

## Department of Energy

### A9 INFORMATION GATHERING, ANALYSIS, AND DISSEMINATION

Information gathering (including, but not limited to, literature surveys, inventories, site visits, and audits), data analysis (including, but not limited to, computer modeling), document preparation (including, but not limited to, conceptual design, feasibility studies, and analytical energy supply and demand studies), and information dissemination (including, but not limited to, document publication and distribution, and classroom training and informational programs), but not including site characterization or environmental monitoring. (See also B3.1 of appendix B to this subpart.)

### A10 REPORTS AND RECOMMENDATIONS ON NON-DOE LEGISLATION

Reports and recommendations on legislation or rulemaking that are not proposed by DOE.

### A11 TECHNICAL ADVICE AND ASSISTANCE TO ORGANIZATIONS

Technical advice and planning assistance to international, national, state, and local organizations.

### A12 EMERGENCY PREPAREDNESS PLANNING

Emergency preparedness planning activities, including, but not limited to, the designation of onsite evacuation routes.

### A13 PROCEDURAL DOCUMENTS

Administrative, organizational, or procedural Policies, Orders, Notices, Manuals, and Guides.

### A14 APPROVAL OF TECHNICAL EXCHANGE ARRANGEMENTS

Approval of technical exchange arrangements for information, data, or personnel with other countries or international organizations (including, but not limited to, assistance in identifying and analyzing another country's energy resources, needs and options).

### A15 INTERNATIONAL AGREEMENTS FOR ENERGY RESEARCH AND DEVELOPMENT

Approval of DOE participation in international "umbrella" agreements for cooperation in energy research and development activities that would not commit the U.S. to any specific projects or activities.

## Pt. 1021, Subpt. D, App. B

### APPENDIX B TO SUBPART D OF PART 1021—CATEGORICAL EXCLUSIONS APPLICABLE TO SPECIFIC AGENCY ACTIONS

#### TABLE OF CONTENTS

#### B. Conditions that Are Integral Elements of the Classes of Actions in Appendix B

##### B1. CATEGORICAL EXCLUSIONS APPLICABLE TO FACILITY OPERATION

- B1.1 Changing rates and prices
- B1.2 Training exercises and simulations
- B1.3 Routine maintenance
- B1.4 Air conditioning systems for existing equipment
- B1.5 Existing steam plants and cooling water systems
- B1.6 Tanks and equipment to control runoff and spills
- B1.7 Electronic equipment
- B1.8 Screened water intake and outflow structures
- B1.9 Airway safety markings and painting
- B1.10 Onsite storage of activated material
- B1.11 Fencing
- B1.12 Detonation or burning of explosives or propellants after testing
- B1.13 Pathways, short access roads, and rail lines
- B1.14 Refueling of nuclear reactors
- B1.15 Support buildings
- B1.16 Asbestos removal
- B1.17 Polychlorinated biphenyl removal
- B1.18 Water supply wells
- B1.19 Microwave, meteorological, and radio towers
- B1.20 Protection of cultural resources, fish and wildlife habitat
- B1.21 Noise abatement
- B1.22 Relocation of buildings
- B1.23 Demolition and disposal of buildings
- B1.24 Property transfers
- B1.25 Real property transfers for cultural resources protection, habitat preservation, and wildlife management
- B1.26 Small water treatment facilities
- B1.27 Disconnection of utilities
- B1.28 Placing a facility in an environmentally safe condition
- B1.29 Disposal facilities for construction and demolition waste
- B1.30 Transfer actions
- B1.31 Installation or relocation of machinery and equipment
- B1.32 Traffic flow adjustments
- B1.33 Stormwater runoff control
- B1.34 Lead-based paint containment, removal, and disposal
- B1.35 Drop-off, collection, and transfer facilities for recyclable materials
- B1.36 Determinations of excess real property

##### B2. CATEGORICAL EXCLUSIONS APPLICABLE TO SAFETY AND HEALTH

- B2.1 Workplace enhancements

**Pt. 1021, Subpt. D, App. B**

**10 CFR Ch. X (1–14 Edition)**

- B2.2 Building and equipment instrumentation
- B2.3 Personnel safety and health equipment
- B2.4 Equipment qualification
- B2.5 Facility safety and environmental improvements
- B2.6 Recovery of radioactive sealed sources

**B3. CATEGORICAL EXCLUSIONS APPLICABLE TO SITE CHARACTERIZATION, MONITORING, AND GENERAL RESEARCH**

- B3.1 Site characterization and environmental monitoring
- B3.2 Aviation activities
- B3.3 Research related to conservation of fish, wildlife, and cultural resources
- B3.4 Transport packaging tests for radioactive or hazardous material
- B3.5 Tank car tests
- B3.6 Small-scale research and development, laboratory operations, and pilot projects
- B3.7 New terrestrial infill exploratory and experimental wells
- B3.8 Outdoor terrestrial ecological and environmental research
- B3.9 Projects to reduce emissions and waste generation
- B3.10 Particle accelerators
- B3.11 Outdoor tests and experiments on materials and equipment components
- B3.12 Microbiological and biomedical facilities
- B3.13 Magnetic fusion experiments
- B3.14 Small-scale educational facilities
- B3.15 Small-scale indoor research and development projects using nanoscale materials
- B3.16 Research activities in aquatic environments

**B4. CATEGORICAL EXCLUSIONS APPLICABLE TO ELECTRIC POWER AND TRANSMISSION**

- B4.1 Contracts, policies, and marketing and allocation plans for electric power
- B4.2 Export of electric energy
- B4.3 Electric power marketing rate changes
- B4.4 Power marketing services and activities
- B4.5 Temporary adjustments to river operations
- B4.6 Additions and modifications to transmission facilities
- B4.7 Fiber optic cable
- B4.8 Electricity transmission agreements
- B4.9 Multiple use of powerline rights-of-way
- B4.10 Removal of electric transmission facilities
- B4.11 Electric power substations and interconnection facilities
- B4.12 Construction of powerlines
- B4.13 Upgrading and rebuilding existing powerlines

**B5. CATEGORICAL EXCLUSIONS APPLICABLE TO CONSERVATION, FOSSIL, AND RENEWABLE ENERGY ACTIVITIES**

- B5.1 Actions to conserve energy or water

- B5.2 Modifications to pumps and piping
- B5.3 Modification or abandonment of wells
- B5.4 Repair or replacement of pipelines
- B5.5 Short pipeline segments
- B5.6 Oil spill cleanup
- B5.7 Import or export natural gas, with operational changes
- B5.8 Import or export natural gas, with new cogeneration powerplant
- B5.9 Temporary exemptions for electric powerplants
- B5.10 Certain permanent exemptions for existing electric powerplants
- B5.11 Permanent exemptions allowing mixed natural gas and petroleum
- B5.12 Workover of existing wells
- B5.13 Experimental wells for injection of small quantities of carbon dioxide
- B5.14 Combined heat and power or cogeneration systems
- B5.15 Small-scale renewable energy research and development and pilot projects
- B5.16 Solar photovoltaic systems
- B5.17 Solar thermal systems
- B5.18 Wind turbines
- B5.19 Ground source heat pumps
- B5.20 Biomass power plants
- B5.21 Methane gas recovery and utilization systems
- B5.22 Alternative fuel vehicle fueling stations
- B5.23 Electric vehicle charging stations
- B5.24 Drop-in hydroelectric systems
- B5.25 Small-scale renewable energy research and development and pilot projects in aquatic environments

**B6. CATEGORICAL EXCLUSIONS APPLICABLE TO ENVIRONMENTAL RESTORATION AND WASTE MANAGEMENT ACTIVITIES**

- B6.1 Cleanup actions
- B6.2 Waste collection, treatment, stabilization, and containment facilities
- B6.3 Improvements to environmental control systems
- B6.4 Facilities for storing packaged hazardous waste for 90 days or less
- B6.5 Facilities for characterizing and sorting packaged waste and overpacking waste
- B6.6 Modification of facilities for storing, packaging, and repacking waste
- B6.7 [Reserved]
- B6.8 Modifications for waste minimization and reuse of materials
- B6.9 Measures to reduce migration of contaminated groundwater
- B6.10 Upgraded or replacement waste storage facilities

**B7. CATEGORICAL EXCLUSIONS APPLICABLE TO INTERNATIONAL ACTIVITIES**

- B7.1 Emergency measures under the International Energy Program
- B7.2 Import and export of special nuclear or isotopic materials

