

APPENDIX A

DICTIONARY

A/E & Construction Performance Appraisals. Reviews of architect/engineer (A/E) and/or construction contractor performance during the project. (Also see Performance Evaluation of A/E.)

A/E Internal Design Coordination. Coordination of design effort within the A/E firm.

A/E Selection Scope of Work for Off-site A/E. Project criteria required by the A/E for subcontractors used by the A/E.

Abandoned Design and Construction. Project costs shall include costs incurred because of the cancellation of all or part of a contract or purchase order to procure, manufacture, or assemble an item of Plant and Capital Equipment (PACE). These costs, less any salvage credits, shall be distributed over the remaining units of property within the project for project accounting purposes, except where such distribution significantly distorts the cost of the remaining property units. Where such distortion occurs, the costs of the abandoned project or project segment may be closed from construction work in progress to abandoned projects. All charges to abandoned projects shall be approved by the Head of the Field Element.

Acceptance. The inspection of a unit or facility for acceptance with a documented listing of the specific testing to be accomplished or work remaining, including the furnishing of any outstanding submittals or technical and record data, to be completed by the construction contractor.

Acceptance Testing. The performance of all necessary testing to demonstrate that installed equipment will operate satisfactorily and safely in accordance with plans and specifications. It includes required hydrostatic, pneumatic, electrical, ventilation, and mechanical functioning and run-in tests of portions of systems, and finally of completed systems.

Acceptance Test Procedure and Plan. A test procedure and plan developed for the acceptance of the facility from the contractor. This test procedure describes the individual testing methods and results that must be met for individual components of the facility to be accepted, such as the testing of concrete, soil analysis, and the level of contamination. Acceptance of the individual components must be completed prior to final acceptance.

Accounting. Salaries, travel, and other expenses for accountants, timekeepers, clerks, and their secretarial support. This is an indirect cost.

Action Plan. A plan describing the implementation of a specific cleanup action.

Activity Based Costing (ABC). A cost estimating method where the project is divided into discrete activities, and a cost estimate is prepared for each activity.

Activity Data Sheet. The activity data sheet (ADS) supports the Environmental Restoration Planning, Budgeting, and Control System and relates to the program summary work breakdown structure (WBS) at a specified level. It is the basic building block for program life-cycle planning. An assessment ADS and a cleanup ADS define a remediation project. Management activities that are not associated with a specific remediation project are specified on separate ADSs.

Additions and Improvements to Structure. Any additions or improvements to a structure, such as adding a new wing to a building. This does not include the additional equipment improvements to a structure, such as adding insulation to a building.

Administration. Salaries, travel, and other expenses for the overall administration personnel (e.g., office manager) of the project. This is an indirect cost.

Agreement in Principal. During negotiations not all details may be decided, but an agreement in principal may be reached. This occurs when most of the contract language is approved by all parties. There may still be some outstanding items that have not been agreed upon during this phase of negotiations.

Aircraft Operation. Aircraft operations specifically for the construction project. This is an indirect cost.

Applicable or Relevant and Appropriate Requirement (ARAR). Requirements, including cleanup standards, standards of control, and other substantive environmental protection requirements and criteria for hazardous substances, as specified under Federal and State law and regulations, that must be met when complying with the Comprehensive Environmental Response, Compensation, and Liability Act (from the Superfund Amendments and Reauthorization Act).

As-built Drawings (Prior to and after construction). A set of drawings that are marked-up by the contractor building a facility or fabricating a piece of equipment that show how the item or facility was actually built versus the way it was originally designed. At the completion of a project, the as-built drawings describe what was actually built.

As Low As Reasonably Achievable (ALARA). A radiation protection principle applied to radiation exposures, with costs and benefits taken into account.

Asbestos Hazard Emergency Response Act (AHERA). 1986 Act requiring school districts to analyze asbestos problems.

Audit. A planned and documented activity performed to determine by investigation, examination, or evaluation of objective evidence the adequacy of and compliance with established procedures, instructions, drawings, and other applicable documents and to determine the effectiveness of implementation. An audit should not be confused with surveillance or inspection activities performed for the sole purpose of process control or product acceptance.

Baseline. A quantitative definition of cost, schedule, and technical performance that serves as a base or standard for measurement and control during the performance of an effort; the established plan against which the status of resources and the effort of the overall program, field program(s), project(s), task(s), or subtask(s) are measured, assessed, and controlled. Once established, baselines are subject to change control discipline (modified).

Baseline (Configuration). A configuration document package that is fixed at a specific time during the life cycle of a system and defines a formal departure point for control of future changes in performance, design, production, construction, and related technical requirements.

Best Available Technology (BAT) or Best Demonstrated Available Technology (BDAT). Treatment technologies that have been shown through actual use to yield the greatest environmental benefits among competing technologies.

Bid Evaluations. A review of all bids submitted by prospective contractors. The bids are opened and studied. After selection of the winning bid, the bid is awarded.

Bid Package. A set of documents that contain the scope of work, specifications, drawings, and general conditions for a project or job. Prospective contractors should be able to review the bid package and develop their cost estimates and schedules for the work.

Bid Package Preparation. All time and materials used to prepare the bid package.

Bonds. Bonds required for construction (e.g., performance, bid, payment). This is an indirect cost.

Buried Contingency. Some estimators have sought to hide contingency estimates in order to protect the project so that the final project does not go over budget because the contingency has been removed by outside sources. This is commonly known as buried contingency.

CAD Services (and computer). Drawings generated by computer-aided drafting and design (CAD) services. These services include the software, hardware, associated materials, and the system operator.

Camp Operations. Operation of construction camp facilities. This is an indirect cost.

Candidate Projects. A list of projects submitted by the operating offices for approval. Submitting candidate projects to Headquarters is part of the budgeting process.

Candidate Sheets. Recommended capital facility upgrades submitted by the operating plant management to support plant/program milestones and commitments.

Capital Review Board. An evaluation and review group that reviews candidate projects prior to submittal to the U. S. Department of Energy (DOE).

