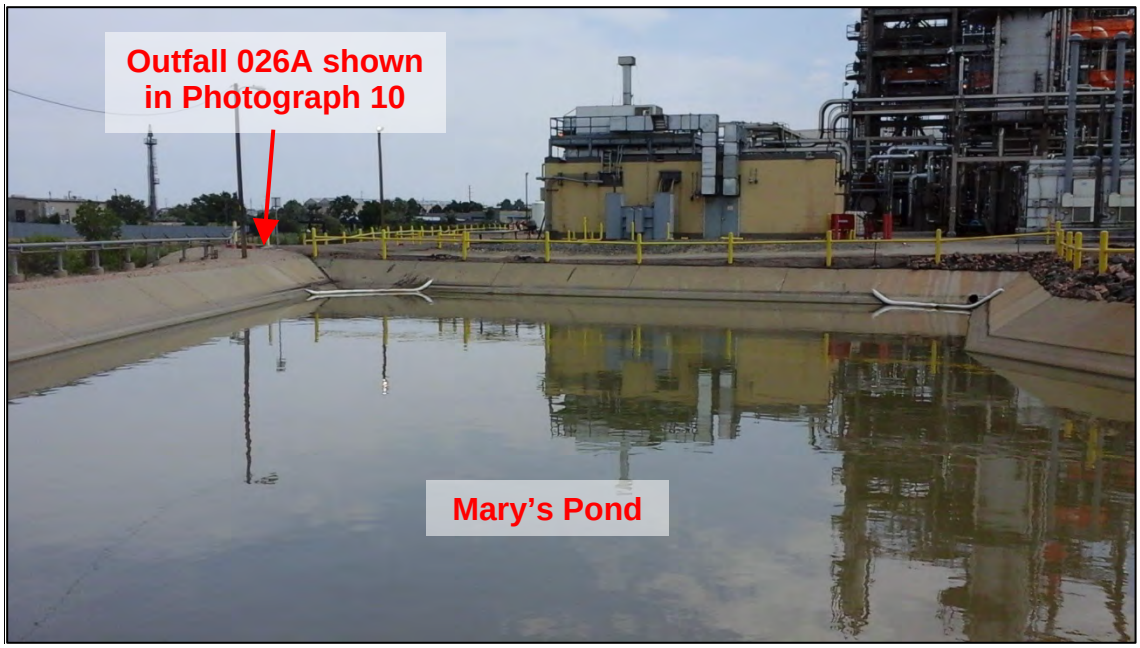
Appendix A - Photograph Log



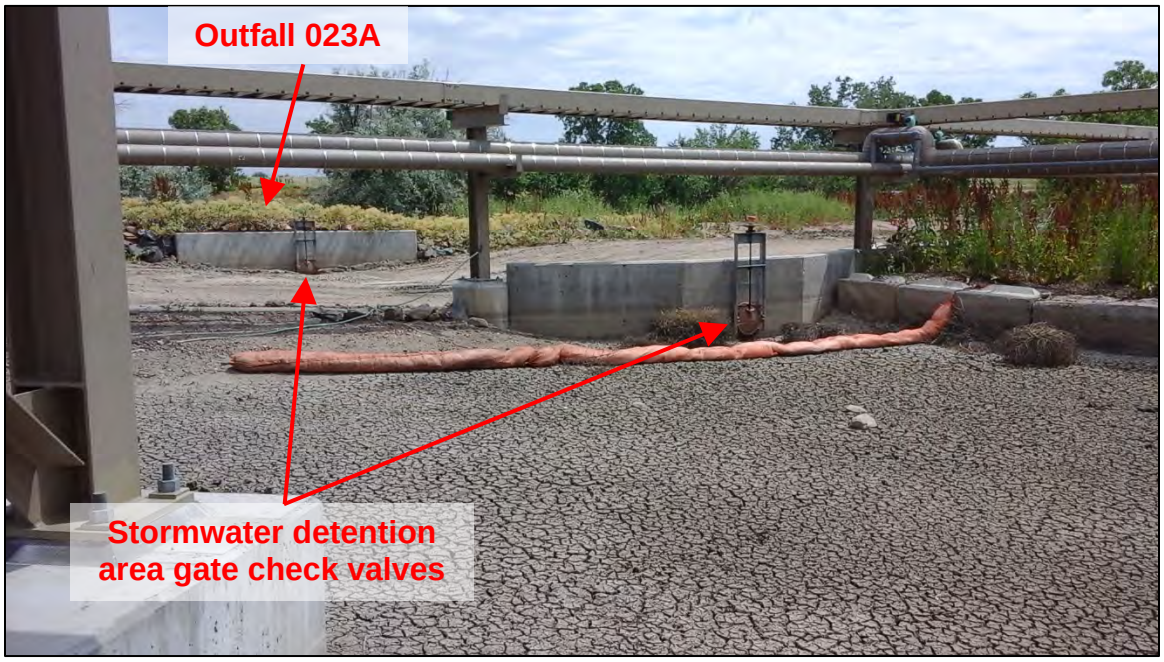
Photograph 1. View, facing southeast, of Mary's Pond receiving stormwater runoff from Plant 3 (asphalt plant). Mary's Pond can be pumped to the WWTP or discharged through Outfall 004A.

