

Badin Business Park

Summary of Solid Waste Management Units

Updated February 2023

This document lists a total of 49 potential waste areas that have been monitored by Badin Business Park. There are 47 Solid Waste Management Units and two Areas of Concern. Note: one site (SWMU #41) was co-listed with NC DEQ Inactive Hazardous Sites Branch in 2018.

1. On-Site Landfill

Action: A series of actions have been implemented to address issues involving the landfill, the former K088 Storage Pad (SWMU #4) and the Wet-Weather Run-on Diversion (SWMU #33). Efforts included surface water control improvements to bring Outfall 013 into compliance with the site's water quality permit; the installation of a two-foot thick, low permeability soil cover over the landfill and former storage pad; the replacement of open ditches with sealed-joint concrete pipe; and the relocation of the Wet-Weather Run-On Diversion outside the landfill.

Current Status: The Corrective Measures Study is currently under review by the State of North Carolina. Additional investigations have been performed at the state's direction.

2. Alcoa-Badin Landfill

Action: A series of actions have been implemented, including re-grading and cover improvements designed to prevent surface run-on, promote surface run-off, and reduce infiltration (1997). A low-flow seep collection system was installed to manage a seep discharge; this discharge was later eliminated through the installation of a force main that routed seep water to a local treatment facility (2005). The seep collection system was later upgraded with the installation of a slurry wall and trench-based seep collection system between the landfill and Little Mountain Creek.

Current Status: The Corrective Measures Study is currently under review by the State of North Carolina. Additional investigations have been performed at the state's direction.

3. Old Brick Landfill

Action: The landfill was graded, covered with compacted clay, and seeded with grass (1987). Since then, Alcoa has taken additional efforts to minimize infiltration of surface waters into the landfill. This included improvements to a diversion channel to route surface water run-on around the landfill (1996) as well as landslide and cover repairs (1997). These actions address the general recommendations contained in Law Environmental's 1994 Landfill Cap Inspection Report. In addition, a new cover and stormwater management system was installed to eliminate contact between stormwater and water infiltration from landfill waste materials (2007). This system was later upgraded to increase the capacity to infiltrate surface water from large storm events (2010).

Current Status: The Corrective Measures Study is currently under review by the State of North Carolina. Additional investigations have been performed at the state's direction.

4. Former K088 Storage Pad

Action: A series of actions were designed to address issues involving the storage pad, the On-site Landfill (SWMU #1) and the Wet-Weather Run-on Diversion (SWMU #33). Efforts included surface water control improvements to bring Outfall 013 into compliance with the site's water quality permit; the installation of a two-foot thick, low permeability soil cover over the landfill and former storage pad; the replacement of open ditches with sealed-joint concrete pipe; and the relocation of the Wet-Weather Run-On Diversion outside the landfill.

Current Status: The Corrective Measures Study is currently under review by the State of North Carolina. Additional investigations have been performed at the state's direction.

5. Former K088 Waste Storage Structure 058

Action: The permitted facility was closed (1992).

Current Status: No further investigation or action required.

6. K088 Storage Building 206 - North

Action: The permitted facility was closed (2012).

Current Status: No further investigation or action required.

7. Aerated Lagoon

Current Status: Letter recommended that no further investigation or action required (2007).

8. Neutralization Tank

Current Status: The RCRA Facility Assessment recommended that no further investigation and no further action is required (1990).

9. Spent Caustic Building

Current Status: The RCRA Facility Assessment recommended that no further investigation and no further action is required (1990).

10. Air Compressor Oil/Water Separator

Action: With state approval, this site was combined with SWMU #7 (1993).

Current Status: No further investigation or action required.

11. Waste Oil Accumulation Area / Misc. Storage Area / Pot Pad Burning Area [2] / Old Bake Furnace Site

Action: This site was investigated through the RCRA Facility Investigation.

Current Status: The RCRA Facility Investigation Report recommended that no further investigation and no further action is required. The report was approved by the State of North Carolina in 2007.

12. Above-Ground Waste Oil Tank

Action: With state approval, this site was combined with SWMU #11 (1993).

