CAFO FACILITY INSPECTION REPORT

OFFICE NO: PCA SYSTEM TASK NO:

INSPECTOR(S): Jared Richardson (PG Environmental, LLC) and Anthony D'Angelo (PG Environmental, LLC)

FACILITY INFORMATION

8365939001 WDID NUMBER	**Harlan Miersma** OWNER NAME	**Miersma Dairy No. 1** FACILITY NAME
CAG018001 NPDES NUMBER	**Ex. 6 Personal Privacy (PP)** OWNER ADDRESS	FACILITY ADDRESS
R8-2007-0001 RWQCB ORDER NO.	**Ontario, CA 91761** OWNER CITY AND STATE	**Ontario, CA 91761** FACILITY CITY AND STATE
03/05/2013 SCHEDULED INSPECTION DATE	**Harlan Miersma** OWNER CONTACT	**Harlan Miersma** FACILITY CONTACT
03/05/2013 ACTUAL INSPECTION DATE	**Ex. 6 Personal Privacy (PP)** OWNER PHONE NO.	FACILITY PHONE NO.
Unknown RECEIVING WATER	**Ex. 6 Personal Privacy (PP)** FACILITY LATITUDE	FACILITY LONGITUDE

INSPECTION TYPE

- ☐ (A1) "A" type compliance -- (EPA Type S)
- ☒ (B1) "B" type compliance -- (EPA Type C)
- ☐ (02) Noncompliance follow-up - Correction of a previously identified violation
- ☐ (03) Enforcement follow-up - Enforcement action is being met
- ☐ (04) Complaint - Complaint
- ☐ (05) Pre-requirement
- ☐ (06) Miscellaneous

_____ (Type) NOTE: If this is an EPA inspection not mentioned above, please note type (e.g., biomonitoring, performance audit, diagnostic, etc.)

No	Was the inspection pre-announced?
Yes	Were potential violations noted during this inspection?
No	Was this a quality assurance-based inspection?
No	Were bioassay samples collected?
No	Were water quality samples collected?

INSPECTION SUMMARY

The overall Facility rating, on a 1 (Unreliable) to 5 (Very Reliable) scale, was determined to be: 4 = Reliable.

Miersma Dairy No. 1 (hereinafter, Facility) was rated "Reliable" due to the following items:

- **A broken depth marker was observed in the existing pond in the southwest corner of the Facility (refer to Photos 8 and 9)**
- **Weekly Storm Water Management Structure visual inspections for the 2013 Monitoring Year had not been conducted at the Facility since February 12, 2013 (refer to Exhibit 1)**
- **The Engineered Waste Management Plan (EWMP) was not fully implemented onsite at the Facility at the time of the inspection (refer to Photos 7 and 8)**
- **Vegetation growth was observed in the containment pond in the southwest corner of the Facility (refer to Photo 8)**

INSPECTOR DATA

INITIALS __AJD___ SIGNATURE _____ DATE__03/05/2013_____

CIWQS DATA ENTRY DATE: _____ REGIONAL BOARD FILE NUMBER: _____

FOR INTERNAL USE: REVIEWED BY: (1)_____ (2) _____ (3) _____

REPORT PREPARED BY: Anthony D'Angelo (PG Environmental, LLC) ON 03/05/2013

EPA SUGGESTED INSPECTION CHECKLIST

☒ Permit	☐ Flow Measurement	☐ Pretreatment	☒ Operations & Maintenance
☒ Records/Reports	☐ Laboratories	☐ Compliance Schedules	☐ Sludge Disposal
☒ Facility Site Review	☐ Eff/Receiving Waters	☐ Self- Monitoring	☐ Other

POTENTIAL VIOLATIONS

1. The EWMP was not fully implemented onsite at the Facility at the time of the inspection, as required by Provisions VII.C.3.a-b of the Permit (refer to Photos 7 and 8)

Description of Potential Violation: **Refer to Item Nos. 1 through 4 of the 'Engineered Waste Management Plan Review' section of this report for additional details.**

Date of Potential Violation: **N/A**

Date of Potential Violation Determination: **03/05/2013**

INSPECTION OBSERVATIONS

On March 5, 2013, a Concentrated Animal Feeding Operation (CAFO) inspection was conducted for Santa Ana Water Board Order No. R8-2007-0001 - 'General Waste Discharge Requirements for Concentrated Animal Feeding Operations (Dairies and Related Facilities) within the Santa Ana Region', NPDES General Permit No. (CAG018001) at Miersma Dairy No. 1 in Ontario, California (refer to Photo 1). The inspectors met with Mr. Harlan Miersma (Owner, Miersma Dairy No. 1) at approximately 2:20 PM on March 5, 2013. Mr. Miersma accompanied the inspectors during the records review and Facility site visit. The inspectors held a closing conference with Mr. Miersma at the conclusion of the inspection. During the closing conference, the inspectors reviewed the preliminary inspection findings with Mr. Miersma.

