

Significant Environmental Aspects	
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Greenprint Denver Significant Aspects

This document shows the most current GPD Significant Aspects and Definitions as determined by efforts recorded in the most recent CCD-204-R Environmental Aspects and Impacts Assessment. The following information is from CCD-204-R001 Environmental Aspects and Impacts Assessment.

Table 8: Updated Significant Aspects

Storm water	Waste water (sewage)
Unregulated Greenhouse Gasses (CO ₂ and Methane)	Threatened & endangered species
VOCs	Electricity
Contaminated land and groundwater	Light
Universal waste (e.g., batteries, e-waste)	ACM (Asbestos Containing Materials)
Hazardous materials & chemicals	Recyclable materials
Hazardous waste	Reusable materials
Air particulates (PM ₁₀ , PM _{2.5} , dust, opacity)	Office supplies & materials
Migratory birds	Construction debris
Compostable waste	Historical properties/ Cultural Resources
Other gasses (CO, NO _x , SO _x)	Wetlands
Biodiversity	Sound/noise
Liquid fuels	Special Waste (non-hazardous industrial waste)
Gaseous Fuels (Propane and Compressed Natural Gas)	Remediation/ investigation derived waste
Ozone Depleting Compounds (ODCs) – chlorofluorocarbons	Solid waste
Radioactive waste	WWTP (Wastewater Treatment Plant) sludge
Biological waste (expired pharmaceuticals, infectious waste)	Pathogens (plague, hantavirus, West Nile virus, dog

	waste, etc.)
Water consumption	Reuse water
	Explosives/fireworks

Table 9: Definitions and Examples of Significant Aspects (Listed Alphabetically)

Significant Aspect	Definitions and Examples
Air particulates	PM10, PM2.5, dust, opacity. Particulate matter (PM) is a complex mixture of extremely small particles and liquid droplets. Particle pollution is made up of a number of components, including acids (such as nitrates and sulfates), organic chemicals, metals, and soil or dust particles. The size of particles is directly linked to their potential for causing health problems. "Inhalable coarse particles," such as those found near roadways and dusty industries, are larger than 2.5 micrometers and smaller than 10 micrometers in diameter. "Fine particles," such as those found in smoke and haze, are 2.5 micrometers in diameter and smaller. These particles can be directly emitted from sources such as forest fires, or they can form when gases emitted from power plants, industries and automobiles react in the air. Of concern are particles that are 10 micrometers in diameter or smaller because those are the particles that generally pass through the throat and nose and enter the lungs. Once inhaled, these particles can affect the heart and lungs and cause serious health effects.
Asbestos Containing Materials (ACM)	Materials that contain greater than 1% asbestos by laboratory PLM analysis. Materials such as ceiling tiles, floor tiles, gaskets, packing, joint compound, heat insulation and brake linings produced before 1990 commonly contained asbestos.
Biodiversity	The variety and natural balance of different species (animals, birds, fish, plants, or other living organisms and wildlife) in a given habitat. Biodiversity shall include requirements for exotic/alien species.
Biological waste	Biological waste is any material that contains or has been contaminated by a biohazardous agent. Biological waste includes, but is not limited to; Petri dishes, surgical wraps, culture tubes, syringes, needles, blood vials, absorbent material, personal protective equipment and pipette tips, expired pharmaceuticals, and infectious waste.
Compostable waste	Biodegradable plant or herbivore waste free from toxic residue that is metabolized by microorganisms to form

