CAFO FACILITY INSPECTION REPORT

INSPECTOR(S): Kristine Karlson (USEPA, Region 9), Michelle Mata and Dat Quach (Regional Water Quality Control Board, San Diego Region)

REPORT PREPARED BY: Kristine Karlson, Environmental Protection Specialist, USEPA, Region 9 and Dat Quach, Regional Water Quality Control Board, San Diego Region

FACILITY INFORMATION

Inspection Date:	**March 26, 2014**
Facility Name:	**Armstrong Egg Farms**
Facility Address:	(b) (6) [redacted]
Authorized Official & Phone:	**Ryan Armstrong, VP Operations, (M) 7**[redacted]
Mailing Address of Authorized Official:	**P.O. Box 2299 Valley Center, CA 92082**
NPDES #:	**Unpermitted**
On-Site Representative & Phone:	**Ryan Armstrong, VP Operations (M) 7**[redacted]**5/ (O) 760-749-1058**
Receiving Water(s):	**Not yet determined at time of inspection.**
Inspector(s)	**Kristine Karlson, EPA Region 9 - 415-947-4297** **Michelle Mata, San Diego Water Quality Control Board (SDWQCB) - 619-521-3369** **Dat Quach, SDWQCB - 619-521-5899**

BACKGROUND

The Armstrong Egg Farms facility located at 27023 N. Lake Wohlford Rd. Valley Center, CA 92082 (Site) was the subject of a complaint from the San Pasqual Tribe in February 2014 regarding possible air and groundwater pollution. The Air and Drinking Water programs have responded to the initial concerns that were raised. This follow-up inspection was conducted to ascertain whether there are surface water concerns at the Site. The Site is not permitted to discharge pollutants under the Clean Water Act and had been operating under a conditional waiver (Conditional Waiver No. 3/Resolution No. R9-2007-0104), which allows eligible facilities, including the Site, to operate without a discharge permit subject to certain conditions. The conditional waiver expired on February 2, 2014 and is in the process of being reassessed and reissued by the SDWQCB. Inspections by the SDWQCB in 2008 found that runoff management at the Site was inconsistent with the conditional waiver. Specifically, state inspectors found that there was evidence of discharges from the Site; that there were inadequate management practices in place to prevent manure from contaminating runoff and discharging from the Site; and that roof misters were generating runoff. In addition, the state found that the Site's composting practices were not allowed under its existing waiver; accordingly, the state expressed an intention to issue site-specific Waste Discharge Requirements to the Site. Documentation of the SDRWQB's follow-up actions ended in 2008.

INSPECTION OBSERVATIONS

On March 27, 2014, Kristine Karlson (US EPA Inspector), and Michelle Mata and Dat Quach (San Diego Regional Water Quality Control Board Inspectors) conducted a joint federal/state compliance evaluation inspection of the Armstrong Egg Farms facility to follow up on the tribal complaint. The inspectors arrived at the Site unannounced and contacted Ryan Armstrong to begin the inspection. Mr. Armstrong arrived promptly and granted access to the Site. Mr. Armstrong was present throughout the inspection, from the opening conference until the end of the exit

interview. Weather at the time of the inspection was about 63°F and overcast with light rain (enough to cause puddling but not discharges).

At the opening conference, I asked to inspect the following areas of the Site: the hen houses, stormwater and process wastewater conveyances, manure storage and handling areas, the perimeter of the Site, and any surface waters either adjacent to, or that might receive flows from, the Site. We began by visiting the nearest surface water – a canal located immediately adjacent to the eastern perimeter of the Site. It was apparent that this water body could not receive flows from the Site, as it was significantly uphill. Other than the canal, Mr. Armstrong said that Lake Wohlford was the nearest surface water, and he was not sure whether it might receive flows from the Site. He did volunteer that process wastewater (runoff from the Site, including flows from the manure processing area) had discharged on multiple occasions from the designated discharge point near the Site's northwest corner (see Photos 24-28 and 32).