The Facility is an 80-acre dairy farm with an animal population of approximately 1,270 milking cows, 180 dry cows, and 900 heifers at the time of the inspection. Process wastewater from milking and cow washing activities is collected into a sump on the south side of the milking barn (refer to Photo 2). Process wastewater is then pumped south to a riser structure located in the northeast corner of the catch basin/pasture area in the southwest portion of the Facility (refer to Photo 3). The riser structure distributes the wastewater to multiple alfalfa valves (approximately 6) along the north side of the eight (8) on-site catch basins (refer to Photos 4 and 5). Mr. Miersma stated that the alfalfa valves are rotated every two (2) weeks. Process wastewater collected in the catch basins flows south into a pasture located immediately north of the containment pond in the southwest corner of the Facility (refer to Photos 6 and 7). Standing water was observed on the south side of the pasture, immediately north of the containment pond in the southwest portion of the Facility (refer to Photo 7). A low point in the northern embankment of the containment pond allows excess accumulated wastewater from the pasture area to enter the containment pond (refer to Photo 7). Mr. Miersma also stated that excess wastewater in the pasture can flow southeast and pond in the southeast corner of the Facility. A concrete spillway is located in the southwest corner of the existing pond, adjacent to the intersection of Vineyard Avenue and Shaefer Avenue (refer to Photo 10). Surface runoff and storm water runoff from the corrals naturally flows to the center of the Facility, then south into a low lying area northeast of the catch basins, and eventually into the catch basins (refer to Photo 11).

Mr. Miersma stated that the corrals are cleaned/scraped two (2) times per year; however, the corrals were cleaned/scraped three (3) times in 2012. Manure is hauled offsite by Art Marquez and is diposed of at croplands in Bakersfield, CA. Manure tracking manifests were maintained of all haul events. Mr. Miersma stated that all mortalities are removed from the Facility immediately by Stiles Animal Removal, Inc.

FACILITY

CAFO Size: **Large** (at time of inspection)
Total Acres: **74**
Production Area Acres: **47**

CONTAINMENT STRUCTURES

Wastewater Lagoons: **1**
Evaporation Ponds: **0**
Catch Basins: **8**
Depth Markers: **1**
Other: **1 pasture**

ANIMALS ONSITE DURING INSPECTION

Milk Cows: **1,270**
Dry Cows: **180**
Heifers: **900**
Calves: **0**
Other: **N/A**

INSPECTION OBSERVATIONS

1. The inspectors observed, during the inspection, a broken depth marker in the existing pond in the southwest corner of the Facility at the time of the inspection (refer to Photos 8 and 9). The broken depth marker was identified during a weekly inspection on January 15, 2013 (refer to Exhibit 1). Permit Attachment B - Monitoring

and Reporting Program, Section I.B.2 states that "deficiencies not corrected within 30 days shall be accompanied by an explanation of the factors preventing immediate correction." Mr. Miersma stated that a replacement depth marker was located onsite at the Facility; however, he had not yet made time to install it.

ANNUAL REPORT REVIEW

ANNUAL REPORT

Monitoring Year: **2012** Reviewed: **Yes** Signed & Certified: **Yes**

Submittal Date: **January 14, 2013**

REPORTED ANIMAL POPULATION

Milk Cows: **1,200** Dry Cows: **260** Heifers: **950**

Calves: **0** Other: **N/A**

MANURE INFORMATION

Amount of manure spread on cropland at the Facility: **None**

Amount of manure hauled away from the Facility: **20,116 tons**

Name and location of the composting operation, or, if the manure was hauled to cropland, the owner or tenant, and the destination address: **Croplands in Bakersfield, CA**

1. Weekly Storm Water Management Structure visual inspections for the Monitoring Year 2013 were not conducted as required by Permit Attachment B - Monitoring and Reporting Program, Section I.B. Specifically, weekly inspections had not been conducted at the Facility since February 12, 2013 (refer to Exhibit 1). Mr. Miersma stated that he had forgotten to conduct weekly inspections since February 12, 2013. Permit Attachment B - Monitoring and Reporting Program, Section I.B states "All containment structures, including but not limited to, ponds, berms, and wastewater distribution lines, shall be inspected at least once a week during the entire year and at least once each 24-hour period during a storm event in which rainfall exceeds 0.5 inches in 24 hours. The findings of these inspections shall be documented on the attached CAFO Weekly Storm Water Management Structure Inspections Log Sheet (Attachment 1[of the Permit])."

