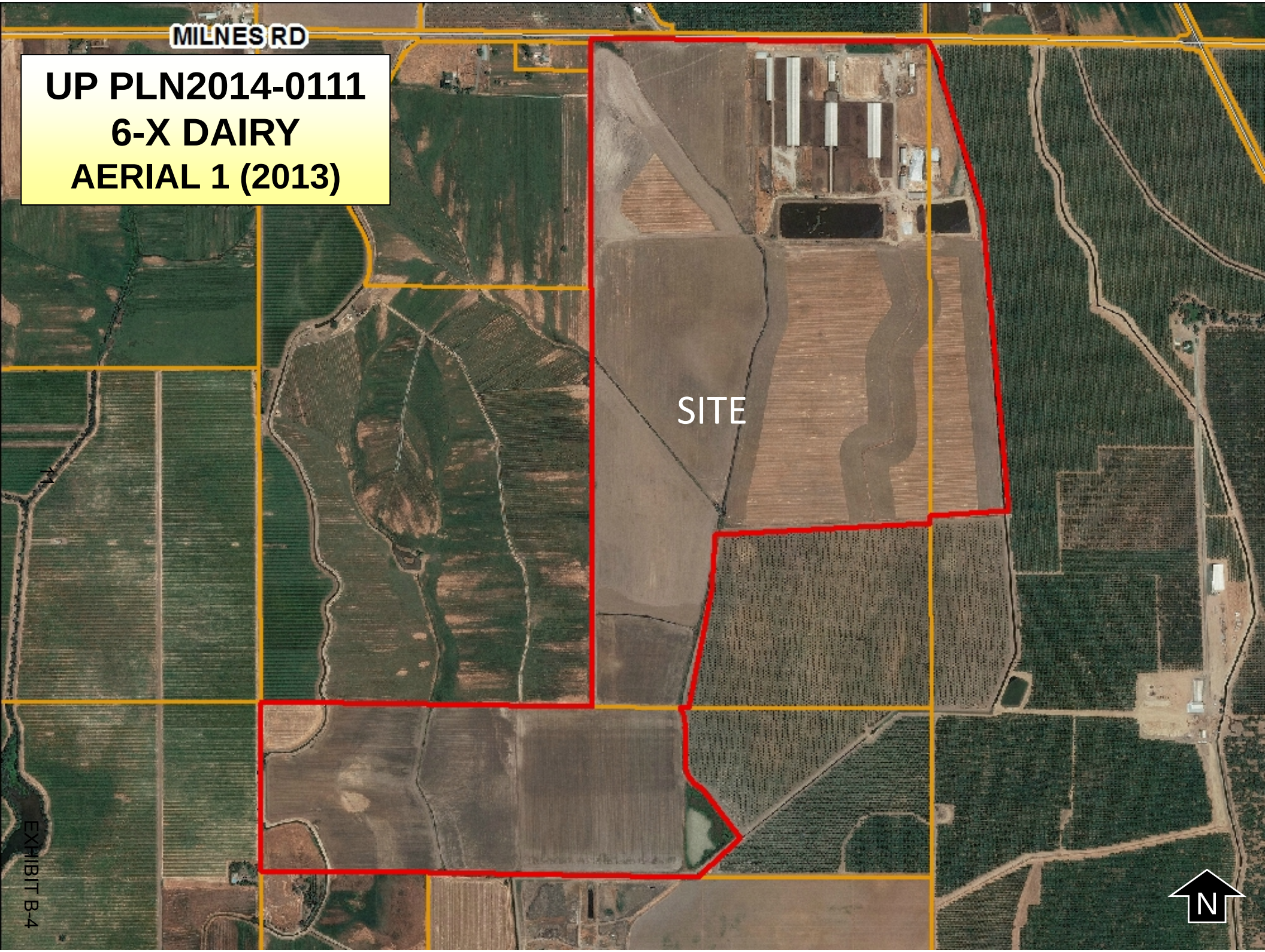
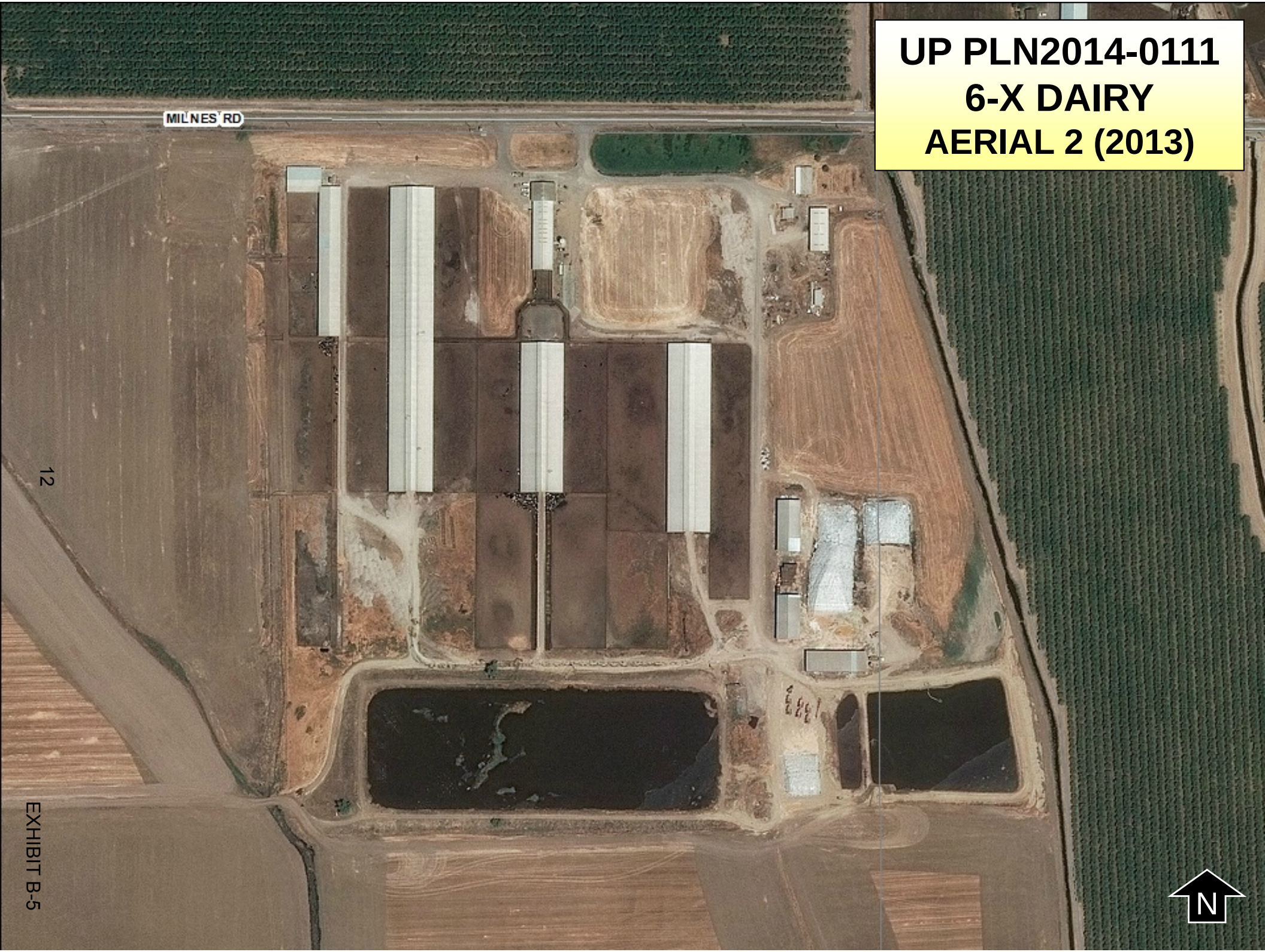
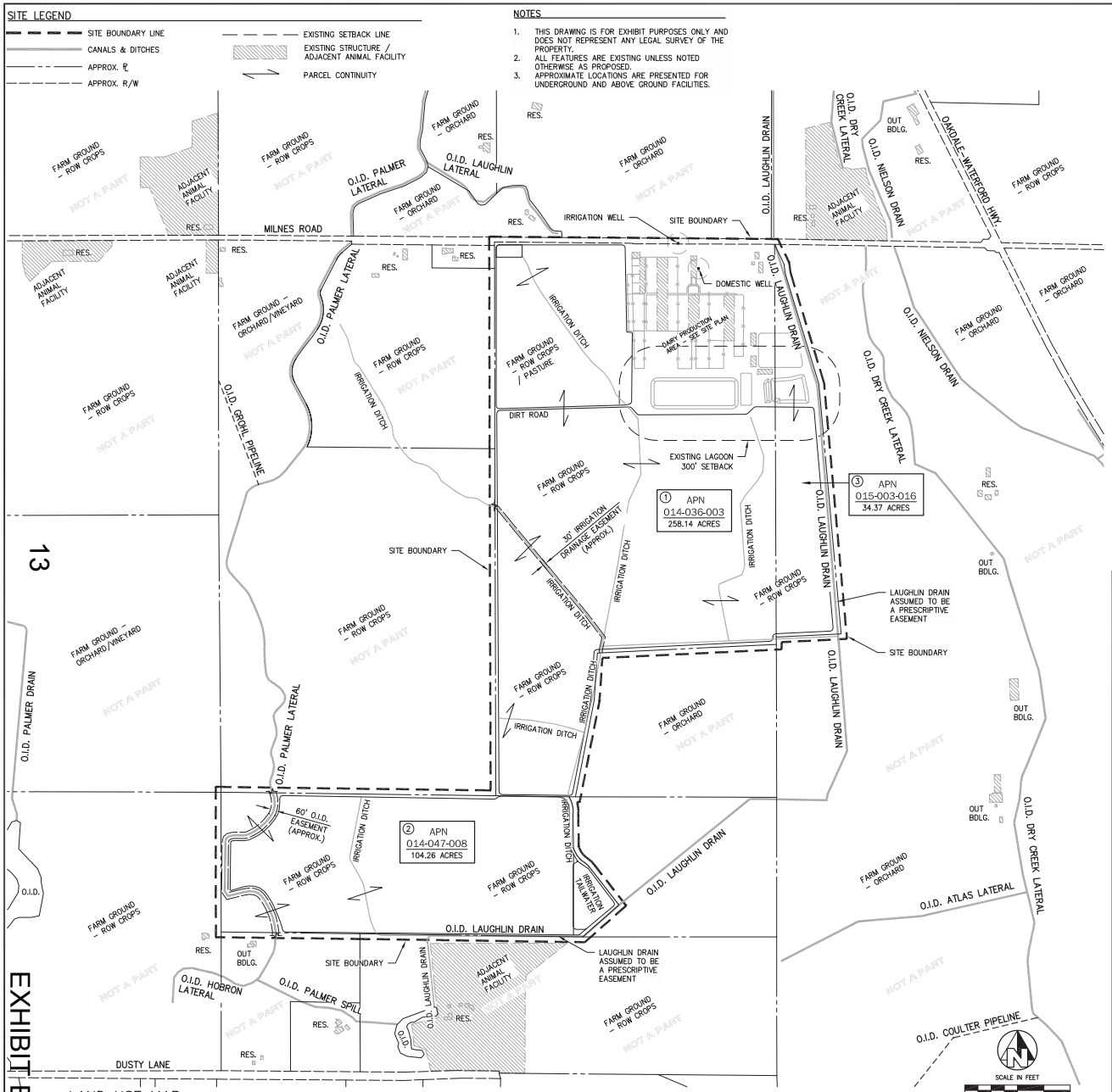
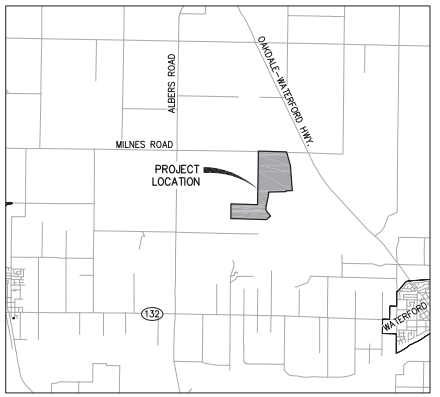
17.15
19.23
EXHIBIT B-3


MILNES RD
UP PLN2014-0111
6-X DAIRY
AERIAL 1 (2013)
SITE
14
EXHIBIT B-4
N


MILNES RD
UP PLN2014-0111
6-X DAIRY
AERIAL 2 (2013)
12
EXHIBIT B-5
N



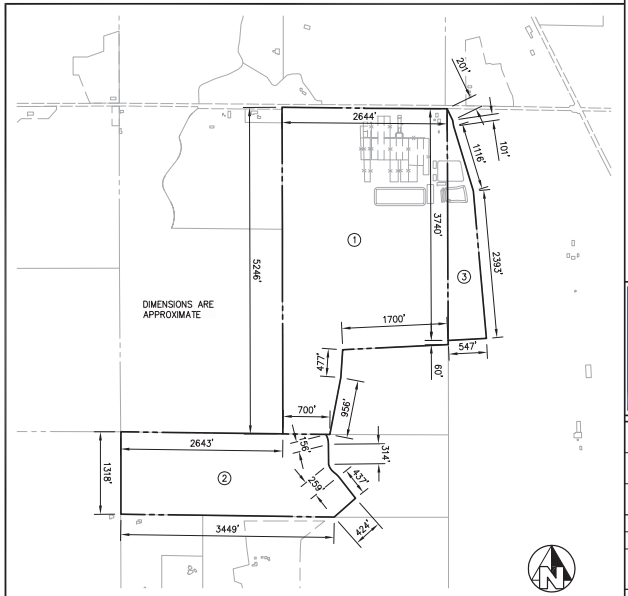
LAND USE MAP



VICINITY MAP
N.T.S.

SITE DATA		
OWNER / OPERATOR:	GARY OSMUNDSON P.O. BOX 12290 OAKDALE, CA 95361	209-595-6858
JURISDICTION:	STANISLAUS COUNTY	
ZONE:	A-2-40	
SITE AREA:	396.77 AC GROSS	
A.P.N.:	SEE LAND USE TABLE	
SITE ADDRESS:	9848 MILNES ROAD MODESTO, CA 95357	
SEISMIC CAT:	D	
WATER:	DOMESTIC WELL	
SEWER:	SEPTIC	
GAS:	LPG	
ELECTRIC:	MID	

SUMMARY OF LAND USE		
#	APN #	GROSS ACRES
1	014-036-003	258.14
2	014-047-008	104.26
3	015-003-016	34.37
TOTAL GROSS ACRES		396.77
DAIRY FACILITY		57
NON FARMABLE ACRES		20
NET FARMABLE ACRES		320



OVERALL PROPERTY DIMENSIONS

NOT FOR CONSTRUCTION
12/11/14

No.	REVISION	BY	DATE

DAIRY PERMITTING
6-X DAIRY
STANISLAUS COUNTY, CALIFORNIA

LAND USE MAP

PROVOST & PRITCHARD
A California Limited Partnership
470 W. 16th Road, Suite 102
Modesto, California 95358
209/529-3212 FAX 209/529-2290
www.ppeng.com

DESIGN ENGINEER: J. TOSTE
LICENSE NO: RCE 77353
DRAFTED BY: DM
CHECKED BY: JT
DATE: 04-28-2014
JOB NO: 232714M1

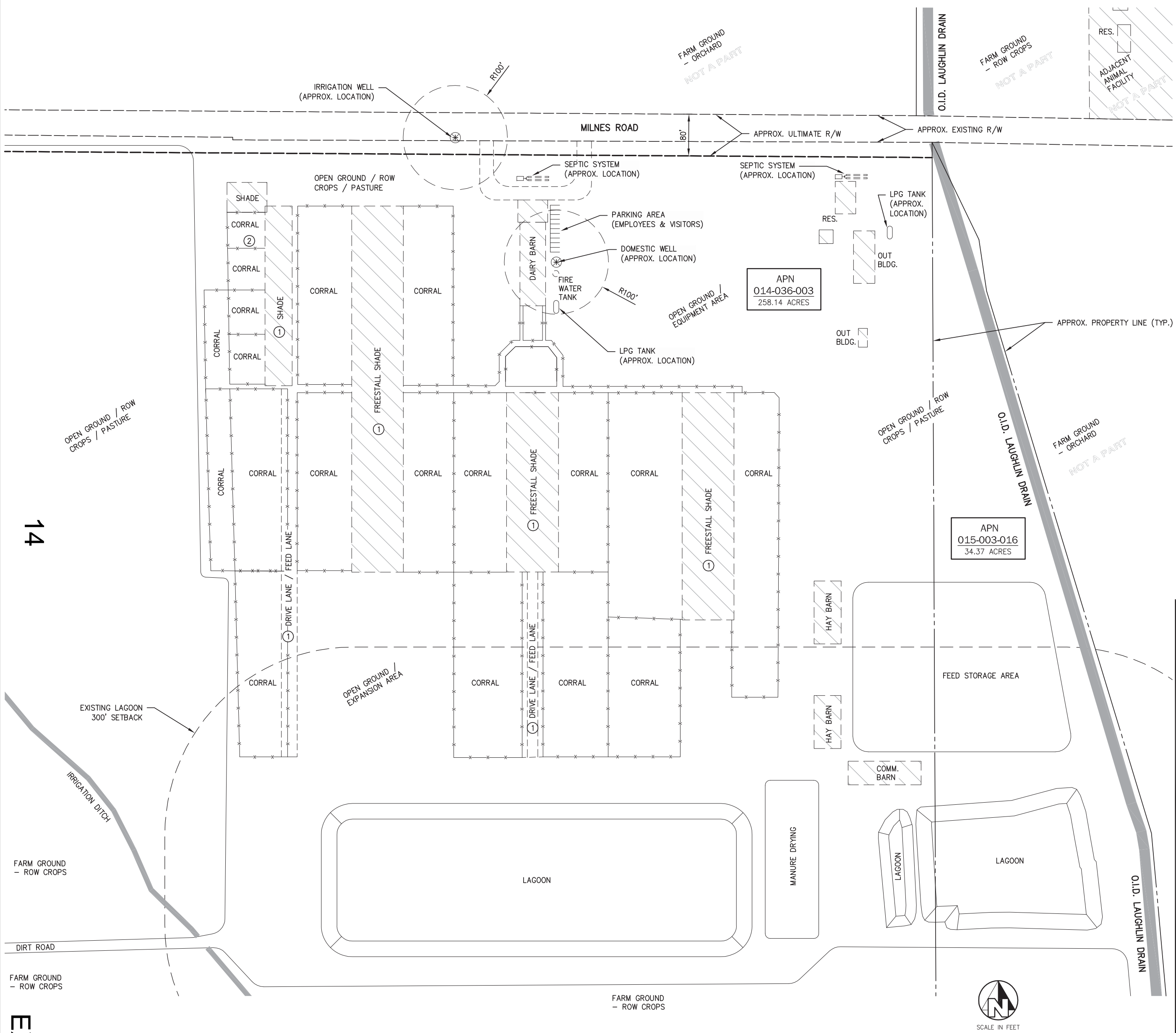
ORIGINAL SCALE SHOWN IS IN INCHES. ADJUST SCALE FOR REDUCED OR ENLARGED PLANS.

SHEET 1 OF 2

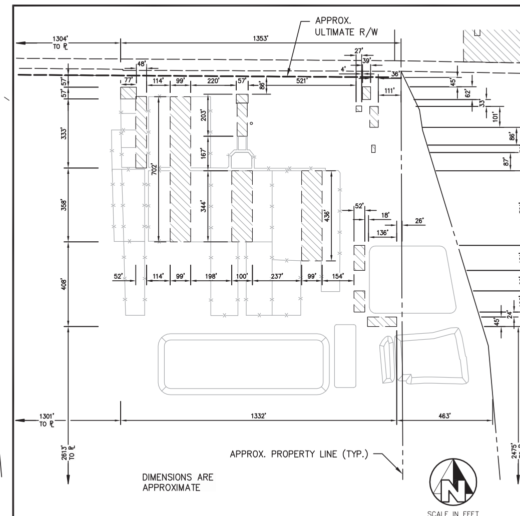
13

EXHIBIT B-6

12/11/2014 4:34 PM K:\Clients\Osmundson Farms-232\232714M1-6-X Dairy-9848 Milnes Rd Modesto\232714M1-Dairy Permitting\DWG\SHEET\1 LAND USE MAP.dwg -- Jason Toste



SITE PLAN – EXISTING DAIRY PRODUCTION AREA



DAIRY PRODUCTION AREA DIMENSIONS

GENERAL NOTES

1. THIS PLAN IS NOT FOR PROPOSED STRUCTURES OR OTHER FACILITIES.
2. NO ADDITIONAL ANIMALS ARE PROPOSED FOR THIS FACILITY PER THIS PLAN.
3. ALL WELLS ON DAIRY SHALL BE LOCATED AT A MINIMUM OF ONE HUNDRED (100) FEET FROM ALL ANIMAL ENCLOSURES AND BE LOCATED AT A MINIMUM OF FIFTY (50) FEET FROM ONE ANOTHER.
4. ALL PARKING AND CIRCULATION AREAS NOT CONCRETE OR ASPHALT CONCRETE PAVED SHALL BE TREATED WITH A DUST PALLIATIVE TO PREVENT THE CREATION OF DUST.
5. HANDICAPPED PARKING SHALL ALSO BE PROVIDED AND SHALL INCORPORATE ACCESSIBLE WALKWAYS AND BUILDING ENTRANCES. THE MINIMUM AMOUNT OF HANDICAPPED PARKING SPACES SHALL BE PREMISED UPON THE FOLLOWING SCALE:
   - *1 HANDICAPPED FOR 1-25 TOTAL SPACES
   - *2 HANDICAPPED FOR 26-50 TOTAL SPACES
   - *3 HANDICAPPED FOR 51-75 TOTAL SPACES
   - *4 HANDICAPPED FOR 76-100 TOTAL SPACES
   - *5 HANDICAPPED FOR 101-150 TOTAL SPACES
   - *6 HANDICAPPED FOR 151-200 TOTAL SPACES

SITE LEGEND

- CANALS & DITCHES
- APPROX. ℄ / R/W
- APPROX. R/W
- EXISTING SETBACK LINE
- EXISTING STRUCTURE / ADJACENT ANIMAL FACILITY
- HERD INDEX LABEL (SEE TABLE)

NOTES

1. THIS DRAWING IS FOR EXHIBIT PURPOSES ONLY AND DOES NOT REPRESENT ANY LEGAL SURVEY OF THE PROPERTY.
2. ALL FEATURES ARE EXISTING UNLESS NOTED OTHERWISE AS PROPOSED.
3. APPROXIMATE LOCATIONS ARE PRESENTED FOR UNDERGROUND AND ABOVE GROUND FACILITIES.

HERD INDEX – EXISTING

#	DESCRIPTION	HOUSING	FLUSH/SCRAPE	ANIMALS
1	MILK COWS / DRY COWS	FREESTALL / EXERCISE PEN / OPEN CORRAL	FLUSH	2280
2	HEIFERS / SUPPORT STOCK	OPEN CORRAL	FLUSH	10
		TOTAL		2,290

NOT FOR CONSTRUCTION 12/11/14

No.	REVISION	BY	DATE

DAIRY PERMITTING
6-X DAIRY
STANISLAUS COUNTY, CALIFORNIA
SITE PLAN

PROVOST & PRITCHARD CONSULTING GROUP
EST. 1968
An Employee Owned Company
4701 SISK ROAD, SUITE 102
MODESTO, CALIFORNIA 95356
209/809-2300 FAX 209/809-2290
www.ppeng.com

DESIGN ENGINEER: J. TOSTE
LICENSE NO: RCE 77353
DRAFTED BY: DM
CHECKED BY: JT
DATE: 04-28-2014
JOB NO: 232714M1
ORIGINAL SCALE SHOWN IS IN INCHES. ADJUST SCALE FOR REDUCED OR ENLARGED PLANS.
SHEET 2 OF 2

EXHIBIT B-7

NOTE: Approval of this application is valid only if the following conditions are met. This permit shall expire unless activated within 18 months of the date of approval. In order to activate the permit, it must be signed by the applicant and one of the following actions must occur: (a) a valid building permit must be obtained to construct the necessary structures and appurtenances; or, (b) the property must be used for the purpose for which the permit is granted. (Stanislaus County Ordinance 21.104.030)

CONDITIONS OF APPROVAL

USE PERMIT APPLICATION NO. PLN2014-0111
6-X DAIRY

Department of Planning and Community Development

1. Use(s) shall be conducted as described in the application and supporting information (including the plot plan) as approved by the Planning Commission and/or Board of Supervisors and in accordance with other laws and ordinances.

2. A the time of filing a "Notice of Determination", within five (5) days of approval of this project by the Planning Commission or Board of Supervisors, the applicant shall submit to the Department of Planning and Community Development a check for **$57.00**, made payable to **Stanislaus County**, for the payment of Clerk Recorder filing fees.

3. The applicant/owner is required to defend, indemnify, or hold harmless the County, its officers, and employees from any claim, action, or proceedings against the County to set aside the approval of the project which is brought within the applicable statute of limitations. The County shall promptly notify the applicant of any claim, action, or proceeding to set aside the approval and shall cooperate fully in the defense.

4. All exterior lighting shall be designed (aimed down and toward the site) to provide adequate illumination without a glare effect. This shall include, but not be limited to, the use of shielded light fixtures to prevent sky glow (light spilling into the night sky) and the installation of shielded fixtures to prevent light trespass (glare and spill light that shines onto neighboring properties).

5. A sign plan for all proposed on-site signs indicating the location, height, area of the sign(s), and message must be approved by the Planning Director or appointed designee(s) prior to installation.

6. The Department of Planning and Community Development shall record a Notice of Administrative Conditions and Restrictions with the County Recorder's Office within 30 days of project approval. The Notice includes: Conditions of Approval/Development Standards and Schedule; any adopted Mitigation Measures; and a project area map.

7. Within six months of project approval, the applicant shall complete Individual Waste Discharge Requirements (WDR) for the project through the Central Valley Regional Water Quality Control Board (CVRWQCB). The applicant and/or property owner shall, at all times, implement and comply with all waste management practices as approved by the Regional Water Quality Control Board (RWQCB); including future modification to Nutrient Management Plan (NMP) and Waste Management Plan (WMP) in accordance with RWQCB review, permitting, and approval.

8. All operating conditions and standards specified in the facilities' Permit to Operate through the San Joaquin Valley Air Pollution District (SJVAPCD) shall be followed.

San Joaquin Valley Air Pollution Control District (SJVAPCD)

9. The proposed project will be subject to District Rule 2010 (Permits Required) and Rule 2201 (New and Modified Stationary Source Review) and will require District permits. Prior to the start of construction the project proponent shall submit to the District an application for an Authority to Construct (ATC). If SJVAPCD determines that an ATC is not required, the applicant shall provide verification in writing to the Stanislaus County Department of Planning and Community Development.

10. The proposed project is subject to all applicable District Rules. These may include the following:

- Regulation VIII (Fugitive PM10 Prohibitions);
- Rule 4102 (Nuisance) – This rule applies to any source operation that emits or may emit air contaminants or other materials. In the event that the project or construction of the project creates a public nuisance, it could be in violation and be subject to District enforcement action;
- Rule 4601 (Architectural Coatings);
- Rule 4641 (Cutback, Slow Cure, and Emulsified Asphalt, Paving and Maintenance Operations);
- Rule 4002 (National Emission Standards for Hazardous Air Pollutants); and
- Rule 4550 (Conservation Management Practices) – The purpose of this rule is to limit fugitive dust emissions from agricultural operation sites. These sites include areas of crop production, animal feeding operations and unpaved roads/equipment areas.

