

California Regional Water Quality Control Board, Colorado River Basin
Prosecution Team Evidence
on the matter of
Administrative Civil Liability Complaint R7-2014-0041
Exhibit 39

Inspection Team:		Agency:		Date of Inspection	
Leo Sarmiento, WRCE Jim Fischer, WRCE Jose Figueuroa, WRCE Jim Polek, Enforcement Officer Roger Vintze, Branch Chief Eugene Mathis, Haz. Subs. Scientist		SWRCB-Office of Enforcement SWRCB-Office of Enforcement CR RWQCB (RB7) US EPA (Region 9) DTSC CUPA DTSC CUPA		August 27, 2013	
Inspection Report Prepared By: Leo Sarmiento/Jim Fischer (limited to SWRCB Programs)					
Name and Location of Facility Inspected			Entry Date/Time	Exit Date/Time	
National Beef CA LP 57 Shank Road Brawley, CA 92227			08/27/2013: (0830)	08/27/2013 (1745)	
Applicable Permits	Order No.	Regulatory Program	WDID No.	Permit Expiration Date	
Industrial Storm Water	97-03-DWQ	Storm Water	7 131020256	Renewed Annually	
Facility Receiving Water Name: N/A			Plant Classification: Cattle/Meat Packaging Plant (SIC 2011)		
Representative(s) Name(s) & Title(s): Brian Webb, Plant Manager			Contact Information: Phone No: (760) 351-2700 (main) email: brian.webb@nationalbeef.com		
Inspection Consent Approved By: Brian Webb, Plant Manager			Date	Time	
			08/27/2013	0850	
Description of Beef Production Process					
Slaughter (Cattle)	General operations: ~2,400 cattle processed per day; ~1300-1400 employees at worksite with 120 contract employees (for supporting cleaning operations); cattle are received via big rig truck trailers (~30 to 40 cattle/trailer); most cattle processed are supplied from ranches within California with occasional product received out-of-state. Slaughter shift: 8-hr operation/day (0530-1430 daily/weekdays only).				
Fabrication/Processing	Beef primal cutting (chuck, rib, loin, round, brisket, etc.); internal organs (hereafter, offal) are processed and sent to rendering onsite. Fab. Shift: 8-hr operation/day (0600-1500 daily/weekdays only).				
Packaging/Distribution	Packaging/storing meats from fabrication; distribution via cooled trailers.				
Rendering	Offal processing: variety meats/organ meats processed for pet food and/or fertilizer/fuel.				
Ground Beef Processing	Ground beef production (packaged into 10-lb. chubs); glycol chilling (closed loop) for antibacterial use; packaging done for distribution.				
Hide Operations	Hide curing operations/packaging done for sale to other countries.				

On August 27, 2013, the above Inspection Team performed an announced technical meeting and facility inspection with staff of the National Beef CA LP (NBC) to evaluate industrial operations with the requirements of Industrial Storm Water General Permit Order No. 97-03-DWQ and other applicable regulatory programs by each respective agency (DTSC, US EPA and SWRCB/RB). NBC is currently enrolled in Order 97-03-DWQ (Notice of Intent (NOI) filed on May 30, 2006). The main goal of this multi-agency facility inspection was to gain better understanding of the facility's operation in the production of beef products and by-products, and review the associated wastewater generated from its processes and pretreated before discharging to the sanitary sewer system. Due to time constraints, the inspection tasks did not include a detailed review of facility data/records, systematic compliance review of industrial stormwater permit, or detailed industrial wastewater pretreatment system review.

Pre-inspection Meeting

Inspection Team arrived at the facility approximately 8:30 a.m. on August 27, 2013. The weather was clear and warm (forecast daily high temperature 108 F). Inspection team met with NBC contact team namely; Brian Webb (Plant Manager), David Kalscheur (VP Engineering), William "Bud" Ludwig (Corporate Environmental Director), Cesar Robles (Safety Coordinator), Mark Jellison (Safety Director). After introductions, Leo Sarmiento requested verbal consent of approval to conduct facility inspection and take photographs. Brian Webb provided verbal consent at 8:50 a.m. with the condition that we provide copies of all photographs taken after the inspection. Leo Sarmiento and Jim Fischer (designated photographers) agreed to provide copies of photos taken after inspection and provided copies of all photos taken before leaving the site.

