

Waste Management Plan Report
 General Order No. R6-2007-0036, Attachment B
 July 1, 2010 deadline

DAIRY FACILITY INFORMATION

A. NAME OF DAIRY OR BUSINESS OPERATING THE DAIRY: Trinkler Dairy Farms Inc.

Physical address of dairy:

<u>7251 Crowslanding RD</u>	<u>Ceres</u>	<u>Stanislaus</u>	<u>95307</u>
Number and Street	City	County	Zip Code

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

TRS Data and Coordinates:

<u>5S</u>	<u>9E</u>	<u>5</u>	<u>Mt. Diablo</u>	<u>37° 31' 57.03" N</u>	<u>120° 59' 43.66" W</u>
Township (T_)	Range (R_)	Section (S_)	Baseline meridian	Latitude (N)	Longitude (W)

Date facility was originally placed in operation: 01/01/1930

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

County Assessor Parcel Number(s) for dairy facility:

0022-0007-0013-0000

B. OPERATOR NAME: Trinkler, Wendel Jr. Telephone no.: (209) 537-9883

<u>P.O. Box 10</u>	<u>Ceres</u>	<u>CA</u>	<u>95307</u>
Mailing Address Number and Street	City	State	Zip Code

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

C. LEGAL OWNER NAME: Trinkler, Wendel Jr. Telephone no.: (209) 537-9883

<u>P.O. Box 10</u>	<u>Ceres</u>	<u>CA</u>	<u>95307</u>
Mailing Address Number and Street	City	State	Zip Code

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

D. CONTACT NAME: Mitchell, Michael Telephone no.: (209) 664-1067

<u>Title: Professional Engineer</u>			
<u>18836 E Clausen RD</u>	<u>Turlock</u>	<u>CA</u>	<u>95380</u>
Mailing Address Number and Street	City	State	Zip Code

CONTACT NAME: Ramos, Joe Telephone no.: (209) 250-2471 (209) 226-2375

<u>Title: Technical Service Provider</u>			
<u>2857 Geer RD, STE A</u>	<u>Turlock</u>	<u>CA</u>	<u>95382</u>
Mailing Address Number and Street	City	State	Zip Code

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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, 2006:

3,780 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	3,180	3,180	22	1,400
Dry Cows	600	600	22	1,400
Bred Heifers (15-24 mo.)	275	275	6	900
Heifers (7-14 mo.)	0	0	0	0
Calves (4-6 mo.)	520	520	6	
Calves (0-3 mo.)	600	600	24	

Predominant milk cow breed: Holstein

Average milk production: 75 pounds per cow per day

Average number of milk cows per string sent to the milkbarn: 460 milk cows per string

Number of milkings per day: 2.0 milkings per day

Number of times milk tank is emptied/filled each day: 5.0 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: 4.0 run cycles/wash

Bulk tank wash vat volume: 50 gallons/cycle

Bulk tank wash wastewater: 1,000.0 gallons/day

Pipeline wash and sanitizing: 4.0 run cycles/wash

Pipeline wash vat volume: 75 gallons/cycle

Pipeline wash wastewater: 600.0 gallons/day

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

Milkbarn / parlor floor wash volume: 24,000 gallons/day

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

Plate coolers volume: 55,465 gallons/day

Vacuum pumps / air compressors / chillers type: Mechanically/Air Cooled

Vacuum pumps / air compressors / chillers volume: 0 gallons/day

Milkbarn and equipment wastewater volume generated daily: 57,386 gallons/day

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B. SOLIDS SEPARATION PROCESS

Combined manure solids separation efficiency (weight basis): 50 %

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

Mechanical Separators

C. MANURE AND BEDDING SOLIDS SUMMARY

	cubic feet		gallons	
	day	storage period	day	storage period
Manure generated by the herd (pre-separation):	8,642.90	1,037,148	64,653.39	7,758,406
Manure generated by the herd sent to pond(s):	6,391.04	766,924	47,808.27	5,736,993
Manure generated by the herd sent to dry lot(s):	974.68	116,961	7,291.08	874,929
Manure solids (herd) removed by separation:	618.28	74,194	4,625.07	555,009
Liquid component in separated solids not sent to pond(s):	658.91	79,069	4,928.96	591,476
Imported and facility generated bedding sent to pond(s):	239.64	28,757	1,792.65	215,118
Total manure and bedding sent to pond(s):	6,630.68	795,682	49,600.93	5,952,111
Residual manure solids and bedding sent to pond(s) w/factor:	428.96	51,476	3,208.86	385,064
	cubic feet per year		gallons per year	
Residual manure solids and bedding sent to pond(s) w/factor:	156,571		1,171,235	

RAINFALL AND RUNOFF

A. RAINFALL ESTIMATES

Rainfall station nearest the facility: Turlock

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): 8.56 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
Existing concrete holding areas and control lanes	30,707	1	0.97	0.50	Drains into pond(s).
Existing manure separator pad	32,947	1	0.97	0.50	Drains into pond(s).
Existing manure stacking pad south of WWS#1	9,803	1	0.97	0.50	Drains into pond(s).
Existing north feed storage area	108,940	1	0.97	0.50	Drains into pond(s).
Existing south feed storage area	151,741	1	0.97	0.50	Drains into pond(s).
Existing west manure stacking pad	6,908	1	0.97	0.50	Drains into pond(s).

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Existing yard north of milk barn	31,174	1	0.97	0.50	Drains Into pond(s).
Proposed north feed storage addition	307,600	1	0.97	0.50	Drains Into pond(s).