11. If applicable, a Rule 4570 (Confined Animal Facilities) application shall be submitted to the District. District Rule 4570 was adopted by the District's Governing Board on June 15, 2006. Dairies with greater than or equal to 500 milk cows are subject to the requirements of District Rule 4570.

Department of Public Works

12. An encroachment permit shall be taken out for any new driveway or for any work to be done in the Milnes Road right-of-way.

13. Milnes Road is classified as 80-foot Local Roadway. Since the project does not include the building of a new structure and there will not be a significant increase in traffic traveling over County maintained roadways, an Irrevocable Offer of Dedication is not required at this time. If a subsequent permit is submitted, an Irrevocable Offer of Dedication will be required. A subsequent permit will include a building permit for a new structure, a discretionary permit (Staff Approval, Use Permit, or Rezone), or a grading permit. The required ½ width of Milnes Road is 40-feet west of the centerline of the roadway. If 40-feet of the road right-of-way do not exist, then the remaining 40-feet shall be dedicated with an Irrevocable Offer of Dedication for the entire parcel frontage.

14. No parking, loading, or unloading of vehicles will be permitted within the County Road right-of-way.

15. A grading and drainage plan for the project site shall be submitted before any building permit for the site is issued that creates a new or bigger building footprint on this parcel. Public Works will review and approve the drainage calculations. The grading and drainage plan shall include the following information:

    The plan shall contain enough information to verify that all runoff will be kept from going onto adjacent properties and Stanislaus County road right-of-way.

    A. The grading, drainage and erosion/sediment control plan shall comply with the current State of California National Pollutant Discharge Elimination System (NPDES) General Construction Permit.

    B. The grading, drainage, and associated work shall be accepted by Stanislaus County Public Works prior to a final inspection or occupancy, as required by the building permit.

    C. The applicant of the building permit shall pay the current Stanislaus County Public Works weighted labor rate for the plan review of the building and/or grading plan. The applicant of the building permit shall pay the current Stanislaus County Public Works weighted labor rate for all on-site inspections. The Public Works inspector shall be contacted 48 hours prior to the commencement of any grading or drainage work on-site.

Oakdale Irrigation District

16. The Laughlin Drain and Palmer Lateral lay within the project site boundaries. Oakdale Irrigation District (OID) maintains a sixty (60) foot prescriptive right-of-way for both the Laughlin Drain and Palmer Lateral. Any proposed improvements within the limits of the OID right-of-way are subject to OID review and approval.

****

*Please note: If Conditions of Approval/Development Standards are amended by the Planning Commission or Board of Supervisors, such amendments will be noted in the upper right-hand corner of the Conditions of Approval/Development Standards; new wording is in **bold**, and deleted wording will have a ~~line through it.~~*

Stanislaus County
Planning and Community Development
1010 10th Street, Suite 3400
Modesto, California 95354
Phone: (209) 525-6330
Fax: (209) 525-5911

CEQA INITIAL STUDY

Adapted from CEQA Guidelines APPENDIX G Environmental Checklist Form, Final Text, December 30, 2009

1.	**Project title:**	Use Permit Application No. PLN2014-0111 - 6-X Dairy (SCH # 2015012051)
2.	**Lead agency name and address:**	Stanislaus County 1010 10th Street, Suite 3400 Modesto, CA 95354
3.	**Contact person and phone number:**	Javier Camarena, Associate Planner (209) 525-6330
4.	**Project location:**	9848 Milnes Road, on the south side of Milnes Road, east of Albers Road, west of Oakdale-Waterford Highway, north of Dusty Lane, in the Waterford area. (APNs: 014-036-003, 014-047-008 & 015-003-016).
5.	**Project sponsor's name and address:**	Vince A. Furtado 2857 Geer Rd. Turlock, CA 95382
6.	**General Plan designation:**	Agriculture
7.	**Zoning:**	A-2-40 (General Agriculture)

8. Description of project:

Request to add 1,015 milk/dry cows to an existing herd count of 1,265 for a total of 2,280 mature cows on an existing 397± acre dairy facility. There will be an estimated increase of one (1) milk truck per day, two (2) commodity truck trips per day, and one (1) cattle truck trip every two days. Employee trips will increase by three (3) per day.

9.	**Surrounding land uses and setting:**	The project site is surrounded by orchards to the north and east, cropland and livestock operation to the south and cropland to the west with scattered single family dwellings in each direction.
10.	**Other public agencies whose approval is required (e.g., permits, financing approval, or participation agreement.):**	Regional Water Quality Control Board

ENVIRONMENTAL FACTORS POTENTIALLY AFFECTED:
The environmental factors checked below would be potentially affected by this project, involving at least one impact that is a "Potentially Significant Impact" as indicated by the checklist on the following pages.

☐ **Aesthetics**	☐ **Agriculture & Forestry Resources**	☐ **Air Quality**
☐ **Biological Resources**	☐ **Cultural Resources**	☐ **Geology /Soils**
☐ **Greenhouse Gas Emissions**	☐ **Hazards & Hazardous Materials**	☐ **Hydrology / Water Quality**
☐ **Land Use / Planning**	☐ **Mineral Resources**	☐ **Noise**
☐ **Population / Housing**	☐ **Public Services**	☐ **Recreation**
☐ **Transportation/Traffic**	☐ **Utilities / Service Systems**	☐ **Mandatory Findings of Significance**

DETERMINATION: (To be completed by the Lead Agency)
On the basis of this initial evaluation:

☒ **I find that the proposed project COULD NOT have a significant effect on the environment, and a NEGATIVE DECLARATION will be prepared.**

☐ **I find that although the proposed project could have a significant effect on the environment, there will not be a significant effect in this case because revisions in the project have been made by or agreed to by the project proponent. A MITIGATED NEGATIVE DECLARATION will be prepared.**

☐ **I find that the proposed project MAY have a significant effect on the environment, and an ENVIRONMENTAL IMPACT REPORT is required.**

☐ **I find that the proposed project MAY have a "potentially significant impact" or "potentially significant unless mitigated" impact on the environment, but at least one effect 1) has been adequately analyzed in an earlier document pursuant to applicable legal standards, and 2) has been addressed by mitigation measures based on the earlier analysis as described on attached sheets. An ENVIRONMENTAL IMPACT REPORT is required, but it must analyze only the effects that remain to be addressed.**

☐ **I find that although the proposed project could have a significant effect on the environment, because all potentially significant effects (a) have been analyzed adequately in an earlier EIR or NEGATIVE DECLARATION pursuant to applicable standards, and (b) have been avoided or mitigated pursuant to that earlier EIR or NEGATIVE DECLARATION, including revisions or mitigation measures that are imposed upon the proposed project, nothing further is required.**

Javier Camarena, Associate Planner — June 8, 2015
Prepared By — Date:

EVALUATION OF ENVIRONMENTAL IMPACTS:

1) A brief explanation is required for all answers except "No Impact" answers that are adequately supported by the information sources a lead agency cites in the parentheses following each question. A "No Impact" answer is adequately supported if the referenced information sources show that the impact simply does not apply to projects like the one involved (e.g., the project falls outside a fault rupture zone). A "No Impact" answer should be explained where it is based on project-specific factors as well as general standards (e.g., the project will not expose sensitive receptors to pollutants, based on a project-specific screening analysis).

2) All answers must take account of the whole action involved, including off-site as well as on-site, cumulative as well as project-level, indirect as well as direct, and construction as well as operational impacts.

3) Once the lead agency has determined that a particular physical impact may occur, then the checklist answers must indicate whether the impact is potentially significant, less than significant with mitigation, or less than significant. "Potentially Significant Impact" is appropriate if there is substantial evidence that an effect may be significant. If there are one or more "Potentially Significant Impact" entries when the determination is made, an EIR is required.

4) "Negative Declaration: Less Than Significant With Mitigation Incorporated" applies where the incorporation of mitigation measures has reduced an effect from "Potentially Significant Impact" to a "Less Than Significant Impact." The lead agency must describe the mitigation measures, and briefly explain how they reduce the effect to a less than significant level (mitigation measures from Section XVII, "Earlier Analyses," may be cross-referenced).

5) Earlier analyses may be used where, pursuant to the tiering, program EIR, or other CEQA process, an effect has been adequately analyzed in an earlier EIR or negative declaration.

Section 15063(c)(3)(D). In this case, a brief discussion should identify the following:

> **a) Earlier Analysis Used. Identify and state where they are available for review.**
>
> **b) Impacts Adequately Addressed. Identify which effects from the above checklist were within the scope of and adequately analyzed in an earlier document pursuant to applicable legal standards, and state whether such effects were addressed by mitigation measures based on the earlier analysis.**
>
> **c) Mitigation Measures. For effects that are "Less than Significant with Mitigation Measures Incorporated," describe the mitigation measures which were incorporated or refined from the earlier document and the extent to which they address site-specific conditions for the project.**

6) Lead agencies are encouraged to incorporate into the checklist references to information sources for potential impacts (e.g., general plans, zoning ordinances). Reference to a previously prepared or outside document should, where appropriate, include a reference to the page or pages where the statement is substantiated.

7) Supporting Information Sources: A source list should be attached, and other sources used or individuals contacted should be cited in the discussion.

8) This is only a suggested form, and lead agencies are free to use different formats; however, lead agencies should normally address the questions from this checklist that are relevant to a project's environmental effects in whatever format is selected.

9) The explanation of each issue should identify:

> **a) the significant criteria or threshold, if any, used to evaluate each question; and**
>
> **b) the mitigation measure identified, if any, to reduce the impact to less than significant.**

ISSUES

I. AESTHETICS -- Would the project:	**Potentially Significant Impact**	**Less Than Significant With Mitigation Included**	**Less Than Significant Impact**	**No Impact**
a) Have a substantial adverse effect on a scenic vista?			**X**	
b) Substantially damage scenic resources, including, but not limited to, trees, rock outcroppings, and historic buildings within a state scenic highway?			**X**	
c) Substantially degrade the existing visual character or quality of the site and its surroundings?			**X**	
d) Create a new source of substantial light or glare which would adversely affect day or nighttime views in the area?			**X**	
Discussion: The site itself is not considered to be a scenic resource or a unique scenic vista. Community standards generally do not dictate the need or desire for architectural review of agricultural uses. Any development resulting from this project will be consistent with existing area developments.				
Mitigation: None.				
References: Stanislaus County General Plan and Support Documentation[1].				
II. AGRICULTURE AND FOREST RESOURCES: In determining whether impacts to agricultural resources are significant environmental effects, lead agencies may refer to the California Agricultural Land Evaluation and Site Assessment Model (1997) prepared by the California Department of Conservation as an optional model to use in assessing impacts on agriculture and farmland. In determining whether impacts to forest resources, including timberland, are significant environmental effects, lead agencies may refer to information compiled by the California Department of Forestry and Fire Protection regarding the state's inventory of forest land, including the Forest and Range Assessment Project and the Forest Legacy Assessment project; and forest carbon measurement methodology provided in Forest Protocols adopted by the California Air Resources Board. -- Would the project:	**Potentially Significant Impact**	**Less Than Significant With Mitigation Included**	**Less Than Significant Impact**	**No Impact**
a) Convert Prime Farmland, Unique Farmland, or Farmland of Statewide Importance (Farmland), as shown on the maps prepared pursuant to the Farmland Mapping and Monitoring Program of the California Resources Agency, to non-agricultural use?			**X**	
b) Conflict with existing zoning for agricultural use, or a Williamson Act contract?			**X**	
c) Conflict with existing zoning for, or cause rezoning of, forest land (as defined in Public Resources Code section 12220(g)), timberland (as defined by Public Resources Code section 4526), or timberland zoned Timberland Production (as defined by Government Code section 51104(g))?				**X**

d) Result in the loss of forest land or conversion of forest land to non-forest use?				**X**
e) Involve other changes in the existing environment which, due to their location or nature, could result in conversion of Farmland, to non-agricultural use or conversion of forest land to non-forest use?			**X**	

Discussion: The project site is currently enrolled under Williamson Act contract no. 71-180. Surrounding land uses consist of cropland to the west, cropland to the south, almond orchard to the east, almond orchard to the north and scattered single family homes and agricultural buildings in each direction. The project site includes three APNs but the facility is conducted on APN 014-036-003.

The parcel has soils classified mostly as unique farmland with parts designated as farmland of statewide importance, prime farmland, unique farmland and confined animal agriculture by the California Department of Conservation Farmland Mapping and Monitoring Program. The 2007 Stanislaus Soil Survey identifies the following soils within the parcel: Dinuba fine sandy loam, 0 to 1 percent slopes; Hopeton loam, 0-3 percent slopes; MdA Madera sandy loam, 0 to 2 percent slopes; Meikle clay, 0 to 1 percent slopes; Montpellier coarse sandy loam, 0 to 3 percent slopes; Montpellier coarse sandy loam, 3 to 8 percent slopes; Montpellier coarse sandy loam, poorly drained variant, 0 to 1 percent slopes; and Peters clay, 0 to 8 percent slopes.

The project site is currently being used to house 1,265 mature cows and contains 201,992 square feet of buildings, including; corrals, freestall shade buildings, a dairy barn, a mobile home, hay barns and commodity barn. The project does not include any new buildings. The proposed project will add 1,015 milk/dry cows to the existing herd for a total of 2,280 mature cows.

This project will have no impact to forest land or timberland. The project will not conflict with any agricultural activities in the area and/or lands enrolled in the Williamson Act. The project was referred to the Department of Conservation, but a response has not been received to date.

The proposed use is permitted in Stanislaus County; however, the Regional Water Quality Control Board (RWQCB) has determined that Waste Discharge Requirements (WDRs) are required, which requires CEQA compliance. RWQCB has reviewed the applicant's Waste Management Plan and Nutrient Management Plan and has stated the the plans are sufficient.

Mitigation: None.

References: Email dated March 2, 2015, from Daniel Davis with the Regional Water Quality Control Board; Referral Response dated February 12, 2015, from RWQCB; Stanislaus County General Plan and Support Documentation[1].

III. AIR QUALITY -- Where available, the significance criteria established by the applicable air quality management or air pollution control district may be relied upon to make the following determinations. -- Would the project:	**Potentially Significant Impact**	**Less Than Significant With Mitigation Included**	**Less Than Significant Impact**	**No Impact**
a) Conflict with or obstruct implementation of the applicable air quality plan?			**X**	
b) Violate any air quality standard or contribute substantially to an existing or projected air quality violation?			**X**	
c) Result in a cumulatively considerable net increase of any criteria pollutant for which the project region is non-attainment under an applicable federal or state ambient air quality standard (including releasing emissions which exceed quantitative thresholds for ozone precursors)?			**X**	

d) Expose sensitive receptors to substantial pollutant concentrations?			**X**	
e) Create objectionable odors affecting a substantial number of people?			**X**	

Discussion: The project site is within the San Joaquin Valley Air Basin, which has been classified as "severe non-attainment" for ozone and respirable particulate matter (PM-10) as defined by the Federal Clean Air Act. The San Joaquin Valley Air Pollution Control District (SJVAPCD) has been established by the State in an effort to control and minimize air pollution. As such, the District maintains permit authority over stationary sources of pollutants.

The primary source of air pollutants generated by this project would be classified as being generated from "mobile" sources. Mobile sources would generally include dust from roads, farming, and automobile exhausts. Mobile sources are generally regulated by the Air Resources Board of the California EPA which sets emissions for vehicles and acts on issues regarding cleaner burning fuels and alternative fuel technologies. As such, the District has addressed most criteria air pollutants through basin wide programs and policies to prevent cumulative deterioration of air quality within the Basin.

This project has been referred to SJVAPCD. The District has stated that dairies that were constructed before January 1, 2004 (the date agricultural operations became subject to Air District permits) and which have not been modified or expanded since that time are grandfathered into District permits based on the as-built capacity of the dairy at the time they became subject to District permitting requirements. The grandfathering of these operations into permits is considered a ministerial action by the District.

Provided that the dairy as currently built, can house the proposed number of animals, and there has been no construction to increase the capacity at the dairy on or after January 1, 2004, the District does not require an Authorization to Construct (ATC) application for the current herd size in the District permits. Therefore, the District is not requiring any permits if the current permit reflects the dairies as-built capacity as of January 1, 2004.

No new construction is proposed, however, any potential future construction may require an ATC Permit and may be subject to the following District Rules: Regulation VIII, Rule 4102, Rule 4601, Rule 4641, Rule 4002, Rule 4102, Rule 4550, and Rule 4570. Staff will include a condition of approval on the project requiring that the applicant be in compliance with the District's rules and regulations.

Mitigation: None.

References: Email dated March 26, 2015, from the San Joaquin Valley Air Pollution Control District to Vince Furtado (applicant); Referral Response dated February 11, 2015 from the San Joaquin Valley Air Pollution Control District; - Regulation VIII Fugitive Dust/PM-10 Synopsis; Referral Response dated December 15, 2014, from SJVAPCD; Stanislaus County General Plan and Support Documentation[1].

IV. BIOLOGICAL RESOURCES -- Would the project:	**Potentially Significant Impact**	**Less Than Significant With Mitigation Included**	**Less Than Significant Impact**	**No Impact**
a) Have a substantial adverse effect, either directly or through habitat modifications, on any species identified as a candidate, sensitive, or special status species in local or regional plans, policies, or regulations, or by the California Department of Fish and Game or U.S. Fish and Wildlife Service?			**X**	
b) Have a substantial adverse effect on any riparian habitat or other sensitive natural community identified in local or regional plans, policies, regulations or by the California Department of Fish and Game or US Fish and Wildlife Service?			**X**	

c) Have a substantial adverse effect on federally protected wetlands as defined by Section 404 of the Clean Water Act (including, but not limited to, marsh, vernal pool, coastal, etc.) through direct removal, filling, hydrological interruption, or other means?			**X**	
d) Interfere substantially with the movement of any native resident or migratory fish or wildlife species or with established native resident or migratory wildlife corridors, or impede the use of native wildlife nursery sites?			**X**	
e) Conflict with any local policies or ordinances protecting biological resources, such as a tree preservation policy or ordinance?			**X**	
f) Conflict with the provisions of an adopted Habitat Conservation Plan, Natural Community Conservation Plan, or other approved local, regional, or state habitat conservation plan?			**X**	
Discussion: It does not appear this project will result in impacts to endangered species or habitats, locally designated species, or wildlife dispersal or mitigation corridors. According to the California Department of Fish and Wildlife (CDFW) Natural Diversity Database (CNDDB), the project is located within quad number 3712067. The quad includes records of the Swainson's Hawk, Tricolored Blackbird, Burrowing Owl, Steelhead, Valley Elderberry Longhord Beetleand Western Pond Turtle. The CNDDB website does not specify the exact location that these records were taken. The project site is an existing confined animal and crop farming operation. No new construction is being proposed as a part of this project. The project has been referred to the California Department of Fish and Wildlife and no comments have been received.				
Mitigation: None.				
References: Stanislaus County General Plan and Support Documentation[1]; and California Department of Fish and Game California Natural Diversity Database.				

V. CULTURAL RESOURCES -- Would the project:	**Potentially Significant Impact**	**Less Than Significant With Mitigation Included**	**Less Than Significant Impact**	**No Impact**
a) Cause a substantial adverse change in the significance of a historical resource as defined in § 15064.5?			**X**	
b) Cause a substantial adverse change in the significance of an archaeological resource pursuant to § 15064.5?			**X**	
c) Directly or indirectly destroy a unique paleontological resource or site or unique geologic feature?			**X**	
d) Disturb any human remains, including those interred outside of formal cemeteries?			**X**	
Discussion: No new construction is being proposed, therefore it does not appear this project will result in significant impacts to any archaeological or cultural resources; however, it is standard practice to add a condition of approval to the project addressing any discovery of cultural resources during any ground disturbing activities.				
Mitigation: None.				
References: Stanislaus County General Plan and Support Documentation[1].				

VI. GEOLOGY AND SOILS -- Would the project:	Potentially Significant Impact	Less Than Significant With Mitigation Included	Less Than Significant Impact	No Impact
a) Expose people or structures to potential substantial adverse effects, including the risk of loss, injury, or death involving:				
i) Rupture of a known earthquake fault, as delineated on the most recent Alquist-Priolo Earthquake Fault Zoning Map issued by the State Geologist for the area or based on other substantial evidence of a known fault? Refer to Division of Mines and Geology Special Publication 42.				**X**
ii) Strong seismic ground shaking?				**X**
iii) Seismic-related ground failure, including liquefaction?				**X**
iv) Landslides?				**X**
b) Result in substantial soil erosion or the loss of topsoil?			**X**	
c) Be located on a geologic unit or soil that is unstable, or that would become unstable as a result of the project, and potentially result in on- or off-site landslide, lateral spreading, subsidence, liquefaction or collapse?			**X**	
d) Be located on expansive soil creating substantial risks to life or property?			**X**	
e) Have soils incapable of adequately supporting the use of septic tanks or alternative waste water disposal systems where sewers are not available for the disposal of waste water?			**X**	

Discussion: As contained in Chapter Five of the General Plan Support Documentation, the areas of the County subject to significant geologic hazard are located in the Diablo Range, west of Interstate 5; however, as per the California Building Code, all of Stanislaus County is located within a geologic hazard zone (Seismic Design Category D, E, or F) and a soils test may be required as part of the building permit process. Results from the soils test will determine if unstable or expansive soils are present. If such soils are present, special engineering of the structure will be required to compensate for the soil deficiency. Although no structures are being proposed as part of this project, any potential new structures will be required to be designed and built according to building standards appropriate to withstand shaking for the area in which they are constructed. Any earth moving is subject to Public Works Standards and Specifications which consider the potential for erosion and run-off prior to permit approval. Likewise, any addition of a septic tank or alternative waste water disposal system would require the approval of the Department of Environmental Resources (DER)through the building permit process, which also takes soil type into consideration within the specific design requirements.

The Stanislaus County Department of Public Works has provided comments requiring a grading and drainage plan that must meet County standards. These comments will be included as conditions of approval on the project.

Mitigation: None.

References: Referral response dated January 26, 2015, from the Stanislaus County Department of Public Works; California Building Code, Stanislaus County General Plan and Support Documentation - Safety Element[1].

VII. GREENHOUSE GAS EMISSIONS -- Would the project:	Potentially Significant Impact	Less Than Significant With Mitigation Included	Less Than Significant Impact	No Impact
a) Generate greenhouse gas emissions, either directly or indirectly, that may have a significant impact on the environment?			X	
b) Conflict with an applicable plan, policy or regulation adopted for the purpose of reducing the emissions of greenhouse gases?			X	

Discussion: Operations will be required to be in compliance with the SJVAPCD standards for emissions. The Environmental Protection Agency (EPA) has issued a rule mandating that livestock facilities report methane and nitrous oxide emissions if they have manure management systems that emit 25,000 metric tons, or 55.1 million pounds, of carbon dioxide each day. The EPA further estimated that 3,200 mature dairy cows produce the 25,000 metric tons of annual carbon dioxide equivalent that would trigger reporting requirements. The USDA Agricultural Research Service's Northwest Irrigation and Soils Research laboratory, in Kimberly, Idaho, conducted a study on a 10,000 milking cow facility and found that emissions thresholds for 25,000 metric tons of annual carbon dioxide equivalent is actually 4,808 mature cows, based on the dairy it monitored. The proposed project will include a total of 2,280 milk/dry cows. These numbers are well below the EPA and USDA estimates for 25,000 metric tons of annual carbon dioxide.

The project was referred to the SJVAPCD. The District has not indicated any issues related to greenhouse gases. The District has provided conditions of approval related to potential future construction. These conditions of approval will be included on the project.

Mitigation: None.

References: Email dated March 26, 2015 from Ramon Norman with the San Joaquin Valley Air Pollution Control District to Vince Furtado (applicant); Referral Response dated February 11, 2015 from the San Joaquin Valley Air Pollution Control District; - Regulation VIII Fugitive Dust/PM-10 Synopsis; Referral Response dated December 15, 2014, from SJVAPCD; "Piloting Innovative Beef and Dairy GHG Emission Reduction Strategies in U.S. Feedlots and Dairies" www.csrwire.com/press_releases/33079-Innovativ; Michael Marsh, Western United Dairyman; Stanislaus County General Plan and Support Documentation[1].

VIII. HAZARDS AND HAZARDOUS MATERIALS -- Would the project:	Potentially Significant Impact	Less Than Significant With Mitigation Included	Less Than Significant Impact	No Impact
a) Create a significant hazard to the public or the environment through the routine transport, use, or disposal of hazardous materials?			X	
b) Create a significant hazard to the public or the environment through reasonably foreseeable upset and accident conditions involving the release of hazardous materials into the environment?			X	
c) Emit hazardous emissions or handle hazardous or acutely hazardous materials, substances, or waste within one-quarter mile of an existing or proposed school?				X

d) Be located on a site which is included on a list of hazardous materials sites compiled pursuant to Government Code Section 65962.5 and, as a result, would it create a significant hazard to the public or the environment?				**X**
e) For a project located within an airport land use plan or, where such a plan has not been adopted, within two miles of a public airport or public use airport, would the project result in a safety hazard for people residing or working in the project area?				**X**
f) For a project within the vicinity of a private airstrip, would the project result in a safety hazard for people residing or working in the project area?				**X**
g) Impair implementation of or physically interfere with an adopted emergency response plan or emergency evacuation plan?			**X**	
h) Expose people or structures to a significant risk of loss, injury or death involving wildland fires, including where wildlands are adjacent to urbanized areas or where residences are intermixed with wildlands?			**X**	

Discussion: Hazardous materials potentially used on site and are typical on dairy facilities include: pipeline cleaning soap; acid cleaner; iodine; teat dip; refrigerant (R22); formaldehyde and copper sulfate; diesel fuel and gasoline; motor oil hydraulic fluid; brake fluid; and antifreeze. The project was referred to the Stanislaus County Environmental Review Committee (ERC), who responded with "no comments."

Pesticide exposure is a risk in agricultural areas. Sources of exposure include contaminated groundwater which is consumed and drift from spray applications. Application of sprays is strictly controlled by the Agricultural Commissioner and can only be accomplished after first obtaining permits. The County Department of Environmental Resources (DER) is responsible for overseeing hazardous materials in this area.

The Envirostor database was accessed to determine if any of the parcels were listed as potential hazardous waste or superfund sites. None of the parcels included in this application nor any nearby parcels were identified on this list.

Mitigation: None.

References: Referral Response dated February 9, 2015, from the Stanislaus County Environmental Review Committee; State of California Department of Toxic Substances Control (http://www.envirostor.dtsc.ca.gov); Stanislaus County General Plan and Support Documentation[1].

IX. HYDROLOGY AND WATER QUALITY -- Would the project:	**Potentially Significant Impact**	**Less Than Significant With Mitigation Included**	**Less Than Significant Impact**	**No Impact**
a) Violate any water quality standards or waste discharge requirements?			**X**	

b) Substantially deplete groundwater supplies or interfere substantially with groundwater recharge such that there would be a net deficit in aquifer volume or a lowering of the local groundwater table level (e.g., the production rate of pre-existing nearby wells would drop to a level which would not support existing land uses or planned uses for which permits have been granted)?			X	
c) Substantially alter the existing drainage pattern of the site or area, including through the alteration of the course of a stream or river, in a manner which would result in substantial erosion or siltation on- or off-site?				X
d) Substantially alter the existing drainage pattern of the site or area, including through the alteration of the course of a stream or river, or substantially increase the rate or amount of surface runoff in a manner which would result in flooding on- or off-site?				X
e) Create or contribute runoff water which would exceed the capacity of existing or planned stormwater drainage systems or provide substantial additional sources of polluted runoff?			X	
f) Otherwise substantially degrade water quality?			X	
g) Place housing within a 100-year flood hazard area as mapped on a federal Flood Hazard Boundary or Flood Insurance Rate Map or other flood hazard delineation map?				X
h) Place within a 100-year flood hazard area structures which would impede or redirect flood flows?				X
i) Expose people or structures to a significant risk of loss, injury or death involving flooding, including flooding as a result of the failure of a levee or dam?				X
j) Inundation by seiche, tsunami, or mudflow?				X

Discussion: Run-off is not considered an issue because of several factors which limit the potential impact. These factors include a relative flat terrain of the subject site, and relatively low rainfall intensities. Areas subject to flooding have been identified in accordance with the Federal Emergency Management Act. The project site itself is not located within a recognized flood zone and, as such, flooding is not an issue with respect to this project. The Stanislaus County Department of Public Works has reviewed the project and is requiring a grading and drainage plan as part of the project. The requirement will be added as a condition of approval to the project.