## Department of Energy

## Pt. 1021, Subpt. D, App. B

### B. CONDITIONS THAT ARE INTEGRAL ELEMENTS OF THE CLASSES OF ACTIONS IN APPENDIX B

The classes of actions listed below include the following conditions as integral elements of the classes of actions. To fit within the classes of actions listed below, a proposal must be one that would not:

(1) Threaten a violation of applicable statutory, regulatory, or permit requirements for environment, safety, and health, or similar requirements of DOE or Executive Orders;

(2) Require siting and construction or major expansion of waste storage, disposal, recovery, or treatment facilities (including incinerators), but the proposal may include categorically excluded waste storage, disposal, recovery, or treatment actions or facilities;

(3) Disturb hazardous substances, pollutants, contaminants, or CERCLA-excluded petroleum and natural gas products that preexist in the environment such that there would be uncontrolled or unpermitted releases;

(4) Have the potential to cause significant impacts on environmentally sensitive resources. An environmentally sensitive resource is typically a resource that has been identified as needing protection through Executive Order, statute, or regulation by Federal, state, or local government, or a Federally recognized Indian tribe. An action may be categorically excluded if, although sensitive resources are present, the action would not have the potential to cause significant impacts on those resources (such as construction of a building with its foundation well above a sole-source aquifer or upland surface soil removal on a site that has wetlands). Environmentally sensitive resources include, but are not limited to:

(i) Property (such as sites, buildings, structures, and objects) of historic, archeological, or architectural significance designated by a Federal, state, or local government, Federally recognized Indian tribe, or Native Hawaiian organization, or property determined to be eligible for listing on the National Register of Historic Places;

(ii) Federally-listed threatened or endangered species or their habitat (including critical habitat) or Federally-proposed or candidate species or their habitat (Endangered Species Act); state-listed or state-proposed endangered or threatened species or their habitat; Federally-protected marine mammals and Essential Fish Habitat (Marine Mammal Protection Act; Magnuson-Stevens Fishery Conservation and Management Act); and otherwise Federally-protected species (such as the Bald and Golden Eagle Protection Act or the Migratory Bird Treaty Act);

(iii) Floodplains and wetlands (as defined in 10 CFR 1022.4, "Compliance with Floodplain and Wetland Environmental Review

Requirements: Definitions," or its successor);

(iv) Areas having a special designation such as Federally- and state-designated wilderness areas, national parks, national monuments, national natural landmarks, wild and scenic rivers, state and Federal wildlife refuges, scenic areas (such as National Scenic and Historic Trails or National Scenic Areas), and marine sanctuaries;

(v) Prime or unique farmland, or other farmland of statewide or local importance, as defined at 7 CFR 658.2(a), "Farmland Protection Policy Act: Definitions," or its successor;

(vi) Special sources of water (such as sole-source aquifers, wellhead protection areas, and other water sources that are vital in a region); and

(vii) Tundra, coral reefs, or rain forests; or

(5) Involve genetically engineered organisms, synthetic biology, governmentally designated noxious weeds, or invasive species, unless the proposed activity would be contained or confined in a manner designed and operated to prevent unauthorized release into the environment and conducted in accordance with applicable requirements, such as those of the Department of Agriculture, the Environmental Protection Agency, and the National Institutes of Health.

### B1. CATEGORICAL EXCLUSIONS APPLICABLE TO FACILITY OPERATION

#### *B1.1 Changing rates and prices*

Changing rates for services or prices for products marketed by parts of DOE other than Power Marketing Administrations, and approval of rate or price changes for non-DOE entities, that are consistent with the change in the implicit price deflator for the Gross Domestic Product published by the Department of Commerce, during the period since the last rate or price change.

#### *B1.2 Training exercises and simulations*

Training exercises and simulations (including, but not limited to, firing-range training, small-scale and short-duration force-on-force exercises, emergency response training, fire fighter and rescue training, and decontamination and spill cleanup training) conducted under appropriately controlled conditions and in accordance with applicable requirements.

#### *B1.3 Routine maintenance*

Routine maintenance activities and custodial services for buildings, structures, rights-of-way, infrastructures (including, but not limited to, pathways, roads, and railroads), vehicles and equipment, and localized vegetation and pest control, during which operations may be suspended and resumed, provided that the activities would be conducted

in a manner in accordance with applicable requirements. Custodial services are activities to preserve facility appearance, working conditions, and sanitation (such as cleaning, window washing, lawn mowing, trash collection, painting, and snow removal). Routine maintenance activities, corrective (that is, repair), preventive, and predictive, are required to maintain and preserve buildings, structures, infrastructures, and equipment in a condition suitable for a facility to be used for its designated purpose. Such maintenance may occur as a result of severe weather (such as hurricanes, floods, and tornados), wildfires, and other such events. Routine maintenance may result in replacement to the extent that replacement is in-kind and is not a substantial upgrade or improvement. In-kind replacement includes installation of new components to replace outmoded components, provided that the replacement does not result in a significant change in the expected useful life, design capacity, or function of the facility. Routine maintenance does not include replacement of a major component that significantly extends the originally intended useful life of a facility (for example, it does not include the replacement of a reactor vessel near the end of its useful life). Routine maintenance activities include, but are not limited to:

- (a) Repair or replacement of facility equipment, such as lathes, mills, pumps, and presses;
- (b) Door and window repair or replacement;
- (c) Wall, ceiling, or floor repair or replacement;
- (d) Reroofing;
- (e) Plumbing, electrical utility, lighting, and telephone service repair or replacement;
- (f) Routine replacement of high-efficiency particulate air filters;
- (g) Inspection and/or treatment of currently installed utility poles;
- (h) Repair of road embankments;
- (i) Repair or replacement of fire protection sprinkler systems;
- (j) Road and parking area resurfacing, including construction of temporary access to facilitate resurfacing, and scraping and grading of unpaved surfaces;
- (k) Erosion control and soil stabilization measures (such as reseeding, gabions, grading, and revegetation);
- (l) Surveillance and maintenance of surplus facilities in accordance with DOE Order 435.1, "Radioactive Waste Management," or its successor;
- (m) Repair and maintenance of transmission facilities, such as replacement of conductors of the same nominal voltage, poles, circuit breakers, transformers, capacitors, crossarms, insulators, and downed powerlines, in accordance, where appropriate, with 40 CFR part 761 (Polychlorinated Biphenyls Manufacturing, Processing, Dis-

tribution in Commerce, and Use Prohibitions) or its successor;

(n) Routine testing and calibration of facility components, subsystems, or portable equipment (such as control valves, in-core monitoring devices, transformers, capacitors, monitoring wells, lysimeters, weather stations, and flumes);

(o) Routine decontamination of the surfaces of equipment, rooms, hot cells, or other interior surfaces of buildings (by such activities as wiping with rags, using strippable latex, and minor vacuuming), and removal of contaminated intact equipment and other material (not including spent nuclear fuel or special nuclear material in nuclear reactors); and

(p) Removal of debris.

#### *B1.4 Air conditioning systems for existing equipment*

Installation or modification of air conditioning systems required for temperature control for operation of existing equipment.

#### *B1.5 Existing steam plants and cooling water systems*

Minor improvements to existing steam plants and cooling water systems (including, but not limited to, modifications of existing cooling towers and ponds), provided that the improvements would not: (1) Create new sources of water or involve new receiving waters; (2) have the potential to significantly alter water withdrawal rates; (3) exceed the permitted temperature of discharged water; or (4) increase introductions of, or involve new introductions of, hazardous substances, pollutants, contaminants, or CERCLA-excluded petroleum and natural gas products.

#### *B1.6 Tanks and equipment to control runoff and spills*

Installation or modification of retention tanks or small (normally under one acre) basins and associated piping and pumps for existing operations to control runoff or spills (such as under 40 CFR part 112). Modifications include, but are not limited to, installing liners or covers. (See also B1.33 of this appendix.)

#### *B1.7 Electronic equipment*

Acquisition, installation, operation, modification, and removal of electricity transmission control and monitoring devices for grid demand and response, communication systems, data processing equipment, and similar electronic equipment.

#### *B1.8 Screened water intake and outflow structures*

Modifications to screened water intake and outflow structures such that intake velocities and volumes and water effluent quality

## Department of Energy

## Pt. 1021, Subpt. D, App. B

and volumes are consistent with existing permit limits.

### *B1.9 Airway safety markings and painting*

Placement of airway safety markings on, painting of, and repair and in-kind replacement of lighting on powerlines and antenna structures, wind turbines, and similar structures in accordance with applicable requirements (such as Federal Aviation Administration standards).

