West Virginia

Pollution Abatement

Preapproved Items

Note: The items listed have been pre-approved by the West Virginia Department of Environmental Protection (DEP) as pollution abatement equipment and will receive salvage value treatment. Items that are not listed will require approval by the DEP in order to receive special treatment.

POLLUTION ABATEMENT CONTROL EQUIPMENT

1. Absorber. Device to separate liquids and gases by use of solvents through mass transfer in the control of waste emissions.

2. Activated Sludge Equipment. Devices that handle, treat and separate sewer sludge from wastewater streams. (Same as sludge handling system.)

3. Aerator. A device for exposing liquids to the circulation of air (oxygen) for purification. (Only applicable when used for waste treatment.)

4. After Burner. A devise that burns combustible gases (tail gas) before they are released into the atmosphere.

5. Air Pollutant Capture Evacuation Systems. Hoods, enclosures, ductwork, stacks and fans used to collect air pollutants for treatment and emissions control by air pollution abatement equipment.

6. Air Pollution Monitoring Equipment. Continuous emission monitors (CEMs), opacity monitors, and ambient air quality and meteorological monitors.

7. Air Tank. A tank that stores compressed waste air (discharge) for treatment.

8. Aircoil Cooling Tower. A tower in which air is cooled for the purpose of increasing the effectiveness of the baghouse used for pollution control.

9. Alarm System. Visual or audible systems designed to warn of actual or potential environmental incident or waste emissions caused by equipment operating outside of normal limits.

10. Ambient Air Monitoring System. Sampling and analytical equipment to establish background pollutant levels in the air.

11. Antifreeze Recycling Units. Equipment that refines waste antifreeze into a usable product (as long as not marketed as a product).

12. Baghouses or Fabric Filtration Unit (including shaker, reverse-air and pulsejet cleaning systems). A devise that removes particulates from an airflow for pollution abatement.

13. Bioremediation Systems. Typically an on-site or underground process for converting wastes to environmentally acceptable products.

14. Blender. Devices that are used for introducing an agent to aid in the removal of pollutants, and are not product related.

15. Boom. Equipment mounted on barges or land to assist in containment and for removal of chemical and oil spills from waterways.

16. Canned Pumps. Totally enclosed pumps to prevent emissions caused by rotating seal failures.

17. Calgon Carbon Filter. A device which removes particulates or organics from either waste water or waste air discharge.

18. Carbon Analyzer. Instrument that monitors either on-line or in a laboratory the quality of cooling waters or waste waters flowing towards a waste water treatment plant as long as it is waste related and has no production use.

19. Catalytic Reduction Systems. Nitrogen oxide emission reduction equipment.

20. Centrifuge. Separation device to remove particulates from a fluid, one or both of which are waste in a waste minimization or restriction process.

21. CFB Boiler. A device that allows the burning of coal and other materials at a much lower temperature than a standard boiler. It achieves a more complete combustion, reducing emissions of particulate matter and gaseous pollutants. It may also be used to dispose of acidic wastes that cause water pollution and to produce an alkaline ash by-product beneficial in treating acid drainage. (Partial certification – equipment subject to allocation.)

22. Chlorofluorocarbons (CFC) Maintenance Equipment. Equipment used to contain chlorofluorocarbons to prevent their release into the atmosphere.

23. Clarifiers / Thickeners / Settlers. As applied to wastewater and not products.

24. Closed Dome Loading System for Rail Cars. Equipment that prevents air emissions from tank cars while loading by use of a vapor collection system.

25. Closed Sampling Systems. Sampling systems designed to reduce emissions by containing sample purges or volatiles.

26. Coal Blending Facilities. Facilities, including conveyors and coal handling equipment used to provide lower sulfur coal for blending in order to reduce SO2 emissions. Only when blended at combustion site.

27. Coal Stacking Tubes. Tubes used to form a coal pile, which limit the dust by reducing the product drop distance from the conveyor belt.

28. Computer Hardware / Software (e.g. for Title V database). Only if dedicated for pollution control activities.

29. Condenser. Device that converts gases to liquids through cooling primarily to control air pollutant emissions and not used primarily for product recovery.

30. Conservation Vents. Tank or container vents to the atmosphere designed to minimize air emissions due to breathing.

31. Continuous Emission Monitoring System. Electrical and pneumatic process instruments packaged to obtain, present and store emissions data to demonstrate compliance with emissions rules and regulations.