Certified Engineering Reports. As a deliverable from the A/E, all engineering reports and drawings must be certified. The certification is a signed statement attesting to the accuracy of the information in the document.

Change Control for Design. The procedures that must be followed to change the baseline design. Scope, cost, and schedule impacts of the change are defined. Levels of approval required to authorize the change depend on the magnitude of the change.

Commissioning Costs. Costs associated with authorizing a facility to operate. These usually include fuel or raw material costs, review costs, team costs, etc., and are project-specific. Commissioning costs are usually found in estimates for nuclear facilities.

Comprehensive Environmental Response, Compensation, and Liability Act (CERCLA). Federal statute (also known as Superfund) enacted in 1980 and reauthorized in 1986, that provides the statutory authority for cleanup of hazardous substances that could endanger public health, welfare, or the environment. CERCLA addresses the uncontrolled releases of hazardous substances to the environment and the cleanup of former or otherwise inactive waste sites.

Compressed Air Costs. Construction and operation of the compressed air system used for construction and temporary facilities. This is an indirect cost.

Computer Systems (software and hardware). Automated data processing to assist operators who monitor and run the equipment or facilities. This includes software and hardware developed for the facility.

Conceptual Design Estimate. A budget or conceptual design estimate is required to request congressional authorization for funding. This request is required for each line item construction project and each contingency-type project.

Conceptual Design Plan. Pre-authorization activity that describes the basis for the conceptual design.

Conceptual Design Report (CDR). The CDR is a document that describes the project in sufficient detail to produce a budget cost estimate and to evaluate the merits of the project. A conceptual design report shall be prepared for line item construction projects prior to inclusion of the project in the DOE budget process.

Conceptual Project Schedule. A schedule that is developed during pre-authorization activities and is based on the conceptual design of the facility.

Configuration Management Plan. A plan to ensure and document that all components of a project interface both physically and functionally.

Constructability Review. Formal review to determine feasibility of constructing a proposed project.

Construction. The act of erecting, renovating, reconditioning, or demolishing a building or other facility, including the labor, materials, and equipment required to complete the task. This is a direct cost. Costs will be charged to plant and capital equipment - construction.

Construction Contractors. Salaries, travel, and other expenses of engineers, engineering assistants, and their secretarial support responsible for engineering and design performed by the construction contractor. When work normally performed by an architect/engineer is performed by a construction contractor, the associated costs are charged to the applicable engineering, design, and inspection accounts. This is an indirect cost.

Construction Coordination and Planning. Management activities that work to keep the project on schedule and on budget during project construction. These activities include, for example, ensuring that construction equipment and supplies are available when needed.

Construction Equipment. Major pieces of equipment used during construction that are not associated with a single work operation. Specific-purpose equipment would be charged to the appropriate direct account. This element includes rental or depreciation, repairs, fuels and lubricants, erection, dismantling, shipping, and operator and assistant wages. This is an indirect cost only if not associated with a particular work operation.

Construction Equipment Maintenance. Maintenance of major pieces of equipment (as defined above) used during construction. This is an indirect cost.

Construction Facilities. Facilities that are constructed, rented, renovated, etc., strictly for use during the construction phase of the project (e.g., structures, roads, utility connections, parking, walkways). Facilities that remain in place or use after completion of construction should be charged elsewhere (e.g., permanent plant construction, sitework, operating expense).

Construction Management. Construction management covers those services provided by the organization responsible for management of the construction effort during Title I and Title

II design, and continuing through the completion of construction. Construction management services are further defined in DOE Order 4700.1, PROJECT MANAGEMENT SYSTEM.

Construction Project Data Sheet (Schedule 44). This form is submitted to DOE Headquarters for review and, if approved, the project is included in the budget submitted to the Office of Management and Budget (OMB). The completed conceptual design estimate normally serves as the basis for preparation of this form.

Construction Status Reports and Meetings. Any meeting or conference called for the purpose of reviewing construction project status. Status reports are issued at regular intervals during the construction and describe project status relative to existing budget, schedule, and scope.

Consumables. Expendable supplies used during construction (e.g., rope, tarps, drill bits, grinding wheels, gloves, hoses, rags, soap, fuels, lubricants). This is an indirect cost.

Contamination Restrictions. Time lost due to radiation dose rates. This is a direct cost.

Contingency. The amount budgeted to cover costs that may result from incomplete design, unforeseen and unpredictable conditions, or uncertainties. The amount of the contingency will depend on the status of design, procurement, and construction and the complexity and uncertainty of the component parts of the project. Contingency is not to be used to avoid making an accurate assessment of expected cost.

Contract Administration. The maintenance and oversight of a project to ensure that all provisions of the contract are met.

Contractor. Includes all persons, organizations, departments, divisions, and companies having contracts, agreements, or memoranda of understanding with the DOE or other federal agency.

Contract Fee. Fee earned by the contractor. It may be based on dollar value or other unit of measure such as manhours. This is an indirect cost.

Contractor Support Related to Design and Construction. Support provided by a contractor during design and construction, such as activities involving project and construction management.

Contribution to Welfare Plans. Health insurance, retirement plans, education, and training that is typically an addition to base salary, in the form of a percent added or unit cost per hour. This is an indirect cost.

Contributions In-Kind. Instead of being paid with money for services supplied, an exchange of a commodity is given. An example of this is if a contractor would demolish an old house, he receives the lumber for payment of his services.

Control Systems for Construction Activities. Any system used to track progress and/or expenses during construction against the baseline budget and schedule.

Corrective Action. A measure taken to rectify and prevent recurrence of conditions that adversely affect quality and mission accomplishments.

Cost Estimate. A statement of costs estimated to be incurred in the conduct of an activity, such as a program, or the acquisition of a project or system. The estimate can be in the form of proposals by contractors or Government agencies, a response to a program opportunity notice, or a DOE estimate.

Cost Plus Award Fee (CPAF) Contract. A contract where the contractor recovers actual costs incurred for completed work and is awarded a fee based on performance. Actual costs include general administration, overhead, labor and fringe benefits, other direct costs, and materials, including mark-up.