As mentioned previously, the RWQCB is responsible for water quality issues related to the project. The project is being circulated for CEQA purposes as RWQCB has determined that Waste Discharge Requirements are required. The applicant has submitted a Waste Management Plan (WMP) and Nutrient Management Plan (NMP) to RWQCB that was deemed complete and acceptable by the RWQCB. The applicant will be required to adhere to the accepted WMP and all RWQCB standards.

Mitigation: None

References: Referral response dated March 2, 2015 from the Regional Water Quality Control Board; Stanislaus County General Plan and Support Documentation[1].

X. LAND USE AND PLANNING -- Would the project:	Potentially Significant Impact	Less Than Significant With Mitigation Included	Less Than Significant Impact	No Impact
a) Physically divide an established community?				**X**
b) Conflict with any applicable land use plan, policy, or regulation of an agency with jurisdiction over the project (including, but not limited to the general plan, specific plan, local coastal program, or zoning ordinance) adopted for the purpose of avoiding or mitigating an environmental effect?				**X**
c) Conflict with any applicable habitat conservation plan or natural community conservation plan?				**X**
Discussion: The project site is designated Agriculture and zoned A-2-40 (General Agriculture). The project will ultimately house 2,280 mature cows which is permitted in the A-2-40 zoning district. However, The RWQCB has determined that the proposed project is subject to CEQA and requires that the applicants obtain a Use Permit in accordance with §21.20.030(F) of the Stanislaus County Zoning Ordinance. CEQA is required in instances where a dairy will be required to obtain individual WDRs as part of an expansion. This project will not conflict with any applicable habitat conservation plan or natural community conservation plan and will not physically divide an established community.				
Mitigation: None.				
References: Stanislaus County General Plan and Support Documentation[1].				

XI. MINERAL RESOURCES -- Would the project:	Potentially Significant Impact	Less Than Significant With Mitigation Included	Less Than Significant Impact	No Impact
a) Result in the loss of availability of a known mineral resource that would be of value to the region and the residents of the state?				**X**
b) Result in the loss of availability of a locally-important mineral resource recovery site delineated on a local general plan, specific plan or other land use plan?				**X**
Discussion: The location of all commercially viable mineral resources in Stanislaus County has been mapped by the State Division of Mines and Geology in Special Report 173. There are no known significant resources on the site.				
Mitigation: None.				
References: Stanislaus County General Plan and Support Documentation[1].				

XII. NOISE -- Would the project result in:	Potentially Significant Impact	Less Than Significant With Mitigation Included	Less Than Significant Impact	No Impact
a) Exposure of persons to or generation of noise levels in excess of standards established in the local general plan or noise ordinance, or applicable standards of other agencies?			**X**	

b) Exposure of persons to or generation of excessive groundborne vibration or groundborne noise levels?				**X**
c) A substantial permanent increase in ambient noise levels in the project vicinity above levels existing without the project?			**X**	
d) A substantial temporary or periodic increase in ambient noise levels in the project vicinity above levels existing without the project?			**X**	
e) For a project located within an airport land use plan or, where such a plan has not been adopted, within two miles of a public airport or public use airport, would the project expose people residing or working in the project area to excessive noise levels?				**X**
f) For a project within the vicinity of a private airstrip, would the project expose people residing or working in the project area to excessive noise levels?				**X**
Discussion: Noise impacts associated with on-site activities and traffic are not anticipated to exceed the normally acceptable level of noise. The project will increase ambient noise levels. Permanent increases may result as the number of animal units is increased on site; however, noise associated with animals in the Agricultural zone is permissible. The nearest sensitive noise receptors are homes on neighboring properties. The nearest dwelling is located approximately 500 feet from the existing dairy facility footprint.				
Mitigation: None.				
References: Stanislaus County Geographical Information Systems; and the Stanislaus County General Plan and Support Documentation[1].				
XIII. POPULATION AND HOUSING -- Would the project:	**Potentially Significant Impact**	**Less Than Significant With Mitigation Included**	**Less Than Significant Impact**	**No Impact**
a) Induce substantial population growth in an area, either directly (for example, by proposing new homes and businesses) or indirectly (for example, through extension of roads or other infrastructure)?				**X**
b) Displace substantial numbers of existing housing, necessitating the construction of replacement housing elsewhere?				**X**
c) Displace substantial numbers of people, necessitating the construction of replacement housing elsewhere?				**X**
Discussion: The proposed use of the site will not create significant service extensions or new infrastructure which could be considered as growth inducing. No housing or persons will be displaced by this project. The increased animals will utilize existing corals and barns. The project site is adjacent to large scale agricultural operations and the nature of the use is considered consistent with the A-2 zoning district.				
Mitigation: None.				
References: Stanislaus County General Plan and Support Documentation[1].				

XIV. PUBLIC SERVICES --	Potentially Significant Impact	Less Than Significant With Mitigation Included	Less Than Significant Impact	No Impact
a) Would the project result in substantial adverse physical impacts associated with the provision of new or physically altered governmental facilities, need for new or physically altered governmental facilities, the construction of which could cause significant environmental impacts, in order to maintain acceptable service ratios, response times or other performance objectives for any of the public services:				
Fire protection?			X	
Police protection?			X	
Schools?				X
Parks?				X
Other public facilities?			X	

Discussion: The County has adopted Public Facilities Fees, as well as one for the Fire Facility Fees on behalf of the appropriate fire district, to address impacts to public services. Such fees are required to be paid at the time of building permit issuance. The project was referred to all public service agencies as well as the Stanislaus County ERC. A referral response was received from the Modesto Irrigation District (MID) requiring that the applicant contact the District if additional electrical service is required. The ERC provided a "no comment" letter. The dairy is not proposing any new structures.

Mitigation: None.

References: Referral response dated February 11, 2015 from Modesto Irrigation District; Referral response from the Stanislaus County Environmental Review Committee dated February 9, 2015; Stanislaus County General Plan and Support Documentation[1].

XV. RECREATION --	Potentially Significant Impact	Less Than Significant With Mitigation Included	Less Than Significant Impact	No Impact
a) Would the project increase the use of existing neighborhood and regional parks or other recreational facilities such that substantial physical deterioration of the facility would occur or be accelerated?				X
b) Does the project include recreational facilities or require the construction or expansion of recreational facilities which might have an adverse physical effect on the environment?				X

Discussion: This project is not anticipated to increase significant demands for recreational facilities as such impacts typically are associated with residential development.

Mitigation: None.

References: Stanislaus County General Plan and Support Documentation[1].

XVI. TRANSPORTATION/TRAFFIC -- Would the project:	Potentially Significant Impact	Less Than Significant With Mitigation Included	Less Than Significant Impact	No Impact
a) Conflict with an applicable plan, ordinance or policy establishing measures of effectiveness for the performance of the circulation system, taking into account all modes of transportation including mass transit and non-motorized travel and relevant components of the circulation system, including but not limited to intersections, streets, highways and freeways, pedestrian and bicycle paths, and mass transit?			X	
b) Conflict with an applicable congestion management program, including, but not limited to level of service standards and travel demand measures, or other standards established by the county congestion management agency for designated roads or highways?			X	
c) Result in a change in air traffic patterns, including either an increase in traffic levels or a change in location that results in substantial safety risks?			X	
d) Substantially increase hazards due to a design feature (e.g., sharp curves or dangerous intersections) or incompatible uses (e.g., farm equipment)?			X	
e) Result in inadequate emergency access?				X
f) Conflict with adopted policies, plans, or programs regarding public transit, bicycle, or pedestrian facilities, or otherwise decrease the performance or safety of such facilities?				X

Discussion: Significant impacts to traffic and transportation were not identified by reviewing agencies. According to the application, a maximum shift is comprised of seven employees. Customer trips will peak at two per day. There will be an estimated increase of one (1) milk truck per day, two (2) commodity truck trips per day, and one (1) cattle truck trip every two days. Employee trips will increase by three (3) per day. The Stanislaus County Department of Public Works is requiring encroachment permits for any new driveways. No right-of-way dedications are required at this time because no new buildings are being proposed. Publics Works has not indicated any significant impacts related to the proposed project.

Mitigation: None.

References: Referreal response from the Stanislaus County Department of Public Works dated January 26, 2015; Stanislaus County General Plan and Support Documentation[1].

XVII. UTILITIES AND SERVICE SYSTEMS -- Would the project:	Potentially Significant Impact	Less Than Significant With Mitigation Included	Less Than Significant Impact	No Impact
a) Exceed wastewater treatment requirements of the applicable Regional Water Quality Control Board?			X	

b) Require or result in the construction of new water or wastewater treatment facilities or expansion of existing facilities, the construction of which could cause significant environmental effects?			**X**	
c) Require or result in the construction of new storm water drainage facilities or expansion of existing facilities, the construction of which could cause significant environmental effects?			**X**	
d) Have sufficient water supplies available to serve the project from existing entitlements and resources, or are new or expanded entitlements needed?			**X**	
e) Result in a determination by the wastewater treatment provider which serves or may serve the project that it has adequate capacity to serve the project's projected demand in addition to the provider's existing commitments?			**X**	
f) Be served by a landfill with sufficient permitted capacity to accommodate the project's solid waste disposal needs?			**X**	
g) Comply with federal, state, and local statutes and regulations related to solid waste?			**X**	
Discussion: The applicant has provided a WMP to RWQCB. The RWQCB has deemed the WMP as sufficient and complete and has not indicated any issues. Impacts to existing utility and service systems are anticipated to be minimal as a result of this project. Staff has not received any referral responses indicating limitations on providing services.				
Mitigation: None.				
References: Stanislaus County General Plan and Support Documentation[1].				
XVIII. MANDATORY FINDINGS OF SIGNIFICANCE --	**Potentially Significant Impact**	**Less Than Significant With Mitigation Included**	**Less Than Significant Impact**	**No Impact**
a) Does the project have the potential to degrade the quality of the environment, substantially reduce the habitat of a fish or wildlife species, cause a fish or wildlife population to drop below self-sustaining levels, threaten to eliminate a plant or animal community, reduce the number or restrict the range of a rare or endangered plant or animal or eliminate important examples of the major periods of California history or prehistory?				**X**
b) Does the project have impacts that are individually limited, but cumulatively considerable? ("Cumulatively considerable" means that the incremental effects of a project are considerable when viewed in connection with the effects of past projects, the effects of other current projects, and the effects of probable future projects)?			**X**	

c) Does the project have environmental effects which will cause substantial adverse effects on human beings, either directly or indirectly?			**X**	

Discussion: Review of this project has not indicated any features which might significantly impact the environmental quality of the site and/or the surrounding area. The RWQCB reviews all dairies for this region. No indications were given by RWQCB that the project would have a cumulative impact or substantial adverse effects on human beings, either directly or indirectly.

[1] Stanislaus County General Plan and Support Documentation adopted in October 1994, as amended. Optional and updated elements of the General Plan and Support Documentation: ***Agricultural Element*** adopted on December 18, 2007; ***Housing Element*** adopted on August 28, 2012; ***Circulation Element*** and ***Noise Element*** adopted on April 18, 2006.

NEGATIVE DECLARATION

NAME OF PROJECT: Use Permit Application No. PLN2014-0111 – 6-X Dairy

LOCATION OF PROJECT: 9848 Milnes Road, on the south side of Milnes Road, east of Albers Road, west of Oakdale-Waterford Highway, north of Dusty Lane, in the Waterford area. APNs 014-036-003, 014-047-008, & 015-003-016

PROJECT DEVELOPERS: Gary Osmundson, 6-X Dairy
P.O. Box 12290
Oakdale, CA 95361

DESCRIPTION OF PROJECT: Request to add 1,015 milk/dry cows to an existing herd count of 1,265 for a total of 2,280 mature cows on an existing 397± acre dairy facility. There will be an estimated increase of one (1) milk truck per day, two (2) commodity truck trips per day, and one (1) cattle truck trip every two days. Employee trips will increase by three (3) per day.

Based upon the Initial Study, dated **June 8, 2015**, the Environmental Coordinator finds as follows:

1. This project does not have the potential to degrade the quality of the environment, nor to curtail the diversity of the environment.

2. This project will not have a detrimental effect upon either short-term or long-term environmental goals.

3. This project will not have impacts which are individually limited but cumulatively considerable.

4. This project will not have environmental impacts which will cause substantial adverse effects upon human beings, either directly or indirectly.

The Initial Study and other environmental documents are available for public review at the Department of Planning and Community Development, 1010 10th Street, Suite 3400, Modesto, California.

Initial Study prepared by: Javier Camarena, Associate Planner

Submit comments to: Stanislaus County
Planning and Community Development Department
1010 10th Street, Suite 3400
Modesto, California 95354

I:\Planning Project Forms\Negative Declaration.wpd

Nutrient Management Plan Report
General Order No. R5-2007-0035, Attachment C
July 1, 2009 deadline

DAIRY FACILITY INFORMATION

A. NAME OF DAIRY OR BUSINESS OPERATING THE DAIRY: 6-X Dairy

Physical address of dairy:

9848 Milnes RD	Modesto	Stanislaus	95357
Number and Street	City	County	Zip Code

Street and nearest cross street (if no address):

Date facility was originally placed in operation: 01/01/1990

Regional Water Quality Control Board Basin Plan designation: San Joaquin River Basin

County Assessor Parcel Number(s) for dairy facility:

0014-0036-0003-0000 0015-0030-0016-0000

B. OPERATOR NAME: Osmundson, Gary Telephone no.: (209) 595-6858 (Landline / Cellular)

P.O. Box 12290	Oakdale	CA	95361
Mailing Address Number and Street	City	State	Zip Code

Operator should receive Regional Board correspondence (check): [X] Yes [ ] No

C. LEGAL OWNER NAME: Van Leeuwen Family Trust, Arlene Stueve, TR. Telephone no.: (806) 584-8472 (Landline / Cellular)

3849 FM 1057	Hereford	TX	79045
Mailing Address Number and Street	City	State	Zip Code

Owner should receive Regional Board correspondence (check): [ ] Yes [X] No

D. CONTACT NAME: Furtado, Vince A Telephone no.: (209) 250-2471 (Landline) (209) 324-4097 (Cellular)

Title: Technical Service Provider

2857 Geer RD, STE A	Turlock	CA	95382
Mailing Address Number and Street	City	State	Zip Code

Nutrient Management Plan Report
General Order No. R5-2007-0035, Attachment C
July 1, 2009 deadline

AVAILABLE NUTRIENTS

A. HERD INFORMATION

The milk cow dairy is currently regulated under individual Waste Discharge Requirements.

Total number of milk and dry cows combined as a baseline value in response to the Report of Waste Discharge (ROWD) request of October, 2005:

2,280 *milk and dry cows combined (regulatory review is required for any expansion)*

	Milk Cows	Dry Cows	Bred Heifers (15-24 mo.)	Heifers (7-14 mo. to breeding)	Calves (4-6 mo.)	Calves (0-3 mo.)
Present count	1,980	300	10	0	0	0
Maximum count	1,980	300	10	0	0	0
Avg live weight (lbs)	1,400	1,450	900	0		
Daily hours on flush	14	6	6	0	0	0

Predominant milk cow breed: Other

Average milk production: 68 *pounds per cow per day*

B. IRRIGATION SOURCES

Irrigation Source Name	Type	Nitrogen (mg/L)	Phosphorus (mg/L)	Potassium (mg/L)	Discharge Rate
Oakdale Irrigation District	Surface water (canal, river)	0.01			2,500 *gpm*

C. NUTRIENT IMPORTS

Nutrient Type/Name	Quantity	Moisture	Nitrogen	Phosphorus (as P2O5)	Potassium (as K2O)
UN32	22.17 *ton*	0.1%	32.000%	0.000%	0.000%
Starter 4-0-0	41.20 *ton*	0.1%	4.000%	0.000%	0.000%
Starter 4-10-10	7.40 *ton*	0.1%	4.000%	10.000%	10.000%
In Season 8-4-12	18.00 *ton*	0.1%	8.000%	4.000%	12.000%

Total nitrogen imported: 20,935.84 *lbs*

Total phosphorus imported: 1,274.76 *lbs*

Total potassium imported: 4,809.19 *lbs*

D. NUTRIENT EXPORTS

Nutrient Type/Name	Quantity	Moisture	Nitrogen	Phosphorus (as P2O5)	Potassium (as K2O)
Settling Basin Solids	2,000.00 *ton*	75.0%	3.000%	1.460%	1.280%
Corral Solids	9,500.00 *ton*	30.0%	2.500%	1.550%	2.850%

Total nitrogen exported: 362,500.00 *lbs*

Total phosphorus exported: 96,467.75 *lbs*

Total potassium exported: 325,235.50 *lbs*

E. STORAGE PERIOD

Storage period is the maximum period of time anticipated between land application of process wastewater (from storage ponds/lagoons) to croplands. A qualified agronomist and civil engineer should collaborate and collectively consider predominant soil types, soil infiltration rates, maximum depth, available water, field capacity, permanent wilting point, allowable depletion, crop water use, evapotranspiration, precipitation, irrigation system capacity, water delivery constraints, crop nutrient requirements, soil nutrient adsorbtion/desorption, rooting depth, nutrient accumulation/availability for current and future crop needs, facility wide process wastewater storage capacity and other factors as deemed necessary across all croplands where process wastewater is applied in selecting a storage period. In many cases conflicts will arise between crop water demands, crop nutrient demands and insufficient process wastewater storage capacity. Process wastewater may not be the best choice as a source of either water and/or nutrients to meet crop demands throughout the year. Groundwater and surface water vulnerability has been considered.

The storage period selected in this Nutrient Management Plan is consistent with the storage period selected in the Waste Management Plan.

Storage period: 120 *days*

APPLICATION AREA

A. ASSESSOR PARCEL NUMBER: 0014-0036-0003-0000
Legal owner of parcel: Owned by Dairy

ASSESSOR PARCEL NUMBER: 0014-0047-0008-0000
Legal owner of parcel: Owned by Dairy

ASSESSOR PARCEL NUMBER: 0015-0003-0016-0000
Legal owner of parcel: Owned by Dairy

B. FIELD NAME: Field 1

Cropable acres: 39

Predominant soil type: Sandy loam

Do irrigation system head-to-head flow conditions exist on the field? [ ] Yes [X] No

Can fresh water for irrigation purposes be delived to the field year round? [ ] Yes [X] No

Can process wastewater be delivered to the field at agronomic rates and times? [X] Yes [ ] No

Tailwater management method: Returned to top of field

Crops grown and rotation:

Crop Type	Plant Date	Harvest Date	Acres Planted
Forage Mix	Late October	Middle April	39
Corn, silage	Middle May	Middle September	39

FIELD NAME: Field 10

Cropable acres: 30

Predominant soil type: Loam

Do irrigation system head-to-head flow conditions exist on the field? [ ] Yes [X] No

Can fresh water for irrigation purposes be delived to the field year round? [ ] Yes [X] No

Can process wastewater be delivered to the field at agronomic rates and times? [X] Yes [ ] No

Tailwater management method: Tailwater Pond

Crops grown and rotation:

Crop Type	Plant Date	Harvest Date	Acres Planted
Corn, silage	Middle March	Middle July	30
Sudangrass, silage	Late July	Early October	30

FIELD NAME: Field 11

Cropable acres: 7

Predominant soil type: Loam

Do irrigation system head-to-head flow conditions exist on the field? [ ] Yes [X] No

Can fresh water for irrigation purposes be delived to the field year round? [ ] Yes [X] No

Can process wastewater be delivered to the field at agronomic rates and times? [ ] Yes [X] No

Tailwater management method: Discharged to surface water (drainage ditch, creek, etc.)

Crops grown and rotation:

Crop Type	Plant Date	Harvest Date	Acres Planted
Forage Mix	Late October	Middle April	7

FIELD NAME: Field 12

Cropable acres: 7

Predominant soil type: Loam

Do irrigation system head-to-head flow conditions exist on the field? [ ] Yes [X] No

Can fresh water for irrigation purposes be delived to the field year round? [ ] Yes [X] No

Can process wastewater be delivered to the field at agronomic rates and times? [ ] Yes [X] No

Tailwater management method: Discharged to surface water (drainage ditch, creek, etc.)

Crops grown and rotation:

Crop Type	Plant Date	Harvest Date	Acres Planted
Forage Mix	Late October	Middle April	7

FIELD NAME: Field 2

Cropable acres: 56

Predominant soil type: Sandy loam

Do irrigation system head-to-head flow conditions exist on the field? [ ] Yes [X] No

Can fresh water for irrigation purposes be delived to the field year round? [ ] Yes [X] No

Can process wastewater be delivered to the field at agronomic rates and times? [X] Yes [ ] No

Tailwater management method: Tailwater Pond

Crops grown and rotation:

Crop Type	Plant Date	Harvest Date	Acres Planted
Forage Mix	Late October	Middle April	56
Corn, silage	Middle May	Middle September	56

FIELD NAME: Field 3

Cropable acres: 12

Predominant soil type: Sandy loam

Do irrigation system head-to-head flow conditions exist on the field? [ ] Yes [X] No

Can fresh water for irrigation purposes be delived to the field year round? [ ] Yes [X] No

Can process wastewater be delivered to the field at agronomic rates and times? [X] Yes [ ] No

Tailwater management method: Tailwater Pond

Crops grown and rotation:

Crop Type	Plant Date	Harvest Date	Acres Planted
Corn, silage	Middle March	Middle July	12
Sudangrass, silage	Late July	Early October	12

FIELD NAME: Field 4

Cropable acres: 22

Predominant soil type: Sandy loam

Do irrigation system head-to-head flow conditions exist on the field? [ ] Yes [X] No

Can fresh water for irrigation purposes be delived to the field year round? [ ] Yes [X] No

Can process wastewater be delivered to the field at agronomic rates and times? [X] Yes [ ] No

Tailwater management method: Tailwater Pond

Crops grown and rotation:

Crop Type	Plant Date	Harvest Date	Acres Planted
Corn, silage	Middle March	Middle July	22
Corn, silage	Late July	Late October	22

FIELD NAME: Field 5

Cropable acres: 44

Predominant soil type: Sandy loam

Do irrigation system head-to-head flow conditions exist on the field? [ ] Yes [X] No

Can fresh water for irrigation purposes be delived to the field year round? [ ] Yes [X] No

Can process wastewater be delivered to the field at agronomic rates and times? [X] Yes [ ] No

Tailwater management method: Tailwater Pond

Crops grown and rotation:

Crop Type	Plant Date	Harvest Date	Acres Planted
Forage Mix	Late October	Middle April	44
Corn, silage	Middle May	Middle September	44

FIELD NAME: Field 6

Cropable acres: 30

Predominant soil type: Loam

Do irrigation system head-to-head flow conditions exist on the field? [ ] Yes [X] No

Can fresh water for irrigation purposes be delived to the field year round? [ ] Yes [X] No

Can process wastewater be delivered to the field at agronomic rates and times? [X] Yes [ ] No

Tailwater management method: Tailwater Pond

Crops grown and rotation:

Crop Type	Plant Date	Harvest Date	Acres Planted
Forage Mix	Late October	Middle April	30
Corn, silage	Middle May	Middle September	30

FIELD NAME: Field 7

Cropable acres: 10

Predominant soil type: Sandy loam

Do irrigation system head-to-head flow conditions exist on the field? [ ] Yes [X] No

Can fresh water for irrigation purposes be delived to the field year round? [ ] Yes [X] No

Can process wastewater be delivered to the field at agronomic rates and times? [X] Yes [ ] No

Tailwater management method: Tailwater Pond

Crops grown and rotation:

Crop Type	Plant Date	Harvest Date	Acres Planted
Corn, silage	Middle March	Middle July	10
Corn, silage	Late July	Late October	10

FIELD NAME: Field 8

Cropable acres: 37

Predominant soil type: Clay

Do irrigation system head-to-head flow conditions exist on the field? [ ] Yes [X] No

Can fresh water for irrigation purposes be delived to the field year round? [ ] Yes [X] No

Can process wastewater be delivered to the field at agronomic rates and times? [X] Yes [ ] No

Tailwater management method: Tailwater Pond

Crops grown and rotation:

Crop Type	Plant Date	Harvest Date	Acres Planted
Corn, silage	Middle March	Middle July	37
Corn, silage	Late July	Late October	37

FIELD NAME: Field 9

Cropable acres: 22

Predominant soil type: Clay

Do irrigation system head-to-head flow conditions exist on the field? [ ] Yes [X] No

Can fresh water for irrigation purposes be delived to the field year round? [ ] Yes [X] No

Can process wastewater be delivered to the field at agronomic rates and times? [X] Yes [ ] No

Tailwater management method: Tailwater Pond

Crops grown and rotation:

Crop Type	Plant Date	Harvest Date	Acres Planted
Forage Mix	Late October	Middle April	22
Corn, silage	Middle May	Middle September	22

C. LAND APPLICATION AREA FIELDS AND PARCELS

Field name	Cropable acres	Total harvests	Parcel number
Field 1	39	2	0014-0036-00030000 0015-0003-00160000
Field 10	30	2	0014-0047-00080000
Field 11	7	1	0014-0047-00080000
Field 12	7	1	0014-0047-00080000
Field 2	56	2	0014-0036-00030000
Field 3	12	2	0014-0036-00030000
Field 4	22	2	0014-0036-00030000
Field 5	44	2	0014-0036-00030000
Field 6	30	2	0014-0036-00030000
Field 7	10	2	0014-0036-00030000
Field 8	37	2	0014-0047-00080000
Field 9	22	2	0014-0047-00080000
Land application area totals	355	24	

NUTRIENT BUDGET

A. NUTRIENT BUDGET FOR CROP: Field 1 / Other

Activity / Event	# of Events	N (lbs/acre) % avail.	P (lbs/acre) % avail.	K (lbs/acre) % avail.	Total N (lbs/acre)
Non-irrigation liquid nutrient application *Nutrient source:* Retention pond (lagoon) *Application method:* Towed tank	1	215.0 60%	27.0 80%	301.0 80%	215.0

	Total N (lbs/acre)	Total P (lbs/acre)	Total K (lbs/acre)
Irrigation sources	0.0	0.0	0.0
Existing soil nutrient content	0.0	0.0	0.0
Plowdown credit	0.0	0.0	0.0
Commercial fertilizer	0.0	0.0	0.0
Dry manure	0.0	0.0	0.0
Liquid manure	215.0	27.0	301.0
Other	0.0	0.0	0.0
Atmospheric deposition	7.0		
Nutrients applied	222.0	27.0	301.0
Potential crop nutrient removal	160.0	25.6	132.8
Nutrient balance	62.0	1.4	168.2
Applied to removal ratio	1.39	1.05	2.27

