

APPENDIX B

GLOSSARY

Abiotic: Non-living or non-biological; includes chemical and physical environments and processes.

Acoustic environment: The totality of noise within a given area.

ACHP: See Advisory Council on Historic Preservation.

Advisory Council on Historic Preservation: An independent federal agency that promotes the preservation, enhancement, and productive use of our nation's historic resources, and advises the President and Congress on national historic preservation policy.

Aesthetic resources: See “Visual resources.”

Agency for Toxic Substances and Disease Registry (ATSDR): Based in Atlanta, Georgia, ATSDR is a federal public health agency of the U.S. Department of Health and Human Services. It serves the public by using science, taking public health actions, and providing health information to prevent harmful exposures and diseases related to toxic substances.

Airshed: A geographic area where air pollutants from sources “upstream,” or within a discrete atmospheric area of flow, are present in the air. While watersheds are actual physical features of the landscape, airsheds are determined using mathematical models of atmospheric deposition.

Air quality: The characteristics of the ambient air (all locations accessible to the general public) as indicated by concentrations of the six air pollutants for which national standards have been established, and by measurement of visibility in mandatory Federal Class I areas.

Alluvium: Material transported and deposited on land by flowing water, such as clay, silt, and sand.

Alternatives analysis: What CEQ calls the “heart of the EIS;” the evaluation of the proposed action compared to all of the alternatives used to define the issues and provide a clear basis for choice among the options.

Ambient air: Any unconfined portion of the atmosphere: open air, surrounding air.

American Society for Testing and Materials (ASTM): ASTM develops technical standards for industry worldwide.

Anhydrous ammonia: Synthetic ammonia used as a nitrogen fertilizer, it is the basis for the production of all nitrogen fertilizers as well as being a direct application material. It is made through a reaction between gas and nitrogen.

Anthropogenic: Of or caused by humans.

APE: See Area of Potential Effect.

Aquifer: An underground layer of rock and sand that contains water.

Archeology: The scientific study, interpretation, and reconstruction of past human cultures from an anthropological perspective based on the investigation of surviving physical evidence of human activity and the reconstruction of related past environments.

Archeological resources: Any material of human life or activities that is at least 100 years old, and that is of archaeological interest.

Area of Potential Effect: Geographic area or areas within which an undertaking may directly or indirectly cause changes in the character or use of historic properties, if such properties exist. The area of potential effects is influenced by the scale and nature of the undertaking and may be different for different kinds of effects caused by the undertaking.

Attainment area: An area considered to have air quality as good as or better than the National Ambient Air Quality Standards as defined in the Clean Air Act. An area may be an attainment area for one pollutant and a non-attainment area for others.

Autism: A brain disorder that begins in early childhood and persists throughout adulthood; it affects three crucial areas of development: communication, social interaction, and creative or imaginative play.

Average Annual Daily Traffic (AADT): Daily number of vehicular movements (e.g., passenger vehicles, buses, and trucks) in both directions on a segment of roadway, averaged over a full calendar year.

Average Daily Traffic (ADT): Daily number of vehicular movements (e.g., passenger vehicles, buses, and trucks) in both directions on a segment of roadway, averaged over a period less than a year.

Background zone: A term used in the Bureau of Land Management VRM; includes seen areas beyond the foreground-middleground zone but usually less than 15 miles (24 km) away.

Baghouse: An enclosed structure that uses filter bags to help remove sulfur dioxide, fly ash, and other particulates from flue and other exhaust gases.

Barker-Hughesville (BH) District: An historic mining district located in both Cascade and Judith Basin Counties, in the Little Belt Mountains southeast of Great Falls; due to the impacts of mining activities, area groundwater, soils and surface water are now contaminated with heavy metals and arsenic.

Base load: The minimum demands of electricity on a power station over a given period of time; the amount of electricity required to operate a plant continuously, day and night, all year long.

Base Realignment and Closure (BRAC): The process the Department of Defense uses to reorganize its installation infrastructure to more efficiently and effectively support its forces, increase operational readiness and facilitate new ways of doing business.

Berm: A curb, ledge, wall or mound used to contain water, separate materials, and/or prevent the spread of contaminants.

Best management practices (BMPs): Methods that have been determined to be the most effective, practical means of preventing or reducing pollution from non-point sources, including construction sites.

Binary cycle power plant: A system where the water or steam from the geothermal reservoir never comes into contact with the turbine or generator unit.