Cost Plus Fixed Fee (CPFF) Contract. A contract where the contractor recovers actual costs incurred for completed work. The fee awarded is predetermined and set by the contract.

Cultural Resources Review. An archaeological survey performed to ground disturbing activities at a proposed project construction site.

Davis-Bacon Administration. Administration of the Davis-Bacon Act, which regulates minimum wage rates on federal projects.

Decision Progress Reporting. Project status reporting using decision tree analyses.

Decommissioning. The process of removing a facility from operation, followed by decontamination, entombment, dismantlement, or conversion to another use.

Decontamination. The removal of hazardous material (typically radioactive or chemical material) from facilities, soils, or equipment by washing, chemical action, mechanical cleaning, or other techniques.

Definitive Estimate. An estimate conducted during the latter stages of a project when engineering may be as much as 40 percent complete. The actual cost is usually within plus 15 percent to minus 5 percent of the definitive estimate.

Demolition. Destruction and removal of facilities or systems from the construction site. This is a direct cost.

Depletable Resources. A resource that is used up during a job.

Design and Construction Errors and Omissions. Errors and omissions are sometimes found in a design during the construction process. These typically lead to change orders. A

contractor's change order would normally be approved if it is caused by errors and omissions in the owner's design package.

Design Calculation and Analysis. These are the calculations and analyses used to support the design. For example, calculations would be shown to support the sizing of the heating, ventilation, and air conditioning (HVAC), heating and cooling units, fans, and ducts.

Design Changes/Controls. The process by which changes to the design are recorded and controlled after the design has been approved. Associated changes to the budget and schedule are documented as part of this procedure.

Design Cost and Scheduling Analysis and Control. Tracking and analysis of the cost and schedule of activities that occur during the design phase of a project.

Design Kickoff. A design kickoff meeting is held with DOE, the A/E, and any site contractors prior to any Title I design activities. This meeting initiates the design effort.

Design Quality Assurance (QA) Plan. Project plan for ensuring the quality of formal design. Components of design QA usually include checkprinting and review of design elements by senior A/E staff.

Design Review. A systematic review of project design to ensure it is meeting the requirements of the objective.

Design Review by Project Team. An internal review conducted by a project team selected to review the design effort.

Design Review Support by Operating Contractor. During the design, an operating contractor reviews the design. This would be an operability type design review.

Detailed Estimate. This estimate is developed for the total project based on the completed design package. This estimate is used to verify the contractor's figures in both a lump sum or negotiated fee project. It is also used to track costs during the construction phase of the contract.

Direct Costs. Any costs that can be specifically identified with a particular project or activity, including salaries, travel, equipment, and supplies directly benefitting the project or activity.

Disposal. There are two types of disposal that could be associated with construction and remediation type projects. Includes regular construction debris as well as hazardous waste that must be disposed of.

Disposal of Radioactive Waste. Cost of compliance with regulatory requirements for radioactive waste disposal.

Document. Any written or pictorial information describing, defining, specifying, reporting, or certifying activities, requirements, procedures, or results. A document is not considered to be a quality assurance record until it satisfies the definition of a quality assurance record.

Drawings. As part of an A/E design effort, drawings are typically a deliverable. These are design drawings that depict how a facility should look after the construction is complete. Also referred to as as-built drawings.

Drinking Water and Sanitation. Supply of drinking water and toilet facilities during construction or operation activities. This is an indirect cost.

Economic Escalation. Cost increases caused by unit price increases. Whereas the cost of projects can increase because of poor management, scope growth, and schedule delays, economic escalation is concerned only with forecasting price increases caused by an increase in the cost of labor, material, or equipment necessary to perform the work.

Economic/Life Cycle Cost Analysis. An analysis of the direct, indirect, recurring, non-recurring, and other related costs incurred or estimated to be incurred in the design, development, production, operation, maintenance, support, and final disposition of a major system over its anticipated useful life span.

Energy Conservation Report. A report that analyzes the different energy systems in a project to achieve a design that minimizes energy use. Typically, systems that use less energy require more capital cost. This study balances the energy savings against the increased capital cost to arrive at an optimum design.

Energy System Acquisition Advisory Board (ESAAB). ESAAB supports the Acquisition Executive by providing advice, assistance and recommendations at key decision points for each major system acquisition and designated major projects. The ESAAB provides a single forum for the discussion of issues and alternatives and is designed to ensure coordinated, objective senior level management advice to the Acquisition Executive. DOE Order 4700.1, PROJECT MANAGEMENT SYSTEM, can be referenced for further information.

Energy System Acquisition Advisory Review (ESAAR). An annual review for environmental projects that reflects the project status and activity for the prior and upcoming fiscal years.

Engineering and Design Studies. Engineering and design studies are conducted throughout a project from pre-authorization through construction to determine the best alternative from an engineering perspective. An example of an engineering study would be to evaluate waste water treatment techniques to determine which one would be the best to achieve the required level of treatment.

Engineering, Design, and Inspection (ED&I). Activities begin with the preliminary design (Title I). Pre-title I activities are not considered part of ED&I activities. ED&I activities include the engineering and design activities in Title I & II and the inspection activities associated with Title III.

Engineering Support (A/E). During the construction of the project, additional technical expertise may be required. This assistance is A/E engineering support.

Environmental Cleanup Costs. All costs associated with an environmental remediation project after the assessment phase.

Environmental Restoration. Cleanup and restoration of sites contaminated with hazardous substances during past production or disposal activities.

Environmental Restoration Management Contractor (ERMC). A contractor responsible for the management and execution of the Environmental Restoration Program for a site.

Environmental, Safety and Health (ES&H) Crosscut. A review of applicable environmental, safety, and health regulations or requirements to determine the impacts of these requirements and regulations on the project. Air and water quality, land disturbances, ecology, climate, public and occupational health and safety, and socioeconomic factors (including non-availability of critical resources and institutional, cultural, and aesthetic considerations) are some of the areas considered.

Equipment and Refurbishment or Equipment Repair. The restoration or replacement of a deteriorated item of PACE such that it may be utilized for its designated purpose. The cost of repair is normally charged to an operating expense account and includes amounts for labor and associated supervision and materials and transportation costs, as well as indirect and other costs incurred in such repairs, but it does not include the costs to replace items of PACE designated as retirement units.