Surface area that does not run off into pond(s):	<u>0</u> sq. ft.
Surface area that runs off into pond(s):	<u>679,720</u> sq. ft.
Total surface area:	<u>679,720</u> sq. ft.
Runoff from normal storage period rainfall:	<u>1,813,528</u> gallons/storage period
Runoff from normal storage period rainfall with 1.5 factor:	<u>2,720,292</u> gallons/storage period
25 year/24 hour storm event runoff:	<u>1,027,525</u> gallons/storage period
Total surface area runoff:	<u>2,841,053</u> gallons/storage period
Total surface area runoff with 1.5 factor:	<u>3,747,817</u> gallons/storage period

C. ROOF AREAS

Name	Surface Area (sq. ft.)	Quantity	Runoff Destination
Existing calf hutch barn	12,445	1	Wastewater pond
Existing Center Group Pen Calf Barn	3,132	1	Wastewater pond
Existing commodity barn	18,525	1	Wastewater pond
Existing dry cow barn east of VWS1	15,402	1	Wastewater pond
Existing dry cow barn west of group pens	15,680	1	Wastewater pond
Existing East Group Pen Calf Barn	3,611	1	Wastewater pond
Existing freestall barn south of spec. needs bar	37,275	1	Wastewater pond
Existing freestall barn south of sprinkler pen	35,575	1	Wastewater pond
Existing hay barn east of commodity barn	12,514	1	Wastewater pond
Existing hay barn north of VWS1	10,881	1	Wastewater pond
Existing hay barn south of calf hutch barn	7,467	1	Wastewater pond
Existing Milking parlor and covered holding pen	6,730	1	Wastewater pond
Existing shade barn south of milk barn	30,018	1	Wastewater pond
Existing south combination freestall/shade barn	176,090	1	Wastewater pond
Existing special needs barn	7,959	1	Wastewater pond
Existing West Group Pen Calf Barn	2,524	1	Wastewater pond
Proposed calf barn	10,800	1	Wastewater pond
Proposed rotary milk barn	26,100	1	Field
Proposed south freestall barn	165,240	1	Field

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Surface area that does not run off into pond(s): 191,340 sq. ft.
 Surface area that runs off into pond(s): 406,628 sq. ft.
 Total surface area: 597,968 sq. ft.
 Runoff from normal storage period rainfall: 2,169,809 gallons/storage period
 Runoff from normal storage period rainfall with 1.5 factor: 3,254,714 gallons/storage period
 25 year/24 hour storm event runoff: 633,706 gallons/storage period
 Total surface area runoff: 2,803,515 gallons/storage period
 Total surface area runoff with 1.5 factor: 3,888,420 gallons/storage period

D. EARTHEN AREAS

Name	Surface Area (sq. ft.)	Quantity	25yr/24-Hour Storm Coefficient	Storage Period Coefficient	Runoff Destination
Earthen areas minus roofed and concreted areas	649,856	1	0.35	0.20	Drains into pond(s).
Proposed freestall exercise pens	81,000	3	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): 892,856 sq. ft.
 Total surface area: 892,856 sq. ft.
 Runoff from normal storage period rainfall: 952,874 gallons/storage period
 Runoff from normal storage period rainfall with 1.5 factor: 1,429,312 gallons/storage period
 25 year/24 hour storm event runoff: 487,012 gallons/storage period
 Total surface area runoff: 1,439,887 gallons/storage period
 Total surface area runoff with 1.5 factor: 1,916,324 gallons/storage period

E. TAILWATER MANAGEMENT

No fields with tailwater entered.

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LIQUID STORAGE

A. POND OR BASIN DESCRIPTION: Proposed WWS 3

Pond is rectangular in shape: Yes No

Dimensions			
Earthen Length (EL):	<u>500 ft.</u>	Earthen Depth (ED):	<u>15 ft.</u>
Earthen Width (EW):	<u>370 ft.</u>	Side Slope (S):	<u>3.0 ft. (h:1v)</u>
Free Board (FB):	<u>2 ft.</u>	Dead Storage Loss (DS):	<u>5.0 ft.</u>
Calculations			
Liquid Length (LL):	<u>488 ft.</u>	Storage Volume Adjusted for Dead Storage Loss:	<u>1,241,344 cu. ft.</u>
Liquid Width (LW):	<u>358 ft.</u>		
Pond Surface Area:	<u>185,000 sq. ft.</u>	Pond Marker Elevation:	<u>12.2 ft.</u>
Storage Volume:	<u>1,868,594 cu. ft.</u>	Evaporation Volume:	<u>928,480 gals/period</u>
		Adjusted Surface Area:	<u>172,688 sq. ft.</u>

POND OR BASIN DESCRIPTION: WWS 1

Pond is rectangular in shape: Yes No

Dimensions			
Earthen Length (EL):	<u>640 ft.</u>	Earthen Depth (ED):	<u>12 ft.</u>
Earthen Width (EW):	<u>175 ft.</u>	Side Slope (S):	<u>2.0 ft. (h:1v)</u>
Free Board (FB):	<u>2 ft.</u>	Dead Storage Loss (DS):	<u>2.0 ft.</u>
Calculations			
Liquid Length (LL):	<u>632 ft.</u>	Storage Volume Adjusted for Dead Storage Loss:	<u>744,811 cu. ft.</u>
Liquid Width (LW):	<u>167 ft.</u>		
Pond Surface Area:	<u>112,000 sq. ft.</u>	Pond Marker Elevation:	<u>9.2 ft.</u>
Storage Volume:	<u>900,973 cu. ft.</u>	Evaporation Volume:	<u>560,627 gals/period</u>
		Adjusted Surface Area:	<u>104,271 sq. ft.</u>

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POND OR BASIN DESCRIPTION: WWS 2

Pond is rectangular in shape: Yes No

Dimensions			
Earthen Length (EL):	<u>1,075</u> ft.	Earthen Depth (ED):	<u>13</u> ft.
Earthen Width (EW):	<u>215</u> ft.	Side Slope (S):	<u>2.5</u> ft. (h:1v)
Free Board (FB):	<u>2</u> ft.	Dead Storage Loss (DS):	<u>2.0</u> ft.