Bioaccumulation/ biomagnification: The collection or amplification of a substance in a biological system; the increase in tissue concentration of bioaccumulated chemical as the chemical passes up through two or more trophic levels.

Biogas: Gas, typically rich in methane, that is produced by the fermentation of organic matter such as manure under anaerobic conditions.

Blowdown: Removal of liquids or solids from a process, a storage vessel, or an evaporative system by the use of pressure to reduce mineral concentration that can cause scaling.

Burlington Northern and Santa Fe (BNSF) Railway: Headquartered in Fort Worth, Texas, BNSF is one of the largest railroad networks in North America. It was formed in 1996 when the Atchison, Topeka and Santa Fe Railway was merged into the Burlington Northern Railroad.

Busbar cost: The wholesale cost to generate power at a plant.

Carboxyhemoglobin: Compound that is formed when inhaled carbon monoxide combines with hemoglobin, binding more tightly than oxygen and rendering the hemoglobin incapable of transporting oxygen.

Cerebrovascular disease: Disease involving blood vessels supplying the brain, such as a stroke.

Chronic lower respiratory disease (CLRD): Includes asthma, chronic obstructive pulmonary disease and bronchiectasis.

Coal Combustion Product (CCP): Large-volume, non-hazardous waste products resulting from combustion of coal at power plants; CCPs that are disposed of in landfills, surface impoundments, or used as mine backfill, are regulated under subtitle D of the Resource Conservation and Recovery Act, and are thus subject to significantly stricter federal regulation than reused CCPs.

Coalbed methane gas: Methane produced from seams of coal in the same way that natural gas is produced from other strata; coalbed methane is generated either from a biological process as a result of microbial action, or from a thermal process as a result of increasing heat with depth of coal. Often a coal seam is saturated with water, with methane held in the coal by water pressure.

Co-firing: The practice of introducing biomass in high-efficiency, coal-fired boilers as a supplemental energy source.

Combustion: Burning. Many important pollutants, such as sulfur dioxide, nitrogen oxides, and particulates (PM-10) are combustion products, often products of the burning of fuels such as coal, oil, gas and wood

Comprehensive Environmental Response, Compensation and Liability Information System (CERCLIS): Contains information on hazardous waste sites, potentially hazardous waste sites, and remedial activities across the nation, including existing and potential NPL sites.

Contamination: Introduction into water, air, and soil of microorganisms, chemicals, toxic substances, wastes, or wastewater in a concentration that makes the medium unfit for its next intended use.

Continental divide: The line of high ground that separates the oceanic drainage basins of a continent; the river systems of a continent on opposite sides of a continent divide flow toward different oceans.

Criteria air pollutants: A group of y common air pollutants regulated by EPA on the basis of criteria (information on health and/or environmental effects of pollution) and for which NAAQS have been established. In general, criteria air pollutants are widely distributed over the country. They are: particulate matter (PM), carbon monoxide (CO), sulfur dioxide (SO₂), ozone (O₃), and lead (Pb).

Cultural resources: Any building, site, district, structure, object, data, or other material significant in history, architecture, archeology, or culture. Cultural resources include: historic properties as defined in the National Historic Preservation Act (NHPA), cultural items as defined in the Native American Graves Protection and Repatriation Act (NAGPRA), archeological resources as defined in the Archeological Resources Protection Act (ARPA), sacred sites as defined in Executive Order 13007, *Protection and Accommodation of Access To "Indian Sacred Sites,"* to which access is provided under the American Indian Religious Freedom Act (AIRFA), and collections.

Cumulative impacts: Impact on the environment that results from the incremental impact of the action when added to other past, present, and reasonably foreseeable future actions regardless of what agency (Federal or non-Federal) or person undertakes such other actions. Effects resulting from individually minor but collectively significant actions taking place over a period of time.

Decibel (dB): The unit of measurement of sound level calculated by taking ten times the common logarithm of the ratio of the magnitude of the particular sound pressure to the standard reference sound pressure of 20 micropascals and its derivatives.

dBA (A-weighted Decibel): The A-scale sound level is a quantity, in decibels, read from a standard sound-level meter with A-weighting circuitry. The A-scale weighting discriminates against the lower frequencies according to a relationship approximating the auditory sensitivity

of the human ear. The A-scale sound level measures approximately the relative “noisiness” or “annoyance” of many common sounds.