32. Cooling Tower pH Indicator. A device which measures the acidity level in cooling towers, keeping the blow down within discharge limits.

33. Cyclonic Separators (including simple cyclones and multicyclones). Devices which remove particulates from air or solids from fluid circuit through the use of a spinning process.

34. Demisters. Devices that provide a water spray to retard dust during scrubbing process, also a device that removes entrained liquids in an air stream.

35. Dephonol-izer Tower. A tower or still to extract phenol from water.

36. Disinfector / Chlorinator. Instrument to inject disinfectant into a waste stream to kill bacteria.

37. Dissolved Air Flotation. Waste water treatment equipment that concentrates solids for separation and disposal.

38. Diversion / Holding Facilities and Conveyances. Temporary material storage structures to delay treatment of solid or liquid waste until the waste treatment facility is capable of handling the waste without upsetting operations.

39. Double Mechanical Seals. Type of pump seal that reduces leaks or emissions at the shaft to casing contact areas.

40. Dry Lime DeSulfurization. System to remove acid gas from the air stream.

41. Dust Suppression System or Equipment. Enclosures and/or chemical/water spray systems to minimize and control dust entrainment or emissions to the ambient air and also including water/chemical spray trucks.

42. Electrostatic Precipitator (including ductwork leading to precipitator). A device that electronically removes dust from emission stacks.

43. Emergency Alarm System. Facility communication system to summon assistance to prevent a spill or emission or mitigate a spill or emission that occurred.

44. Enzyme / Nutrient Treatment (Addition/Removal). Applies only to waste water and ground water treatment applications.

45. Equalization. Waste water treatment process to smooth out swings in influent quality generally carried out in tanks, impoundments or ponds.

46. Erosion Control. Approved best management practice installed to prevent the loss of soil or other particles with rainwater.

47. Excess Tankage. Tanks whose sole purpose is to hold or treat spilled materials.

48. Fat / Grit Traps. Equipment at the beginning of a waste water treatment plant that removes wastes that cannot be effectively treated.

49. Filter. Device to remove solids from a waste liquid or gas stream.

50. Fixed Lead Detection Monitoring Equipment. Permanently mounted air emission measuring equipment designed to provide notice and/or a record of undesirable releases.

51. Flare. Open flame burner to destroy waste gases to acceptable air emission products.

52. Flocculation Equipment. Devices that introduce a chemical agent to a discharge for the purpose of adhering ultra fines to the froth which are skimmed off for disposal.

53. Flue Gas Recirculation Equipment. Combustion gas handling equipment that assists in the reduction of generation of air pollutants.

54. Flume. Trough used to transport wastewater to a treatment plant.

55. Fugitive Emission Monitoring Equipment. Air pollution devices designed to record or provide notice of air emissions not associated with defined point emission sources.

56. Fugitive Emissions Control Equipment. Devices such as "dry break" fittings and rupture disks that reduce air emissions caused by normal operations of chemical handling and storage equipment.

57. Gas Blanketing System. System used to reduce volatile emissions.

58. Gas Conditioning Systems. Systems for the injection of agents into pre- or post-combustion gases which prevent or inhibit the formation of pollutants.

59. Groundwater Collection Systems and Recovery Wells. Groundwater wells used to prevent the migration of underground contaminants off site.

60. Groundwater Monitoring Well Systems. Water wells specifically laid out around a contaminated or potentially contaminated underground site that provides samples for analysis to verify contamination or extent of contamination.

61. Groundwater Treatment Systems. Collection and processing equipment for converting contaminated groundwater into environmentally safe water or reducing the contamination level in the groundwater.

62. Hazardous Spill Prevention Equipment. Any equipment used primarily to keep hazardous materials from being exposed to the environment, such as floats, collars, tubing, etc.

63. Hydroseeders. Devices used to prevent erosion by the distribution of grass seed mixtures to the ground.

64. Ionizing Scrubbers. Electronic system for removing particles for a waste fluid prior to discharge.

65. Leachate Collection Systems. Piping and equipment installed below fly ash or other impoundments to collect dam leakage for treatment.

66. Limestone Injection System. Equipment used for the injection of pulverized limestone into a fluidized bed boiler to control SO2 emissions.

67. Low NOx Burners. Boiler and incinerator fuel burners redesigned to reduce the oxides of nitrogen emissions. (Partial certification – equipment subject to allocation.)

