2010 Dairy Annual Report – Due 1 July 2011

☐ **Check Box if Dairy is Empty**

Dairy Name: Henry Tosta Dairy

Dairy Address: 20662 San Jose Rd. Tracy

Date Annual Report Received: 6/23/11

Type of Annual Report Used: (New) Or Innovative Ag Form

Annual Report Document Review

Signatures: (Yes) Missing Operator

Missing Owner Missing Both

	Number of Mature Cows	Number of Acres
2010 Annual Report	950	428
2005 ROWD + 15%	1196	172

Nutrient Exports Reported? (Yes) or No or No exports

Number of Manure Manifests Received: 2

Number of New Wastewater Agreements Received: 0

Crops and Harvest Information Provided? Yes or (No)

Land Application Information Provided? Yes or (No)

Manure Analyses Provided? (Yes) or No

Process Wastewater Analyses? (Yes) or No

Irrigation Water Analyses Provided? (Yes) or No

Soil Analyses Provided (Required every 5 yrs)? (Yes) or No Or N/A→2009 DATA

Plant Tissue Analyses Provided)? Yes or (No)

NO CROPS

Overall Applied to Removed Ratio for N: X

Discharges Reported? Yes or (No)

If Yes, was information provided? Yes or No

NMP Updated? Yes or (No)

Any Validation Errors? Yes or (No)

If Yes, please list:

Review of Other Submittals

Groundwater Results? (Yes) or No

Chain of Custody Received? (Yes) or No

WMP Retrofit Status Provided? Yes or No or (N/A)

Notes on Construction Status:

ok

Annual Report - General Order No. R5-2007-0035
Reporting period 01/01/2010 to 12/31/2010.

DAIRY FACILITY INFORMATION

A. NAME OF DAIRY OR BUSINESS OPERATING THE DAIRY: Henry Tosta Dairy

Physical address of dairy:

20662 San Jose Road	Tracy	San Joaquin	95304
Number and Street	City	County	Zip Code

Street and nearest cross street (if no address):

Date facility was originally placed in operation: 07/05/1962

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

County Assessor Parcel Number(s) for dairy facility:

0209-0290-0007-0000

B. OPERATORS

Tosta, Henry

Operator name: Tosta, Henry — Telephone no.: (209) 836-1286 (Landline) — Cellular

20662 San Jose RD	Tracy	CA	95304
Mailing Address Number and Street	City	State	Zip Code

This operator is responsible for paying permit fees.

C. OWNERS

Tosta, Henry

Legal owner name: Tosta, Henry — Telephone no.: (209) 836-1286 (Landline) — Cellular

20662 San Jose RD	Tracy	CA	95304
Mailing Address Number and Street	City	State	Zip Code

This owner is responsible for paying permit fees.

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AVAILABLE NUTRIENTS

A. HERD INFORMATION

	Milk Cows	Dry Cows	Bred Heifers (15-24 mo.)	Heifers (7-14 mo. to breeding)	Calves (4-6 mo.)	Calves (0-3 mo.)
Number open confinement	0	150	250	200	150	75
Number under roof	800	0	0	0	0	0
Maximum number	800	150	250	200	150	75
Average number	800	135	250	200	150	75
Avg live weight (lbs)	1,400	1,500	1,150	730		

Predominant milk cow breed: Holstein

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

B. MANURE GENERATED

Total manure excreted by the herd: 27,761.88 *tons per reporting period*

Total nitrogen from manure: 344,688.94 *lbs per reporting period*

After ammonia losses (30% loss applied): 241,282.26 *lbs per reporting period*

Total phosphorus from manure: 56,263.02 *lbs per reporting period*

Total potassium from manure: 152,156.18 *lbs per reporting period*

Total salt from manure: 407,723.25 *lbs per reporting period*

C. PROCESS WASTEWATER GENERATED

Process wastewater generated: _____ *gallons*

Total nitrogen generated: _____ *lbs*

Total phosphorus generated: _____ *lbs*

Total potassium generated: _____ *lbs*

Total salt generated: _____ *lbs*

	0 *gallons applied*
+	0 *gallons exported*
-	0 *gallons imported*
=	0 *gallons generated*

D. IRRIGATION SOURCES

Irrigation Source Name	Type
Canal	Surface water

Irrigation Source Name	Type
Domestic Well	Ground water

E. NUTRIENT IMPORTS

No nutrient imports entered.

F. NUTRIENT EXPORTS

Date	Material type	Quantity	Reporting basis	Moisture (%)	Density (lbs/cu ft)	Total N (%)	Total P (%)	K (%)	Total Salt (%)
06/18/2010	Corral solids	600.00 *ton*	As-is	11.3		2.540000	0.520000	1.900000	0.000000
09/01/2010	Corral solids	1,200.00 *ton*	As-is	37.5		2.890000	0.650000	2.700000	0.000000

No liquid nutrient exports entered.

Material type	Total N (lbs)	Total P (lbs)	Total K (lbs)	Total salt (lbs)
Dry manure	99,840.00	21,840.00	87,600.00	0.00
Process wastewater	0.00	0.00	0.00	0.00
Total exports for all materials	99,840.00	21,840.00	87,600.00	0.00

APPLICATION AREA

A. LIST OF LAND APPLICATION AREAS

Field name	Controlled acres	Cropable acres	Total harvests	Type of waste applied	Parcel number
1	36	36	0	none	0209-0290-0006-0000
2	12	12	0	none	0209-0300-0018-0000
3	85	85	0	none	0209-0300-0018-0000
4	80	80	0	none	0209-0290-0003-0000
6	118	118	0	none	0209-0300-0016-0000
8	97	97	0	none	0212-0090-0001-0000
Land application area totals	428	428	0		

B. CROPS AND HARVESTS

No application area fields entered.

NUTRIENT BUDGET

A. LAND APPLICATIONS

No application area crops entered.

B. NUTRIENT BUDGET

No application area crops entered.