Dendritic Drainage: A river or stream tributary pattern resembling the branching of certain hardwood trees.

Discharge: The volume of fluid plus suspended sediment that passes a given point within a given period of time.

Dissolved Oxygen: An amount of oxygen dispersed in water, usually expressed as mg/L; DO sustains the lives of fish and other aquatic organisms; cold and flowing water usually contains more DO than warm, stagnant water.

Electric load: The combined electrical needs of all units in a system.

Emplanements: Number of passenger boardings in a given period of time (day, year, etc.) at an airport.

Endangered species: A species that is threatened with extinction throughout all or a significant portion of its range.

Environment: The total surroundings of an organism, including both non-living (abiotic) and living (biotic) components, that is, other plants and animals as well as those of its own kind.

Environmental Assessment: A concise public document which serves to briefly provide sufficient evidence and analysis for determining whether to prepare an EIS or a Finding of No Significant Impact (FONSI) in compliance with NEPA.

Environmental Site Assessment (ESA): Provides a good general indication of the past and existing conditions on a site that could indicate a recognized environment condition (i.e. contamination).

Evapotranspiration (ET) Cap: Cap commonly used at Class II landfills and other waste repositories in Montana. As each waste cell is filled, a final cover is placed on it. The final cover is designed to retain the precipitation that falls on the final cover and maximize evaporation and transpiration by the plants grown on the cover. The cap is constructed with a gravel layer immediately on top of the waste material (like ash) to serve as a capillary break. The gravel is covered with 48 inches of materials that function as subsoil. The capillary break prevents the subsoil from losing water into the waste. Six inches of topsoil are applied and planted with suitable vegetation to minimize erosion and transpire the moisture retained in the cap. The ET cap is easier to construct and maintain than a compacted clay cap and mimics the natural soil conditions while preventing infiltration.

Farmland Protection Policy Act (FPPA): A federal law that aims to minimize the impact federal programs have on the unnecessary and irreversible conversion of farmland to non-agricultural uses. It assures that, to the extent possible, federal programs are administered to be compatible with state, local, and private programs and policies to protect farmland.

Federal Aviation Administration (FAA): Federal agency primarily responsible for the advancement, safety and regulation of civil aviation in the United States.

Footprint (ecological): A measure of how much land and water is needed to produce the resources that humans consume and to dispose of the waste that humans produce.

Foreground-middleground zone: A term used in the Bureau of Land Management VRM; includes areas seen from highways, rivers, or other viewing locations which are less than 3-5 miles (5-8 km) away.

Flue gas: The air coming out of a chimney after combustion; it can include nitrogen oxides, carbon oxides, water vapor, sulfur oxides, particles and many chemical pollutants.

Flue gas desulfurization: Removes PM and SO₂ by producing contact between the exhaust gas and a scrubbing slurry (generally limestone). Mounted horizontal plates facilitate the transport of the slurry, whose contact with the exhaust gas forms a wet mixture of calcium sulfite and sulfate.

Fugitive dust: Particles lifted into the ambient air due to man-made and natural activities such as the movement of soil, vehicles, equipment, blasting, and wind. This excludes particulate matter emitted directly from the exhaust of motor vehicles and other internal combustion engines.

Fly ash: Non-combustible residual particles expelled by flue gas.

Gasification: A method for exploiting poor-quality coal and thin coal seams by burning the coal in place to produce combustible gas that can be collected and burned to generate power or processed into chemicals and fuels.

Generating capacity: The total amount of electrical power that a utility can produce at any one time, usually measured in megawatts; three types generating capacity include a base load, an intermediate load, and a peaking capacity.

Geothermal resources: Internal heat of the earth when used as a source of energy, it is usually contained in underground reservoirs of steam, hot water, and hot dry rocks.

Groundwater: Water in the porous rocks and soils of the earth's crust; a gratuitous proportion of the total supply of fresh water.

Habitat: A place where particular plants or animals occur or could occur.

Hazardous substances: Solid or liquid materials, which may cause or contribute to mortality or serious illness by virtue of physical and chemical characteristics, or pose a hazard to human health or the environment when improperly managed, disposed of, treated, stored, or transported.

Hazardous waste: A waste or combination of wastes which, because of its quantity, concentration, or physical, chemical, or infectious characteristics, may either cause, or significantly contribute to an increase in mortality or an increase in serious, irreversible illness; or pose a substantial present or potential hazard to human health or the environment when improperly treated, stored, transported, disposed of, or otherwise managed.