Fresh water applied: 0.00 *feet* Total harvests: 1

NUTRIENT BUDGET FOR CROP: Field 1 / Corn, silage

Activity / Event	# of Events	N (lbs/acre) % avail.	P (lbs/acre) % avail.	K (lbs/acre) % avail.	Total N (lbs/acre)
Non-irrigation liquid nutrient application *Nutrient source:* Retention pond (lagoon) *Application method:* Towed tank	1	270.0 60%	44.0 80%	186.0 80%	270.0
In season fertilizer sidedress 1 *Nutrient source:* Commercial fertilizer *Application method:* Sidedress	1	35.0 100%	0.0 90%	0.0 90%	35.0
Pre-irrigation prior to planting (no fertilizer) *Nutrient source:* Water only *Application method:* Surface	1	0.0 0%	0.0 0%	0.0 0%	0.0

Irrigation Source	N (lbs/acre)	P (lbs/acre)	K (lbs/acre)	Runtime (hrs)
Oakdale Irrigation District	0.0	0.0	0.0	35.0
	0.0	0.0	0.0	

NUTRIENT BUDGET FOR CROP (CONTINUED): Field 1 / Corn, silage

Activity / Event	# of Events	N (lbs/acre) % avail.	P (lbs/acre) % avail.	K (lbs/acre) % avail.	Total N (lbs/acre)
In season irrigation (no fertilizer) *Nutrient source:* Water only *Application method:* Surface	6	0.0 0%	0.0 0%	0.0 0%	0.1

Irrigation Source	N (lbs/acre)	P (lbs/acre)	K (lbs/acre)	Runtime (hrs)
Oakdale Irrigation District	0.0	0.0	0.0	32.0
	0.0	0.0	0.0	

	Total N (lbs/acre)	Total P (lbs/acre)	Total K (lbs/acre)
Irrigation sources	0.1	0.0	0.0
Existing soil nutrient content	0.0	0.0	0.0
Plowdown credit	0.0	0.0	0.0
Commercial fertilizer	35.0	0.0	0.0
Dry manure	0.0	0.0	0.0
Liquid manure	270.0	44.0	186.0
Other	0.0	0.0	0.0
Atmospheric deposition	7.0		
Nutrients applied	312.1	44.0	186.0
Potential crop nutrient removal	224.0	42.0	184.8
Nutrient balance	88.1	2.0	1.2
Applied to removal ratio	1.39	1.05	1.01

Fresh water applied: 2.68 *feet* Total harvests: 1

NUTRIENT BUDGET FOR CROP: Field 10 / Corn, silage

Activity / Event	# of Events	N (lbs/acre) % avail.	P (lbs/acre) % avail.	K (lbs/acre) % avail.	Total N (lbs/acre)
Non-irrigation liquid nutrient application *Nutrient source:* Retention pond (lagoon) *Application method:* Towed tank	1	215.0 60%	40.0 80%	290.0 80%	215.0
Starter fertilizer at planting *Nutrient source:* Commercial fertilizer *Application method:* Banding	1	16.0 100%	32.0 100%	32.0 100%	16.0
In season fertilizer sidedress 1 *Nutrient source:* Commercial fertilizer *Application method:* Sidedress	1	70.0 100%	0.0 0%	0.0 0%	70.0

NUTRIENT BUDGET FOR CROP (CONTINUED): Field 10 / Corn, silage

Activity / Event	# of Events	N (lbs/acre) % avail.	P (lbs/acre) % avail.	K (lbs/acre) % avail.	Total N (lbs/acre)
In season irrigation (no fertilizer) *Nutrient source:* Water only *Application method:* Surface	7	0.0 0%	0.0 0%	0.0 0%	0.1

Irrigation Source	N (lbs/acre)	P (lbs/acre)	K (lbs/acre)	Runtime (hrs)
Oakdale Irrigation District	0.0	0.0	0.0	28.0
	0.0	0.0	0.0	

	Total N (lbs/acre)	Total P (lbs/acre)	Total K (lbs/acre)
Irrigation sources	0.1	0.0	0.0
Existing soil nutrient content	0.0	0.0	0.0
Plowdown credit	0.0	0.0	0.0
Commercial fertilizer	86.0	32.0	32.0
Dry manure	0.0	0.0	0.0
Liquid manure	215.0	40.0	290.0
Other	0.0	0.0	0.0
Atmospheric deposition	7.0		
Nutrients applied	308.1	72.0	322.0
Potential crop nutrient removal	224.0	42.0	184.8
Nutrient balance	84.1	30.0	137.2
Applied to removal ratio	1.38	1.71	1.74

Fresh water applied: 3.01 *feet* Total harvests: 1

NUTRIENT BUDGET FOR CROP: Field 10 / Sudangrass, silage

Activity / Event	# of Events	N (lbs/acre) % avail.	P (lbs/acre) % avail.	K (lbs/acre) % avail.	Total N (lbs/acre)
In season irrigation (no fertilizer) *Nutrient source:* Water only *Application method:* Surface	1	0.0 0%	0.0 0%	0.0 0%	0.0

Irrigation Source	N (lbs/acre)	P (lbs/acre)	K (lbs/acre)	Runtime (hrs)
Oakdale Irrigation District	0.0	0.0	0.0	24.0
	0.0	0.0	0.0	

Activity / Event	# of Events	N (lbs/acre) % avail.	P (lbs/acre) % avail.	K (lbs/acre) % avail.	Total N (lbs/acre)
In season irrigation (with fertilizer) *Nutrient source:* Commercial fertilizer *Application method:* Pipeline	1	96.0 100%	48.0 100%	144.0 100%	96.0

Irrigation Source	N (lbs/acre)	P (lbs/acre)	K (lbs/acre)	Runtime (hrs)
Oakdale Irrigation District	0.0	0.0	0.0	24.0
	0.0	0.0	0.0	

NUTRIENT BUDGET FOR CROP (CONTINUED): Field 10 / Sudangrass, silage

Activity / Event	# of Events	N (lbs/acre) % avail.	P (lbs/acre) % avail.	K (lbs/acre) % avail.	Total N (lbs/acre)
In season irrigation (with fertilizer) *Nutrient source:* Commercial fertilizer *Application method:* Pipeline	1	70.0 100%	0.0 0%	0.0 0%	70.0

Irrigation Source	N (lbs/acre)	P (lbs/acre)	K (lbs/acre)	Runtime (hrs)
Oakdale Irrigation District	0.0	0.0	0.0	24.0
	0.0	0.0	0.0	

	Total N (lbs/acre)	Total P (lbs/acre)	Total K (lbs/acre)
Irrigation sources	0.0	0.0	0.0
Existing soil nutrient content	0.0	0.0	0.0
Plowdown credit	0.0	0.0	0.0
Commercial fertilizer	166.0	48.0	144.0
Dry manure	0.0	0.0	0.0
Liquid manure	0.0	0.0	0.0
Other	0.0	0.0	0.0
Atmospheric deposition	7.0		
Nutrients applied	173.0	48.0	144.0
Potential crop nutrient removal	154.0	23.8	168.0
Nutrient balance	19.0	24.2	-24.0
Applied to removal ratio	1.12	2.02	0.86

Fresh water applied: 1.10 *feet* Total harvests: 1

NUTRIENT BUDGET FOR CROP: Field 11 / Other

Activity / Event	# of Events	N (lbs/acre) % avail.	P (lbs/acre) % avail.	K (lbs/acre) % avail.	Total N (lbs/acre)
Non-irrigation liquid nutrient application *Nutrient source:* Retention pond (lagoon) *Application method:* Towed tank	1	180.0 60%	24.0 80%	118.0 80%	180.0

	Total N (lbs/acre)	Total P (lbs/acre)	Total K (lbs/acre)
Irrigation sources	0.0	0.0	0.0

Existing soil nutrient content	0.0	0.0	0.0
Plowdown credit	0.0	0.0	0.0
Commercial fertilizer	0.0	0.0	0.0
Dry manure	0.0	0.0	0.0
Liquid manure	180.0	24.0	118.0
Other	0.0	0.0	0.0
Atmospheric deposition	14.0		
Nutrients applied	194.0	24.0	118.0
Potential crop nutrient removal	140.0	22.4	116.2
Nutrient balance	54.0	1.6	1.8
Applied to removal ratio	1.39	1.07	1.02

Fresh water applied: 0.00 *feet* Total harvests: 1

NUTRIENT BUDGET FOR CROP: Field 12 / Other

Activity / Event	# of Events	N (lbs/acre) % avail.	P (lbs/acre) % avail.	K (lbs/acre) % avail.	Total N (lbs/acre)
Non-irrigation liquid nutrient application	1	180.0	24.0	118.0	180.0
Nutrient source: Retention pond (lagoon)		60%	80%	80%	
Application method: Towed tank					

	Total N (lbs/acre)	Total P (lbs/acre)	Total K (lbs/acre)
Irrigation sources	0.0	0.0	0.0
Existing soil nutrient content	0.0	0.0	0.0
Plowdown credit	0.0	0.0	0.0
Commercial fertilizer	0.0	0.0	0.0
Dry manure	0.0	0.0	0.0
Liquid manure	180.0	24.0	118.0
Other	0.0	0.0	0.0
Atmospheric deposition	14.0		
Nutrients applied	194.0	24.0	118.0
Potential crop nutrient removal	140.0	22.4	116.2
Nutrient balance	54.0	1.6	1.8
Applied to removal ratio	1.39	1.07	1.02

Fresh water applied: 0.00 *feet* Total harvests: 1

NUTRIENT BUDGET FOR CROP: Field 2 / Other

Activity / Event	# of Events	N (lbs/acre) % avail.	P (lbs/acre) % avail.	K (lbs/acre) % avail.	Total N (lbs/acre)

NUTRIENT BUDGET FOR CROP (CONTINUED): Field 2 / Other

Activity / Event	# of Events	N (lbs/acre) % avail.	P (lbs/acre) % avail.	K (lbs/acre) % avail.	Total N (lbs/acre)
Non-irrigation liquid nutrient application *Nutrient source:* Retention pond (lagoon) *Application method:* Towed tank	1	215.0 60%	27.0 80%	301.0 80%	215.0

	Total N (lbs/acre)	Total P (lbs/acre)	Total K (lbs/acre)
Irrigation sources	0.0	0.0	0.0
Existing soil nutrient content	0.0	0.0	0.0
Plowdown credit	0.0	0.0	0.0
Commercial fertilizer	0.0	0.0	0.0
Dry manure	0.0	0.0	0.0
Liquid manure	215.0	27.0	301.0
Other	0.0	0.0	0.0
Atmospheric deposition	7.0		
Nutrients applied	222.0	27.0	301.0
Potential crop nutrient removal	160.0	25.6	132.8
Nutrient balance	62.0	1.4	168.2
Applied to removal ratio	1.39	1.05	2.27

Fresh water applied: 0.00 *feet* Total harvests: 1

NUTRIENT BUDGET FOR CROP: Field 2 / Corn, silage

Activity / Event	# of Events	N (lbs/acre) % avail.	P (lbs/acre) % avail.	K (lbs/acre) % avail.	Total N (lbs/acre)
Non-irrigation liquid nutrient application *Nutrient source:* Retention pond (lagoon) *Application method:* Towed tank	1	135.0 60%	43.0 80%	185.0 80%	135.0
Starter fertilizer at planting *Nutrient source:* Commercial fertilizer *Application method:* Banding	1	16.0 100%	0.0 0%	0.0 0%	16.0
Pre-irrigation prior to planting (no fertilizer) *Nutrient source:* Water only *Application method:* Surface	1	0.0 0%	0.0 0%	0.0 0%	0.0

Irrigation Source	N (lbs/acre)	P (lbs/acre)	K (lbs/acre)	Runtime (hrs)
Oakdale Irrigation District	0.0	0.0	0.0	52.0
	0.0	0.0	0.0	

NUTRIENT BUDGET FOR CROP (CONTINUED): Field 2 / Corn, silage

Activity / Event	# of Events	N (lbs/acre) % avail.	P (lbs/acre) % avail.	K (lbs/acre) % avail.	Total N (lbs/acre)
In season irrigation (no fertilizer) *Nutrient source:* Water only *Application method:* Surface	6	0.0 0%	0.0 0%	0.0 0%	0.1

Irrigation Source	N (lbs/acre)	P (lbs/acre)	K (lbs/acre)	Runtime (hrs)
Oakdale Irrigation District	0.0	0.0	0.0	47.0
	0.0	0.0	0.0	

Activity / Event	# of Events	N (lbs/acre) % avail.	P (lbs/acre) % avail.	K (lbs/acre) % avail.	Total N (lbs/acre)
In season irrigation (with fertilizer) *Nutrient source:* Retention pond (lagoon) *Application method:* Pipeline	1	155.0 60%	11.0 80%	234.0 80%	155.0

Irrigation Source	N (lbs/acre)	P (lbs/acre)	K (lbs/acre)	Runtime (hrs)
Oakdale Irrigation District	0.0	0.0	0.0	43.0
	0.0	0.0	0.0	

	Total N (lbs/acre)	Total P (lbs/acre)	Total K (lbs/acre)
Irrigation sources	0.1	0.0	0.0
Existing soil nutrient content	0.0	0.0	0.0
Plowdown credit	0.0	0.0	0.0
Commercial fertilizer	16.0	0.0	0.0
Dry manure	0.0	0.0	0.0
Liquid manure	290.0	54.0	419.0
Other	0.0	0.0	0.0
Atmospheric deposition	7.0		
Nutrients applied	313.1	54.0	419.0
Potential crop nutrient removal	224.0	42.0	184.8
Nutrient balance	89.1	12.0	234.2
Applied to removal ratio	1.40	1.29	2.27

Fresh water applied: 3.10 *feet* Total harvests: 1

NUTRIENT BUDGET FOR CROP: Field 3 / Corn, silage

Activity / Event	# of Events	N (lbs/acre) % avail.	P (lbs/acre) % avail.	K (lbs/acre) % avail.	Total N (lbs/acre)
Starter fertilizer at planting *Nutrient source:* Commercial fertilizer *Application method:* Banding	1	16.0 100%	0.0 0%	0.0 0%	16.0

NUTRIENT BUDGET FOR CROP (CONTINUED): Field 3 / Corn, silage

Activity / Event	# of Events	N (lbs/acre) % avail.	P (lbs/acre) % avail.	K (lbs/acre) % avail.	Total N (lbs/acre)
In season irrigation (no fertilizer) *Nutrient source:* Water only *Application method:* Surface	5	0.0 0%	0.0 0%	0.0 0%	0.1

Irrigation Source	N (lbs/acre)	P (lbs/acre)	K (lbs/acre)	Runtime (hrs)
Oakdale Irrigation District	0.0	0.0	0.0	11.5
	0.0	0.0	0.0	

Activity / Event	# of Events	N (lbs/acre) % avail.	P (lbs/acre) % avail.	K (lbs/acre) % avail.	Total N (lbs/acre)
In season irrigation (with fertilizer) *Nutrient source:* Retention pond (lagoon) *Application method:* Pipeline	2	145.0 60%	22.0 80%	210.0 80%	290.0

Irrigation Source	N (lbs/acre)	P (lbs/acre)	K (lbs/acre)	Runtime (hrs)
Oakdale Irrigation District	0.0	0.0	0.0	9.0
	0.0	0.0	0.0	

	Total N (lbs/acre)	Total P (lbs/acre)	Total K (lbs/acre)
Irrigation sources	0.1	0.0	0.0
Existing soil nutrient content	0.0	0.0	0.0
Plowdown credit	0.0	0.0	0.0
Commercial fertilizer	16.0	0.0	0.0
Dry manure	0.0	0.0	0.0
Liquid manure	290.0	44.0	420.0
Other	0.0	0.0	0.0
Atmospheric deposition	7.0		
Nutrients applied	313.1	44.0	420.0
Potential crop nutrient removal	224.0	42.0	184.8
Nutrient balance	89.1	2.0	235.2
Applied to removal ratio	1.40	1.05	2.27

Fresh water applied: 2.90 *feet* Total harvests: 1

NUTRIENT BUDGET FOR CROP: Field 3 / Sudangrass, silage

Activity / Event	# of Events	N (lbs/acre) % avail.	P (lbs/acre) % avail.	K (lbs/acre) % avail.	Total N (lbs/acre)
In season irrigation (no fertilizer) *Nutrient source:* Water only *Application method:* Surface	1	0.0 0%	0.0 0%	0.0 0%	0.0

Irrigation Source	N (lbs/acre)	P (lbs/acre)	K (lbs/acre)	Runtime (hrs)
Oakdale Irrigation District	0.0	0.0	0.0	11.0
	0.0	0.0	0.0	

NUTRIENT BUDGET FOR CROP (CONTINUED): Field 3 / Sudangrass, silage

Activity / Event	# of Events	N (lbs/acre) % avail.	P (lbs/acre) % avail.	K (lbs/acre) % avail.	Total N (lbs/acre)
In season irrigation (with fertilizer) *Nutrient source:* Retention pond (lagoon) *Application method:* Pipeline	2	104.0 60%	12.0 80%	168.0 80%	208.0

Irrigation Source	N (lbs/acre)	P (lbs/acre)	K (lbs/acre)	Runtime (hrs)
Oakdale Irrigation District	0.0	0.0	0.0	9.0
	0.0	0.0	0.0	

	Total N (lbs/acre)	Total P (lbs/acre)	Total K (lbs/acre)
Irrigation sources	0.0	0.0	0.0
Existing soil nutrient content	0.0	0.0	0.0
Plowdown credit	0.0	0.0	0.0
Commercial fertilizer	0.0	0.0	0.0
Dry manure	0.0	0.0	0.0
Liquid manure	208.0	24.0	336.0
Other	0.0	0.0	0.0
Atmospheric deposition	7.0		
Nutrients applied	215.0	24.0	336.0
Potential crop nutrient removal	154.0	23.8	168.0
Nutrient balance	61.0	0.2	168.0
Applied to removal ratio	1.40	1.01	2.00

Fresh water applied: 1.11 *feet* Total harvests: 1

NUTRIENT BUDGET FOR CROP: Field 4 / Corn, silage

Activity / Event	# of Events	N (lbs/acre) % avail.	P (lbs/acre) % avail.	K (lbs/acre) % avail.	Total N (lbs/acre)
Starter fertilizer at planting *Nutrient source:* Commercial fertilizer *Application method:* Banding	1	16.0 100%	0.0 0%	0.0 0%	16.0
In season irrigation (no fertilizer) *Nutrient source:* Water only *Application method:* Surface	5	0.0 0%	0.0 0%	0.0 0%	0.1

Irrigation Source	N (lbs/acre)	P (lbs/acre)	K (lbs/acre)	Runtime (hrs)
Oakdale Irrigation District	0.0	0.0	0.0	21.5
	0.0	0.0	0.0	

NUTRIENT BUDGET FOR CROP (CONTINUED): Field 4 / Corn, silage

Activity / Event	# of Events	N (lbs/acre) % avail.	P (lbs/acre) % avail.	K (lbs/acre) % avail.	Total N (lbs/acre)
In season irrigation (with fertilizer) *Nutrient source:* Retention pond (lagoon) *Application method:* Pipeline	2	145.0 60%	22.0 80%	202.0 80%	290.0

Irrigation Source	N (lbs/acre)	P (lbs/acre)	K (lbs/acre)	Runtime (hrs)
Oakdale Irrigation District	0.0	0.0	0.0	16.5
	0.0	0.0	0.0	

	Total N (lbs/acre)	Total P (lbs/acre)	Total K (lbs/acre)
Irrigation sources	0.1	0.0	0.0
Existing soil nutrient content	0.0	0.0	0.0
Plowdown credit	0.0	0.0	0.0
Commercial fertilizer	16.0	0.0	0.0
Dry manure	0.0	0.0	0.0
Liquid manure	290.0	44.0	404.0
Other	0.0	0.0	0.0
Atmospheric deposition	7.0		
Nutrients applied	313.1	44.0	404.0
Potential crop nutrient removal	224.0	42.0	184.8
Nutrient balance	89.1	2.0	219.2
Applied to removal ratio	1.40	1.05	2.19

Fresh water applied: 2.94 *feet* Total harvests: 1

NUTRIENT BUDGET FOR CROP: Field 4 / Corn, silage

Activity / Event	# of Events	N (lbs/acre) % avail.	P (lbs/acre) % avail.	K (lbs/acre) % avail.	Total N (lbs/acre)
Starter fertilizer at planting *Nutrient source:* Commercial fertilizer *Application method:* Banding	1	16.0 100%	0.0 0%	0.0 0%	16.0
In season irrigation (no fertilizer) *Nutrient source:* Water only *Application method:* Surface	3	0.0 0%	0.0 0%	0.0 0%	0.0

Irrigation Source	N (lbs/acre)	P (lbs/acre)	K (lbs/acre)	Runtime (hrs)
Oakdale Irrigation District	0.0	0.0	0.0	20.0
	0.0	0.0	0.0	

NUTRIENT BUDGET FOR CROP (CONTINUED): Field 4 / Corn, silage

Activity / Event	# of Events	N (lbs/acre) % avail.	P (lbs/acre) % avail.	K (lbs/acre) % avail.	Total N (lbs/acre)
In season irrigation (with fertilizer) *Nutrient source:* Retention pond (lagoon) *Application method:* Pipeline	2	89.0 60%	14.0 80%	130.0 80%	178.0

Irrigation Source	N (lbs/acre)	P (lbs/acre)	K (lbs/acre)	Runtime (hrs)
Oakdale Irrigation District	0.0	0.0	0.0	18.0
	0.0	0.0	0.0	

	Total N (lbs/acre)	Total P (lbs/acre)	Total K (lbs/acre)
Irrigation sources	0.1	0.0	0.0
Existing soil nutrient content	0.0	0.0	0.0
Plowdown credit	0.0	0.0	0.0
Commercial fertilizer	16.0	0.0	0.0
Dry manure	0.0	0.0	0.0
Liquid manure	178.0	28.0	260.0
Other	0.0	0.0	0.0
Atmospheric deposition	7.0		
Nutrients applied	201.1	28.0	260.0
Potential crop nutrient removal	144.0	27.0	118.8
Nutrient balance	57.1	1.0	141.2
Applied to removal ratio	1.40	1.04	2.19

Fresh water applied: 2.01 *feet* Total harvests: 1

NUTRIENT BUDGET FOR CROP: Field 5 / Other

Activity / Event	# of Events	N (lbs/acre) % avail.	P (lbs/acre) % avail.	K (lbs/acre) % avail.	Total N (lbs/acre)
Pre-irrigation prior to planting (with fertilizer) *Nutrient source:* Retention pond (lagoon) *Application method:* Pipeline	1	215.0 60%	27.0 80%	290.0 80%	215.0

Irrigation Source	N (lbs/acre)	P (lbs/acre)	K (lbs/acre)	Runtime (hrs)
Oakdale Irrigation District	0.0	0.0	0.0	30.0
	0.0	0.0	0.0	

	Total N (lbs/acre)	Total P (lbs/acre)	Total K (lbs/acre)
Irrigation sources	0.0	0.0	0.0

Existing soil nutrient content	0.0	0.0	0.0
Plowdown credit	0.0	0.0	0.0
Commercial fertilizer	0.0	0.0	0.0
Dry manure	0.0	0.0	0.0
Liquid manure	215.0	27.0	290.0
Other	0.0	0.0	0.0
Atmospheric deposition	7.0		
Nutrients applied	222.0	27.0	290.0
Potential crop nutrient removal	160.0	25.6	132.8
Nutrient balance	62.0	1.4	157.2
Applied to removal ratio	1.39	1.05	2.18

Fresh water applied: 0.31 *feet* Total harvests: 1

NUTRIENT BUDGET FOR CROP: Field 5 / Corn, silage

Activity / Event	# of Events	N (lbs/acre) % avail.	P (lbs/acre) % avail.	K (lbs/acre) % avail.	Total N (lbs/acre)
Starter fertilizer at planting *Nutrient source:* Commercial fertilizer *Application method:* Banding	1	16.0 100%	0.0 0%	0.0 0%	16.0
Pre-irrigation prior to planting (no fertilizer) *Nutrient source:* Water only *Application method:* Surface	1	0.0 0%	0.0 0%	0.0 0%	0.0

Irrigation Source	N (lbs/acre)	P (lbs/acre)	K (lbs/acre)	Runtime (hrs)
Oakdale Irrigation District	0.0	0.0	0.0	40.0
	0.0	0.0	0.0	

In season irrigation (no fertilizer) *Nutrient source:* Water only *Application method:* Surface	4	0.0 0%	0.0 0%	0.0 0%	0.0

Irrigation Source	N (lbs/acre)	P (lbs/acre)	K (lbs/acre)	Runtime (hrs)
Oakdale Irrigation District	0.0	0.0	0.0	37.0
	0.0	0.0	0.0	

In season irrigation (with fertilizer) *Nutrient source:* Retention pond (lagoon) *Application method:* Pipeline	2	145.0 60%	22.0 80%	202.0 80%	290.0

Irrigation Source	N (lbs/acre)	P (lbs/acre)	K (lbs/acre)	Runtime (hrs)
Oakdale Irrigation District	0.0	0.0	0.0	35.0
	0.0	0.0	0.0	

	Total N (lbs/acre)	Total P (lbs/acre)	Total K (lbs/acre)
Irrigation sources	0.1	0.0	0.0

Existing soil nutrient content	0.0	0.0	0.0
Plowdown credit	0.0	0.0	0.0
Commercial fertilizer	16.0	0.0	0.0
Dry manure	0.0	0.0	0.0
Liquid manure	290.0	44.0	404.0
Other	0.0	0.0	0.0
Atmospheric deposition	7.0		
Nutrients applied	313.1	44.0	404.0
Potential crop nutrient removal	224.0	42.0	184.8
Nutrient balance	89.1	2.0	219.2
Applied to removal ratio	1.40	1.05	2.19

Fresh water applied: 2.70 *feet* Total harvests: 1

NUTRIENT BUDGET FOR CROP: Field 6 / Other

Activity / Event	# of Events	N (lbs/acre) % avail.	P (lbs/acre) % avail.	K (lbs/acre) % avail.	Total N (lbs/acre)
Pre-irrigation prior to planting (with fertilizer) *Nutrient source:* Retention pond (lagoon) *Application method:* Pipeline	1	215.0 60%	27.0 80%	290.0 80%	215.0

Irrigation Source	N (lbs/acre)	P (lbs/acre)	K (lbs/acre)	Runtime (hrs)
Oakdale Irrigation District	0.0	0.0	0.0	23.0
	0.0	0.0	0.0	

	Total N (lbs/acre)	Total P (lbs/acre)	Total K (lbs/acre)
Irrigation sources	0.0	0.0	0.0
Existing soil nutrient content	0.0	0.0	0.0
Plowdown credit	0.0	0.0	0.0
Commercial fertilizer	0.0	0.0	0.0
Dry manure	0.0	0.0	0.0
Liquid manure	215.0	27.0	290.0
Other	0.0	0.0	0.0
Atmospheric deposition	7.0		
Nutrients applied	222.0	27.0	290.0
Potential crop nutrient removal	160.0	25.6	132.8
Nutrient balance	62.0	1.4	157.2
Applied to removal ratio	1.39	1.05	2.18

Fresh water applied: 0.35 *feet* Total harvests: 1

NUTRIENT BUDGET FOR CROP: Field 6 / Corn, silage

Activity / Event	# of Events	N (lbs/acre) % avail.	P (lbs/acre) % avail.	K (lbs/acre) % avail.	Total N (lbs/acre)
Starter fertilizer at planting *Nutrient source:* Commercial fertilizer *Application method:* Banding	1	16.0 100%	0.0 0%	0.0 0%	16.0
Pre-irrigation prior to planting (no fertilizer) *Nutrient source:* Water only *Application method:* Surface	1	0.0 0%	0.0 0%	0.0 0%	0.0

