Figure: 30 TAC §17.14(a)

[Figure: 30 TAC §17.14(a)]

Tier I Table The property listed in this table is property that the executive director has determined is used wholly or partly for pollution control purposes when used as shown in the Description section of the table and when no marketable product arises from using the property, except heat recovery steam generators listed as a partial use percentage. The items listed are described in generic terms without the use of brand names or trademarks. The use percentages on all property on the table are established based on standard uses of the pieces of equipment involved. If the executive director determines that the equipment is not being used in a standard manner (e.g., use in production or recovery of a marketable product), the executive director may require that a Tier III application, using the Cost Analysis Procedure, be filed by the applicant to calculate the appropriate use determination percentage. For items where the description limits the use determination to the incremental cost difference, the cost of the property or device with the pollution control feature is compared to a similar device or property without the pollution control feature. The table is a list adopted under Texas Tax Code, §11.31(g).

Air Pollution Control Equipment

Particulate control Devices

No.	Media	Property	Description	%
A-1	Air	Dust Collection Systems	Structures containing filters, blowers, ductwork - used to remove particulate matter from exhaust gas streams in order to prevent release of particulate matter to ambient air.	100
A-2	Air	Demisters or Mist Eliminators Added	Mesh pads or cartridges - used to remove entrained liquid droplets from exhaust gas streams.	100
A-3	Air	Electrostatic Precipitators	Wet or dry particulate collection created by an electric field between positive or negative electrodes and collection surface.	100
A-4	Air	Dry Cyclone Separators	Single or multiple inertial separators with blowers and ductwork used to remove particulate matter from exhaust gas streams.	100
A-5	Air	Scrubbers	Wet collection device using spray chambers, wet cyclones, packed beds, orifices, venturi, or high- pressure sprays to remove particulates and chemicals from exhaust gas streams. System may include pumps, ductwork, and blowers needed for the equipment to function.	100

No.	Media	Property	Description	%
A-6	Air	Water/ Chemical Sprays and Enclosures for Particulate Suppression	Spray nozzles, conveyor and chute covers, windshields, piping, and pumps used to reduce fugitive particulate emissions.	100
A-7	Air	Smokeless Ignitors	Installed on electric generating units to control particulate emissions and opacity on start-up.	100

Combustion Based Control Devices

No.	Media	Property	Description	%
A-20	Air	Thermal Oxidizers	Thermal destruction of air pollutants by direct flame combustion.	100
A-21	Air	Catalytic Oxidizer	Thermal destruction of air pollutants that uses a catalyst to promote oxidation.	100
A-22	Air	Flare/Vapor Combustor	Stack, burner, flare tip, and blowers used to destroy air contaminants in a vent gas stream.	100

Non-Volatile Organic Compounds Gaseous Control Devices

No.	Media	Property	Description	%
A-40	Air	Molecular Sieve	Microporous filter used to remove hydrogen sulfide (H_2S) or nitrogen oxides (NO_X) [(NO_X)] from a waste gas stream.	100
A-41	Air	Strippers Used in Conjunction with Final Control Device	Stripper, with associated pumps, piping - used to remove contaminants from a waste gas stream or waste liquid stream.	100
A-42	Air	Chlorofluorocarbon (CFC) Replacement Projects	Projects to replace one CFC with an environmentally cleaner CFC or other refrigerant where there is no increase in the cooling capacity or the efficiency of the unit. Includes all necessary equipment needed to replace the CFC and achieve the same level of cooling capacity.	100
A-43	Air	Halon Replacement Projects	All necessary equipment needed to replace the Halon in a fire suppression system with an environmentally cleaner substance.	100

Monitoring and Sampling Equipment

No.	Media	Property	Description	%
A-60	Air	Fugitive Emission Monitors	Organic vapor analyzers - used to discover leaking piping components.	100