The Site is an approximately 32 acre egg farm, located at this address for over 40 years according to Mr. Armstrong. It has 16 active hen houses and a row of older, smaller hen houses at the south end of the Site that he says are no longer in use. In the center of the Site is a manure storage and processing area. Mr. Armstrong reported at the time of the inspection that there were approximately 270,000 hens at the Site, weighing an average of 2.9 lbs. EPA regulations categorize egg farms as Large Concentrated Animal Feeding Operations (Large CAFOs) if there are greater than 82,000 laying hens at an operation that uses other than a liquid manure handling system (40 CFR Part 122.23(b)(2)). The San Diego Regional Water Quality Control Board (SDRWQCB) has no general permit available for poultry facilities; each such facility that discharges would be required to apply for individual permit coverage. There is a conditional waiver from permit coverage (Conditional Waiver No. 3) available from the SDRWQCB. Under the definitions in this waiver, CAFO facilities with 300-999 "animal units" are considered "medium-sized" and eligible for a waiver, where each animal unit is 1,000 lbs. Under this definition, the Site would be considered to house 783 animal units and would be conditionally eligible for a waiver. According to Mr. Armstrong, all chickens are confined in hen houses, and they are housed there 365 days per year.

There are no manure lagoons, as chicken manure is instead scraped from the floors of the hen houses and dried onsite before being sold as fertilizer to local farmers. Mr. Armstrong reported that he stores manure onsite for about 30 days before it is sold. The manure storage area in the center of the Site is paved, but it is not covered; and manure wastewater has eroded rills in the exposed soil between the concrete storage pads and the curb and gutter area at the front of the Site.

According to Mr. Armstrong, process water was previously generated when misters were used to cool the older hen houses at the south end of the Site. Mr. Armstrong reported that over-misting did previously result in some runoff, but he said that the newer hen houses currently in use do not requiring misting as they instead use blowers for cooling and aeration. The surface of the Site is mostly bare dirt, except for the following paved areas: access roads, the concrete pads under the hen houses and other buildings, and the concrete pad in the center of the Site where manure is stored and dried. My observation that the Site slopes gently toward the northwest corner was corroborated by Mr. Armstrong during the inspection. He reported that he had directed all surface flows toward a single point near the northwest corner, in anticipation of building a retention pond at that location someday. Mr. Armstrong showed us an engineering plan written in 2011 that called for the retention pond to be sited there. I observed that the selected location had limited space for construction of a retention pond, but Mr. Armstrong was not concerned about lack of space. At the time of the inspection, it was unclear why Mr. Armstrong had not yet installed the pond, or when he planned to do so.

The discharge point near the northwest corner consists of a concrete curb leading to a funnel-shaped headwall at the inlet of a culvert that directs flows west under N. Lake Wohlford Rd. At the outlet of the culvert is an earthen ditch

that turns sharply toward the north, then bends west. The ultimate destination of flows that enter the ditch is not apparent from the roadway. Mr. Armstrong claims to be leasing this property that receives the Site's discharges.

AREAS OF CONCERN

1. **Potential for Unauthorized Discharges:**
   - **a.** Because this Site qualifies as a Large CAFO under EPA's regulations **(**40 CFR Part 122.23(b)(2)), and the Site is unpermitted under the Clean Water Act, discharges from the Site to Waters of the United States are prohibited. The operator acknowledges that on multiple occasions, flows have left the Site, but it is currently unclear whether there is a pathway to a jurisdictional surface water. The operator must ensure that no discharges to Waters of the United States occur without authorization by the permitting authority.
   - b. The State of California regulates discharges to all "waters of the state," which include both surface waters and groundwater (Porter-Cologne Water Quality Control Act § 13050). 27 CCR § 13264(a) provides that no person shall initiate any new discharge of waste to waters of the state prior to issuance of waste discharge requirements or a waiver of such requirements. At several points – both onsite and offsite, polluted waters come into contact with soils (unpaved areas) and may soak into the groundwater. Part 3.II.B.1 of the conditional waiver the Site has been operating under prohibits this.

2. **Terms of the Conditional Waiver No. 3 Not Met:**
   - a. Part 3.II.B of the conditional waiver requires that facilities are operated and maintained in accordance with 27 CCR 27 § 22562-22565, including a provision in § 22562 requiring that wastewater and manure run-off be retained in a basin designed to capture a 25-year, 24-hour storm. No such basin has yet been constructed at the Site.
   - b. Part 3.I.B.2.e) of the conditional waiver states that temporary manure storage areas should covered to prevent direct contact between precipitation and animal wastes. No such permanent cover was provided; nor was temporary plastic sheeting provided in preparation for the precipitation event that occurred on the date of the inspection.
   - c. Part 3.I.B.2.b) of the conditional waiver states that manure can be stored for no more than two weeks onsite. Manure at the Site is stored for 30 days, inconsistent with this requirement.