### *B1.10 Onsite storage of activated material*

Routine, onsite storage at an existing facility of activated equipment and material (including, but not limited to, lead) used at that facility, to allow reuse after decay of radioisotopes with short half-lives.

### *B1.11 Fencing*

Installation of fencing, including, but not limited to border marking, that would not have the potential to significantly impede wildlife population movement (including migration) or surface water flow.

### *B1.12 Detonation or burning of explosives or propellants after testing*

Outdoor detonation or burning of explosives or propellants that failed (duds), were damaged (such as by fracturing), or were otherwise not consumed in testing. Outdoor detonation or burning would be in areas designated and routinely used for those purposes under existing applicable permits issued by Federal, state, and local authorities (such as a permit for a RCRA miscellaneous unit (40 CFR part 264, subpart X)).

### *B1.13 Pathways, short access roads, and rail lines*

Construction, acquisition, and relocation, consistent with applicable right-of-way conditions and approved land use or transportation improvement plans, of pedestrian walkways and trails, bicycle paths, small outdoor fitness areas, and short access roads and rail lines (such as branch and spur lines).

### *B1.14 Refueling of nuclear reactors*

Refueling of operating nuclear reactors, during which operations may be suspended and then resumed.

### *B1.15 Support buildings*

Siting, construction or modification, and operation of support buildings and support structures (including, but not limited to, trailers and prefabricated and modular buildings) within or contiguous to an already developed area (where active utilities and currently used roads are readily accessible). Covered support buildings and structures include, but are not limited to, those for office purposes; parking; cafeteria services; edu-

cation and training; visitor reception; computer and data processing services; health services or recreation activities; routine maintenance activities; storage of supplies and equipment for administrative services and routine maintenance activities; security (such as security posts); fire protection; small-scale fabrication (such as machine shop activities), assembly, and testing of non-nuclear equipment or components; and similar support purposes, but exclude facilities for nuclear weapons activities and waste storage activities, such as activities covered in B1.10, B1.29, B1.35, B2.6, B6.2, B6.4, B6.5, B6.6, and B6.10 of this appendix.

### *B1.16 Asbestos removal*

Removal of asbestos-containing materials from buildings in accordance with applicable requirements (such as 40 CFR part 61, "National Emission Standards for Hazardous Air Pollutants"; 40 CFR part 763, "Asbestos"; 29 CFR part 1910, subpart I, "Personal Protective Equipment"; and 29 CFR part 1926, "Safety and Health Regulations for Construction"; and appropriate state and local requirements, including certification of removal contractors and technicians).

### *B1.17 Polychlorinated biphenyl removal*

Removal of polychlorinated biphenyl (PCB)-containing items (including, but not limited to, transformers and capacitors), PCB-containing oils flushed from transformers, PCB-flushing solutions, and PCB-containing spill materials from buildings or other aboveground locations in accordance with applicable requirements (such as 40 CFR part 761).

### *B1.18 Water supply wells*

Siting, construction, and operation of additional water supply wells (or replacement wells) within an existing well field, or modification of an existing water supply well to restore production, provided that there would be no drawdown other than in the immediate vicinity of the pumping well, and the covered actions would not have the potential to cause significant long-term decline of the water table, and would not have the potential to cause significant degradation of the aquifer from the new or replacement well.

### *B1.19 Microwave, meteorological, and radio towers*

Siting, construction, modification, operation, and removal of microwave, radio communication, and meteorological towers and associated facilities, provided that the towers and associated facilities would not be in a governmentally designated scenic area (see B(4)(iv) of this appendix) unless otherwise authorized by the appropriate governmental entity.

*B1.20 Protection of cultural resources, fish and wildlife habitat*

Small-scale activities undertaken to protect cultural resources (such as fencing, labeling, and flagging) or to protect, restore, or improve fish and wildlife habitat, fish passage facilities (such as fish ladders and minor diversion channels), or fisheries. Such activities would be conducted in accordance with an existing natural or cultural resource plan, if any.

*B1.21 Noise abatement*

Noise abatement measures (including, but not limited to, construction of noise barriers and installation of noise control materials).

*B1.22 Relocation of buildings*

Relocation of buildings (including, but not limited to, trailers and prefabricated buildings) to an already developed area (where active utilities and currently used roads are readily accessible).

*B1.23 Demolition and disposal of buildings*

Demolition and subsequent disposal of buildings, equipment, and support structures (including, but not limited to, smoke stacks and parking lot surfaces), provided that there would be no potential for release of substances at a level, or in a form, that could pose a threat to public health or the environment.

*B1.24 Property transfers*

Transfer, lease, disposition, or acquisition of interests in personal property (including, but not limited to, equipment and materials) or real property (including, but not limited to, permanent structures and land), provided that under reasonably foreseeable uses (1) there would be no potential for release of substances at a level, or in a form, that could pose a threat to public health or the environment and (2) the covered actions would not have the potential to cause a significant change in impacts from before the transfer, lease, disposition, or acquisition of interests.

*B1.25 Real property transfers for cultural resources protection, habitat preservation, and wildlife management*

Transfer, lease, disposition, or acquisition of interests in land and associated buildings for cultural resources protection, habitat preservation, or fish and wildlife management, provided that there would be no potential for release of substances at a level, or in a form, that could pose a threat to public health or the environment.

*B1.26 Small water treatment facilities*

Siting, construction, expansion, modification, replacement, operation, and decommissioning of small (total capacity less than approximately 250,000 gallons per day) wastewater and surface water treatment facilities whose liquid discharges are externally regulated, and small potable water and sewage treatment facilities.

Siting, construction, expansion, modification, operation, and decommissioning of small (total capacity less than approximately 250,000 gallons per day) wastewater and surface water treatment facilities whose liquid discharges are externally regulated, and small potable water and sewage treatment facilities.

*B1.27 Disconnection of utilities*

Activities that are required for the disconnection of utility services (including, but not limited to, water, steam, telecommunications, and electrical power) after it has been determined that the continued operation of these systems is not needed for safety.

*B1.28 Placing a facility in an environmentally safe condition*

Minor activities that are required to place a facility in an environmentally safe condition where there is no proposed use for the facility. These activities would include, but are not limited to, reducing surface contamination, and removing materials, equipment or waste (such as final defueling of a reactor, where there are adequate existing facilities for the treatment, storage, or disposal of the materials, equipment or waste). These activities would not include conditioning, treatment, or processing of spent nuclear fuel, high-level waste, or special nuclear materials.

*B1.29 Disposal facilities for construction and demolition waste*

Siting, construction, expansion, modification, operation, and decommissioning of small (less than approximately 10 acres) solid waste disposal facilities for construction and demolition waste, in accordance with applicable requirements (such as 40 CFR part 257, "Criteria for Classification of Solid Waste Disposal Facilities and Practices," and 40 CFR part 61, "National Emission Standards for Hazardous Air Pollutants") that would not release substances at a level, or in a form, that could pose a threat to public health or the environment.

*B1.30 Transfer actions*

Transfer actions, in which the predominant activity is transportation, provided that (1) the receipt and storage capacity and management capability for the amount and type of materials, equipment, or waste to be moved already exists at the receiving site and (2) all necessary facilities and operations at the receiving site are already permitted, licensed, or approved, as appropriate. Such transfers are not regularly scheduled as part of ongoing routine operations.

*B1.31 Installation or relocation of machinery and equipment*

Installation or relocation and operation of machinery and equipment (including, but

## Department of Energy

## Pt. 1021, Subpt. D, App. B

not limited to, laboratory equipment, electronic hardware, manufacturing machinery, maintenance equipment, and health and safety equipment), provided that uses of the installed or relocated items are consistent with the general missions of the receiving structure. Covered actions include modifications to an existing building, within or contiguous to a previously disturbed or developed area, that are necessary for equipment installation and relocation. Such modifications would not appreciably increase the footprint or height of the existing building or have the potential to cause significant changes to the type and magnitude of environmental impacts.

### *B1.32 Traffic flow adjustments*

Traffic flow adjustments to existing roads (including, but not limited to, stop sign or traffic light installation, adjusting direction of traffic flow, and adding turning lanes), and road adjustments (including, but not limited to, widening and realignment) that are within an existing right-of-way and consistent with approved land use or transportation improvement plans.