No.	Media	Property	Description	%
A-61	Air	Continuous & Noncontinuous Emission Monitors	Monitors, analyzers, buildings, air conditioning equipment, and optical gas imaging instruments used to demonstrate compliance with emission limitations of regulated air contaminants, (including flow and diluent gas monitors and dedicated buildings).	100
A-62	Air	Monitoring Equipment on Final Control Devices	Temperature monitor or controller, flow-meter, pH meter, and other meters for a pollution control device. Monitoring of production equipment or processes is not included.	100
A-63	Air	On or Off-Site Ambient Air Monitoring Facilities	Towers, structures, analytical equipment, sample collectors, monitors, and power supplies used to monitor for levels of contaminants in ambient air.	100
A-64	Air	Noncontinuous Emission Monitors, Portable	Portable monitors, analyzers, structures, trailers, air conditioning equipment, and optical gas imaging instruments used to demonstrate compliance with emission limitations.	100
A-65	Air	Predictive Emission Monitors	Monitoring of process and operational parameters that are used solely to calculate or determine compliance with emission limitations.	100
A-66	Air	Sampling Ports	Construction of stack or tower sampling ports used for emission sampling or for the monitoring of process or operational parameters that are used to calculate or determine compliance with emission limitations.	100
A-67	Air	Automotive Dynamometers	Automotive dynamometers used for emissions testing of fleet vehicles.	100

Nitrogen Oxides Controls

No.	Media	Property	Description	%
A-80	Air	Selective Catalytic and Non-catalytic Reduction Systems	Catalyst bed, reducing agent injection and storage, monitors - used to reduce nitrogen oxides (NO_x) [(NO_X)] emissions from combustion sources. Non-catalytic systems use a reducing agent without a catalyst.	100
A-81	Air	Catalytic Converters for Stationary Sources	Used to reduce NO_x [NO_X] emissions from internal combustion engines.	100
A-82	Air	Air/Fuel Ratio Controllers for Piston-Driven Internal Combustion Engines	Used to control the air/fuel mixtures and reduce NO_x [NO_X] formation for fuel injected, naturally aspirated, or turbocharged engines.	100

No.	Media	Property	Description	%
A-83	Air	Flue Gas Recirculation	Ductwork and blowers used to redirect part of the flue gas back to the combustion chamber for reduction of NO_x [NOx] formation. May include fly ash collection in coal fired units.	100
A-84	Air	Water/Steam Injection	Piping, nozzles, and pumps to inject water or steam into the burner flame of utility or industrial burners or the atomizer ports for gas turbines, used to reduce NO_x [NO_x] formation.	100
A-85	Air	Over-fire Air & Combination of asymmetric over-fire air with the injection of anhydrous ammonia or other pollutant-reducing agents	The asymmetric over- fire air layout injects preheated air and anhydrous ammonia or other pollutant-reducing agent through nozzles through a series of ducts, dampers, expansion joints, and valves.	100
A-86	Air	Low-NO_x [Low-NO_X] Burners	Installation of low-NO_x [low-NO_x] burners. The eligible portion is the incremental cost difference. For a replacement burner, the incremental cost difference is calculated by comparing the cost of the new burner with the cost of the existing burner. For new installations, the incremental cost difference is calculated by comparing the cost of the new burner to the cost of a similarly sized burner without NO_x [NOx] controls from the most recent generation of burners.	100
A-87	Air	Water Lances	Installed in the fire box of boilers and industrial furnaces to eliminate hot spots, thereby reducing NO_x [NO_x] formation.	100
A-88	Air	Electric Power Generation Burner Retrofit	Retrofit of existing burners on electric power generating units with components for reducing NO_x [NO_X] including directly related equipment.	100
A-89	Air	Wet or Dry Sorbent Injection Systems	Use of a sorbent for flue gas desulfurization or NO_x [NOx] control.	100
A-90	Air	Dry Low-NO_x Emission Systems	Equipment installed on natural gas-fired compression turbines to reduce NO_x emissions including combustor liners, injectors, fuel conditioning system, fuel ring, fuel control valve, pilot valve, sensors, controls, fuel gas treater, fuel nozzle assemblies, transition piece assemblies, cap assemblies, inner crossfire tubes and outer crossfire tubes.	100
A-91	Air	Lean-Burn Portions of Reciprocating Engines	Turbocharger, fuel injection system consisting of fuel nozzles positioned within a pre-combustion chamber, and pre-combustion chamber for engines.	100

No.	Media	Property	Description	%
A-92	Air	Heat Recovery Steam Generators	A boiler designed to capture waste heat from combustion turbine exhaust for the generation of steam while reducing unit output-based emissions.	65