NUTRIENT ANALYSES

A. MANURE ANALYSES

Manure

Sample and source description: Manure
Source of analysis: Lab analysis
Method of reporting: As-is
Sample date: 07/08/2010
Material type: Corral solids
Density: _____ *lbs/cu ft*
Moisture: 11.3 %

	Total N (%)	Total P (%)	K (%)	Calcium (%)	Magnesium (%)	Sodium (%)	Bicarbonate (%)	Carbonate (%)	Sulfate (%)	Chloride (%)	Total salt (%)
Value	2.540000	0.520000	1.900000								
DL	0.100000	0.100000	0.100000								

Manure

Sample and source description: Manure
Source of analysis: Lab analysis
Method of reporting: As-is
Sample date: 10/04/2010
Material type: Corral solids
Density: _____ *lbs/cu ft*
Moisture: 37.5 %

	Total N (%)	Total P (%)	K (%)	Calcium (%)	Magnesium (%)	Sodium (%)	Bicarbonate (%)	Carbonate (%)	Sulfate (%)	Chloride (%)	Total salt (%)
Value	2.890000	0.650000	2.700000	3.200000	0.950000	0.510000				1.320000	
DL	0.100000	0.100000	0.100000	0.010000	0.020000	0.010000				0.000000	

B. PROCESS WASTEWATER ANALYSES

Lagoon Water

Sample and source description: Lagoon Water

Sample date: 01/06/2010 Material type: Process wastewater Source of analysis: Lab analysis

	Kjeldahl-N (mg/L)	Ammonium-N (mg/L)	Nitrate-N (mg/L)	Total P (mg/L)	K (mg/L)	Calcium (mg/L)	Magnesium (mg/L)	Sodium (mg/L)	Bicarbonate (mg/L)	Carbonate (mg/L)	Sulfate (mg/L)	Chloride (mg/L)	EC (µmhos/cm)
Value	549.00	370.00		46.00	956.00								5,800.00
DL	0.50	0.50		0.50	2.00								1.00

Lagoon

Sample and source description: Lagoon

Sample date: 09/17/2010 Material type: Process wastewater Source of analysis: Lab analysis

	Kjeldahl-N (mg/L)	Ammonium-N (mg/L)	Nitrate-N (mg/L)	Total P (mg/L)	K (mg/L)	Calcium (mg/L)	Magnesium (mg/L)	Sodium (mg/L)	Bicarbonate (mg/L)	Carbonate (mg/L)	Sulfate (mg/L)	Chloride (mg/L)	EC (µmhos/cm)
Value	381.00	260.00		52.00	502.00	180.00	98.00	302.00				436.00	5,390.00
DL	0.50	0.50		0.50	2.00	0.50	1.00	0.50				0.10	1.00

Lagoon Water

Sample and source description: Lagoon Water

Sample date: 10/04/2010 Material type: Process wastewater Source of analysis: Lab analysis

	Kjeldahl-N (mg/L)	Ammonium-N (mg/L)	Nitrate-N (mg/L)	Total P (mg/L)	K (mg/L)	Calcium (mg/L)	Magnesium (mg/L)	Sodium (mg/L)	Bicarbonate (mg/L)	Carbonate (mg/L)	Sulfate (mg/L)	Chloride (mg/L)	EC (µmhos/cm)
Value	756.00	518.00		64.00	1,396.00								13,200.00
DL	0.50	0.50		0.50	2.00								1.00

C. IRRIGATION WATER ANALYSES

Canal

Canal

Sample description: Canal

Sample date: 10/29/2010 Source of analysis: Lab analysis

	Total N (mg/L)	EC (µmhos/cm)
Value		641.00
DL		0.10

Domestic Well

Domestic Well

Sample description: Domestic Well

Sample date: 10/04/2010 Source of analysis: Lab analysis

	Total N (mg/L)	EC (µmhos/cm)
Value		806.00
DL		0.10

D. SOIL ANALYSES

1

1

Soil

Sample and source description: Soil

Sample date: 01/28/2009 Source of analysis: Lab analysis

	Nitrate-N (mg/kg)	Total P (mg/kg)	Soluble P (mg/kg)	K (mg/kg)	Total salt (mg/kg)	Organic matter (%)
Value		660.00				
DL		0.50				

2

Soil

Sample and source description: Soil

Sample date: 01/28/2009 Source of analysis: Lab analysis

	Nitrate-N (mg/kg)	Total P (mg/kg)	Soluble P (mg/kg)	K (mg/kg)	Total salt (mg/kg)	Organic matter (%)
Value		770.00				
DL		0.50				

3

3

Soil

Sample and source description: Soil

Sample date: 01/28/2009 Source of analysis: Lab analysis

	Nitrate-N (mg/kg)	Total P (mg/kg)	Soluble P (mg/kg)	K (mg/kg)	Total salt (mg/kg)	Organic matter (%)
Value		730.00				
DL		0.50				

4

Soil

Sample and source description: Soil

Sample date: 01/28/2009 Source of analysis: Lab analysis

	Nitrate-N (mg/kg)	Total P (mg/kg)	Soluble P (mg/kg)	K (mg/kg)	Total salt (mg/kg)	Organic matter (%)
Value		1,360.00				
DL		0.50				

6

6

Soil

Sample and source description: Soil

Sample date: 01/28/2009 Source of analysis: Lab analysis

	Nitrate-N (mg/kg)	Total P (mg/kg)	Soluble P (mg/kg)	K (mg/kg)	Total salt (mg/kg)	Organic matter (%)
Value		1,250.00				
DL		0.50				

8

Soil

Sample and source description: Soil

Sample date: 01/28/2009 Source of analysis: Lab analysis

	Nitrate-N (mg/kg)	Total P (mg/kg)	Soluble P (mg/kg)	K (mg/kg)	Total salt (mg/kg)	Organic matter (%)
Value		730.00				
DL		0.50				

E. PLANT TISSUE ANALYSES

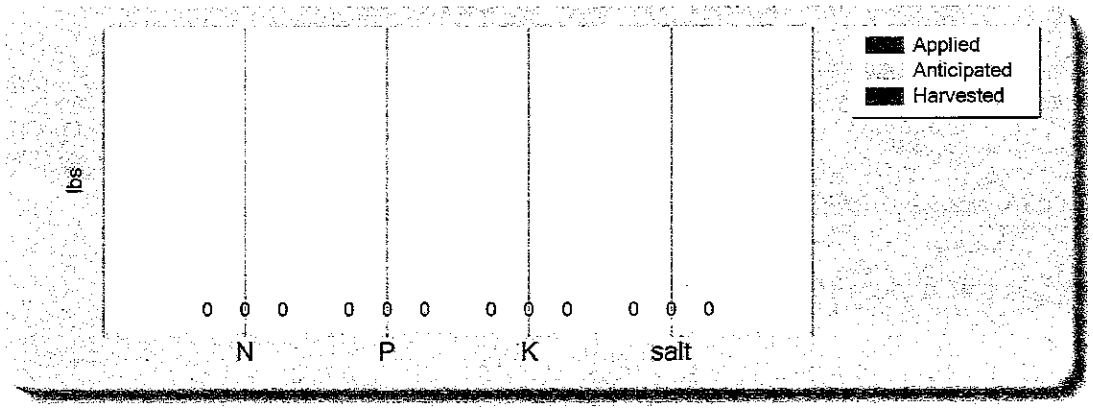
No plant tissue analyses entered.