### *B1.33 Stormwater runoff control*

Design, construction, and operation of control practices to reduce stormwater runoff and maintain natural hydrology. Activities include, but are not limited to, those that reduce impervious surfaces (such as vegetative practices and use of porous pavements), best management practices (such as silt fences, straw wattles, and fiber rolls), and use of green infrastructure or other low impact development practices (such as cisterns and green roofs).

### *B1.34 Lead-based paint containment, removal, and disposal*

Containment, removal, and disposal of lead-based paint in accordance with applicable requirements (such as provisions relating to the certification of removal contractors and technicians at 40 CFR part 745, "Lead-Based Paint Poisoning Prevention In Certain Residential Structures").

### *B1.35 Drop-off, collection, and transfer facilities for recyclable materials*

Siting, construction, modification, and operation of recycling or compostable material drop-off, collection, and transfer stations on or contiguous to a previously disturbed or developed area and in an area where such a facility would be consistent with existing zoning requirements. The stations would have appropriate facilities and procedures established in accordance with applicable requirements for the handling of recyclable or compostable materials and household hazardous waste (such as paint and pesticides). Except as specified above, the collection of

hazardous waste for disposal and the processing of recyclable or compostable materials are not included in this class of actions.

### *B1.36 Determinations of excess real property*

Determinations that real property is excess to the needs of DOE and, in the case of acquired real property, the subsequent reporting of such determinations to the General Services Administration or, in the case of lands withdrawn or otherwise reserved from the public domain, the subsequent filing of a notice of intent to relinquish with the Bureau of Land Management, Department of the Interior. Covered actions would not include disposal of real property.

## **B2. CATEGORICAL EXCLUSIONS APPLICABLE TO SAFETY AND HEALTH**

### *B2.1 Workplace enhancements*

Modifications within or contiguous to an existing structure, in a previously disturbed or developed area, to enhance workplace habitability (including, but not limited to, installation or improvements to lighting, radiation shielding, or heating/ventilating/air conditioning and its instrumentation, and noise reduction).

### *B2.2 Building and equipment instrumentation*

Installation of, or improvements to, building and equipment instrumentation (including, but not limited to, remote control panels, remote monitoring capability, alarm and surveillance systems, control systems to provide automatic shutdown, fire detection and protection systems, water consumption monitors and flow control systems, announcement and emergency warning systems, criticality and radiation monitors and alarms, and safeguards and security equipment).

### *B2.3 Personnel safety and health equipment*

Installation of, or improvements to, equipment for personnel safety and health (including, but not limited to, eye washes, safety showers, radiation monitoring devices, fumehoods, and associated collection and exhaust systems), provided that the covered actions would not have the potential to cause a significant increase in emissions.

### *B2.4 Equipment qualification*

Activities undertaken to (1) qualify equipment for use or improve systems reliability or (2) augment information on safety-related system components. These activities include, but are not limited to, transportation container qualification testing, crane and lift-gear certification or recertification testing, high efficiency particulate air filter testing and certification, stress tests (such as "burn-in" testing of electrical components and leak testing), and calibration of sensors or diagnostic equipment.

*B2.5 Facility safety and environmental improvements*

Safety and environmental improvements of a facility (including, but not limited to, replacement and upgrade of facility components) that do not result in a significant change in the expected useful life, design capacity, or function of the facility and during which operations may be suspended and then resumed. Improvements include, but are not limited to, replacement/upgrade of control valves, in-core monitoring devices, facility air filtration systems, or substation transformers or capacitors; addition of structural bracing to meet earthquake standards and/or sustain high wind loading; and replacement of aboveground or belowground tanks and related piping, provided that there is no evidence of leakage, based on testing in accordance with applicable requirements (such as 40 CFR part 265, “Interim Status Standards for Owners and Operators of Hazardous Waste Treatment, Storage, and Disposal Facilities” and 40 CFR part 280, “Technical Standards and Corrective Action Requirements for Owners and Operators of Underground Storage Tanks”). These actions do not include rebuilding or modifying substantial portions of a facility (such as replacing a reactor vessel).

*B2.6 Recovery of radioactive sealed sources*

Recovery of radioactive sealed sources and sealed source-containing devices from domestic or foreign locations provided that (1) the recovered items are transported and stored in compliant containers, and (2) the receiving site has sufficient existing storage capacity and all required licenses, permits, and approvals.

**B3. CATEGORICAL EXCLUSIONS APPLICABLE TO SITE CHARACTERIZATION, MONITORING, AND GENERAL RESEARCH***B3.1 Site characterization and environmental monitoring*

Site characterization and environmental monitoring (including, but not limited to, siting, construction, modification, operation, and dismantlement and removal or otherwise proper closure (such as of a well) of characterization and monitoring devices, and siting, construction, and associated operation of a small-scale laboratory building or renovation of a room in an existing building for sample analysis). Such activities would be designed in conformance with applicable requirements and use best management practices to limit the potential effects of any resultant ground disturbance. Covered activities include, but are not limited to, site characterization and environmental monitoring under CERCLA and RCRA. (This class of actions excludes activities in aquatic environments. See B3.16 of this appendix for

such activities.) Specific activities include, but are not limited to:

(a) Geological, geophysical (such as gravity, magnetic, electrical, seismic, radar, and temperature gradient), geochemical, and engineering surveys and mapping, and the establishment of survey marks. Seismic techniques would not include large-scale reflection or refraction testing;

(b) Installation and operation of field instruments (such as stream-gauging stations or flow-measuring devices, telemetry systems, geochemical monitoring tools, and geophysical exploration tools);

(c) Drilling of wells for sampling or monitoring of groundwater or the vadose (unsaturated) zone, well logging, and installation of water-level recording devices in wells;

(d) Aquifer and underground reservoir response testing;

(e) Installation and operation of ambient air monitoring equipment;

(f) Sampling and characterization of water, soil, rock, or contaminants (such as drilling using truck- or mobile-scale equipment, and modification, use, and plugging of boreholes);

(g) Sampling and characterization of water effluents, air emissions, or solid waste streams;

(h) Installation and operation of meteorological towers and associated activities (such as assessment of potential wind energy resources);

(i) Sampling of flora or fauna; and

(j) Archeological, historic, and cultural resource identification in compliance with 36 CFR part 800 and 43 CFR part 7.

*B3.2 Aviation activities*

Aviation activities for survey, monitoring, or security purposes that comply with Federal Aviation Administration regulations.

*B3.3 Research related to conservation of fish, wildlife, and cultural resources*

Field and laboratory research, inventory, and information collection activities that are directly related to the conservation of fish and wildlife resources or to the protection of cultural resources, provided that such activities would not have the potential to cause significant impacts on fish and wildlife habitat or populations or to cultural resources.

*B3.4 Transport packaging tests for radioactive or hazardous material*

Drop, puncture, water-immersion, thermal, and fire tests of transport packaging for radioactive or hazardous materials to certify that designs meet the applicable requirements (such as 49 CFR 173.411 and 173.412 and 10 CFR 71.73).



## Department of Energy

## Pt. 1021, Subpt. D, App. B

### *B3.5 Tank car tests*

Tank car tests under 49 CFR part 179 (including, but not limited to, tests of safety relief devices, pressure regulators, and thermal protection systems).

### *B3.6 Small-scale research and development, laboratory operations, and pilot projects*

Siting, construction, modification, operation, and decommissioning of facilities for small-scale research and development projects; conventional laboratory operations (such as preparation of chemical standards and sample analysis); and small-scale pilot projects (generally less than 2 years) frequently conducted to verify a concept before demonstration actions, provided that construction or modification would be within or contiguous to a previously disturbed or developed area (where active utilities and currently used roads are readily accessible). Not included in this category are demonstration actions, meaning actions that are undertaken at a scale to show whether a technology would be viable on a larger scale and suitable for commercial deployment.

### *B3.7 New terrestrial infill exploratory and experimental wells*

Siting, construction, and operation of new terrestrial infill exploratory and experimental (test) wells, for either extraction or injection use, in a locally characterized geological formation in a field that contains existing operating wells, properly abandoned wells, or unminable coal seams containing natural gas, provided that the site characterization has verified a low potential for seismicity, subsidence, and contamination of freshwater aquifers, and the actions are otherwise consistent with applicable best practices and DOE protocols, including those that protect against uncontrolled releases of harmful materials. Such wells may include those for brine, carbon dioxide, coalbed methane, gas hydrate, geothermal, natural gas, and oil. Uses for carbon sequestration wells include, but are not limited to, the study of saline formations, enhanced oil recovery, and enhanced coalbed methane extraction.