Escalation. A time-related increase in the amount of labor hours required to produce a given unit of work output, aggregate demand exceeding aggregate supply, external pressures on the market such as droughts or cartels, wage-price spiral, an increase in the cost of labor, or a decrease in the availability of good or services. These factors independently or in unison will increase the cost of a good or service.

Escorts. Personnel to escort uncleared construction workers in a security restricted area. This is a direct cost.

Evaluation of RCRA/EPA/State Permit Regulations. An analysis of applicable federal, state, and local environmental regulations to determine what permits are required for the project. (Note: RCRA = Resource Conservation and Recovery Act, EPA = Environmental Protection Agency.)

Expense Funding. Funding from the Operating Office expense funds.

Facility. A single project that includes any buildings and functional systems, such as equipment, process systems and associated piping, landfills, and impoundments. A facility is usually associated with a unique process or operation at a given location.

Feasibility Study. The objectives of the feasibility study are to identify the alternatives for remediation and to select and describe the alternative that satisfies the applicable or relevant and appropriate requirements for mitigating confirmed environmental contamination. Successful completion of the feasibility study should result in the development of a remedial design to implement the selected remedial actions.

Fire Protection. Fire protection equipment and systems provided during construction that do not become part of the permanent plant. This is an indirect cost.

“First Level” Codes. Sometimes called **“primary levels,”** represent the major cost categories. The major components or categories of work for each of the primary levels on each project are listed and assigned a “secondary level.” Codes are then broken down by work elements or bills of material and each work element or bill of material (BM) is assigned a “third level” or fine detail level.

Freight. Delivery service provided to move materials and equipment from the supplier’s point of origin to the job site. This is a direct cost.

Full Time Equivalent (FTE). A method of calculating labor costs where the number of employees is multiplied by the rate and duration to calculate cost.

Funding Profile. A representation of the project costs over the life of the project.

General Cleanup. General area cleanup and yard cleanup. Cleanup associated with a particular work operation is charged directly to the associated account. This is an indirect cost, only if not associated with a particular work operation.

Government Estimates. Determines the reasonableness of competitive bids received in connection with fixed-price construction contracts, and serves as a control in evaluating cost estimates prepared by a prime cost-type construction contractor. Sometimes called engineer’s estimate.

Hazardous Ranking System (HRS). A U.S. EPA scoring system used for a number of environmental decisions, including ranking disposal sites for cleanup.

Hazardous Waste. As defined in RCRA, a solid waste, or combination of solid wastes, that because of its quantity, concentration, or physical, chemical, or infectious characteristics, may cause or significantly contribute to an increase in mortality or an increase in serious, irreversible, or incapacitating reversible illness or pose a substantial present or potential hazard to human health or the environment when improperly treated, stored, transported, or disposed of, or otherwise managed.

Heat. Heating, ventilation, and air conditioning for construction and temporary facilities. This is an indirect cost.

Holiday and Vacation Pay. Paid legal holidays and charged vacation pay. This is an indirect cost.

Identification of Long Lead Procurements. The identification of those items of equipment and/or construction materials that must be ordered prior to the estimated physical construction start to ensure availability at the time needed so as not to delay construction performance.

Identification of Project Record Requirements. The identification of document control and filing requirements.

Improvements to Land. The cost of general site clearing, grading, drainage, and facilities common to the project as a whole (such as roads, walks, paved areas, fences, guard towers, railroads, port facilities, etc.), but excluding individual buildings, other structures, utilities, special equipment/process systems, and demolition, tunneling, and drilling when they are a significant intermediate or end product of the project.

Independent Cost Estimate (ICE). A documented cost estimate that has the express purpose of serving as an analytical tool to validate, cross check, or analyze estimates developed by proponents of a project. An independent cost estimate also serves as a basis for verifying risk assessments.

Indirect Costs. Costs incurred by an organization for common or joint objectives and that cannot be identified specifically with a particular activity or project.

Initial Complement of Furnishings. Includes furniture and other furnishings to make a facility operable as per the original intent.

Inspection. Examination or measurement to verify whether an item or activity conforms to specified requirements.

Inspection Planning. Planning for the survey of a unit, facility, or area to determine overall compliance with contract drawings and specifications.

Installations/Alterations. Installation and/or modification of project equipment during construction activities.

Insurance. Insurance, other than payroll, carried by the contractor in connection with the construction work (e.g., vehicle and property damage, liability, builders risk). This is an indirect cost.

Integrated Project Schedule. An integrated project schedule contains all the elements of the overall project, including the design and engineering, procurement, construction, R&D,

safety, environmental, and operations activities. An integrated project schedule would cover pre-authorization through construction activities.

Interest Penalties. Contractual financial penalties for failure to pay invoices in a timely fashion.

Intermediate Estimate. An estimate conducted at the intermediate stages of a project or the beginning of the design stage.

Item. An all-inclusive term used in place of any of the following: appurtenance, assembly, component, equipment, material, module, part, structure, facility, subassembly, system, subsystem, or unit.

Key Decision 0. The project milestone required for requesting conceptual design funding in the internal review budget cycle.

Key Decision 1. The project milestone denoting that the project has received approval in the internal review budget process.

Key Decision 2. The project milestone denoting that the project has been approved to start final/detailed design and long-lead procurement.

Key Decision 3. The project milestone denoting that the project has been approved to start construction or enter full-scale development.

Key Decision 4. The project milestone denoting that the project is operationally ready.

Land and Rights. The purchase price and other acquisition costs required to obtain the land and/or land rights necessary for a project. This includes removal costs less salvage realized in disposing of any facilities acquired with the land.

Letter of Instruction. Design guidance document for the A/E to follow. This document is produced by the PM and describes any required design deviations from the Design Criteria Manual.

Laundry. Cleaning of contaminated clothing. This is an indirect cost.

Legal. Salaries, travel, and other expenses of lawyers and legal fees. This is an indirect cost.

