CLEA

Monitoring Report Submittal Transmittal Form

Attn: Guy Childs (916) 464-4648
Central Valley Regional Water Quality Control Board
11020 Sun Center Drive #200
Rancho Cordova, CA 95670-6114

Discharger:	The Morning Star Packing Company, LP
Name of Facility:	Williams Facility
WDRs Order Number:	95-160
WDID:	5A062005001
County:	Colusa

I am hereby submitting to the Central Valley Water Board the following information:

Check all that apply:

Monthly Monitoring Report for the month of OCTOBER

1st / 2nd / 3rd / 4th (circle one) Quarterly Monitoring Report for the year of _____

1st / 2nd (circle one) Semi-annual Monitoring Report for the year _____

Annual Monitoring Report for the year _____

Violation Notification

During the monitoring period, there were / were not (circle one) any violations of the WDRs.

1. The violations were: N/A

2. Have the violations been corrected? Yes / No. If no, what will be done to correct the violations: N/A

Certification Statement

"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: _____ Phone: (530) 666-6600

Printed Name: ROSS OLIVEIRA Date: 12/1/13

12.04.13 LC

THE MORNING STAR PACKING COMPANY
2211 Old HWY 99, Williams, CA 95987

30 November 2013

Mr. Guy Childs
Central Valley Regional Water Quality Control Board
11020 Sun Center Drive #200
Rancho Cordova, CA 95670-6114

Re: Monthly Report for The Morning Star Packing Company – Williams, according to Waste Discharge Requirements Order No. 95-160.

Dear Mr. Childs:

Please find herewith the October monthly monitoring data relative to Order No. 95-160 with all applicable information.

Tomato processing at the Williams facility ended on 2 October 2013 and discharges from clean-up ended on 4 October 2013.

A summary table has been included that provides information on the daily application of washwater and cooling pond water to each field. The drying times and irrigation set times for each field and check can be determined using this table. Irrigations have ended for the season, so a cycle end date of 31 October 2013 has been assumed for cycle average calculations.

> *"I certify under penalty of law that this document and all attachments have been prepared under my direction or supervision in accordance with a system designed to assure that qualified personnel properly gathered and evaluated the information submitted. The information submitted is, to the best of my knowledge and belief, true, accurate and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment."*

Respectfully yours,

Ross Oliveira

Williams
2211 Old HWY 99
Williams, California
95987

Santa Nella
12045 S Ingomar Grade Rd
Los Banos, California
93635

Los Banos
13448 Volta Rd
Los Banos, California
93635

Daily weather report for COLUSA.A (CIMIS #32, Colusa)

More about COLUSA.A: Station description; More data: Daily ~ Averages;

Time Period: October 1, 2013 to October 31, 2013, retrieved on November 5, 2013
Note: Only 86% of requested data were available from station COLUSA.A. See retrieval table.

DATE	OBS TIME	PRECIP AMOUNT & TYPE	AIR TEMPERATURE			WIND		ETo	SOL RAD	SOIL T		WX	RELATIVE HUMIDITY		BULB TEMP		PAN EVAP
			MAX	MIN	OBS	DD	SS			MAX	MIN		MAX	MIN	WET	DRY	
MM DD YYYY	HH:MM	(IN) *	(F) *		*		*	(IN) *	(LY) *	(F) *		*		*	(F) *		(IN) *
10-01-2013	23:59	0.00	78	47		0	0		421	66	63		99.0	43.0			
10-02-2013	23:59	0.00	79	49		0	0		425	66	62		86.0	29.0			
10-03-2013	23:59	0.00	73	55		0	0		430	65	62		48.0	22.0			
10-04-2013	23:59	0.00	79	50		0	0		435	63	60		44.0	17.0			
10-05-2013	23:59	0.00	84	47		0	0		428	67	60		85.0	15.0			
10-06-2013	23:59	0.00	82	40		0	0		387	71	61		96.0	21.0			
10-07-2013	23:59	0.00	82	40		0	0		353	70	61		97.0	23.0			
10-08-2013	23:59	0.00	77	48		0	0		370	63	60		72.0	23.0			
10-09-2013	23:59	0.00	74	58		0	0		386	62	60		45.0	28.0			
10-10-2013	23:59	0.00	75	47		0	0		376	63	60		80.0	35.0			
10-11-2013	23:59	0.00	76	41		0	0		376	63	59		99.0	34.0			
10-12-2013	23:59	0.00	76	42		0	0		363	63	59		99.0	34.0			
10-13-2013	23:59	0.00	75	51		0	0		380	63	60		70.0	28.0			
10-14-2013	23:59	0.00	77	47		0	0		379	62	59		68.0	22.0			
10-15-2013	23:59	0.00	80	51		0	0		384	62	59		47.0	17.0			
10-16-2013	23:59	0.00	80	39		0	0		366	62	58		84.0	25.0			
10-17-2013	23:59	0.00	81	40		0	0		368	61	58		95.0	22.0			
10-18-2013	23:59	0.00	81	42		0	0		368	62	58		97.0	25.0			
10-19-2013	23:59	0.00	86	42		0	0		360	62	58		100.0	24.0			
10-20-2013	23:59	0.00	87	42		0	0		354	61	58		100.0	24.0			
10-21-2013	23:59	0.00	82	47		0	0		417	61	58		100.0	29.0			
10-22-2013	23:59	0.00	86	43		0	0		349	62	58		99.0	27.0			
10-23-2013	23:59	0.00	86	43		0	0		350	62	58		100.0	24.0			
10-24-2013	23:59	0.00	77	42		0	0		336	62	58		99.0	34.0			
10-25-2013	23:59	0.00	77	43		0	0		322	61	58		100.0	35.0			
10-26-2013	23:59	0.00	78	42		0	0		330	61	58		99.0	28.0			
10-27-2013	23:59	0.00	71	40		0	0		324	61	57		100.0	41.0			
10-28-2013	23:59	0.00	63	40		0	0		198	60	57		100.0	47.0			
10-29-2013	23:59	0.00	64	45		0	0		216	59	57		98.0	54.0			
10-30-2013	23:59	0.00	68	39		0	0		299	59	57		100.0	44.0			
10-31-2013	23:59	0.00	72	39		0	0		307	59	56		100.0	37.0			

31 records listed

The Morning Star Packing Company
General Pond Monitoring
2013

Cooling Pond TDS and EC Results from 7/15/2013

EC	570 umhos/cm
TDS	340 mg/l
TDS/EC Ratio	0.60

Cooling Pond Monitoring

Date	pH	Freeboard (ft)	DO mg/l	EC umhos/cm	TDS[1] mg/l	Levee Condition	Water Color	Odors
10/7/13	7.60	3.00	9.7	626	373	Good	Grey/Green	None
10/14/13	7.80	3.00	9.0	630	376	Good	Grey/Green	None
10/21/13	7.60	3.13	9.0	748	446	Good	Grey/Green	None
10/28/13	7.70	3.17	9.4	710	424	Good	Grey/Green	None
Average	**7.68**	**3.07**	**9.3**	**679**	**405**			

[1] *TDS calculated using TDS/EC ratio.*

Settling Pond Monitoring by Morning Star

Date	pH	Freeboard (ft)	DO mg/l	EC umhos/cm	Levee Condition	Water Color	Odors
No Process Water in Settling Pond. No Sample Pulled for October.							
Average							

Settling Pond Effluent Monitoring by Lab

Date	pH	EC umhos/cm	TDS mg/l	FDS mg/l	Settleable Solid ml/l	BOD (5-day) mg/l	Nitrate as Nitrogen mg/l	Nitrate mg/l	Total Kjeldahl Nitrogen mg/l
No Process Water in Settling Pond. No Sample Pulled for October.									
Average									

MORNING STAR

"Excellence Through Commitment"

Field Log: CP/SP #1 Technician: Jon Ikerd

Date: 10-7-13 Weather: 67

COOLING POND

pH 7.6 EC: 626 umhos/cm Temp: °C 59 °F

Freeboard: 36 inches Time: 0900 (0700-0900 hours)

Sample for dissolved oxygen analysis: Taken with Hach Meter RESULT: 9.7

Levee Condition: Good

Water Color: Grey Green

Odors: yes (no) Strength: _____ Characteristics: _____

Other Observations: _____

Equipment Calibration: (yes) no Please see attached calibration notes.

SETTLING POND

pH EC: ____ umhos/cm Temp: °C °F

Freeboard: _____ inches Time: _____ (0700-0900 hours)

Sample for dissolved oxygen analysis: RESULT: #1_____ #2____

Levee Condition: _____

Water Color: _____

Odors: yes / no Strength: _____ Characteristics: _____

Other Observations: _____

Equipment Calibration: yes / no Please see attached calibration notes.

MORNING STAR

"Excellence Through Commitment"

Field Log: CP/SP 2 Technician: Jon Ikerd

Date: 10-14-13 Weather: 62

COOLING POND

pH 7.8 EC: 630 umhos/cm Temp: °C 59 °F

Freeboard: 36 inches Time: 0900 (0700-0900 hours)

Sample for dissolved oxygen analysis: Taken with Hach Meter RESULT: 9.0

Levee Condition: Good

Water Color: Grey Green

Odors: yes / (no) Strength: _____ Characteristics: _____

Other Observations: _____

Equipment Calibration: (yes) / no Please see attached calibration notes.

SETTLING POND

pH EC: ____ umhos/cm Temp: °C °F

Freeboard: ____ inches Time: _____ (0700-0900 hours)

Sample for dissolved oxygen analysis: RESULT: #1_____ #2____

Levee Condition: _____

Water Color: _____

Odors: yes / no Strength: _____ Characteristics: _____

Other Observations: _____

Equipment Calibration: yes / no Please see attached calibration notes.

MORNING STAR

"Excellence Through Commitment"

Field Log: CP/SP 3 Technician: Jon Ikerd

Date: 10-21-13 Weather: 65

COOLING POND

pH 7.6 EC: 748 umhos/cm Temp: °C 63 °F

Freeboard: 37.5 inches Time: 0700 (0700-0900 hours)

Sample for dissolved oxygen analysis: Taken with Hach Meter RESULT: 9.0

Levee Condition: Good

Water Color: Grey / Green

Odors: yes (no) Strength: _____ Characteristics: _____

Other Observations: _____

Equipment Calibration: (yes) / no Please see attached calibration notes.

SETTLING POND

pH EC: ____ umhos/cm Temp: °C °F

Freeboard: _____ inches Time: _____ (0700-0900 hours)

Sample for dissolved oxygen analysis: RESULT: #1_____ #2____

Levee Condition: _____

Water Color: _____

Odors: yes / no Strength: _____ Characteristics: _____

Other Observations: _____

Equipment Calibration: yes / no Please see attached calibration notes.

MORNING STAR

"Excellence Through Commitment"

Field Log: CP/SP 4 Technician: Jon Ikerd

Date: 10-28-13 Weather: 55

COOLING POND

pH 7.7 EC: 710 umhos/cm Temp: °C 60 °F

Freeboard: 38 inches Time: 0845 (0700-0900 hours)

Sample for dissolved oxygen analysis: Taken with Hach Meter RESULT: 9.4

Levee Condition: Good

Water Color: Grey/Green

Odors: yes (no) Strength: _____ Characteristics: _____

Other Observations: _____

Equipment Calibration: (yes) / no Please see attached calibration notes.

SETTLING POND

pH EC: ____ umhos/cm Temp: °C °F

Freeboard: _____ inches Time: _____ (0700-0900 hours)

Sample for dissolved oxygen analysis: RESULT: #1_____ #2_____

Levee Condition: _____

Water Color: _____

Odors: yes / no Strength: _____ Characteristics: _____

Other Observations: _____

Equipment Calibration: yes / no Please see attached calibration notes.

The Morning Star Packing Company
Washwater and Fresh Water Flows to Fields
October-13

DATE	TIMES	Flow through Irrigation Ditch		Discharge from Cooling Pond		Discharge from Settling Pond/Gutters [1]		Discharge from GCID Canal
		WATER FLOW		WATER FLOW		WATER FLOW		WATER FLOW
		GPM	GPD	GPM	GPD	GPM	GPD	GPD
10/1/13	15min. Intervals	1,014	1,459,833			1,144	1,646,722	
10/2/13	15min. Intervals	1,202	1,730,363			1,633	2,350,886	
10/3/13	15min. Intervals	499	717,879			682	982,732	
10/4/13	15min. Intervals	12	17,563			12	17,563	
10/5/13	15min. Intervals							
10/6/13	15min. Intervals							
10/7/13	15min. Intervals							
10/8/13	15min. Intervals							
10/9/13	15min. Intervals							
10/10/13	15min. Intervals							
10/11/13	15min. Intervals							
10/12/13	15min. Intervals							
10/13/13	15min. Intervals							
10/14/13	15min. Intervals							
10/15/13	15min. Intervals							
10/16/13	15min. Intervals							
10/17/13	15min. Intervals							
10/18/13	15min. Intervals							
10/19/13	15min. Intervals							
10/20/13	15min. Intervals							
10/21/13	15min. Intervals							
10/22/13	15min. Intervals							
10/23/13	15min. Intervals							
10/24/13	15min. Intervals							
10/25/13	15min. Intervals							
10/26/13	15min. Intervals							
10/27/13	15min. Intervals							
10/28/13	15min. Intervals							
10/29/13	15min. Intervals							
10/30/13	15min. Intervals							
10/31/13	15min. Intervals							
Average		681	981,409			868	1,249,476	
Minimum		12	17,563			12	17,563	
Maximum		1,202	1,730,363			1,633	2,350,886	

[1] Discharge from settling pond/gutters flows used to calcualte Settling Pond Effluent loading rates. Discharge from cooling pond used to calculate cooling pond water nutrient loadings.