Calculations			
Liquid Length (LL):	<u>1,065</u> ft.	Storage Volume Adjusted for Dead Storage Loss:	<u>1,713,825</u> cu. ft.
Liquid Width (LW):	<u>205</u> ft.	Pond Marker Elevation:	<u>10.2</u> ft.
Pond Surface Area:	<u>231,125</u> sq. ft.	Evaporation Volume:	<u>1,160,281</u> gals/period
Storage Volume:	<u>2,028,492</u> cu. ft.	Adjusted Surface Area:	<u>215,801</u> sq. ft.

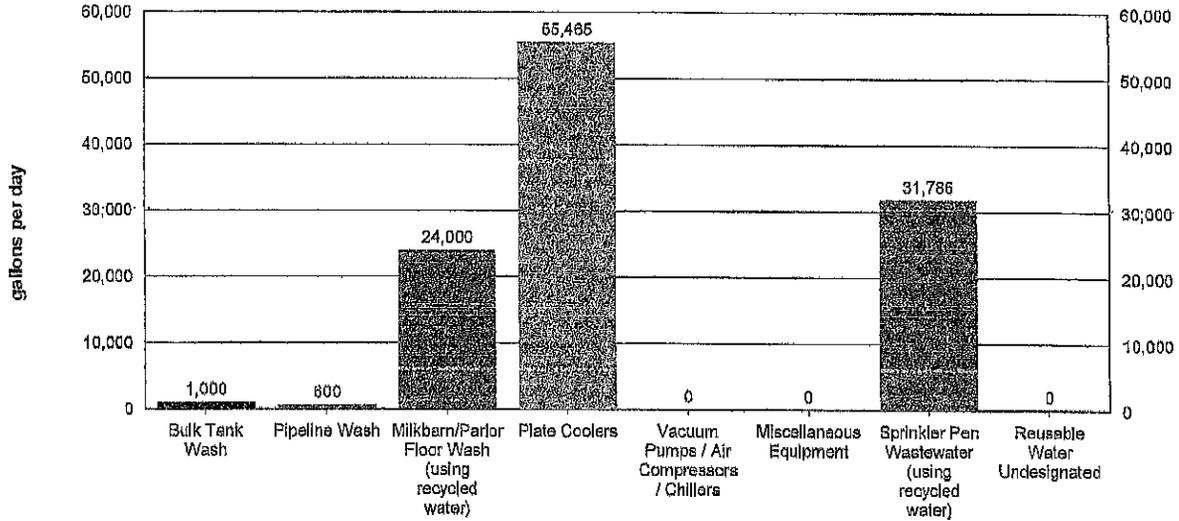
Potential storage losses (due to dead storage): 1,098,079.0 cubic feet - or - 8,214,201.3 gallons

Liquid storage surface area:	<u>498,573</u> sq. ft.
Rainfall onto retention pond(s):	<u>2,818,130</u> gallons/storage period
Rainfall runoff into retention pond(s):	<u>4,936,212</u> gallons/storage period
Normal rainfall onto retention pond(s) with 1.5 factor:	<u>4,227,195</u> gallons/storage period
Normal rainfall runoff into retention pond(s) with 1.5 factor:	<u>7,404,318</u> gallons/storage period
Storage period evaporation (default):	<u>11.50</u> inches/storage period
Storage period evaporation (user-override):	_____ inches/storage period
Storage period evaporation volume:	<u>2,649,388</u> gallons/storage period
Manure and bedding sent to pond(s):	<u>5,952,111</u> gallons/storage period
Milkbarn water sent to pond(s):	<u>6,886,320</u> gallons/storage period
Fresh flush water for storage period:	<u>720,000</u> gallons/storage period

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CHARTS

A. MILKBARN WASTEWATER SENT TO POND(S).



Values shown in chart are approximate values per day.

Total milkbarn wastewater generated daily:

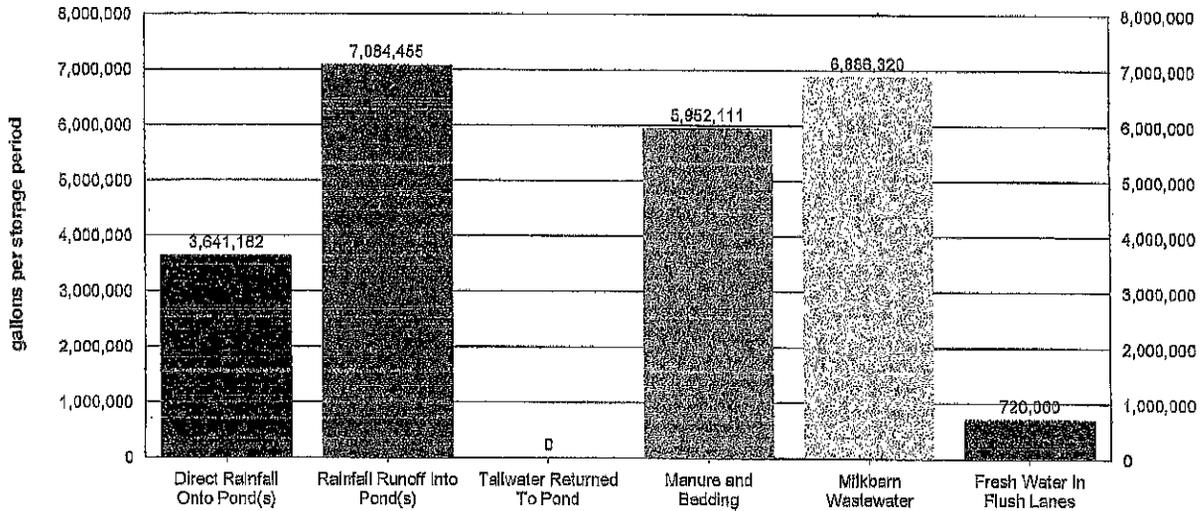
57,386 gallons/day

Total milkbarn wastewater generated per period:

6,886,320 gallons/storage period

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B. PROCESS WASTEWATER (NORMAL PRECIPITATION)



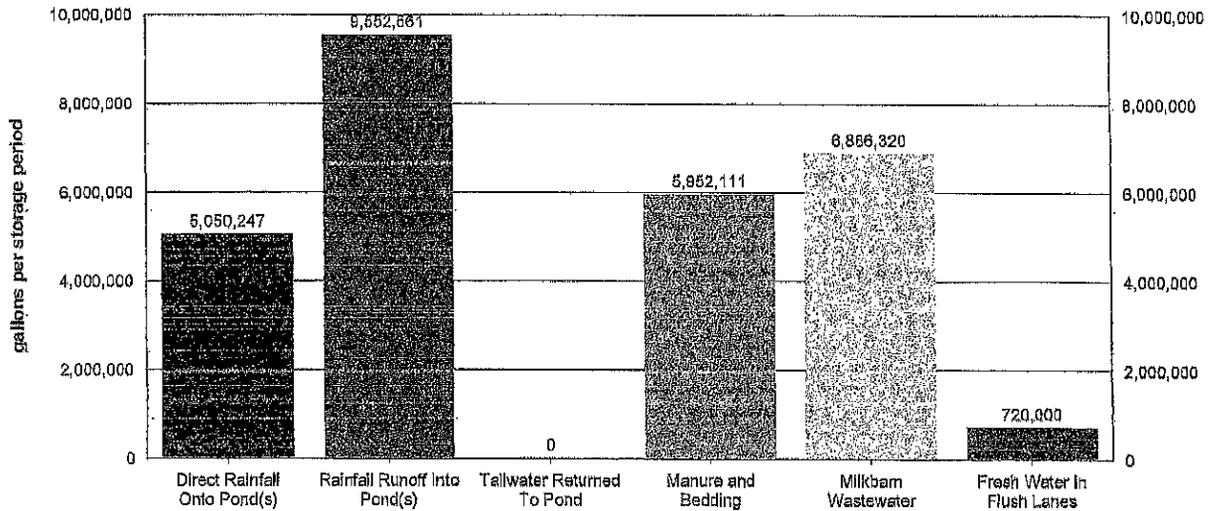
Values shown in chart are approximate values for storage period.

Storage period:	<u>120 days</u>
Total process wastewater generated daily:	<u>202,367 gallons/day</u>
Total process wastewater generated per period:	<u>24,284,068 gallons/storage period</u>
Total process wastewater removed due to evaporation:	<u>2,649,388 gallons/storage period</u>
Total storage capacity required:	<u>21,634,680 gallons</u> <u>2,892,136 cu. ft.</u>
Existing storage capacity (adjusted for dead storage loss):	<u>27,677,772 gallons</u> <u>3,699,980 cu. ft.</u>

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

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C. PROCESS WASTEWATER (NORMAL PRECIPITATION WITH 1.5 FACTOR)



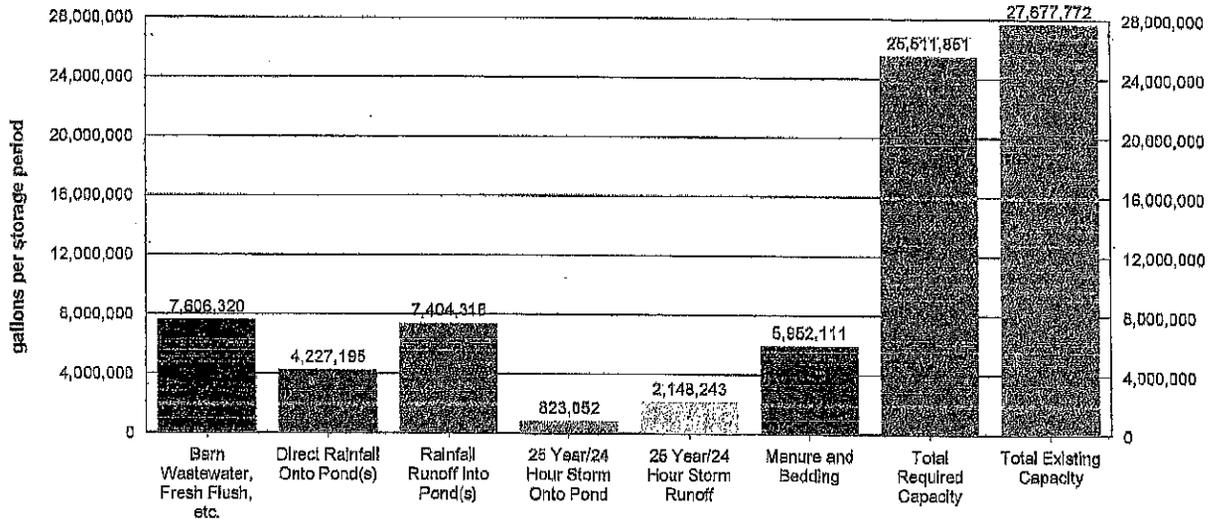
Values shown in chart are approximate values for storage period.