Current Status: No further investigation or action required.

13. Former Underground Waste Oil Storage Tank

Action: With state approval, this site was combined with SWMU #11 (1993).

Current Status: No further investigation or action required.

14. Anode Assembly Iron Melting Furnace Baghouse

Current Status: The RCRA Facility Assessment recommended that no further investigation and no further action is required (1990).

15. Rod Blast Baghouse

Current Status: The RCRA Facility Assessment recommended that no further investigation and no further action is required (1990).

16. Butt Blast Baghouse

Current Status: The RCRA Facility Assessment recommended that no further investigation and no further action is required (1990).

17. Machine Shop Baghouse [1]

Current Status: The RCRA Facility Assessment recommended that no further investigation and no further action is required (1990).

18. Machine Shop Baghouse [2]

Current Status: The RCRA Facility Assessment recommended that no further investigation and no further action is required (1990).

19. Sludge Dewatering Bed

Current Status: The RCRA Facility Assessment recommended that no further investigation and no further action is required (1990).

20. Vehicle Wash Station

Action: Confirmation sampling was conducted (1993).

Current Status: No further investigation or action required.

21. Sandblast Area

Current Status: The RCRA Facility Assessment recommended that no further investigation and no further action is required (1990).

22. Scrap Yard

Action: 725 tons of surface and subsurface debris and soils were removed from the site and properly disposed. Clean soil was imported to backfill deeper parts of the excavation; a 30-mil HDPE liner was placed over the backfill; and the area was covered with #57 washed stone (1994). In accordance with best management practices, storm sewers were cleaned and additional surface soils were excavated and disposed of properly.

Current Status: The Corrective Measures Study is currently under review by the State of North Carolina.

23. Former Waste Paint Storage Area

Current Status: The RCRA Facility Assessment recommended that no further investigation and no further action is required (1990).

24. Caustic Degreaser

Current Status: The RCRA Facility Assessment recommended that no further investigation and no further action is required (1990).

25. Underground Conveyance Line to NPDES Outfall 009

Action: The North Storm Drain piping was voluntarily repaired and replaced with sealed joint pipe. Sections of the conveyance line were relocated or raised above the groundwater table (1990)

Current Status: The Corrective Measures Study is currently under review by the State of North Carolina.

26. Former Underground Conveyance Line to NPDES Outfall 001

Current Status: The RCRA Facility Assessment recommended that no further investigation and no further action is required (1990).

27. Underground Conveyance Line to NPDES Outfall 001

Current Status: The RCRA Facility Assessment recommended that no further investigation and no further action is required (1990).

28. Underground Conveyance Line to NPDES Outfall 003

Current Status: The RCRA Facility Assessment recommended that no further investigation and no further action is required (1990).

29. Underground Conveyance Line to NPDES Outfall 004

Current Status: The RCRA Facility Assessment recommended that no further investigation and no further action is required (1990).

30. Underground Conveyance Line to NPDES Outfall 005

Current Status: The RCRA Facility Assessment recommended that no further investigation and no further action is required (1990).

31. Stormwater Oil/Water Separator [1]

Current Status: The RCRA Facility Assessment recommended that no further investigation and no further action is required (1990).

32. Stormwater Oil/Water Separator [2]

Current Status: The RCRA Facility Assessment recommended that no further investigation and no further action is required (1990).

33. Wet-Weather Run-on Diversion

Action: A series of actions were designed to address issues involving the Wet-Weather Run-on Diversion, the On-site Landfill (SWMU #1) and the former K088 Storage Pad (SWMU #4). Efforts included surface water control improvements to bring Outfall 013 into compliance with the site's water quality permit; the installation of a two-foot thick, low permeability soil cover over the landfill and former storage pad; the replacement of open ditches with sealed-joint concrete pipe; and the relocation of the Wet-Weather Run-On Diversion outside the landfill. Interim measures included of raising wet-storm water pipes and ditches outside the areas of Spent Pot Lining and at elevations above the groundwater table.