The Morning Star Packing Company
Water & Constituent Loading Calculations
Field: M. S. 1

LAND APPLICATION AREA:

M.S. 1 — 95.0 acres

Day	Settling Pond Effluent Applied (gal)	Settling Pond Effluent Applied (in)	BOD Ave. Applied (mg/l)	TDS Ave. Applied (mg/l)	Nitrogen Ave. Applied (mg/l)	Cooling Pond Effluent Applied (gal)	Cooling Pond Effluent Applied (in)	TDS Ave. Applied (mg/l)	Fresh Irrigation (gal)	Fresh Irrigation (in)	Rainfall (in)	Hydraulic Loading (in)	BOD Loading Total Weight (lbs/day)	BOD Loading Loading Applied (lbs/ac/day)	Nitrogen Loading Total (lbs/day)	Nitrogen Loading Applied (lbs/ac/month)	TDS Loading Total (lbs/day)	TDS Loading Applied (lbs/ac/month)
1	1,459,833	0.57	367	1,090	86	0	0.00	340	0	0.00	0.00	0.57	4,471	47	1,049	11	13,278	140
2	1,730,363	0.67	367	1,090	86.1	0	0.00	340	0	0.00	0.00	0.67	5,299	56	1,243	13	15,738	166
3	717,879	0.28	349	1,090	99.0	0	0.00	340	0	0.00	0.00	0.28	2,091	22	593	6	6,529	69
4	17,563	0.01	349	1,090	99.0	0	0.00	340	0	0.00	0.00	0.01	51	1	15	0	160	2
5	0	0.00	349	1,090	99.0	0	0.00	340	0	0.00	0.00	0.00	0	0	0	0	0	0
6	0	0.00	349	1,090	99.0	0	0.00	340	0	0.00	0.00	0.00	0	0	0	0	0	0
7	0	0.00	349	1,090	99.0	0	0.00	353	0	0.00	0.00	0.00	0	0	0	0	0	0
8	0	0.00	349	1,090	99.0	0	0.00	353	0	0.00	0.00	0.00	0	0	0	0	0	0
9	0	0.00	349	1,090	99.0	0	0.00	353	0	0.00	0.00	0.00	0	0	0	0	0	0
10	0	0.00	349	1,090	99.0	0	0.00	353	0	0.00	0.00	0.00	0	0	0	0	0	0
11	0	0.00	349	1,090	99.0	0	0.00	353	0	0.00	0.00	0.00	0	0	0	0	0	0
12	0	0.00	349	1,090	99.0	0	0.00	353	0	0.00	0.00	0.00	0	0	0	0	0	0
13	0	0.00	349	1,090	99.0	0	0.00	353	0	0.00	0.00	0.00	0	0	0	0	0	0
14	0	0.00	349	1,090	99.0	0	0.00	365	0	0.00	0.00	0.00	0	0	0	0	0	0
15	0	0.00	349	1,090	99.0	0	0.00	365	0	0.00	0.00	0.00	0	0	0	0	0	0
16	0	0.00	349	1,090	99.0	0	0.00	365	0	0.00	0.00	0.00	0	0	0	0	0	0
17	0	0.00	349	1,090	99.0	0	0.00	365	0	0.00	0.00	0.00	0	0	0	0	0	0
18	0	0.00	349	1,090	99.0	0	0.00	365	0	0.00	0.00	0.00	0	0	0	0	0	0
19	0	0.00	349	1,090	99.0	0	0.00	365	0	0.00	0.00	0.00	0	0	0	0	0	0
20	0	0.00	349	1,090	99.0	0	0.00	365	0	0.00	0.00	0.00	0	0	0	0	0	0
21	0	0.00	349	1,090	99.0	0	0.00	398	0	0.00	0.00	0.00	0	0	0	0	0	0
22	0	0.00	349	1,090	99.0	0	0.00	398	0	0.00	0.00	0.00	0	0	0	0	0	0
23	0	0.00	349	1,090	99.0	0	0.00	398	0	0.00	0.00	0.00	0	0	0	0	0	0
24	0	0.00	349	1,090	99.0	0	0.00	398	0	0.00	0.00	0.00	0	0	0	0	0	0
25	0	0.00	349	1,090	99.0	0	0.00	398	0	0.00	0.00	0.00	0	0	0	0	0	0
26	0	0.00	349	1,090	99.0	0	0.00	398	0	0.00	0.00	0.00	0	0	0	0	0	0
27	0	0.00	349	1,090	99.0	0	0.00	398	0	0.00	0.00	0.00	0	0	0	0	0	0
28	0	0.00	349	1,090	99.0	0	0.00	415	0	0.00	0.00	0.00	0	0	0	0	0	0
29	0	0.00	349	1,090	99.0	0	0.00	415	0	0.00	0.00	0.00	0	0	0	0	0	0
30	0	0.00	349	1,090	99.0	0	0.00	415	0	0.00	0.00	0.00	0	0	0	0	0	0
31	0	0.00	349	1,090	99.0	0	0.00	415	0	0.00	0.00	0.00	0	0	0	0	0	0
	3,925,638	**1.53**				**0**	**0.00**		**0**	**0.00**	**0.00**	**1.53**	**11,912**	**4 Ave.**	**2,900**	**31 Total**	**35,705**	**376 Total**
	12.0	**ac-ft**				**0.0**	**ac-ft**		**0.0**	**ac-ft**	**0.0**							
Percent of Total =	**100%**					**0%**			**0%**									

Irrigation Cycle Start Date: **9/21/13**
Irrigation Cycle End Date: **10/31/13** *
BOD Applied: **410**
Cycle Average BOD: **10**

**Irrigations have ended for the season. So a cycle end date of 10/31/2013 has been assumed for cycle average calculations.*

Cumulative Loading Calculations	**Nitrogen**	**TDS**
Commercial Applications		
July-13	0 lbs/acre	0 lbs/acre
August-13	0 lbs/acre	0 lbs/acre
September-13	67 lbs/acre	512 lbs/acre
October-13	31 lbs/acre	376 lbs/acre
Total	**98 lbs/acre**	**888 lbs/acre**

The Morning Star Packing Company
Water & Constituent Loading Calculations
Field: M. S. 2 & 3

LAND APPLICATION AREA: M.S. 2 & 3 — 82.1 acres

Day	Settling Pond Effluent Applied (gal)	Settling Pond Effluent Applied (in)	BOD Ave. Applied (mg/l)	TDS Ave. Applied (mg/l)	Nitrogen Ave. Applied (mg/l)	Cooling Pond Effluent Applied (gal)	Cooling Pond Effluent Applied (in)	TDS Ave. Applied (mg/l)	Fresh Irrigation (gal)	Fresh Irrigation (in)	Rainfall (in)	Hydraulic Loading (in)	BOD Loading Total Weight (lbs/day)	BOD Loading Loading Applied (lbs/ac/day)	Nitrogen Loading Total (lbs/day)	Nitrogen Loading Applied (lbs/ac/month)	TDS Loading Total (lbs/day)	TDS Loading Applied (lbs/ac/month)
1	0	0.00	367	1,090	86.1	0	0.00	340	0	0.00	0.00	0.00	0	0	0	0	0	0
2	0	0.00	367	1,090	86.1	0	0.00	340	0	0.00	0.00	0.00	0	0	0	0	0	0
3	0	0.00	349	1,090	99.0	0	0.00	340	0	0.00	0.00	0.00	0	0	0	0	0	0
4	0	0.00	349	1,090	99.0	0	0.00	340	0	0.00	0.00	0.00	0	0	0	0	0	0
5	0	0.00	349	1,090	99.0	0	0.00	340	0	0.00	0.00	0.00	0	0	0	0	0	0
6	0	0.00	349	1,090	99.0	0	0.00	340	0	0.00	0.00	0.00	0	0	0	0	0	0
7	0	0.00	349	1,090	99.0	0	0.00	353	0	0.00	0.00	0.00	0	0	0	0	0	0
8	0	0.00	349	1,090	99.0	0	0.00	353	0	0.00	0.00	0.00	0	0	0	0	0	0
9	0	0.00	349	1,090	99.0	0	0.00	353	0	0.00	0.00	0.00	0	0	0	0	0	0
10	0	0.00	349	1,090	99.0	0	0.00	353	0	0.00	0.00	0.00	0	0	0	0	0	0
11	0	0.00	349	1,090	99.0	0	0.00	353	0	0.00	0.00	0.00	0	0	0	0	0	0
12	0	0.00	349	1,090	99.0	0	0.00	353	0	0.00	0.00	0.00	0	0	0	0	0	0
13	0	0.00	349	1,090	99.0	0	0.00	353	0	0.00	0.00	0.00	0	0	0	0	0	0
14	0	0.00	349	1,090	99.0	0	0.00	365	0	0.00	0.00	0.00	0	0	0	0	0	0
15	0	0.00	349	1,090	99.0	0	0.00	365	0	0.00	0.00	0.00	0	0	0	0	0	0
16	0	0.00	349	1,090	99.0	0	0.00	365	0	0.00	0.00	0.00	0	0	0	0	0	0
17	0	0.00	349	1,090	99.0	0	0.00	365	0	0.00	0.00	0.00	0	0	0	0	0	0
18	0	0.00	349	1,090	99.0	0	0.00	365	0	0.00	0.00	0.00	0	0	0	0	0	0
19	0	0.00	349	1,090	99.0	0	0.00	365	0	0.00	0.00	0.00	0	0	0	0	0	0
20	0	0.00	349	1,090	99.0	0	0.00	365	0	0.00	0.00	0.00	0	0	0	0	0	0
21	0	0.00	349	1,090	99.0	0	0.00	398	0	0.00	0.00	0.00	0	0	0	0	0	0
22	0	0.00	349	1,090	99.0	0	0.00	398	0	0.00	0.00	0.00	0	0	0	0	0	0
23	0	0.00	349	1,090	99.0	0	0.00	398	0	0.00	0.00	0.00	0	0	0	0	0	0
24	0	0.00	349	1,090	99.0	0	0.00	398	0	0.00	0.00	0.00	0	0	0	0	0	0
25	0	0.00	349	1,090	99.0	0	0.00	398	0	0.00	0.00	0.00	0	0	0	0	0	0
26	0	0.00	349	1,090	99.0	0	0.00	398	0	0.00	0.00	0.00	0	0	0	0	0	0
27	0	0.00	349	1,090	99.0	0	0.00	398	0	0.00	0.00	0.00	0	0	0	0	0	0
28	0	0.00	349	1,090	99.0	0	0.00	415	0	0.00	0.00	0.00	0	0	0	0	0	0
29	0	0.00	349	1,090	99.0	0	0.00	415	0	0.00	0.00	0.00	0	0	0	0	0	0
30	0	0.00	349	1,090	99.0	0	0.00	415	0	0.00	0.00	0.00	0	0	0	0	0	0
31	0	0.00	349	1,090	99.0	0	0.00	415	0	0.00	0.00	0.00	0	0	0	0	0	0
	0	0.00				0	0.00		0	0.00	0.00	0.00	0	0 Ave.	0	0 Total	0	0 Total
	0.0	ac-ft				0.0	ac-ft		0.0	ac-ft	0.0							
Percent of Total =	#DIV/0!					#DIV/0!			#DIV/0!									

Irrigation Cycle Start Date: **9/16/13**
Irrigation Cycle End Date: **10/31/13** *
BOD Applied: **133**
Cycle Average BOD: **3**

**Irrigations have ended for the season. So a cycle end date of 10/31/2013 has been assumed for cycle average calculations.*

Cumulative Loading Calculations

Commercial Applications	Nitrogen	TDS
July-13	58 lbs/acre	360 lbs/acre
August-13	102 lbs/acre	655 lbs/acre
September-13	124 lbs/acre	841 lbs/acre
October-13	0 lbs/acre	0 lbs/acre
Total	**284 lbs/acre**	**1,856 lbs/acre**

The Morning Star Packing Company
Water & Constituent Loading Calculations
Field: M. S. 5

LAND APPLICATION AREA:

M.S. 5 24.6 acres

Day	Settling Pond Effluent Applied (gal)	Settling Pond Effluent Applied (in)	BOD Ave. Applied (mg/l)	TDS Ave. Applied (mg/l)	Nitrogen Ave. Applied (mg/l)	Cooling Pond Effluent Applied (gal)	Cooling Pond Effluent Applied (in)	TDS Ave. Applied (mg/l)	Fresh Irrigation (gal)	Fresh Irrigation (in)	Rainfall (in)	Hydraulic Loading (in)	BOD Loading Total Weight (lbs/day)	BOD Loading Loading Applied (lbs/ac/day)	Nitrogen Loading Total (lbs/day)	Nitrogen Loading Applied (lbs/ac/month)	TDS Loading Total (lbs/day)	TDS Loading Applied (lbs/ac/month)
1	0	0.00	367	1,090	86.1	0	0.00	340	0	0.00	0.00	0.00	0	0	0	0	0	0
2	0	0.00	367	1,090	86.1	0	0.00	340	0	0.00	0.00	0.00	0	0	0	0	0	0
3	0	0.00	349	1,090	99.0	0	0.00	340	0	0.00	0.00	0.00	0	0	0	0	0	0
4	0	0.00	349	1,090	99.0	0	0.00	340	0	0.00	0.00	0.00	0	0	0	0	0	0
5	0	0.00	349	1,090	99.0	0	0.00	340	0	0.00	0.00	0.00	0	0	0	0	0	0
6	0	0.00	349	1,090	99.0	0	0.00	340	0	0.00	0.00	0.00	0	0	0	0	0	0
7	0	0.00	349	1,090	99.0	0	0.00	353	0	0.00	0.00	0.00	0	0	0	0	0	0
8	0	0.00	349	1,090	99.0	0	0.00	353	0	0.00	0.00	0.00	0	0	0	0	0	0
9	0	0.00	349	1,090	99.0	0	0.00	353	0	0.00	0.00	0.00	0	0	0	0	0	0
10	0	0.00	349	1,090	99.0	0	0.00	353	0	0.00	0.00	0.00	0	0	0	0	0	0
11	0	0.00	349	1,090	99.0	0	0.00	353	0	0.00	0.00	0.00	0	0	0	0	0	0
12	0	0.00	349	1,090	99.0	0	0.00	353	0	0.00	0.00	0.00	0	0	0	0	0	0
13	0	0.00	349	1,090	99.0	0	0.00	353	0	0.00	0.00	0.00	0	0	0	0	0	0
14	0	0.00	349	1,090	99.0	0	0.00	365	0	0.00	0.00	0.00	0	0	0	0	0	0
15	0	0.00	349	1,090	99.0	0	0.00	365	0	0.00	0.00	0.00	0	0	0	0	0	0
16	0	0.00	349	1,090	99.0	0	0.00	365	0	0.00	0.00	0.00	0	0	0	0	0	0
17	0	0.00	349	1,090	99.0	0	0.00	365	0	0.00	0.00	0.00	0	0	0	0	0	0
18	0	0.00	349	1,090	99.0	0	0.00	365	0	0.00	0.00	0.00	0	0	0	0	0	0
19	0	0.00	349	1,090	99.0	0	0.00	365	0	0.00	0.00	0.00	0	0	0	0	0	0
20	0	0.00	349	1,090	99.0	0	0.00	365	0	0.00	0.00	0.00	0	0	0	0	0	0
21	0	0.00	349	1,090	99.0	0	0.00	398	0	0.00	0.00	0.00	0	0	0	0	0	0
22	0	0.00	349	1,090	99.0	0	0.00	398	0	0.00	0.00	0.00	0	0	0	0	0	0
23	0	0.00	349	1,090	99.0	0	0.00	398	0	0.00	0.00	0.00	0	0	0	0	0	0
24	0	0.00	349	1,090	99.0	0	0.00	398	0	0.00	0.00	0.00	0	0	0	0	0	0
25	0	0.00	349	1,090	99.0	0	0.00	398	0	0.00	0.00	0.00	0	0	0	0	0	0
26	0	0.00	349	1,090	99.0	0	0.00	398	0	0.00	0.00	0.00	0	0	0	0	0	0
27	0	0.00	349	1,090	99.0	0	0.00	398	0	0.00	0.00	0.00	0	0	0	0	0	0
28	0	0.00	349	1,090	99.0	0	0.00	415	0	0.00	0.00	0.00	0	0	0	0	0	0
29	0	0.00	349	1,090	99.0	0	0.00	415	0	0.00	0.00	0.00	0	0	0	0	0	0
30	0	0.00	349	1,090	99.0	0	0.00	415	0	0.00	0.00	0.00	0	0	0	0	0	0
31	0	0.00	349	1,090	99.0	0	0.00	415	0	0.00	0.00	0.00	0	0	0	0	0	0
	0	0.00				0	0.00		0	0.00	0.00	0.00	0	0 Ave.	0	0 Total	0	0 Total
	0.0	ac-ft				0.0	ac-ft		0.0	ac-ft	0.0							
Percent of Total =	#DIV/0!					#DIV/0!			#DIV/0!									

Irrigation Cycle Start Date: **9/10/13**
Irrigation Cycle End Date: **10/31/13** *
BOD Applied: **273**
Cycle Average BOD: **5**

**Irrigations have ended for the season. So a cycle end date of 10/31/2013 has been assumed for cycle average calculations.*

Cumulative Loading Calculations

	Nitrogen	TDS
Commercial Applications		
July-13	80 lbs/acre	549 lbs/acre
August-13	52 lbs/acre	327 lbs/acre
September-13	87 lbs/acre	594 lbs/acre
October-13	0 lbs/acre	0 lbs/acre
Total	**219 lbs/acre**	**1,470 lbs/acre**

The Morning Star Packing Company
Water & Constituent Loading Calculations
Field: M. S. 6

LAND APPLICATION AREA:

M.S. 6 — 21.4 acres

Day	Settling Pond Effluent Applied (gal)	Settling Pond Effluent Applied (in)	BOD Ave. Applied (mg/l)	TDS Ave. Applied (mg/l)	Nitrogen Ave. Applied (mg/l)	Cooling Pond Effluent Applied (gal)	Cooling Pond Effluent Applied (in)	TDS Ave. Applied (mg/l)	Fresh Irrigation (gal)	Fresh Irrigation (in)	Rainfall (in)
1	0	0.00	367	1,090	86.1	0	0.00	340	0	0.00	0.00
2	0	0.00	367	1,090	86.1	0	0.00	340	0	0.00	0.00
3	0	0.00	349	1,090	99.0	0	0.00	340	0	0.00	0.00
4	0	0.00	349	1,090	99.0	0	0.00	340	0	0.00	0.00
5	0	0.00	349	1,090	99.0	0	0.00	340	0	0.00	0.00
6	0	0.00	349	1,090	99.0	0	0.00	340	0	0.00	0.00
7	0	0.00	349	1,090	99.0	0	0.00	353	0	0.00	0.00
8	0	0.00	349	1,090	99.0	0	0.00	353	0	0.00	0.00
9	0	0.00	349	1,090	99.0	0	0.00	353	0	0.00	0.00
10	0	0.00	349	1,090	99.0	0	0.00	353	0	0.00	0.00
11	0	0.00	349	1,090	99.0	0	0.00	353	0	0.00	0.00
12	0	0.00	349	1,090	99.0	0	0.00	353	0	0.00	0.00
13	0	0.00	349	1,090	99.0	0	0.00	353	0	0.00	0.00
14	0	0.00	349	1,090	99.0	0	0.00	365	0	0.00	0.00
15	0	0.00	349	1,090	99.0	0	0.00	365	0	0.00	0.00
16	0	0.00	349	1,090	99.0	0	0.00	365	0	0.00	0.00
17	0	0.00	349	1,090	99.0	0	0.00	365	0	0.00	0.00
18	0	0.00	349	1,090	99.0	0	0.00	365	0	0.00	0.00
19	0	0.00	349	1,090	99.0	0	0.00	365	0	0.00	0.00
20	0	0.00	349	1,090	99.0	0	0.00	365	0	0.00	0.00
21	0	0.00	349	1,090	99.0	0	0.00	398	0	0.00	0.00
22	0	0.00	349	1,090	99.0	0	0.00	398	0	0.00	0.00
23	0	0.00	349	1,090	99.0	0	0.00	398	0	0.00	0.00
24	0	0.00	349	1,090	99.0	0	0.00	398	0	0.00	0.00
25	0	0.00	349	1,090	99.0	0	0.00	398	0	0.00	0.00
26	0	0.00	349	1,090	99.0	0	0.00	398	0	0.00	0.00
27	0	0.00	349	1,090	99.0	0	0.00	398	0	0.00	0.00
28	0	0.00	349	1,090	99.0	0	0.00	415	0	0.00	0.00
29	0	0.00	349	1,090	99.0	0	0.00	415	0	0.00	0.00
30	0	0.00	349	1,090	99.0	0	0.00	415	0	0.00	0.00
31	0	0.00	349	1,090	99.0	0	0.00	415	0	0.00	0.00
	0	**0.00**				**0**	**0.00**		**0**	**0.00**	**0.00**
	0.0	**ac-ft**				**0.0**	**ac-ft**		**0.0**	**ac-ft**	**0.0**
Percent of Total =	**#DIV/0!**					**#DIV/0!**			**#DIV/0!**		

Day	Hydraulic Loading (in)	BOD Loading Total Weight (lbs/day)	BOD Loading Loading Applied (lbs/ac/day)	Nitrogen Loading Total (lbs/day)	Nitrogen Loading Applied (lbs/ac/month)	TDS Loading Total (lbs/day)	TDS Loading Applied (lbs/ac/month)
1	0.00	0	0	0	0	0	0
2	0.00	0	0	0	0	0	0
3	0.00	0	0	0	0	0	0
4	0.00	0	0	0	0	0	0
5	0.00	0	0	0	0	0	0
6	0.00	0	0	0	0	0	0
7	0.00	0	0	0	0	0	0
8	0.00	0	0	0	0	0	0
9	0.00	0	0	0	0	0	0
10	0.00	0	0	0	0	0	0
11	0.00	0	0	0	0	0	0
12	0.00	0	0	0	0	0	0
13	0.00	0	0	0	0	0	0
14	0.00	0	0	0	0	0	0
15	0.00	0	0	0	0	0	0
16	0.00	0	0	0	0	0	0
17	0.00	0	0	0	0	0	0
18	0.00	0	0	0	0	0	0
19	0.00	0	0	0	0	0	0
20	0.00	0	0	0	0	0	0
21	0.00	0	0	0	0	0	0
22	0.00	0	0	0	0	0	0
23	0.00	0	0	0	0	0	0
24	0.00	0	0	0	0	0	0
25	0.00	0	0	0	0	0	0
26	0.00	0	0	0	0	0	0
27	0.00	0	0	0	0	0	0
28	0.00	0	0	0	0	0	0
29	0.00	0	0	0	0	0	0
30	0.00	0	0	0	0	0	0
31	0.00	0	0	0	0	0	0
	0.00	**0**	**0 Ave.**	**0**	**0 Total**	**0**	**0 Total**

Irrigation Cycle Start Date: **8/25/13**
Irrigation Cycle End Date: **10/31/13** *
BOD Applied: **266**
Cycle Average BOD: **4**

**Irrigations have ended for the season. So a cycle end date of 10/31/2013 has been assumed for cycle average calculations.*

Cumulative Loading Calculations	**Nitrogen**	**TDS**
Commercial Applications		
July-13	66 lbs/acre	448 lbs/acre
August-13	52 lbs/acre	325 lbs/acre
September-13	0 lbs/acre	0 lbs/acre
October-13	0 lbs/acre	0 lbs/acre
Total	**118 lbs/acre**	**773 lbs/acre**

The Morning Star Packing Company
Water & Constituent Loading Calculations
Field: M. S. 11

LAND APPLICATION AREA: M.S. 11 — 35.6 acres

Day	Settling Pond Effluent Applied (gal)	Settling Pond Effluent Applied (in)	BOD Ave. Applied (mg/l)	TDS Ave. Applied (mg/l)	Nitrogen Ave. Applied (mg/l)	Cooling Pond Effluent Applied (gal)	Cooling Pond Effluent Applied (in)	TDS Ave. Applied (mg/l)	Fresh Irrigation (gal)	Fresh Irrigation (in)	Rainfall (in)	Hydraulic Loading (in)	BOD Loading Total Weight (lbs/day)	BOD Loading Loading Applied (lbs/ac/day)	Nitrogen Loading Total (lbs/day)	Nitrogen Loading Applied (lbs/ac/month)	TDS Loading Total (lbs/day)	TDS Loading Applied (lbs/ac/month)
1	0	0.00	367	1,090	86.1	0	0.00	340	0	0.00	0.00	0.00	0	0	0	0	0	0
2	0	0.00	367	1,090	86.1	0	0.00	340	0	0.00	0.00	0.00	0	0	0	0	0	0
3	0	0.00	349	1,090	99.0	0	0.00	340	0	0.00	0.00	0.00	0	0	0	0	0	0
4	0	0.00	349	1,090	99.0	0	0.00	340	0	0.00	0.00	0.00	0	0	0	0	0	0
5	0	0.00	349	1,090	99.0	0	0.00	340	0	0.00	0.00	0.00	0	0	0	0	0	0
6	0	0.00	349	1,090	99.0	0	0.00	340	0	0.00	0.00	0.00	0	0	0	0	0	0
7	0	0.00	349	1,090	99.0	0	0.00	353	0	0.00	0.00	0.00	0	0	0	0	0	0
8	0	0.00	349	1,090	99.0	0	0.00	353	0	0.00	0.00	0.00	0	0	0	0	0	0
9	0	0.00	349	1,090	99.0	0	0.00	353	0	0.00	0.00	0.00	0	0	0	0	0	0
10	0	0.00	349	1,090	99.0	0	0.00	353	0	0.00	0.00	0.00	0	0	0	0	0	0
11	0	0.00	349	1,090	99.0	0	0.00	353	0	0.00	0.00	0.00	0	0	0	0	0	0
12	0	0.00	349	1,090	99.0	0	0.00	353	0	0.00	0.00	0.00	0	0	0	0	0	0
13	0	0.00	349	1,090	99.0	0	0.00	353	0	0.00	0.00	0.00	0	0	0	0	0	0
14	0	0.00	349	1,090	99.0	0	0.00	365	0	0.00	0.00	0.00	0	0	0	0	0	0
15	0	0.00	349	1,090	99.0	0	0.00	365	0	0.00	0.00	0.00	0	0	0	0	0	0
16	0	0.00	349	1,090	99.0	0	0.00	365	0	0.00	0.00	0.00	0	0	0	0	0	0
17	0	0.00	349	1,090	99.0	0	0.00	365	0	0.00	0.00	0.00	0	0	0	0	0	0
18	0	0.00	349	1,090	99.0	0	0.00	365	0	0.00	0.00	0.00	0	0	0	0	0	0
19	0	0.00	349	1,090	99.0	0	0.00	365	0	0.00	0.00	0.00	0	0	0	0	0	0
20	0	0.00	349	1,090	99.0	0	0.00	365	0	0.00	0.00	0.00	0	0	0	0	0	0
21	0	0.00	349	1,090	99.0	0	0.00	398	0	0.00	0.00	0.00	0	0	0	0	0	0
22	0	0.00	349	1,090	99.0	0	0.00	398	0	0.00	0.00	0.00	0	0	0	0	0	0
23	0	0.00	349	1,090	99.0	0	0.00	398	0	0.00	0.00	0.00	0	0	0	0	0	0
24	0	0.00	349	1,090	99.0	0	0.00	398	0	0.00	0.00	0.00	0	0	0	0	0	0
25	0	0.00	349	1,090	99.0	0	0.00	398	0	0.00	0.00	0.00	0	0	0	0	0	0
26	0	0.00	349	1,090	99.0	0	0.00	398	0	0.00	0.00	0.00	0	0	0	0	0	0
27	0	0.00	349	1,090	99.0	0	0.00	398	0	0.00	0.00	0.00	0	0	0	0	0	0
28	0	0.00	349	1,090	99.0	0	0.00	415	0	0.00	0.00	0.00	0	0	0	0	0	0
29	0	0.00	349	1,090	99.0	0	0.00	415	0	0.00	0.00	0.00	0	0	0	0	0	0
30	0	0.00	349	1,090	99.0	0	0.00	415	0	0.00	0.00	0.00	0	0	0	0	0	0
31	0	0.00	349	1,090	99.0	0	0.00	415	0	0.00	0.00	0.00	0	0	0	0	0	0
	0	0.00				0	0.00		0	0.00	0.00	0.00	0	0 Ave.	0	0 Total	0	0 Total
	0.0	ac-ft				0.0	ac-ft		0.0	ac-ft	0.0							
Percent of Total =	#DIV/0!					#DIV/0!			#DIV/0!									