ENGINEERED WASTE MANAGEMENT PLAN (EWMP) REVIEW

Did the inspector review the EWMP in the RWQCB file?	**Yes**
Did the Facility have a copy of the EWMP on-site and available for review?	**Yes**
EWMP preparation date:	**March 1, 2007**
EWMP prepared by:	**Natural Resources Conservation Service (NRCS)**
Santa Ana RWQCB EWMP acceptance date:	**May 24, 2007**
EWMP was certified by the Facility's engineer/consultant on:	**March 15, 2007**

1. The EWMP was not fully implemented onsite at the Facility and the containment structures were not adequately maintained as required by the Permit. Item No. 7 of the 'Operation and Maintenance' section of the EWMP states that "the dairy operator shall maintain weed control on the top and inside of the pond embankments...excessive growth of any vegetation will be controlled with mowing and/or grazing." Vegetation growth was observed inside

the containment pond located in the southwest corner of the Facility (refer to Photo 8). It should be noted that Mr. Miersma stated that the bottom of the containment pond in the southwest corner of the Facility is plowed annually. As a result of the observed vegetative growth, the Discharger had not adequately maintained the containment structure to ensure capacity and was not fully implementing the approved EWMP. The Discharger shall design, construct, and maintain containment structures and shall fully implement the EWMP as required by Provisions VII.C.3.a and VII.C.3.b of the Permit.

2. The EWMP was not fully implemented onsite at the Facility as required by the Permit. Item No. 8 of the 'Operation and Maintenance' section of the EWMP states that "pastures will be disked and planted to reduce any standing water problems." Mr. Miersma stated that the pasture is never disked or plowed; however, he does repair the berms between the catch basins, north of the pasture and existing pond, on a regular basis. Standing water and accumulated solids were observed on the south side of the pasture, immediately north of the containment pond in the southwest corner of the Facility (refer to Photos 6 and 7). As a result, the Discharger was not fully implementing the approved EWMP. The Discharger shall fully implement the EWMP as required by Provision VII.C.3.b of the Permit.

3. The EWMP was not fully implemented onsite at the Facility as required by the Permit. Item No. 9 of the 'Operation and Maintenance' section of the EWMP states that "weekly inspections of ponds, wastewater distribution and application equipment and embankment will be made to make sure all facilties are operating properly." Weekly inspections had not been conducted at the Facility since February 12, 2013 (refer to Exhibit 1). Mr. Miersma stated that he had forgotten to conduct weekly inspections since February 12, 2013. This finding is addressed in Item No. 1 of the 'Annual Report Review' section of this report.

4. The EWMP was not fully implemented onsite at the Facility as required by the Permit. Item No. 13 of the 'Operation and Maintenance' section of the EWMP states that "a safety floatation device should be by the ponds for emergency use." An emergency flotation device was not located by the existing pond in the southwest corner of the Facility at the time of the inspection. As a result, the Discharger was not fully implementing the approved EWMP. The Discharger shall fully implement the EWMP as required by Provision VII.C.3.b of the Permit.

NUTRIENT MANAGEMENT PLAN (NMP) REVIEW (IF APPLICABLE)

Did the Facility have a copy of the NMP on-site and available for review?	**N/A**
Date NMP was prepared:	**N/A**
NMP prepared by:	**N/A**
Santa Ana RWQCB NMP acceptance date:	**N/A**

1. The Discharger does not apply manure, litter, or process wastewater to croplands under their ownership or operational control; therefore, the Discharger is not required to develop, implement, and retain onsite a Nutrient Management Plan as stated in Provision VII.C.3.d of the Permit.

FACILITY HOUSEKEEPING, WASTEWATER, AND MANURE INFORMATION

Typical Depth of Manure in Corrals (in inches):	**3-6**
Estimated Freeboard in Fullest Lagoon (in feet):	**Dry - full capacity**
Date of Last Lagoon Solids Removal, per Facility Representative:	**Unknown**
Disposal Location for Lagoon Solids:	**Unknown**

CONDITION OF BERMS AND CONTAINMENT STRUCTURES

1. The inspectors observed, during the inspection, that vegetation growth potentially affecting the containment structure capacity was present in the containment pond located in the southwest corner of the Facility (refer to Photo 8). This item is addressed in Item No. 1 of the 'Engineered Waste Management Plan Review' section of this report. Provisions VII.C.3.a of the Permit states that "the discharger shall design, construct, and maintain containment structures to retain all wastewater within the facility, including all process wastewater and all precipitation on, and drainage through, manured areas resulting from rainfall up to and including a 25-year, 24-hour rainfall event." The Discharger must design and maintain all containment structures per the EWMP as required by Provisions VII.C.3.a-b of the Permit.