Leo Sarmiento started the meeting and provided the following details of the inspection agenda which included technical discussion and the onsite inspection tasks:

- Discuss facility operation (activities inside and outside facility buildings, major equipment used, chemicals used and sources and location of wastewater corresponding to each process operation)
- Discuss wastewater pretreatment facility (flow diagram, past and current operational issues/problems and corresponding solutions, other planned projects)
- Inspect facility and take photographs (afternoon session) – walkthrough of process operations and locations of corresponding areas where wastewater is generated and discharged into the wastewater pretreatment facility.

Facility Background

Brian Webb stated that NBC purchased the meat processing/packaging plant from Brawley Beef and started operations in 2006. NBC currently employs 1300-1400 workers with additional 120 contract sanitary employees for sanitation/cleaning purposes only. NBC is a beef packing company and Brian described the operational stages for cattle processing at the plant (see process description on page 1).

Dave Kalscheur (Vice President of Engineering) described the facility layout (see Photo 20 – Satellite view of NBC facility and wastewater pretreatment system/equipment). The identification numbers/letters correspond to the location of above ground storage tanks, oil storage drums/chemical storage and transformers (oil storage).

The storm water runoff from the west side of the facility is conveyed to a detention/percolation basin located north of the facility (adjacent to parking lot) and runoff from the east side of the facility is conveyed to a constructed "ditch" type detention/percolation basin located across the weighing station/guard post. A copy of the updated storm water pollution prevention plan was shown and briefly discussed.

Chemicals used in the production of beef are stored in totes and drums outside the plant building (see numbers 26-45 of the facility layout). The wastewater pretreatment facility is shown on the southern area of the plant building which is composed a diffused air flotation (DAF) unit, anaerobic digester (pond #1) with gas recovery for heating, aerobic pond (pond #2) with mechanical aerators and supplemental oxygen generator and pond #3 for final clarification and/or return of activated sludge to pond #2.

Facility Operation Description and Photographs

The facility inspection started in the clean areas (processing/packaging of ground beef production) followed by inspections in the dirty areas (slaughter operations, etc). However, for purposes of describing the order of process operation, the following describes cattle production from start of slaughter operation to finish beef products and by-products. Corresponding photographs describe typical daily work tasks that generate wastewater and discharged to the site wastewater pretreatment facility. The final effluent of the wastewater pretreatment facility is discharged to the City of Brawley's sewage collection system for further treatment at the City's wastewater treatment plant.

Attachments 1-2 provide illustrations of overall plant processing locations along with corresponding major equipment in place.

Slaughter

Beef cattle are brought into the facility via big rig trailer trucks (30-40 beef cattle/truck) and transferred into the unloading dock where water is sprayed to cool down the cattle. Approximately 700 beef cattle are staged in a covered corral that directs beef cattle one at a time into the slaughter area. Wastewater is generated from overhead sprays/misters to assist with cooling the cattle during hot weather and also from washing/cleaning manure and urine accumulated in the corral area. Wastewater is collected and combined with effluent from a DAF tank at the plant which is then discharged to an anaerobic digestion pond #1.

Photos below show the unloading dock for the beef cattle from truck trailers contained under a covered corral where wastewater is generated.



Photo 1: Unloading dock where truck trailers unload cattle; wet ground/ponding due to major rain event the night before.



Photo 2: Wastewater generated in cattle leading drawer area from water misters and floor washing



Photo 3: Wastewater discharged via a floor drain to pond #1



Photo 4: Wastewater from DAF #1 (bypassed using portable hoses) to pond #1 (see previous photo)



Photo 5: Slaughter area enclosure used for cattle bloodletting and collection of blood; product is transferred to truck trailer tanks via pipes/hoses



Photo 6: Floor condition after cleaning/washing with blood droppings on floor



Photo 7: Internal organ processing area



Photo 8: Typical floor drains within organ processing area

Fabrication (Primal Cutting)

Following slaughter operations, beef carcasses are then further processed into primal cuts (chuck, brisket, ribs, round, etc.) in the fabrication area. Solids dropped on the floor are removed prior to washing and cleaning. Wastewater is then discharged via floor drains connected to a sump pump in the basement.