Photograph 2. View of Outfall 004A to Sand Creek from Mary's Pond, shown in Photograph 1.

Photograph 3. View, facing west, from the Colorado Boulevard right-of-way, of Outfall 021A at the northeast corner of the Nelson Property. The stormwater detention basin on the northeast side of the property is located behind the white fence. Outfall 021A is noted as the location where accumulated stormwater is monitored and also where stormwater is commingled with stormwater runoff from the City of Commerce City's MS4 from Colorado Boulevard.

Photograph 4. View of a storm drain culvert inlet along Colorado Boulevard adjacent to the Nelson Property. This MS4 culvert outlets at the headwall shown in Photograph 3 at the same location as Outfall 021A from the Nelson Property.

Photograph 5. View of Outfall 022A on the northwest side of the Nelson Property. This outfall drains into an adjacent offsite (behind chain link fence) parking lot and potentially to the City of Commerce City MS4.

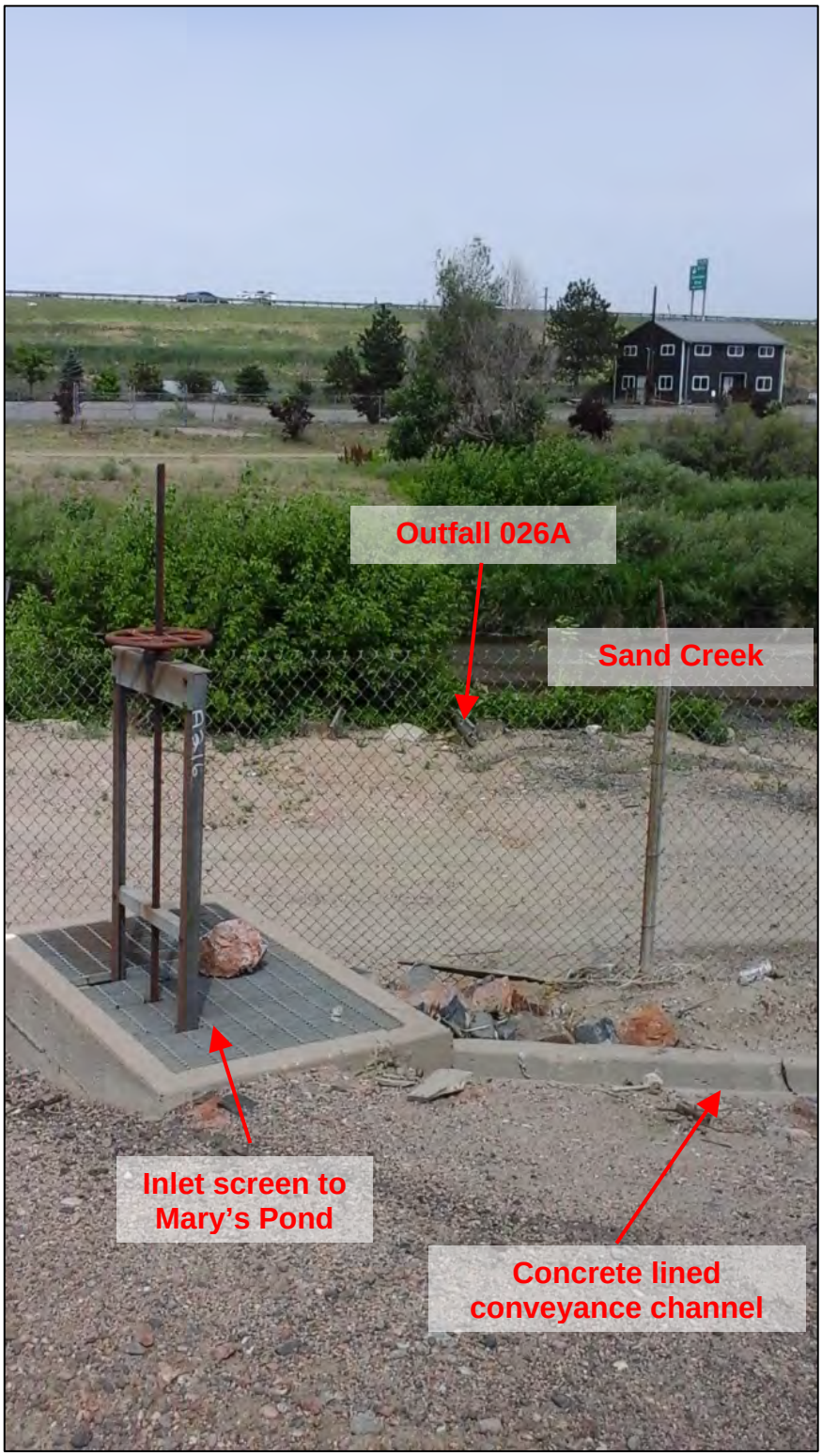


Photograph 6. View of Outfall 023A and the two gate check valves for the Outfall 023A stormwater detention area.

Photograph 7. Close-up view of Outfall 023A from stormwater detention area, shown in Photograph 6, which discharges into Sand Creek.

Photograph 8. View, facing north, from Outfall 023A towards Sand Creek.

Photograph 9. View, facing northwest, of Outfall 024A downgradient of a stormwater detention basin that captures runoff from the Plant 2 employee parking lot.



Photograph 10. View, facing east, of Outfall 026A which is a high flow contingency (i.e., overflow) discharge point from the Plant 3 east perimeter concrete lined conveyance channel that flows to Mary's Pond (refer to Photograph 1).

Photograph 11. View, facing northeast, of the stormwater detention area located immediately east of the GWTS. This stormwater detention area overflows towards the Sand Creek Swale Pond and to the stormwater detention area before discharges to Outfall 023A. This stormwater detention area is not identified in the SWMP.