Storage period:	<u>120 days</u>
Total process wastewater generated daily:	<u>234,677 gallons/day</u>
Total process wastewater generated per period:	<u>28,161,239 gallons/storage period</u>
Total process wastewater removed due to evaporation:	<u>2,649,388 gallons/storage period</u>
Total storage capacity required:	<u>25,511,851 gallons</u>
	<u>3,410,438 cu. ft.</u>
Existing storage capacity (adjusted for dead storage loss):	<u>27,677,772 gallons</u>
	<u>3,699,980 cu. ft.</u>

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

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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:	<u>7,606,320</u> gallons/storage period
Manure and bedding sent to pond:	<u>5,952,111</u> gallons/storage period
Precipitation onto pond:	<u>4,227,195</u> gallons/storage period
Precipitation runoff:	<u>7,404,318</u> gallons/storage period
25 year/24 hour storm onto pond:	<u>823,052</u> gallons/storage period
25 year/24 hour storm runoff:	<u>2,148,243</u> gallons/storage period
Residual solids after liquids have been removed (liquid equivalent):	<u>385,064</u> gallons/storage period
Total process wastewater removed due to evaporation:	<u>2,649,388</u> gallons/storage period
Total required capacity:	<u>25,511,851</u> gallons/storage period
Total existing capacity:	<u>27,677,772</u> gallons/storage period
Existing capacity meets estimated storage needs:	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No

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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: WWS 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 2.5 feet above the pond invert beginning in March of each year.

Sludge accumulation will be measured annually.

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

Storage is visually monitored or professionally measured to evaluate solid accumulation. Storage is typically cleaned multiple times throughout the irrigation season through pumping.

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When solids/sludge accumulate to a thickness of 3.0 feet, the following method will be used to maintain adequate storage capacity while protecting any pond liner:

Water is added throughout the year to dilute solids. Solids are pumped out during irrigations. If necessary, storage can also be agitated and pumped into slurry wagons or directly excavated for Spring and/or Fall application. If excavation is required, cleaning equipment operator will be informed as to overall depth of storage and instructed to remain 6-12 inches from the floor.

OPERATIONS AND MAINTENANCE PLAN FOR POND: WWS 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 annually.

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

Sludge accumulation should be measured at pond drawdown with a probe that can indicate sludge thickness.

When solids/sludge accumulate to a thickness of 2.0 feet, the following method will be used to maintain adequate storage capacity while protecting any pond liner:

Water is added throughout the year to dilute solids. Solids are pumped out during irrigations. If necessary, storage can also be agitated and pumped into slurry wagons or directly excavated for Spring and/or Fall application. If excavation is required, cleaning equipment operator will be informed as to overall depth of storage and instructed to remain 6-12 inches from the floor.

OPERATIONS AND MAINTENANCE PLAN FOR POND: Proposed WWS 3

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 5.0 feet above the pond invert beginning in March of each year.

Sludge accumulation will be measured annually.

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

Sludge accumulation should be measured at pond drawdown with a probe that can indicate sludge thickness. Precautions should be taken to ensure that probing tool is designed to not damage the storage's synthetic liner.

When solids/sludge accumulate to a thickness of 5.0 feet, the following method will be used to maintain adequate storage capacity while protecting any pond liner:

Water is added throughout the year to dilute solids. Solids are pumped out during irrigations. If necessary, storage can also be agitated and pumped into slurry wagons. As this proposed storage will be synthetically lined, standard cleaning methods such as direct excavation should be avoided to protect the integrity of the liner.

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.

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<i>Buildings with rooftop rainfall collection systems</i>	Quantity	Surface Area (sq. ft.)
Existing calf hutch barn	1	12,445
Existing Center Group Pen Calf Barn	1	3,132
Existing commodity barn	1	18,525
Existing dry cow barn east of WWS1	1	15,402
Existing dry cow barn west of group pens	1	15,680
Existing East Group Pen Calf Barn	1	3,811
Existing freestall barn south of spec. needs bar	1	37,275
Existing freestall barn south of sprinkler pen	1	35,575
Existing hay barn east of commodity barn	1	12,514
Existing hay barn north of WWS1	1	10,881
Existing hay barn south of calf hutch barn	1	7,467
Existing Milking parlor and covered holding pen	1	6,730
Existing shade barn south of milk barn	1	30,018
Existing south combination freestall/shade barn	1	176,090
Existing special needs barn	1	7,959
Existing West Group Pen Calf Barn	1	2,524
Proposed calf barn	1	10,800
Proposed rotary milk barn	1	26,100
Proposed south freestall barn	1	165,240

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 October

Description of how rainfall collection systems will be assessed:

Gutters and downspouts will be cleaned and repaired as needed.

C. CORRAL MAINTENANCE

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- 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 runoff 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 following 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 runoff 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

Waste Management Plan Report
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July 1, 2010 deadline

- i. During the dry season and prior to the wet season, the perimeter of manure storage areas will be assessed to ensure all runoff 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, flush drains and corral drains as needed.
-Pumps are monitored daily.
-Corrals are regraded and dirt is added as needed to prevent ponding.