Volatile Organic [organic] Compounds Control

No.	Media	Property	Description	%
A-110	Air	Carbon Adsorption Systems	Carbon beds or liquid-jacketed systems, blowers, piping, condensers - used to remove volatile organic compounds (VOC) emissions and odors from exhaust gas streams.	100
A-111	Air	Storage Tank Secondary Seals and Internal Floating Roofs	Used to reduce VOC emissions caused by evaporation losses from aboveground storage tanks.	100
A-112	Air	Replacement of Existing Pumps, Valves, or Seals in Piping Service	The incremental cost difference between the cost of the original equipment and the replacement equipment is eligible only when the replacement of these parts is done for the sole purpose of eliminating fugitive VOC emissions. New systems do not qualify for this item.	100
A-113	Air	Welding of Pipe Joints in VOC Service (Existing Pipelines)	Welding of existing threaded or flanged pipe joints to eliminate fugitive emission leaks.	100
A-114	Air	Welding of Pipe Joints in VOC Service (New Construction)	The incremental cost difference between the cost of using threaded or flanged joints and welding of pipe joints in VOC service.	100
A-115	Air	External Floating Roofs	Used to reduce VOC emissions caused by evaporation losses from aboveground storage tanks. Must be installed to meet or exceed §115.112 of this title (relating to Control Requirements).	100
A-116	Air	Fixed Storage Tank Roofs	Fixed roofs installed on external floating roof tanks used to store any product containing VOC as an additional VOC control measure.	100
A-117	Air	Geodesic Domes	Geodesic domes installed on external floating roof storage tanks as a means of controlling VOC emissions.	100
A-118	Air	Submerged Fill Pipes	Submerged fill pipes installed in storage tanks used to store any product containing VOC.	100
A-119	Air	Dual Mechanical Pump Seals	The incremental cost difference between the cost of dual mechanical seal pumps and comparable single sealed pumps.	100

No.	Media	Property	Description	%
A-120	Air	Seal-Less Pumps	The incremental cost difference between the cost of seal-less pumps and the cost of similarly sized pumps with seals.	100

Mercury Control

No.	Media	Property	Description	%
A-130	Air	Sorbent Injection Systems	Sorbents sprayed into the flue gas that chemically react to absorb mercury. The sorbents are then removed by a particulate removal device. Equipment may include pumps, tanks, blowers, nozzles, ductwork, hoppers, and particulate collection devices needed for the equipment to function.	100
A-131	Air	Fixed Sorbent Systems	Equipment, such as stainless steel plate with a gold coating that is installed in the flue gas to absorb mercury.	100
A-132	Air	Mercury Absorbing Filters	Filters that absorb mercury such as those using the affinity between mercury and metallic selenium.	100
A-133	Air	Oxidation Systems	Equipment used to change elemental mercury to oxidized mercury. This can be catalysts (similar to Selective Catalytic Reduction (SCR) catalyst) or chemical additives that can be added to the flue gas or directly to the fuel.	100
A-134	Air	Photochemical Oxidation	Use of an ultraviolet light from a mercury lamp to provide an excited state mercury species in flue gas, leading to oxidation of elemental mercury. These units are only eligible if mercury is removed from flue gas.	100
A-135	Air	Chemical Injection Systems	Equipment used to inject chemicals into the combustion zone or flue gas that chemically bonds mercury to the additive, which is then removed in a particulate removal device.	100

Sulfur Oxides Controls

No.	Media	Property	Description	%
A-160	Air	Wet and Dry Scrubbers	Circulating fluid bed and moving bed technologies using a dry sorbent or various wet scrubber designs that inject a wet sorbent into the scrubber.	100

No.	Media	Property	Description	%
A-161	Air	Selective Catalytic and Non-catalytic Reduction Systems	Catalyst bed, reducing agent injection and storage, monitors - used to reduce sulfur oxide emissions from combustion sources. Non-catalytic systems use a reducing agent without a catalyst.	100

Miscellaneous Control Equipment

No.	Media	Property	Description	%
A-180	Air	Hoods, Duct and Collection Systems connected to Final Control Devices	Piping, headers, blowers, hoods, and ducts used to collect air contaminants and route them to a control device.	100
A-181	Air	Stack Modifications	Construction of stack extensions to meet a permit requirement.	100
A-182	Air	New Stack Construction	The incremental cost difference between the stack height required for production purposes and the stack height required for pollution control purposes.	100
A-183	Air	Stack Repairs	Repairs made to an existing stack for that stack to provide the same level of pollution control as was previously provided.	100
A-184	Air	Vapor/Liquid Recovery Equipment (for venting to a control device)	Piping, blowers, vacuum pumps, and compressors used to capture a waste gas or liquid stream and vent to a control device, including those used to eliminate emissions associated with loading tank trucks, rail cars, and barges.	100
A-185	Air	Paint Booth Control Devices	Pollution control equipment associated with the paint booth - including the items such as the control device, water curtain, filters, or other devices to capture paint fumes.	100
A-186	Air	Blast Cleaning System - Connected to a Control Device	Particulate control device and blast material recycling system.	100
A-187	Air	Amine or Chilled Ammonia Scrubber	Installed to provide post combustion capture of pollutants (including carbon dioxide (CO_2) upon the effective date of a final rule adopted by the United States Environmental Protection Agency (EPA) regulating [carbon dioxide] CO_2 as a pollutant).	100
A-188	Air	Catalyst-based Systems	Installed to allow the use of catalysts to reduce pollutants in emission streams.	100
A-189	Air	Enhanced Scrubbing Technology	Installed to enhance scrubber performance, including equipment that promotes the oxidation of elemental mercury in the flue gas prior to entering the scrubber.	100