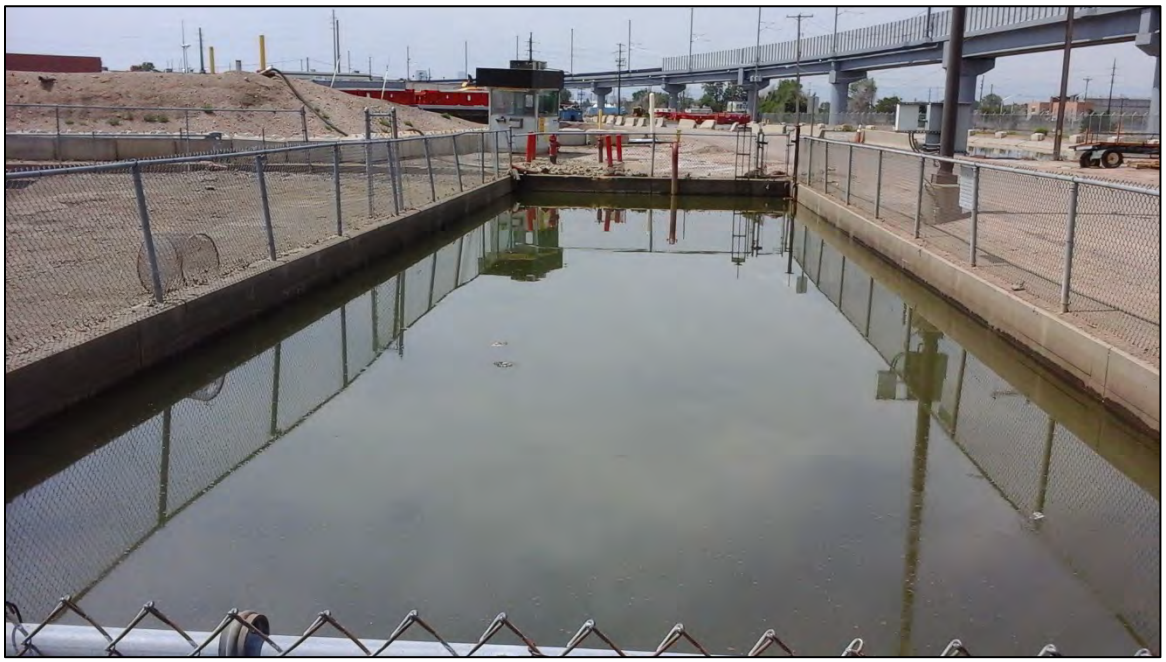
Photograph 12. View of the Sand Creek Swale Pond located between Plant 1 and Sand Creek where hydrocarbons during wet weather or times of elevated groundwater levels migrates to the ground surface. Note the black oil staining on the ground surface and netting to restrict wildlife access.

Photograph 13. View, facing southwest, of the stormwater detention area upgradient of Outfall 023A.

Photograph 14. View, facing east, of the stormwater detention basin in the northeast corner of the Nelson Property which discharges to Outfall 021A (refer to Photograph 3). Accumulated sediment and vegetative growth was observed within the basin.

Photograph 15. View, facing north, of a valley gutter leading into the stormwater detention basin shown in Photograph 14. Note the accumulated sediment in and around the valley gutter.

Photograph 16. View, facing west, of the stormwater detention basin located in the northwest corner of the Nelson Property. This basin discharges through Outfall 022A shown in Photograph 5. Note the significant vegetative growth potentially diminishing the capacity and effectiveness of this stormwater control.