G. MORTALITY MANAGEMENT

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

Rendering company or landfill name: Baker Commodities Inc.

Rendering company or landfill telephone number: (559) 237-4310

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 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: Annually

J. CHEMICAL MANAGEMENT

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

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	
Iodine	18,000	gallons	year	Milkbarn	Picked up by distributor			
Acid	1,200	gallons	year	Milkbarn	Picked up by distributor			
Soap	3,600	gallons	year	Milkbarn	Picked up by distributor			

Waste Management Plan Report
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July 1, 2010 deadline

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: Figures 3-4

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: Figures 2-4

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: Figures 3-4

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

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: Figures 3-4

G. 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: Figures 2 & 3

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: 06099C0545E

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 Certificate

Waste Management Plan Report
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July 1, 2010 deadline

CERTIFICATION

A. DAIRY FACILITY INFORMATION

Name of dairy or business operating the dairy: Trinkler Dairy Farms Inc.

Physical address of dairy:

7251 Crowslanding RD

Ceres

Stanislaus

95307

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.

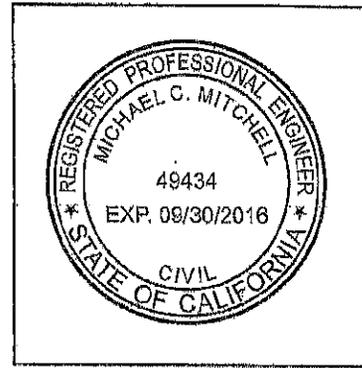
Storage capacity is:

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

1/21/16

SIGNATURE OF CIVIL ENGINEER

DATE

Michael Mitchell

PRINT OR TYPE NAME

18836 E Clausen RD; Turlock, CA 95380

MAILING ADDRESS

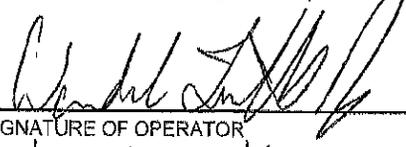
(209) 664-1067

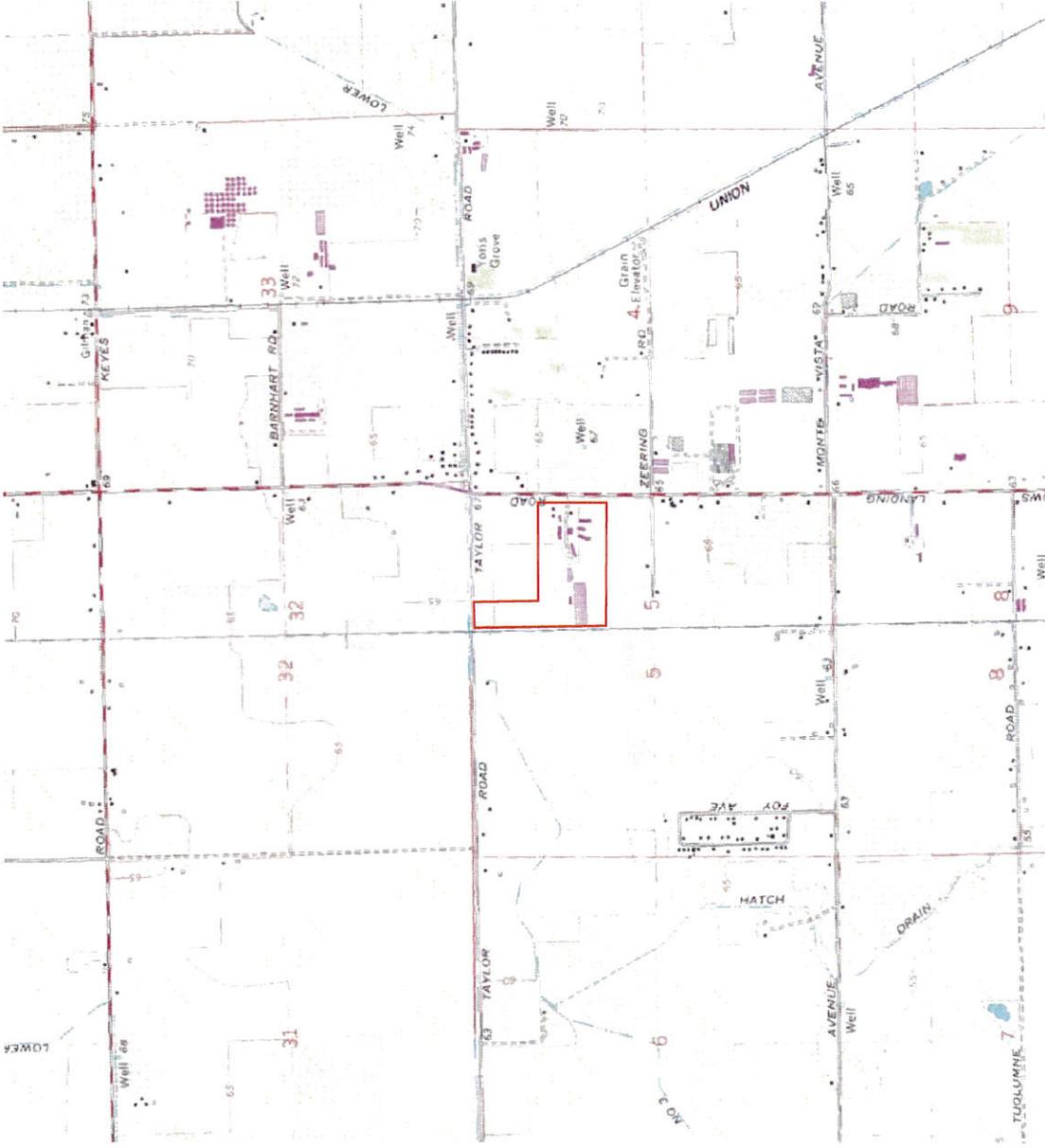
PHONE NUMBER

Waste Management Plan Report
General Order No. R6-2007-0036, Attachment B
July 1, 2010 deadline