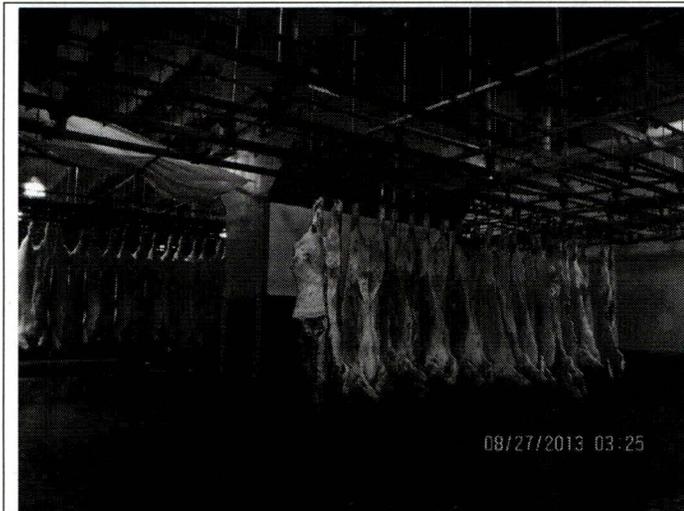


Photo 9: Carcasses are batch processed for quality control



Photo 10: Fabrication/cutting meat products



Photo 10: Fabrication area floor drain where washing is done

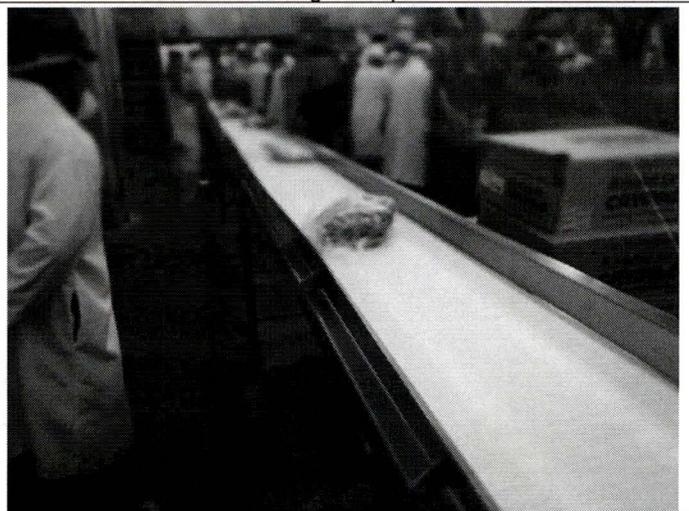


Photo 11: Packaging area with vacuum wrapping equipment in operation

Rendering/Hide Processing

The photographs below show the rendering units for processing offal, organ meats, fat trimmings, etc. transported to the rendering area via conveyors located in the basement.