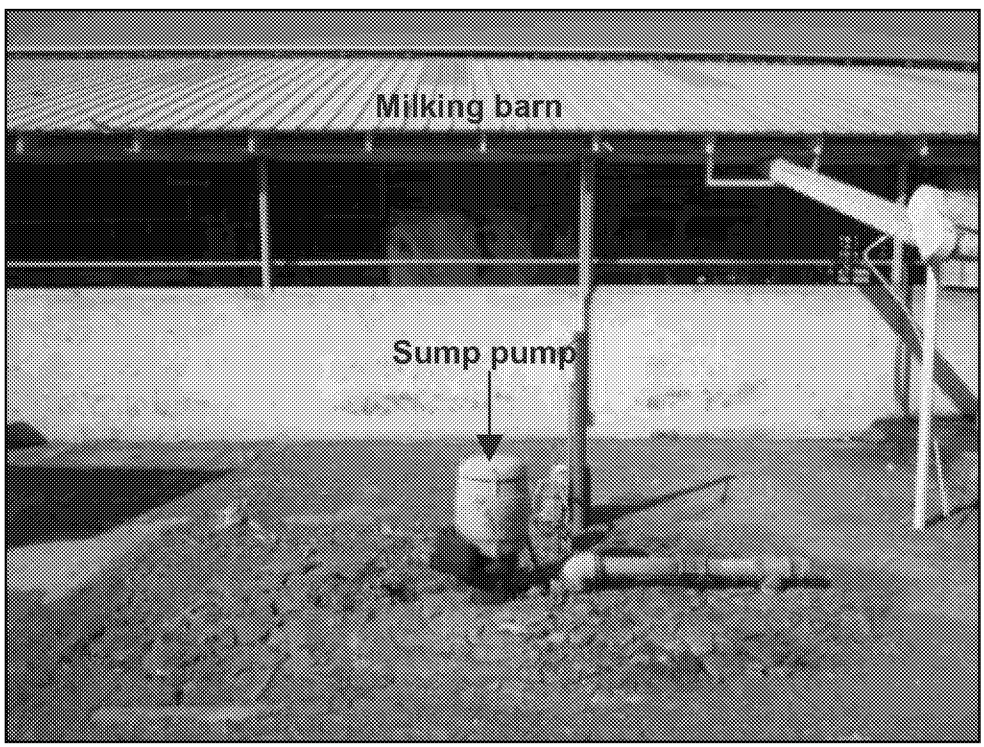
ITEMS FOR FOLLOW UP ON FUTURE INSPECTIONS

1. Verify whether or not a new depth marker has been installed in the existing pond located in the southwest corner of the Facility

2. Ensure that Weekly Storm Water Management Structure visual inspections are being conducted at the Facility as required by the Permit and approved EWMP

3. Verify if the EWMP has been fully implemented onsite at the Facility

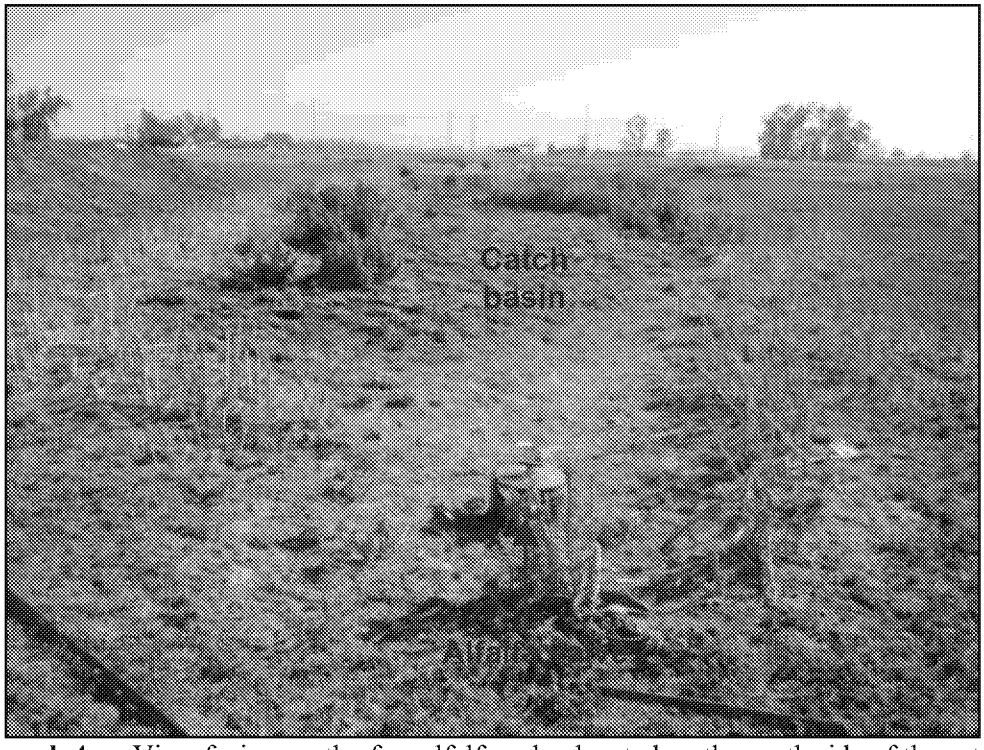
Photograph 1. Miersma Dairy No. 1 Facility sign.



Photograph 2. View facing north of the process wastewater sump pump on the south side of the milking barn. The sump pump conveys process wastewater south to the catch basins where it is land applied via alfalfa valves.