Life-Cycle Cost (LCC). The sum total of the direct, indirect, recurring, nonrecurring, and other related costs incurred or estimated to be incurred in the design, development, production, operation, maintenance, support, and final disposition of a major system over its anticipated useful life span. Where system or project planning anticipates use of existing sites or facilities, restoration and refurbishment costs should be included.

Light and Power. Light and power for construction and temporary facilities. This is an indirect cost.

Main Plant. This term is used to describe the building, facility, or plant, which must be capitalized.

Maintenance of General Construction Plant. Maintenance and operation of general construction plant facilities not chargeable to other accounts. Includes depreciation of general site improvements and temporary land improvements. This is an indirect cost.

Management and Operating (M&O) Contractor/M&O Support During Construction. Technical support from project M&O contractor during facility construction and start-up.

Material Handling. The receipt, offloading, and storage of materials. The final movement to the point of installation is charged to the appropriate direct account. This is an indirect cost.

Material Procurement Rate. Percent markup on purchased materials.

Medical and First Aid. Medical personnel, first aid supplies, and hospital expenses. This is an indirect cost.

Milestone. A important or critical event and/or activity that must occur in the project cycle to achieve the project objective(s).

Motor Pool Operations. Operation of a pool for motor vehicles for general and administrative services. Automobiles operated specifically for other services are not to be included here. This is an indirect cost.

National Emission Standards for Hazardous Air Pollutants (NESHAP). Clean Air Act limits for release of hazardous pollutants for which no ambient air quality standard is applicable.

National Environmental Policy Act (NEPA) of 1969. This act established the requirement for conducting environmental reviews of federal actions that have the potential for adverse impact on the human environment. NEPA requires that DOE perform an environmental review, with public participation, of proposed major federal actions that may have an impact on the human environment. This review usually results in an environmental assessment or environmental impact statement.

Negotiations of Fixed Price Contract Changes. Contract negotiations between DOE and a contractor on a fixed price contract during the contract period.

Non-Conformance Reports (NCRs). A report that documents a contractor's failure to comply with the contractual requirements.

Office Supplies and Expenses. Expenses of administrative offices, including stationery, forms, blueprints, reproduction equipment and supplies, furniture, photography, telecommunications services and personnel, janitorial services, heating and air-conditioning, lighting, water and sewage, depreciation of office facilities and equipment, repairs and maintenance of office buildings and equipment, messenger and mail services, and office employees not chargeable to other accounts. This is an indirect cost.

Operable Unit (OU). A discrete portion of a DOE installation identified as a group of release sites placed together for the purpose of remediation as a single project. OUs may represent geographical portions of an installation, or they may represent a specific installation problem, such as surface/subsurface groundwater contamination. Cleanup of an installation may be divided into a number of OUs, depending on the complexity of the problems associated with the installation. An OU may represent all or part of discrete locations such as Waste Area Groups (WAGs) and Solid Waste Management Units (SWMUs). OUs usually contain more than one release site, may be in close geographic proximity to other OUs, and may exhibit similar waste characteristics and types of releases. Release sites do not have to be contiguous to be included in a specific OU.

Operation Test Plans. Plans developed to fully test the operation during start-up as well as tests to be conducted to check the operations of the system once the facility is in operation.

Operations and Maintenance (O&M). Activities required to maintain the effectiveness of response actions.

Operational Readiness Review. Facility audit to verify that the facility is ready to commence operation.

Operator Training. Training provided for the operating contractor personnel in order to run and maintain a facility. This includes all required health and safety and specialized training by a vendor.

Order-of-Magnitude Estimate. An estimate conducted during the preliminary stages of a project.

Other Project Costs (OPC). All other costs related to a project that are not included in the Total Estimated Costs, such as supporting research and development, pre-authorization costs prior to start of Title I design, plant support costs during construction, activation, and startup.

Outside Contractor Support. Support of DOE activities using outside contractors instead of DOE personnel.

Parametric Estimate. Parametric estimating requires historical data bases on similar systems or subsystems. Statistical analysis is performed on the data to find correlations between cost drivers and other system parameters, such as design or performance parameters. The analysis produces cost equations or cost estimating relationships that can be used individually or grouped into more complex models.

Payroll Insurance. Contractor's contribution to social security taxes. This is an indirect cost.

Performance Evaluation of A/E. To ensure that the design effort is completed on time and within budget, the A/E performance must be evaluated. The performance is evaluated during design by using the number of drawings that are expected to be produced and the number of manhours required for each drawing. These hours are tracked to give an indication of the performance of the A/E. Another performance evaluation is to assess that the facility is being designed in accordance with the functional design criteria.

Permits, Licenses. Permits and licenses required for construction and transportation permits, equipment operating (e.g., building, street, utility, environmental, and transportation permits; equipment operating licenses). This is an indirect cost.

Permits After Title I. Permits obtained for construction are permits after Title I.

Permits Prior to Title I. Permits prior to Title I include all those permits required during the design phase of a project. It may also include permits that must be obtained prior to construction.

Personnel. Salaries, travel, and other expenses of personnel for recruitment employment and employee relations activities. This is an indirect cost.

Physically Handicapped Review. Review of design for barrier-free design/construction features for facility accessibility by the handicapped.

Pilot Plant. A pilot plant is a small-scale demonstration plant that is used to evaluate a process and better define the process design parameters.

Planning Estimate. A cost estimate for general planning and budgeting purposes only. Planning estimates will be used when there is a need for an order-of-magnitude estimate, but sufficient definitive information is lacking that would allow the development of a total estimated cost. Planning estimates are developed for each project (program) at the time of project identification. Since these are developed before conceptual design, they are order-of-magnitude only and have the least amount of accuracy and lowest confidence level. Care should be exercised in these estimates to ensure that the order of magnitude is correct, since a tendency exists to avoid changing, particularly upward, this estimate once established.

Plant and Capital Equipment (PACE) Fund. For conventional construction projects, this is a fund that provides for the plant and its basic equipment/furnishings.

Plant Forces Work Review. Determines whether part or all of the project work will be performed by plant forces as defined by the Davis-Bacon Act.