Irrigation Cycle Start Date: 9/13/13
Irrigation Cycle End Date: 10/31/13 *
BOD Applied: 326
Cycle Average BOD: 7

**Irrigations have ended for the season. So a cycle end date of 10/31/2013 has been assumed for cycle average calculations.*

Cumulative Loading Calculations

	Nitrogen	TDS
Commercial Applications		
July-13	90 lbs/acre	618 lbs/acre
August-13	75 lbs/acre	561 lbs/acre
September-13	85 lbs/acre	618 lbs/acre
October-13	0 lbs/acre	0 lbs/acre
Total	**250 lbs/acre**	**1,797 lbs/acre**

The Morning Star Packing Company
Water & Constituent Loading Calculations
Field: M. S. 14

LAND APPLICATION AREA: M.S. 14 — 44.5 acres

Day	Settling Pond Effluent Applied (gal)	Settling Pond Effluent Applied (in)	BOD Ave. Applied (mg/l)	TDS Ave. Applied (mg/l)	Nitrogen Ave. Applied (mg/l)	Cooling Pond Effluent Applied (gal)	Cooling Pond Effluent Applied (in)	TDS Ave. Applied (mg/l)	Fresh Irrigation (gal)	Fresh Irrigation (in)	Rainfall (in)
1	0	0.00	367	1,090	86.1	0	0.00	340	0	0.00	0.00
2	0	0.00	367	1,090	86.1	0	0.00	340	0	0.00	0.00
3	0	0.00	349	1,090	99.0	0	0.00	340	0	0.00	0.00
4	0	0.00	349	1,090	99.0	0	0.00	340	0	0.00	0.00
5	0	0.00	349	1,090	99.0	0	0.00	340	0	0.00	0.00
6	0	0.00	349	1,090	99.0	0	0.00	340	0	0.00	0.00
7	0	0.00	349	1,090	99.0	0	0.00	353	0	0.00	0.00
8	0	0.00	349	1,090	99.0	0	0.00	353	0	0.00	0.00
9	0	0.00	349	1,090	99.0	0	0.00	353	0	0.00	0.00
10	0	0.00	349	1,090	99.0	0	0.00	353	0	0.00	0.00
11	0	0.00	349	1,090	99.0	0	0.00	353	0	0.00	0.00
12	0	0.00	349	1,090	99.0	0	0.00	353	0	0.00	0.00
13	0	0.00	349	1,090	99.0	0	0.00	353	0	0.00	0.00
14	0	0.00	349	1,090	99.0	0	0.00	365	0	0.00	0.00
15	0	0.00	349	1,090	99.0	0	0.00	365	0	0.00	0.00
16	0	0.00	349	1,090	99.0	0	0.00	365	0	0.00	0.00
17	0	0.00	349	1,090	99.0	0	0.00	365	0	0.00	0.00
18	0	0.00	349	1,090	99.0	0	0.00	365	0	0.00	0.00
19	0	0.00	349	1,090	99.0	0	0.00	365	0	0.00	0.00
20	0	0.00	349	1,090	99.0	0	0.00	365	0	0.00	0.00
21	0	0.00	349	1,090	99.0	0	0.00	398	0	0.00	0.00
22	0	0.00	349	1,090	99.0	0	0.00	398	0	0.00	0.00
23	0	0.00	349	1,090	99.0	0	0.00	398	0	0.00	0.00
24	0	0.00	349	1,090	99.0	0	0.00	398	0	0.00	0.00
25	0	0.00	349	1,090	99.0	0	0.00	398	0	0.00	0.00
26	0	0.00	349	1,090	99.0	0	0.00	398	0	0.00	0.00
27	0	0.00	349	1,090	99.0	0	0.00	398	0	0.00	0.00
28	0	0.00	349	1,090	99.0	0	0.00	415	0	0.00	0.00
29	0	0.00	349	1,090	99.0	0	0.00	415	0	0.00	0.00
30	0	0.00	349	1,090	99.0	0	0.00	415	0	0.00	0.00
31	0	0.00	349	1,090	99.0	0	0.00	415	0	0.00	0.00
	0	0.00				0	0.00		0	0.00	0.00
	0.0	ac-ft				0.0	ac-ft		0.0	ac-ft	0.0
Percent of Total =	#DIV/0!					#DIV/0!			#DIV/0!		

Day	Hydraulic Loading (in)	BOD Loading Total Weight (lbs/day)	BOD Loading Applied (lbs/ac/day)	Nitrogen Loading Total (lbs/day)	Nitrogen Loading Applied (lbs/ac/month)	TDS Loading Total (lbs/day)	TDS Loading Applied (lbs/ac/month)
1	0.00	0	0	0	0	0	0
2	0.00	0	0	0	0	0	0
3	0.00	0	0	0	0	0	0
4	0.00	0	0	0	0	0	0
5	0.00	0	0	0	0	0	0
6	0.00	0	0	0	0	0	0
7	0.00	0	0	0	0	0	0
8	0.00	0	0	0	0	0	0
9	0.00	0	0	0	0	0	0
10	0.00	0	0	0	0	0	0
11	0.00	0	0	0	0	0	0
12	0.00	0	0	0	0	0	0
13	0.00	0	0	0	0	0	0
14	0.00	0	0	0	0	0	0
15	0.00	0	0	0	0	0	0
16	0.00	0	0	0	0	0	0
17	0.00	0	0	0	0	0	0
18	0.00	0	0	0	0	0	0
19	0.00	0	0	0	0	0	0
20	0.00	0	0	0	0	0	0
21	0.00	0	0	0	0	0	0
22	0.00	0	0	0	0	0	0
23	0.00	0	0	0	0	0	0
24	0.00	0	0	0	0	0	0
25	0.00	0	0	0	0	0	0
26	0.00	0	0	0	0	0	0
27	0.00	0	0	0	0	0	0
28	0.00	0	0	0	0	0	0
29	0.00	0	0	0	0	0	0
30	0.00	0	0	0	0	0	0
31	0.00	0	0	0	0	0	0
	0.00	0	0 Ave.	0	0 Total	0	0 Total

Irrigation Cycle Start Date: **9/26/13**
Irrigation Cycle End Date: **10/31/13** *
BOD Applied: **76**
Cycle Average BOD: **2**

**Irrigations have ended for the season. So a cycle end date of 10/31/2013 has been assumed for cycle average calculations.*

Cumulative Loading Calculations	**Nitrogen**	**TDS**
Commercial Applications		
July-13	68 lbs/acre	435 lbs/acre
August-13	132 lbs/acre	784 lbs/acre
September-13	102 lbs/acre	753 lbs/acre
October-13	0 lbs/acre	0 lbs/acre
Total	**302 lbs/acre**	**1,972 lbs/acre**

The Morning Star Packing Company
Water & Constituent Loading Calculations
Field: M. S. 15

LAND APPLICATION AREA: M.S. 15 — 26.7 acres

Day	Settling Pond Effluent Applied (gal)	Settling Pond Effluent Applied (in)	BOD Ave. Applied (mg/l)	TDS Ave. Applied (mg/l)	Nitrogen Ave. Applied (mg/l)	Cooling Pond Effluent Applied (gal)	Cooling Pond Effluent Applied (in)	TDS Ave. Applied (mg/l)	Fresh Irrigation (gal)	Fresh Irrigation (in)	Rainfall (in)
1	0	0.00	367	1,090	86.1	0	0.00	340	0	0.00	0.00
2	0	0.00	367	1,090	86.1	0	0.00	340	0	0.00	0.00
3	0	0.00	349	1,090	99.0	0	0.00	340	0	0.00	0.00
4	0	0.00	349	1,090	99.0	0	0.00	340	0	0.00	0.00
5	0	0.00	349	1,090	99.0	0	0.00	340	0	0.00	0.00
6	0	0.00	349	1,090	99.0	0	0.00	340	0	0.00	0.00
7	0	0.00	349	1,090	99.0	0	0.00	353	0	0.00	0.00
8	0	0.00	349	1,090	99.0	0	0.00	353	0	0.00	0.00
9	0	0.00	349	1,090	99.0	0	0.00	353	0	0.00	0.00
10	0	0.00	349	1,090	99.0	0	0.00	353	0	0.00	0.00
11	0	0.00	349	1,090	99.0	0	0.00	353	0	0.00	0.00
12	0	0.00	349	1,090	99.0	0	0.00	353	0	0.00	0.00
13	0	0.00	349	1,090	99.0	0	0.00	353	0	0.00	0.00
14	0	0.00	349	1,090	99.0	0	0.00	365	0	0.00	0.00
15	0	0.00	349	1,090	99.0	0	0.00	365	0	0.00	0.00
16	0	0.00	349	1,090	99.0	0	0.00	365	0	0.00	0.00
17	0	0.00	349	1,090	99.0	0	0.00	365	0	0.00	0.00
18	0	0.00	349	1,090	99.0	0	0.00	365	0	0.00	0.00
19	0	0.00	349	1,090	99.0	0	0.00	365	0	0.00	0.00
20	0	0.00	349	1,090	99.0	0	0.00	365	0	0.00	0.00
21	0	0.00	349	1,090	99.0	0	0.00	398	0	0.00	0.00
22	0	0.00	349	1,090	99.0	0	0.00	398	0	0.00	0.00
23	0	0.00	349	1,090	99.0	0	0.00	398	0	0.00	0.00
24	0	0.00	349	1,090	99.0	0	0.00	398	0	0.00	0.00
25	0	0.00	349	1,090	99.0	0	0.00	398	0	0.00	0.00
26	0	0.00	349	1,090	99.0	0	0.00	398	0	0.00	0.00
27	0	0.00	349	1,090	99.0	0	0.00	398	0	0.00	0.00
28	0	0.00	349	1,090	99.0	0	0.00	415	0	0.00	0.00
29	0	0.00	349	1,090	99.0	0	0.00	415	0	0.00	0.00
30	0	0.00	349	1,090	99.0	0	0.00	415	0	0.00	0.00
31	0	0.00	349	1,090	99.0	0	0.00	415	0	0.00	0.00
	0	**0.00**				**0**	**0.00**		**0**	**0.00**	**0.00**
	0.0	**ac-ft**				**0.0**	**ac-ft**		**0.0**	**ac-ft**	**0.0**
Percent of Total =	**#DIV/0!**					**#DIV/0!**			**#DIV/0!**		

Hydraulic Loading (in)	BOD Loading Total Weight (lbs/day)	BOD Loading Loading Applied (lbs/ac/day)	Nitrogen Loading Total (lbs/day)	Nitrogen Loading Applied (lbs/ac/month)	TDS Loading Total (lbs/day)	TDS Loading Applied (lbs/ac/month)
0.00	0	**0**	0	**0**	0	**0**
0.00	0	**0**	0	**0**	0	**0**
0.00	0	**0**	0	**0**	0	**0**
0.00	0	**0**	0	**0**	0	**0**
0.00	0	**0**	0	**0**	0	**0**
0.00	0	**0**	0	**0**	0	**0**
0.00	0	**0**	0	**0**	0	**0**
0.00	0	**0**	0	**0**	0	**0**
0.00	0	**0**	0	**0**	0	**0**
0.00	0	**0**	0	**0**	0	**0**
0.00	0	**0**	0	**0**	0	**0**
0.00	0	**0**	0	**0**	0	**0**
0.00	0	**0**	0	**0**	0	**0**
0.00	0	**0**	0	**0**	0	**0**
0.00	0	**0**	0	**0**	0	**0**
0.00	0	**0**	0	**0**	0	**0**
0.00	0	**0**	0	**0**	0	**0**
0.00	0	**0**	0	**0**	0	**0**
0.00	0	**0**	0	**0**	0	**0**
0.00	0	**0**	0	**0**	0	**0**
0.00	0	**0**	0	**0**	0	**0**
0.00	0	**0**	0	**0**	0	**0**
0.00	0	**0**	0	**0**	0	**0**
0.00	0	**0**	0	**0**	0	**0**
0.00	0	**0**	0	**0**	0	**0**
0.00	0	**0**	0	**0**	0	**0**
0.00	0	**0**	0	**0**	0	**0**
0.00	0	**0**	0	**0**	0	**0**
0.00	0	**0**	0	**0**	0	**0**
0.00	0	**0**	0	**0**	0	**0**
0.00	0	**0**	0	**0**	0	**0**
0.00	**0**	**0 Ave.**	**0**	**0 Total**	**0**	**0 Total**

Irrigation Cycle Start Date: **9/11/13**
Irrigation Cycle End Date: **10/31/13** *
BOD Applied: **240**
Cycle Average BOD: **5**

**Irrigations have ended for the season. So a cycle end date of 10/31/2013 has been assumed for cycle average calculations.*

Cumulative Loading Calculations	**Nitrogen**	**TDS**
Commercial Applications		
July-13	12 lbs/acre	89 lbs/acre
August-13	126 lbs/acre	848 lbs/acre
September-13	68 lbs/acre	488 lbs/acre
October-13	0 lbs/acre	0 lbs/acre
Total	**206 lbs/acre**	**1,425 lbs/acre**

The Morning Star Packing Company
Water & Constituent Loading Calculations
Field: M. S. 16 & 17

LAND APPLICATION AREA:

M.S. 16 & 17 — 36.7 acres

Day	Settling Pond Effluent Applied (gal)	Settling Pond Effluent Applied (in)	BOD Ave. Applied (mg/l)	TDS Ave. Applied (mg/l)	Nitrogen Ave. Applied (mg/l)	Cooling Pond Effluent Applied (gal)	Cooling Pond Effluent Applied (in)	TDS Ave. Applied (mg/l)	Fresh Irrigation (gal)	Fresh Irrigation (in)	Rainfall (in)
1	0	0.00	367	1,090	86.1	0	0.00	340	0	0.00	0.00
2	0	0.00	367	1,090	86.1	0	0.00	340	0	0.00	0.00
3	0	0.00	349	1,090	99.0	0	0.00	340	0	0.00	0.00
4	0	0.00	349	1,090	99.0	0	0.00	340	0	0.00	0.00
5	0	0.00	349	1,090	99.0	0	0.00	340	0	0.00	0.00
6	0	0.00	349	1,090	99.0	0	0.00	340	0	0.00	0.00
7	0	0.00	349	1,090	99.0	0	0.00	353	0	0.00	0.00
8	0	0.00	349	1,090	99.0	0	0.00	353	0	0.00	0.00
9	0	0.00	349	1,090	99.0	0	0.00	353	0	0.00	0.00
10	0	0.00	349	1,090	99.0	0	0.00	353	0	0.00	0.00
11	0	0.00	349	1,090	99.0	0	0.00	353	0	0.00	0.00
12	0	0.00	349	1,090	99.0	0	0.00	353	0	0.00	0.00
13	0	0.00	349	1,090	99.0	0	0.00	353	0	0.00	0.00
14	0	0.00	349	1,090	99.0	0	0.00	365	0	0.00	0.00
15	0	0.00	349	1,090	99.0	0	0.00	365	0	0.00	0.00
16	0	0.00	349	1,090	99.0	0	0.00	365	0	0.00	0.00
17	0	0.00	349	1,090	99.0	0	0.00	365	0	0.00	0.00
18	0	0.00	349	1,090	99.0	0	0.00	365	0	0.00	0.00
19	0	0.00	349	1,090	99.0	0	0.00	365	0	0.00	0.00
20	0	0.00	349	1,090	99.0	0	0.00	365	0	0.00	0.00
21	0	0.00	349	1,090	99.0	0	0.00	398	0	0.00	0.00
22	0	0.00	349	1,090	99.0	0	0.00	398	0	0.00	0.00
23	0	0.00	349	1,090	99.0	0	0.00	398	0	0.00	0.00
24	0	0.00	349	1,090	99.0	0	0.00	398	0	0.00	0.00
25	0	0.00	349	1,090	99.0	0	0.00	398	0	0.00	0.00
26	0	0.00	349	1,090	99.0	0	0.00	398	0	0.00	0.00
27	0	0.00	349	1,090	99.0	0	0.00	398	0	0.00	0.00
28	0	0.00	349	1,090	99.0	0	0.00	415	0	0.00	0.00
29	0	0.00	349	1,090	99.0	0	0.00	415	0	0.00	0.00
30	0	0.00	349	1,090	99.0	0	0.00	415	0	0.00	0.00
31	0	0.00	349	1,090	99.0	0	0.00	415	0	0.00	0.00
	0	0.00				0	0.00		0	0.00	0.00
	0.0	ac-ft				0.0	ac-ft		0.0	ac-ft	0.0
Percent of Total =	#DIV/0!					#DIV/0!			#DIV/0!		

Hydraulic Loading (in)	BOD Loading Total Weight (lbs/day)	BOD Loading Loading Applied (lbs/ac/day)	Nitrogen Loading Total (lbs/day)	Nitrogen Loading Applied (lbs/ac/month)	TDS Loading Total (lbs/day)	TDS Loading Applied (lbs/ac/month)
0.00	0	0	0	0	0	0
0.00	0	0	0	0	0	0
0.00	0	0	0	0	0	0
0.00	0	0	0	0	0	0
0.00	0	0	0	0	0	0
0.00	0	0	0	0	0	0
0.00	0	0	0	0	0	0
0.00	0	0	0	0	0	0
0.00	0	0	0	0	0	0
0.00	0	0	0	0	0	0
0.00	0	0	0	0	0	0
0.00	0	0	0	0	0	0
0.00	0	0	0	0	0	0
0.00	0	0	0	0	0	0
0.00	0	0	0	0	0	0
0.00	0	0	0	0	0	0
0.00	0	0	0	0	0	0
0.00	0	0	0	0	0	0
0.00	0	0	0	0	0	0
0.00	0	0	0	0	0	0
0.00	0	0	0	0	0	0
0.00	0	0	0	0	0	0
0.00	0	0	0	0	0	0
0.00	0	0	0	0	0	0
0.00	0	0	0	0	0	0
0.00	0	0	0	0	0	0
0.00	0	0	0	0	0	0
0.00	0	0	0	0	0	0
0.00	0	0	0	0	0	0
0.00	0	0 Ave.	0	0 Total	0	0 Total

Irrigation Cycle Start Date: 9/1/13
Irrigation Cycle End Date: 10/31/13 *
BOD Applied: 291
Cycle Average BOD: 5

Irrigations have ended for the season. So a cycle end date of 10/31/2013 has been assumed for cycle average calculations.

Cumulative Loading Calculations	Nitrogen	TDS
Commercial Applications		
July-13	87 lbs/acre	601 lbs/acre
August-13	29 lbs/acre	229 lbs/acre
September-13	81 lbs/acre	532 lbs/acre
October-13	0 lbs/acre	0 lbs/acre
Total	**197 lbs/acre**	**1,362 lbs/acre**

The Morning Star Packing Company
Water & Constituent Loading Calculations
Field: M. S. 18 Check 1

LAND APPLICATION AREA: M.S. 18 Ch1 — 39.1 acres

Day	Settling Pond Effluent Applied (gal)	Settling Pond Effluent Applied (in)	BOD Ave. Applied (mg/l)	TDS Ave. Applied (mg/l)	Nitrogen Ave. Applied (mg/l)	Cooling Pond Effluent Applied (gal)	Cooling Pond Effluent Applied (in)	TDS Ave. Applied (mg/l)	Fresh Irrigation (gal)	Fresh Irrigation (in)	Rainfall (in)
1	0	0.00	367	1,090	86.1	0	0.00	340	0	0.00	0.00
2	0	0.00	367	1,090	86.1	0	0.00	340	0	0.00	0.00
3	0	0.00	349	1,090	99.0	0	0.00	340	0	0.00	0.00
4	0	0.00	349	1,090	99.0	0	0.00	340	0	0.00	0.00
5	0	0.00	349	1,090	99.0	0	0.00	340	0	0.00	0.00
6	0	0.00	349	1,090	99.0	0	0.00	340	0	0.00	0.00
7	0	0.00	349	1,090	99.0	0	0.00	353	0	0.00	0.00
8	0	0.00	349	1,090	99.0	0	0.00	353	0	0.00	0.00
9	0	0.00	349	1,090	99.0	0	0.00	353	0	0.00	0.00
10	0	0.00	349	1,090	99.0	0	0.00	353	0	0.00	0.00
11	0	0.00	349	1,090	99.0	0	0.00	353	0	0.00	0.00
12	0	0.00	349	1,090	99.0	0	0.00	353	0	0.00	0.00
13	0	0.00	349	1,090	99.0	0	0.00	353	0	0.00	0.00
14	0	0.00	349	1,090	99.0	0	0.00	365	0	0.00	0.00
15	0	0.00	349	1,090	99.0	0	0.00	365	0	0.00	0.00
16	0	0.00	349	1,090	99.0	0	0.00	365	0	0.00	0.00
17	0	0.00	349	1,090	99.0	0	0.00	365	0	0.00	0.00
18	0	0.00	349	1,090	99.0	0	0.00	365	0	0.00	0.00
19	0	0.00	349	1,090	99.0	0	0.00	365	0	0.00	0.00
20	0	0.00	349	1,090	99.0	0	0.00	365	0	0.00	0.00
21	0	0.00	349	1,090	99.0	0	0.00	398	0	0.00	0.00
22	0	0.00	349	1,090	99.0	0	0.00	398	0	0.00	0.00
23	0	0.00	349	1,090	99.0	0	0.00	398	0	0.00	0.00
24	0	0.00	349	1,090	99.0	0	0.00	398	0	0.00	0.00
25	0	0.00	349	1,090	99.0	0	0.00	398	0	0.00	0.00
26	0	0.00	349	1,090	99.0	0	0.00	398	0	0.00	0.00
27	0	0.00	349	1,090	99.0	0	0.00	398	0	0.00	0.00
28	0	0.00	349	1,090	99.0	0	0.00	415	0	0.00	0.00
29	0	0.00	349	1,090	99.0	0	0.00	415	0	0.00	0.00
30	0	0.00	349	1,090	99.0	0	0.00	415	0	0.00	0.00
31	0	0.00	349	1,090	99.0	0	0.00	415	0	0.00	0.00
	0	0.00				0	0.00		0	0.00	0.00
	0.0 ac-ft					0.0 ac-ft			0.0 ac-ft		0.0
Percent of Total =	#DIV/0!					#DIV/0!			#DIV/0!		

Hydraulic Loading (in)	BOD Loading Total Weight (lbs/day)	BOD Loading Loading Applied (lbs/ac/day)	Nitrogen Loading Total (lbs/day)	Nitrogen Loading Applied (lbs/ac/month)	TDS Loading Total (lbs/day)	TDS Loading Applied (lbs/ac/month)
0.00	0	0	0	0	0	0
0.00	0	0	0	0	0	0
0.00	0	0	0	0	0	0
0.00	0	0	0	0	0	0
0.00	0	0	0	0	0	0
0.00	0	0	0	0	0	0
0.00	0	0	0	0	0	0
0.00	0	0	0	0	0	0
0.00	0	0	0	0	0	0
0.00	0	0	0	0	0	0
0.00	0	0	0	0	0	0
0.00	0	0	0	0	0	0
0.00	0	0	0	0	0	0
0.00	0	0	0	0	0	0
0.00	0	0	0	0	0	0
0.00	0	0	0	0	0	0
0.00	0	0	0	0	0	0
0.00	0	0	0	0	0	0
0.00	0	0	0	0	0	0
0.00	0	0	0	0	0	0
0.00	0	0	0	0	0	0
0.00	0	0	0	0	0	0
0.00	0	0	0	0	0	0
0.00	0	0	0	0	0	0
0.00	0	0	0	0	0	0
0.00	0	0	0	0	0	0
0.00	0	0	0	0	0	0
0.00	0	0	0	0	0	0
0.00	0	0	0	0	0	0
0.00	0	0	0	0	0	0
0.00	0	0 Ave.	0	0 Total	0	0 Total

Irrigation Cycle Start Date: **9/21/13**
Irrigation Cycle End Date: **10/31/13** *
BOD Applied: **121**
Cycle Average BOD: **3**

**Irrigations have ended for the season. So a cycle end date of 10/31/2013 has been assumed for cycle average calculations.*

Cumulative Loading Calculations	Nitrogen	TDS
Commercial Applications		
July-13	72 lbs/acre	495 lbs/acre
August-13	48 lbs/acre	275 lbs/acre
September-13	57 lbs/acre	410 lbs/acre
October-13	0 lbs/acre	0 lbs/acre
Total	**177 lbs/acre**	**1,180 lbs/acre**

The Morning Star Packing Company
Water & Constituent Loading Calculations
Field: M. S. 18 Check 2

LAND APPLICATION AREA: M.S. 18 Ch2 — 39.1 acres

Day	Settling Pond Effluent Applied (gal)	Settling Pond Effluent Applied (in)	BOD Ave. Applied (mg/l)	TDS Ave. Applied (mg/l)	Nitrogen Ave. Applied (mg/l)	Cooling Pond Effluent Applied (gal)	Cooling Pond Effluent Applied (in)	TDS Ave. Applied (mg/l)	Fresh Irrigation (gal)	Fresh Irrigation (in)	Rainfall (in)
1	0	0.00	367	1,090	86.1	0	0.00	340	0	0.00	0.00
2	0	0.00	367	1,090	86.1	0	0.00	340	0	0.00	0.00
3	0	0.00	349	1,090	99.0	0	0.00	340	0	0.00	0.00
4	0	0.00	349	1,090	99.0	0	0.00	340	0	0.00	0.00
5	0	0.00	349	1,090	99.0	0	0.00	340	0	0.00	0.00
6	0	0.00	349	1,090	99.0	0	0.00	340	0	0.00	0.00
7	0	0.00	349	1,090	99.0	0	0.00	353	0	0.00	0.00
8	0	0.00	349	1,090	99.0	0	0.00	353	0	0.00	0.00
9	0	0.00	349	1,090	99.0	0	0.00	353	0	0.00	0.00
10	0	0.00	349	1,090	99.0	0	0.00	353	0	0.00	0.00
11	0	0.00	349	1,090	99.0	0	0.00	353	0	0.00	0.00
12	0	0.00	349	1,090	99.0	0	0.00	353	0	0.00	0.00
13	0	0.00	349	1,090	99.0	0	0.00	353	0	0.00	0.00
14	0	0.00	349	1,090	99.0	0	0.00	365	0	0.00	0.00
15	0	0.00	349	1,090	99.0	0	0.00	365	0	0.00	0.00
16	0	0.00	349	1,090	99.0	0	0.00	365	0	0.00	0.00
17	0	0.00	349	1,090	99.0	0	0.00	365	0	0.00	0.00
18	0	0.00	349	1,090	99.0	0	0.00	365	0	0.00	0.00
19	0	0.00	349	1,090	99.0	0	0.00	365	0	0.00	0.00
20	0	0.00	349	1,090	99.0	0	0.00	365	0	0.00	0.00
21	0	0.00	349	1,090	99.0	0	0.00	398	0	0.00	0.00
22	0	0.00	349	1,090	99.0	0	0.00	398	0	0.00	0.00
23	0	0.00	349	1,090	99.0	0	0.00	398	0	0.00	0.00
24	0	0.00	349	1,090	99.0	0	0.00	398	0	0.00	0.00
25	0	0.00	349	1,090	99.0	0	0.00	398	0	0.00	0.00
26	0	0.00	349	1,090	99.0	0	0.00	398	0	0.00	0.00
27	0	0.00	349	1,090	99.0	0	0.00	398	0	0.00	0.00
28	0	0.00	349	1,090	99.0	0	0.00	415	0	0.00	0.00
29	0	0.00	349	1,090	99.0	0	0.00	415	0	0.00	0.00
30	0	0.00	349	1,090	99.0	0	0.00	415	0	0.00	0.00
31	0	0.00	349	1,090	99.0	0	0.00	415	0	0.00	0.00
	0	**0.00**				**0**	**0.00**		**0**	**0.00**	**0.00**
	0.0	**ac-ft**				**0.0**	**ac-ft**		**0.0**	**ac-ft**	**0.0**
Percent of Total =	**#DIV/0!**					**#DIV/0!**			**#DIV/0!**		