Current Status: The Corrective Measures Study is currently under review by the State of North Carolina. Additional investigations have been performed at the state's direction.

34. Miscellaneous Storage Area

Action: With state approval, this site was combined with SWMU #11 (1993).

Current Status: No further investigation or action required.

35. Former Waste Oil Storage Area

Action: PCB-impacted soils were excavated and removed (2012).

Current Status: The Corrective Measures Study is currently under review by the State of North Carolina. Additional investigations have been performed at the state's direction.

36. Pot Pad Burning Area (1)

Action: Confirmation sampling was conducted (1993).

Current Status: No further investigation or action required

37. Pot Pad Burning Area (2)

Action: With state approval, this site was combined with SWMU #11 (1993)

Current Status: No further investigation or action required.

38. Old Rotary Station

Action: This site was investigated through the RCRA Facility Investigation.

Current Status: The RCRA Facility Investigation Report recommended that no further investigation and no further action is required. The report was approved by the State of North Carolina in 2007.

39. PCB Storage Building

Action: Confirmation sampling was conducted (1993).

Current Status: No further investigation or action required.

40. Former Anode Bake Furnace

Action: With state approval, this site was combined with SWMU #11 (1993)

Current Status: No further investigation or action required

41. R-173 Lime Fill

Action: This site was co-listed with NC DEQ Inactive Hazardous Sites Branch (2018).

Current Status: On May 17, 2017, Badin Business Park requested that SWMU 41 be regulated solely under the authority of the facility's RCRA permit as SWMU 41 rather than under the Inactive Hazardous Sites Branch (IHSB) as Alcoa-Pine Rd Ravine Disposal site (NONCD0001177). This request was made because the IHSB site NONCD0001177 and SWMU 41 are in fact one in the same. On February 16, 2018, the NC Department of Environmental Quality determined that SWMU 41 should remain under the authority of the IHSB.

42. Building 016

Action: This site was investigated through the RCRA Facility Investigation.

Current Status: The RCRA Facility Investigation Report recommended that no further investigation and no further action is required. The report was approved by the State of North Carolina in 2007.

43. Overhead Crane Rebuild Structure

Action: This site was investigated through the RCRA Facility Investigation.

Current Status: The RCRA Facility Investigation Report recommended that no further investigation and no further action is required. The report was approved by the State of North Carolina in 2007.

44. Pine Tree Grove Area

Action: This site was identified in 1996 and investigated through the RCRA Facility Investigation and Corrective Measures Study.

Current Status: The Corrective Measures Study is currently under review by the State of North Carolina. Additional investigations have been performed at the state's direction.

45. Bogan's Radiator Shop

Note: This was an unpermitted discharge onto Alcoa property that occurred in 2003

Action: Impacted soils were excavated and removed (2003). These measures met remediation goals for the site.

Current Status: No further investigation or action required.

46. Coke Management Area (formerly West SPL Area)

Action: This site was identified in 1999 and included in the RCRA Facility Investigation (2001). To improve stormwater runoff from the area, a clay mat, topsoil cover and vegetation cap was voluntarily installed (2003). In accordance with best management practices, surface water diversions and an asphalt cover were installed (2016, 2019).

Current Status: The RCRA Facility Investigation Report recommended that no further investigation and no further action is required. The report was approved by the State of North Carolina in 2007.

47. Former Pot Shell Cutting Area

Action: Soils removed (1996). Post removal soil samples did not contain detectable concentrations of the constituent of concern.

Current Status: No further investigation or action required.

Areas of Concern

AOC-A: Fuel Oil Tank Release

Action: More than 1,300 cubic feet of contaminated soil was excavated and removed (1985).

Current Status: The RCRA Facility Investigation Report recommended that no further investigation and no further action is required. The report was approved by the State of North Carolina in 2007.

AOC-B: Compressor Oil Leakage Area

Action: Contaminated surface and near surface soils were removed and properly disposed in conjunction with the closure of the aerated lagoon (SWMU #7).

Current Status: The RCRA Facility Investigation Report recommended that no further investigation and no further action is required. The report was approved by the State of North Carolina in 2007.