NUTRIENT APPLICATIONS, POTENTIAL REMOVAL, AND BALANCE

A. SUMMARY OF NUTRIENT APPLICATIONS, POTENTIAL REMOVAL, AND BALANCE

	Total N (lbs/acre)	Total P (lbs/acre)	Total K (lbs/acre)	Total salt (lbs/acre)
Existing soil nutrient content	0.00	0.00	0.00	0.00
Plowdown credit	0.00	0.00	0.00	0.00
Commercial fertilizer / Other	0.00	0.00	0.00	0.00
Dry manure	0.00	0.00	0.00	0.00
Process wastewater	0.00	0.00	0.00	0.00
Irrigation water	0.00	0.00	0.00	0.00
Atmospheric deposition	0.00	0.00	0.00	0.00
Total nutrients applied	0.00	0.00	0.00	0.00
Anticipated crop nutrient removal	0.00	0.00	0.00	0.00
Actual crop nutrient removal	0.00	0.00	0.00	0.00
Nutrient balance	0.00	0.00	0.00	0.00
Applied to removed ratio	0.00	0.00	0.00	0.00

B. POUNDS OF NUTRIENT APPLIED VS. CROP REMOVAL



C. POUNDS OF NUTRIENT APPLIED BY MATERIAL TYPE

Pounds of nitrogen applied

Existing soil nutrient content	0
Plowdown credit	0
Commercial fertilizer / Other	0
Dry manure	0
Process wastewater	0
Irrigation water	0
Atmospheric deposition	0

lbs

Pounds of phosphorus applied

Existing soil nutrient content	0
Plowdown credit	0
Commercial fertilizer / Other	0
Dry manure	0
Process wastewater	0
Irrigation water	0
Atmospheric deposition	0

lbs

Pounds of potassium applied

Existing soil nutrient content	0
Plowdown credit	0
Commercial fertilizer / Other	0
Dry manure	0
Process wastewater	0
Irrigation water	0
Atmospheric deposition	0

lbs

Pounds of salt applied

Existing soil nutrient content	0
Plowdown credit	0
Commercial fertilizer / Other	0
Dry manure	0
Process wastewater	0
Irrigation water	0
Atmospheric deposition	0

lbs

EXCEPTION REPORTING

A. MANURE AND PROCESS WASTEWATER DISCHARGES

The following is a summary of all manure and process wastewater discharges from the production area to surface water or to land areas (land application areas or otherwise) when not in accordance with the facility's Nutrient Management Plan.

No manure or process wastewater discharges occurred during the reporting period.

B. STORM WATER DISCHARGES

The following is a summary of all storm water discharges from the production area to surface water during the reporting period when not in accordance with the facility 's Nutrient Management Plan.

No stormwater discharges occurred during the reporting period.

C. LAND APPLICATION AREA TO SURFACE WATER DISCHARGES

The following is a summary of all discharges from the land application area to surface water that have occurred during the reporting period when not in accordance with the facility's Nutrient Management Plan.

No land application area to surface water discharges occurred during the reporting period.

NUTRIENT MANAGEMENT PLAN STATEMENT

A. NUTRIENT MANAGEMENT PLAN STATEMENT

Was the facility's NMP updated in the reporting period?	No
Was the facility's NMP developed by a certified nutrient management planner (specialist) as specified in Attachment C of the General Order?	Yes
Was the facility's NMP approved by a certified nutrient management planner (specialist) as specified in Attachment C of the General Order?	Yes

ADDITIONAL NOTES

A. NOTES

*2010 Oat samples were taken however, Mr. Tosta was unable to locate the lab analysis reports. We are currently providing the crop sampling service to Mr. Tosta and making sure all the necessary crops are sampled.

CERTIFICATION

A. 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.

√ Henry Tosta	√ Henry Tosta
SIGNATURE OF OWNER OF FACILITY	SIGNATURE OF OPERATOR OF FACILITY
Henry Tosta HENRY TOSTA	SAME AS OWNER
PRINT OR TYPE NAME	PRINT OR TYPE NAME
√ HENRY TOSTA	√ HENRY TOSTA
DATE 6-20-11	DATE 6-20-11

Annual Report - General Order No. R5-2007-0035
Reporting period 01/01/2010 to 12/31/2010.

ATTACHMENTS

A. REQUIRED ATTACHMENTS

The following lists the required documents that should be attached to the Annual Report when submitted.

Annual Dairy Facility Assessment	**Included**
Provide an Annual Dairy Facility Assessment (an update to the Preliminary Dairy Facility Assessment in Attachment A) for each reporting period. On the PDFA Final page, click on the ADFA Report button to generate an ADFA report after updating information as needed.	
Manure/Process Wastewater Tracking Manifests	**Included**
Provide copies of all manure/process wastewater tracking manifests for the reporting period, signed by both the owner/operator and the hauler.	
Written Agreements	**N/A**
Provide copies of all written agreements with each third party that receives solid manure or process wastewater from the Discharger for its own use.	
Corrective Actions Documents	**N/A**
Provide records documenting any corrective actions taken to correct deficiencies noted as a result of the inspections required in the Monitoring Requirements of the General Order. Deficiencies not corrected in 30 days must be accompanied by an explanation of the factors preventing immediate correction.	
Groundwater Monitoring	**N/A**
Dischargers that monitor supply wells or subsurface (tile) drainage systems, or that have monitoring well systems must submit monitoring results as directed in the General Order, Groundwater Reporting Section starting on page MRP-13.	
Storm Water Monitoring	**N/A**
Dischargers that are required to monitor storm water more frequently than required in the General Order must submit monitoring results as directed in the General Order, Storm Water Reporting Section on page MRP-14.	

Annual Dairy Facility Assessment Report
General Order No. R5-2007-0035

DAIRY FACILITY INFORMATION

A. NAME OF DAIRY OR BUSINESS OPERATING THE DAIRY: Henry Tosta Dairy

Physical address of dairy:

20662 San Jose Road	Tracy	San Joaquin	95304
Number and Street	City	County	Zip Code

Street and nearest cross street (if no address): _____

LAND AREA ESTIMATES

A. LAND AREA

Size of the dairy production area (corrals, barns, ponds, feed storage): 20.0 acres

Estimated area (including roofed, impervious, and earthen surfaces) that receives rainfall which drains into the wastewater retention pond(s): 2.0 acres

Size of the crop land area currently used for manure (lagoon and solids) application: 421.0 acres

HERD AND MILKING ESTIMATES

A. HERD INFORMATION

	Milk Cows	Dry Cows	Bred Heifers (15-24 mo.)	Heifers (7-14 mo. to breeding)	Calves (4-6 mo.)	Calves (0-3 mo.)
Number / head	800	150	250	200	150	75
Avg live weight (lbs)	1,400	1,500	1,150	730		
Avg milk production (lbs/cow/day)	68					
Daily hours on flush	0	0	0	0	0	0

Predominant animal breed: Holstein

Storage period: 120 days

Average number of milk cows per string sent to milkbarn: 198 milk cows per string

Number of milkings per day: 2.0 milkings per day

Number of times milk tank is emptied each day: 1.0 milk loads per day

Number of hours spent milking each day: 15.0 hours per day

Bulk tank wash and sanitizing: 3 run cycles

Pipeline wash and sanitizing: 3 run cycles

Copies of this assessment shall be maintained for 10 years.