Irrigation Source	N (lbs/acre)	P (lbs/acre)	K (lbs/acre)	Runtime (hrs)
Oakdale Irrigation District	0.0	0.0	0.0	32.0
	0.0	0.0	0.0	

In season irrigation (no fertilizer) *Nutrient source:* Water only *Application method:* Surface	4	0.0 0%	0.0 0%	0.0 0%	0.0

Irrigation Source	N (lbs/acre)	P (lbs/acre)	K (lbs/acre)	Runtime (hrs)
Oakdale Irrigation District	0.0	0.0	0.0	28.0
	0.0	0.0	0.0	

In season irrigation (with fertilizer) *Nutrient source:* Retention pond (lagoon) *Application method:* Pipeline	2	145.0 60%	22.0 80%	202.0 80%	290.0

Irrigation Source	N (lbs/acre)	P (lbs/acre)	K (lbs/acre)	Runtime (hrs)
Oakdale Irrigation District	0.0	0.0	0.0	26.0
	0.0	0.0	0.0	

	Total N (lbs/acre)	Total P (lbs/acre)	Total K (lbs/acre)
Irrigation sources	0.1	0.0	0.0
Existing soil nutrient content	0.0	0.0	0.0
Plowdown credit	0.0	0.0	0.0
Commercial fertilizer	16.0	0.0	0.0
Dry manure	0.0	0.0	0.0
Liquid manure	290.0	44.0	404.0
Other	0.0	0.0	0.0
Atmospheric deposition	7.0		
Nutrients applied	313.1	44.0	404.0
Potential crop nutrient removal	224.0	42.0	184.8
Nutrient balance	89.1	2.0	219.2
Applied to removal ratio	1.40	1.05	2.19

Fresh water applied: 3.01 *feet* Total harvests: 1

NUTRIENT BUDGET FOR CROP: Field 7 / Corn, silage

Activity / Event	# of Events	N (lbs/acre) % avail.	P (lbs/acre) % avail.	K (lbs/acre) % avail.	Total N (lbs/acre)
Starter fertilizer at planting *Nutrient source:* Commercial fertilizer *Application method:* Banding	1	16.0 100%	0.0 0%	0.0 0%	16.0
In season irrigation (no fertilizer) *Nutrient source:* Water only *Application method:* Surface	5	0.0 0%	0.0 0%	0.0 0%	0.1

Irrigation Source	N (lbs/acre)	P (lbs/acre)	K (lbs/acre)	Runtime (hrs)
Oakdale Irrigation District	0.0	0.0	0.0	10.0
	0.0	0.0	0.0	

In season irrigation (with fertilizer) *Nutrient source:* Retention pond (lagoon) *Application method:* Pipeline	2	145.0 60%	22.0 80%	202.0 80%	290.0

Irrigation Source	N (lbs/acre)	P (lbs/acre)	K (lbs/acre)	Runtime (hrs)
Oakdale Irrigation District	0.0	0.0	0.0	8.0
	0.0	0.0	0.0	

	Total N (lbs/acre)	Total P (lbs/acre)	Total K (lbs/acre)
Irrigation sources	0.1	0.0	0.0
Existing soil nutrient content	0.0	0.0	0.0
Plowdown credit	0.0	0.0	0.0
Commercial fertilizer	16.0	0.0	0.0
Dry manure	0.0	0.0	0.0
Liquid manure	290.0	44.0	404.0
Other	0.0	0.0	0.0
Atmospheric deposition	7.0		
Nutrients applied	313.1	44.0	404.0
Potential crop nutrient removal	224.0	42.0	184.8
Nutrient balance	89.1	2.0	219.2
Applied to removal ratio	1.40	1.05	2.19

Fresh water applied: 3.04 *feet* Total harvests: 1

NUTRIENT BUDGET FOR CROP: Field 7 / Corn, silage

Activity / Event	# of Events	N (lbs/acre) % avail.	P (lbs/acre) % avail.	K (lbs/acre) % avail.	Total N (lbs/acre)
Starter fertilizer at planting *Nutrient source:* Commercial fertilizer *Application method:* Banding	1	16.0 100%	0.0 0%	0.0 0%	16.0

NUTRIENT BUDGET FOR CROP (CONTINUED): Field 7 / Corn, silage

Activity / Event	# of Events	N (lbs/acre) % avail.	P (lbs/acre) % avail.	K (lbs/acre) % avail.	Total N (lbs/acre)
In season irrigation (no fertilizer) *Nutrient source:* Water only *Application method:* Surface	3	0.0 0%	0.0 0%	0.0 0%	0.0

Irrigation Source	N (lbs/acre)	P (lbs/acre)	K (lbs/acre)	Runtime (hrs)
Oakdale Irrigation District	0.0	0.0	0.0	9.0
	0.0	0.0	0.0	

Activity / Event	# of Events	N (lbs/acre) % avail.	P (lbs/acre) % avail.	K (lbs/acre) % avail.	Total N (lbs/acre)
In season irrigation (with fertilizer) *Nutrient source:* Retention pond (lagoon) *Application method:* Pipeline	2	89.0 60%	14.0 80%	130.0 80%	178.0

Irrigation Source	N (lbs/acre)	P (lbs/acre)	K (lbs/acre)	Runtime (hrs)
Oakdale Irrigation District	0.0	0.0	0.0	8.5
	0.0	0.0	0.0	

	Total N (lbs/acre)	Total P (lbs/acre)	Total K (lbs/acre)
Irrigation sources	0.1	0.0	0.0
Existing soil nutrient content	0.0	0.0	0.0
Plowdown credit	0.0	0.0	0.0
Commercial fertilizer	16.0	0.0	0.0
Dry manure	0.0	0.0	0.0
Liquid manure	178.0	28.0	260.0
Other	0.0	0.0	0.0
Atmospheric deposition	7.0		
Nutrients applied	201.1	28.0	260.0
Potential crop nutrient removal	144.0	27.0	118.8
Nutrient balance	57.1	1.0	141.2
Applied to removal ratio	1.40	1.04	2.19

Fresh water applied: 2.03 *feet* Total harvests: 1

NUTRIENT BUDGET FOR CROP: Field 8 / Corn, silage

Activity / Event	# of Events	N (lbs/acre) % avail.	P (lbs/acre) % avail.	K (lbs/acre) % avail.	Total N (lbs/acre)
Non-irrigation liquid nutrient application *Nutrient source:* Retention pond (lagoon) *Application method:* Towed tank	1	215.0 60%	40.0 80%	290.0 80%	215.0
Starter fertilizer at planting *Nutrient source:* Commercial fertilizer *Application method:* Banding	1	16.0 100%	32.0 100%	32.0 100%	16.0

NUTRIENT BUDGET FOR CROP (CONTINUED): Field 8 / Corn, silage

Activity / Event	# of Events	N (lbs/acre) % avail.	P (lbs/acre) % avail.	K (lbs/acre) % avail.	Total N (lbs/acre)
In season fertilizer sidedress 1 *Nutrient source:* Commercial fertilizer *Application method:* Sidedress	1	70.0 100%	0.0 0%	0.0 0%	70.0
In season irrigation (no fertilizer) *Nutrient source:* Water only *Application method:* Surface	7	0.0 0%	0.0 0%	0.0 0%	0.1

Irrigation Source	N (lbs/acre)	P (lbs/acre)	K (lbs/acre)	Runtime (hrs)
Oakdale Irrigation District	0.0	0.0	0.0	34.0
	0.0	0.0	0.0	

	Total N (lbs/acre)	Total P (lbs/acre)	Total K (lbs/acre)
Irrigation sources	0.1	0.0	0.0
Existing soil nutrient content	0.0	0.0	0.0
Plowdown credit	0.0	0.0	0.0
Commercial fertilizer	86.0	32.0	32.0
Dry manure	0.0	0.0	0.0
Liquid manure	215.0	40.0	290.0
Other	0.0	0.0	0.0
Atmospheric deposition	7.0		
Nutrients applied	308.1	72.0	322.0
Potential crop nutrient removal	224.0	42.0	184.8
Nutrient balance	84.1	30.0	137.2
Applied to removal ratio	1.38	1.71	1.74

Fresh water applied: 2.96 *feet* Total harvests: 1

NUTRIENT BUDGET FOR CROP: Field 8 / Corn, silage

Activity / Event	# of Events	N (lbs/acre) % avail.	P (lbs/acre) % avail.	K (lbs/acre) % avail.	Total N (lbs/acre)
Starter fertilizer at planting *Nutrient source:* Commercial fertilizer *Application method:* Banding	1	16.0 100%	40.0 100%	40.0 100%	16.0
In season irrigation (no fertilizer) *Nutrient source:* Water only *Application method:* Surface	3	0.0 0%	0.0 0%	0.0 0%	0.0

Irrigation Source	N (lbs/acre)	P (lbs/acre)	K (lbs/acre)	Runtime (hrs)
Oakdale Irrigation District	0.0	0.0	0.0	32.0
	0.0	0.0	0.0	

NUTRIENT BUDGET FOR CROP (CONTINUED): Field 8 / Corn, silage

Activity / Event	# of Events	N (lbs/acre) % avail.	P (lbs/acre) % avail.	K (lbs/acre) % avail.	Total N (lbs/acre)
In season irrigation (with fertilizer) *Nutrient source:* Commercial fertilizer *Application method:* Pipeline	2	70.0 100%	0.0 0%	0.0 0%	140.0

Irrigation Source	N (lbs/acre)	P (lbs/acre)	K (lbs/acre)	Runtime (hrs)
Oakdale Irrigation District	0.0	0.0	0.0	33.0
	0.0	0.0	0.0	

	Total N (lbs/acre)	Total P (lbs/acre)	Total K (lbs/acre)
Irrigation sources	0.1	0.0	0.0
Existing soil nutrient content	0.0	0.0	0.0
Plowdown credit	0.0	0.0	0.0
Commercial fertilizer	156.0	40.0	40.0
Dry manure	0.0	0.0	0.0
Liquid manure	0.0	0.0	0.0
Other	0.0	0.0	0.0
Atmospheric deposition	7.0		
Nutrients applied	163.1	40.0	40.0
Potential crop nutrient removal	144.0	27.0	118.8
Nutrient balance	19.1	13.0	-78.8
Applied to removal ratio	1.13	1.48	0.34

Fresh water applied: 2.02 *feet* Total harvests: 1

NUTRIENT BUDGET FOR CROP: Field 9 / Other

Activity / Event	# of Events	N (lbs/acre) % avail.	P (lbs/acre) % avail.	K (lbs/acre) % avail.	Total N (lbs/acre)
Non-irrigation liquid nutrient application *Nutrient source:* Retention pond (lagoon) *Application method:* Towed tank	1	215.0 60%	27.0 80%	134.0 80%	215.0

	Total N (lbs/acre)	Total P (lbs/acre)	Total K (lbs/acre)
Irrigation sources	0.0	0.0	0.0

Existing soil nutrient content	0.0	0.0	0.0
Plowdown credit	0.0	0.0	0.0
Commercial fertilizer	0.0	0.0	0.0
Dry manure	0.0	0.0	0.0
Liquid manure	215.0	27.0	134.0
Other	0.0	0.0	0.0
Atmospheric deposition	7.0		
Nutrients applied	222.0	27.0	134.0
Potential crop nutrient removal	160.0	25.6	132.8
Nutrient balance	62.0	1.4	1.2
Applied to removal ratio	1.39	1.05	1.01

Fresh water applied: 0.00 *feet* Total harvests: 1

NUTRIENT BUDGET FOR CROP: Field 9 / Corn, silage

Activity / Event	# of Events	N (lbs/acre) % avail.	P (lbs/acre) % avail.	K (lbs/acre) % avail.	Total N (lbs/acre)
Non-irrigation liquid nutrient application *Nutrient source:* Retention pond (lagoon) *Application method:* Towed tank	1	270.0 60%	44.0 80%	186.0 80%	270.0
In season fertilizer sidedress 1 *Nutrient source:* Commercial fertilizer *Application method:* Sidedress	1	35.0 100%	0.0 90%	0.0 90%	35.0
Pre-irrigation prior to planting (no fertilizer) *Nutrient source:* Water only *Application method:* Surface	1	0.0 0%	0.0 0%	0.0 0%	0.0

Irrigation Source	N (lbs/acre)	P (lbs/acre)	K (lbs/acre)	Runtime (hrs)
Oakdale Irrigation District	0.0	0.0	0.0	22.0
	0.0	0.0	0.0	

In season irrigation (no fertilizer) *Nutrient source:* Water only *Application method:* Surface	6	0.0 0%	0.0 0%	0.0 0%	0.1

Irrigation Source	N (lbs/acre)	P (lbs/acre)	K (lbs/acre)	Runtime (hrs)
Oakdale Irrigation District	0.0	0.0	0.0	20.0
	0.0	0.0	0.0	

	Total N (lbs/acre)	Total P (lbs/acre)	Total K (lbs/acre)
Irrigation sources	0.1	0.0	0.0

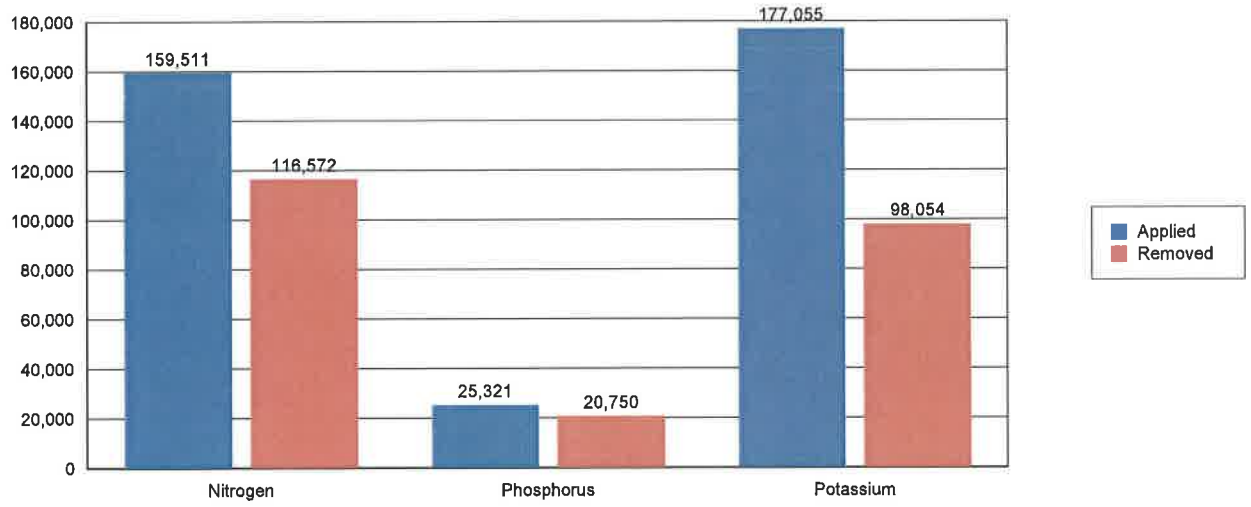
Existing soil nutrient content	0.0	0.0	0.0
Plowdown credit	0.0	0.0	0.0
Commercial fertilizer	35.0	0.0	0.0
Dry manure	0.0	0.0	0.0
Liquid manure	270.0	44.0	186.0
Other	0.0	0.0	0.0
Atmospheric deposition	7.0		
Nutrients applied	312.1	44.0	186.0
Potential crop nutrient removal	224.0	42.0	184.8
Nutrient balance	88.1	2.0	1.2
Applied to removal ratio	1.39	1.05	1.01

Fresh water applied: 2.97 *feet* Total harvests: 1

Nutrient Management Plan Report
General Order No. R5-2007-0035, Attachment C
July 1, 2009 deadline

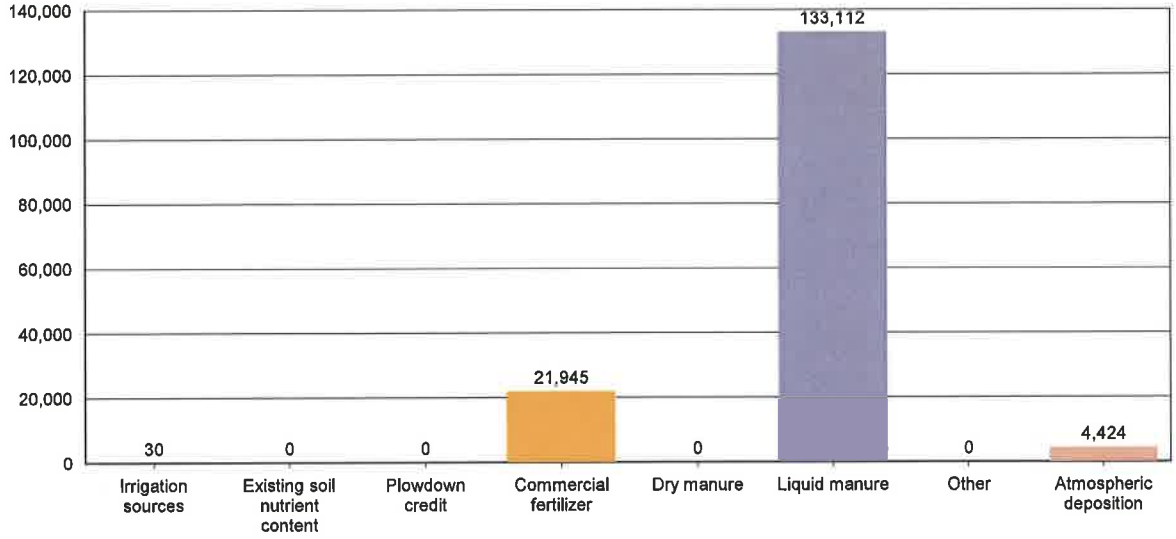
NUTRIENT APPLICATIONS, POTENTIAL REMOVAL, AND BALANCE

A. POUNDS OF NUTRIENT APPLIED VS. CROP REMOVAL POTENTIAL



	Total N (lbs)	Total P (lbs)	Total K (lbs)
Irrigation sources	29.7	0.0	0.0
Existing soil nutrient content	0.0	0.0	0.0
Plowdown credit	0.0	0.0	0.0
Commercial fertilizer	21,945.0	5,064.0	7,944.0
Dry manure	0.0	0.0	0.0
Liquid manure	133,112.0	20,257.0	169,111.0
Other	0.0	0.0	0.0
Atmospheric deposition	4,424.0		
Nutrients applied to all crops	159,510.7	25,321.0	177,055.0
Potential crop nutrient removal	116,572.0	20,749.8	98,054.4
Nutrient balance	42,938.7	4,571.2	79,000.6
Applied to removal ratio	1.37	1.22	1.81

B. POUNDS OF NITROGEN APPLIED BY NUTRIENT SOURCE



	Total N (lbs)	Total P (lbs)	Total K (lbs)
Irrigation sources	29.7	0.0	0.0
Existing soil nutrient content	0.0	0.0	0.0
Plowdown credit	0.0	0.0	0.0
Commercial fertilizer	21,945.0	5,064.0	7,944.0
Dry manure	0.0	0.0	0.0
Liquid manure	133,112.0	20,257.0	169,111.0
Other	0.0	0.0	0.0
Atmospheric deposition	4,424.0		
Nutrients applied to all crops	159,510.7	25,321.0	177,055.0
Potential crop nutrient removal	116,572.0	20,749.8	98,054.4
Nutrient balance	42,938.7	4,571.2	79,000.6
Applied to removal ratio	1.37	1.22	1.81

NUTRIENT BALANCE

A. WHOLE FARM BALANCE

	Total N (lbs)	Total P (lbs)	Total K (lbs)
Nutrients in storage from herd*			
Daily gross	1,955.3	325.2	1,031.7
Annual gross	713,675.1	118,690.4	376,586.5
Net to pond storage after ammonia losses (30% loss applied)	278,420.9	66,773.5	219,675.5
Net to drylot storage after ammonia losses (30% loss applied)	221,151.7	51,916.9	236,408.1
Net in storage (30% loss applied)	499,572.6	118,690.4	456,083.5
Irrigation sources	29.7	0.0	0.0
Atmospheric deposition	4,424.0		
Imports	20,935.8	1,274.8	4,809.2
Exports	362,500.0	96,467.8	325,235.5
Potential crop nutrient removal	116,572.0	20,749.8	98,054.4
Nutrient balance	45,890.1	2,747.6	37,602.8
Nutrient balance ratio	1.39	1.13	1.38

* Potassium excretion from milk cows and dry cows only.

SAMPLING AND ANALYSIS PLAN

A. MANURE SAMPLING AND ANALYSIS PLAN

Frequency	Sampling Methods	Source	Minimum data collection requirements	
			Field Analytes	Lab Analytes
Annually	Annual estimation for total manure dry weight applied to each field will be quantified using the following: Dry weight applied from a source to a crop per application event = weight applied * (1 - (percent moisture / 100)) Dry weight applied to crop per application event = sum of dry weights applied from each source Dry weight applied to a crop = sum of dry weights applied during each application Dry weight applied to a field = sum of dry weights applied to each crop Annual estimation for total manure dry weight exported will be quantified using the following: Dry weight exported from a source per event = weight exported * (1 - (percent moisture / 100)) Dry weight exported per event = sum of dry weights exported from each source Dry weight exported to any offsite destination = sum of dry weights exported per event	Corral solids Settling basin solids	Total dry weight (tons) manure applied annually to each land application area, and total dry weight (tons) manure exported offsite annually	None required

A. MANURE SAMPLING AND ANALYSIS PLAN (CONTINUED)

Frequency	Sampling Methods	Source	Minimum data collection requirements	
			Field Analytes	Lab Analytes
Twice per year	For each manure source, a composite sample per the "Approved Sampling Procedures for Nutrient and Groundwater Monitoring at Existing Milk Cow Dairies" will be collected.	Corral solids Settling basin solids	None required	Total nitrogen, total phosphorus, total potassium, and percent moisture
Once every two years (biennially)	For each manure source, a composite sample per the "Approved Sampling Procedures for Nutrient and Groundwater Monitoring at Existing Milk Cow Dairies" will be collected.	Corral solids Settling basin solids	None required	General minerals, including: calcium, magnesium, sodium, sulfate, chloride Fixed solids (ash)
Each application to each land application area	For each applied manure source, a composite sample per the "Approved Sampling Procedures for Nutrient and Groundwater Monitoring at Existing Milk Cow Dairies" will be collected. For each applied manure source, a scaled weight by truckload will be recorded.	Corral solids Settling basin solids	Date applied and total weight (tons) applied	Percent moisture

A. MANURE SAMPLING AND ANALYSIS PLAN (CONTINUED)

Frequency	Sampling Methods	Source	Minimum data collection requirements	
			Field Analytes	Lab Analytes
Each offsite export of manure	For each manure source exported, a composite sample "Approved Sampling Procedures for Nutrient and Groundwater Monitoring at Existing Milk Cow Dairies" will be collected. For each manure source exported, a scaled weight by truckload will be recorded.	Corral solids Settling basin solids	Date exported and total weight (tons) exported	Percent moisture

B. PROCESS WASTEWATER SAMPLING AND ANALYSIS PLAN

Frequency	Sampling Methods	Source	Minimum data collection requirements	
			Field Analytes	Lab Analytes
Anually	A composite or grab sample prior to blending with irrigation water per the "Approved Sampling Procedures for Nutrient and Groundwater Monitoring at Existing Milk Cow Dairies" will be collected.	Wastewater Storage Pond #1 Wastewater Storage Pond #2	None required	pH, total dissolved solids, electrical conductivity, nitrate-nitrogen, ammonion-nitrogen, total Kjeldahl nitrogen, total phosphorus, and total potassium
Once every two years (biennially)	For each pond, a composite or grab sample per the "Approved Sampling Procedures for Nutrient and Groundwater Monitoring at Existing Milk Cow Dairies" will be collected.	Wastewater Storage Pond #1 Wastewater Storage Pond #2	None required	General minerals, including: calcium, magnesium, sodium, bicarbonate, carbonate, sulfate, and chloride

B. PROCESS WASTEWATER SAMPLING AND ANALYSIS PLAN (CONTINUED)

Frequency	Sampling Methods	Source	Minimum data collection requirements	
			Field Analytes	Lab Analytes
Each application	For each pond, a composite or grab sample per the "Approved Sampling Procedures for Nutrient and Groundwater Monitoring at Existing Milk Cow Dairies" will be collected.	Wastewater Storage Pond #1 Wastewater Storage Pond #2	Date applied and volume (gallons or acre-inches) applied	None required
Quarterly during one application event	For field measurement: For each pond, a composite or grab sample per the "Approved Sampling Procedures for Nutrient and Groundwater Monitoring at Existing Milk Cow Dairies" will be collected. For laboratory analyses: For each pond, a composite or grab sample per the "Approved Sampling Procedures for Nutrient and Groundwater Monitoring at Existing Milk Cow Dairies" will be collected.	Wastewater Storage Pond #1 Wastewater Storage Pond #2	Date applied and electrical conductivity	Nitrate-nitrogen (only when pond is aerated), un-ionized ammonia-nitrogen, total Kjeldahl nitrogen, total phosphorus, total potassium, and total dissolved solids

C. SOIL SAMPLING AND ANALYSIS PLAN

Frequency	Sampling Methods	Source	Minimum data collection requirements	
			Field Analytes	Lab Analytes

C. SOIL SAMPLING AND ANALYSIS PLAN (CONTINUED)

Frequency	Sampling Methods	Source	Minimum data collection requirements	
			Field Analytes	Lab Analytes
Once every five years for each land application area (may be distributed over a 5-year period by sampling 20% of the land application areas annually)	For each field, a composite sample per the "Approved Sampling Procedures for Nutrient and Groundwater Monitoring at Existing Milk Cow Dairies" will be collected.	See Land Application Table	None required	Soluble phosphorus
Fall pre-plant for each crop	For each field, a composite sample per the "Approved Sampling Procedures for Nutrient and Groundwater Monitoring at Existing Milk Cow Dairies" will be collected.	See Land Application Table	None required	0 to 1 foot: Electrical conductivity, nitrate-nitrogen, soluble phosphorus, potassium, and organic matter 1 to 2 feet: Nitrate-nitrogen
Spring pre-plant for each crop	For each field, a composite sample per the "Approved Sampling Procedures for Nutrient and Groundwater Monitoring at Existing Milk Cow Dairies" will be collected.	See Land Application Table	None required	0 to 1 foot: Nitrate-nitrogen and organic matter 1 to 2 foot: Nitrate-nitrogen

D. PLANT TISSUE SAMPLING AND ANALYSIS PLAN

Frequency	Sampling Methods	Source	Minimum data collection requirements	
			Field Analytes	Lab Analytes
Each crop harvest from each land application area	For each field and crop, a composite sample per the "Approved Sampling Procedures for Nutrient and Groundwater Monitoring at Existing Milk Cow Dairies" will be collected. For each field and crop, a scaled weight by truckload will be recorded.	See Land Application Table	Date harvested and total weight (tons) of harvested material removed from each land application area	Percent wet weight of harvested plant removed Laboratory analyses for total nitrogen, total phosphorus, total potassium (expressed on a dry weight basis), fixed solids (ash), and percent moisture

D. PLANT TISSUE SAMPLING AND ANALYSIS PLAN (CONTINUED)

Frequency	Sampling Methods	Source	Minimum data collection requirements	
			Field Analytes	Lab Analytes
Mid-season, as necessary to assess need for additional nitrogen fertilizer during the growing season (only required if Discharger wants to add fertilizer in excess of 1.4 times the nitrogen expected to be removed by the harvested portion of the crop)	For each field and crop, a composite sample per the "Approved Sampling Procedures for Nutrient and Groundwater Monitoring at Existing Milk Cow Dairies" will be collected.	See Land Application Table	None required	Total nitrogen, expressed on a dry weight basis

E. IRRIGATION WATER SAMPLING AND ANALYSIS PLAN

Frequency	Sampling Methods	Source	Minimum data collection requirements	
			Field Analytes	Lab Analytes
Each fresh water irrigation event for each land application area	Oakdale Irrigation District Canal 1 - flow rate multiplied by runtime	Oakdale Irrigation District Canal.	Date applied and volume (gallons or acre-inches) applied	None required
One irrigation event during each irrigation season during actual irrigation events – for each irrigation water source (well and canal)	For each irrigation source, a grab sample per the "Approved Sampling Procedures for Nutrient and Groundwater Monitoring at Existing Milk Cow Dairies" will be collected. In lieu of sampling the irrigation water, the Discharger may provide equivalent data from the local irrigation district.	Oakdale Irrigation District Canal	None required	Electrical conductivity, total dissolved solids, and total nitrogen

F. GROUNDWATER MONITORING SAMPLING AND ANALYSIS PLAN

Frequency	Sampling Methods	Source	Minimum data collection requirements	
			Field Analytes	Lab Analytes

F. GROUNDWATER MONITORING SAMPLING AND ANALYSIS PLAN (CONTINUED)

Frequency	Sampling Methods	Source	Minimum data collection requirements	
			Field Analytes	Lab Analytes
Every five years (may be distributed over a 5-year period by sampling 20% of the wells annually)	For each domestic and agricultural supply well, a grab sample per the "Approved Sampling Procedures for Nutrient and Groundwater Monitoring at Existing Milk Cow Dairies" will be collected.	Main Dairy Domestic Well at milk barn.	None required	General minerals, including: calcium, magnesium, sodium, bicarbonate, carbonate, sulfate, chloride Total dissolved solids
Annually	For each domestic and agricultural supply well, a grab sample per the "Approved Sampling Procedures for Nutrient and Groundwater Monitoring at Existing Milk Cow Dairies" will be collected.	Main Dairy Domestic Well at milk barn.	Electrical conductivity and ammonion-nitrogen	Nitrate-nitrogen. If field measurement indicates the presence of ammonium-nitrogen, the Discharger shall collect a sample for laboratory analysis of ammonium-nitrogen.