Inspection and Photograph Date: March 5, 2013

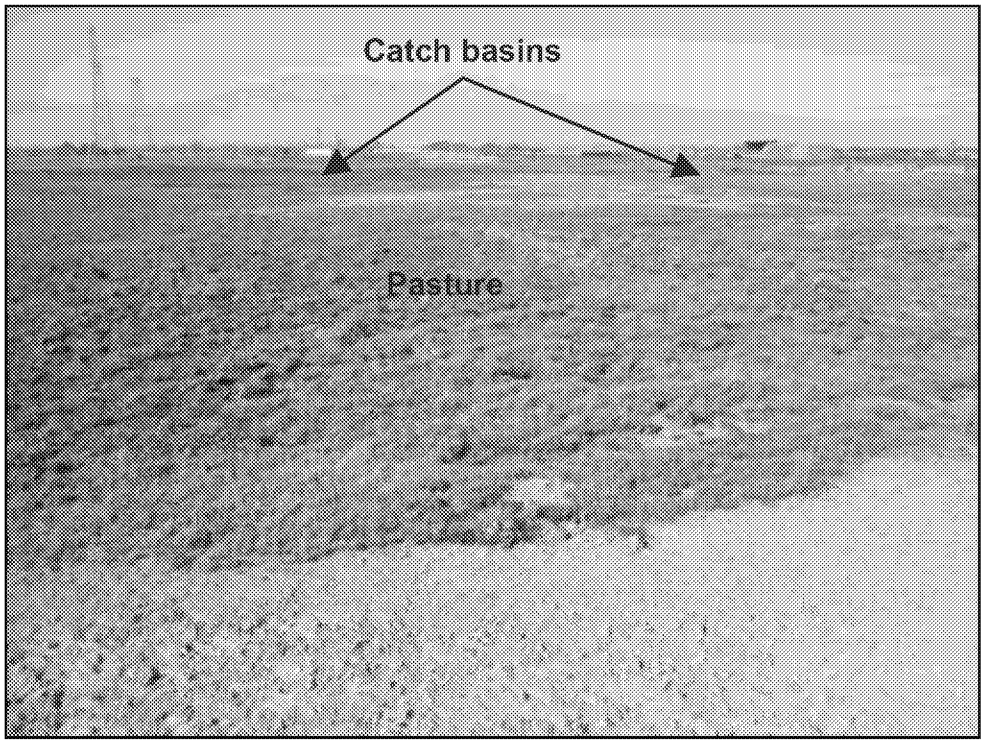
Photograph 3. View facing northeast of the process wastewater riser structure located northeast of the catch basins. The riser structure distributes wastewater to alfalfa valves located north of the catch basins.



Photograph 4. View facing south of an alfalfa valve located on the north side of the catch basins. Note process wastewater flows from the alfalfa valves south into the catch basin, and eventually into the pasture located between the catch basins and containment pond in the southwest corner of the Facility.

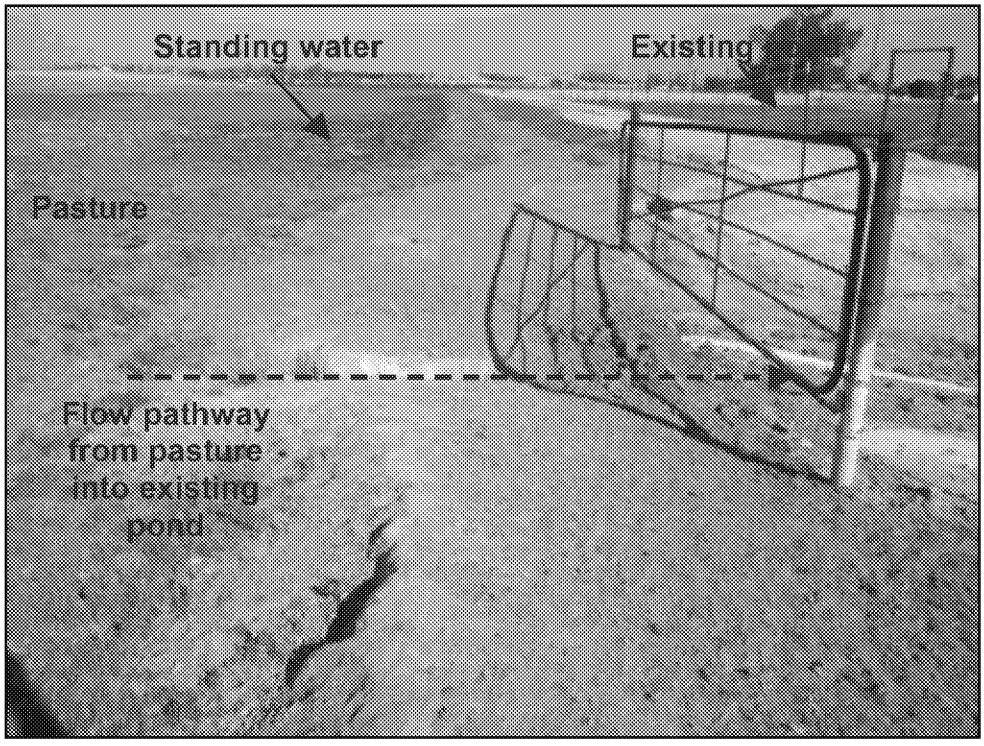
Inspection and Photograph Date: March 5, 2013

Photograph 5. View facing south of an alfalfa valve actively applying process wastewater to a catch basin.