Photo 12: Offal conveyors used for rendering operations



Photo 13: Basement floor condition below fabrication area



Photo 14: View of the screening operations in basement



Photo 15: Boiler/cooker or melt cooker for rendering operations

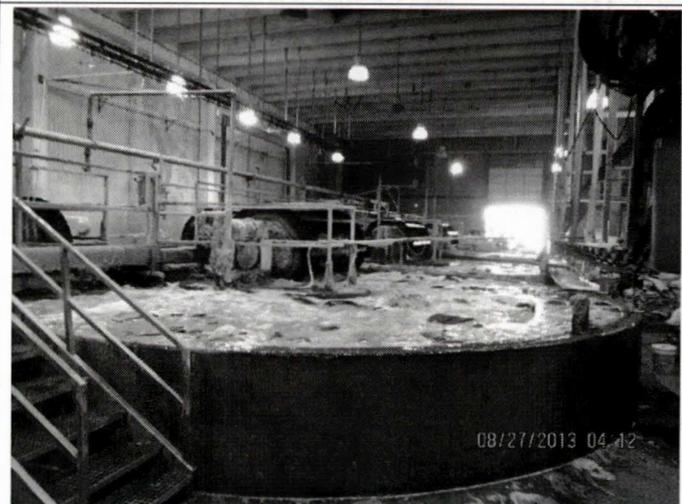


Photo 16: Hides being processed/soaked in brine solution



Photo 17: Close-up view of brine floor drain tank

Overall, slaughter and fabrication lines generate the largest volume of wastewater streams from the facility which then enter the pretreatment system for treatment and discharge to City of Brawley sanitary sewer collection system.

Ground Beef Production/Packaging

In addition to primal production, the facility also has a separate ground beef production line. The photos below show components of this production line including the packaging units used in the ground beef production operations. Floors in this area are typically dry cleaned first with manual collection and removal of meats dropped on the floor prior to the actual floor washing.

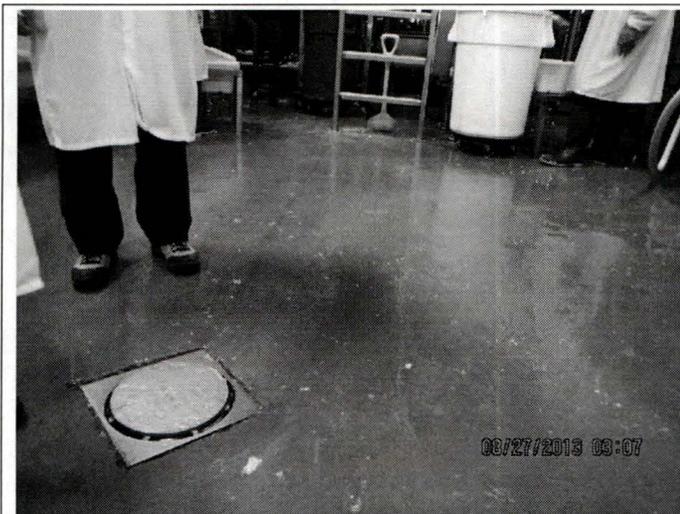


Photo 18: Floor drain/condition within ground beef floor area



Photo 19: Manual floor cleaning operations prior to washing

Outside Facility Operations:

Wastewater generated from all processing operations along with domestic sanitary sewage waste is conveyed to a wastewater pretreatment facility via a series of sump pumps and lift stations. Photo 20 below illustrates the overall layout of the wastewater pretreatment facility showing major treatment trains (Diffused Air Flotation (DAF) units, Anaerobic Pond #1, Aerated Pond #2, Clarification Pond #3, Suspended Air Flotation (SAF) unit, and sludge handling units (Belt Press and Sludge Load-out)).