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Significant Aspect	Definitions and Examples
	nutrient rich soil amendments. Carnivore waste is not included in this aspect definition and is considered solid waste.
Construction debris	Concrete, brick, asphalt and other such material discarded in the construction or demolition of an improvement to property.
Contaminated land and groundwater	Contaminated Land refers to land contaminated by hazardous substances (such as arsenic, DDT or oil) which may pose a risk to human health and/or the environment. Contaminated groundwater refers to water found underground in porous rock strata and soils, as in a spring, which has been polluted.
Electricity	Energy resulting from the flow of charge particles, such as electrons or ions.
Explosives/fireworks	An explosive is a material that either is chemically or otherwise energetically unstable or produces a sudden expansion of the material usually accompanied by the production of heat and large changes in pressure. A firework is a low explosive pyrotechnic device used primarily for aesthetic and entertainment purposes.
Gaseous Fuels	Gaseous fuels are those combustible or energy-generating molecules that can be harnessed to create mechanical energy, usually producing kinetic energy in gas form; includes propane and compressed natural gas.
Hazardous materials & chemicals	Substances that are harmful to human and environmental health and/or safety in relatively small quantities. Such materials include flammable, combustible, corrosive, reactive, explosive, substances, radioactive and toxic substances as well as any other substance defined as "hazardous" by the state or federal government.
Hazardous waste	Wastes meeting the "RCRA Characteristics" of Toxicity, Ignitability, Reactivity, or Corrosivity or have been listed as hazardous in RCRA. Hazardous waste is a waste with properties that make it dangerous or potentially harmful to human health or the environment. Hazardous wastes can be liquids, solids, contained gases, or sludges. They can be the by-products of manufacturing processes or simply discarded commercial products. Examples include cleaning fluids, pesticides, paint waste, laboratory wastes, aerosol cans that have not been punctured and drained, gas-contaminated rags.
Historical properties/ Cultural Resources	Structures, manmade or natural, that have been deemed important for cultural or natural reasons.
Light	Light from human activities that has potential to cause environmental impact, especially 24 hour light.

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Liquid fuels	Liquid fuels are those combustible or energy-generating molecules that can be harnessed to create mechanical energy, usually producing kinetic energy in liquid form; includes liquefied natural gas (LNG), gasoline and diesel.
Migratory birds	Migratory birds have a seasonal and somewhat predictable pattern of movement. Critical habitat for migratory birds includes the places where they nest and raise their young, spend their winters, and rest and rejuvenate during migration. Refer to the Migratory Bird Act.
Office supplies & materials	Items used in an office environment. Examples include pens, pencils, paper, furniture, and electronics.
Other gases	<p>CO: Carbon monoxide is produced from the partial combustion of carbon-containing compounds, notably in internal-combustion engines. Other sources of CO emissions include industrial processes (such as metals processing and chemical manufacturing), residential wood burning, and natural sources such as forest fires.</p> <p>NOx: A Nitrogen oxide is the generic term for a group of highly reactive gases, all of which contain nitrogen and oxygen in varying amounts. Many of the nitrogen oxides are colorless and odorless. However, one common pollutant, nitrogen dioxide (NO₂) along with particles in the air can often be seen as a reddish-brown layer over many urban areas.</p> <p>SOx: Sulfur oxide gases are formed when fuel containing sulfur, such as coal and oil, is burned, and when gasoline is extracted from oil, or metals are extracted from ore. These gases dissolve easily in water. SO₂ dissolves in water vapor to form acid, and interacts with other gases and particles in the air to form sulfates and other products that can be harmful to people and their environment.</p>
Ozone Depleting Compounds (ODCs)	ODCs are compounds that have been shown to destroy ozone in the upper atmosphere. ODCs include CFCs, HCFCs, halons, methyl bromide, carbon tetrachloride, and methyl chloroform. Refer to the Montreal Protocol.
Pathogens	Microorganisms that can cause disease in other organisms or in humans, animals, and plants. They may be bacteria, viruses, or parasites and are found in sewage, in runoff from animal farms or rural areas populated with domestic and/or wild animals, and in water used for swimming. (Examples include plague, hantavirus, West Nile, dog waste, etc).
Radioactive waste	Liquid, solid, or gaseous waste resulting from mining of radioactive ore, production of reactor fuel materials,