No.	Media	Property	Description	%
A-190	Air	Airless Paint Spray Gun	The incremental cost difference between an airless paint spray gun and a comparable standard air powered paint spray gun.	100

Water and Wastewater Pollution Control Equipment

Solid Separation and De-watering

No.	Media	Property	Description	%
W-1	Water	API Separator	Separates oil, water, and solids by settling and skimming.	100
W-2	Wastewater [Waste water]	CPI Separator	Mechanical oil, water, and solids separator.	100
W-3	Wastewater [Waste water]	Dissolved Air Flotation	Mechanical oil, water, and solids separator.	100
W-4	Wastewater [Waste water]	Skimmer	Used to remove hydrocarbon from process wastewater.	100
W-5	Wastewater [Waste water]	Decanter	Used to decant hydrocarbon from process wastewater.	100
W-6	Wastewater [Waste water]	Belt Press, Filter Press, or Plate and Frame	Mechanical de-watering devices.	100
W-7	Water	Centrifuge	Separation of liquid and solid waste by centrifugal force, typically a rotating drum.	100
W-8	Water	Settling Basin	Simple tank or basin for gravity separation of suspended solids.	100
W-9	Water	Equalization	Tank, sump, or headbox used to settle solids and equilibrate process wastewater streams.	100
W-10	Water	Clarifier	Circular settling basins usually containing surface skimmers and sludge removal rakes.	100

Disinfection

No.	Media	Property	Description	%
W-20	Water	Chlorination	Wastewater disinfection treatment using chlorine	100
W-21	Water	De-chlorination	Equipment for removal of chlorine from water or wastewater.	100
W-22	Water	Electrolytic Disinfection	Disinfect water by the use of electrolytic cells.	100
W-23	Water	Ozonization	Equipment that generates ozone for the disinfection of wastewater.	100
W-24	Water	Ultraviolet	Disinfection of wastewater by the use of ultraviolet light.	100

No.	Media	Property	Description	%
W-25	Water	Mixed Oxidant Solution	Solution of chlorine, chlorine dioxide, and ozone to replace chlorine for disinfection.	100

Biological Systems

No.	Media	Property	Description	%
W-30	Water	Activated Sludge	Wastewater treatment using microorganisms to metabolize biodegradable organic matter in aqueous waste streams. Can include tanks, aeration equipment, clarifiers, and equipment used to handle sludge.	100
W-31	Water	Adsorption	Use of activated carbon to remove organic contaminants from wastewater.	100
W-32	Water	Aeration	Passing air through wastewater to increase oxygen available for bacterial activities that remove contaminants.	100
W-33	Water	Rotary Biological Contactor	Use of large rotating discs that contain a bio- film of microorganisms that promote biological purification of the wastewater.	100
W-35	Water	Trickling Filter	Fixed bed of highly permeable media in which wastewater passes through and forms a slime layer to remove contaminants.	100
W-36	Water	Wetlands and Lagoons (artificial)	Artificial marsh, swamp, or pond that uses vegetation and natural microorganisms as bio- filters to remove sediment and other pollutants from wastewater or stormwater.	100
W-37	Water	Digester	Enclosed, heated tanks for treatment of sludge that is broken down by bacterial action.	100

Other Equipment

No.	Media	Property	Description	%
W-50	Water	Irrigation	Equipment that is used to disburse treated wastewater through irrigation on the site.	100
W-51	Water	Outfall Diffuser	Device used to diffuse effluent discharge from an outfall.	100
W-52	Water	Activated Carbon Treatment	Use of carbon media such as coke or coal to remove organics and particulate from wastewater. May be used in either fixed or fluidized beds.	100
W-53	Water	Oxidation Ditches and Ponds	Process of pumping air bubbles into a pond to assist in oxidizing organic and mineral pollution.	100