### *B3.8 Outdoor terrestrial ecological and environmental research*

Outdoor terrestrial ecological and environmental research in a small area (generally less than 5 acres), including, but not limited to, siting, construction, and operation of a small-scale laboratory building or renovation of a room in an existing building for associated analysis. Such activities would be designed in conformance with applicable requirements and use best management practices to limit the potential effects of any resultant ground disturbance.

### *B3.9 Projects to reduce emissions and waste generation*

Projects to reduce emissions and waste generation at existing fossil or alternative fuel combustion or utilization facilities, provided that these projects would not have the potential to cause a significant increase in the quantity or rate of air emissions. For this category of actions, "fuel" includes, but is not limited to, coal, oil, natural gas, hydrogen, syngas, and biomass; but "fuel" does not include nuclear fuel. Covered actions include, but are not limited to:

(a) Test treatment of the throughput product (solid, liquid, or gas) generated at an existing and fully operational fuel combustion or utilization facility;

(b) Addition or replacement of equipment for reduction or control of sulfur dioxide, oxides of nitrogen, or other regulated substances that requires only minor modification to the existing structures at an existing fuel combustion or utilization facility, for which the existing use remains essentially unchanged;

(c) Addition or replacement of equipment for reduction or control of sulfur dioxide, oxides of nitrogen, or other regulated substances that involves no permanent change in the quantity or quality of fuel burned or used and involves no permanent change in the capacity factor of the fuel combustion or utilization facility; and

(d) Addition or modification of equipment for capture and control of carbon dioxide or other regulated substances, provided that adequate infrastructure is in place to manage such substances.

### *B3.10 Particle accelerators*

Siting, construction, modification, operation, and decommissioning of particle accelerators, including electron beam accelerators, with primary beam energy less than approximately 100 million electron volts (MeV) and average beam power less than approximately 250 kilowatts (kW), and associated beamlines, storage rings, colliders, and detectors, for research and medical purposes (such as proton therapy), and isotope production, within or contiguous to a previously disturbed or developed area (where active utilities and currently used roads are readily accessible), or internal modification of any accelerator facility regardless of energy, that does not increase primary beam energy or current. In cases where the beam energy exceeds 100 MeV, the average beam power must be less than 250 kW, so as not to exceed an average current of 2.5 milliamperes (mA).

### *B3.11 Outdoor tests and experiments on materials and equipment components*

Outdoor tests and experiments for the development, quality assurance, or reliability of materials and equipment (including, but

not limited to, weapon system components) under controlled conditions. Covered actions include, but are not limited to, burn tests (such as tests of electric cable fire resistance or the combustion characteristics of fuels), impact tests (such as pneumatic ejector tests using earthen embankments or concrete slabs designated and routinely used for that purpose), or drop, puncture, water-immersion, or thermal tests. Covered actions would not involve source, special nuclear, or byproduct materials, except encapsulated sources manufactured to applicable standards that contain source, special nuclear, or byproduct materials may be used for non-destructive actions such as detector/sensor development and testing and first responder field training.

*B3.12 Microbiological and biomedical facilities*

Siting, construction, modification, operation, and decommissioning of microbiological and biomedical diagnostic, treatment and research facilities (excluding Biosafety Level-3 and Biosafety Level-4), in accordance with applicable requirements and best practices (such as Biosafety in Microbiological and Biomedical Laboratories, 5th Edition, Dec. 2009, U.S. Department of Health and Human Services) including, but not limited to, laboratories, treatment areas, offices, and storage areas, within or contiguous to a previously disturbed or developed area (where active utilities and currently used roads are readily accessible). Operation may include the purchase, installation, and operation of biomedical equipment (such as commercially available cyclotrons that are used to generate radioisotopes and radiopharmaceuticals, and commercially available biomedical imaging and spectroscopy instrumentation).

*B3.13 Magnetic fusion experiments*

Performing magnetic fusion experiments that do not use tritium as fuel, within existing facilities (including, but not limited to, necessary modifications).

*B3.14 Small-scale educational facilities*

Siting, construction, modification, operation, and decommissioning of small-scale educational facilities (including, but not limited to, conventional teaching laboratories, libraries, classroom facilities, auditoriums, museums, visitor centers, exhibits, and associated offices) within or contiguous to a previously disturbed or developed area (where active utilities and currently used roads are readily accessible). Operation may include, but is not limited to, purchase, installation, and operation of equipment (such as audio/visual and laboratory equipment) commensurate with the educational purpose of the facility.

*B3.15 Small-scale indoor research and development projects using nanoscale materials*

Siting, construction, modification, operation, and decommissioning of facilities for indoor small-scale research and development projects and small-scale pilot projects using nanoscale materials in accordance with applicable requirements (such as engineering, worker safety, procedural, and administrative regulations) necessary to ensure the containment of any hazardous materials. Construction and modification activities would be within or contiguous to a previously disturbed or developed area (where active utilities and currently used roads are readily accessible).

*B3.16 Research activities in aquatic environments*

Small-scale, temporary surveying, site characterization, and research activities in aquatic environments, limited to:

- (a) Acquisition of rights-of-way, easements, and temporary use permits;
- (b) Installation, operation, and removal of passive scientific measurement devices, including, but not limited to, antennae, tide gauges, flow testing equipment for existing wells, weighted hydrophones, salinity measurement devices, and water quality measurement devices;
- (c) Natural resource inventories, data and sample collection, environmental monitoring, and basic and applied research, excluding (1) large-scale vibratory coring techniques and (2) seismic activities other than passive techniques; and
- (d) Surveying and mapping.

These activities would be conducted in accordance with, where applicable, an approved spill prevention, control, and response plan and would incorporate appropriate control technologies and best management practices. None of the activities listed above would occur within the boundary of an established marine sanctuary or wildlife refuge, a governmentally proposed marine sanctuary or wildlife refuge, or a governmentally recognized area of high biological sensitivity, unless authorized by the agency responsible for such refuge, sanctuary, or area (or after consultation with the responsible agency, if no authorization is required). If the proposed activities would occur outside such refuge, sanctuary, or area and if the activities would have the potential to cause impacts within such refuge, sanctuary, or area, then the responsible agency shall be consulted in order to determine whether authorization is required and whether such activities would have the potential to cause significant impacts on such refuge, sanctuary, or area. Areas of high biological sensitivity include, but are not limited to, areas of known ecological importance, whale and marine mammal mating and calving/pupping areas, and

## Department of Energy

## Pt. 1021, Subpt. D, App. B

fish and invertebrate spawning and nursery areas recognized as being limited or unique and vulnerable to perturbation; these areas can occur in bays, estuaries, near shore, and far offshore, and may vary seasonally. No permanent facilities or devices would be constructed or installed. Covered actions do not include drilling of resource exploration or extraction wells.

### B4. CATEGORICAL EXCLUSIONS APPLICABLE TO ELECTRICAL POWER AND TRANSMISSION

#### *B4.1 Contracts, policies, and marketing and allocation plans for electric power*

Establishment and implementation of contracts, policies, and marketing and allocation plans related to electric power acquisition that involve only the use of the existing transmission system and existing generation resources operating within their normal operating limits.

#### *B4.2 Export of electric energy*

Export of electric energy as provided by Section 202(e) of the Federal Power Act over existing transmission systems or using transmission system changes that are themselves categorically excluded.

#### *B4.3 Electric power marketing rate changes*

Rate changes for electric power, power transmission, and other products or services provided by a Power Marketing Administration that are based on a change in revenue requirements if the operations of generation projects would remain within normal operating limits.

#### *B4.4 Power marketing services and activities*

Power marketing services and power management activities (including, but not limited to, storage, load shaping and balancing, seasonal exchanges, and other similar activities), provided that the operations of generating projects would remain within normal operating limits.

#### *B4.5 Temporary adjustments to river operations*

Temporary adjustments to river operations to accommodate day-to-day river fluctuations, power demand changes, fish and wildlife conservation program requirements, and other external events, provided that the adjustments would occur within the existing operating constraints of the particular hydrosystem operation.

#### *B4.6 Additions and modifications to transmission facilities*

Additions or modifications to electric power transmission facilities within a previously disturbed or developed facility area. Covered activities include, but are not limited to, switchyard rock grounding upgrades, secondary containment projects, paving

projects, seismic upgrading, tower modifications, load shaping projects (such as the installation and use of flywheels and battery arrays), changing insulators, and replacement of poles, circuit breakers, conductors, transformers, and crossarms.