3. **Conditional Waiver No. 3 No Longer Applicable:**
   - a. In 2008, the state found that conditions at the Site were not consistence with the terms of Conditional Waiver No. 3. Accordingly, the SDRWQCB stated its intention to issue site-specific water discharge requirements. Further, Conditional Waiver No. 3 expired on February 3, 2014. The state is in the process of reissuing the conditional waiver for Discharges from Animal Operations; however, both past and current conditions at the Site would not meet the terms of the new draft waiver (now called Conditional Waiver No. 7).

United States Environmental Protection Agency
Washington, D.C. 20460

Water Compliance Inspection Report

Section A: National Data System Coding (i.e., PCS)

Transaction Code	NPDES	yr/mo/day	Inspection Type	Inspector	Fac Type
1 N 2 5	3 CAU0000000 11	12 17	18 =	19 J	20 3

Remarks

21 66

Inspection Work Days	Facility Self-Monitoring Evaluation Rating	BI	QA	Reserved
67 2 0 0 69	70 2	71 N	72 N	73 74 / 75 80

Section B: Facility Data

Name and Location of Facility Inspected *(For industrial users discharging to POTW, also include POTW name and NPDES permit number)*	Entry Time/Date	Permit Effective Date
ARMSTRONG EGG FARMS (b) (6) [redacted] VALLEY CENTER, CA 92082	1:25 PM-3/26/14	N/A
	Exit Time/Date	Permit Expiration Date
	3:30 PM-3/26/14	N/A

Name(s) of On-Site Representative(s)/Title(s)/Phone and Fax Number(s)

RYAN ARMSTRONG, VP OPERATIONS, (OFC)
[redacted], (M) 7(b) (6) [redacted], (F) 7[redacted]

Other Facility Data *(e.g., SIC NAICS, and other descriptive information)*

SIC CODE:

Name, Address of Responsible Official/Title/Phone and Fax Number

SAME AS ABOVE

Contacted ☑ Yes ☐ No

Section C: Areas Evaluated During Inspection *(Check only those areas evaluated)*

☐ Permit	☐ Self-Monitoring Program	☐ Pretreatment	☐ MS4
☐ **Records/Reports**	☐ Compliance Schedules	☐ Pollution Prevention	
☑ Facility Site Review	☐ Laboratory	☐ Storm Water	
☑ Effluent/Receiving Waters	☑ Operations & Maintenance	☐ Combined Sewer Overflow	
☐ Flow Measurement	☐ Sludge Handling/Disposal	☐ Sanitary Sewer Overflow	

Section D: Summary of Findings/Comments

(Attach additional sheets of narrative and checklists, including Single Event Violation codes, as necessary)

SEV Codes	SEV Description
☐☐☐☐☐	
☐☐☐☐☐	
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Name(s) and Signature(s) of Inspector(s)	Agency/Office/Phone and Fax Numbers	Date
KRISTINE KARLSON *Kristine Karlson*	EPA R9/ENF 3-1/415-947-4297	6/20/14
MICHELLE MATA AND DAT QUACH		
Signature of Management Q A Reviewer	Agency/Office/Phone and Fax Numbers	Date

INSTRUCTIONS

Section A: National Data System Coding *(i.e., PCS)*

Column 1: Transaction Code: Use N, C, or D for New, Change, or Delete. All inspections will be *new* unless there is an error in the data entered.

Columns 3-11: NPDES Permit No. Enter the facility's NPDES permit number - third character in permit number indicates permit type for U=unpermitted, G=general permit, etc.. *(Use the Remarks columns to record the State permit number, if necessary.)*

Columns 12-17: Inspection Date. Insert the date entry was made into the facility. Use the year/month/day format (e.g., 04/10/01 = October 01, 2004).