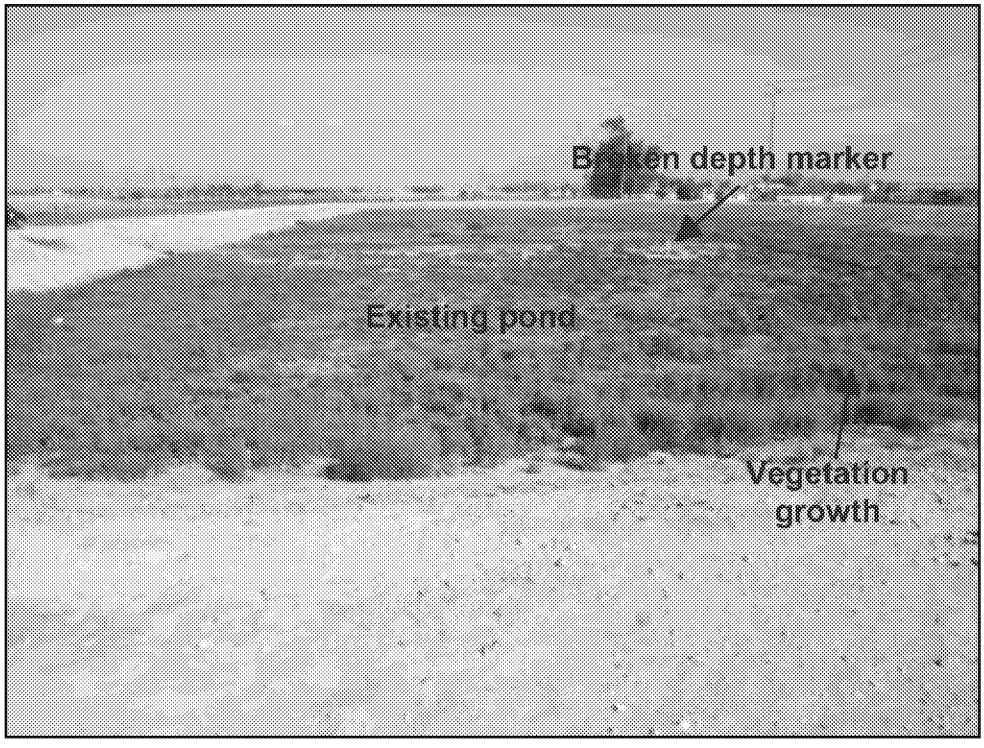


Photograph 6. View facing north from the north side of the existing pond in the southwest corner of the Facility at the pasture located between the existing pond and the catch basins.

Inspection and Photograph Date: March 5, 2013

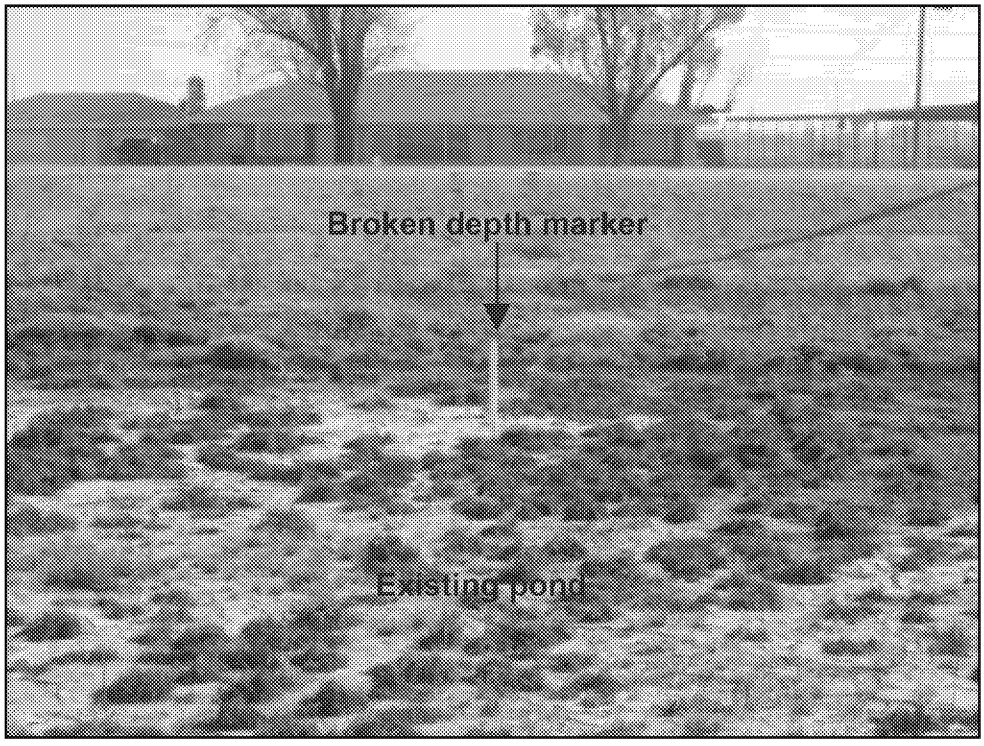


Photograph 7. View facing east of the flow pathway from the pasture south of the catch basins into the containment pond in the southwest corner of the Facility. Note the standing water in the pasture adjacent to the pond.