Haze: An atmospheric aerosol of sufficient concentration to be visible. The particles are too small to see individually, but reduce visual range by scattering light.

Heat: The transfer of energy from one object at a higher temperature to another object at a lower temperature.

Heavy metals: Metallic elements like mercury, lead, cadmium, arsenic, copper and zinc that can be harmful pollutants when they enter air, soil, and water.

Hemoglobin: Oxygen-carrying pigment and protein in red blood cells of vertebrates.

High Plains Sanitary Landfill and Recycle Center (HPSL): A licensed landfill located within Cascade County, approximately nine miles (14 km) north of the City of Great Falls and one mile (1.6 km) east of US Route 87.

Historic Landmark: Significant historic places designated by federal, state, or local officials because they possess exceptional value or quality in illustrating or interpreting the heritage of the United States.

Historic Property: As defined by the NHPA, a historic property or historic resource is any prehistoric or historic district, site, building, structure, or object included in, or eligible for inclusion in, the National Register of Historic Places (NRHP), including any artifacts, records, and remains that are related to and located in such properties. The term also includes properties of traditional religious and cultural importance (traditional cultural properties), which are eligible for inclusion in the NRHP as a result of their association with the cultural practices or beliefs of an Indian tribe or Native Hawaiian organization.

Hydroelectric: Related to electric energy produced by moving water (i.e. through a dam on a river that stores water in a reservoir).

Impairment: An adverse impact on a resource or a value (i.e. when a significant adverse impact reaches the level of impairing a national park, it is prohibited under the Organic Act of 1916).

Intercontinental Ballistic Missile (ICBM): A very long-ranged, ballistic missile typically designed for nuclear weapons delivery, delivering one or more nuclear warheads to a pre-designated target.

Labor Market Area: An economically integrated geographic area within which individuals can reside and find employment within a reasonable distance or can readily change employment without changing their place of residence.

Lacustrine: Pertaining to lakes. According to the U.S. Fish and Wildlife Service's classification system, these wetlands are characterized by the following: (1) situated in a topographic depression or a dammed river channel; (2) lacking trees, shrubs, persistent emergents, emergent mosses or lichens with greater than 30 percent areal coverage; and (3) a total area exceeding 20 acres (8 ha).

Lacustrine limnetic wetland: All deep waters within the lacustrine system.

Lacustrine littoral wetland: Wetlands along lake edges and shorelines, typically shallow wetlands (less than 2 meter water depth) which extend from the shore to the non-persistent emergent deep waters.

Land Evaluation and Site Assessment (LESA): The Natural Resources Conservation Service (NRCS) in Montana uses the LESA system to rank and prioritize proposals for the Farm and Ranch Lands Protection Program (FRPP), and to systematically assess and identify prime agricultural lands through the use of a consistent rating scheme. Factors are used to label a group of attributes such as soil potential, agricultural productivity, or environmental benefit. Factor scale refers to the way points are assigned to a factor, i.e. 0 to 100 points. A factor rating is the value assigned to a particular parcel. Weight refers to the relative importance of the factor in the LESA system, i.e. a multiplier applied to a factor rating (for example, 0.0 to 1.0). Score is used to denote the total of all weighted factor ratings, i.e. a LESA score.

L_{dn}: Day-night average noise level; a single number descriptor that represents the constantly varying sound level during a continuous 24-hour period. The L_{dn} is typically calculated using 24 consecutive one-hour L_{eq} noise levels. The L_{dn} includes a 10 dBA penalty that is added to noises which occur during the nighttime hours between 10:00 p.m. and 7:00 a.m. to account for people's higher sensitivity to noise at night when the background noise level is typically low.

L_{eq}: A-weighted, equivalent noise level; uses a single number to describe the constantly fluctuating instantaneous ambient noise levels at a receptor location during a period of time, and accounts for all of the noises and quiet periods that occur during that time period.

L₉₀: 90th percentile-exceeded noise level; this is a metric that indicates the single noise level that is exceeded during 90 percent of a measurement period, although the actual instantaneous noise levels fluctuate continuously. The L₉₀ noise level is typically considered the ambient noise level, and is often near the low end of the instantaneous noise levels during a measurement period.