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
Wendel Trinkler, Jr. PRINT OR TYPE NAME	Wendel Trinkler, Jr. PRINT OR TYPE NAME
1/22/16 DATE	1/22/16 DATE



LEGEND

□ Facility Boundary



TRINKLER DAIRY
STANISLAUS COUNTY, CA

FIGURE 1
TOPOGRAPHIC MAP

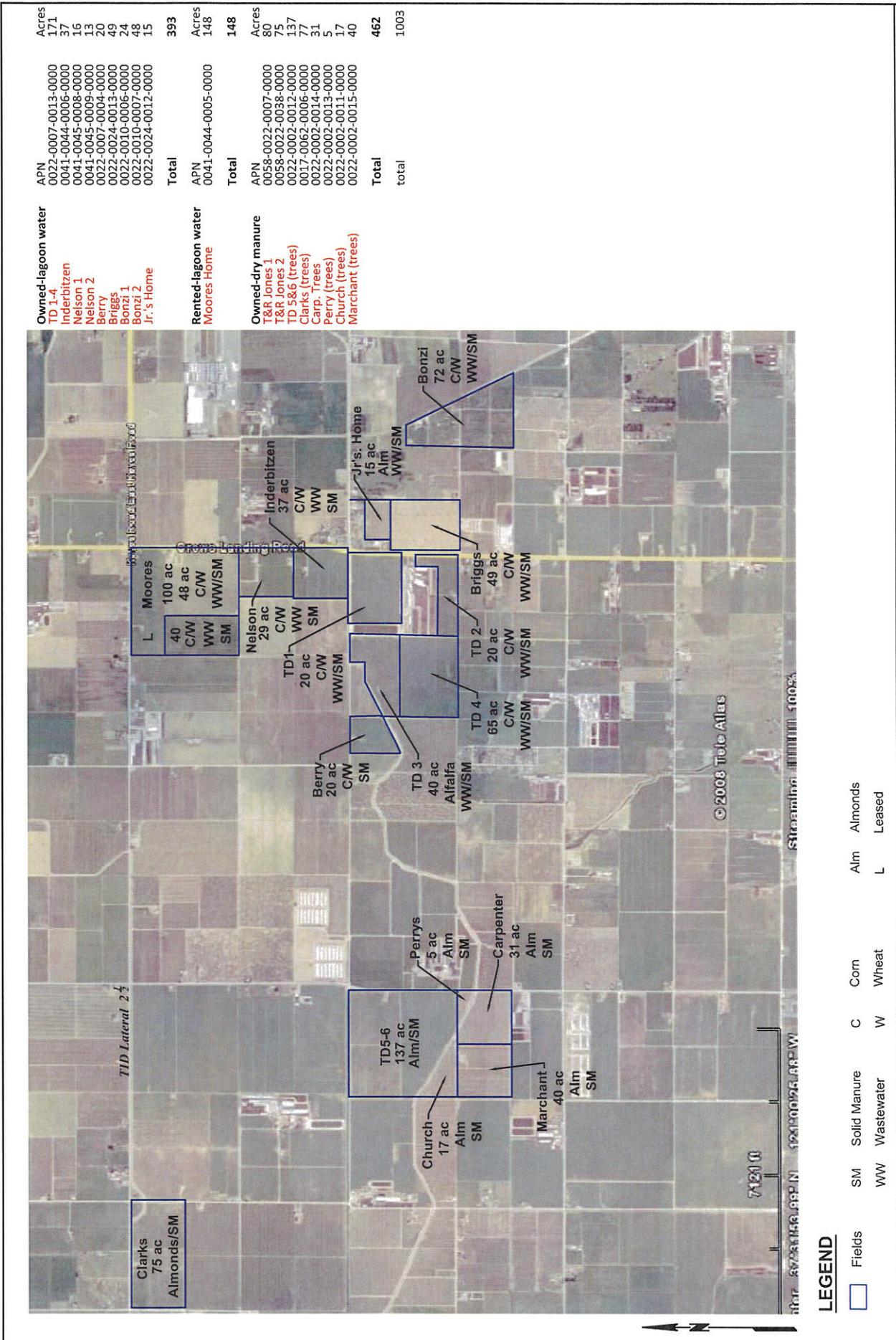
PROJECT NO. FRA-00

DATE: 10/17/14

DRAWN BY: SB

APP. BY: JR





	PROJECT NO. FRA-00		DATE: 2/9/15	DRAWN BY: SB	APP. BY: JR
	TRINKLER DAIRY STANISLAUS COUNTY, CA				
FIGURE 3 FIELD AND CROPPING MAP					

Owned-lagoon water

APN	0022-0007-0013-0000	Acres	171
TD 1-4	0041-0044-0006-0000		37
Inderbitzen	0041-0045-0008-0000		16
Nelson 1	0041-0045-0009-0000		13
Nelson 2	0022-0007-0004-0000		20
Berry	0022-0024-0013-0000		49
Briggs	0022-0010-0006-0000		24
Bonzi 1	0022-0010-0007-0000		48
Bonzi 2	0022-0024-0012-0000		15
Jr.'s Home			
Total			393