Hydraulic Loading (in)	BOD Loading: Total Weight (lbs/day)	BOD Loading: Loading Applied (lbs/ac/day)	Nitrogen Loading: Total (lbs/day)	Nitrogen Loading: Applied (lbs/ac/month)	TDS Loading: Total (lbs/day)	TDS Loading: Applied (lbs/ac/month)
0.00	0	**0**	0	**0**	0	**0**
0.00	0	**0**	0	**0**	0	**0**
0.00	0	**0**	0	**0**	0	**0**
0.00	0	**0**	0	**0**	0	**0**
0.00	0	**0**	0	**0**	0	**0**
0.00	0	**0**	0	**0**	0	**0**
0.00	0	**0**	0	**0**	0	**0**
0.00	0	**0**	0	**0**	0	**0**
0.00	0	**0**	0	**0**	0	**0**
0.00	0	**0**	0	**0**	0	**0**
0.00	0	**0**	0	**0**	0	**0**
0.00	0	**0**	0	**0**	0	**0**
0.00	0	**0**	0	**0**	0	**0**
0.00	0	**0**	0	**0**	0	**0**
0.00	0	**0**	0	**0**	0	**0**
0.00	0	**0**	0	**0**	0	**0**
0.00	0	**0**	0	**0**	0	**0**
0.00	0	**0**	0	**0**	0	**0**
0.00	0	**0**	0	**0**	0	**0**
0.00	0	**0**	0	**0**	0	**0**
0.00	0	**0**	0	**0**	0	**0**
0.00	0	**0**	0	**0**	0	**0**
0.00	0	**0**	0	**0**	0	**0**
0.00	0	**0**	0	**0**	0	**0**
0.00	0	**0**	0	**0**	0	**0**
0.00	0	**0**	0	**0**	0	**0**
0.00	0	**0**	0	**0**	0	**0**
0.00	0	**0**	0	**0**	0	**0**
0.00	0	**0**	0	**0**	0	**0**
0.00	0	**0** Ave.	**0**	0 Total	**0**	0 Total

Irrigation Cycle Start Date: **9/26/13**
Irrigation Cycle End Date: **10/31/13** *
BOD Applied: **76**
Cycle Average BOD: **2**

**Irrigations have ended for the season. So a cycle end date of 10/31/2013 has been assumed for cycle average calculations.*

Cumulative Loading Calculations	**Nitrogen**	**TDS**
Commercial Applications		
July-13	0 lbs/acre	0 lbs/acre
August-13	72 lbs/acre	480 lbs/acre
September-13	51 lbs/acre	376 lbs/acre
October-13	0 lbs/acre	0 lbs/acre
Total	**123 lbs/acre**	**856 lbs/acre**

The Morning Star Packing Company
Water & Constituent Loading Calculations
Field: M. S. 20 Check 1

LAND APPLICATION AREA: M.S. 20 Ch1 — 32.3 acres

Day	Settling Pond Effluent Applied (gal)	Settling Pond Effluent Applied (in)	BOD Ave. Applied (mg/l)	TDS Ave. Applied (mg/l)	Nitrogen Ave. Applied (mg/l)	Cooling Pond Effluent Applied (gal)	Cooling Pond Effluent Applied (in)	TDS Ave. Applied (mg/l)	Fresh Irrigation (gal)	Fresh Irrigation (in)	Rainfall (in)	Hydraulic Loading (in)	BOD Loading Total Weight (lbs/day)	BOD Loading Loading Applied (lbs/ac/day)	Nitrogen Loading Total (lbs/day)	Nitrogen Loading Applied (lbs/ac/month)	TDS Loading Total (lbs/day)	TDS Loading Applied (lbs/ac/month)
1	0	0.00	367	1,090	86.1	0	0.00	340	0	0.00	0.00	0.00	0	0	0	0	0	0
2	0	0.00	367	1,090	86.1	0	0.00	340	0	0.00	0.00	0.00	0	0	0	0	0	0
3	0	0.00	349	1,090	99.0	0	0.00	340	0	0.00	0.00	0.00	0	0	0	0	0	0
4	0	0.00	349	1,090	99.0	0	0.00	340	0	0.00	0.00	0.00	0	0	0	0	0	0
5	0	0.00	349	1,090	99.0	0	0.00	340	0	0.00	0.00	0.00	0	0	0	0	0	0
6	0	0.00	349	1,090	99.0	0	0.00	340	0	0.00	0.00	0.00	0	0	0	0	0	0
7	0	0.00	349	1,090	99.0	0	0.00	353	0	0.00	0.00	0.00	0	0	0	0	0	0
8	0	0.00	349	1,090	99.0	0	0.00	353	0	0.00	0.00	0.00	0	0	0	0	0	0
9	0	0.00	349	1,090	99.0	0	0.00	353	0	0.00	0.00	0.00	0	0	0	0	0	0
10	0	0.00	349	1,090	99.0	0	0.00	353	0	0.00	0.00	0.00	0	0	0	0	0	0
11	0	0.00	349	1,090	99.0	0	0.00	353	0	0.00	0.00	0.00	0	0	0	0	0	0
12	0	0.00	349	1,090	99.0	0	0.00	353	0	0.00	0.00	0.00	0	0	0	0	0	0
13	0	0.00	349	1,090	99.0	0	0.00	353	0	0.00	0.00	0.00	0	0	0	0	0	0
14	0	0.00	349	1,090	99.0	0	0.00	365	0	0.00	0.00	0.00	0	0	0	0	0	0
15	0	0.00	349	1,090	99.0	0	0.00	365	0	0.00	0.00	0.00	0	0	0	0	0	0
16	0	0.00	349	1,090	99.0	0	0.00	365	0	0.00	0.00	0.00	0	0	0	0	0	0
17	0	0.00	349	1,090	99.0	0	0.00	365	0	0.00	0.00	0.00	0	0	0	0	0	0
18	0	0.00	349	1,090	99.0	0	0.00	365	0	0.00	0.00	0.00	0	0	0	0	0	0
19	0	0.00	349	1,090	99.0	0	0.00	365	0	0.00	0.00	0.00	0	0	0	0	0	0
20	0	0.00	349	1,090	99.0	0	0.00	365	0	0.00	0.00	0.00	0	0	0	0	0	0
21	0	0.00	349	1,090	99.0	0	0.00	398	0	0.00	0.00	0.00	0	0	0	0	0	0
22	0	0.00	349	1,090	99.0	0	0.00	398	0	0.00	0.00	0.00	0	0	0	0	0	0
23	0	0.00	349	1,090	99.0	0	0.00	398	0	0.00	0.00	0.00	0	0	0	0	0	0
24	0	0.00	349	1,090	99.0	0	0.00	398	0	0.00	0.00	0.00	0	0	0	0	0	0
25	0	0.00	349	1,090	99.0	0	0.00	398	0	0.00	0.00	0.00	0	0	0	0	0	0
26	0	0.00	349	1,090	99.0	0	0.00	398	0	0.00	0.00	0.00	0	0	0	0	0	0
27	0	0.00	349	1,090	99.0	0	0.00	398	0	0.00	0.00	0.00	0	0	0	0	0	0
28	0	0.00	349	1,090	99.0	0	0.00	415	0	0.00	0.00	0.00	0	0	0	0	0	0
29	0	0.00	349	1,090	99.0	0	0.00	415	0	0.00	0.00	0.00	0	0	0	0	0	0
30	0	0.00	349	1,090	99.0	0	0.00	415	0	0.00	0.00	0.00	0	0	0	0	0	0
31	0	0.00	349	1,090	99.0	0	0.00	415	0	0.00	0.00	0.00	0	0	0	0	0	0
	0	**0.00**				**0**	**0.00**		**0**	**0.00**	**0.00**	**0.00**	**0**	**0 Ave.**	**0**	**0 Total**	**0**	**0 Total**
	0.0	**ac-ft**				**0.0**	**ac-ft**		**0.0**	**ac-ft**	**0.0**							
Percent of Total =	**#DIV/0!**					**#DIV/0!**			**#DIV/0!**									

Irrigation Cycle Start Date:	**8/29/13**
Irrigation Cycle End Date:	**10/31/13** *
BOD Applied:	**97**
Cycle Average BOD:	**2**

**Irrigations have ended for the season. So a cycle end date of 10/31/2013 has been assumed for cycle average calculations.*

Cumulative Loading Calculations	**Nitrogen**	**TDS**
Commercial Applications		
July-13	34 lbs/acre	211 lbs/acre
August-13	100 lbs/acre	803 lbs/acre
September-13	28 lbs/acre	161 lbs/acre
October-13	0 lbs/acre	0 lbs/acre
Total	**162 lbs/acre**	**1,175 lbs/acre**

The Morning Star Packing Company
Water & Constituent Loading Calculations
Field: M. S. 20 Check 2

LAND APPLICATION AREA: M.S. 20 Ch2 — 32.3 acres

Day	Settling Pond Effluent Applied (gal)	Settling Pond Effluent Applied (in)	BOD Ave. Applied (mg/l)	TDS Ave. Applied (mg/l)	Nitrogen Ave. Applied (mg/l)	Cooling Pond Effluent Applied (gal)	Cooling Pond Effluent Applied (in)	TDS Ave. Applied (mg/l)	Fresh Irrigation (gal)	Fresh Irrigation (in)	Rainfall (in)	Hydraulic Loading (in)	BOD Loading Total Weight (lbs/day)	BOD Loading Loading Applied (lbs/ac/day)	Nitrogen Loading Total (lbs/day)	Nitrogen Loading Applied (lbs/ac/month)	TDS Loading Total (lbs/day)	TDS Loading Applied (lbs/ac/month)
1	0	0.00	367	1,090	86.1	0	0.00	340	0	0.00	0.00	0.00	0	0	0	0	0	0
2	0	0.00	367	1,090	86.1	0	0.00	340	0	0.00	0.00	0.00	0	0	0	0	0	0
3	0	0.00	349	1,090	99.0	0	0.00	340	0	0.00	0.00	0.00	0	0	0	0	0	0
4	0	0.00	349	1,090	99.0	0	0.00	340	0	0.00	0.00	0.00	0	0	0	0	0	0
5	0	0.00	349	1,090	99.0	0	0.00	340	0	0.00	0.00	0.00	0	0	0	0	0	0
6	0	0.00	349	1,090	99.0	0	0.00	340	0	0.00	0.00	0.00	0	0	0	0	0	0
7	0	0.00	349	1,090	99.0	0	0.00	353	0	0.00	0.00	0.00	0	0	0	0	0	0
8	0	0.00	349	1,090	99.0	0	0.00	353	0	0.00	0.00	0.00	0	0	0	0	0	0
9	0	0.00	349	1,090	99.0	0	0.00	353	0	0.00	0.00	0.00	0	0	0	0	0	0
10	0	0.00	349	1,090	99.0	0	0.00	353	0	0.00	0.00	0.00	0	0	0	0	0	0
11	0	0.00	349	1,090	99.0	0	0.00	353	0	0.00	0.00	0.00	0	0	0	0	0	0
12	0	0.00	349	1,090	99.0	0	0.00	353	0	0.00	0.00	0.00	0	0	0	0	0	0
13	0	0.00	349	1,090	99.0	0	0.00	353	0	0.00	0.00	0.00	0	0	0	0	0	0
14	0	0.00	349	1,090	99.0	0	0.00	365	0	0.00	0.00	0.00	0	0	0	0	0	0
15	0	0.00	349	1,090	99.0	0	0.00	365	0	0.00	0.00	0.00	0	0	0	0	0	0
16	0	0.00	349	1,090	99.0	0	0.00	365	0	0.00	0.00	0.00	0	0	0	0	0	0
17	0	0.00	349	1,090	99.0	0	0.00	365	0	0.00	0.00	0.00	0	0	0	0	0	0
18	0	0.00	349	1,090	99.0	0	0.00	365	0	0.00	0.00	0.00	0	0	0	0	0	0
19	0	0.00	349	1,090	99.0	0	0.00	365	0	0.00	0.00	0.00	0	0	0	0	0	0
20	0	0.00	349	1,090	99.0	0	0.00	365	0	0.00	0.00	0.00	0	0	0	0	0	0
21	0	0.00	349	1,090	99.0	0	0.00	398	0	0.00	0.00	0.00	0	0	0	0	0	0
22	0	0.00	349	1,090	99.0	0	0.00	398	0	0.00	0.00	0.00	0	0	0	0	0	0
23	0	0.00	349	1,090	99.0	0	0.00	398	0	0.00	0.00	0.00	0	0	0	0	0	0
24	0	0.00	349	1,090	99.0	0	0.00	398	0	0.00	0.00	0.00	0	0	0	0	0	0
25	0	0.00	349	1,090	99.0	0	0.00	398	0	0.00	0.00	0.00	0	0	0	0	0	0
26	0	0.00	349	1,090	99.0	0	0.00	398	0	0.00	0.00	0.00	0	0	0	0	0	0
27	0	0.00	349	1,090	99.0	0	0.00	398	0	0.00	0.00	0.00	0	0	0	0	0	0
28	0	0.00	349	1,090	99.0	0	0.00	415	0	0.00	0.00	0.00	0	0	0	0	0	0
29	0	0.00	349	1,090	99.0	0	0.00	415	0	0.00	0.00	0.00	0	0	0	0	0	0
30	0	0.00	349	1,090	99.0	0	0.00	415	0	0.00	0.00	0.00	0	0	0	0	0	0
31	0	0.00	349	1,090	99.0	0	0.00	415	0	0.00	0.00	0.00	0	0	0	0	0	0
	0	**0.00**				**0**	**0.00**		**0**	**0.00**	**0.00**	**0.00**	**0**	**0 Ave.**	**0**	**0 Total**	**0**	**0 Total**
	0.0	**ac-ft**				**0.0**	**ac-ft**		**0.0**	**ac-ft**	**0.0**							
Percent of Total =	**#DIV/0!**					**#DIV/0!**			**#DIV/0!**									