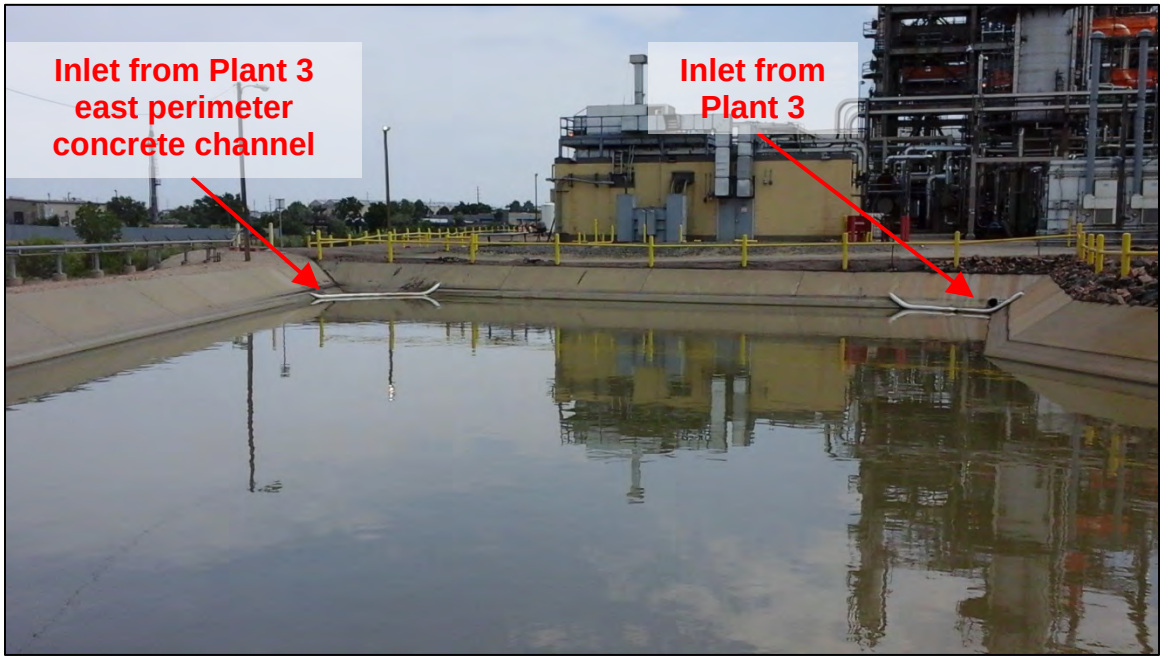
Photograph 17. View, facing south, of Facility's onsite Finger Lake impoundment.

Photograph 18. View, facing south, of the Facility's onsite Webber's Pond. Note the accumulated trash and debris within the pond itself.

Photograph 19. View, facing southeast, of an inlet into the southeast corner of Webber's Pond. Not the trash and debris in the pond adjacent to this inlet.

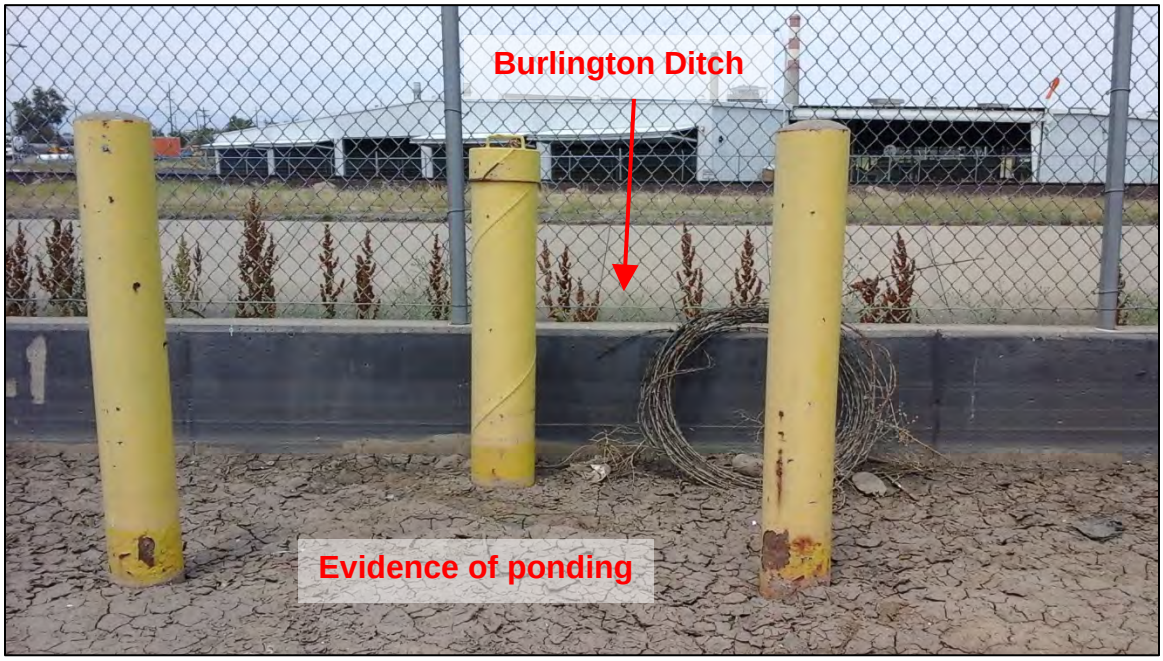
Photograph 20. View of the pump that transfers the contents of Finger Lake into Webber's Pond or to the WWTP. The pump was located within secondary containment; however, petroleum product staining was observed on the ground surface outside of the containment.