NUTRIENT MANAGEMENT PLAN REVIEW

A. NUTRIENT MANAGEMENT PLAN REVIEW

Person who created the NMP: Furtado, Vince A *See above for contact information.*
Date the NMP was drafted: 09/23/2014
Person who approved the final NMP: Furtado, Vince A *See above for contact information.*
Date of NMP implementation: 09/23/2014

ATTACHED MAP AND DOCUMENTATION REFERENCES

The following list, based upon user selections and data entries, describes the minimum required attachments that must be submitted with the Nutrient Management Plan for the reporting schedule of 'July 1, 2009'.

A. PRELIMINARY DAIRY FACILITY ASSESSMENT

The NMP will include the initial Preliminary Dairy Facility Assessment (Attachment A) and the annual updates as required by Monitoring and Reporting Program No. R5-2007-0035. Copies of these assessments shall be maintained for 10 years.

B. LAND AREA MAP(S)

Identify each land application area (under the Discharger's control, whether it is owned, rented, or leased, to which manure or process wastewater from the production area is or may be applied for nutrient recycling) on a single published base map

1. A field identification system (Assessor's Parcel Number; land application area; crops grown); indication if each land application is owned, rented, or leased by the Discharger; indication of what type of waste is applied (solid manure only, wastewater only, or both solid manure and wastewater); drainage flow direction in each field, nearby surface waters, and storm water discharge points; tailwater and storm water drainage controls; subsurface (tile) drainage systems (including discharge points and lateral extent); irrigation supply wells and groundwater monitoring wells; sampling locations for discharges of storm water and tailwater to surface water from the field.

2. Process wastewater conveyance structures, discharge points and discharge mixing points with irrigation water supplies; pumping facilities; flow meter locations; drainage ditches and canals, culverts, draining controls (berms, levees, etc.), and drainage easements.

Application area map reference number: Figure 3

Identify each field under control of the Discharger and within five miles of the dairy where neither process wastewater nor manure is applied. Each field shall be identified on a single published base map at an appropriate scale by the following:

1. Assessor's Parcel Number.
2. Total acreage.
3. Information on who owns or leases the field

Non-application area map reference number: None

Setbacks, Buffers, and Other Alternatives to Protect Surface Water (see Technical Standard VII):

1. Identify all potential surface waters or conduits to surface water that are within 100 feet of any land application area.
2. For each land application area that is within 100 feet of a surface water or a conduit to surface water, identify the setback, vegetated buffer, or other alternative practice that will be implemented to protect surface water (Technical Standard VII).

Setbacks and buffers map reference number: Figure 3

C. PROCESS WASTEWATER WRITTEN AGREEMENTS

Provide copies of written agreements with third parties that receive process wastewater for their own use from the Discharger's dairy (Technical Standards V.A.1 and V.A.3).

Nutrient Management Plan Report
General Order No. R5-2007-0035, Attachment C
July 1, 2009 deadline

SAMPLING AND ANALYSIS PLAN CERTIFICATION

A. DAIRY FACILITY INFORMATION

Name of dairy or business operating the dairy: 6-X Dairy

Physical address of dairy:

9848 Milnes RD	Modesto	Stanislaus	95357
Physical Address Number and Street	City	County	Zip Code

Street and nearest cross street (if no address):

B. DOCUMENTATION OF QUALIFICATIONS AND PLAN DEVELOPMENT

I certify that I meet the requirements as a certified specialist in developing nutrient management plans as described in Attachment C of Waste Discharge Requirements General Order No. R5-2007-0035 and that I prepared the Sampling and Analysis plan.

Technical Service Provider
TITLE/QUALIFICATIONS OF CERTIFIED NUTRIENT MANAGEMENT SPECIALIST

Vince A. Furtado — 9-24-14
SIGNATURE OF TRAINED PROFESSIONAL — DATE

Vince A Furtado
PRINT OR TYPE NAME

2857 Geer RD, STE A; Turlock, CA 95382
MAILING ADDRESS

(209) 250-2471
PHONE NUMBER

C. OWNER AND/OR OPERATOR CERTIFICATION

I certify under penalty of law that I have personally examined and am familiar with the information submitted in this document and all attachments and that, based on my inquiry of those individuals immediately responsible for obtaining the information, I believe that the information is true, accurate, and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment.

SIGNATURE OF OWNER OF FACILITY	SIGNATURE OF OPERATOR OF FACILITY
Arlene Stueve, TR. Van Leeuwen Family Trust	Gary Osmundson
PRINT OR TYPE NAME	PRINT OR TYPE NAME
	10-30-14
DATE	DATE

Nutrient Management Plan Report
General Order No. R5-2007-0035, Attachment C
July 1, 2009 deadline

NUTRIENT BUDGET CERTIFICATION

A. DAIRY FACILITY INFORMATION

Name of dairy or business operating the dairy: 6-X Dairy

Physical address of dairy:

9848 Milnes RD	Modesto	Stanislaus	95357
Number and Street	City	County	Zip Code

Street and nearest cross street (if no address):

B. DOCUMENTATION OF QUALIFICATIONS AND PLAN DEVELOPMENT

I certify that I meet the requirements as a certified specialist in developing nutrient management plans as described in Attachment C of Waste Discharge Requirements General Order No. R5-2007-0035 and that I prepared the Nutrient Budget plan.

Technical Service Provider
TITLE/QUALIFICATIONS OF CERTIFIED NUTRIENT MANAGEMENT SPECIALIST

Vince A. Furtado — 9-24-14
SIGNATURE OF TRAINED PROFESSIONAL — DATE

Vince A Furtado
PRINT OR TYPE NAME

2857 Geer RD, STE A; Turlock, CA 95382
MAILING ADDRESS

(209) 250-2471
PHONE NUMBER

C. OWNER AND/OR OPERATOR CERTIFICATION

I certify under penalty of law that I have personally examined and am familiar with the information submitted in this document and all attachments and that, based on my inquiry of those individuals immediately responsible for obtaining the information, I believe that the information is true, accurate, and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment.

SIGNATURE OF OWNER OF FACILITY	SIGNATURE OF OPERATOR OF FACILITY
Arlene Stueve, TR. Van Leeuwen Family Trust	Gary Osmundson
PRINT OR TYPE NAME	PRINT OR TYPE NAME
	10-30-14
DATE	DATE

Nutrient Management Plan Report
General Order No. R5-2007-0035, Attachment C
July 1, 2009 deadline

STATEMENTS OF COMPLETION

Waste Discharge Requirements General Order No. R5-2007-0035 for Existing Milk Cow Dairies (General Order) requires owners and operators of existing milk cow dairies (Dischargers) to develop and implement a Nutrient Management Plan for their land application areas (land under control of the Discharger, whether it is owned, rented, or leased, to which manure or process wastewater from the production area is or may be applied for nutrient cycling). The Discharger is required to maintain the NMP at the dairy, make the NMP available to Central Valley Water Board staff during their inspections, and submit the NMP to the Executive Officer upon request.

The General Order requires the Discharger to submit two Statements of Completion during development of the NMP. The Discharger may use this form to comply with the General Order requirement to submit one or both of these Statements of Completion. Parts A and E must be completed for each Statement of Completion. Parts B, C and D are to be completed for the Statements of Completion due by 1 July 2008, 31 December 2008 and 1 July 2009, respectively. Both the owner and the operator of the dairy must sign this form in Part E below.

A. DAIRY FACILITY INFORMATION

Name of dairy or business operating the dairy: 6-X Dairy

9848 Milnes RD	Modesto	Stanislaus	95357
Number and Street	City	County	Zip Code

Street and nearest cross street (if no address):

Operator name: Osmundson, Gary Telephone no.: Landline (209) 595-6858 Cellular

P.O. Box 12290	Oakdale	CA	95361
Mailing Address Number and Street	City	State	Zip Code

Legal owner name: Van Leeuwen Family Trust, Arlene Stueve, TR. Telephone no.: Landline (806) 584-8472 Cellular

3849 FM 1057	Hereford	TX	79045
Mailing Address Number and Street	City	State	Zip Code

B. STATEMENT OF COMPLETION DUE 1 JULY 2008

I have completed the following items of the Nutrient Management Plan (check the boxes of completed sections), which are due 1 July 2008:

☑ **Item I.A.1 Land Application Information**
Identification of land used for manure application and needed information on a facility map.

☑ **Item I.B Land Application Information**
Information list for information provided on map above.

☑ **Item I.C Land Application Information**
Copies of written third-party process wastewater agreements.

☑ **Item I.D Land Application Information**
Identification of fields under control of the discharger within five miles of the dairy where neither process wastewater nor manure is applied.

☑ **Item II Sampling and Analysis Plan**

☑ **Item IV Setbacks, Buffers, and Other Alternatives to Protect Surface Water**
Identification of all potential surface waters or conduits to surface waters within 100 feet of land application areas and appropriate protection.

☑ **Item VI Record-Keeping Requirements**
Identification of monitoring records that will be maintained as required in the production and land application areas.

Has Item II (Sampling and Analysis Plan) of the Nutrient Management Plan been certified by a Certified Nutrient Management Specialist as required in the General Order?

☑ Yes ☐ No

C. STATEMENT OF COMPLETION DUE 31 DECEMBER 2008

I have completed the following items of the Nutrient Management Plan (check the boxes of completed sections), which are due 31 December 2008:

☑ **Item V Field Risk Assessment**
Evaluation of the effectiveness of management practices used to control the discharge of waste constituents from land application areas by assessing the water quality monitoring results of discharges of manure, process wastewater, tailwater, subsurface (tile) drainage, or storm water from the land application areas.

D. STATEMENT OF COMPLETION DUE 1 JULY 2009

I have completed the following items of the Nutrient Management Plan (check the boxes of completed sections), which are due 1 July 2009:

☑ **Item I.A.2 Land Application Area Information**
Identification of process wastewater conveyance, mixing and drainage information for each land application area on a facility map.

☑ **Item III Nutrient Budget**
Established planned rates of nutrient applications by crop based on nutrient monitoring results for each land application area.

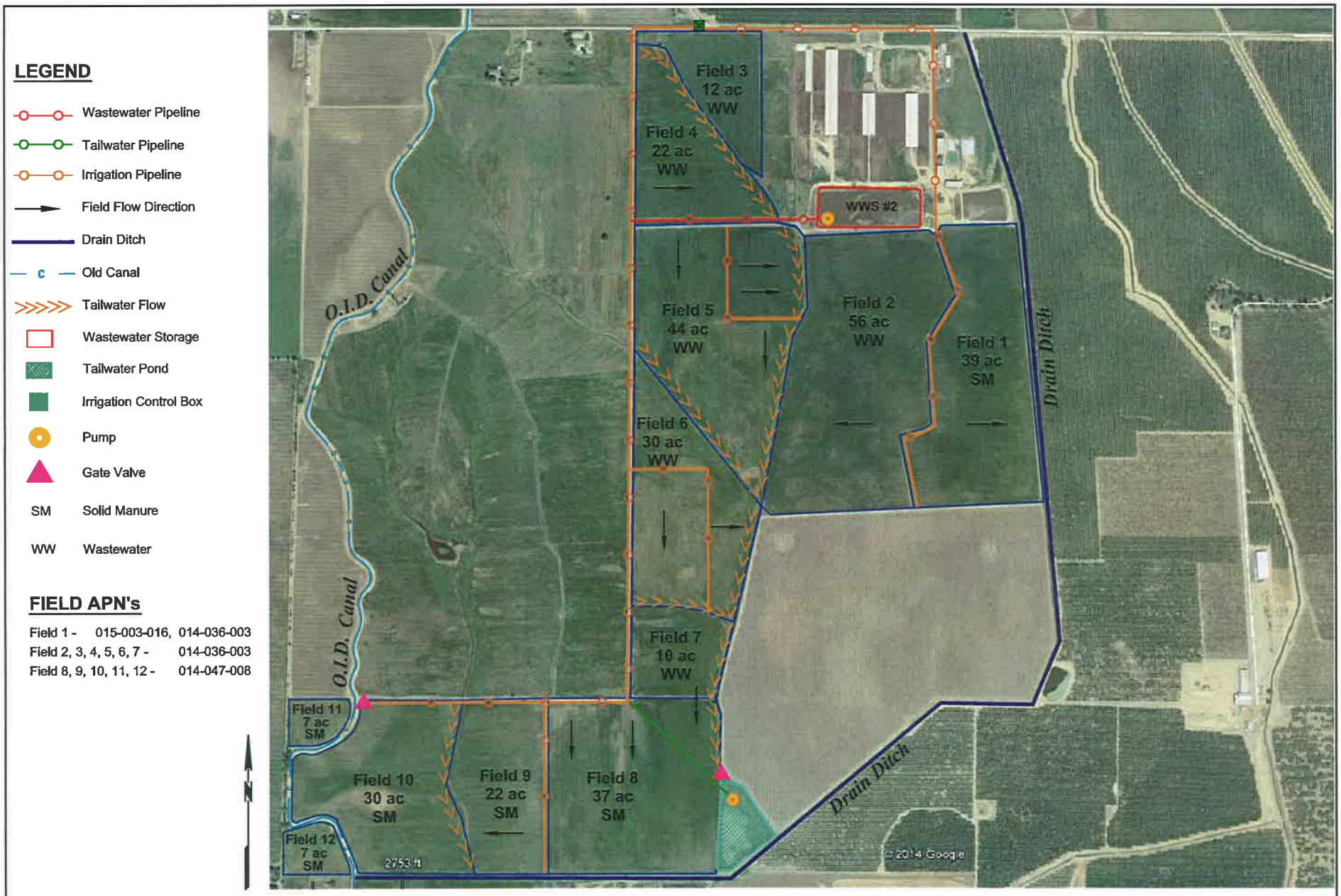
Has Item III (Nutrient Budget) of the Nutrient Management Plan been certified by a Certified Nutrient Management Specialist as required in the General Order?

☑ Yes ☐ No

E. CERTIFICATION STATEMENT

I certify under penalty of law that I have completed the items of the Nutrient Management Plan that are checked in Parts B, C and/or D above for the dairy identified in Part A above and that the appropriate certified nutrient management specialist has certified the items requiring such certification as noted in part B and/or D above and that I have personally examined and am familiar with the information submitted in Parts A, B, C and D of this document and all attachments and that, based on my inquiry of those individuals immediately responsible for obtaining the information, I believe that the information is true, accurate, and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment.

SIGNATURE OF OWNER OF FACILITY	SIGNATURE OF OPERATOR OF FACILITY
Arlene Stueve, TR. Van Leeuwen Family Trust	Gary Osmundson
PRINT OR TYPE NAME	PRINT OR TYPE NAME
	10-30-14
DATE	DATE



FR Ag Services, Inc.	SCALE: 0 1000 2000 APPROXIMATE SCALE IN FEET	6-X DAIRY Stanislaus County, CA		**FIGURE 3** DAIRY FIELDS
	PROJECT NO. FRA-00	DATE: 9/19/14	DRAWN BY: SB	APP. BY: VF

FRA-00_6-X

LAND APPLICATION AREA FIELD INFORMATION ATTACHMENT

DAIRY NAME: 6-X Dairy
DAIRY ADDRESS: 9848 Milnes Road, Modesto, CA 95357

APN	FIELD ID	ACRES	CROPS GROWN	OPERATED BY DAIRY OWNER	LEASED BY DAIRY OPERATOR	LEASED BY OTHER	NUTRIENTS APPLIED
0015-0003-0016-0000	1	39	Corn / Forage	XX			Solid Manure
0014-0036-0003-0000							
0014-0036-0003-0000	2	56	Corn / Forage	XX			Wastewater
0014-0036-0003-0000	3	12	Corn / Sudan	XX			Wastewater
0014-0036-0003-0000	4	22	Corn / Corn	XX			Wastewater
0014-0036-0003-0000	5	44	Corn / Forage	XX			Wastewater
0014-0036-0003-0000	6	30	Corn / Forage	XX			Wastewater
0014-0036-0003-0000	7	10	Corn / Corn	XX			Wastewater
0014-0047-0008-0000	8	37	Corn / Corn	XX			Solid Manure
0014-0047-0008-0000	9	22	Corn / Forage	XX			Solid Manure
0014-0047-0008-0000	10	30	Corn / Sudan	XX			Solid Manure
0014-0047-0008-0000	11	7	Forage	XX			Solid Manure
0014-0047-0008-0000	12	7	Forage	XX			Solid Manure

Waste Management Plan Report
General Order No. R5-2007-0035, Attachment B
July 1, 2010 deadline

DAIRY FACILITY INFORMATION

A. NAME OF DAIRY OR BUSINESS OPERATING THE DAIRY: 6-X Dairy

Physical address of dairy:

9848 Milnes RD	Modesto	Stanislaus	95357
Number and Street	City	County	Zip Code

Street and nearest cross street (if no address):

TRS Data and Coordinates:

3S	10E	13	Mt. Diablo	37° 40' 53.32" N	120° 48' 51.43" W
Township (T_)	Range (R_)	Section (S_)	Baseline meridian	Latitude (N)	Longitude (W)

Date facility was originally placed in operation: 01/01/1990

Regional Water Quality Control Board Basin Plan designation: San Joaquin River Basin

County Assessor Parcel Number(s) for dairy facility:

0014-0036-0003-0000 0015-0030-0016-0000

B. OPERATOR NAME: Osmundson, Gary Telephone no.: (Landline) (209) 595-6858 (Cellular)

P.O. Box 12290	Oakdale	CA	95361
Mailing Address Number and Street	City	State	Zip Code

Operator should receive Regional Board correspondence (check): [X] Yes [ ] No

C. LEGAL OWNER NAME: Van Leeuwen Family Trust, Arlene Stueve, TR. Telephone no.: (Landline) (806) 584-8472 (Cellular)

3849 FM 1057	Hereford	TX	79045
Mailing Address Number and Street	City	State	Zip Code

Owner should receive Regional Board correspondence (check): [ ] Yes [X] No

D. CONTACT NAME: Furtado, Vince A Telephone no.: (Landline) (209) 250-2471 (Cellular) (209) 324-4097

Title: Project Manager

2857 Geer RD, STE A	Turlock	CA	95382
Mailing Address Number and Street	City	State	Zip Code

CONTACT NAME: Sousa, Manny Telephone no.: (Landline) (209) 238-3151 (Cellular) (209) 581-1567

Title: Professional Engineer

P.O. Box 1613	Oakdale	CA	95361
Mailing Address Number and Street	City	State	Zip Code

Waste Management Plan Report
General Order No. R5-2007-0035, Attachment B
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HERD AND MILKING EQUIPMENT

A. HERD AND MILKING

The milk cow dairy is currently regulated under individual Waste Discharge Requirements.

Total number of milk and dry cows combined as a baseline value in response to the Report of Waste Discharge (ROWD) request of October, 2005:

2,280 milk and dry cows combined (regulatory review is required for any expansion)

Type of Animal	Present Count	Maximum Count	Daily Flush Hours	Avg Live Weight (lbs)
Milk Cows	1,980	1,980	18	1,400
Dry Cows	300	300	5	1,450
Bred Heifers (15-24 mo.)	10	10	5	900
Heifers (7-14 mo.)	0	0	0	0
Calves (4-6 mo.)	0	0	0	
Calves (0-3 mo.)	0	0	0	

Predominant milk cow breed: Other

Average milk production: 68 pounds per cow per day

Average number of milk cows per string sent to the milkbarn: 200 milk cows per string

Number of milkings per day: 3.0 milkings per day

Number of times milk tank is emptied/filled each day: 3.0 per day

Number of hours spent milking each day: 20.0 hours per day

B. MILKBARN EQUIPMENT AND FLOOR WASH

Bulk tank wash and sanitizing: 3.0 run cycles/wash

Bulk tank wash vat volume: 50 gallons/cycle

Bulk tank wash wastewater: 450.0 gallons/day

Pipeline wash and sanitizing: 3.0 run cycles/wash

Pipeline wash vat volume: 110 gallons/cycle

Pipeline wash wastewater: 990.0 gallons/day

Reused / recycled water is the source of parlor floor wash water: [X] Yes [ ] No

Milkbarn / parlor floor wash volume: 2,750 gallons/day

Plate coolers type: Well Water Cooled (Water Reused/Recycled)

Plate coolers volume: 51,650 gallons/day

Vacuum pumps / air compressors / chillers type: Well Water Cooled (Water Reused/Recycled)

Vacuum pumps / air compressors / chillers volume: 2,200 gallons/day

Milkbarn and equipment wastewater volume generated daily: 55,290 gallons/day

C. OTHER WATER USES

Reused/recycled water is the source of herd drinking water: [ ] Yes [X] No

	Milk Cows	Dry Cows	Bred Heifers (15-24 mo.)	Bred Heifers (7-14 mo.)	Calves (4-6 mo.)	Calves (0-3 mo.)
Number of cows drinking from reusable water:	0 *of 1,980*	0 *of 300*	0 *of 10*	0 *of 0*	0 *of 0*	0 *of 0*
Gallons per head per day:	0	0	0	0	0	0

Total reusable water consumed by herd: 0 gallons/day

Reused/recycled water is the source of sprinkler pen water: [ ] Yes [X] No

Number of sprinklers in the holding pen: 0 sprinklers

Duration of each sprinkler cycle: 0.1 minutes

Number of sprinkler pen runs/milking: 0 cycles/milking

Flow rate for each sprinkler head: 0.1 gallons/minute

Total sprinkler pen wastewater volume: 0 gallons/day

Total fresh water used in manure flush lane system(s): 0 gallons/day

D. MISCELLANEOUS EQUIPMENT

No miscellaneous equipment entered.

E. MILKBARN AND EQUIPMENT SUMMARY

Number of days in storage period: 120 days

Water available for reuse/recycle: 53,850 gallons/day

Recycled water reused: 2,750 gallons/day

Recycled water leaving system: 0 gallons/day

Reusable water balance: 51,100 gallons/day

Volume of milkbarn and equipment wastewater generated for storage period: 6,634,800 gallons/storage period

MANURE AND BEDDING SOLIDS

A. IMPORTED AND FACILITY GENERATED BEDDING

Bedding Type	Imported or Generated (tons)	Density (lbs/cu. ft.)	Applied Separation Efficiency (default)	Solids to Pond (cu. ft./period)
Facility generated bedding	148	40.0	0%	3,700
			Total:	3,700

B. SOLIDS SEPARATION PROCESS

Combined manure solids separation efficiency (weight basis): 0 %

Description of all solids separation equipment used in flushed lane manure management systems:

Solid Settling Basin
Mechanical Separator- Currently inoperative

C. MANURE AND BEDDING SOLIDS SUMMARY

	cubic feet		gallons	
	day	storage period	day	storage period
Manure generated by the herd (pre-separation):	4,797.29	575,675	35,886.25	4,306,350
Manure generated by the herd sent to pond(s):	3,389.17	406,701	25,352.79	3,042,334
Manure generated by the herd sent to dry lot(s):	1,408.12	168,974	10,533.46	1,264,015
Manure solids (herd) removed by separation:	0.00	0	0.00	0
Liquid component in separated solids not send to pond(s):	0.00	0	0.00	0
Imported and facility generated bedding sent to pond(s):	30.83	3,700	230.65	27,678
Total manure and bedding sent to pond(s):	3,420.01	410,401	25,583.44	3,070,012
Residual manure solids and bedding sent to pond(s) w/factor:	284.80	34,176	2,130.48	255,657
	cubic feet per year		gallons per year	
Residual manure solids and bedding sent to pond(s) w/factor:	103,953		777,624	

RAINFALL AND RUNOFF

A. RAINFALL ESTIMATES

Rainfall station nearest the facility: Oakdale

25 year/24 hour storm event (default NOAA Atlas 2, 1973): 2.50 inches/storage period

25 year/24 hour storm event (user-override): _____ inches/storage period

Storage period rainfall (default DWR climate data): 10.08 inches/storage period

Storage period rainfall (user-override): _____ inches/storage period

Flood zone: Zone X

B. IMPERVIOUS AREAS

Name	Surface Area (sq. ft.)	Quantity	25yr/24hr Storm Runoff Coefficient	Storage Period Runoff Coefficient	Runoff Destination
Concrete Feed Alley/Lane	24,500	1	0.97	0.50	Drains into pond(s).
Concrete Feed Alley/Lane	17,280	1	0.97	0.50	Drains into pond(s).
Concrete Feed Area	50,400	1	0.97	0.50	Drains into pond(s).
Concrete Lane	5,100	1	0.97	0.50	Drains into pond(s).
Main Transfer Lane	10,428	1	0.97	0.50	Drains into pond(s).
Milk Barn Holding Pen	12,805	1	0.97	0.50	Drains into pond(s).
Separator Pad	8,400	1	0.97	0.50	Drains into pond(s).
Wash Pad	3,000	1	0.97	0.50	Drains into pond(s).