No.	Media	Property	Description	%
W-54	Water	Filters: Sand, Gravel, or Microbial	Passing wastewater through a sand or gravel bed to remove solids and reduce bacteria.	100
W-55	Water	Chemical Precipitation	Process used to remove heavy metals from wastewater.	100
W-56	Water	Ultra-filtration	Use of semi-permeable membrane and hydrostatic pressure to filter solids and high molecular weight solutes from wastewater.	100
W-57	Water	Conveyances, Pumps, Sumps, Tanks, Basins	Used to segregate storm water from process water, control storm water runoff, or convey contaminated process water.	100
W-58	Water	Water Recycling Systems	Installed systems, excluding cooling towers, that clean, recycle, or reuse wastewater or use gray water or storm water to reduce the amount of a facility's discharge or the amount of new water used as process or make-up water including Zero Discharge Systems.	100
W-59	Water	Wastewater Treatment Facility/Plant	New wastewater treatment facilities (including on-site septic systems) constructed to process wastewater generated on site.	100
W-60	Water	High-Pressure Reverse Osmosis	The passing of a contaminated water stream over a permeable membrane at high pressure to collect contaminants.	100
W-61	Water	Hydro-cyclone Vapor Extraction	An air-sparged hydro-cyclone for the removal of VOCs from a wastewater stream.	100
W-62	Water	Recycled Water Cleaning System	Equipment used to collect and recycle the water used in a high-pressure water system for cleaning contaminants from equipment and pavement.	100
W-63	Water	Chemical Oxidation	Use of hydrogen peroxide or other oxidants for wastewater treatment.	100
W-64	Water	Storm Water Containment Systems	Structures or liners used for containment of runoff from rainfall. The land that is actually occupied by the containment structure is eligible for a positive use determination.	100
W-65	Water	Wastewater Impoundments	Ponds used for the collection of water after use and before circulation.	100
W-66	Water	Oil/Water Separator	Mechanical device used to separate oils from storm water.	100

Control/Monitoring Equipment

No.	Media	Property	Description	%
W-70	Water	pH Meter, Dissolved Oxygen Meter, or Chart Recorder	Used for wastewater operations control and monthly reporting requirements.	100
W-71	Water	On-line Analyzer	Device that conducts chemical analysis on sample streams for wastewater operations control.	100
W-72	Water	Neutralization	Control equipment used to adjust pH of wastewater treatment components.	100
W-73	Water	Respirometer	Device used to measure oxygen uptake or CO_2 [carbon dioxide (CO_2)] release in wastewater treatment systems.	100
W-74	Water	Diversion	Structures used for the capture and control of storm water and process wastewater or emergency diversion of process material. Land means only land that is actually occupied by the diversion or storage structure.	100
W-76	Water	Building	Used for housing wastewater control and monitoring equipment.	100
W-77	Water	De-foaming Systems	Systems consisting of nozzles, pilings, spray heads, and piping used to reduce surface foam.	100

Solid Waste Management Pollution Control Equipment

Solid Waste Management [management]

No.	Media	Property	Description	%
S-1	Land / Water	Stationary Mixing and Sizing Equipment	Immobile equipment used for solidification, stabilization, or grinding of self-generated waste material for the purpose of disposal.	100
S-2	Land / Water	Decontamination Equipment	Equipment used to remove waste contamination or residues from vehicles that leave the facility.	100
S-3	Land / Water	Solid Waste Incinerator (not used for energy recovery and export or material recovery)	Solid waste incinerators, feed systems, ash handling systems, and controls.	100
S-4	Land / Water / Air	Monitoring and Control Equipment	Alarms, indicators, and controllers, for high liquid level, pH, temperature, or flow in waste treatment system. Does not include fire alarms.	100
S-5	Land / Water	Solid Waste Treatment Vessels	Any vessel used for waste treatment.	100