Photograph 21. View of transfer hose that connects Finger Lake and Webber's Pond.



Photograph 22. View of Mary's Pond. This pond contained three inlets and one outlet to Outfall 004A. However, pumping equipment was also installed to pump the contents of Mary's Pond to the WWTP during normal conditions, as shown in Photograph 23.

Photograph 23. View of the pump that transfers the contents of Mary's Pond to the WWTP during normal conditions.



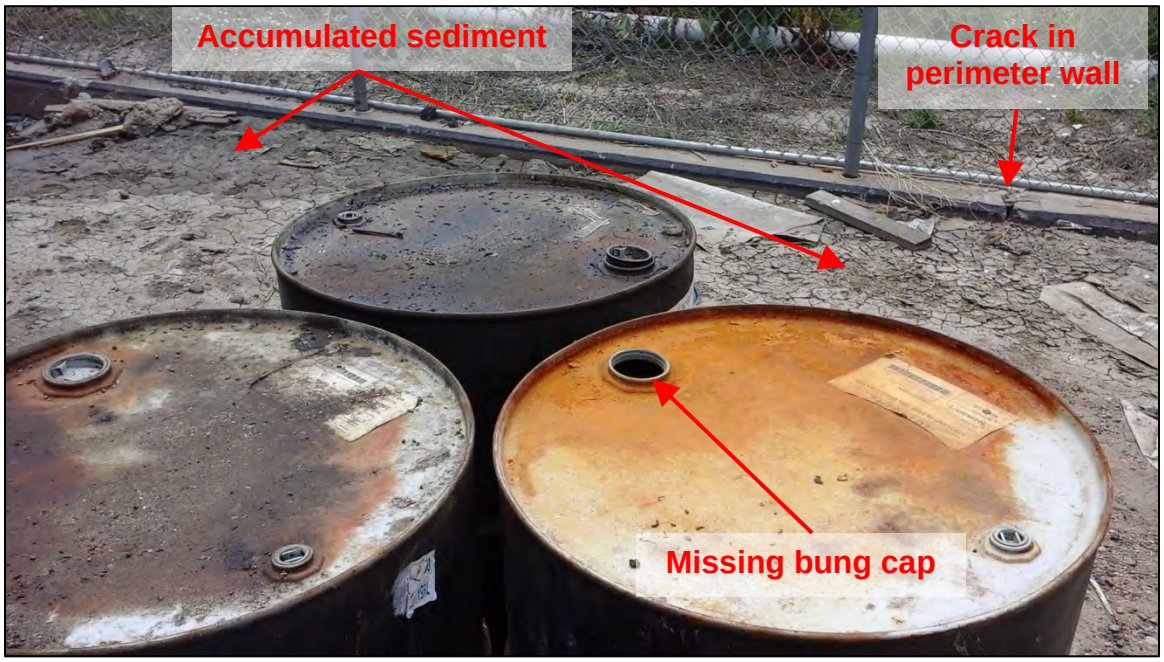
Photograph 24. View, facing south, of evidence of ponding between Webber's Pond and the western Facility wall adjacent to the Burlington Ditch. Mr. Marler explained that the 2015 overflow and discharge event from Webber's Pond to the Burlington Ditch occurred near this location.

Photograph 25. View of waste chemical and used oil totes and drums storage area to the southeast of Webber's Pond. Secondary containment was not provided for these materials. Note the Facility's perimeter chain link fence.