#### *B4.7 Fiber optic cable*

Adding fiber optic cables to transmission facilities or burying fiber optic cable in existing powerline or pipeline rights-of-way. Covered actions may include associated vaults and pulling and tensioning sites outside of rights-of-way in nearby previously disturbed or developed areas.

#### *B4.8 Electricity transmission agreements*

New electricity transmission agreements, and modifications to existing transmission arrangements, to use a transmission facility of one system to transfer power of and for another system, provided that no new generation projects would be involved and no physical changes in the transmission system would be made beyond the previously disturbed or developed facility area.

#### *B4.9 Multiple use of powerline rights-of-way*

Granting or denying requests for multiple uses of a transmission facility's rights-of-way (including, but not limited to, grazing permits and crossing agreements for electric lines, water lines, natural gas pipelines, communications cables, roads, and drainage culverts).

#### *B4.10 Removal of electric transmission facilities*

Deactivation, dismantling, and removal of electric transmission facilities (including, but not limited to, electric powerlines, substations, and switching stations) and abandonment and restoration of rights-of-way (including, but not limited to, associated access roads).

#### *B4.11 Electric power substations and interconnection facilities*

Construction or modification of electric power substations or interconnection facilities (including, but not limited to, switching stations and support facilities).

#### *B4.12 Construction of powerlines*

Construction of electric powerlines approximately 10 miles in length or less, or approximately 20 miles in length or less within previously disturbed or developed powerline or pipeline rights-of-way.

#### *B4.13 Upgrading and rebuilding existing powerlines*

Upgrading or rebuilding approximately 20 miles in length or less of existing electric powerlines, which may involve minor relocations of small segments of the powerlines.

**B5. CATEGORICAL EXCLUSIONS APPLICABLE TO CONSERVATION, FOSSIL, AND RENEWABLE ENERGY ACTIVITIES**

*B5.1 Actions to conserve energy or water*

(a) Actions to conserve energy or water, demonstrate potential energy or water conservation, and promote energy efficiency that would not have the potential to cause significant changes in the indoor or outdoor concentrations of potentially harmful substances. These actions may involve financial and technical assistance to individuals (such as builders, owners, consultants, manufacturers, and designers), organizations (such as utilities), and governments (such as state, local, and tribal). Covered actions include, but are not limited to weatherization (such as insulation and replacing windows and doors); programmed lowering of thermostat settings; placement of timers on hot water heaters; installation or replacement of energy efficient lighting, low-flow plumbing fixtures (such as faucets, toilets, and showerheads), heating, ventilation, and air conditioning systems, and appliances; installation of drip-irrigation systems; improvements in generator efficiency and appliance efficiency ratings; efficiency improvements for vehicles and transportation (such as fleet changeout); power storage (such as flywheels and batteries, generally less than 10 megawatt equivalent); transportation management systems (such as traffic signal control systems, car navigation, speed cameras, and automatic plate number recognition); development of energy-efficient manufacturing, industrial, or building practices; and small-scale energy efficiency and conservation research and development and small-scale pilot projects. Covered actions include building renovations or new structures, provided that they occur in a previously disturbed or developed area. Covered actions could involve commercial, residential, agricultural, academic, institutional, or industrial sectors. Covered actions do not include rulemakings, standard-settings, or proposed DOE legislation, except for those actions listed in B5.1(b) of this appendix.

(b) Covered actions include rulemakings that establish energy conservation standards for consumer products and industrial equipment, provided that the actions would not: (1) Have the potential to cause a significant change in manufacturing infrastructure (such as construction of new manufacturing plants with considerable associated ground disturbance); (2) involve significant unresolved conflicts concerning alternative uses of available resources (such as rare or limited raw materials); (3) have the potential to result in a significant increase in the disposal of materials posing significant risks to human health and the environment (such as RCRA hazardous wastes); or (4) have the po-

tential to cause a significant increase in energy consumption in a state or region.

*B5.2 Modifications to pumps and piping*

Modifications to existing pump and piping configurations (including, but not limited to, manifolds, metering systems, and other instrumentation on such configurations conveying materials such as air, brine, carbon dioxide, geothermal system fluids, hydrogen gas, natural gas, nitrogen gas, oil, produced water, steam, and water). Covered modifications would not have the potential to cause significant changes to design process flow rates or permitted air emissions.

*B5.3 Modification or abandonment of wells*

Modification (but not expansion) or plugging and abandonment of wells, provided that site characterization has verified a low potential for seismicity, subsidence, and contamination of freshwater aquifers, and the actions are otherwise consistent with best practices and DOE protocols, including those that protect against uncontrolled releases of harmful materials. Such wells may include, but are not limited to, storage and injection wells for brine, carbon dioxide, coalbed methane, gas hydrate, geothermal, natural gas, and oil. Covered modifications would not be part of site closure.

*B5.4 Repair or replacement of pipelines*

Repair, replacement, upgrading, rebuilding, or minor relocation of pipelines within existing rights-of-way, provided that the actions are in accordance with applicable requirements (such as Army Corps of Engineers permits under section 404 of the Clean Water Act). Pipelines may convey materials including, but not limited to, air, brine, carbon dioxide, geothermal system fluids, hydrogen gas, natural gas, nitrogen gas, oil, produced water, steam, and water.

*B5.5 Short pipeline segments*

Construction and subsequent operation of short (generally less than 20 miles in length) pipeline segments conveying materials (such as air, brine, carbon dioxide, geothermal system fluids, hydrogen gas, natural gas, nitrogen gas, oil, produced water, steam, and water) between existing source facilities and existing receiving facilities (such as facilities for use, reuse, transportation, storage, and refining), provided that the pipeline segments are within previously disturbed or developed rights-of-way.

*B5.6 Oil spill cleanup*

Removal of oil and contaminated materials recovered in oil spill cleanup operations and disposal of these materials in accordance with applicable requirements (such as the National Oil and Hazardous Substances Pollution Contingency Plan).

## Department of Energy

## Pt. 1021, Subpt. D, App. B

### *B5.7 Import or export natural gas, with operational changes*

Approvals or disapprovals of new authorizations or amendments of existing authorizations to import or export natural gas under section 3 of the Natural Gas Act that involve minor operational changes (such as changes in natural gas throughput, transportation, and storage operations) but not new construction.

### *B5.8 Import or export natural gas, with new cogeneration powerplant*

Approvals or disapprovals of new authorizations or amendments of existing authorizations to import or export natural gas under section 3 of the Natural Gas Act that involve new cogeneration powerplants (as defined in the Powerplant and Industrial Fuel Use Act of 1978, as amended) within or contiguous to an existing industrial complex and requiring generally less than 10 miles of new natural gas pipeline or 20 miles within previously disturbed or developed rights-of-way.

### *B5.9 Temporary exemptions for electric powerplants*

Grants or denials of temporary exemptions under the Powerplant and Industrial Fuel Use Act of 1978, as amended, for electric powerplants.

### *B5.10 Certain permanent exemptions for existing electric powerplants*

For existing electric powerplants, grants or denials of permanent exemptions under the Powerplant and Industrial Fuel Use Act of 1978, as amended, other than exemptions under section 312(c) relating to cogeneration and section 312(b) relating to certain state or local requirements.

### *B5.11 Permanent exemptions allowing mixed natural gas and petroleum*

For new electric powerplants, grants or denials of permanent exemptions from the prohibitions of Title II of the Powerplant and Industrial Fuel Use Act of 1978, as amended, to permit the use of certain fuel mixtures containing natural gas or petroleum.

### *B5.12 Workover of existing wells*

Workover (operations to restore production, such as deepening, plugging back, pulling and resetting lines, and squeeze cementing) of existing wells (including, but not limited to, activities associated with brine, carbon dioxide, coalbed methane, gas hydrate, geothermal, natural gas, and oil) to restore functionality, provided that workover operations are restricted to the existing wellpad and do not involve any new site preparation or earthwork that would have the potential to cause significant impacts on nearby habi-

tat; that site characterization has verified a low potential for seismicity, subsidence, and contamination of freshwater aquifers; and the actions are otherwise consistent with best practices and DOE protocols, including those that protect against uncontrolled releases of harmful materials.