These calculations are preliminary and approximate only. Completion of your Waste Management Plan and Nutrient Management Plan will provide you with more detailed and precise calculations upon which to make important decisions.

B. MILKBARN EQUIPMENT AND PARLOR FLOOR WASH

All numerical values in gallons per day	Milkbarn/parlor floor wash	Fresh water used in manure flush lanes	Plate coolers	Vacuum pumps / air compressors / chillers
Selected Type:	Traditional Manual Parlor Floor Wash		Well Water Cooled (Water Reused/Recycled)	Well Water Cooled (Water Reused/Recycled)
Estimated:	8,080		25,302	22,500
User-Entered:	1,000		2,950	1,000
Volume used in calculations:	1,000		2,950	1,000
Source is recycled water:	[X] Yes [ ] No			

C. MISCELLANEOUS EQUIPMENT

No miscellaneous equipment added to the annual dairy facility assessment.

D. DRINKING WATER SOURCE

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

If yes, total amount of reused water consumed: _____ gallons per head per day

E. SPRINKLER PEN

Number of sprinklers in the holding pen: 45 sprinklers

Length of each sprinkler cycle: 2.0 minutes

Number of sprinkler pen cycles per string: 2 cycles/string

Water flow rate of each sprinkler head: 2.0 gallons per minute

Sprinkler pen wastewater volume: 2,910 gallons per day

Sprinklers reuse water from equipment: [X] Yes [ ] No

F. MILKBARN WATER CALCULATIONS

Water available for reuse/recycle: 3,950 gallons per day

Recycled water used again: 3,910 gallons per day

Balance: 40 gallons per day

Milkbarn water sent to pond: 5,375 gallons per day

Milkbarn water leaving system: 0 gallons per day

RETENTION PONDS STORAGE CAPACITY ESTIMATES

A. PONDS

Annual Dairy Facility Assessment Report
General Order No. R5-2007-0035

Basin Name	numerical values in feet						
	Earthen Length (EL)	Earthen Width (EW)	Earthen Depth (ED)	Side Slope H:V (S)	Free Board (FB)	Dead Storage Loss (DS)	Storage Volume Corrected for Dead Storage Loss (ft^3)
Lagoon 1	535	50	12	2.0	2	1	110,916
Lagoon 2	635	70	17	2.0	2	1	288,783
Lagoon 3	561	214	6	1.0	2	1	344,043
Lagoon 4	534	182	6	1.0	2	1	276,684
Lagoon 5	387	137	6	1.0	2	1	148,209
Lagoon 6	273	131	6	1.0	2	1	98,961
Lagoon 7	231	189	6	1.0	2	1	122,313

RAINFALL ESTIMATES

A. RAINFALL AND DRAINAGE INFORMATION

Rainfall station nearest the facility: Tracy Carbana

Storage period: 120 days

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

Storage period rainfall (DWR climate data): 6.82 inches

Combined storage period rainfall and 25 year / 24 hour storm event: 9.32 inches

Estimated rainfall onto and drained into the wastewater retention pond: 2,951,431 gallons

NUTRIENT REMOVAL BY CROP ESTIMATES

A. CROPS

No crops added to the annual dairy facility assessment.

ANNUAL NUTRIENT IMPORT & EXPORT ESTIMATES

A. ANNUAL NUTRIENT IMPORTS

Combined estimate of nutrients from commercial fertilizers and atmospheric Nitrogen applied to crops:

Nutrient Description	Amount Applied (lbs)
Nitrogen (N)	0
Phosphorus as Orthophosphate (P2O5)	0
Potassium as Potash (K2O)	0
Atmospheric Nitrogen Deposition	5,894

Atmospheric Nitrogen Deposition Rate (ANDR) = 14 lbs N / acre / year.

Copies of this assessment shall be maintained for 10 years.

These calculations are preliminary and approximate only. Completion of your Waste Management Plan and Nutrient Management Plan will provide you with more detailed and precise calculations upon which to make important decisions.

Annual Dairy Facility Assessment Report
General Order No. R5-2007-0035

B. ANNUAL NUTRIENT EXPORTS

Manure Type	Volume Exported	Moisture Content	Total Nitrogen	Total Phosphorus
Separator Solids	0 tons	0.00 %	0.00 %	0.00 %
Corral Solids	1,800 tons	37.50 %	2.89 %	0.65 %
Liquid Manure	0 gallons	N/A	0.00 mg/L	0.00 mg/L

ANNUAL DAIRY FACILITY ASSESSMENT SUMMARY

A. LAND USE

Dairy production area (corrals, barns, ponds, feed storage): 20 acres

Estimate the area (including roofed, impervious, and earthen surfaces) that receives rainfall which drains into a wastewater retention pond: 2 acres

Crop land area used for manure application: 421 acres

B. HERD, MILKING, AND MILKBARN/PARLOR

Milk cows: 800 head

Dry cows: 150 head

Bred heifers (15 - 24 months): 250 head

Heifers (7 - 14 months to breeding): 200 head

Calves (4 - 6 months): 150 head

Calves (0 - 3 months): 75 head

Total number of animals: 1,625 head

Average number of milk cows per string sent to milk barn: 198 cows per string

Number of milking strings entering milk barn per milking: 4.04 strings per milking

Storage period: 120 days

Total manure production by herd for storage period: 294,211 cu. ft.

Estimated manure production for storage period (to dry lot): 294,211 cu. ft.

Estimated manure production for storage period (to pond): 0 gallons

Total milkbarn water volume for storage period (to pond): 645,000 gallons

C. ROOFED, IMPERVIOUS, AND EARTHEN RAINFALL RUNOFF AREAS

Total area receiving rainfall and draining to ponds (production area): 87,120 sq. ft.

Copies of this assessment shall be maintained for 10 years.

These calculations are preliminary and approximate only. Completion of your Waste Management Plan and Nutrient Management Plan will provide you with more detailed and precise calculations upon which to make important decisions.