Column 18: Inspection Type*. Use one of the codes listed below to describe the type of inspection:

A Performance Audit
B Compliance Biomonitoring
C Compliance Evaluation (non-sampling)
D Diagnostic
F Pretreatment (Follow-up)
G Pretreatment (Audit)
I Industrial User (IU) Inspection
J Complaints
M Multimedia
N Spill
O Compliance Evaluation (Oversight)
P Pretreatment Compliance Inspection
R Reconnaissance
S Compliance Sampling

U IU Inspection with Pretreatment Audit
X Toxics Inspection
Z Sludge - Biosolids
Combined Sewer Overflow-Sampling
$ Combined Sewer Overflow-Non-Sampling
+ Sanitary Sewer Overflow-Sampling
& Sanitary Sewer Overflow-Non-Sampling
\ CAFO-Sampling
= CAFO-Non-Sampling
2 IU Sampling Inspection
3 IU Non-Sampling Inspection
4 IU Toxics Inspection
5 IU Sampling Inspection with Pretreatment
6 IU Non-Sampling Inspection with Pretreatment
7 IU Toxics with Pretreatment

! Pretreatment Compliance (Oversight)
@ Follow-up (enforcement)
{ Storm Water-Construction-Sampling
} Storm Water-Construction-Non-Sampling
: Storm Water-Non-Construction-Sampling
~ Storm Water-Non-Construction-Non-Sampling
< Storm Water-MS4-Sampling
- Storm Water-MS4-Non-Sampling
> Storm Water-MS4-Audit

Column 19: Inspector Code. Use one of the codes listed below to describe the *lead agency* in the inspection.

A — State (Contractor)
B ---- EPA (Contractor)
E — Corps of Engineers
J — Joint EPA/State Inspectors—EPA Lead
L ---- Local Health Department (State)
N — NEIC Inspectors
O— Other Inspectors, Federal/EPA (Specify in Remarks columns)
P— Other Inspectors, State (Specify in Remarks columns)
R — EPA Regional Inspector
S — State Inspector
T — Joint State/EPA Inspectors—State lead

Column 20: Facility Type. Use one of the codes below to describe the facility.

1 — Municipal. Publicly Owned Treatment Works (POTWs) with 1987 Standard Industrial Code (SIC) 4952.
2 — Industrial. Other than municipal, agricultural, and Federal facilities.
3 — Agricultural. Facilities classified with 1987 SIC 0111 to 0971.
4 — Federal. Facilities identified as Federal by the EPA Regional Office.
5 — Oil & Gas. Facilities classified with 1987 SIC 1311 to 1389.

Columns 21-66: Remarks. These columns are reserved for remarks at the discretion of the Region.

Columns 67-69: Inspection Work Days. Estimate the total work effort (to the nearest 0.1 work day), up to 99.9 days, that were used to complete the inspection and submit a QA reviewed report of findings. This estimate includes the accumulative effort of all participating inspectors; any effort for laboratory analyses, testing, and remote sensing; and the billed payroll time for travel and pre and post inspection preparation. This estimate does not require detailed documentation.

Column 70: Facility Evaluation Rating. Use information gathered during the inspection (regardless of inspection type) to evaluate the quality of the facility self-monitoring program. Grade the program using a scale of 1 to 5 with a score of 5 being used for very reliable self-monitoring programs, 3 being satisfactory, and 1 being used for very unreliable programs.

Column 71: Biomonitoring Information. Enter D for static testing. Enter F for flow through testing. Enter N for no biomonitoring.

Column 72: Quality Assurance Data Inspection. Enter Q if the inspection was conducted as followup on quality assurance sample results. Enter N otherwise.

Columns 73-80: These columns are reserved for regionally defined information.

Section B: Facility Data

This section is self-explanatory except for "Other Facility Data," which may include new information not in the permit or PCS (e.g., new outfalls, names of receiving waters, new ownership, other updates to the record, SIC/NAICS Codes, Latitude/Longitude).

Section C: Areas Evaluated During Inspection

Check only those areas evaluated by marking the appropriate box. Use Section D and additional sheets as necessary. Support the findings, as necessary, in a brief narrative report. Use the headings given on the report form (e.g., Permit, Records/Reports) when discussing the areas evaluated during the inspection.

Section D: Summary of Findings/Comments

Briefly summarize the inspection findings. This summary should abstract the pertinent inspection findings, not replace the narrative report. Reference a list of attachments, such as completed checklists taken from the NPDES Compliance Inspection Manuals and pretreatment guidance documents, including effluent data when sampling has been done. Use extra sheets as necessary.

*Footnote: In addition to the inspection types listed above under column 18, a state may continue to use the following wet weather and CAFO inspection types until the state is brought into ICIS-NPDES: K: CAFO, V: SSO, Y: CSO, W: Storm Water 9: MS4. States may also use the new wet weather, CAFO and MS4 inspections types shown in column 18 of this form. The EPA regions are required to use the new wet weather, CAFO, and MS4 inspection types for inspections with an inspection date (DTIN) on or after July 1, 2005.