No.	Media	Property	Description	%
S-6	Land / Water	Secondary Containment	External structure or liner used to contain and collect liquids released from a primary containment device and/or ancillary equipment. Main purpose is to prevent groundwater or soil contamination.	100
S-7	Land / Water	Liners (Noncommercial Landfills and Impoundments)	A continuous layer or layers of natural and/or man-made materials that restrict downward or lateral escape of wastes or leachate in an impoundment or landfill.	100
S-8	Land / Water	Leachate Collection and Removal Systems	A system capable of collecting leachate or liquids, including suspended solids, generated from percolation through or drainage from a waste. Systems for removal of leachate may include sumps, pumps, and piping.	100
S-9	Land/ Water	Leak Detection Systems	A system capable of detecting the failure of a primary or secondary containment structure or the presence of a liquid or waste in a containment structure.	100
S-10	Land/ Water	Final Cover Systems for Landfills (Noncommercial)	A system of liners and materials to provide drainage, erosion prevention, infiltration minimization, gas venting, and a biotic barrier.	100
S-11	Land/ Water	Lysimeters	An unsaturated zone monitoring device used to monitor soil-pore liquid quality at a waste management unit (e.g., below the treatment zone of a land treatment unit).	100
S-12	Water	Groundwater Monitoring Well and Systems	A groundwater well or system of wells designed to monitor the quality of groundwater at a waste management unit (e.g., detection monitoring systems or compliance monitoring systems).	100
S-13	Air	Fugitive Emission Monitors	A monitoring device used to monitor or detect fugitive emissions from a waste management unit or ancillary equipment.	100
S-14	Land / Water	Slurry Walls/Barrier Walls	A pollution control method using a barrier to minimize lateral migration of pollutants in soils and groundwater.	100
S-15	Water	Groundwater Recovery or Remediation System	A groundwater remediation system used to remove or treat pollutants in contaminated groundwater or to contain pollutants (e.g., pump-and-treat systems).	100
S-16	Water	Noncommercial Injection Wells (Including Saltwater Disposal Wells) and Ancillary Equipment	Injection well, pumps, collection tanks and piping, pretreatment equipment, and monitoring equipment.	100

No.	Media	Property	Description	%
S-17	Land / Water	Noncommercial Landfills (used for disposal of self - generated waste materials) and Ancillary Equipment	Excavation, clay and synthetic liners, leak detection systems, leachate collection and treatment equipment, monitor wells, waste hauling equipment, decontamination facilities, security systems, and equipment used to manage the disposal of waste in the landfill.	100
S-18	Land / Water	Resource Conservation Recovery Act Containment Buildings (used for storage or treatment of hazardous waste)	Pads, structures, solid waste treatment equipment used to meet the requirements of 30 TAC Chapter 335, Subchapter O – Land Disposal Restrictions, §335.431.	100
S-19	Land / Water	Surface Impoundments and Ancillary Equipment (Including Brine Disposal Ponds)	Excavation, ponds, clay and synthetic liners, leak detection systems, leachate collection and treatment equipment, monitor wells, and pumps.	100
S-20	Land / Water	Waste Storage Used to Collect and/or Store Waste Prior to Treatment or Disposal	Tanks, containers and ancillary equipment such as pumps, piping, secondary containment, and vent controls (e.g., Resource Conservation Recovery Act Storage Tanks, 90-Day Storage Facilities, Feed Tanks to Treatment Facilities).	100
S-21	Air	Fugitive Emission Containment Structures	Structures or equipment used to contain or reduce fugitive emissions or releases from waste management activities (e.g., coverings for conveyors, chutes, enclosed areas for loading and unloading activities).	100
S-22	Water	Double-Hulled Barge	If double-hulled to reduce chance of leakage into public waters, calculate the incremental cost difference between a single-hulled barge and a double-hulled barge.	100
S-23	Land	Composting Equipment	Used to compost material where the compost will be used on site. (Does not include commercial composting facilities.)	100
S-24	Land	Compost Application Equipment	Equipment used to apply compost that has been generated on-site.	100
S-25	Land	Vegetated Compost Sock	Put in place as part of a facility's permanent Best Management Plan (BMP).	100
S-26	Air	Foundry Sand Reclamation Systems for Foundries	Components of a sand reclamation system that provide specific pollution control. Includes hooding over shaker screens vented to a dust collector, conveyor covers, and emission control devices at other points.	100
S-27	Air / Water / Land	Concrete Reclaiming Equipment	Processes mixed, un-poured concrete batches to reclaim the sand and gravel for reuse and recycles the water in a closed loop system.	100

No.	Media	Property	Description	%
S-28	Land	Fencing installed for the control of windblown trash or access control.	Fencing installed at landfills, solid waste transfer stations, or storage/treatment areas located at hazardous waste management facilities to meet environmental regulations.	100
S-29	Land / Water	Reclamation Equipment	Construction type equipment such as dozers, front-end loaders and dump trucks used exclusively for land reclamation. Does not include commercial reclamation equipment.	100