### *B5.13 Experimental wells for injection of small quantities of carbon dioxide*

Siting, construction, operation, plugging, and abandonment of experimental wells for the injection of small quantities of carbon dioxide (and other incidentally co-captured gases) in locally characterized, geologically secure storage formations at or near existing carbon dioxide sources to determine the suitability of the formations for large-scale sequestration, provided that (1) The characterization has verified a low potential for seismicity, subsidence, and contamination of freshwater aquifers; (2) the wells are otherwise in accordance with applicable requirements, best practices, and DOE protocols, including those that protect against uncontrolled releases of harmful materials; and (3) the wells and associated drilling activities are sufficiently remote so that they would not have the potential to cause significant impacts related to noise and other vibrations. Wells may be used for enhanced oil or natural gas recovery or for secure storage of carbon dioxide in saline formations or other secure formations. Over the duration of a project, the wells would be used to inject, in aggregate, less than 500,000 tons of carbon dioxide into the geologic formation. Covered actions exclude activities in aquatic environments. (See B3.16 of this appendix for activities in aquatic environments.)

### *B5.14 Combined heat and power or cogeneration systems*

Conversion to, replacement of, or modification of combined heat and power or cogeneration systems (the sequential or simultaneous production of multiple forms of energy, such as thermal and electrical energy, in a single integrated system) at existing facilities, provided that the conversion, replacement, or modification would not have the potential to cause a significant increase in the quantity or rate of air emissions and would not have the potential to cause significant impacts to water resources.

### *B5.15 Small-scale renewable energy research and development and pilot projects*

Small-scale renewable energy research and development projects and small-scale pilot projects, provided that the projects are located within a previously disturbed or developed area. Covered actions would be in accordance with applicable requirements (such as local land use and zoning requirements) in

the proposed project area and would incorporate appropriate control technologies and best management practices.

#### *B5.16 Solar photovoltaic systems*

The installation, modification, operation, and removal of commercially available solar photovoltaic systems located on a building or other structure (such as rooftop, parking lot or facility, and mounted to signage, lighting, gates, or fences), or if located on land, generally comprising less than 10 acres within a previously disturbed or developed area. Covered actions would be in accordance with applicable requirements (such as local land use and zoning requirements) in the proposed project area and would incorporate appropriate control technologies and best management practices.

#### *B5.17 Solar thermal systems*

The installation, modification, operation, and removal of commercially available small-scale solar thermal systems (including, but not limited to, solar hot water systems) located on or contiguous to a building, and if located on land, generally comprising less than 10 acres within a previously disturbed or developed area. Covered actions would be in accordance with applicable requirements (such as local land use and zoning requirements) in the proposed project area and would incorporate appropriate control technologies and best management practices.

#### *B5.18 Wind turbines*

The installation, modification, operation, and removal of a small number (generally not more than 2) of commercially available wind turbines, with a total height generally less than 200 feet (measured from the ground to the maximum height of blade rotation) that (1) Are located within a previously disturbed or developed area; (2) are located more than 10 nautical miles (about 11.5 miles) from an airport or aviation navigation aid; (3) are located more than 1.5 nautical miles (about 1.7 miles) from National Weather Service or Federal Aviation Administration Doppler weather radar; (4) would not have the potential to cause significant impacts on bird or bat populations; and (5) are sited or designed such that the project would not have the potential to cause significant impacts to persons (such as from shadow flicker and other visual effects, and noise). Covered actions would be in accordance with applicable requirements (such as local land use and zoning requirements) in the proposed project area and would incorporate appropriate control technologies and best management practices. Covered actions include only those related to wind turbines to be installed on land.

#### *B5.19 Ground source heat pumps*

The installation, modification, operation, and removal of commercially available small-scale ground source heat pumps to support operations in single facilities (such as a school or community center) or contiguous facilities (such as an office complex) (1) Only where (a) major associated activities (such as drilling and discharge) are regulated, and (b) appropriate leakage and contaminant control measures would be in place (including for cross-contamination between aquifers); (2) that would not have the potential to cause significant changes in subsurface temperature; and (3) would be located within a previously disturbed or developed area. Covered actions would be in accordance with applicable requirements (such as local land use and zoning requirements) in the proposed project area and would incorporate appropriate control technologies and best management practices.

#### *B5.20 Biomass power plants*

The installation, modification, operation, and removal of small-scale biomass power plants (generally less than 10 megawatts), using commercially available technology (1) Intended primarily to support operations in single facilities (such as a school and community center) or contiguous facilities (such as an office complex); (2) that would not affect the air quality attainment status of the area and would not have the potential to cause a significant increase in the quantity or rate of air emissions and would not have the potential to cause significant impacts to water resources; and (3) would be located within a previously disturbed or developed area. Covered actions would be in accordance with applicable requirements (such as local land use and zoning requirements) in the proposed project area and would incorporate appropriate control technologies and best management practices.

#### *B5.21 Methane gas recovery and utilization systems*

The installation, modification, operation, and removal of commercially available methane gas recovery and utilization systems installed within a previously disturbed or developed area on or contiguous to an existing landfill or wastewater treatment plant that would not have the potential to cause a significant increase in the quantity or rate of air emissions. Covered actions would be in accordance with applicable requirements (such as local land use and zoning requirements) in the proposed project area and would incorporate appropriate control technologies and best management practices.

## Department of Energy

## Pt. 1021, Subpt. D, App. B

### *B5.22 Alternative fuel vehicle fueling stations*

The installation, modification, operation, and removal of alternative fuel vehicle fueling stations (such as for compressed natural gas, hydrogen, ethanol and other commercially available biofuels) on the site of a current or former fueling station, or within a previously disturbed or developed area within the boundaries of a facility managed by the owners of a vehicle fleet. Covered actions would be in accordance with applicable requirements (such as local land use and zoning requirements) in the proposed project area and would incorporate appropriate control technologies and best management practices.

### *B5.23 Electric vehicle charging stations*

The installation, modification, operation, and removal of electric vehicle charging stations, using commercially available technology, within a previously disturbed or developed area. Covered actions are limited to areas where access and parking are in accordance with applicable requirements (such as local land use and zoning requirements) in the proposed project area and would incorporate appropriate control technologies and best management practices.

### *B5.24 Drop-in hydroelectric systems*

The installation, modification, operation, and removal of commercially available small-scale, drop-in, run-of-the-river hydroelectric systems that would (1) Involve no water storage or water diversion from the stream or river channel where the system is installed and (2) not have the potential to cause significant impacts on water quality, temperature, flow, or volume. Covered systems would be located up-gradient of an existing anadromous fish barrier that is not planned for removal and where fish passage retrofit is not planned and where there would not be the potential for significant impacts to threatened or endangered species or other species of concern (as identified in B(4)(ii) of this appendix). Covered actions would involve no major construction or modification of stream or river channels, and the hydroelectric systems would be placed and secured in the channel without the use of heavy equipment. Covered actions would be in accordance with applicable requirements (such as local land use and zoning requirements) in the proposed project area and would incorporate appropriate control technologies and best management practices.

### *B5.25 Small-scale renewable energy research and development and pilot projects in aquatic environments*

Small-scale renewable energy research and development projects and small-scale pilot projects located in aquatic environments.

Activities would be in accordance with, where applicable, an approved spill prevention, control, and response plan, and would incorporate appropriate control technologies and best management practices. Covered actions would not occur (1) Within areas of hazardous natural bottom conditions or (2) within the boundary of an established marine sanctuary or wildlife refuge, a governmentally proposed marine sanctuary or wildlife refuge, or a governmentally recognized area of high biological sensitivity, unless authorized by the agency responsible for such refuge, sanctuary, or area (or after consultation with the responsible agency, if no authorization is required). If the proposed activities would occur outside such refuge, sanctuary, or area and if the activities would have the potential to cause impacts within such refuge, sanctuary, or area, then the responsible agency shall be consulted in order to determine whether authorization is required and whether such activities would have the potential to cause significant impacts on such refuge, sanctuary, or area. Areas of high biological sensitivity include, but are not limited to, areas of known ecological importance, whale and marine mammal mating and calving/pupping areas, and fish and invertebrate spawning and nursery areas recognized as being limited or unique and vulnerable to perturbation; these areas can occur in bays, estuaries, near shore, and far offshore, and may vary seasonally. No permanent facilities or devices would be constructed or installed. Covered actions do not include drilling of resource exploration or extraction wells, use of large-scale vibratory coring techniques, or seismic activities other than passive techniques.