Level-of-Service (LOS): Performance of a roadway segment. The LOS scale ranges from A to F, with each level defined by a range of traffic volume to capacity ratios. LOS criteria A, B, and C are considered good operating conditions, where motorists experience minor to tolerable delays. LOS criterion D represents below average conditions. LOS criterion E corresponds to the maximum capacity of the roadway. LOS criterion F represents a gridlock situation.

Levelized cost: The present value of the total cost of building and operating a generating plant over its economic life, converted to equal annual payments; costs are levelized (adjusted to remove the impact of inflation) in real dollars.

LMA: See “Labor Market Area.”

Market based: Using an economic system in which goods and services are traded at an agreed upon price to improve the cost-effectiveness of a policy.

Mesic: Refers to sites or habitats characterized by intermediate moisture conditions.

Methylation: Conversion of mercury (Hg) into methylmercury (CH₃Hg) through biotic (living) or abiotic (non-living) processes in the environment.

Metropolitan Statistical Area: As defined by the federal Office of Management and Budget, an MSA is an urban area that meets specified size criteria: either it has a core city of at least 50,000 inhabitants within its corporate limits, or it contains an urbanized area of at least 50,000 inhabitants and has a total population of at least 100,000. The Great Falls MSA is coincident with Cascade County.

Millirem: One thousand (10⁻³) of a rem. A rem is a unit of absorbed radiation. One rem is equal to *n* times the number of rads, where the factor *n* is dependent on the type of radiation which is being absorbed.

Mitigation: A method or action to reduce or eliminate adverse program impacts.

Monitoring (monitor): Systematically observing, recording, or measuring some environmental attribute, such as air quality or water quality, or ascertaining compliance with a given law, regulation, or standard. For example, measurement of air pollution is referred to as monitoring. EPA, state and local agencies measure the types and amounts of pollutants in the ambient air. The 1990 Clean Air Act requires certain large polluters to perform enhanced monitoring to provide an accurate picture of how much pollution is being released into the air. The 1990 Clean Air Act requires states to monitor community air in polluted areas to check on whether the areas are being cleaned up according to schedules set out in the law.

Monofill: A landfill that contains only ash.

Montana State University: A public unit of the Montana University System founded in 1893. The main campus is located in Bozeman, with branch campuses in three other cities, including Great Falls.

MSA: See “Metropolitan Statistical Area.”

National Environmental Policy Act: Establishes procedures that Federal agencies must follow in making decisions on Federal actions that may impact the environment. Procedures include evaluation of environmental effects of proposed actions, and alternatives to proposed actions, involvement of the public and cooperating agencies.

National Ambient Air Quality Standards (NAAQS): Standards established on a state or Federal level that define the limits for airborne concentrations of designated “criteria” pollutants (e.g. nitrogen dioxide, sulfur dioxide, carbon monoxide, particulate matter, ozone, and lead) to

protect public health with an adequate margin of safety (primary standards) and to protect public welfare, including plant and animal life, visibility, and materials (secondary standards).

National Institute for Occupational Safety and Health (NIOSH): Federal agency responsible for conducting research and making recommendations for the prevention of work-related injury and illness. NIOSH is part of the Centers for Disease Control and Prevention (CDC) in the Department of Health and Human Services.

National Priorities List: List of national priorities among the known releases or threatened releases of hazardous substances, pollutants, or contaminants throughout the United States and its territories; sites listed in the NPL also are known as Superfund sites.

National Register of Historic Places: The nation's official list of cultural resources worthy of preservation. Authorized under the National Historic Preservation Act of 1966, the National Register is part of a national program to coordinate and support public and private efforts to identify, evaluate, and protect our historic and archeological resources. Properties listed in the Register include districts, sites, buildings, structures, and objects that are significant in American history, architecture, archeology, engineering, and culture. The National Register is administered by the National Park Service.

Native vegetation: Plant life that occurs naturally in an area without agriculture or cultivation efforts.

Navigable waters: The waters of the United States, including the territorial seas; all waters that are currently used, were used in the past, or may be susceptible to use in interstate or foreign commerce, including all waters that are subject to the ebb and flow of the tide, as defined by 40 CFR 110.1.

NEPA: See “National Environmental Policy Act.”

Neurotoxicity: Having the capability of harming nerve tissue.

Noise: Sound that is perceived by humans as annoying and unwanted.

NPL: See “National Priorities List.”

Non-attainment area: An area that has been designated by the U.S. Environmental Protection Agency and the appropriate state air quality agency as exceeding one or more National Ambient Air Quality Standards.

NPL: See “National Priorities List.”