Pre-title I Activities. Pre-title I activities are defined in a variety of DOE references as all activities taking place prior to the start of the preliminary design. This includes siting and

related engineering studies conducted to establish project scope, feasibility, need, etc., as well as all activities that produce formal deliverables, such as conceptual design reports.

Preliminary Assessment/Site Investigation (PA/SI). One of the first stages in remediating a site. The PA/SI is designed to evaluate all known information about the site and to conduct a preliminary investigation of the extent and nature of the contamination at the site. The purpose is to determine if further action or investigation is appropriate. Data collected during this period is used to build an HRS score for the site.

Preliminary Safety Analysis Report (PSAR). For complex or expensive projects, a preliminary safety analysis is prepared and approved before construction begins. The analysis must be accompanied by a report that documents the analysis.

Premium Pay. Incremental wage increases for such things as overtime, shift differential, and general foreman. This is a direct cost.

Prime Contractors. DOE's major contractors; principally, DOE's management and operations contractors.

Procedure. A document that specifies or describes how an activity is to be performed.

Procurement. Salaries, travel, and other expenses of those responsible for field purchasing and expediting of materials, supplies, and equipment. This is an indirect cost.

Procurement and Construction Specifications. A deliverable of the design effort is the procurement and construction specification or requirement. These documents allow a contractor to procure all equipment necessary for construction.

Procurement Coordination. Coordination of equipment and materials between purchasing staff and project management to ensure that schedule and cost requirements are being fulfilled.

Procurement Document. Purchase requisitions, purchase orders, drawings, contracts, contract task orders, specifications, or instructions used to determine requirements for purchase (modified).

Productivity. Consideration for factors that affect the efficiency of construction labor (e.g., location, weather, work space, coordination, schedule). This is a direct cost.

Program. An organized set of activities directed toward a common purpose or goal undertaken or proposed in support of an assigned mission area. It is characterized by a strategy for accomplishing a definite objective(s) that identifies the means of accomplishment, particularly in qualitative terms, with respect to work force, material, and facility requirements. Programs are typically made up of technology-based activities, projects, and supporting operations.

Program Manager. An individual in an organization or activity who is responsible for the management of a specific function or functions, budget formulation, and execution of the approved budget. The program manager receives an approved funding program from responsible authority identifying program dollars available to accomplish the assigned function.

Program Objectives. A statement or set of statements defining the purposes and goals to be achieved during performance of a program to fulfill a DOE mission, including the technical capabilities, cost, and schedule goals.

Program Office. The Headquarters organizational element responsible for managing a program.

Program Participant. Any organization, contractor, or individual who is responsible for meeting assigned program objectives.

Project. A unique major effort within a program that has firmly scheduled beginning, intermediate, and ending date milestones; prescribed performance requirements; prescribed costs; and close management, planning, and control. The project is the basic building block in relation to a program that is individually planned, approved, and managed. A project is not constrained to any specific element of the budget structure (e.g., operating expense or plant and capital equipment). Construction, if required, is part of the total project. Authorized, and at least partially appropriated, projects will be divided into three categories: major system acquisitions, major projects, and other projects.

Project Assessment and Reporting. Project status reporting and comparison against budgeted or scheduled project forecasts.

Project Closeout. The final phase of a project where all project contracts are closed and all records finalized for storage.

Project Management. Project management covers those services provided to the DOE on a specific project, beginning at the start of design and continuing through the completion of construction, for planning, organizing, directing, controlling, and reporting on the status of the project. It includes developing and maintaining the project management plan; managing project resources; establishing and implementing management systems, including performance measurement systems; and approving and implementing changes to project baselines.

Project Management Plan (PMP). The PMP is the document that sets forth the plans, organization, and systems that those responsible for managing the project shall utilize. The content and extent of detail of the PMP will vary in accordance with the size and type of project and state of project execution.

Project Schedules. Schedules may be developed for each phase of the project, such as design, procurement, and construction. These schedules would indicate the sequence required

to finish the activities during the allotted time. Project schedules may also be used in the performance evaluation of contractors.

Project Support. Support covers those activities performed by the operating contractor for internal management and technical support of the project manager.

Project Validation. Headquarters review and validation of line item projects for constructability, costs, and schedule.

Protective Clothing. Materials and time required for construction forces to dress and undress for work in contaminated areas. This is a direct cost.

Quality. The totality of features and characteristics of an item or service that bears on its ability to satisfy given needs or fitness for intended use, which includes conformance to requirements.

Quality Assurance. All those planned and systematic actions necessary to provide adequate confidence that a facility, structure, system, or component will perform satisfactorily in service.

Quality Control. All those actions necessary to control and verify the features and characteristics of a material, process, product, or service to specified requirements. Quality control is the process through which actual quality performance is measured and compared with standards.

RCRA Facility Assessment (RFA). The initial RCRA process to determine whether corrective action for a RCRA past practice unit is warranted or to define what additional data must be gathered to make this determination; analogous to a CERCLA Preliminary Assessment and Site Inspection.

RCRA Facility Investigation (RFI). The RCRA process to determine the extent of hazardous waste contamination; analogous to the Comprehensive Environmental Response, Compensation, and Liability Act remedial investigation.

Radiation Control Timekeepers. Personnel who monitor employee exposure to radioactive materials and ensure that regulatory limits are not exceeded.

Radiation Protection by Operation Contractor. Personnel protective equipment and monitoring devices supplied by the operating contractor for protection against employee exposure to radioactive materials.

Regulatory Overview by A/E. An evaluation of all applicable local, state, and federal environmental and health and safety regulations by the A/E during project design.

Regulatory Requirements (non NEPA). A full regulatory compliance check is conducted on all steps of the overall project to ensure that all work is conducted in accordance with all current regulations. This includes federal, state, and local regulations.

Remedial Action. A subactivity (CERCLA term) in a remedial response involving actual implementation, following remedial design, of the selected source control and/or off-site remedial effort.

Remedial Design. The final design specifications and drawings are developed for remediation work. All engineering required to perform the remediation is completed.