Surface area that does not run off into pond(s):	0 sq. ft.
Surface area that runs off into pond(s):	131,913 sq. ft.
Total surface area:	131,913 sq. ft.
Runoff from normal storage period rainfall:	414,447 gallons/storage period
Runoff from normal storage period rainfall with 1.5 factor:	621,670 gallons/storage period
25 year/24 hour storm event runoff:	199,411 gallons/storage period
Total surface area runoff:	613,858 gallons/storage period
Total surface area runoff with 1.5 factor:	821,081 gallons/storage period

C. ROOF AREAS

Name	Surface Area (sq. ft.)	Quantity	Runoff Destination
Center Freestall Barn	34,000	1	Wastewater pond
Commodity Barn	6,300	1	Wastewater pond
East Freestall Barn	44,000	1	Wastewater pond
Hay Barn	6,000	1	Wastewater pond
Hay Barn	5,000	1	Wastewater pond
Milk Barn	10,116	1	Wastewater pond
Shade Barn	17,000	1	Wastewater pond
Shade Barn	4,000	1	Wastewater pond
Shop	3,200	1	Wastewater pond
West Freestall Barn	70,000	1	Wastewater pond

Surface area that does not run off into pond(s):	0 sq. ft.
Surface area that runs off into pond(s):	199,616 sq. ft.
Total surface area:	199,616 sq. ft.
Runoff from normal storage period rainfall:	1,254,314 gallons/storage period
Runoff from normal storage period rainfall with 1.5 factor:	1,881,472 gallons/storage period
25 year/24 hour storm event runoff:	311,090 gallons/storage period
Total surface area runoff:	1,565,404 gallons/storage period
Total surface area runoff with 1.5 factor:	2,192,561 gallons/storage period

D. EARTHEN AREAS

Name	Surface Area (sq. ft.)	Quantity	25yr/24 Storm Coefficient	Storage Period Coefficient	Runoff Destination
Corral	25,080	1	0.35	0.20	Drains into pond(s).
Corral	59,500	1	0.35	0.20	Drains into pond(s).
Corrals	44,640	2	0.35	0.20	Drains into pond(s).
Exercise Pen	32,640	1	0.35	0.20	Drains into pond(s).

Exercise Pen	98,000	1	0.35	0.20	Drains into pond(s).
Exercise Pen	49,810	1	0.35	0.20	Drains into pond(s).
Exercise Pens	34,000	5	0.35	0.20	Drains into pond(s).
Yard Area, Roads etc.	1,073,698	1	0.35	0.20	Drains into pond(s).

Surface area that does not run off into pond(s):	0 sq. ft.
Surface area that runs off into pond(s):	1,598,008 sq. ft.
Total surface area:	1,598,008 sq. ft.
Runoff from normal storage period rainfall:	2,008,260 gallons/storage period
Runoff from normal storage period rainfall with 1.5 factor:	3,012,390 gallons/storage period
25 year/24 hour storm event runoff:	871,641 gallons/storage period
Total surface area runoff:	2,879,901 gallons/storage period
Total surface area runoff with 1.5 factor:	3,884,031 gallons/storage period

E. TAILWATER MANAGEMENT

No fields with tailwater entered.

Waste Management Plan Report
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July 1, 2010 deadline

LIQUID STORAGE

A. POND OR BASIN DESCRIPTION: Solid Settling Basin

Pond is rectangular in shape: [X] Yes [ ] No

Dimensions			
Earthen Length (EL):	214 ft.	Earthen Depth (ED):	14 ft.
Earthen Width (EW):	55 ft.	Side Slope (S):	1.0 ft. (h:1v)
Free Board (FB):	2 ft.	Dead Storage Loss (DS):	2.0 ft.

Calculations			
Liquid Length (LL):	210 ft.	Storage Volume Adjusted for Dead Storage Loss:	82,333 cu. ft.
Liquid Width (LW):	51 ft.		
Pond Surface Area:	11,770 sq. ft.	Pond Marker Elevation:	11.2 ft.
Storage Volume:	93,240 cu. ft.	Evaporation Volume:	56,424 gals/period
		Adjusted Surface Area:	10,494 sq. ft.

POND OR BASIN DESCRIPTION: Wastewater Storage Pond #1

Pond is rectangular in shape: [X] Yes [ ] No

Dimensions			
Earthen Length (EL):	327 ft.	Earthen Depth (ED):	16 ft.
Earthen Width (EW):	246 ft.	Side Slope (S):	1.5 ft. (h:1v)
Free Board (FB):	2 ft.	Dead Storage Loss (DS):	2.0 ft.

Calculations			
Liquid Length (LL):	321 ft.	Storage Volume Adjusted for Dead Storage Loss:	808,488 cu. ft.
Liquid Width (LW):	240 ft.		
Pond Surface Area:	80,442 sq. ft.	Pond Marker Elevation:	13.2 ft.
Storage Volume:	921,858 cu. ft.	Evaporation Volume:	410,658 gals/period
		Adjusted Surface Area:	76,378 sq. ft.

POND OR BASIN DESCRIPTION: Wastewater Storage Pond #2

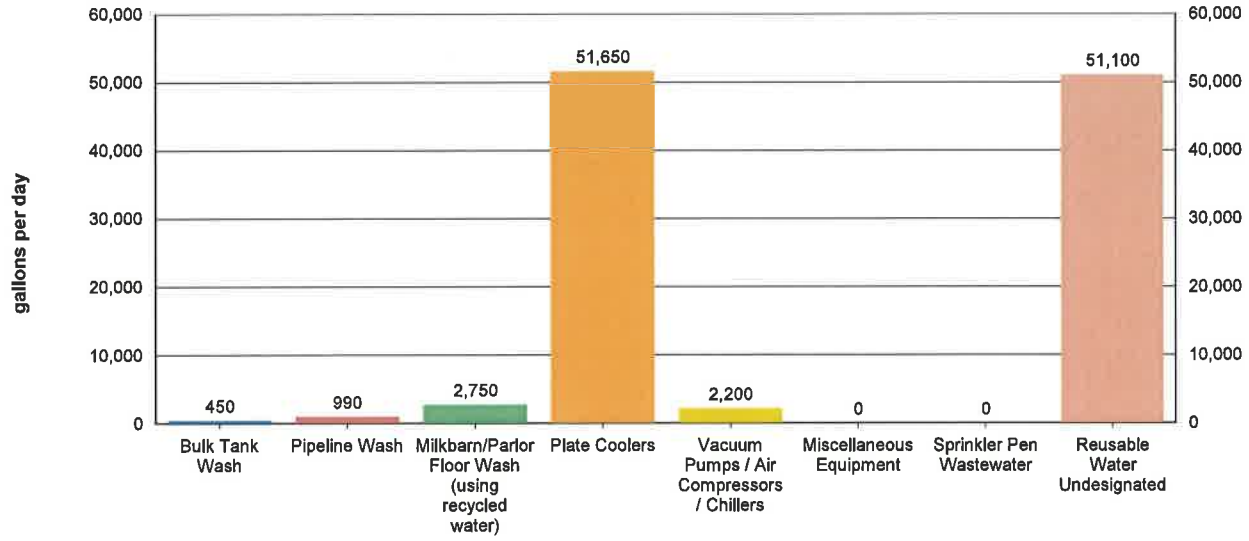
Pond is rectangular in shape: [X] Yes [ ] No

Dimensions			
Earthen Length (EL):	820 ft.	Earthen Depth (ED):	24 ft.
Earthen Width (EW):	300 ft.	Side Slope (S):	2.0 ft. (h:1v)
Free Board (FB):	2 ft.	Dead Storage Loss (DS):	2.0 ft.
Calculations			
Liquid Length (LL):	812 ft.	Storage Volume Adjusted for Dead Storage Loss:	3,901,547 cu. ft.
Liquid Width (LW):	292 ft.		
Pond Surface Area:	246,000 sq. ft.	Pond Marker Elevation:	21.2 ft.
Storage Volume:	4,204,405 cu. ft.	Evaporation Volume:	1,265,537 gals/period
		Adjusted Surface Area:	235,378 sq. ft.

Potential storage losses (due to dead storage):	427,135.0 cubic feet - or -	3,195,191.7 gallons
Liquid storage surface area:	324,854 sq. ft.	
Rainfall onto retention pond(s):	2,125,201 gallons/storage period	
Rainfall runoff into retention pond(s):	3,677,021 gallons/storage period	
Normal rainfall onto retention pond(s) with 1.5 factor:	3,187,802 gallons/storage period	
Normal rainfall runoff into retention pond(s) with 1.5 factor:	5,515,532 gallons/storage period	
Storage period evaporation (default):	11.50 inches/storage period	
Storage period evaporation (user-override):	inches/storage period	
Storage period evaporation volume:	1,732,619 gallons/storage period	
Manure and bedding sent to pond(s):	3,070,012 gallons/storage period	
Milkbarn water sent to pond(s):	6,634,800 gallons/storage period	
Fresh flush water for storage period:	0 gallons/storage period	

CHARTS

A. MILKBARN WASTEWATER SENT TO POND(S)

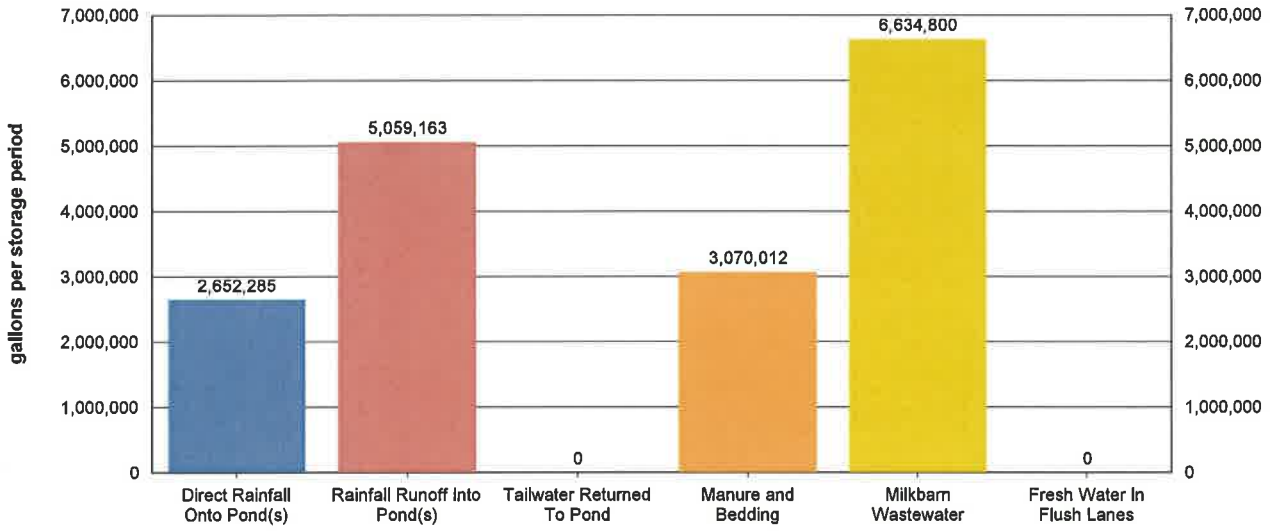


Values shown in chart are approximate values per day.

Total milkbarn wastewater generated daily: 55,290 gallons/day

Total milkbarn wastewater generated per period: 6,634,800 gallons/storage period

B. PROCESS WASTEWATER (NORMAL PRECIPITATION)

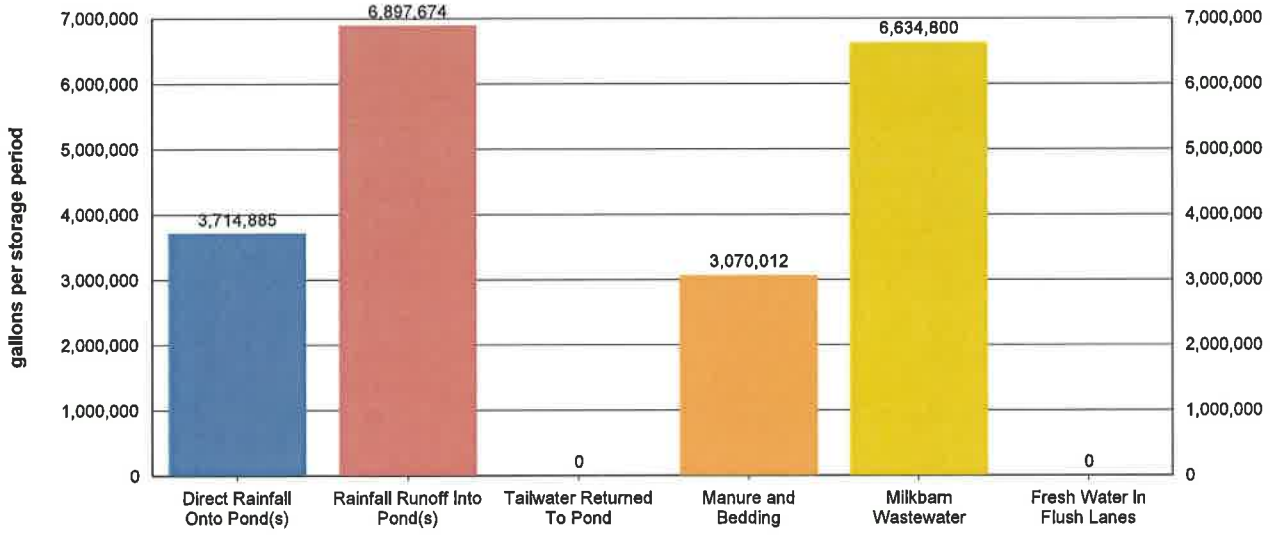


Values shown in chart are approximate values for storage period.

Storage period:	120	days
Total process wastewater generated daily:	145,136	gallons/day
Total process wastewater generated per period:	17,416,260	gallons/storage period
Total process wastewater removed due to evaporation:	1,732,619	gallons/storage period
Total storage capacity required:	15,683,641	gallons
	2,096,598	cu. ft.
Existing storage capacity (adjusted for dead storage loss):	35,849,402	gallons
	4,792,368	cu. ft.

Considering normal precipitation, existing capacity meets estimated storage needs: [X] Yes [ ] No

C. PROCESS WASTEWATER (NORMAL PRECIPITATION WITH 1.5 FACTOR)

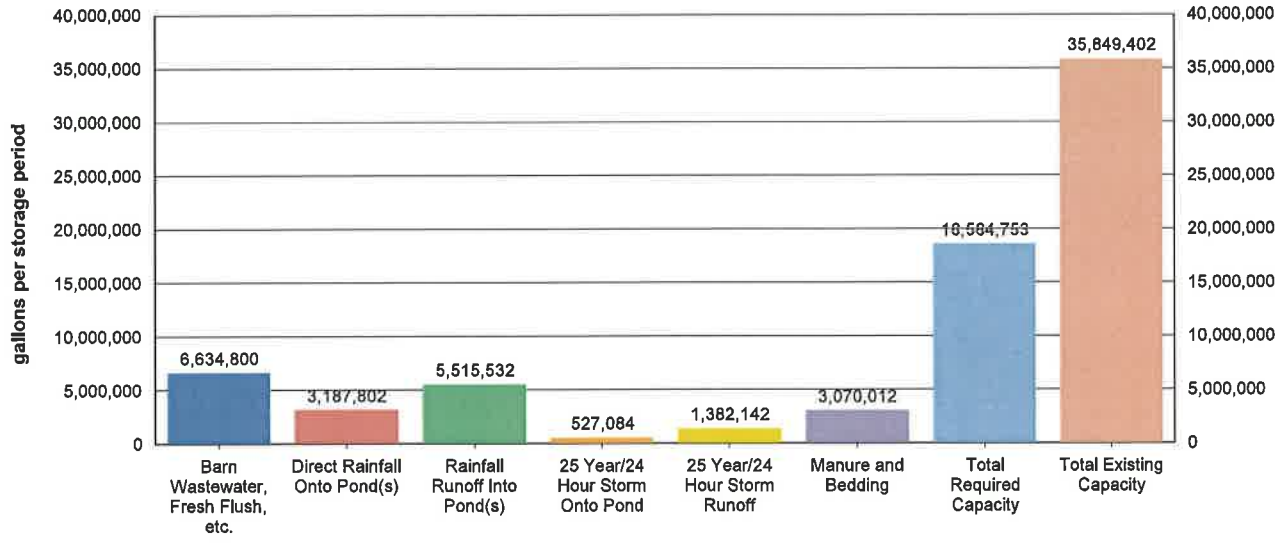


Values shown in chart are approximate values for storage period.

Storage period:	120	days
Total process wastewater generated daily:	169,311	gallons/day
Total process wastewater generated per period:	20,317,372	gallons/storage period
Total process wastewater removed due to evaporation:	1,732,619	gallons/storage period
Total storage capacity required:	18,584,753	gallons
	2,484,420	cu. ft.
Existing storage capacity (adjusted for dead storage loss):	35,849,402	gallons
	4,792,368	cu. ft.

Considering factored precipitation, existing capacity meets estimated storage needs: [X] Yes [ ] No

D. STORAGE VOLUME ASSESSMENT (NORMAL PRECIPITATION WITH 1.5 FACTOR)



Values shown in chart are approximate values for storage period.

Storage period:	120	days
Barn wastewater, fresh flush water, and tailwater:	6,634,800	gallons/storage period
Manure and bedding sent to pond:	3,070,012	gallons/storage period
Precipitation onto pond:	3,187,802	gallons/storage period
Precipitation runoff:	5,515,532	gallons/storage period
25 year/24 hour storm onto pond:	527,084	gallons/storage period
25 year/24 hour storm runoff:	1,382,142	gallons/storage period
Residual solids after liquids have been removed (liquid equivalent):	255,657	gallons/storage period
Total process wastewater removed due to evaporation:	1,732,619	gallons/storage period
Total required capacity:	18,584,753	gallons/storage period
Total existing capacity:	35,849,402	gallons/storage period
Existing capacity meets estimated storage needs:	[X] Yes [ ] No	

OPERATION AND MAINTENANCE PLAN

The goal of the Operation and Maintenance Plan is to eliminate discharges of waste or storm water to surface waters from the production area and the protection of underlying soils and ground water.

A. POND MAINTENANCE

i. FREEBOARD MONITORING

1. Freeboard will be monitored monthly from June 1 through September 1 (dry season) and weekly from October 1 through May 31 (wet season). The results will be recorded on a Dairy Production Area Visual Inspection Form.
2. Freeboard will be monitored during and after each significant storm event and the results recorded on a Production Area Significant Storm Event Inspection Form.
3. Ponds will be photographed on the first day of each month. Pond photos will be labeled and maintained with the dairy's monitoring records.

ii. PREPARATION FOR MAINTAINING WINTER STORAGE CAPACITY

1. The retention pond(s) will begin to be lowered to the minimum operating level on or before a designated date each year.
2. The minimum operating level will include the necessary storage volume as identified in Section II.A in Attachment B of the General Order.

iii. OTHER POND MONITORING

1. At the time of each monitoring for freeboard, the pond(s) will be inspected for evidence of excessive odors, mosquito breeding, algae, or equipment damage; and issues with berm integrity, including cracking, slumping, erosion, excess vegetation, animal burrows, and seepage. Any issues identified and corrective actions performed will be recorded on a Dairy Production Area Visual Inspection Form - Other Pond Monitoring.
2. At the time of each monitoring during and after each significant storm event, the ponds will be inspected for evidence of any discharge and issues with berm integrity, including cracking, slumping, erosion, excess vegetation, animal burrows, and seepage. Any issues identified and corrective actions performed will be recorded on a Production Area Significant Storm Event Inspection Form.

iv. SOLIDS REMOVAL PROCEDURES

1. The average thickness of the solids accumulated on the bottom of the pond(s) will be measured on the designated interval using the owner, operator, and/or designer specified procedure.
2. Once solids/sludge on the bottom of the pond(s) reach the owner, operator, and/or designer specified critical thickness, solids/sludge will be removed so that adequate capacity is maintained.
3. When necessary, solids/sludge will be removed using the owner, operator, and/or designer specified methods for protecting any pond liner.

OPERATIONS AND MAINTENANCE PLAN FOR POND: Wastewater Storage Pond #1

Dry season freeboard monitoring will occur on the 5th of each month.

Wet season freeboard monitoring will occur every Monday of each week.

Process wastewater pond contents will be lowered to the minimum operating level (elevation) of 2.0 feet above the pond invert beginning in April of each year.

Sludge accumulation will be measured semiannually.

The following method will be used to measure solids/sludge accumulation:

Solids are visually monitored or professionally measured to evaluate solids accumulation.

When solids/sludge accumulate to a thickness of 8.0 feet, the following method will be used to maintain adequate storage capacity while protecting any pond liner:

Storage is agitated and solids pumped out during irrigation events. Remaining solids are either removed with the use of an excavator or pumped out with the use of slurry wagons. Cleaning equipment stays at least one foot off the bottom of the storage.

OPERATIONS AND MAINTENANCE PLAN FOR POND: Wastewater Storage Pond #2

Dry season freeboard monitoring will occur on the 5th of each month.

Wet season freeboard monitoring will occur every Monday of each week.

Process wastewater pond contents will be lowered to the minimum operating level (elevation) of 2.0 feet above the pond invert beginning in March of each year.

Sludge accumulation will be measured semiannually.

The following method will be used to measure solids/sludge accumulation:

Solids are visually monitored or professionally measured to evaluate solids accumulation.

When solids/sludge accumulate to a thickness of 11.0 feet, the following method will be used to maintain adequate storage capacity while protecting any pond liner:

Storage is agitated and solids pumped out during irrigation events. Remaining solids are either removed with the use of an excavator or pumped out with the use of slurry wagons. Cleaning equipment stays at least one foot off the bottom of the storage.

OPERATIONS AND MAINTENANCE PLAN FOR POND: Solid Settling Basin

Dry season freeboard monitoring will occur on the 5th of each month.

Wet season freeboard monitoring will occur every Monday of each week.

Process wastewater pond contents will be lowered to the minimum operating level (elevation) of 2.0 feet above the pond invert beginning in May of each year.

Sludge accumulation will be measured semiannually.

The following method will be used to measure solids/sludge accumulation:

Solids are visually monitored or professionally measured to evaluate solids accumulation. Solids are removed semiannually with the use of an excavator

When solids/sludge accumulate to a thickness of 12.0 feet, the following method will be used to maintain adequate storage capacity while protecting any pond liner:

Solids are removed from basin with the use of an excavator. Cleaning equipment stays at least one foot off the bottom of the basin.

B. RAINFALL COLLECTION SYSTEM MAINTENANCE

i. Annually, rainfall collection systems will be assessed to ensure:

1. Conveyances are free of debris and operating within designer/manufacturer specifications.
2. Components are properly fastened according to designer/manufacturer specifications.
3. All downspouts and related infrastructure are connected to conveyances that divert water away from manured areas.
4. Water from the rainfall collection system(s) is diverted to an appropriate destination.

Buildings with rooftop rainfall collection systems	Quantity	Surface Area (sq. ft.)
Center Freestall Barn	1	34,000

Commodity Barn	1	6,300
East Freestall Barn	1	44,000
Hay Barn	1	6,000
Hay Barn	1	5,000
Milk Barn	1	10,116
Shade Barn	1	17,000
Shade Barn	1	4,000
Shop	1	3,200
West Freestall Barn	1	70,000

Assessment for buildings with rooftop rainfall collection systems will occur on or before: 5th of October

Assessment for other rainfall collections systems will occur on or before: 5th of November

Description of how rainfall collection systems will be assessed:

Gutters and downspouts are cleaned and repaired as needed.

C. CORRAL MAINTENANCE

i. Monthly from June 1st through September 30th (dry season) and weekly from October 1st through May 31st (wet season), the perimeter of the corrals and pens will be assessed to ensure that runon and runoff controls such as berms are functioning correctly, and that all water that contacts waste is collected and diverted into the wastewater retention pond(s). Any issues identified and corrective actions performed will be recorded on a Dairy Production Area Visual Inspection Form - Corrals.

ii. The corrals will be assessed by the designated date to determine:

1. Whether manure needs to be removed from the corrals based on the owner, operator, and/or designer specified conditions.

2. Whether there are depressions within the corrals that should be filled/groomed to prevent ponding.

iii. Removal of manure and/or regrading, when necessary, will be completed on or before the designated month/day of each year.

Day of the month dry season assessment will occur: 5th of each month

Day of the week wet season assessment will occur: Monday

Solid manure removal and regrading assessment will occur on or before: 5th of October

Conditions requiring manure removal and/or regrading:

Solids are removed twice per year, usually in the spring and fall after harvest.

Solid manure removal and/or regrading will occur on or before: 5th of November

D. FEED STORAGE AREA MAINTENANCE

i. During the dry season and prior to the wet season, the perimeter of storage areas will be assessed to ensure all runon and runoff controls such as berms are functioning correctly and runoff and leachate from the areas are collected and diverted into the wastewater pond(s). Any issues identified and corrective actions performed will be recorded on a Dairy Production Area Visual Inspection Form - Manure and Feed Storage Areas.

ii. During the wet season, feed storage area(s) will be assessed to determine if there are depressions within any feed storage area that should be filled or repaired to prevent ponding.

iii. Any necessary regrading/resurfacing and berm/conveyance maintenance will be completed on an annual basis.

Day of the month dry season assessment will occur: 5th of each month

Day of the week wet season assessment will occur: Monday

Regrading/resurfacing and berm maintenance assessment will occur on or before: 5th of October

Regrading/resurfacing and berm maintenance completion will occur on or before: 5th of November

E. SOLID MANURE STORAGE AREA MAINTENANCE

i. During the dry season and prior to the wet season, the perimeter of manure storage areas will be assessed to ensure all runon and runoff controls such as berms are functioning correctly and runoff and leachate from the areas are collected and diverted into the wastewater pond(s). Any issues identified and corrective actions performed will be recorded on a Dairy Production Area Visual Inspection Form - Manure and Feed Storage Areas.

ii. During the wet season, manure storage area(s) will be assessed to determine if there are depressions within any manure storage area that should be filled to prevent ponding.

iii. Any necessary regrading/resurfacing and berm/conveyance maintenance will be completed on an annual basis.

Day of the month dry season assessment will occur: 5th of each month

Day of the month wet season assessment will occur: Monday

Regrading/resurfacing and berm maintenance assessment will occur on or before: 5th of October

Regrading/resurfacing and berm maintenance completion will occur on or before: 5th of November

F. ANIMAL HOUSING AND FLUSH WATER CONVEYANCE SYSTEM MAINTENANCE

i. A map will be attached that identifies critical points for monitoring the animal housing and flush water conveyance system to verify that water is being managed as identified in this Waste Management Plan. These points will be maintained at owner, operator, and/or designer specified intervals.

Animal housing area assessment will occur on or before: 5th of October

Animal housing drainage system maintenance will occur on or before: 5th of November

Animal housing area drainage system assessment and maintenance methods:

Debris is removed from flush lanes, drains and corral drains as needed.
Pumps are monitored daily.
Scrape lanes are cleaned daily or as needed.
Corrals are regraded and fill dirt applied as needed to prevent ponding.

G. MORTALITY MANAGEMENT

i. Dead animals will be stored, removed, and disposed of properly.

Rendering company or landfill name: Sisk Tallow

Rendering company or landfill telephone number: (209) 667-1451

H. ANIMALS AND SURFACE WATER MANAGEMENT

i. A system will be in place, monitored, and maintained to prevent animals from entering any surface waters when a stream or other surface water crosses or adjoins the corral(s).

Does a stream or any other surface water cross or adjoin the corrals? [ ] Yes [X] No

I. MONITORING SALT IN ANIMAL RATIONS

i. The combined quantity of minerals as salt in animal drinking water and feed rations will be reviewed by a qualified nutritionist on a routine basis to verify that minerals are limited to the amount required to maintain animal health and optimum production. As feed rations change, mineral content may change.

Assessment interval: Monthly

J. CHEMICAL MANAGEMENT

i. Chemicals and other contaminants handled at the facility will not be disposed of in any manure or process wastewater, storm water storage or treatment system unless specifically designed to treat such chemicals and other contaminants.

Chemical Name	Quantity	Units	Frequency	Usage Area	Destination (Used Chemical / Container)	Disposal Company		Collection Frequency
						Name	Phone	
Roundup	25	gallons	year	Pond banks, roadways, Valves and pipelines	Disposal Company	Gilton Solid Waste	(209) 527-3781	routine
Goal	15	gallons	year	Pond banks, roadways, Valves and pipelines	Disposal Company	Gilton Solid Waste	(209) 527-3781	routine

REQUIRED ATTACHMENTS

The following list, based upon user selections and data entries, describes the minimum required attachments that must be submitted with the Waste Management Plan for the reporting schedule of 'July 1, 2010'.