Miscellaneous Pollution Control Equipment

No.	Media	Property	Description	%
M-1	Air / Land / Water	Spill Response/ Cleanup Equipment Pre-positioned and Stored for Addressing Future Emergencies	Boats, barges, booms, skimmers, trawls, pumps, power units, packaging materials and containers, vacuum trailers, storage sheds, diversion basins, tanks, and dispersants.	100
M-2	Air / Land	Hazardous Air Pollutant Abatement Equipment - required removal material contaminated with asbestos, lead, or some other hazardous air pollutant	High-Efficiency Particulate Arresting (HEPA) Vacuum Equipment, Negative Air Pressure Enclosures, Glove Bags, and Disposal Containers.	100
M-3	Air / Land / Water	Vacuum Trucks, Street Sweepers and Watering Trucks	Mobile Surface Cleaning Equipment - used exclusively to control particulate matter on plant roads. (Does not include sweepers or scrubbers used to control particulate matter within buildings.)	100
M-4	Land	Compactors, Barrel Crushers, Balers, Shredders	Compactors and similar equipment used to change the physical format of waste material for recycling/reuse purposes or on-site disposal of facility-generated waste.	100
M-5	Air / Land / Water	Solvent Recovery Systems	Used to remove hazardous content from waste solvents by heat, vaporization, and condensation, by filtration, or by other means. The recycled solvents must be reused at the facility generating the waste.	100
M-6	Land / Water	Boxes, Bins, Carts, Barrels, Storage Bunkers	Collection/storage containers for source-separation of materials to be recycled or reused. Does not include product storage containers or facilities.	100
M-7	Air	Environmental Paving Located at Industrial Facilities	Paving of outdoor vehicular traffic areas in order to meet or exceed an adopted air quality rule, regulation, or law. Does not include paving of parking areas or driveways for convenience purposes or storm water control. Does not include dirt or gravel. Value of the paving must be stated on a square foot basis with a plot plan provided that shows the paving in question.	100
M-8	Air / Land / Water	Sampling Equipment	Equipment used to collect samples of exhaust gas, wastewater, soil, or other solid waste to be analyzed for specific contaminants or pollutants.	100
M-9	Water	Dry Stack Building for Poultry Litter	A pole-barn type structure used to temporarily store poultry litter in an environmentally safe manner.	100
M-10	Land / Water	Poultry Incinerator	Incinerators used to dispose of poultry carcasses.	100

M-11	Land / Water	Structures, Enclosures, Containment Areas, Pads for Composting Operations	Required to meet 'no exposure' storm water regulations.	100
M-12	Air	Methane Capture Equipment	Equipment used to capture methane generated by the decomposition of waste material on site. Methane must be sent to a control device rather than used.	100
M-13	Land	Drilling Mud Recycling System	Consisting of only the Shaker Tank System, Shale Shakers, Desilter, Desander, and Degasser.	100
M-14	Land	Drilling Rig Spill Response Equipment	Includes only the Ram Type Blowout Preventers, Closing Units, and Choke Manifold Systems.	100
M-15	Air	Odor Neutralization and Chemical Treatment Systems	Carbon adsorption, zeolite adsorption, and other odor neutralizing and chemical treatment systems to meet local ordinance or to prevent/correct nuisance odors at off-site receptors.	100
M-16	Air	Odor Dispersing and Removal Systems	Electrostatic precipitators, vertical dispersing fans, stack extensions, and other physical control equipment used to dilute, disperse, or capture nuisance odor vent streams.	100
M-17	Air	Low NO_X Combustion System for Drilling Rigs	Equipment on power generating units designed solely to reduce NO_X generation	100
M-18	Air	Odor Detectors	Olfactometers, gas chromatographs, and other analytical instrumentation used specifically for detecting and measuring ambient odor, either empirically or chemical specific.	100
M-19	Land	Cathodic Protection	Cathodic protection installed to prevent corrosion of metal tanks and piping.	100
M-20	Water	Fish and Other Aquatic Organism Protection Equipment	Equipment installed to protect fish and other aquatic organisms from entrainment or impingement in an intake cooling water structure. Equipment includes: Aquatic Filter Barrier Systems, Fine-Mesh Traveling Intake Screens, Fish Return Buckets, Sprays, Flow-Altering Louvers, Fish Trough, Fish Behavioral Deterrents, and Wetland Creation.	100
M-21	Water / Land	Double-walled Piping	The difference between cost of single walled piping and the cost of double-walled piping, when the double-walled piping is installed to prevent unauthorized discharges.	100
M-22	Water / Land	Double-walled Tanks	The difference between cost of single walled tanks and the cost of double-walled tanks, when the double-walled tanks are installed to prevent unauthorized discharges.	100