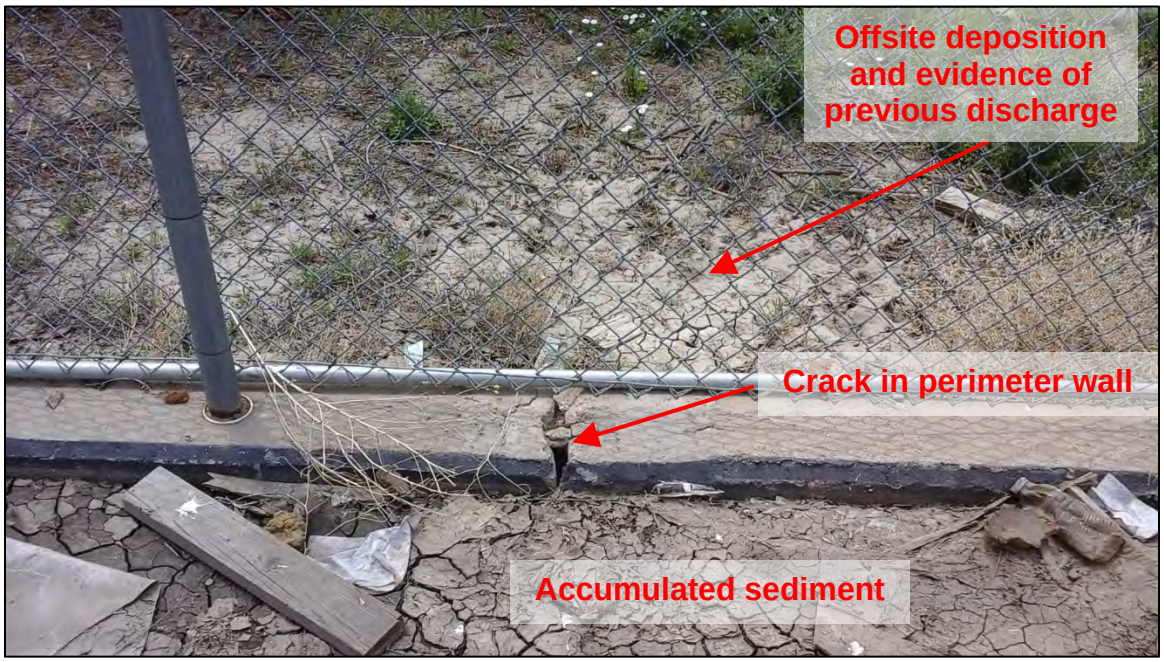
Photograph 26. View, facing north, of sediment accumulation against the Facility's south perimeter wall at the waste chemical and used oil storage area shown in Photograph 25. Note secondary containment was not provided for these totes of waste fluids.

Photograph 27. Additional view of accumulated sediment along the south perimeter wall shown in Photograph 26. Note the depth of sediment varied along this perimeter wall.

Photograph 28. Additional view of accumulated sediment along the south perimeter wall. Also note secondary containment was not provided for the 55-gallon drums of used oil.



Photograph 29. Additional view of accumulated sediment along the south perimeter wall as shown in Photograph 28. Note one of the 55-gallon drums of used oil was missing a bung cap. Also note the crack in the perimeter wall (also shown in Photograph 30).



Photograph 30. View of a crack in the southern perimeter wall shown in Photograph 29. Evidence of previous stormwater and sediment discharges from this location were observed (e.g., deposition of sediment offsite on the opposite side of the wall).

Photograph 31. View, facing south, of evidence of erosion occurring upgradient of the Plant 3 east perimeter concrete channel that leads to Mary's Pond (Outfall 004A) or to Outfall 026A during high flow events. Red dotted arrow indicates flow direction. According to Facility representatives this continual flow was from non-contact cooling water in Plant 3 into this channel. Note the slope above the channel was eroded due to the continual flow.

Photograph 32. View, facing north, of rill formation on the east embankment of Webber's Pond. Note the sediment deposited in Webber's Pond below the rill. Also note the uncovered scrap and waste dumpsters located upgradient of Webber's Pond.