NRHP: See “National Register of Historic Places.”

Palustrine emergent wetland: Classification of the U.S. Fish and Wildlife Service for non-tidal wetlands dominated by trees, shrubs, or persistent emergent vegetation. Palustrine emergent wetlands include vegetated wetlands traditionally called by such names as marsh, swamp, bog,

fen, and prairie. They also include small, shallow, permanent or intermittent water bodies often called ponds.

Particulate matter: Solid or liquid matter suspended in the atmosphere.

Photochemical: Of or pertaining to chemical action of light, or produced by it.

Photovoltaic: Converting light into electricity; semiconductor devices that convert sunlight into direct current electricity (i.e. solar cells).

Plume: A continuous emission from a point source of contamination that has a starting point and a noticeable pathway.

Portage: On a river expedition using watercraft, overland transport of boats (rafts, keelboats, canoes, kayaks, etc.) and gear around insurmountable obstacles such as waterfalls, cascades, or boulders. On lakes, a portage is a land crossing between unconnected lakes. Portages often entail substantial time or effort or both.

Potable: A liquid, usually water, which is drinkable.

Powder River Basin: An area containing the world's largest single deposit of low-sulfur coal, located in southeastern Montana and northeastern Wyoming.

Power purchase agreement: The off-take contract from a large customer to buy the electricity generated by a power plant.

Pulverized coal: A coal that has been crushed to a fine dust in a grinding mill. It is blown into the combustion zone of a furnace and burns very rapidly and efficiently.

Reclamation/ remediation: The process of restoring an area to an acceptable pre-existing condition; an action to correct damage to the environment (i.e. after a power plant is decommissioned or shut down).

Recognized Environmental Condition (REC): Refers to the presence or likelihood of a hazardous substance or petroleum on a property under conditions that indicate a release or threat of a release to the environment.

Resource Conservation Recovery Information System (RCRIS): RCRIS provides selective information on sites that generate, transport, or dispose of hazardous wastes.

Riverine-lacustrine boundary: Transition zone at which a river enters a reservoir or natural lake.

Runoff: The non-infiltrating water entering a stream or other conveyance channel shortly after a rainfall.

Scenic resources (see "Visual Resources")

Scoping: Planning process that solicits people's and "stakeholders'" opinions on the value of a park, issues facing a park, and the future of a park. Also used in the NEPA process at the outset of preparing an EA or an EIS to help determine the scope of the study and the major issues that merit investigation and analysis.

Sediment: Particles derived from rock or biological sources that have been transported by water.

Seldom-seen zone: A term used in the Bureau of Land Management VRM; includes areas not seen as foreground-middleground or background (hidden from view)

Selective catalytic reduction: A non-combustion control technology that converts NO_x into molecular nitrogen and water by injecting a reducing agent (i.e. ammonia) into the flue gas in the presence of a catalyst.

Sensitive receptor: Areas defined as those sensitive to noise, such as hospitals, residential areas, schools, outdoor theaters, and protected wildlife species.

SHPO: See State Historic Preservation Officer.

Siltation: Deposition of fine mineral particles (silt) on the beds of streams or lakes.

Source: Any place or object from which pollutants are released. A source can be a power plant, factory, dry cleaning business, gas station or farm. Cars, trucks and other motor vehicles are sources, and consumer products and machines used in industry can be sources too. Sources that stay in one place are referred to as stationary sources; sources that move around, such as cars or planes, are called mobile sources.

Species: All organisms of a given kind; a group of plants or animals that breed together but are not bred successfully with organisms outside their group.

State Historic Preservation Officer: Appointed under the authority of the National Historic Preservation Act of 1966, the State Historic Preservation Officer (SHPO) is the official in each state and territory charged with administering national and state historic preservation program at the state level.

Steady state: A type of equilibrium in which those variables that are not constant grow over time at a constant and common rate.

Storm water: Runoff water resulting from precipitation.

Strategic Air Command (SAC): Branch of the United States Air Force that, from 1946 to 1992, was in charge of America's bomber-based and ballistic missile-based strategic nuclear arsenal, as well as the infrastructure necessary to support their operations.

Sub-bituminous coal: A coal with a heating value between bituminous (soft; high in carbon) and lignite (young; low-grade; low in sulfur) with low-fixed carbon and high percentages of volatile matter and moisture.