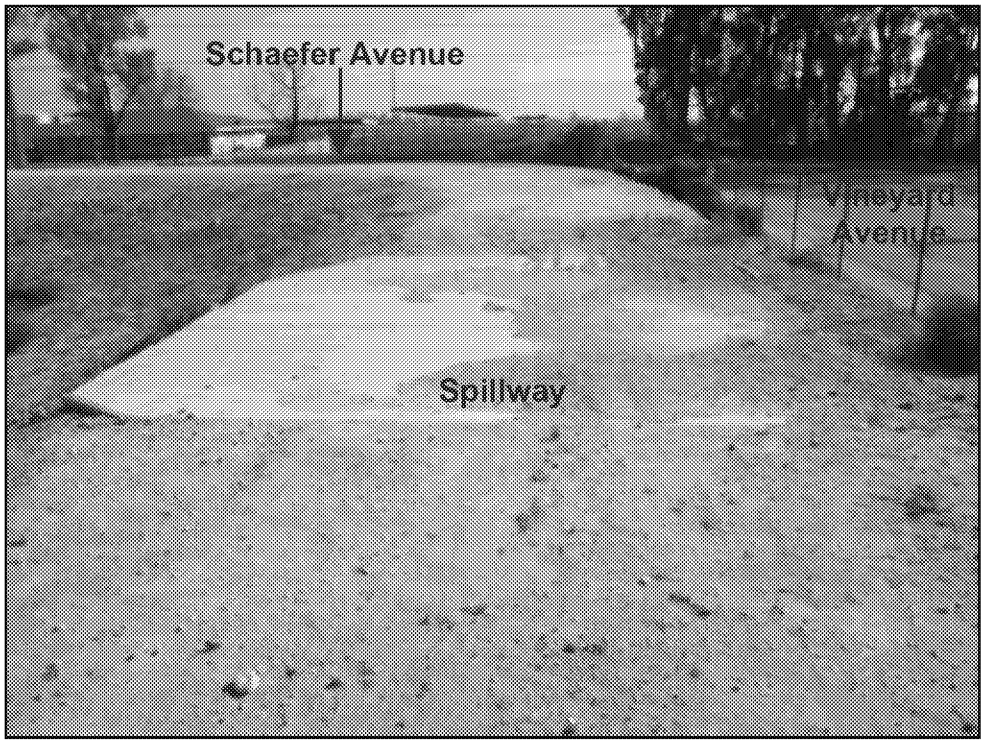


Photograph 8. View facing east of the existing pond in the southwest corner of the Facility. Note the broken depth marker and vegetation growth in the pond bottom.

Inspection and Photograph Date: March 5, 2013

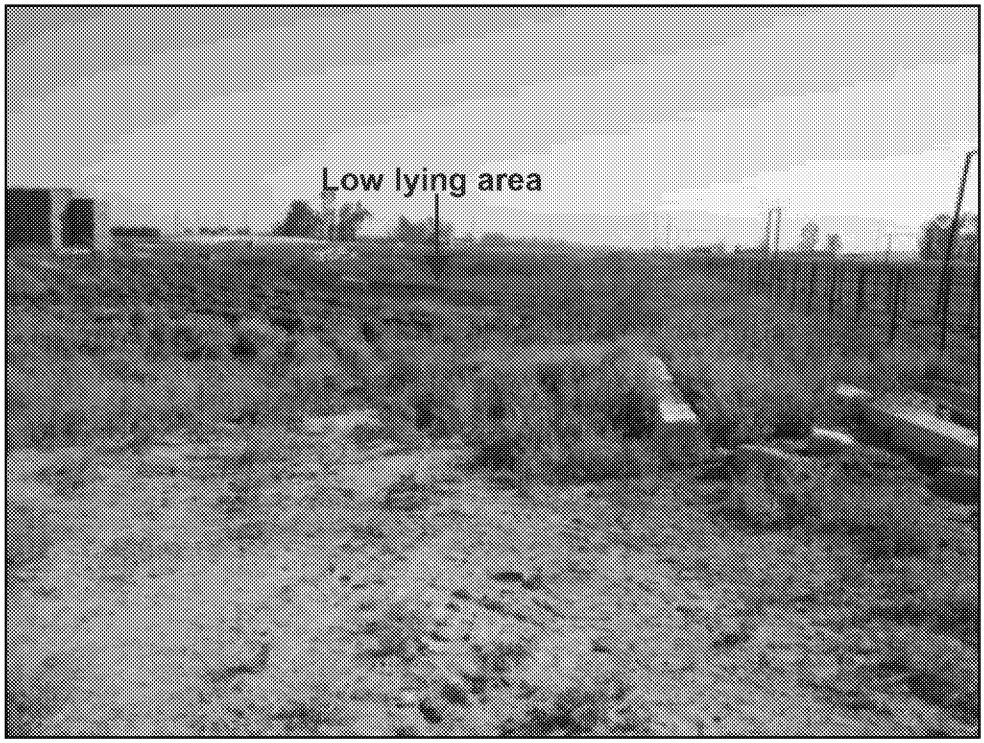


Photograph 9. Close-up view of the broken depth marker in the existing pond located in the southwest corner of the Facility, shown in Photograph 8.