D. RETENTION POND AND SETTLING BASIN ESTIMATES

Liquid storage surface area (retention ponds only):	420,883	sq. ft.
Rainfall onto and drained into retention ponds for storage period:	2,951,431	gallons
Waste production as manure:	0	gallons
Milkbarn water:	645,000	gallons
Milkbarn water comparative estimate:	7	gallons per cow per day
Fresh flush water for storage period:	0	gallons
25 year / 24 hour storm event (NOAA Atlas 2, 1973):	2.50	inches
Critical storage period rainfall (DWR Climate Data):	6.82	inches
Combined critical storage period and 25 year / 24 hour storm event:	9.32	inches
Total storage capacity required:	3,596,431	gallons
	480,773	cu. ft.
Existing storage capacity (adjusted for dead storage loss):	10,397,239	gallons
	1,389,909	cu. ft.
Existing capacity meets estimated storage needs:	Yes	

E. NITROGEN (N) AND PHOSPHORUS (P) EXCRETION ESTIMATES

Daily gross nitrogen excretion estimates:	952	lbs nitrogen per day
Annual gross nitrogen excretion estimates:	347,363	lbs nitrogen per year
Nitrogen to pond storage after ammonia losses (30% loss applied):	0	lbs nitrogen per year
Nitrogen to drylot storage after ammonia losses (30% loss applied):	243,154	lbs nitrogen per year
Total nitrogen in storage (ponds and drylot combined):	243,154	lbs nitrogen per year
Daily gross phosphorus excretion estimates:	155	lbs phosphorus per day
Annual gross phosphorus excretion estimates:	56,562	lbs phosphorus per year
Phosphorus to pond storage:	0	lbs phosphorus per year
Phosphorus to drylot storage:	56,562	lbs phosphorus per year
Total phosphorus in storage (ponds and drylot combined):	56,562	lbs phosphorus per year

F. NITROGEN AND PHOSPHORUS IMPORT ESTIMATES

Total nitrogen imports onto facility as commercial fertilizers:	0	lbs nitrogen per year
Atmospheric Nitrogen Deposition (ANDR):	5,894	lbs nitrogen per year
Total phosphorus imports onto facility as commercial fertilizers:	0	lbs phosphorus per year

G. NITROGEN AND PHOSPHORUS EXPORT ESTIMATES

Total nitrogen exports off facility as manure:	65,025	lbs nitrogen per year
Total phosphorus exports off facility as manure:	14,625	lbs phosphorus per year

Copies of this assessment shall be maintained for 10 years.

These calculations are preliminary and approximate only. Completion of your Waste Management Plan and Nutrient Management Plan will provide you with more detailed and precise calculations upon which to make important decisions.

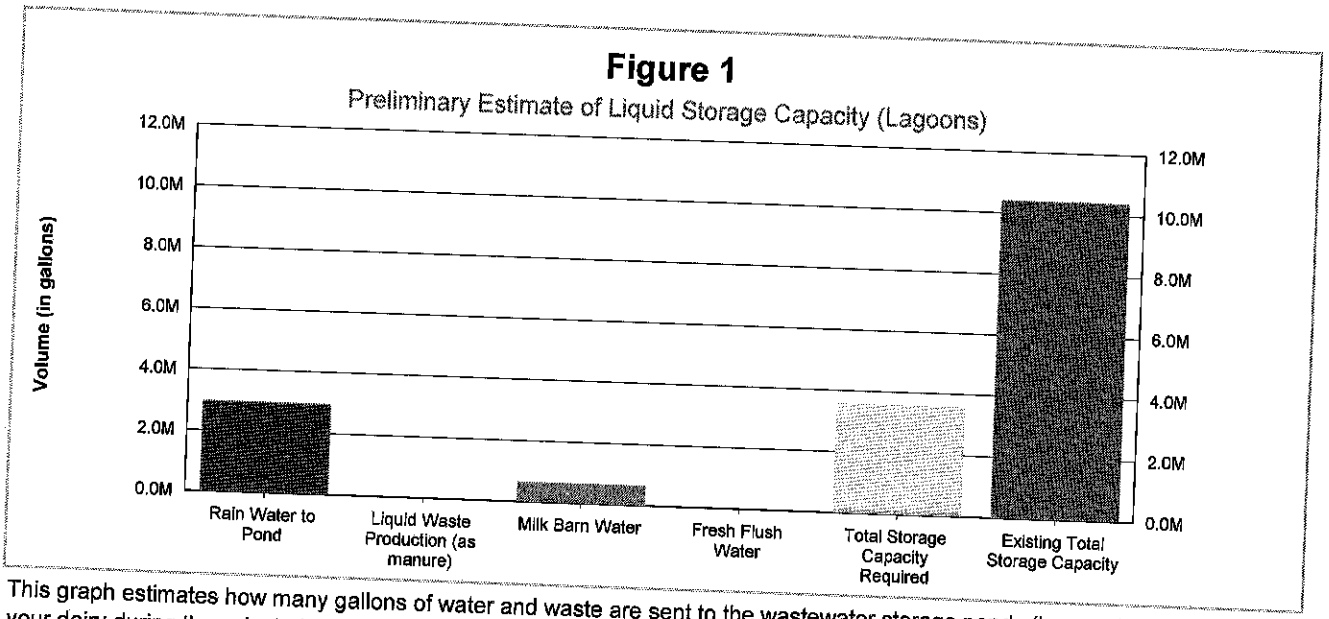
H. ANNUAL NITROGEN AND PHOSPHORUS BALANCE ESTIMATE

Total nitrogen in storage (after 30% ammonia loss):	243,154	lbs
Nitrogen imported (as commercial fertilizer and ANDR):	5,894	lbs
Nitrogen exported as manure:	65,025	lbs
Nitrogen removed by crops:	0	lbs
Excess nitrogen (N generated - N removed):	184,023	lbs
Whole farm nitrogen balance ratio:	0.00	

Total phosphorus in storage:	56,562	lbs
Phosphorus imported as commercial fertilizer:	0	lbs
Phosphorus exported as manure:	14,625	lbs
Phosphorus removed by crops:	0	lbs
Excess phosphorus (P generated - P removed):	41,937	lbs