Irrigation Cycle Start Date: **9/4/13**
Irrigation Cycle End Date: **10/31/13** *
BOD Applied: **221**
Cycle Average BOD: **4**

**Irrigations have ended for the season. So a cycle end date of 10/31/2013 has been assumed for cycle average calculations.*

Cumulative Loading Calculations	**Nitrogen**	**TDS**
Commercial Applications		
July-13	34 lbs/acre	218 lbs/acre
August-13	67 lbs/acre	425 lbs/acre
September-13	63 lbs/acre	438 lbs/acre
October-13	0 lbs/acre	0 lbs/acre
Total	**164 lbs/acre**	**1,081 lbs/acre**

The Morning Star Packing Company
Water & Constituent Loading Calculations
Field: M. S. 21

LAND APPLICATION AREA:

M.S. 21 25.9 acres

Day	Settling Pond Effluent Applied (gal)	Settling Pond Effluent Applied (in)	BOD Ave. Applied (mg/l)	TDS Ave. Applied (mg/l)	Nitrogen Ave. Applied (mg/l)	Cooling Pond Effluent Applied (gal)	Cooling Pond Effluent Applied (in)	TDS Ave. Applied (mg/l)	Fresh Irrigation (gal)	Fresh Irrigation (in)	Rainfall (in)
1	0	0.00	367	1,090	86.1	0	0.00	340	0	0.00	0.00
2	0	0.00	367	1,090	86.1	0	0.00	340	0	0.00	0.00
3	0	0.00	349	1,090	99.0	0	0.00	340	0	0.00	0.00
4	0	0.00	349	1,090	99.0	0	0.00	340	0	0.00	0.00
5	0	0.00	349	1,090	99.0	0	0.00	340	0	0.00	0.00
6	0	0.00	349	1,090	99.0	0	0.00	340	0	0.00	0.00
7	0	0.00	349	1,090	99.0	0	0.00	353	0	0.00	0.00
8	0	0.00	349	1,090	99.0	0	0.00	353	0	0.00	0.00
9	0	0.00	349	1,090	99.0	0	0.00	353	0	0.00	0.00
10	0	0.00	349	1,090	99.0	0	0.00	353	0	0.00	0.00
11	0	0.00	349	1,090	99.0	0	0.00	353	0	0.00	0.00
12	0	0.00	349	1,090	99.0	0	0.00	353	0	0.00	0.00
13	0	0.00	349	1,090	99.0	0	0.00	353	0	0.00	0.00
14	0	0.00	349	1,090	99.0	0	0.00	365	0	0.00	0.00
15	0	0.00	349	1,090	99.0	0	0.00	365	0	0.00	0.00
16	0	0.00	349	1,090	99.0	0	0.00	365	0	0.00	0.00
17	0	0.00	349	1,090	99.0	0	0.00	365	0	0.00	0.00
18	0	0.00	349	1,090	99.0	0	0.00	365	0	0.00	0.00
19	0	0.00	349	1,090	99.0	0	0.00	365	0	0.00	0.00
20	0	0.00	349	1,090	99.0	0	0.00	365	0	0.00	0.00
21	0	0.00	349	1,090	99.0	0	0.00	398	0	0.00	0.00
22	0	0.00	349	1,090	99.0	0	0.00	398	0	0.00	0.00
23	0	0.00	349	1,090	99.0	0	0.00	398	0	0.00	0.00
24	0	0.00	349	1,090	99.0	0	0.00	398	0	0.00	0.00
25	0	0.00	349	1,090	99.0	0	0.00	398	0	0.00	0.00
26	0	0.00	349	1,090	99.0	0	0.00	398	0	0.00	0.00
27	0	0.00	349	1,090	99.0	0	0.00	398	0	0.00	0.00
28	0	0.00	349	1,090	99.0	0	0.00	415	0	0.00	0.00
29	0	0.00	349	1,090	99.0	0	0.00	415	0	0.00	0.00
30	0	0.00	349	1,090	99.0	0	0.00	415	0	0.00	0.00
31	0	0.00	349	1,090	99.0	0	0.00	415	0	0.00	0.00
	0	**0.00**				**0**	**0.00**		**0**	**0.00**	**0.00**
	0.0	**ac-ft**				**0.0**	**ac-ft**		**0.0**	**ac-ft**	**0.0**
Percent of Total =	**#DIV/0!**					**#DIV/0!**			**#DIV/0!**		

Day	Hydraulic Loading (in)	BOD Loading Total Weight (lbs/day)	BOD Loading Loading Applied (lbs/ac/day)	Nitrogen Loading Total (lbs/day)	Nitrogen Loading Applied (lbs/ac/month)	TDS Loading Total (lbs/day)	TDS Loading Applied (lbs/ac/month)
1	0.00	0	**0**	0	**0**	0	**0**
2	0.00	0	**0**	0	**0**	0	**0**
3	0.00	0	**0**	0	**0**	0	**0**
4	0.00	0	**0**	0	**0**	0	**0**
5	0.00	0	**0**	0	**0**	0	**0**
6	0.00	0	**0**	0	**0**	0	**0**
7	0.00	0	**0**	0	**0**	0	**0**
8	0.00	0	**0**	0	**0**	0	**0**
9	0.00	0	**0**	0	**0**	0	**0**
10	0.00	0	**0**	0	**0**	0	**0**
11	0.00	0	**0**	0	**0**	0	**0**
12	0.00	0	**0**	0	**0**	0	**0**
13	0.00	0	**0**	0	**0**	0	**0**
14	0.00	0	**0**	0	**0**	0	**0**
15	0.00	0	**0**	0	**0**	0	**0**
16	0.00	0	**0**	0	**0**	0	**0**
17	0.00	0	**0**	0	**0**	0	**0**
18	0.00	0	**0**	0	**0**	0	**0**
19	0.00	0	**0**	0	**0**	0	**0**
20	0.00	0	**0**	0	**0**	0	**0**
21	0.00	0	**0**	0	**0**	0	**0**
22	0.00	0	**0**	0	**0**	0	**0**
23	0.00	0	**0**	0	**0**	0	**0**
24	0.00	0	**0**	0	**0**	0	**0**
25	0.00	0	**0**	0	**0**	0	**0**
26	0.00	0	**0**	0	**0**	0	**0**
27	0.00	0	**0**	0	**0**	0	**0**
28	0.00	0	**0**	0	**0**	0	**0**
29	0.00	0	**0**	0	**0**	0	**0**
30	0.00	0	**0**	0	**0**	0	**0**
31	0.00	0	**0**	0	**0**	0	**0**
	0.00	**0**	**0 Ave.**	**0**	**0 Total**	**0**	**0 Total**

Irrigation Cycle Start Date: **9/11/13**
Irrigation Cycle End Date: **10/31/13** *
BOD Applied: **373**
Cycle Average BOD: 7

**Irrigations have ended for the season. So a cycle end date of 10/31/2013 has been assumed for cycle average calculations.*

Cumulative Loading Calculations	**Nitrogen**	**TDS**
Commercial Applications		
July-13	78 lbs/acre	499 lbs/acre
August-13	75 lbs/acre	561 lbs/acre
September-13	101 lbs/acre	730 lbs/acre
October-13	0 lbs/acre	0 lbs/acre
Total	**254 lbs/acre**	**1,790 lbs/acre**

The Morning Star Packing Company
Water & Constituent Loading Calculations
Field: M. S. 24 Check 1

LAND APPLICATION AREA:

M.S. 24 Ch1 79.9 acres

Day	Settling Pond Effluent Applied (gal)	Settling Pond Effluent Applied (in)	BOD Ave. Applied (mg/l)	TDS Ave. Applied (mg/l)	Nitrogen Ave. Applied (mg/l)	Cooling Pond Effluent Applied (gal)	Cooling Pond Effluent Applied (in)	TDS Ave. Applied (mg/l)	Fresh Irrigation (gal)	Fresh Irrigation (in)	Rainfall (in)
1	0	0.00	367	1,090	86.1	0	0.00	340	0	0.00	0.00
2	0	0.00	367	1,090	86.1	0	0.00	340	0	0.00	0.00
3	0	0.00	349	1,090	99.0	0	0.00	340	0	0.00	0.00
4	0	0.00	349	1,090	99.0	0	0.00	340	0	0.00	0.00
5	0	0.00	349	1,090	99.0	0	0.00	340	0	0.00	0.00
6	0	0.00	349	1,090	99.0	0	0.00	340	0	0.00	0.00
7	0	0.00	349	1,090	99.0	0	0.00	353	0	0.00	0.00
8	0	0.00	349	1,090	99.0	0	0.00	353	0	0.00	0.00
9	0	0.00	349	1,090	99.0	0	0.00	353	0	0.00	0.00
10	0	0.00	349	1,090	99.0	0	0.00	353	0	0.00	0.00
11	0	0.00	349	1,090	99.0	0	0.00	353	0	0.00	0.00
12	0	0.00	349	1,090	99.0	0	0.00	353	0	0.00	0.00
13	0	0.00	349	1,090	99.0	0	0.00	353	0	0.00	0.00
14	0	0.00	349	1,090	99.0	0	0.00	365	0	0.00	0.00
15	0	0.00	349	1,090	99.0	0	0.00	365	0	0.00	0.00
16	0	0.00	349	1,090	99.0	0	0.00	365	0	0.00	0.00
17	0	0.00	349	1,090	99.0	0	0.00	365	0	0.00	0.00
18	0	0.00	349	1,090	99.0	0	0.00	365	0	0.00	0.00
19	0	0.00	349	1,090	99.0	0	0.00	365	0	0.00	0.00
20	0	0.00	349	1,090	99.0	0	0.00	365	0	0.00	0.00
21	0	0.00	349	1,090	99.0	0	0.00	398	0	0.00	0.00
22	0	0.00	349	1,090	99.0	0	0.00	398	0	0.00	0.00
23	0	0.00	349	1,090	99.0	0	0.00	398	0	0.00	0.00
24	0	0.00	349	1,090	99.0	0	0.00	398	0	0.00	0.00
25	0	0.00	349	1,090	99.0	0	0.00	398	0	0.00	0.00
26	0	0.00	349	1,090	99.0	0	0.00	398	0	0.00	0.00
27	0	0.00	349	1,090	99.0	0	0.00	398	0	0.00	0.00
28	0	0.00	349	1,090	99.0	0	0.00	415	0	0.00	0.00
29	0	0.00	349	1,090	99.0	0	0.00	415	0	0.00	0.00
30	0	0.00	349	1,090	99.0	0	0.00	415	0	0.00	0.00
31	0	0.00	349	1,090	99.0	0	0.00	415	0	0.00	0.00
	0	**0.00**				**0**	**0.00**		**0**	**0.00**	**0.00**
	0.0	**ac-ft**				**0.0**	**ac-ft**		**0.0**	**ac-ft**	**0.0**
Percent of Total =	**#DIV/0!**					**#DIV/0!**			**#DIV/0!**		

Hydraulic Loading (in)	BOD Loading Total Weight (lbs/day)	BOD Loading Loading Applied (lbs/ac/day)	Nitrogen Loading Total (lbs/day)	Nitrogen Loading Applied (lbs/ac/month)	TDS Loading Total (lbs/day)	TDS Loading Applied (lbs/ac/month)
0.00	0	**0**	0	**0**	0	**0**
0.00	0	**0**	0	**0**	0	**0**
0.00	0	**0**	0	**0**	0	**0**
0.00	0	**0**	0	**0**	0	**0**
0.00	0	**0**	0	**0**	0	**0**
0.00	0	**0**	0	**0**	0	**0**
0.00	0	**0**	0	**0**	0	**0**
0.00	0	**0**	0	**0**	0	**0**
0.00	0	**0**	0	**0**	0	**0**
0.00	0	**0**	0	**0**	0	**0**
0.00	0	**0**	0	**0**	0	**0**
0.00	0	**0**	0	**0**	0	**0**
0.00	0	**0**	0	**0**	0	**0**
0.00	0	**0**	0	**0**	0	**0**
0.00	0	**0**	0	**0**	0	**0**
0.00	0	**0**	0	**0**	0	**0**
0.00	0	**0**	0	**0**	0	**0**
0.00	0	**0**	0	**0**	0	**0**
0.00	0	**0**	0	**0**	0	**0**
0.00	0	**0**	0	**0**	0	**0**
0.00	0	**0**	0	**0**	0	**0**
0.00	0	**0**	0	**0**	0	**0**
0.00	0	**0**	0	**0**	0	**0**
0.00	0	**0**	0	**0**	0	**0**
0.00	0	**0**	0	**0**	0	**0**
0.00	0	**0**	0	**0**	0	**0**
0.00	0	**0**	0	**0**	0	**0**
0.00	0	**0**	0	**0**	0	**0**
0.00	0	**0**	0	**0**	0	**0**
0.00	**0**	**0 Ave.**	**0**	**0 Total**	**0**	**0 Total**

Irrigation Cycle Start Date: **9/21/13**
Irrigation Cycle End Date: **10/31/13** *
BOD Applied: **167**
Cycle Average BOD: **4**

**Irrigations have ended for the season. So a cycle end date of 10/31/2013 has been assumed for cycle average calculations.*

Cumulative Loading Calculations	**Nitrogen**	**TDS**
Commercial Applications		
July-13	68 lbs/acre	433 lbs/acre
August-13	147 lbs/acre	936 lbs/acre
September-13	49 lbs/acre	339 lbs/acre
October-13	0 lbs/acre	0 lbs/acre
Total	**264 lbs/acre**	**1,708 lbs/acre**

The Morning Star Packing Company
Water & Constituent Loading Calculations
Field: M. S. 24 Check 2