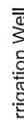
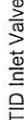
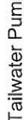
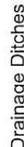
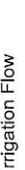
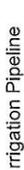
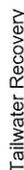
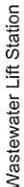
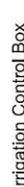
Rented-lagoon water

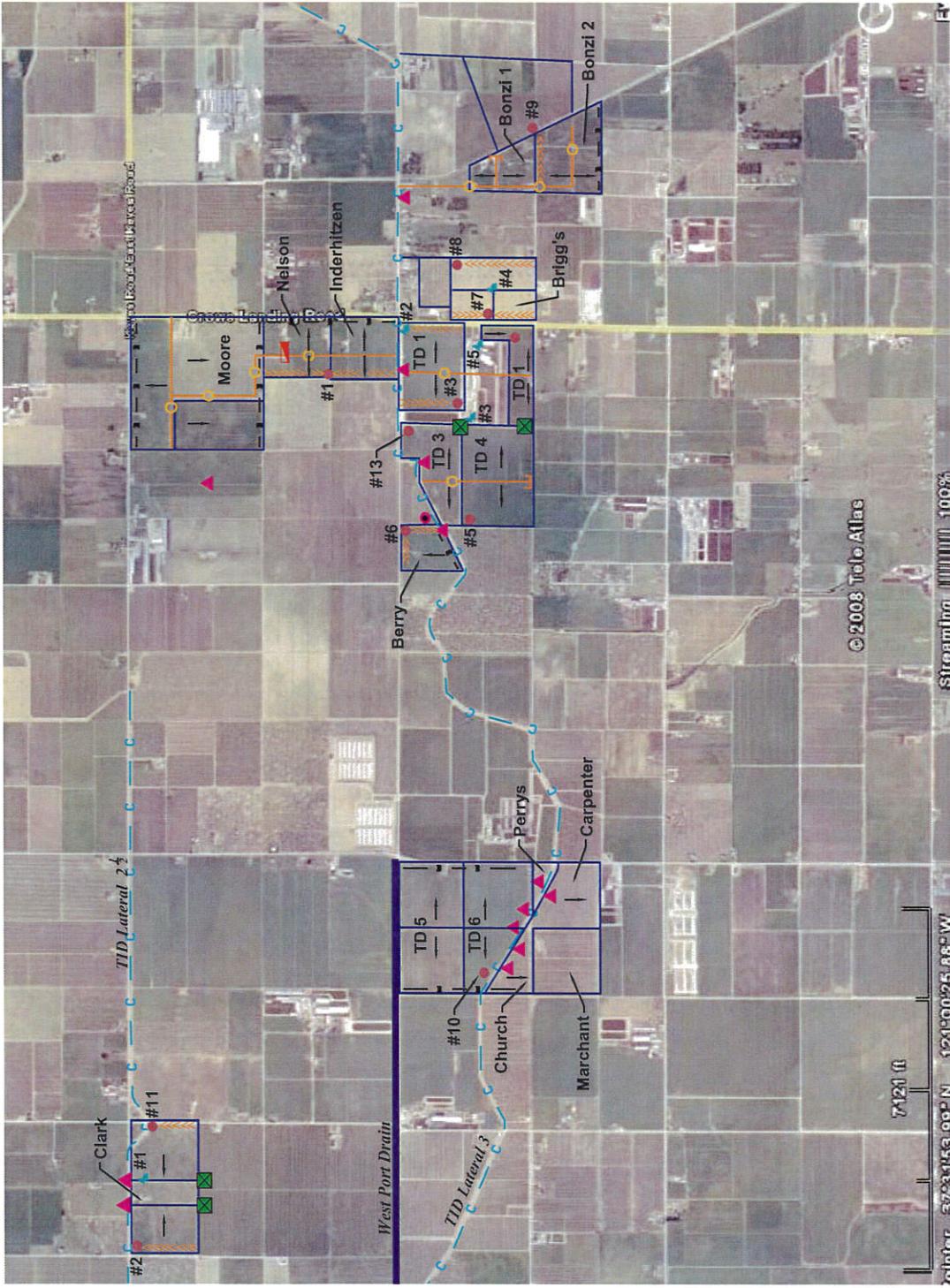
APN	0041-0044-0005-0000	Acres	148
Moore's Home			
Total			148

Owned-dry manure

APN	0058-0022-0007-0000	Acres	80
T&R Jones 1	0058-0022-0038-0000		75
T&R Jones 2	0022-0002-0012-0000		137
TD 5&6 (trees)	0017-0062-0006-0000		77
Clarks (trees)	0022-0002-0014-0000		31
Carp. Trees	0022-0002-0013-0000		5
Perry (trees)	0022-0002-0011-0000		17
Church (trees)	0022-0002-0015-0000		40
Marchant (trees)			
Total			462
total			1003

LEGEND

-  Fields
-  Irrigation Well
-  TID Inlet Valve
-  Tailwater Pump
-  Tailwater Drain Pump
-  Drainage Ditches
-  Irrigation Mixing Box
-  Irrigation Flow
-  Irrigation Pipeline
-  Tailwater Recovery
-  Canal
-  Wastewater Lift Station
-  Irrigation Control Box



PROJECT NO. FRA-00	DATE: 10/17/14	DRAWN BY: SB	APP. BY: JR
SCALE: 0 3200 6400 APPROXIMATE SCALE IN FEET			
TRINKLER DAIRY STANISLAUS COUNTY, CA			

FIGURE 4
IRRIGATION SCHEMATIC