CHARTS

A. FIGURE 1



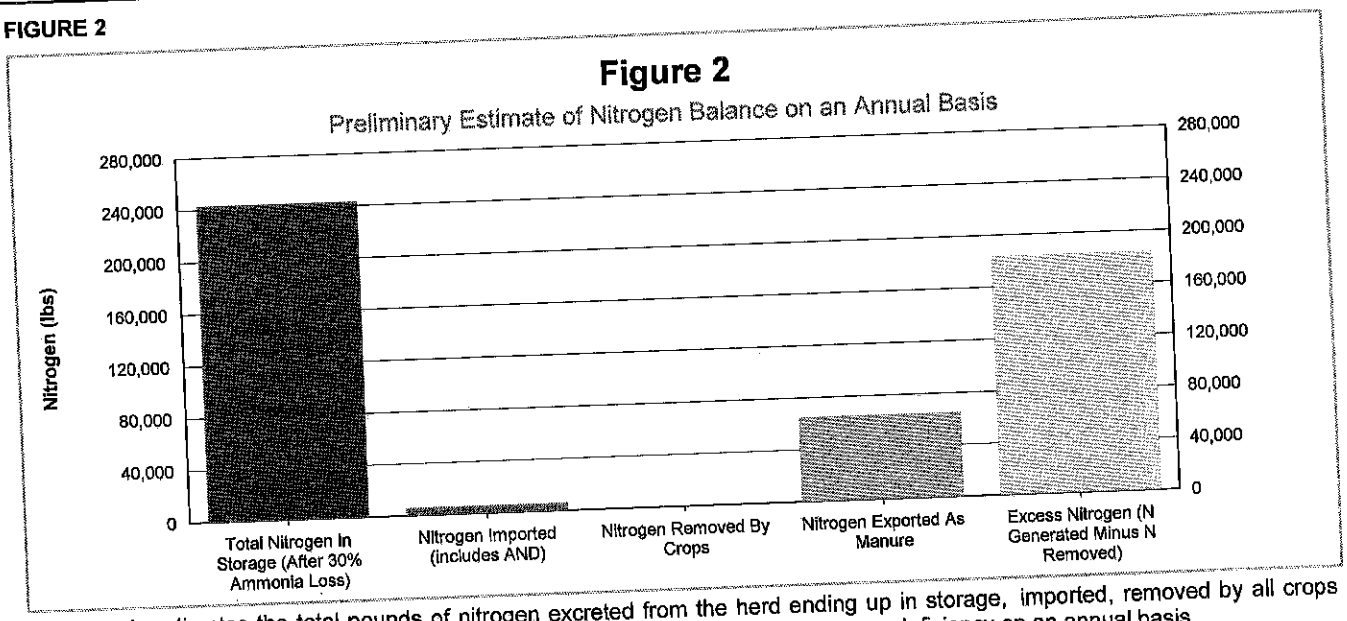
This graph estimates how many gallons of water and waste are sent to the wastewater storage ponds (lagoons) on your dairy during the selected 120 day storage period.

Your wastewater storage ponds (lagoons) must be very close to empty as a result of applying nutrients to crops over the last year starting in the beginning of October and should not fill before February.

Existing Storage Capacity:	10,397,239 gallons
Required Storage Capacity:	3,596,431 gallons
Storage Capacity Difference:	6,800,807 gallons

The estimated pond capacity appears to be adequate.

B. FIGURE 2



This graph estimates the total pounds of nitrogen excreted from the herd ending up in storage, imported, removed by all crops associated with the dairy, exported (typically as dry manure), and balance, excess, or deficiency on an annual basis.

Nutrients must be applied at rates and times appropriate for the crop to prevent surfacewater and groundwater degradation.

Total nitrogen in storage (after 30% ammonia loss):	243,154 pounds
Nitrogen imported (includes AND*):	5,894 pounds
Nitrogen exported (as manure):	65,025 pounds
Nitrogen removed by crops:	0 pounds
Nitrogen excess or deficiency:	184,023 pounds
Whole farm nitrogen balance ratio:	0.00 (regulatory limit 1.65**)

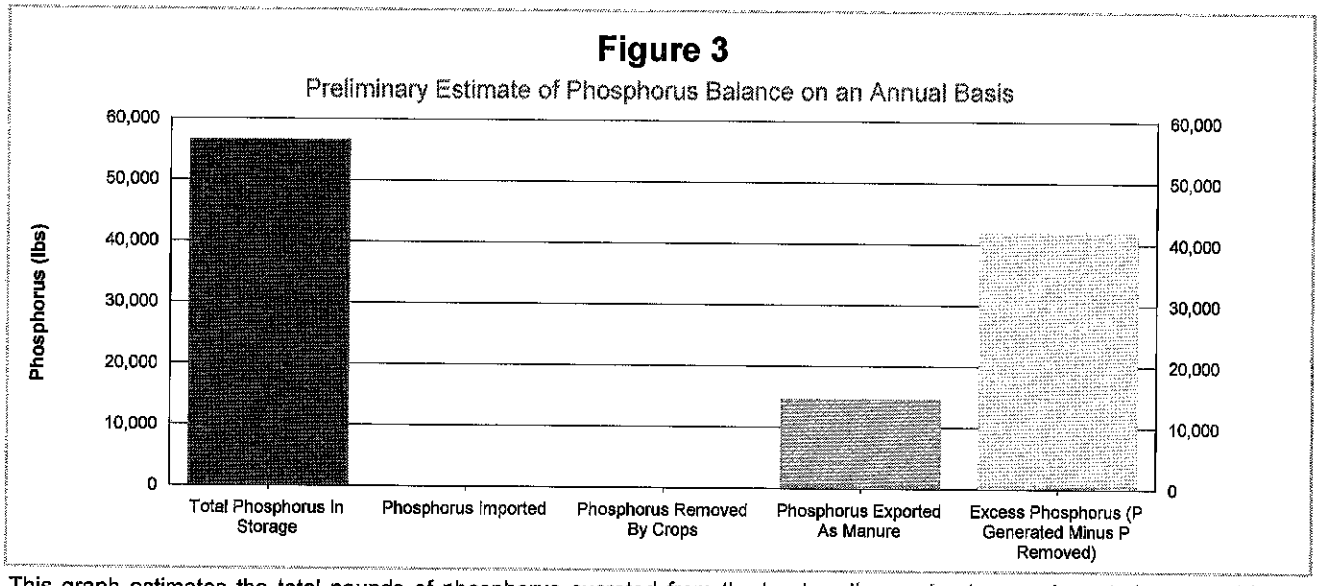
It appears that the crop rotation may be capable of removing the nitrogen applied on an annual basis.

*** AND = Atmospheric Nitrogen Deposition**

**** Whole Farm Nitrogen Balance alone does not assure compliance, you cannot list cropland acreage or claim nutrient uptake for cropland that lacks infrastructure for controlled nutrient applications at agronomic rates and times.**

Nitrogen balance ratio = (Total nitrogen in storage - Nitrogen exported + Nitrogen in irrigation water + Nitrogen imports) / Crop removal

C. FIGURE 3



This graph estimates the total pounds of phosphorus excreted from the herd ending up in storage, imported, removed by all crops associated with the dairy, exported (typically as dry manure), and balance, excess, or deficiency on an annual basis.

Nutrients must be applied at rates and times appropriate for the crop to prevent surfacewater and groundwater degradation.

Total phosphorus in storage:	56,562 pounds
Phosphorus imported:	0 pounds
Phosphorus exported (as manure):	14,625 pounds
Phosphorus removed by crops:	0 pounds
Phosphorus excess or deficiency:	41,937 pounds

It appears that the crop rotation may NOT be capable of removing the phosphorus applied on an annual basis.