## **B6. CATEGORICAL EXCLUSIONS APPLICABLE TO ENVIRONMENTAL RESTORATION AND WASTE MANAGEMENT ACTIVITIES**

### *B6.1 Cleanup actions*

Small-scale, short-term cleanup actions, under RCRA, Atomic Energy Act, or other authorities, less than approximately 10 million dollars in cost (in 2011 dollars), to reduce risk to human health or the environment from the release or threat of release of a hazardous substance other than high-level radioactive waste and spent nuclear fuel, including treatment (such as incineration, encapsulation, physical or chemical separation, and compaction), recovery, storage, or disposal of wastes at existing facilities currently handling the type of waste involved in the action. These actions include, but are not limited to:

(a) Excavation or consolidation of contaminated soils or materials from drainage channels, retention basins, ponds, and spill areas that are not receiving contaminated surface water or wastewater, if surface water or groundwater would not collect and if such

actions would reduce the spread of, or direct contact with, the contamination;

(b) Removal of bulk containers (such as drums and barrels) that contain or may contain hazardous substances, pollutants, contaminants, CERCLA-excluded petroleum or natural gas products, or hazardous wastes (designated in 40 CFR part 261 or applicable state requirements), if such actions would reduce the likelihood of spillage, leakage, fire, explosion, or exposure to humans, animals, or the food chain;

(c) Removal of an underground storage tank including its associated piping and underlying containment systems in accordance with applicable requirements (such as RCRA, subtitle I; 40 CFR part 265, subpart J; and 40 CFR part 280, subparts F and G) if such action would reduce the likelihood of spillage, leakage, or the spread of, or direct contact with, contamination;

(d) Repair or replacement of leaking containers;

(e) Capping or other containment of contaminated soils or sludges if the capping or containment would not unduly limit future groundwater remediation and if needed to reduce migration of hazardous substances, pollutants, contaminants, or CERCLA-excluded petroleum and natural gas products into soil, groundwater, surface water, or air;

(f) Drainage or closing of man-made surface impoundments if needed to maintain the integrity of the structures;

(g) Confinement or perimeter protection using dikes, trenches, ditches, or diversions, or installing underground barriers, if needed to reduce the spread of, or direct contact with, the contamination;

(h) Stabilization, but not expansion, of berms, dikes, impoundments, or caps if needed to maintain integrity of the structures;

(i) Drainage controls (such as run-off or run-on diversion) if needed to reduce offsite migration of hazardous substances, pollutants, contaminants, or CERCLA-excluded petroleum or natural gas products or to prevent precipitation or run-off from other sources from entering the release area from other areas;

(j) Segregation of wastes that may react with one another or form a mixture that could result in adverse environmental impacts;

(k) Use of chemicals and other materials to neutralize the pH of wastes;

(l) Use of chemicals and other materials to retard the spread of the release or to mitigate its effects if the use of such chemicals would reduce the spread of, or direct contact with, the contamination;

(m) Installation and operation of gas ventilation systems in soil to remove methane or petroleum vapors without any toxic or radioactive co-contaminants if appropriate filtration or gas treatment is in place;

(n) Installation of fences, warning signs, or other security or site control precautions if humans or animals have access to the release; and

(o) Provision of an alternative water supply that would not create new water sources if necessary immediately to reduce exposure to contaminated household or industrial use water and continuing until such time as local authorities can satisfy the need for a permanent remedy.

#### *B6.2 Waste collection, treatment, stabilization, and containment facilities*

The siting, construction, and operation of temporary (generally less than 2 years) pilot-scale waste collection and treatment facilities, and pilot-scale (generally less than 1 acre) waste stabilization and containment facilities (including siting, construction, and operation of a small-scale laboratory building or renovation of a room in an existing building for sample analysis), provided that the action (1) Supports remedial investigations/feasibility studies under CERCLA, or similar studies under RCRA (such as RCRA facility investigations/corrective measure studies) or other authorities and (2) would not unduly limit the choice of reasonable remedial alternatives (such as by permanently altering substantial site area or by committing large amounts of funds relative to the scope of the remedial alternatives).

#### *B6.3 Improvements to environmental control systems*

Improvements to environmental monitoring and control systems of an existing building or structure (such as changes to scrubbers in air quality control systems or ion-exchange devices and other filtration processes in water treatment systems), provided that during subsequent operations (1) Any substance collected by the environmental control systems would be recycled, released, or disposed of within existing permitted facilities and (2) there are applicable statutory or regulatory requirements or permit conditions for disposal, release, or recycling of any hazardous substance or CERCLA-excluded petroleum or natural gas products that are collected or released in increased quantity or that were not previously collected or released.

#### *B6.4 Facilities for storing packaged hazardous waste for 90 days or less*

Siting, construction, modification, expansion, operation, and decommissioning of an onsite facility for storing packaged hazardous waste (as designated in 40 CFR part 261) for 90 days or less or for longer periods as provided in 40 CFR 262.34(d), (e), or (f) (such as accumulation or satellite areas).



## Department of Energy

### *B6.5 Facilities for characterizing and sorting packaged waste and overpacking waste*

Siting, construction, modification, expansion, operation, and decommissioning of an onsite facility for characterizing and sorting previously packaged waste or for overpacking waste, other than high-level radioactive waste, provided that operations do not involve unpacking waste. These actions do not include waste storage (covered under B6.4, B6.6, B6.10 of this appendix, and C16 of appendix C) or the handling of spent nuclear fuel.

### *B6.6 Modification of facilities for storing, packaging, and repacking waste*

Modification (excluding increases in capacity) of an existing structure used for storing, packaging, or repacking waste other than high-level radioactive waste or spent nuclear fuel, to handle the same class of waste as currently handled at that structure.

### *B6.7 [Reserved]*

### *B6.8 Modifications for waste minimization and reuse of materials*

Minor operational changes at an existing facility to minimize waste generation and for reuse of materials. These changes include, but are not limited to, adding filtration and recycle piping to allow reuse of machining oil, setting up a sorting area to improve process efficiency, and segregating two waste streams previously mingled and assigning new identification codes to the two resulting wastes.

### *B6.9 Measures to reduce migration of contaminated groundwater*

Small-scale temporary measures to reduce migration of contaminated groundwater, including the siting, construction, operation, and decommissioning of necessary facilities. These measures include, but are not limited to, pumping, treating, storing, and re-injecting water, by mobile units or facilities that are built and then removed at the end of the action.

### *B6.10 Upgraded or replacement waste storage facilities*

Siting, construction, modification, expansion, operation, and decommissioning of a small upgraded or replacement facility (less than approximately 50,000 square feet in area) within or contiguous to a previously disturbed or developed area (where active utilities and currently used roads are readily accessible) for storage of waste that is already at the site at the time the storage capacity is to be provided. These actions do not include the storage of high-level radioactive waste, spent nuclear fuel or any waste that requires special precautions to prevent nu-

## Pt. 1021, Subpt. D, App. C

clear criticality. (See also B6.4, B6.5, B6.6 of this appendix, and C16 of appendix C.)

### B7. CATEGORICAL EXCLUSIONS APPLICABLE TO INTERNATIONAL ACTIVITIES

#### *B7.1 Emergency measures under the International Energy Program*

Planning and implementation of emergency measures pursuant to the International Energy Program.

#### *B7.2 Import and export of special nuclear or isotopic materials*

Approval of import or export of small quantities of special nuclear materials or isotopic materials in accordance with applicable requirements (such as the Nuclear Non-Proliferation Act of 1978 and the "Procedures Established Pursuant to the Nuclear Non-Proliferation Act of 1978" (43 FR 25326, June 9, 1978)).

### APPENDIX C TO SUBPART D OF PART 1021—CLASSES OF ACTIONS THAT NORMALLY REQUIRE EAS BUT NOT NECESSARILY EISS

#### TABLE OF CONTENTS

C1 [Reserved]
C2 [Reserved]
C3 Electric Power Marketing Rate Changes, Not Within Normal Operating Limits
C4 Upgrading, Rebuilding, or Construction of Powerlines
C5 Vegetation Management Program
C6 Erosion Control Program
C7 Contracts, Policies, and Marketing and Allocation Plans for Electric Power
C8 Protection of Cultural Resources and Fish and Wildlife Habitat
C9 Wetlands Demonstration Projects
C10 [Reserved]
C11 Particle Acceleration Facilities
C12 Energy System Demonstration Actions
C13 Import or Export Natural Gas Involving Minor New Construction
C14 Water Treatment Facilities
C15 Research and Development Incinerators and Nonhazardous Waste Incinerators
C16 Large Waste Packaging and Storage Facilities

C1 [RESERVED]

C2 [RESERVED]

#### C3 ELECTRIC POWER MARKETING RATE CHANGES, NOT WITHIN NORMAL OPERATING LIMITS

Rate changes for electric power, power transmission, and other products or services provided by Power Marketing Administrations that are based on changes in revenue requirements if the operations of generation