A. SITE MAP(S)

Provide a site map (or maps) of appropriate scale to show property boundaries and the location of the features of the production area including the following in sufficient detail: structures used for animal housing, milk parlor, and other buildings; corrals and ponds; solids separation facilities (settling basins or mechanical separators); other areas where animal wastes are deposited or stored; feed storage areas; drainage flow directions and nearby surface waters; all water supply wells (domestic, irrigation, and barn wells) and groundwater monitoring wells.

Production area map reference number: Figure 2

Provide a site map (or maps) of appropriate scale to show property boundaries and the location of the features of all land application areas (land under the Discharger's control, whether it is owned, rented, or leased, to which manure or process wastewater from the production area is or may be applied for nutrient recycling) including the following in sufficient detail: a field identification system (Assessor's Parcel Number; field by name or number; total acreage of each field; crops grown; indication if each field is owned, leased, or used pursuant to a formal agreement); indication of what type of waste is applied (solid manure only, wastewater only, or both solid manure and wastewater); drainage flow direction in each field, nearby surface waters, and storm water discharge points; tailwater and storm water drainage controls; subsurface (tile) drainage systems (including discharge points and lateral extent); irrigation supply wells and groundwater monitoring wells; sampling locations for discharges of storm water and tailwater to surface water from the field.

Application area map reference number: Figure 3

Provide a site map (or maps) of appropriate scale to show property boundaries and the location of all cropland (land that is part of the dairy but not used for dairy waste application) including the following in sufficient detail: Assessor's Parcel Number, total acreage, crops grown, and information on who owns or leases the field. The Waste Management Plan shall indicate if such cropland is covered under the Conditional Waiver of Waste Discharge Requirements for Discharges from Irrigated Lands (Order No. R5-2006-0053 for Coalition Group or Order No. R5-2006-0054 for Individual Discharger, or updates thereto).

Non-application area map reference number: None

Provide a site map (or maps) of appropriate scale to show property boundaries and the location of all off-property domestic wells within 600 feet of the production area or land application area(s) associated with the dairy and the location of all municipal supply wells within 1,500 feet of the production area or land application area(s) associated with the dairy.

Well area map reference number: Figure 2, 3

Provide a site map (or maps) of appropriate scale to show property boundaries and a vicinity map, north arrow and the date the map was prepared. The map shall be drawn on a published base map (e.g., a topographic map or aerial photo) using an appropriate scale that shows sufficient details of all facilities.

Vicinity map reference number: Figure 1

B. PROCESS WASTEWATER MAP(S)

Provide a site map (or maps) of appropriate scale to show property boundaries and the location of the features of the production area including the following in sufficient detail: process wastewater conveyance structures, discharge points, and discharge /mixing points with irrigation water supplies; pumping facilities and flow meter locations; upstream diversion structures, drainage ditches and canals, culverts, drainage controls (berms/levees, etc.), and drainage easements; and any additional components of the waste handling and storage system.

Production infrastructure system area map reference number: Figure 2,3

Provide a site map (or maps) of appropriate scale to show property boundaries and the location of the features of all land application areas (land under the Discharger's control, whether it is owned, rented, or leased, to which manure or process wastewater from the production area is or may be applied for nutrient recycling) including the following in sufficient detail: process wastewater conveyance structures, discharge points and discharge mixing points with irrigation water supplies; pumping facilities ; flow meter locations; drainage ditches and canals, culverts, drainage controls (berms, levees, etc.), and drainage easements.

Land application infrastructure system area map reference number: Figure 3

C. EXCESS PRECIPITATION CONTINGENCY REPORT

There were no attachment references entered or required for this attachment section.

D. OPERATION AND MAINTENANCE PLAN

Attach a map that identifies critical points for monitoring the system to verify that water is being managed as identified in this Waste Management Plan (see Attachment B, Pg B-7 V.F, V.G, and V.H for additional requirements).

Animal housing assessment map reference number: Figure 2

E. FLOOD PROTECTION / INUNDATION REPORT

Provide a published flood zone map that shows the facility is outside the relevant flood zones.

Flood zone map and/or document reference number: 06099C0365E

F. BACKFLOW PROTECTION

Attach documentation from a trained professional (i.e. a person certified by the American Backflow Prevention Association, an inspector from a state or local governmental agency who has experience and/or training in backflow prevention, or a consultant with such experience and/or training), as specified in Required Reports and Notices H.1 of Waste Discharge Requirements General Order No. R5-2007-0035, that there are no cross-connections that would allow the backflow of wastewater into a water supply well, irrigation well, or surface water as identified on the Site Map.

Backflow documentation reference number: Backflow Form

Waste Management Plan Report
General Order No. R5-2007-0035, Attachment B
July 1, 2010 deadline

CERTIFICATION

A. DAIRY FACILITY INFORMATION

Name of dairy or business operating the dairy: 6-X Dairy

Physical address of dairy:

9848 Milnes RD	Modesto	Stanislaus	95357
Number and Street	City	County	Zip Code

Street and nearest cross street (if no address):

B. DOCUMENTATION OF QUALIFICATIONS AND PLAN DEVELOPMENT

I have reviewed the portion of the waste management plan that is related to storage capacity facility and design specifications in accordance with Item II, Attachment B of the Waste Discharge Requirements General Order for Existing Milk Cow Dairies - Order No. R5-2007-0035 and certify that this plan was prepared by, or under the responsible charge of, and certified by a civil engineer who is registered pursuant to California law or other person as may be permitted under the provisions of the California Business and Professions Code to assume responsible charge of such work.

Storage capacity is:

Insufficient

☐ Retrofitting Plan/Schedule/Design Criteria attached in accordance with Attachment B, II.B. 1-5 and Attachment B, II. C.

Sufficient

☒ Certification 1 - Certified in accordance with Attachment B, II. A. 1-8. (no contingency plan)

☐ Certification 2 - Certified in accordance with Attachment B, II. A. 1-8, II. C. (with contingency plan attached)

CIVIL ENGINEER'S WET STAMP

Manuel R Sousa — 10-2-14

SIGNATURE OF CIVIL ENGINEER — DATE

Manny Sousa
PRINT OR TYPE NAME

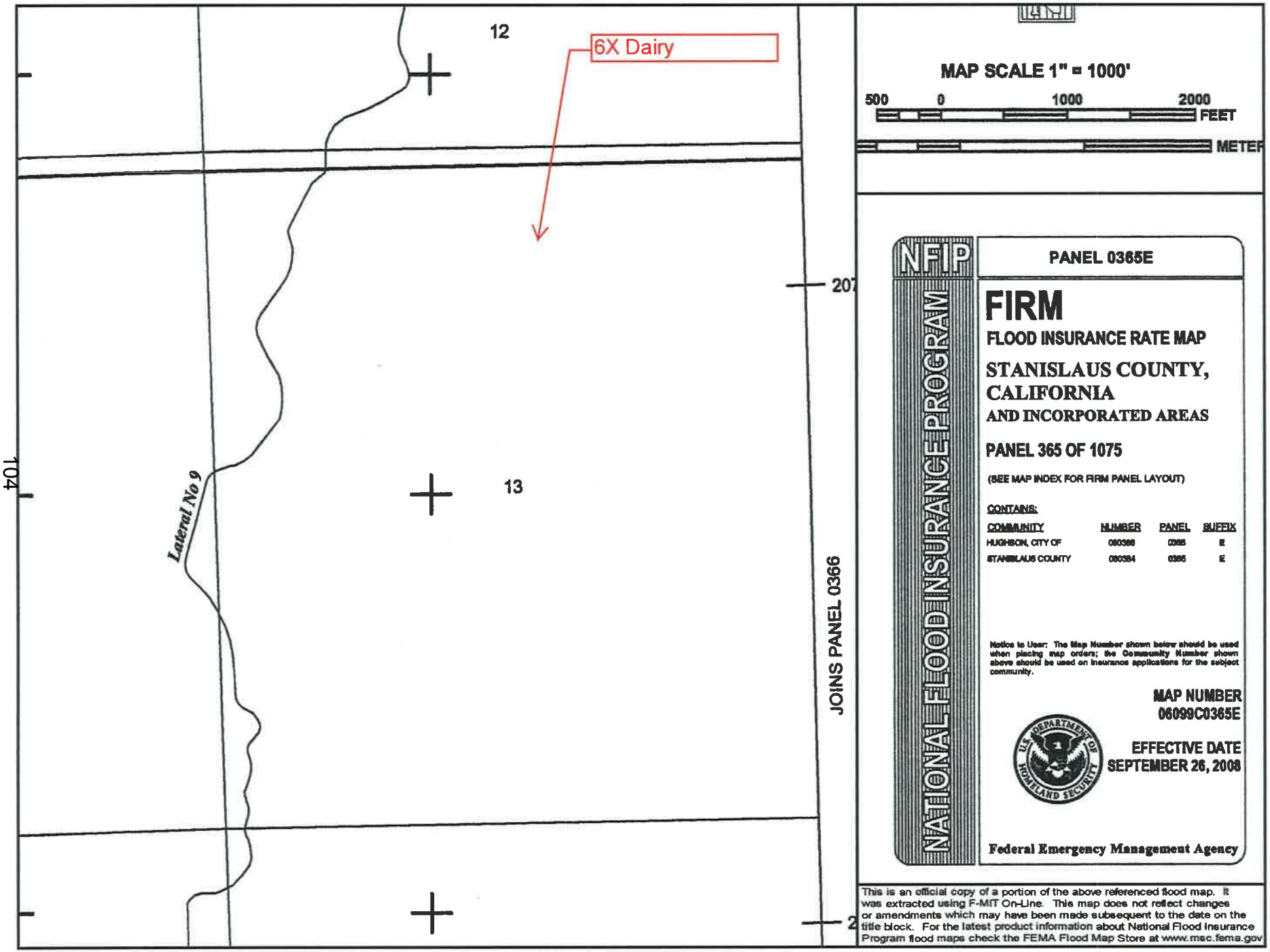
P.O. Box 1613; Oakdale, CA 95361
MAILING ADDRESS

(209) 238-3151
PHONE NUMBER

C. OWNER AND/OR OPERATOR CERTIFICATION

I certify under penalty of law that I have personally examined and am familiar with the information submitted in this document and all attachments and that, based on my inquiry of those individuals immediately responsible for obtaining the information, I believe that the information is true, accurate, and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment.

SIGNATURE OF OWNER	SIGNATURE OF OPERATOR
Arlene Stueve, TR. Van Leeuwen Family Trust	Gary Osmundson
PRINT OR TYPE NAME	PRINT OR TYPE NAME
	10-30-14
DATE	DATE


12
6X Dairy
13
Lateral No 9
104
JOINS PANEL 0366
MAP SCALE 1" = 1000'
500 0 1000 2000
FEET
METER
NFIP
NATIONAL FLOOD INSURANCE PROGRAM
PANEL 0365E
FIRM
FLOOD INSURANCE RATE MAP
STANISLAUS COUNTY, CALIFORNIA
AND INCORPORATED AREAS
PANEL 365 OF 1075
(SEE MAP INDEX FOR FIRM PANEL LAYOUT)
CONTAINS:
COMMUNITY NUMBER PANEL SUFFIX
HUGHSON, CITY OF 060380 0365 E
STANISLAUS COUNTY 060394 0365 E
Notice to User: The Map Number shown below should be used when placing map orders; the Community Number shown above should be used on insurance applications for the subject community.
MAP NUMBER
06099C0365E
EFFECTIVE DATE
SEPTEMBER 26, 2008
Federal Emergency Management Agency
This is an official copy of a portion of the above referenced flood map. It was extracted using F-MIT On-Line. This map does not reflect changes or amendments which may have been made subsequent to the date on the title block. For the latest product information about National Flood Insurance Program flood maps check the FEMA Flood Map Store at www.msc.fema.gov

LEGEND

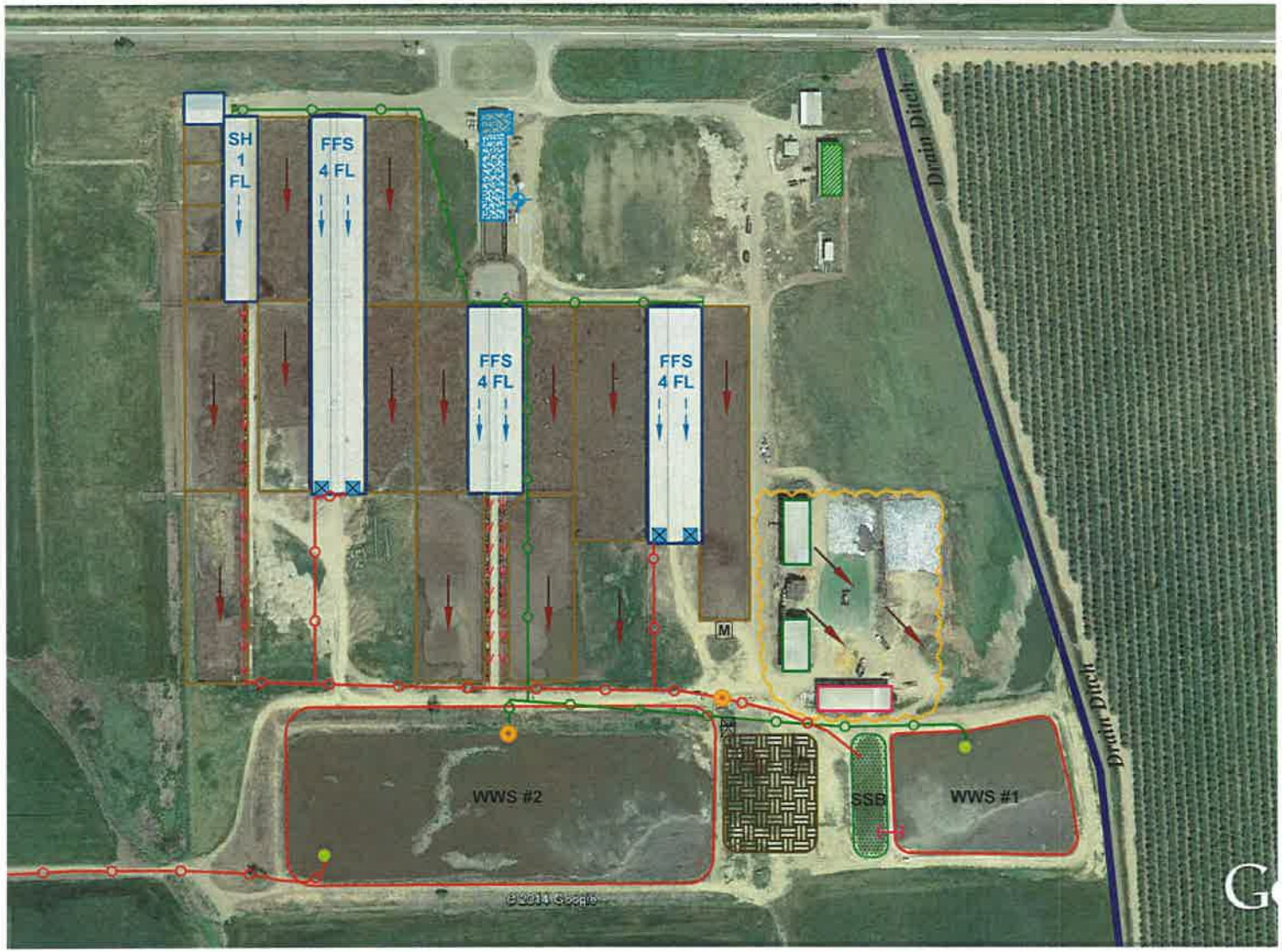
Facility Boundary

N

FR Ag Services, Inc.	SCALE: 0 2000 4000 APPROXIMATE SCALE IN FEET	6-X DAIRY 9848 Milnes Rd Modesto, CA 95357			**FIGURE 1** TOPOGRAPHIC MAP
	PROJECT NO. FRA-00	DATE: 2/13/14	DRAWN BY: SB	APP. BY: VF	FRA-00_6X

LEGEND

- Milk Barn
- Waste Water Storage
- Shade
- Commodity Barn
- Hay Barn
- Solids Settling Basin
- Shop
- Corral
- Soild Manure Stacking
- Mechanical Separator
- Feed Storage
- Flow Direction
- Wastewater Pipeline
- Flush Pipeline
- Flush Lane
- 3 Flush Lanes
- Floating Pump
- Pump
- Domestic Well
- Drain
- M Mortality Storage
- "T" Pipe
- Drain Ditch
- Capped
- FFS Flush Freestall
- FL Flush Lane



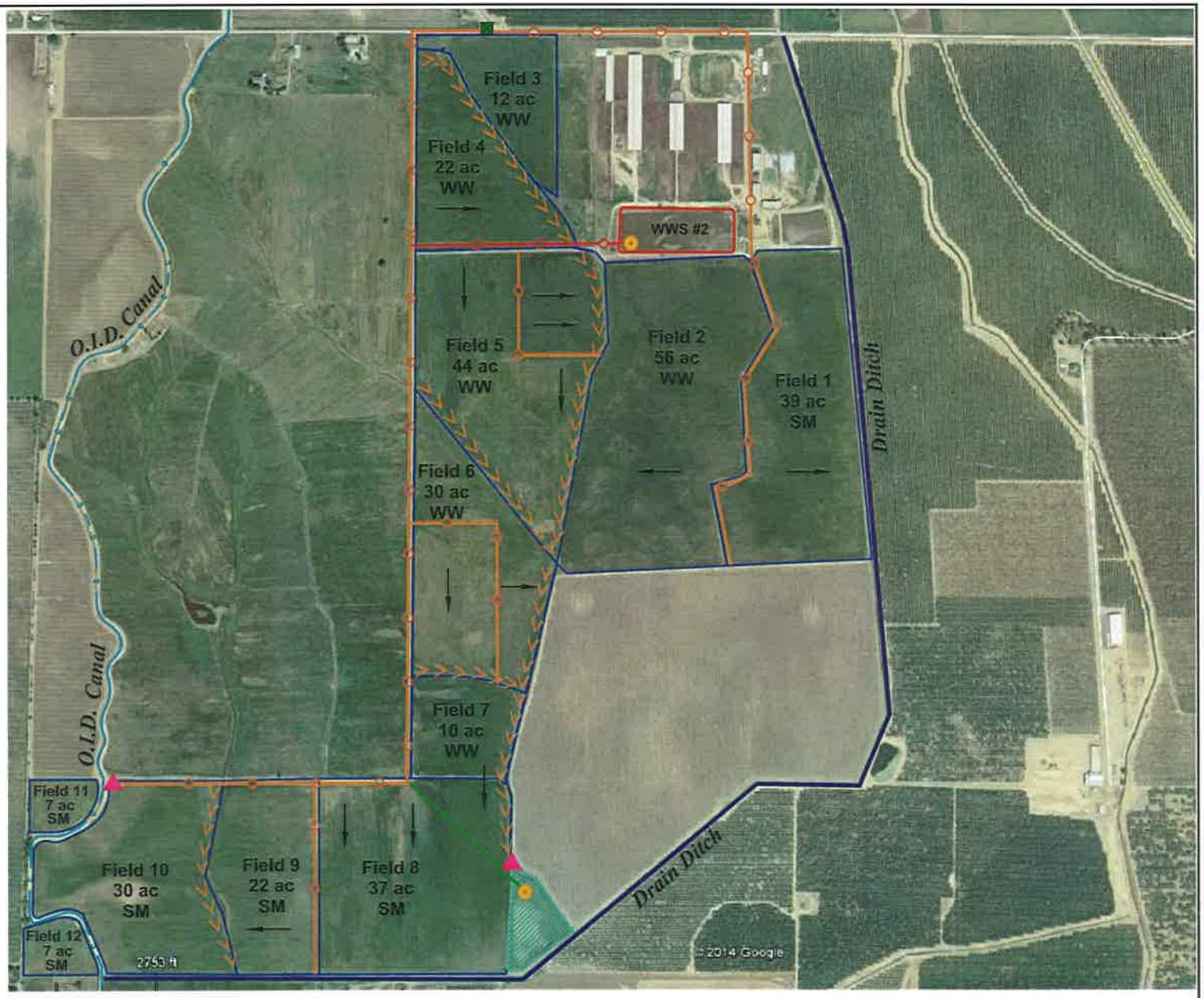
FR Ag Services, Inc.	SCALE: 0 300 600 APPROXIMATE SCALE IN FEET	6-X DAIRY Stanislaus County, CA			**FIGURE 2** DAIRY FACILITY
	PROJECT NO. FRA-00	DATE: 9/19/14	DRAWN BY: SB	APP. BY: VF	FRA-00_6-X

LEGEND

- Wastewater Pipeline
- Tailwater Pipeline
- Irrigation Pipeline
- Field Flow Direction
- Drain Ditch
- C — Old Canal
- Tailwater Flow
- Wastewater Storage
- Tailwater Pond
- Irrigation Control Box
- Pump
- Gate Valve
- SM — Solid Manure
- WW — Wastewater

FIELD APN's

Field 1 - 015-003-016, 014-036-003
Field 2, 3, 4, 5, 6, 7 - 014-036-003
Field 8, 9, 10, 11, 12 - 014-047-008



Ag Services, Inc.

SCALE:
0 1000 2000
APPROXIMATE SCALE IN FEET

6-X DAIRY
Stanislaus County, CA

FIGURE 3
DAIRY FIELDS

PROJECT NO.	DATE:	DRAWN BY:	APP. BY:
FRA-00	9/19/14	SB	VF

FRA-00_6-X

FR Ag Services, Inc.

LAND APPLICATION AREA FIELD INFORMATION ATTACHMENT

DAIRY NAME: 6-X Dairy
DAIRY ADDRESS: 9848 Milnes Road, Modesto, CA 95357

APN	FIELD ID	ACRES	CROPS GROWN	OPERATED BY DAIRY OWNER	LEASED BY DAIRY OPERATOR	LEASED BY OTHER	NUTRIENTS APPLIED
0015-0003-0016-0000	1	39	Corn / Forage	XX			Solid Manure
0014-0036-0003-0000							
0014-0036-0003-0000	2	56	Corn / Forage	XX			Wastewater
0014-0036-0003-0000	3	12	Corn / Sudan	XX			Wastewater
0014-0036-0003-0000	4	22	Corn / Corn	XX			Wastewater
0014-0036-0003-0000	5	44	Corn / Forage	XX			Wastewater
0014-0036-0003-0000	6	30	Corn / Forage	XX			Wastewater
0014-0036-0003-0000	7	10	Corn / Corn	XX			Wastewater
0014-0047-0008-0000	8	37	Corn / Corn	XX			Solid Manure
0014-0047-0008-0000	9	22	Corn / Forage	XX			Solid Manure
0014-0047-0008-0000	10	30	Corn / Sudan	XX			Solid Manure
0014-0047-0008-0000	11	7	Forage	XX			Solid Manure
0014-0047-0008-0000	12	7	Forage	XX			Solid Manure

DEPARTMENT OF PLANNING AND COMMUNITY DEVELOPMENT

1010 10th Street, Suite 3400, Modesto, CA 95354
Phone: 209.525.6330 Fax: 209.525.5911

August 6, 2015

MEMO TO: Stanislaus County Planning Commission

FROM: Department of Planning and Community Development

SUBJECT: USE PERMIT APPLICATION NO. PLN2014-0111 – 6-X DAIRY

Staff is requesting that Use Permit Application No. PLN2014-0111 – 6-X Dairy be continued to the September 3, 2015, Planning Commission meeting. The applicant and staff are currently working with the San Joaquin Valley Air Pollution District (SJVAPCD) on addressing air quality comments provided by the Air District. The continuance is requested to provide the applicant and staff additional time to address concerns recently raised by the Air District.

RECOMMENDATION

Staff recommends that Use Permit Application No. PLN2014-0111 – 6-X Dairy be continued to the regular Planning Commission meeting of September 3, 2015.

DEPARTMENT OF PLANNING AND COMMUNITY DEVELOPMENT

1010 10th Street, Suite 3400, Modesto, CA 95354
Phone: 209.525.6330 Fax: 209.525.5911

September 3, 2015

MEMO TO: Stanislaus County Planning Commission

FROM: Department of Planning and Community Development

SUBJECT: USE PERMIT APPLICATION NO. PLN2014-0111 – 6-X DAIRY

Staff is requesting that Use Permit Application No. PLN2014-0111 – 6-X Dairy be continued indefinitely. The applicant is currently working with the San Joaquin Valley Air Pollution District (SJVAPCD) on addressing air quality comments provided by the Air District. The continuance is requested to provide the applicant and staff additional time to address concerns raised by the Air District.

RECOMMENDATION

Staff recommends that Use Permit Application No. PLN2014-0111 – 6-X Dairy be continued indefinitely.

SUMMARY OF RESPONSES FOR ENVIRONMENTAL REVIEW REFERRALS

PROJECT: USE PERMIT APPLICATION NO. PLN2014-0111 - 6-X DAIRY

REFERRED TO:				RESPONDED		RESPONSE			MITIGATION MEASURES		CONDITIONS	
	2 WK	30 DAY	PUBLIC HEARING NOTICE	YES	NO	WILL NOT HAVE SIGNIFICANT IMPACT	MAY HAVE SIGNIFICANT IMPACT	NO COMMENT NON CEQA	YES	NO	YES	NO
CA DEPT OF CONSERVATION: Land Resources / Mine Reclamation	X	X	X		X							
CA DEPT OF FISH & WILDLIFE	X	X	X		X							
CA DEPT OF TRANSPORTATION DIST 10	X	X	X		X							
CA OPR STATE CLEARINGHOUSE	X	X	X	X		X				X		X
CA RWQCB CENTRAL VALLEY REGION	X	X	X	X		X				X		X
COOPERATIVE EXTENSION	X	X	X		X							
FIRE PROTECTION DIST: STAN. CONSOLIDATED	X	X	X	X		X				X		X
HOSPITAL DISTRICT: OAK VALLEY	X	X	X		X							
IRRIGATION DISTRICT: OAKDALE & MODESTO	X	X	X	X		X				X	X	
MOSQUITO DISTRICT: EASTSIDE	X	X	X		X							
MT VALLEY EMERGENCY MEDICAL	X	X	X		X							
PACIFIC GAS & ELECTRIC	X	X	X		X							
SAN JOAQUIN VALLEY APCD	X	X	X	X		X				X	X	
SCHOOL DISTRICT 1: EMPIRE & WATERFORD	X	X	X		X							
SCHOOL DISTRICT 2: MODESTO & WATERFORD	X	X	X		X							
STAN CO AG COMMISSIONER	X	X	X		X							
STAN CO BUILDING PERMITS DIVISION	X	X		X				X		X		X
STAN CO CEO	X	X			X							
STAN CO DER	X	X			X							
STAN CO ERC	X	X			X							
STAN CO FARM BUREAU	X	X			X							
STAN CO HAZARDOUS MATERIALS	X	X			X							
STAN CO PUBLIC WORKS	X	X		X		X				X	X	
STAN CO SHERIFF	X	X			X							
STAN CO SUPERVISOR DIST 1: O'BRIEN	X	X			X							
STAN COUNTY COUNSEL	X	X			X							
STANISLAUS FIRE PREVENTION BUREAU	X	X			X							
STANISLAUS LAFCO	X	X			X							
SURROUNDING LAND OWNERS			X		X							
TELEPHONE COMPANY:	X	X	X		X							
US FISH & WILDLIFE	X	X	X		X							