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	reactor operation, processing of irradiated reactor fuels, and related operations, and from use of radioactive materials in research, industry, and medicine.
Recyclable materials	Materials which are capable of being recycled and which may be segregated from other waste material for collection and recycling, rather than collection and disposal. Examples include glass, paper, plastic, cardboard, and lead/acid batteries.
Remediation/ investigation derived waste (IDW)	IDW is a subset of remediation wastes. IDW is waste that is generated in the process of investigating or examining an actual or potentially contaminated site. It includes solid and hazardous waste, media (including groundwater, surface water, soils, and sediments) and debris that contain <i>listed</i> hazardous wastes or exhibit a characteristic of a hazardous waste. It includes media and debris that is not hazardous but is contaminated with hazardous constituents. Not all IDW is hazardous waste.
Reusable materials	Material that can be used again, either for its original purpose, or for a new purpose.
Reuse water	Reclaimed water, sometimes called recycled water, is former wastewater (sewage) that has been treated to remove solids and certain impurities, and then allowed to recharge the aquifer rather than being discharged to surface water. This recharging is often done by using the treated wastewater for irrigation. In most locations, it is only intended to be used for non-potable uses, such as irrigation, dust control, and fire suppression, and there is controversy about possible health and environmental effects for those uses.
Solid waste	All solid, semi-solid, liquid and gaseous wastes, including trash, garbage, yard waste, ashes, industrial waste, construction waste, and household discards such as appliances, furniture and equipment.
Sound/noise	Sound or noise from human activities that has potential to cause environmental impact, especially 24 hour sound noise.
Special waste	Wastes that are not hazardous, but are also not considered “trash.” These wastes include crushed oil filters, petroleum contaminated soils below 500 PPM TPH concentration, contaminated spill response media, empty drums & aerosol cans, wastes not identified as “acceptable” for landfill in RCRA Subtitle D.
Threatened & endangered species	Threatened species are species (animals, birds, fish, plants, or other living organisms) that are likely to

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	become endangered if not protected. Endangered species are species threatened with extinction by man-made or natural changes in their environment. Refer to the Endangered Species Act.
Universal waste	Wastes specifically identified as Universal Hazardous Wastes in Federal regulations (RCRA). Examples include florescent light bulbs, batteries that can't be recycled (e.g. Ni-Cad or aluminum-air), electronics, aerosol cans, pesticides, and mercury-containing equipment.
Unregulated Greenhouse Gases	Gases with global warming potential, such as CO ₂ . Refer to the Kyoto Protocol.
Volatile organic compounds (VOC)	Carbon-containing compounds that evaporate into the air (with a few exceptions). VOCs contribute to the formation of smog and/or may themselves be toxic. VOCs often have an odor. Examples include gasoline, alcohol, solvents used in paints, components of petroleum fuels, hydraulic fluids, paint thinners, and dry cleaning agents. VOCs are common ground-water contaminants.
Wastewater	<p>Wastewater is any water that has been adversely affected in quality by anthropogenic influence. It comprises liquid waste discharged by domestic residences, commercial properties, industry, and/or agriculture and can encompass a wide range of potential contaminants and concentrations. Wastewater refers to the municipal wastewater that contains a broad spectrum of contaminants resulting from the mixing of wastewaters from different sources.</p> <p>Sewage is correctly the subset of wastewater that is contaminated with feces or urine, but is often used to mean any waste water. "Sewage" includes domestic, municipal, or industrial liquid waste products disposed of, usually via a pipe or sewer or similar structure, sometimes in a cesspool emptier.</p>
Wastewater Treatment Plant (WWTP) sludge	Solid matter that settles to the bottom of septic tanks or wastewater treatment plant sedimentation and must be disposed of by bacterial digestion or other methods or pumped out for land disposal or incineration.
Water consumption	Consumptive water use. Water abstracted which is no longer available for use because it has evaporated, transpired, been incorporated into products, landscaping, and crops, consumed by man or livestock, ejected directly to the sea or into evaporation areas or otherwise removed from freshwater resources.

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Wetlands	Areas of land inundated by surface water and groundwater, for example, bogs, fens, marshes, swamps, wet meadows, and shallow open waters. In places like Colorado wetlands are usually closely associated with rivers or lakes, and may blend unnoticeably into the riparian zone. Refer to Section 404 of the Clean Water Act.

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