Swamp gas: Biogas that is produced by the anaerobic decomposition of wetland vegetation that has settled to the bottom of a marsh, swamp, or other wetland.

TCP: See Traditional Cultural Property.

Thermoelectric: The conversion from heat differentials to electricity or vice versa (i.e. when heated water in a boiler turns into steam, and the steam spins the turbine that generates electricity; when water is used to cool steam back into water so it can be pumped back to the generator to become steam again).

Thimerosal: A mercury-containing preservative used in some vaccines and other products since the 1930's. No harmful effects were reported from thimerosal at doses used in vaccines, except for minor local reactions like redness and swelling at the injection site. The medical profession assured the public that there was specifically no scientific evidence linking thimerosal to an increased risk of developing autism or any other behavior disorder, but many parents of autism sufferers have not accepted these assurances. In 1999, in response to this unresolved controversy, it was agreed that thimerosal should be reduced or eliminated in vaccines as a precautionary measure. At present, all routinely recommended pediatric vaccines in the US contain no thimerosal or only trace amounts.

Toxicity: A measure of how toxic or poisonous something is.

Traditional Cultural Property: A property eligible for inclusion on the National Register of Historic Places because of its association with cultural practices or beliefs of a living community that are important in maintaining the continuing cultural identity of the community. Traditional Cultural Properties are essential to maintaining the cultural integrity of many Native American Indian nations and are critical to the cultural lives of many of their communities.

Turbidity: A measure of water clarity; a measure of the amount of suspended solids (usually fine clay or silt particles) in water and thus the degree of scattering or absorption of light in the water.

Vernal Pool: Seasonal, depressional wetlands. They are covered by shallow water for variable periods from winter to spring, but may be completely dry for most of the summer and fall. Vernal pools range in size from small puddles to shallow lakes and are usually found in a gently sloping plain of grassland. Although generally isolated, they are sometimes connected to each other by small drainages known as vernal swales. Beneath vernal pools lies either bedrock or a hard clay layer in the soil that helps keep water in the pool.

Viewshed: Subunits of the landscape where the scene is contained by topography, similar to a watershed.

Visual resources: The quality of the environment as perceived through the visual sense; visual resources are evaluated by comparing project features with the major features in the existing landscape; denotes an interaction between a human observer and the landscape he or she is observing.

Visual resource inventory: As part of the visual resource management system developed by the Bureau of Land Management, consists of identifying the visual resources of an area and assigning them to inventory classes. The process involves rating the visual appeal of a tract of land, measuring public concern for scenic quality, and determining whether the tract of land is visible from travel routes or observation points. Based on these three factors, BLM-administered lands are placed into one of four visual resource inventory classes. These inventory classes represent the relative value of the visual resources. Classes I and II are the most valued, Class III represents a moderate value, and Class IV represents the least value.

Visual Resource Management: A system developed by the Bureau of Land Management for minimizing the visual impacts of surface-disturbing activities and maintaining scenic values for the future.

Visual resource contrast rating: The second step of the Bureau of Land Management's VRM process, used to determine the significance of aesthetic impacts. The contrast rating classifies changes in a landscape introduced by a project into one of four "dominance classes:" not noticeable, noticeable, distracting, and dominant.

Volatile Organic Compounds (VOCs): Any organic compound that participates in atmospheric photochemical reactions. Some compounds are specifically listed as exempt due to their having negligible photochemical reactivity. [See 40 CFR 51.100.] Photochemical reactions of VOCs with oxides of nitrogen and sulfur can produce O₃ and PM.

VRM: See Visual Resource Management.

Waste-to-energy: A range of processes associated with municipal or industrial waste where the waste is burned, gasified or digested at a high temperature. Energy is recovered from these processes (usually in the form of heat) and is reclaimed to produce steam and/or generate electricity.

Water rights: A body of law that determines water ownership; a legal right to take possession of water occurring in a natural waterway and to divert that water for beneficial use.

Western System Coordination Council (WSCC): The U.S. bulk power system has evolved into three major networks or power grids. The WSCC is one of these networks. The major networks consist of extra-high-voltage connections between individual utilities designed to permit the transfer of electrical energy from one part of the network to another. These transfers may be restricted by a lack of contractual arrangements or by inadequate transmission capability.

Wetlands: Areas that are inundated or saturated with surface or groundwater at a frequency and duration sufficient to support a prevalence of vegetation typically adapted for life in saturated soil, including swamps, marshes, bogs, and other similar areas.

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