M-23	Land / Water / Air	Remote Controlled Block Valves	Valves installed on pipelines used to transport hydrocarbons and natural gas as a spill control measure.	100
M-24	Land / Water	Nondestructive Pipeline Testing	Expenditures for nondestructive pipeline testing such as radiography. Expenditures for non-pollution control purposes are not included.	100

Equipment Located at Tank Installations including Service Stations

Spill and Overfill Prevention Equipment

No.	Media	Property	Description	%
T-1	Water	Tight Fill Fittings	Liquid tight connections between the delivery hose and fill pipe.	100
T-2	Water	Spill Containers	Spill containment manholes equipped with either a bottom drain valve to return liquids to the tank or a hand pump for liquid removal.	100
T-3	Water	Automatic Shut-off Valves	Flapper valves installed in the fill pipe to automatically stop the flow of product.	100
T-4	Water	Overfill Alarms	External signaling device attached to an automatic tank gauging system.	100
T-5	Water	Vent Restriction Devices	Float vent valves or ball float valves to prevent backflow through vents.	100

Secondary Containment

No.	Media	Property	Description	%
T-10	Water	Double-walled Tanks	The difference between cost of single-walled tanks and the cost of double-walled tanks, when the double-walled tanks are installed to prevent unauthorized discharges or leaks.	100
T-11	Water	Double-walled Piping	The difference between cost of single-walled piping and the cost of double-walled piping, when the double-walled piping is installed to prevent unauthorized discharges or leaks.	100
T-12	Water	Tank Top Sumps	Liquid tight containers to contain leaks or spills that involve tank top fittings and equipment.	100
T-13	Water	Under Dispenser Sumps	Contains leaks and spills from dispensers and pumps.	100
T-14	Water	Sensing Devices	Installed to monitor for product accumulation in secondary containment sumps.	100

No.	Media	Property	Description	%
T-15	Land / Water	Concrete Paving Above Underground Tanks and Pipes	Required concrete paving located above underground pipes and tanks. The use determination value is limited to the difference between the cost per square foot of the concrete paving and the cost per square foot of the other paving installed at the service station. This item only applies to service stations.	100

Release Detection for Tanks and Piping

No.	Media	Property	Description	%
T-20	Water	Automatic Tank Gauging	Includes tank gauging probe and control console	100
T-21	Water	Groundwater or Soil Vapor Monitoring	Observation wells located inside the tank excavation or monitoring wells located outside the tank excavation	100
T-22	Water	Monitoring of Secondary Containment	Liquid sensors or hydrostatic monitoring systems installed in the interstitial space for tanks or piping	100
T-23	Water	Automatic Line Leak Detectors	Devices installed at the pump that are designed to detect leaks in underground piping. Mechanical and electronic devices are acceptable.	100
T-24	Water	Under Pump Check Valve	Valve installed to prevent back flow in the fuel dispensing line. This device is only used on suction pump piping systems.	100
T-25	Water	Tightness Testing Equipment	Equipment purchased to comply with tank and/or piping tightness testing requirements.	100

Cathodic Protection

No.	Media	Property	Description	%
T-30	Water	Isolation Fittings	Dielectric bushings and fittings to separate underground piping from aboveground tanks and piping.	100
T-31	Water	Sacrificial Anodes	Magnesium or zinc anodes packaged in low resistivity backfill to provide galvanic protection.	100
T-32	Water	Dielectric Coatings	Factory installed coal-tar epoxies, enamels, fiberglass reinforced plastic, or urethanes on tanks and/or piping. Field installed coatings limited to exposed threads, fittings, and damaged surface areas.	100

Emissions Control Equipment

No.	Media	Property	Description	%
T-40	Air	Stage I or Stage II Vapor Recovery	Includes pressure/vacuum vent relief valves, vapor return piping, stage 2 nozzles, coaxial hoses, vapor processing units, and vacuum- assist units. Used for motor vehicle fuel dispensing facilities. Does not include fuel delivery components of fuel dispensing unit.	100