68. Neutralization / pH Adjustment Equipment. Used in wastewater treatment system.

69. Oil / Water Separator. Used in wastewater treatment.

70. Organic Decanters. Separation device to remove wastewater from organic waste streams using the differences in specific gravities.

71. Ozonoloyis Facility. Waste handling equipment using ozone as a source of oxygen to purify the waste.

72. Piezometers. When used in a groundwater monitoring system.

73. Portable Air or Water Emissions or Waste Monitoring Facilities / Equipment. Hand held or field transportable devices that detect or measure air or water emissions at remote locations.

74. Portable Field Sampling Equipment. Hand held or field transportable devices for obtaining samples of air, water or solid waste.

75. Precipitation / Separation / Sedimentation. Processes used in wastewater treatment.

76. Remote Video Equipment to Monitor Emissions. Television cameras permanently located to provide a record of visible emissions usually by a television monitor or videotape; cameras may be remotely adjustable to provide a wide area of coverage from a fixed location.

77. Reverse Osmosis. Used as a wastewater treatment process.

78. Rotary Biological Contractor Unit. Form of wastewater treatment (activated sludge).

79. Scrubbers. Devices and associated equipment used to remove particulates from the air or other fluids.

80. Sewage and Wastewater Treatment. Equipment to treat municipal and industrial sewage or wastewater prior to discharge.

81. Soil Flushing Systems. Groundwater injection and recovery systems designed to slowly remove contaminants.

82. Soil Vapor Extraction. Groundwater cleanup remediation system.

83. Soil Washing Equipment. Facilities to handle excavated soil and contaminants to reduce or remove the contamination, usually with water.

84. Solidification, Stabilization, Verification, Encapsulation Grinding Equipment. Qualify, to waste related only applications.

85. Spill Containment. Equipment designed to collect solid and liquid material and prevent the material from moving to the environment from the spill site.

86. Spill Response / Cleanup Equipment. Equipment dedicated to collecting spilled materials and other equipment designed to contain or remove spilled materials from surface waters.

87. Spray Dryers. System used to remove SO2 or other acid gases from the gas stream prior to a particulate control device.

88. Stacks. Vertical pipes intended to route air emissions to a height to achieve acceptable air dispersion.

89. Steam Strippers. Special air stripper utilizing steam as the energy source in handling waste streams. If what is being stripped goes to a control device.

90. Sulfur Recovery / Conversion Equipment. Devices to capture waste sulfur compounds for reuse or disposal.

91. Tank Floating Roof and Seal System. Moveable tank top designed to reduce air emissions by eliminating the vapor space above the liquid level.

92. Tank / Container Closed Vent System. Piping and equipment to prevent air emissions during tank / container filling or emptying activities.

93. Telescopic or Retractable Fines Solid Loading System. Equipment used to reduce air contaminates (particulate and emissions) during loading operation.

94. Thermal Oxidizer Fume Incinerator. Combustor used to convert waste gases to gases that may be emitted to the air in accordance with air permits.

95. Ultra Filtration System. When used in wastewater process.

96. Vapor Balancing Transfer System. Piping and control devices to exchange vapors from a receiving container back to the source container during a transfer of liquids.

97. Vent Valve Collection Header. Piping that routes discharges from one or more vent valves to a common point for treatment prior to venting materials to the atmosphere.

98. Vessel Cleaning Vapor Recovery Systems. Closed tank or vessel vent system routed to a collection point to prevent air emissions when removing tank or vessel residuals.

99. Waste Pumps. Pumping equipment dedicated to transporting wastewaters or waste slurries to treatment or disposal facilities.

100. Waste Transportation Facilities / Equipment. Rail, truck, car, containers, barges and other equipment dedicated for use in relocating wastes.

101. Waste Treatment Flow Meter. A device used to measure volume of wastewater.

102. Waste Water Skimmer. Waste treatment device to separate floating material.

103. Wind Turbine. Each wind turbine installed at a wind power project and each tower upon which the turbine is affixed. A wind turbine includes 1) the rotor, consisting of the blades and the supporting hub, 2) the drive train, which includes the rotating parts of the wind turbine (exclusive of the rotor); it usually consists of shafts, gearbox, coupling, a mechanical brake, and the generator, 3) the nacelle and main frame, including wind turbine housing, bedplate, and the yaw system and 4) the machine controls. Additionally, the tower includes the foundation. However, the portion considered to be pollution abatement control equipment shall be no greater than 79% of the total value of the facility.