Armstrong Chicken Farms Clean Water Act inspection (__ of 88 photos)
All photos taken by Kristine Karlson, EPA, on March 26, 2014.

Photo 5 –Manure piles, located in the center of the facility. Manure is piled in rows to dry on a paved area. View is to the west. This image represents three photographs, stitched together.

Armstrong Chicken Farms Clean Water Act inspection (__ of 88 photos)
All photos taken by Kristine Karlson, EPA, on March 26, 2014.

Photo 6 – View of hen houses to the north of the manure piles. View is to the northwest. There is an area between the manure piles and the hen house immediately to the north that is unpaved. This image represents two photographs stitched together.

Armstrong Chicken Farms Clean Water Act inspection (__ of 88 photos)
All photos taken by Kristine Karlson, EPA, on March 26, 2014.

Photo 7 – View of canal running alongside and above the Armstrong Egg Farms facility. The canal is located uphill from the facility and does not appear to be able to receive flows from it. Circle marks hen houses downhill and to the west.

Armstrong Chicken Farms Clean Water Act inspection (__ of 88 photos)
All photos taken by Kristine Karlson, EPA, on March 26, 2014.

Photo 24 – Stitched photograph showing the curb along the western perimeter of the facility, leading to the main discharge point (circled). On the right is the red truck seen in Photos 22 and 23. This shows the relative distance between the conveyor belt and discharge point.

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Armstrong Chicken Farms Clean Water Act inspection (41 of 88 photos total)
All photos taken by Kristine Karlson, EPA, on March 26, 2014.

Photo 1 – Sign at entry of Armstrong Egg Farms facility located at 27023 N Lake Wohlford Rd in Valley Center, CA.

Photo 2 – View of vehicle wheel wash at facility entrance. Wash water sprays tires and is collected in an underground sump.

Armstrong Chicken Farms Clean Water Act inspection (41 of 88 photos total)
All photos taken by Kristine Karlson, EPA, on March 26, 2014.

Photo 3 – View inside sump where wheel wash water is collected and reused. At the time we arrived, a vactor truck was cleaning out the sump.

Photo 4 – View inside one of the hen houses. Manure falls to the floor and is scraped out by workers.

Armstrong Chicken Farms Clean Water Act inspection (__ of 88 photos)
All photos taken by Kristine Karlson, EPA, on March 26, 2014.

Photo 5 –Manure piles, located in the center of the facility. Manure is piled in rows to dry on a paved area. View is to the west. This image represents three photographs, stitched together.

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Armstrong Chicken Farms Clean Water Act inspection (__ of 88 photos)
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Armstrong Chicken Farms Clean Water Act inspection (41 of 88 photos total)
All photos taken by Kristine Karlson, EPA, on March 26, 2014.

Photo 8 – View of the easternmost hen house adjacent to the canal in the previous photo. The earthen berm supports the western side of the canal. The bed of the canal lies above the level of the ground below.

Photo 9 – Hen houses lined up in the southern portion of the facility. Arrows mark the likely direction of any stormwater flows, based on our observations of the topography and the operator's statements. Flow is downhill to the north, then west toward the roadway.

Armstrong Chicken Farms Clean Water Act inspection (41 of 88 photos total)
All photos taken by Kristine Karlson, EPA, on March 26, 2014.

Photo 10 – View of the area between two of the hen houses in the previous photograph. Each of these areas discharges via a small culvert to the paved area immediately north. There did not appear to be much, if any, waste (feathers or manure) accumulated in these areas.

Photo 11 – View of one of the small culverts between the hen houses in photograph 9.

Armstrong Chicken Farms Clean Water Act inspection (41 of 88 photos total)
All photos taken by Kristine Karlson, EPA, on March 26, 2014.

Photo 12 – Looking west along the curb in front of the hen houses in photos 9-11. Arrows show the direction of flow.

Photo 13 – Area between two hen houses graded to discharge in front of earthen berm. The berm can also be seen at the top of the previous photo.

Armstrong Chicken Farms Clean Water Act inspection (41 of 88 photos total)
All photos taken by Kristine Karlson, EPA, on March 26, 2014.

Photo 14 – View toward the northwest of the same earthen berm. It directs any flows from the hen houses in the south end of the facility across the pavement and toward the manure piles (see arrows).