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. IN ADDITION, I CERTIFY THAT THE PROVISIONS OF WASTE DISCHARGE REQUIREMENTS GENERAL ORDER NO. R5-2007-0035, INCLUDING THE DEVELOPMENT AND IMPLEMENTATION OF A NUTRIENT MANAGEMENT PLAN AND WASTE MANAGEMENT PLAN, WILL BE COMPLIED WITH."

/ Henry Tosta	/ Henry Tosta
SIGNATURE OF OWNER OF FACILITY	SIGNATURE OF OPERATOR OF FACILITY
/ Henry Tosta	/ Henry Tosta
PRINT OR TYPE NAME	PRINT OR TYPE NAME
/ owner	/ owner
TITLE AND DATE 6-20-11	TITLE AND DATE 6-20-11

Copies of this assessment shall be maintained for 10 years.

These calculations are preliminary and approximate only. Completion of your Waste Management Plan and Nutrient Management Plan will provide you with more detailed and precise calculations upon which to make important decisions.

ATTACHMENT D

Manure/Process Wastewater Tracking Manifest
For
Existing Milk Cow Dairies

Instructions:

1) Complete one manifest for each hauling event, for each destination. A hauling event may last for several days, as long as the manure is being hauled to the same destination.
2) If there are multiple destinations, **complete a separate form for each destination.**
3) The operator must obtain the signature of the hauler upon completion of each manure-hauling event.
4) The operator shall submit copies of manure/process wastewater tracking manifest(s) with the Annual Monitoring Report for Existing Milk Cow Dairies.

Operator Information:

Name of Operator: Henry Tosta

Name of Dairy Facility: Henry Tosta Dairy

Facility Address: 20662 San Jose Rd. (Number and Street) Tracy (City) 95304 (Zip Code)

Contact Person Name and Phone Number: Henry Tosta (Name) (209) 836-1286 (Phone Number)

Manure/Process Wastewater Hauler Information:

Name of Hauling Company/Person: Arnardo's Bros.

Address of Hauling Company/Person: 17100 Tracy Blvd. (Number and Street) Tracy (City) 95376 (Zip Code)

Contact Person: Anthony Enos (Name) (209) 483-0350 (Phone Number)

Destination Information:

Composting Facility / Broker / Farmer / Other (identify) (please circle one)

Contact information of Composting Facility, Broker, Farmer, or Other (as identified above):

Arnado Bros. (Name) 17100 Tracy Blvd. (Number and Street) Tracy (City) 95376 (Zip Code) (209) 483-0350 (Phone Number)

Manure/Process Wastewater Destination Address or Assessor's Parcel Number:

Anthony Enos (Name) Grimes Rd. (Number and Street) Tracy (City) 95304 (Zip Code) (209) 483-0350 (Phone Number)

Dates Hauled: 18-Jun-10

Amount Hauled:

Enter the amount of manure hauled in tons or cubic yards (indicate the units used), the manure solids content (if amount reported in tons) or manure density (if amount reported in cubic yards), and the method used to calculate the amount:

Manure: 600 Tons

Manure Solids Content (if amount reported in tons): solids

Manure Density (if amount reported in cubic yards):

Method used to determine amount of manure: Weighed Trucks

Enter the amount of process wastewater hauled in gallons and the method used to determine the amount.

Process Wastewater: n/a Gallons

Method used to determine volume of process wastewater: n/a

Written Agreement:

Does the Operator have a written agreement (in compliance with Land Application Specification C.2 of Waste Discharge Requirements General Order No. R5-2007-0035) with any party that receives process wastewater from the Operator for its own use? (please check one)

[ ] Yes [X] No

If the answer is no, the Operator agrees to have such a written agreement with any such party for any proces wastewater transferrred after **31 December 2007** to such party.

HT (Operator shall provide initials here to acknowledge this requirement).

Certification:

I declare under the penalty of law that I personally examined and am familiar with the information submitted in this document, 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 a fine and imprisonment for knowing violations.

Operator's Signature: X Henry Costa Date: 6-20-11

Hauler's Signature: X REFUSED TO SIGN Date:

ATTACHMENT D

Manure/Process Wastewater Tracking Manifest
For
Existing Milk Cow Dairies

Instructions:

1) Complete one manifest for each hauling event, for each destination. A hauling event may last for several days, as long as the manure is being hauled to the same destination.
2) If there are multiple destinations, **complete a separate form for each destination.**
3) The operator must obtain the signature of the hauler upon completion of each manure-hauling event.
4) The operator shall submit copies of manure/process wastewater tracking manifest(s) with the Annual Monitoring Report for Existing Milk Cow Dairies.

Operator Information:

Name of Operator: Henry Tosta

Name of Dairy Facility: Henry Tosta Dairy

Facility Address: 20662 San Jose Rd. (Number and Street) Tracy (City) 95304 (Zip Code)

Contact Person Name and Phone Number: Henry Tosta (Name) (209) 836-1286 (Phone Number)

Manure/Process Wastewater Hauler Information:

Name of Hauling Company/Person: Arnardo's Bros.

Address of Hauling Company/Person: 17100 Tracy Blvd. (Number and Street) Tracy (City) 95376 (Zip Code)

Contact Person: Anthony Enos (Name) (209) 483-0350 (Phone Number)

Destination Information:

Composting Facility / Broker / Farmer / Other (identify) (please circle one)

Contact information of Composting Facility, Broker, Farmer, or Other (as identified above):

Name	Number and Street	City	Zip Code	Phone Number
Arnado Bros.	17100 Tracy Blvd.	Tracy	95376	(209) 483-0350

Manure/Process Wastewater Destination Address or Assessor's Parcel Number:

Name	Number and Street	City	Zip Code	Phone Number
Anthony Enos	Grimes Rd.	Tracy	95304	(209) 483-0350

Dates Hauled: 1-Sep-10

Amount Hauled:

Enter the amount of manure hauled in tons or cubic yards (indicate the units used), the manure solids content (if amount reported in tons) or manure density (if amount reported in cubic yards), and the method used to calculate the amount:

Manure: 1200 Tons

Manure Solids Content (if amount reported in tons): solids

Manure Density (if amount reported in cubic yards):

Method used to determine amount of manure: Weighed Trucks

Enter the amount of process wastewater hauled in gallons and the method used to determine the amount.

Process Wastewater: n/a Gallons

Method used to determine volume of process wastewater: n/a

Written Agreement:

Does the Operator have a written agreement (in compliance with Land Application Specification C.2 of Waste Discharge Requirements General Order No. R5-2007-0035) with any party that receives process wastewater from the Operator for its own use? (please check one)

☐ Yes ☒ No

If the answer is no, the Operator agrees to have such a written agreement with any such party for any proces wastewater transferrred after **31 December 2007** to such party.