Photograph 33. View, facing south, of additional rill formations along the eastern embankment of Webber's Pond. Note the sediment deposited in Webber's Pond beneath the rill. Also note the torn poly liner for Webber's Pond, as shown in Photograph 36.

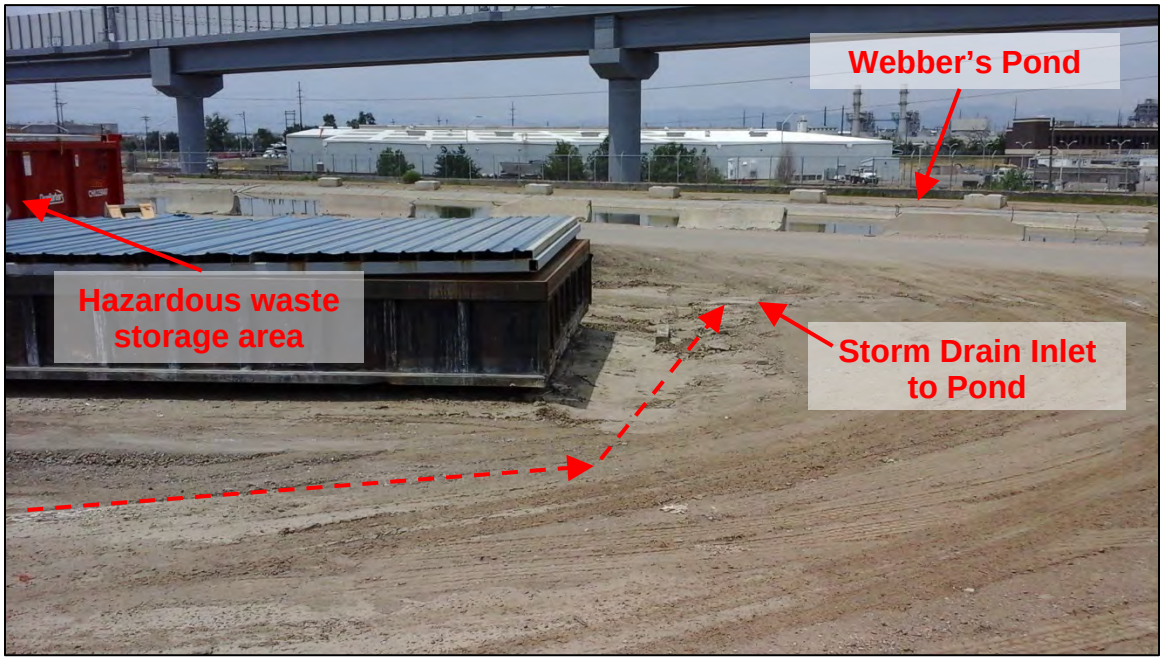
Photograph 34. View of crushed 55-gallon drums in one of the uncovered scrap and waste dumpsters located adjacent to Webber's Pond, shown in Photograph 32.

Photograph 35. View of leachate on the ground surface beneath the uncovered scrap and waste dumpsters shown in Photographs 32 and 34.

Photograph 36. Close-up view of the torn poly liner of Webber's Pond shown in Photograph 33.

Photograph 37. View, facing southwest, of the hazardous waste storage area located in Plant 1, east of Webber's Pond. Note six (6) red hazardous waste dumpsters were stored outside of this designated hazardous waste storage area and lacked secondary containment. Red dotted arrow indicates flow direction; refer to Photographs 38 and 39 for the observed flow pathway.

Photograph 38. View, facing south, of the hazardous waste storage area located in Plant 1, east of Webber's Pond. Red dotted arrow indicates flow direction; refer to Photograph 39 for observed flow pathway to Webber's Pond.



Photograph 39. View of the observed flow pathway from the area with the six (6) red hazardous waste dumpsters to Webber's Pond, as shown in Photographs 37 and 38. Stormwater runoff from this area enters a storm drain which flows to the adjacent Webber's Pond.