Photo 15 – Ditch running along the west side of the southernmost hen houses. The culvert carries flows westbound, under North Lake Wohlford Rd.

Armstrong Chicken Farms Clean Water Act inspection (41 of 88 photos total)
All photos taken by Kristine Karlson, EPA, on March 26, 2014.

Photo 16 – Closer view of the manure piles stored in the center of the site. These were previously shows in Photos 5, 6 and 14.

Photo 17 – This unpaved area to the north of the manure piles contains manure runoff rills. The rills and topography show that the direction of the runoff is to the northwest, and then back onto the paved area along the western border of the facility.

Armstrong Chicken Farms Clean Water Act inspection (41 of 88 photos total)
All photos taken by Kristine Karlson, EPA, on March 26, 2014.

Photo 18 – View toward the north along the paved western border of the facility. According to Mr. Armstrong, the curb to the left keeps flows moving toward the discharge point near the NW corner. Arrows show reported direction of flow.

Photo 19 – View of the area between hen houses in the northwest quadrant of the facility.

Armstrong Chicken Farms Clean Water Act inspection (41 of 88 photos total)
All photos taken by Kristine Karlson, EPA, on March 26, 2014.

Photo 20 – View between the last two hen houses in the northwest quadrant of the facility. Areas are eroding, and there are feathers on the ground. On the left (marked) is a manure cleanout.

Photo 21 – Closer view of manure cleanout in previous photo.

Armstrong Chicken Farms Clean Water Act inspection (41 of 88 photos total)
All photos taken by Kristine Karlson, EPA, on March 26, 2014.

Photo 22 – Toward the end of the curb seen in Photo 18. Ahead, a blue conveyor belt is visible, loading manure from the cleanout in Photos 20 and 21 into the back of the red truck.

Photo 23 – View of conveyor belt unloading manure into the red truck in Photo 22. Manure is spilled on the pavement.

Armstrong Chicken Farms Clean Water Act inspection (__ of 88 photos)
All photos taken by Kristine Karlson, EPA, on March 26, 2014.

Photo 24 – Stitched photograph showing the curb along the western perimeter of the facility, leading to the main discharge point (circled). On the right is the red truck seen in Photos 22 and 23. This shows the relative distance between the conveyor belt and discharge point.

Armstrong Chicken Farms Clean Water Act inspection (41 of 88 photos total)
All photos taken by Kristine Karlson, EPA, on March 26, 2014.

Photo 25 – Closer view of discharge point seen in previous photo. A cement channel leads under the fence line to the west. Feathers and other debris has accumulated here.

Photo 26 – View through the fence of the cement channel, as it enters a culvert that crosses under North Lake Wohlford Rd.

Armstrong Chicken Farms Clean Water Act inspection (41 of 88 photos total)
All photos taken by Kristine Karlson, EPA, on March 26, 2014.

Photo 27 – Wider view of the discharge point. Mr. Armstrong said that this area is slated to become a retention pond (to prevent discharges), per an engineering plan drafted in 2011.

Photo 28 – Blowers airing out the largest hen house, at the NW corner of the facility. The light coloring on the ground is a coating of fine feathers. Discharge point is marked with an arrow.

Armstrong Chicken Farms Clean Water Act inspection (41 of 88 photos total)
All photos taken by Kristine Karlson, EPA, on March 26, 2014.

Photo 29 – Feathers coating the ground outside the hen house in the previous photo. Inspector Kristine Karlson kicked the surface of the coating to show the contrast with the darker ground underneath.

Photo 30 – View to the east of runoff channel alongside the north side of the hen house in Photo 28. Direction of flow, per Mr. Armstrong, is to the west and toward the discharge point (see arrow).

Armstrong Chicken Farms Clean Water Act inspection (41 of 88 photos total)
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Photo 31 – These pipes convey flows from the channel in the previous photo under the access road along the west side of the facility.

Photo 32 – Outlet of culvert seen in Photo 26. It discharges to the west, into a drainage channel to the west of North Lake Wohlford Rd. Mr. Armstrong said that he leases this property from the owner.

Armstrong Chicken Farms Clean Water Act inspection (41 of 88 photos total)
All photos taken by Kristine Karlson, EPA, on March 26, 2014.

Photo 33 – Water collected in the drainage channel seen in the previous photo. Direction of flow is to the north (yellow arrow). A red arrow marks the outlet of the culvert.