HT (Operator shall provide initials here to acknowledge this requirement).

Certification:

I declare under the penalty of law that I personally examined and am familiar with the information submitted in this document, 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 a fine and imprisonment for knowing violations.

Operator's Signature: X Henry Foster Date: 6-20-11

Hauler's Signature: X REFUSED TO SIGN Date:

DENELE ANALYTICAL, INC.

1232 South Ave. • Turlock, CA 95380 • Ph. (209) 634-9055 • Fax (209) 634-9057 • www.denelelab.com

DAIRY COMPLIANCE ANALYSIS REPORT

Customer/Results To*
Dairy Monitoring Co.
PO Box 1440
Ripon, CA
95366

Grower
Tosta Dairy

PURCHASE ORDER: NA
RECEIVED DATE: 10/4/2010 10:15:00 AM
SUBMITTED BY: Jim Avila
ANALYZED DATE: 10/05/2010

Domestic / Ag Wells (H1)
SOURCE: Well Water

Customer Sample	Lab ID	Analyte	Method Ref	Amount	Units
Domestic Well	10100092C	Electrical Conductivity	EPA 120.1	0.806	mmhos/cm
		Nitrate Nitrogen	SM 4500 NO3-D	1.33	mg/L

Laboratory Quality Control	LCS %	MS %	MSD %	MS/MSD RPD %
Nitrate Nitrogen (NO3-N)	99.0	97.6	97.1	0.4

The warranty of Denele Analytical is limited to the accuracy of the analyses of the samples as received. Denele Analytical assumes no responsibility for which the customer uses our test results, nor liability for any other warranties, expressed or implied. These terms and conditions shall supercede any conflicting terms and conditions submitted on customer purchase orders or other forms submitted for work.

Dairy Monitoring Co. Orland, Manteca, Tulare, Ca

DENELE ANALYTICAL
1232 South Ave.
Turlock, Ca 95380
Ph#209-634-9055 Fax# 209-634-9057

Date: 10-4-10
Acc.# 179
Dairy: **Tosta Dairy**

Report & Bill To			Copy To	
Client:	Dairy Monitoring Co.		Name;	
Address:	PO Box 1440		Address:	
City and State:	Ripon, Ca	95366	City/State:	
Phone:	209-599-4955	Fax 209-599-4911	Ph#	
			Fax#	
Project ID:	**Tosta Dairy**			
Sampled By:	(Print) Jim Avila			
	(Sign)			Office use

Date Collected	Time Collected	Type Test Code	EC	Sample ID # Field #	Well Purge Time	Well or Subsurface (Tile) Drainage System Location 10100092	Lab #
10-3	1:12	M7		MANURE			A
10-3	1:15	H3	15.2	LAGOON			B
10-3	1:16	H1	15.4	Domestic Well			C

Remarks:

Relinquished By (Signature)	Date	Time	Received By (Signature)	Date	Time
			B. [illegible]	10/4	10:15
Relinquished By (Signature)	Date	Time	Received By (Signature)	Date	Time
[illegible]	10-4-10				

Dairy Monitoring Co.
Main Office
1108 W. Main St., Ripon, CA 95366

Chain of Custody Form

Jim Avila, 209-481-6902
Fax 599-4911

DENELE ANALYTICAL, INC.

1232 South Ave. • Turlock, CA 95380 • Ph. (209) 634-9055 • Fax (209) 634-9057 • www.denelelab.com

DAIRY COMPLIANCE ANALYSIS REPORT

Customer/Results To*
Dairy Monitoring Co.
PO Box 1440
Ripon, CA
95366

Grower
Tosta Dairy

PURCHASE ORDER: NA
RECEIVED DATE: 10/29/2010 2:20:00 PM
SUBMITTED BY: Jim Avila
ANALYZED DATE: 10/29/2010

Domestic Wells / Irr. Water (H7)
SOURCE: Irrigation Water

Customer Sample	Lab ID	Analyte	Method Ref	Amount	Units
Canal	10100802G	Electrical Conductivity	EPA 120.1	0.641	mmhos/cm
		Nitrate Nitrogen	SM 4500 NO3-D	0.78	mg/L
		Total Nitrogen	SM 4500 NH3-C, SM 4500 NO3-D	0.78	mg/L

Laboratory Quality Control	LCS %	MS %	MSD %	MS/MSD RPD %
Nitrate Nitrogen (NO3-N)	99.7	101	100	0.8
Total Nitrogen (TN)	101	101	101	0.0

The warranty of Denele Analytical is limited to the accuracy of the analyses of the samples as received. Denele Analytical assumes no responsibility for which the customer uses our test results, nor liability for any other warranties, expressed or implied. These terms and conditions shall supercede any conflicting terms and conditions submitted on customer purchase orders or other forms submitted for work.

Dairy Monitoring Co. Orland, Manteca, Tulare, Ca

DENELE ANALYTICAL
1232 South Ave.
Turlock, Ca 95380
Ph#209-634-9055 Fax# 209-634-9057

Date: 10-29-10
Acc.# 179
Dairy: **Tosta Dairy**

Report & Bill To			Copy To	
Client:	Dairy Monitoring Co.		Name;	
Address:	PO Box 1440		Address:	
City and State:	Ripon, Ca	95366	City/State:	
Phone:	209-599-4955	Fax 209-599-4911	Ph#	
			Fax#	
Project ID:	**Tosta Dairy**			
Sampled By:	(Print) Jim Avila			
	(Sign)		10100802	Office use

Date Collected	Time Collected	Type Test Code	EC	Sample ID # Field #	Well Purge Time	Well or Subsurface (Tile) Drainage System Location	Lab #
10-29	NOON	F18		#3		Alfalfa Silage (1st cutting)	A
				#3		(2nd cutting)	B
				#3		(4th cutting)	C
				#8		Alfalfa Silage (1st cutting)	D
				#8		(2nd cutting)	E
				#8		(4th cutting)	F
		H1, H6	22.2	Canal		Irrigation	G

Remarks:

Relinquished By (Signature)	Date	Time	Received By (Signature)	Date	Time
			[signature]	10/29	2:20
Relinquished By (Signature)	Date	Time	Received By (Signature)	Date	Time
[signature]	10-29-10				

Dairy Monitoring Co.
Main Office
1108 W. Main St., Ripon, CA 95366

Chain of Custody Form

Jim Avila, 209-481-6902
Fax 599-4911

Dairy Monitoring Co.

Henry Tosta Dairy
20662 San Jose Road
Tracy, CA 95304

July 2011 Deliverables

- ✓2010 Annual Report
- ✓2010 Manure Manifests
- ✓2010 ADFA
- ✓2010 Groundwater Analysis

Main Office: 1108 W. Main St. Ripon, CA 95366 209-599-4955