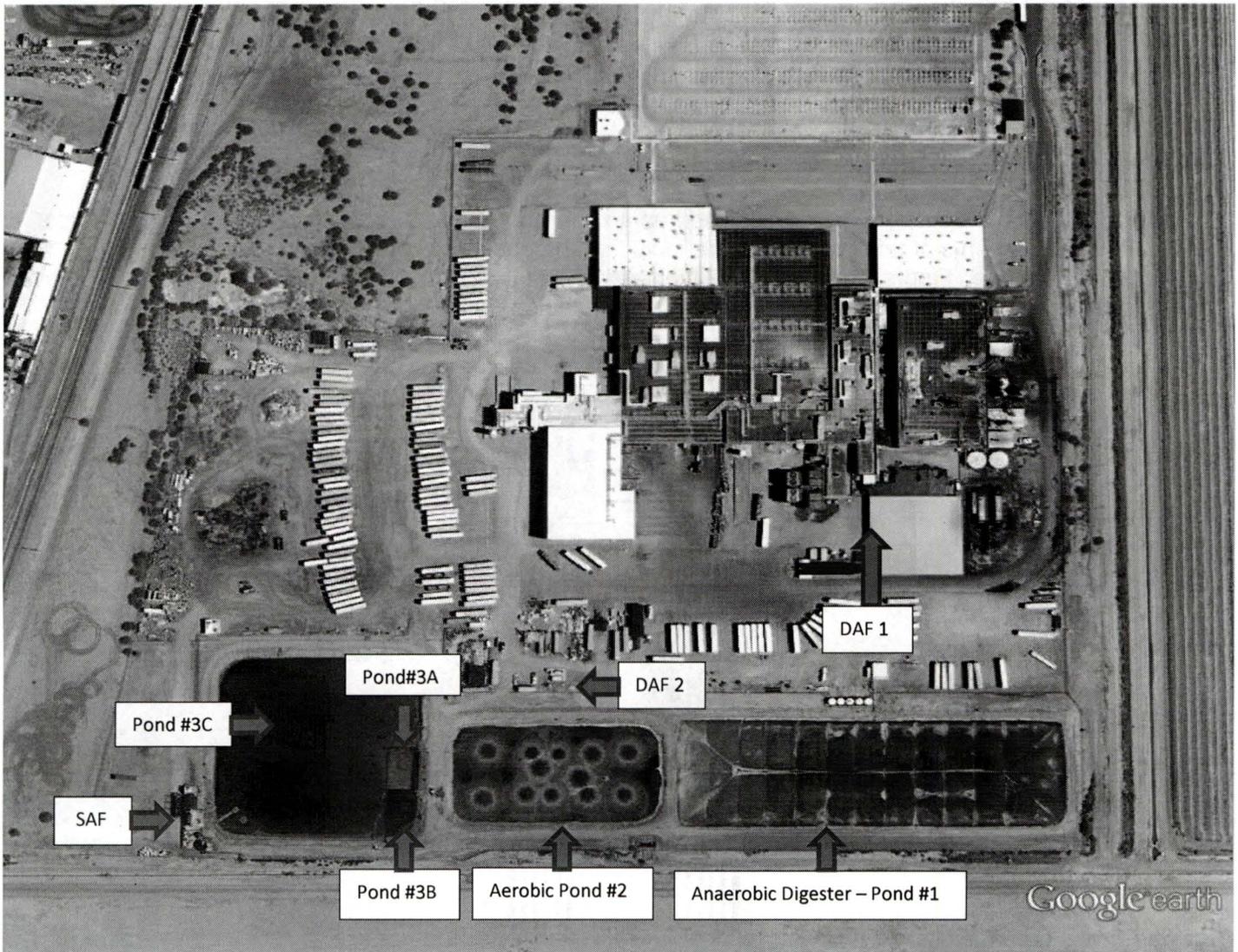


Photo 20: Satellite view of NBC facility and wastewater pretreatment system/equipment

Description of major treatment units at the wastewater pretreatment facility with reference to the technical documents prepared by HR Green, Inc. (Industrial Wastewater Pretreatment, April 2013) include:

- a. Screening/DAF (Diffused Air Flotation) Unit #1
 - primary solids separation; two DAF units with a splitter box for parallel operation
 - magnetic flow meter for influent flow to the two DAF units
- b. Pond #1 (Anaerobic Digestion)
 - BOD reduction and gas production
 - gas recovery for boiler operations
 - receives gravity flow from DAF units and domestic wastewater diversion (newly installed)
 - average discharge rate from Pond #1 is 1200 gallons per day (gpm) into DAF #2

- c. DAF Unit #2
 - solids removal from pond #1
- d. Pond #2 (Aeration Pond)
 - mechanical aerators/enhanced oxygen aeration; BOD/NH3 reduction
- e. Pond #3 (Clarification/Return Activated Sludge (RAS) and Waste Activated Sludge (WAS))
 - Solids removal (WAS) and recirculation (RAS)
- f. Final processing (Suspended Air Flotation (SAF) unit)
 - coagulation/filtration/sludge disposal
 - treated waste is then metered to City of Brawley sanitary sewer collection system

Attachments 3-4 illustrate wastewater treatment processes and flows prior to final discharge to the City's sewage collection system (provided and updated by David Kalscheur of NBC).