Photo 34 – Continuation of the channel seen in the previous two photos. The channel curves toward the west.

Armstrong Chicken Farms Clean Water Act inspection (41 of 88 photos total)
All photos taken by Kristine Karlson, EPA, on March 26, 2014.

Photo 35 – This area, immediately to the north of the main egg farm, is where Mr. Armstrong reported that he land applies manure. It was not clear where the land application area was. From the south side of the fence and via aerial photography, it appears manure is arranged in rows similar to those in the center of the egg farm.

Armstrong Chicken Farms Clean Water Act inspection (41 of 88 photos total)
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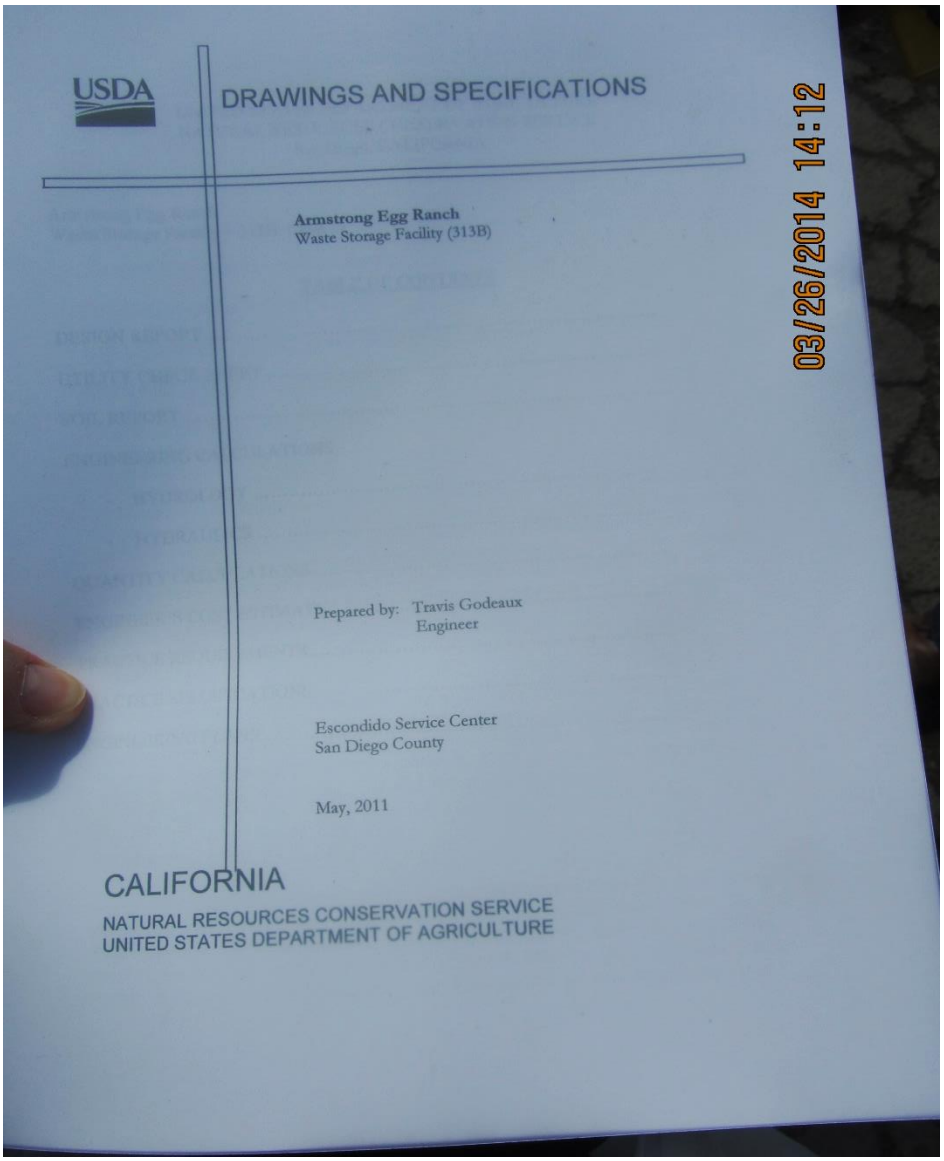

Photo 36 – Cover page of “Armstrong Egg Ranch Waste Storage Facility” Plan dated May 2011.