Remedial Investigation (RI). The CERCLA process of determining the extent of hazardous substance contamination and, and as appropriate, conducting treatability investigations. The RI is often done in conjunction with the feasibility study.

Reporting Time. Time given to employees to report for work when no work is available because of weather or other conditions. This is an indirect cost.

Reproduction. Copying or duplication of project documents during project design.

Request for Project Authorization. A request for project activity authorization is submitted to the field office manager or designee for approval prior to the initiation of work or contracting the work. The authorization procedure in DOE Order 4700.1 should be followed.

Requirements for Safety Analysis Determination. Safety analyses must include the identification of hazards, assessment of risks, and methods for risk elimination or control. The line organization is responsible for preparing the safety analyses, obtaining an independent review of each analysis, and authorizing the construction operation and subsequent significant modification.

Research and Development (also called Development). The development and testing of systems and pilot plants judged to be technically and economically desirable as a means of achieving principal program goals. Engineering development concerns itself with processes, preproduction components, equipment, subsystems, and systems. Initiation of work in this category is dependent upon successful demonstration of a technical feasibility and economic potential during the technology phase.

Resource Conservation and Recovery Act (RCRA). Addresses the management of regulated hazardous waste and requires that permits be obtained for DOE facilities that treat, store, or dispose of hazardous waste or mixed waste; establishes standards for these facilities; and requires corrective actions (e.g., remediation) of past releases of hazardous waste from regulated waste management units.

Retroactive Pay. This account is used only when actual distribution of retroactive pay adjustments would be burdensome or the specific projects affected are closed. This is a holding account; only unallocatable costs should remain in this account.

Review Support by Management and Operating (M&O) Contractor. Review of design drawings prior to construction by M&O contractor.

Risk. The combined effect of the probability and consequences of failure of an item expressed in qualitative or quantitative terms.

Risk Estimate. A description of the probability that organisms exposed to a specific dose of chemical will develop an adverse response (e.g., cancer).

Risk/Health Assessment. The potential for realization of unwanted negative consequences of events. Public health risk assessment is a quantitative or qualitative evaluation of data from sources, such as toxicology and epidemiology, to predict the effects of public exposure to environmental factors that pose a potential hazard to the health and well-being of the public. Environmental and/or health effects resulting from exposure to a chemical or physical agent (pollutant) are combined with toxicity assessment results to provide an overall estimate or risk to the public. The process includes identification of the threat's source, determination of the threat's potential extent or magnitude, and resolution of probability that the defined undesirable situation will ensue from the exposure.

Safeguard and Security Systems. Safeguards against potential environmental damage and methods for mitigating environmental hazards must be developed. Security systems must be designed to protect the public from endangerment as well as protection for the facility.

Safety. All safety programs conducted during the course of the construction contract. Welding glasses, gloves, temporary railing, and other safety measures should be charged to the appropriate related cost account rather than to this account. This is an indirect cost.

Safety Review by A/E. A review by the A/E during the design phase for safety aspects of a project.

Sales Tax. State and local sales and use taxes. This is an indirect cost.

Scaffolding. General purpose scaffolding. Scaffolding erected for a particular work operation should be charged to the appropriate account. This is an indirect cost, only if not associated with a particular work operation.

Scope Change. A change in task objectives, plans (project or field work), or schedule that results in a material difference from the terms of an approval to proceed previously granted by higher authority. Under certain conditions, change in resource application may constitute a change in scope.

Security. Salaries, travel, and other expenses of security guards and associated equipment. This is an indirect cost.

Security and Restrictions. Time lost due to security limitations and restrictions. This is a direct cost.

Short Form Project Data Sheet. Short form project data sheets are brief overviews of projects that contain the project mission requirements, total estimated costs, other costs, tentative project schedule, and the amount of funding requested in the budget.

Significant Alterations. Any alteration or betterment of a facility that needs to be capitalized. (Reference DOE Order 2200.6, Chapter 6)

Signup and Termination Pay. Recruitment costs and severance pay. This is an indirect cost.

Site. A geographic entity comprising land, buildings, and other facilities required to perform program objectives. Generally a site has, organizationally, all of the required facility management functions (i.e., it is not a satellite of some other site). For purposes of this document, site and installation are synonymous.

Site Inspection. The purpose of the site inspection is to acquire the necessary data to confirm the existence of environmental contamination at identified potential sites and to assess the associated potential risk to human health, welfare, and the environment. The data collected at each site must be sufficient to support the decision for either continuing with a remedial investigation/feasibility study or for removing the site from further investigation through a decision document.

Site Investigation (final site selection). Acquisition of title and in some cases lessor interests in real property requires a formal site selection. Site selection and acquisition of real property must follow DOE policy as stated in DOE Order 4300.1, Real Property Management. This element describes any plans for site selection and real property acquisition and ultimate disposal, including the party responsible for the property, with particular emphasis on any implications of these actions on project contract provisions. Also included are plans to contract for utility services for the sites including a statement concerning whether or not such services will necessitate an increase in capacity for local utilities.

Site Selection Report. A report containing all activities included in the site selection. This includes a report pertaining to the acquisition of real property as well as any environmental site assessments that were conducted.

Sitework. Improvements made exterior to the structures on site. Includes such things as utilities, landscaping, irrigation, lighting, railroads, roads, and walks. This is a direct cost if permanent; otherwise, it is indirect.

Small Tools. Small hand tools and power tools, boxes, protective clothing, maintenance, and toolroom operation. This is an indirect cost.

Software. The programs, procedures, rules, and any associated documentation pertaining to the operation of a computer system.

Spares (initial and startup). During startup or shakedown of equipment and a facility, several spare parts need to be on site to keep equipment up and running. After startup, an initial set of spare parts is inventoried as part of the project costs.

Special Equipment. The installed cost of large items of special equipment and process systems such as vessels (e.g., towers, reactors, storage tanks), heat transfer systems (e.g., heat exchangers, stacks, cooling towers, desuperheaters, etc.), package units (e.g., waste treatment packages, clarifier packages, sulfurization, demineralization, etc.), and process piping systems.