Photograph 10. View facing south of the concrete spillway located in the southwest corner of the existing pond, shown in Photographs 8 and 9, adjacent to Vineyard Avenue and Schaefer Avenue.

Inspection and Photograph Date: March 5, 2013



Photograph 11. View facing south of a low lying area in the central portion of the Facility. Surface runoff and storm water runoff from the corrals flows to this area and eventually into the catch basins.

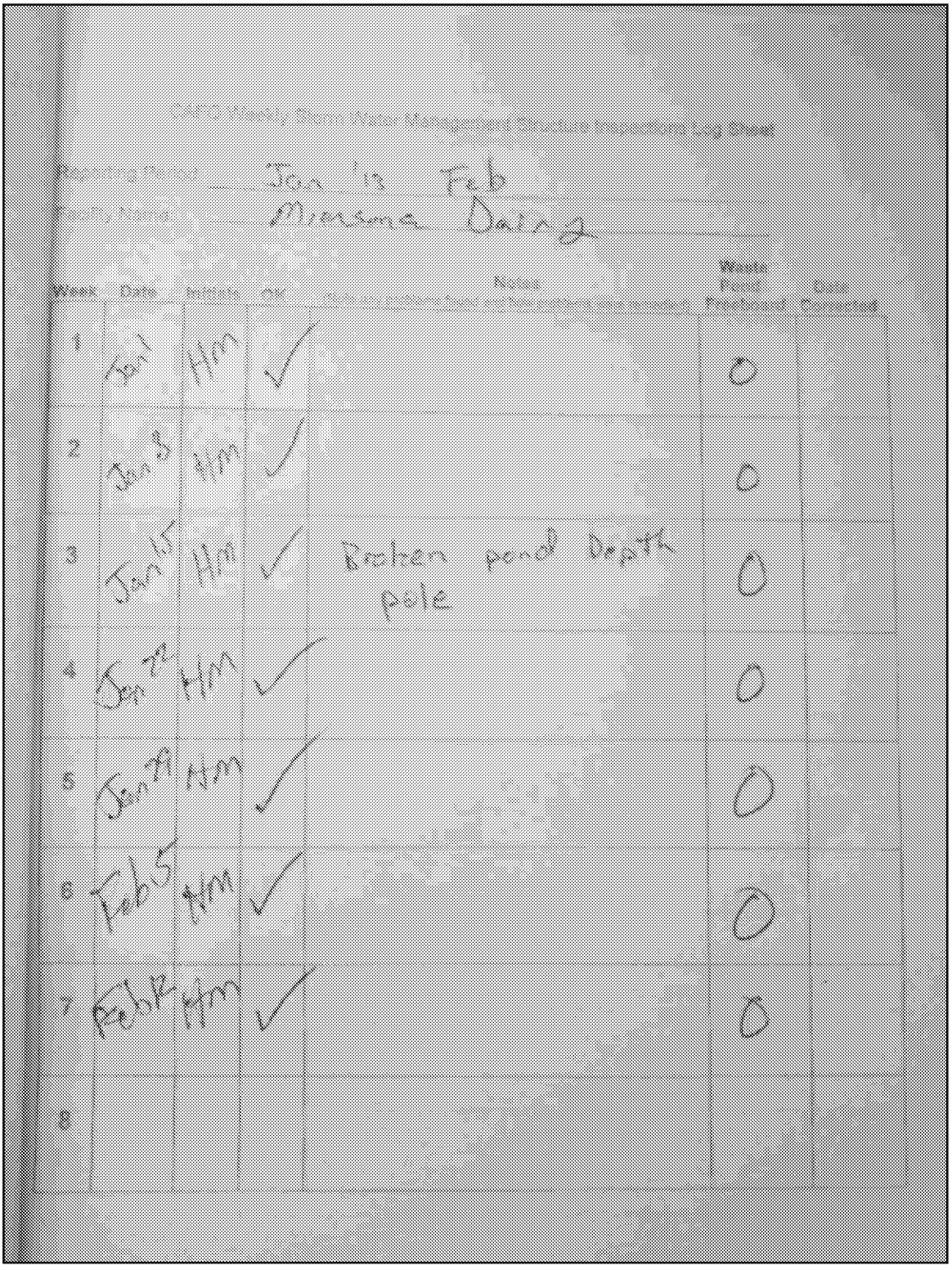


Exhibit 1. Discharger's 2013 Weekly Storm Water Management Structure Inspection Log Sheet. Note weekly inspections had not been conducted since February 12, 2013.