LAND APPLICATION AREA: M.S. 24 Ch2 — 79.9 acres

Day	Settling Pond Effluent Applied (gal)	Settling Pond Effluent Applied (in)	BOD Ave. Applied (mg/l)	TDS Ave. Applied (mg/l)	Nitrogen Ave. Applied (mg/l)	Cooling Pond Effluent Applied (gal)	Cooling Pond Effluent Applied (in)	TDS Ave. Applied (mg/l)	Fresh Irrigation (gal)	Fresh Irrigation (in)	Rainfall (in)	Hydraulic Loading (in)	BOD Loading Total Weight (lbs/day)	BOD Loading Loading Applied (lbs/ac/day)	Nitrogen Loading Total (lbs/day)	Nitrogen Loading Applied (lbs/ac/month)	TDS Loading Total (lbs/day)	TDS Loading Applied (lbs/ac/month)
1	186,888	0.09	367	1,090	86.1	0	0.00	340	0	0.00	0.00	0.09	572	7	134	2	1,700	21
2	620,524	0.29	367	1,090	86.1	0	0.00	340	0	0.00	0.00	0.29	1,900	24	446	6	5,644	71
3	264,853	0.12	349	1,090	99.0	0	0.00	340	0	0.00	0.00	0.12	771	10	219	3	2,409	30
4	0	0.00	349	1,090	99.0	0	0.00	340	0	0.00	0.00	0.00	0	0	0	0	0	0
5	0	0.00	349	1,090	99.0	0	0.00	340	0	0.00	0.00	0.00	0	0	0	0	0	0
6	0	0.00	349	1,090	99.0	0	0.00	340	0	0.00	0.00	0.00	0	0	0	0	0	0
7	0	0.00	349	1,090	99.0	0	0.00	353	0	0.00	0.00	0.00	0	0	0	0	0	0
8	0	0.00	349	1,090	99.0	0	0.00	353	0	0.00	0.00	0.00	0	0	0	0	0	0
9	0	0.00	349	1,090	99.0	0	0.00	353	0	0.00	0.00	0.00	0	0	0	0	0	0
10	0	0.00	349	1,090	99.0	0	0.00	353	0	0.00	0.00	0.00	0	0	0	0	0	0
11	0	0.00	349	1,090	99.0	0	0.00	353	0	0.00	0.00	0.00	0	0	0	0	0	0
12	0	0.00	349	1,090	99.0	0	0.00	353	0	0.00	0.00	0.00	0	0	0	0	0	0
13	0	0.00	349	1,090	99.0	0	0.00	353	0	0.00	0.00	0.00	0	0	0	0	0	0
14	0	0.00	349	1,090	99.0	0	0.00	365	0	0.00	0.00	0.00	0	0	0	0	0	0
15	0	0.00	349	1,090	99.0	0	0.00	365	0	0.00	0.00	0.00	0	0	0	0	0	0
16	0	0.00	349	1,090	99.0	0	0.00	365	0	0.00	0.00	0.00	0	0	0	0	0	0
17	0	0.00	349	1,090	99.0	0	0.00	365	0	0.00	0.00	0.00	0	0	0	0	0	0
18	0	0.00	349	1,090	99.0	0	0.00	365	0	0.00	0.00	0.00	0	0	0	0	0	0
19	0	0.00	349	1,090	99.0	0	0.00	365	0	0.00	0.00	0.00	0	0	0	0	0	0
20	0	0.00	349	1,090	99.0	0	0.00	365	0	0.00	0.00	0.00	0	0	0	0	0	0
21	0	0.00	349	1,090	99.0	0	0.00	398	0	0.00	0.00	0.00	0	0	0	0	0	0
22	0	0.00	349	1,090	99.0	0	0.00	398	0	0.00	0.00	0.00	0	0	0	0	0	0
23	0	0.00	349	1,090	99.0	0	0.00	398	0	0.00	0.00	0.00	0	0	0	0	0	0
24	0	0.00	349	1,090	99.0	0	0.00	398	0	0.00	0.00	0.00	0	0	0	0	0	0
25	0	0.00	349	1,090	99.0	0	0.00	398	0	0.00	0.00	0.00	0	0	0	0	0	0
26	0	0.00	349	1,090	99.0	0	0.00	398	0	0.00	0.00	0.00	0	0	0	0	0	0
27	0	0.00	349	1,090	99.0	0	0.00	398	0	0.00	0.00	0.00	0	0	0	0	0	0
28	0	0.00	349	1,090	99.0	0	0.00	415	0	0.00	0.00	0.00	0	0	0	0	0	0
29	0	0.00	349	1,090	99.0	0	0.00	415	0	0.00	0.00	0.00	0	0	0	0	0	0
30	0	0.00	349	1,090	99.0	0	0.00	415	0	0.00	0.00	0.00	0	0	0	0	0	0
31	0	0.00	349	1,090	99.0	0	0.00	415	0	0.00	0.00	0.00	0	0	0	0	0	0
	1,072,265	0.50				0	0.00		0	0.00	0.00	0.50	3,243	1 Ave.	799	10 Total	9,753	122 Total
	3.3	ac-ft				0.0	ac-ft		0.0	ac-ft	0.0							
Percent of Total =	100%					0%			0%									

Irrigation Cycle Start Date: 9/28/13
Irrigation Cycle End Date: 10/31/13 *
BOD Applied: 69
Cycle Average BOD: 2

**Irrigations have ended for the season. So a cycle end date of 10/31/2013 has been assumed for cycle average calculations.*

Cumulative Loading Calculations	Nitrogen	TDS
Commercial Applications		
July-13	68 lbs/acre	435 lbs/acre
August-13	142 lbs/acre	969 lbs/acre
September-13	61 lbs/acre	447 lbs/acre
October-13	10 lbs/acre	122 lbs/acre
Total	**281 lbs/acre**	**1,973 lbs/acre**

MORNING STAR

"Excellence Through Commitment"

LAND APPLICATION AREA MONITORING

Daily **DURING**-Application Inspection Observations:

Field No: # Ms1 Technician: Sergio

Date: 10/1/13 Weather: Sunny 76°

1. Any evidence of erosion: yes / (no) _____
2. Berm Condition Good
3. Standpipe and flow control valve condition N/A Lift pumps working
4. Are the valves being used properly: (yes) / no _____
5. Is there any soil saturation: yes / (no) _____
6. Is there any ponding: yes / (no) _____
7. Is there any potential runoff to off-site areas: yes / (no) _____
8. Is there any potential and actual discharge to surface water: yes / (no) _____
9. Are there any accumulation of organic solids at soil surface: yes / (no) _____
10. Is there any soil clogging: yes / (no) _____
11. Are there any odors that have the potential to be objectionable at or beyond the property boundary: yes / (no) _____
12. Are there any insects: yes / (no) _____
13. Temperature and wind direction/strength: Sunny 76° Wind 9mph SSW
14. Other observations: Harvested Rice Field being watered, Taking most of the Settling Pond water

MORNING STAR

"Excellence Through Commitment"

LAND APPLICATION AREA MONITORING

Daily **DURING**-Application Inspection Observations:

Field No: # MS 1 Technician: Sergio

Date: 10/2/13 Weather: Sunny 83°

1. Any evidence of erosion: yes / (no)
2. Berm Condition GOOD
3. Standpipe and flow control valve condition N/A Lift pumps working
4. Are the valves being used properly: (yes) / no
5. Is there any soil saturation: yes / (no)
6. Is there any ponding: yes / (no)
7. Is there any potential runoff to off-site areas: yes / (no)
8. Is there any potential and actual discharge to surface water: yes / (no)
9. Are there any accumulation of organic solids at soil surface: yes / (no)
10. Is there any soil clogging: yes / (no)
11. Are there any odors that have the potential to be objectionable at or beyond the property boundary: yes / (no)
12. Are there any insects: yes / (no)
13. Temperature and wind direction/strength: Sunny 83° Wind 6mph WNW
14. Other observations: Harvested Rice Field taking most of the Settling Pond water

MORNING STAR

"Excellence Through Commitment"

LAND APPLICATION AREA MONITORING

Daily **DURING**-Application Inspection Observations:

Field No: # MS1 Technician: Sergio

Date: 10/3/13 Weather: Sunny 72°

1. Any evidence of erosion: yes / (no)
2. Berm Condition Good
3. Standpipe and flow control valve condition UM Lift pumps Working
4. Are the valves being used properly: (yes) / no
5. Is there any soil saturation: yes / (no)
6. Is there any ponding: yes / (no)
7. Is there any potential runoff to off-site areas: yes / (no)
8. Is there any potential and actual discharge to surface water: yes / (no)
9. Are there any accumulation of organic solids at soil surface: yes / (no)
10. Is there any soil clogging: yes / (no)
11. Are there any odors that have the potential to be objectionable at or beyond the property boundary: yes / (no)
12. Are there any insects: yes / (no)
13. Temperature and wind direction/strength: Sunny 72° Wind 30mph SSW
14. Other observations: Harvested RICE FIELD taking most of the Settling pond water

LAND APPLICATION AREA MONITORING

Daily **POST**-Application Inspection Observations:

Field No: # MS 1 Technician: Sergio

Date: 10/4/13 Weather: Sunny 75°

1. Any evidence of erosion: yes / (no) _____
2. Berm Condition GOOD
3. Standpipe and flow control valve condition VIA CIFT pumps working
4. Are the valves being used properly: (yes) / no _____
5. Is there any soil saturation: yes / (no) _____
6. Is there any ponding: yes / (no) _____
7. Is there any potential runoff to off-site areas: yes / (no) _____
8. Is there any potential and actual discharge to surface water: yes / (no) _____
9. Are there any accumulation of organic solids at soil surface: yes / (no) _____
10. Is there any soil clogging: yes / (no) _____
11. Are there any odors that have the potential to be objectionable at or beyond the property boundary: yes / (no) _____
12. Are there any insects: yes / (no) _____
13. Temperature and wind direction/strength: Sunny 75° Wind 25mph SSW
14. Other observations: Harvested RICE FIELD DOVE watering

MORNING STAR

"Excellence Through Commitment"

LAND APPLICATION AREA MONITORING

Daily **DURING**-Application Inspection Observations:

Field No: # 24ch2 Technician: Sergio

Date: 10/1/13 Weather: Sunny 76°

1. Any evidence of erosion: yes / (no) _____
2. Berm Condition GOOD
3. Standpipe and flow control valve condition N/A Lift pumps Working
4. Are the valves being used properly: (yes) / no _____
5. Is there any soil saturation: yes / (no) _____
6. Is there any ponding: yes / (no) _____
7. Is there any potential runoff to off-site areas: yes / (no) _____
8. Is there any potential and actual discharge to surface water: yes / (no) _____
9. Are there any accumulation of organic solids at soil surface: yes / (no) _____
10. Is there any soil clogging: yes / (no) _____
11. Are there any odors that have the potential to be objectionable at or beyond the property boundary: yes / (no) _____
12. Are there any insects: yes / (no) _____
13. Temperature and wind direction/strength: Sunny 76° Wind 9mph SSW
14. Other observations: Pasture looks Good

MORNING STAR

"Excellence Through Commitment"

LAND APPLICATION AREA MONITORING

Daily **DURING**-Application Inspection Observations:

Field No: # 24ch2 Technician: Sergio

Date: 10/2/13 Weather: Sunny 83°

1. Any evidence of erosion: yes / (no) _____
2. Berm Condition GOOD
3. Standpipe and flow control valve condition N/A Lift pumps working
4. Are the valves being used properly: (yes) / no _____
5. Is there any soil saturation: yes / (no) _____
6. Is there any ponding: yes / (no) _____
7. Is there any potential runoff to off-site areas: yes / (no) _____
8. Is there any potential and actual discharge to surface water: yes / (no) _____
9. Are there any accumulation of organic solids at soil surface: yes / (no) _____
10. Is there any soil clogging: yes / (no) _____
11. Are there any odors that have the potential to be objectionable at or beyond the property boundary: yes / (no) _____
12. Are there any insects: yes / (no) _____
13. Temperature and wind direction/strength: Sunny 83° Wind 6mph NNW
14. Other observations: Pasture looks GOOD

MORNING STAR

"Excellence Through Commitment"

LAND APPLICATION AREA MONITORING

Daily **DURING**-Application Inspection Observations:

Field No: #24ch2 Technician: Sergio

Date: 10/3/13 Weather: Sunny 72°

1. Any evidence of erosion: yes / (no) _____
2. Berm Condition Good _____
3. Standpipe and flow control valve condition N/A Lift pumps Working _____
4. Are the valves being used properly: (yes) / no _____
5. Is there any soil saturation: yes / (no) _____
6. Is there any ponding: yes / (no) _____
7. Is there any potential runoff to off-site areas: yes / (no) _____
8. Is there any potential and actual discharge to surface water: yes / (no) _____
9. Are there any accumulation of organic solids at soil surface: yes / (no) _____
10. Is there any soil clogging: yes / (no) _____
11. Are there any odors that have the potential to be objectionable at or beyond the property boundary: yes / (no) _____
12. Are there any insects: yes / (no) _____
13. Temperature and wind direction/strength: Sunny 72° wind 30mph SSW
14. Other observations: Pasture looks Good

LAND APPLICATION AREA MONITORING

Daily POST-Application Inspection Observations:

Field No: # 24ch 2. Technician: Sergio

Date: 10/4/13 Weather: Sunny 75°

1. Any evidence of erosion: yes / (no) _____
2. Berm Condition GOOD
3. Standpipe and flow control valve condition N/A Lift pumps working
4. Are the valves being used properly: (yes) / no _____
5. Is there any soil saturation: yes / (no) _____
6. Is there any ponding: yes / (no) _____
7. Is there any potential runoff to off-site areas: yes / (no) _____
8. Is there any potential and actual discharge to surface water: yes / (no) _____
9. Are there any accumulation of organic solids at soil surface: yes / (no) _____
10. Is there any soil clogging: yes / (no) _____
11. Are there any odors that have the potential to be objectionable at or beyond the property boundary: yes / (no) _____
12. Are there any insects: yes / (no) _____
13. Temperature and wind direction/strength: Sunny 75° wind 25mph SSW
14. Other observations: Crop looks good, DONE watering Season over