Standard Equipment. Items of equipment in which only a minimum of design work is required, such as “off-the-shelf” items. Examples include office furniture, laboratory equipment, heavy mobile equipment, etc. Includes spare parts that are made part of the capital cost. This is a direct cost.

Startup. Startup covers one time-costs incurred by the M&O contractor during the transition period between the completion of construction and operation of the facility.

Statement of Work for M&O Contractor Project Management Activities. The contractual statement of work describing the project management activities that the M&O contractor must deliver.

Storage. Retention and monitoring of waste in a retrievable manner pending final disposal.

Strategic Facility Assessment. A review that determines whether a facility is “mission essential” in conjunction with the planned upgrade to the facility.

Subproject Designation. A term used to divide a project into separately manageable portions of the project.

Superfund. The fund set up by CERCLA for cleanup of abandoned hazardous waste sites; a colloquial term used to describe CERCLA.

Superfund Amendments and Reauthorization Act (SARA). The 1987 Act amending and reauthorizing CERCLA for responding to hazardous waste sites and increasing the size of the fund.

Superintendence. Salaries, travel, and other expenses of those supervising construction, including construction superintendents, assistants, and their secretarial support. Only general superintendents are included here. Superintendents assigned to specific portions of the project are charged directly to the appropriate direct cost accounts. This is an indirect cost, only if not associated with a particular work operation.

Surveys, Geological Studies, and Test. Topographical and other field surveys, soil tests, load tests, geological studies, test borings, and other subsurface investigations. This is an indirect cost.

Task. As defined by the Environmental Restoration Program, an assigned piece of work to be finished within a certain time. A task is a unique entity of work that addresses either the assessment effort or cleanup effort for remediating an OU. An assessment task can consist of up to four subtasks representing the first four remediation phases, usually accomplished in series. A cleanup task consists of two subtasks representing the remaining two remediation phases. The subtasks are the basic building blocks in the program and as such, are individually planned, approved, executed, and controlled. It is defined at the fourth WBS level: remediation task summary.

Taxes Other Than Payroll. Business and property taxes. This is an indirect cost.

Temporary Decontamination and Disposal Facilities. Facilities that are provided as part of an environmental cleanup job that will not become part of the permanent facilities of that project. These temporary facilities would be for the decontamination of personnel, equipment, and temporary disposal facilities until all permits and approvals for disposal have been obtained.

Termination Costs. All costs associated with terminating a project prior to completion are termination costs. Termination costs include disposition of unfinished facilities or hardware and settlement of all contracts and subcontracts. Disposition can include mothballing, dismantling, or disposal.

Title I Design. The preliminary stage of project design. In this phase, the design criteria are defined in greater detail to permit the design process to proceed with the development of alternate concepts and a Title I design summary, if required.

Title I Design Estimates. An intermediate estimate used to verify that the Title I design details still remain within the project funding.

Title II Design. The definitive stage of project design. The approved Title I concept and the supporting documentation prepared for Title I forms the basis of all activity in Title II. Definitive design includes any drawings, specifications, bidding documents, cost estimates, and coordination with all parties that might affect the project; development of firm construction and procurement schedules; and assistance in analyzing proposals or bids.

Title II Design Estimates. The estimate is used to certify bids or to be used in contract negotiations. As Title II design specifications and drawings are developed, the Title II estimate is completed.

Title III Design. The inspection portion of project ED&I. The activities identified in DOE Order 4700.1, PROJECT MANAGEMENT SYSTEMS, for inclusion in Title III can be separated into two categories: office support and field services.

Total Estimated Cost (TEC). An estimate of the total cost of a task, demonstration, or program. The total estimated cost differs from a planning estimate in that it is based on definitive information regarding technical scope, contracting methods, schedule, and resource

requirements. As such, once a task is approved, its total estimated cost is baselined and becomes subject to change control procedures.

Total Project Cost (TPC). Consists of all costs specific to a project incurred prior to the start-up of facility operation. All research and development, operating, plant, and capital equipment costs specifically associated with a project.

Transfer and Moving or Relocation. Transfer and relocation costs associated with the project personnel to the job site area (costs are incurred by the receiving location). This is an indirect cost.

Transportation of Workers. Transporting employees engaged in the construction work to and from the job site. This is an indirect cost.

Travel. Travel to other locations for project purposes.

Treatment. Any activity that alters the chemical or physical nature of a waste to reduce its toxicity or prepare it for disposal.

Trips to Vendor/Fabricators. Travel to vendor/fabricator manufacturing facilities to review and/or inspect vendor work on project equipment.

User Move-In. User move-in costs are those associated with moving employees and equipment, including computers, into new facilities.

Utilities (specific to a project). Water, gas, electrical and sewer beyond a point of 5 feet outside building.

Value Engineering. Value engineering is a proven management technique using a systemized approach to seek out the best functional balance between the cost, reliability, and performance of a product or project.

Value Engineering After to Title I. Value engineering performed during the construction phase of a project after Title I.

Value Engineering Prior to Title I. Value engineering performed during the design phase of a project before Title I.

Vendor Submittals. Documents provided by vendors on their equipment and materials. These documents are used to determine whether or not the equipment meets the specifications of the purchase order.

Vulnerability Assessments. An evaluation of the vulnerability of a facility that would allow a hostile agent within the plant to gather intelligence of national security interest.

Warehousing. Operation of the on-site construction warehouse facilities. Rental and operation of off-site facilities. This is an indirect cost.

Waste Handling to Point of Disposal. Waste handling to the point of disposal includes all activities from when waste is generated up until the time it would be properly disposed. This includes all waste handling, temporary storage, packaging activities, and transportation.

Water. Water for construction. This is an indirect cost.

Welding Tests. Welding certification tests conducted at the job site or elsewhere. This is an indirect cost.

Work Orders. Issued to contractors providing indefinite delivery services. This type of contract is designed to have work orders written describing a service or deliverable that is to be provided by the indefinite delivery contractor.

Work Breakdown Structure (WBS). A breakdown of a project into those subelements that define the project. The WBS provides a consistent organization framework throughout the project.