Following the walkthrough of inside processes at the plant, the Inspection Team then inspected outside facilities including the pretreatment facility. The inspection team started at DAF#1 and ended at the final effluent discharge location near the solids handling units (southwest portion of the facility located adjacent to Pond #3). According to Brian Webb, the pretreatment facility has a total of six (6) dedicated operators on rotating shift work schedule with a certified Grade 3 wastewater operator-in-charge. All process waters (1,800-2,000 gallons per minute) were pumped into DAF#1 for solids separation and offsite disposal (composting). The DAF#1 unit was equipped with influent magnetic flow meter and a flow-paced composite sampler for process control/monitoring. Following summary of wastewater flow volume into DAF#1:

- Process wastewater – 1,800 to 2,300 gallons per minute (gpm) depending on changes of production schedule
- Boiler blowdown - 28,800 gallons per day (gpd)
- Brine – 42,000 gpd

Effluent from DAF #1 was discharged into Pond #1 (anaerobic digester) together with plant sanitary discharge. Pond #1 has 10 million gallon capacity with biogas production for boiler heating operations. Effluent from Pond #1 was discharged to DAF #2 for grease removal and then to Pond #2 for aerobic treatment. Pond #2 was equipped with mechanical aerators, air blowers and oxygen generator to enhance oxygen supply below 4 feet. Solids content in Pond #2 are controlled by wasting solids into Pond #3, and periodically recirculating solids back into Pond #2 using a 50 horsepower recirculation pump. Mixed liquor suspended solids (MLSS) was maintained at 4,000 mg/liter in Pond #2.

Effluent from Pond #2 was discharged to Pond #3 which was modified into Pond #3A for Return Activated Sludge (RAS)- Waste Activate Sludge (WAS) and secondary clarifier, Pond #3B for pond level control and Pond #3C (not part of the current treatment process – solids were removed in fall of 2012). Pond #3C was also available for total solids slug diversion should there be solids overload to the solids treatment train. Solids from Pond #3B were sent to a flocculation tank and then to Suspended Air Flotation (SAF) unit. Solids from SAF were pumped to a Belt Press unit for offsite disposal and final effluent was discharged to the City of Brawley's collection system. During the inspection, both Total Suspended Solids (TSS) meters installed at the final effluent pipe were out of service. A flow paced sampler was taking samples of the final effluent prior to discharge to the City's sewer system.

The following photographs show the conditions of the wastewater pretreatment system at time of the inspection:

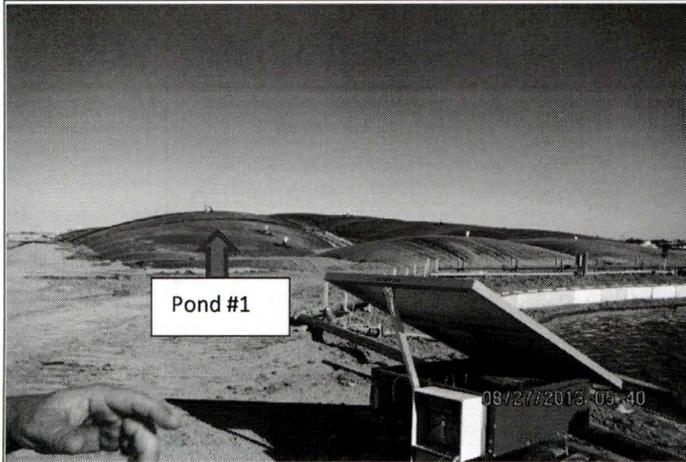


Photo 21: View of Pond#1 with covered matting

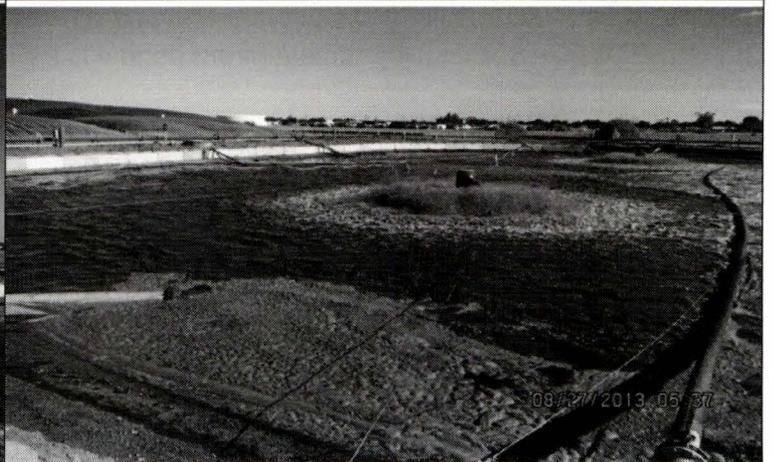


Photo 22: View of Pond#2 with operational aeration system



Photo 23: View of Pond #3A (right) and Pond #3B (left)



Photo 24: View of Pond #3C

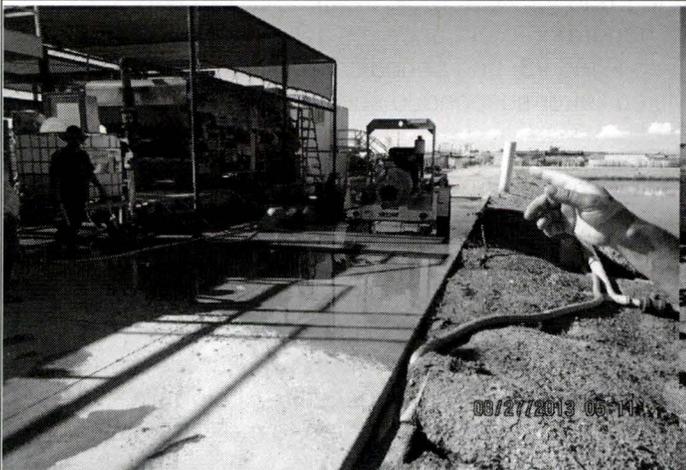


Photo 25: View of final solids handling units

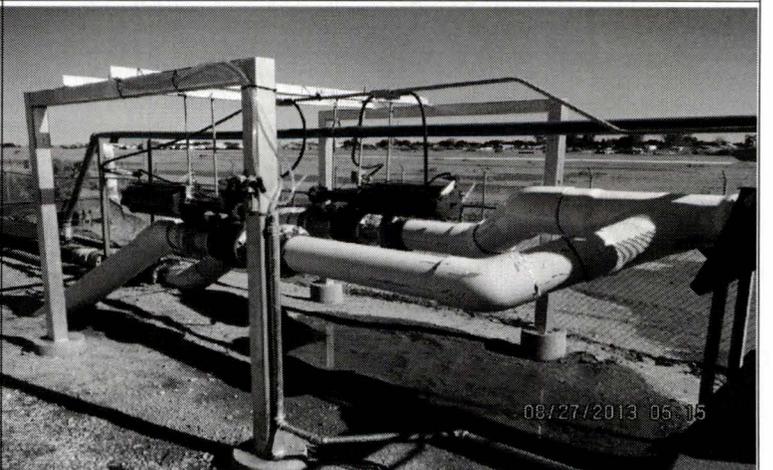


Photo 26: View of final plant effluent discharge valves (right valve connected to City of Brawley sanitary sewer and left valve connected to Pond #3 to allow for plant return flow diversions/operational flexibility)

Conclusion

A successful technical exchange of information was accomplished during this initial inspection of NBC. Technical review and documented portions of the announced inspection included tours of all major inside and outside processing activities including the wastewater pretreatment facility which was in full operation during the entire facility inspection. The wealth of information gained during the inspection will be helpful in providing the inspection team with additional technical insights regarding the facility complexities, operational challenges, and ongoing projects to ensure continuous wastewater pretreatment compliance.

The inspection team confirmed that no leather tanning/finishing activities are undertaken at the facility which would require a pretreatment permit for these categorical standards pursuant to 40 CFR, part 425 regulations.

A future Pretreatment Compliance Audit/Inspection (PCA/PCI) for NBC would provide additional technical information regarding facility pretreatment compliance performance which could be undertaken as part of a future industrial pretreatment program evaluation for the City of Brawley.

