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FY 2020 INITIAL PLANNING AND BUDGET GUIDANCE

Overview

This document provides guidance for Environmental Management's (EM) fiscal year (FY) 2020 planning and budget formulation overarching guidance.

EM continues to work towards fully integrating budget formulation, key decisions, and life-cycle planning to ensure that senior management understands the long-term impacts of near-term budget decisions in real time. Each site's annual budget formulation process should be conducted within the context of Cleanup Program segment baselines and life-cycle goals and objectives at the site, paying close attention to Key Performance Metrics, milestones and other key planned completion dates. As part of your FY 2020 submission to Headquarters, it is important that you provide both your FY 2020 request and your site's FY 2021-FY 2024 projected profile based on your FY 2020 request. The outyear component of this request is the basis for understanding the impacts of a FY 2020 decision beyond the formulation year. Having the outyear data available simplifies the formulation process and ensures consistency with planning estimates. These projected profiles should assume no more than 2% per year overall escalation rate at each site given historical funding trends and realistic expectations for future funding. Assumptions regarding priorities and scope determination should be made consistent with the budget guidance provided.

Once senior management has made decisions regarding the FY 2020 budget, sites will be asked to update the FY 2021- FY 2024 window to reflect any changes. These data will be updated again once the Congressional Budget Request is released.

In addition to these short-term outyear profiles, it is essential that EM is able to reconcile life-cycle cost profiles at Headquarters with current site baselines and life-cycle cost data as they currently reside in IPABS. The approved Cleanup Program segment baselines for each major contract must be reflected within the overall site life cycle baseline. We need to work corporately to develop a single-source data set for Headquarters to use that will be updated through a documented process and can be modified as necessary to meet various requirements (EMEL, Congressional Budget Request, baseline change control, alternatives analyses, etc.) but will remain traceable for consistency across the program. Life-cycle cost approach, update schedule, and requirements will be discussed at the upcoming Planning Workshop so that we can get site input on the best way to accomplish this as we move forward.

Planning and Budget Deliverables

The FY 2020 – FY 2024 Planning and Budget Workshop is scheduled for April 10 – 12, 2018.

In support of this workshop, site offices will develop and submit their FY 2020 – FY 2024 planning update through the Planning and Budget Integration Tool. Consistent with previous years, funding profiles will be required for the prior year (FY 2018 Omnibus), budget year (FY 2019 Request) and fiscal year(s) for the next planning and budget cycle (FY 2020 – FY 2024). Cost profiles in the planning update must reflect scope within the funding target (the "blue" section), additional compliance-related scope above target ("the "orange" section—represents the

12088 compliance case, and any additional scope constituting the site full requirements case (the “red “section). This data will be due in the Planning and Budget Integration Tool (i.e., red/blue module) by April 5, 2018, in preparation for the planning and budget workshop the following week. The Planning and Budget Integration Tool will be seeded with the final FY 2019 Congressional Budget Request data for each site. Funding target assumptions for each site will also be included, as described below.

In addition to the submittal of your planning update, sites offices should be prepared to provide and discuss the following at the workshop:

Budget

- Overall accomplishments that will be achieved at the FY 2020-FY 2024 target levels
 - Targets will assume 2% per year inflation from FY 2019 Request level
- Impacts associated with a “flat” target from FY 2019
 - FY 2020 flat to FY 2019, 2% per inflation FY 2021 – FY 2024
- Impacts assuming a 5% reduction (i.e., decrement) from the FY 2020 – FY 2024 target levels
- Status and impacts in the 5-year window for Cleanup Program segment baselines and Key Performance Metrics
- Status and impacts in the 5-year window of baselines for post-Critical Decision (CD-2) Line Item Construction Projects and capital asset cleanup projects (above the minor project threshold) as well as plans for existing pre-CD-2 projects and future projects)
- Major Schedule of site activities for the 5-year window
- Site’s infrastructure needs by functional areas and by facility (like last year, infrastructure project information is captured under each cost profile in Planning and Budget Integration Tool)

Planning

- Approach for development of full requirements life-cycle cost elements at the site and for IPABS
- The environmental liability process and cost profiles for the next audit
- Opportunities for return on investment (life-cycle cost reductions or schedule accelerations)
- IPABS and what-if tool
- Key planning assumptions impacting life cycle costs

Programmatic Assumptions

Continuing Resolution (CR) Planning

As evidenced over the past several years, operating a portion of the fiscal year under a CR is highly anticipated. As such, sites should assume that FY 2020 will operate under a CR for the first 6 months of the fiscal year. This would include assumptions associated with the startup of new projects for FY 2020, as well as a ramp of project activities.

Project Work Scope Categorization and Funding / Authorization Requirements (HQ POC: Jeff McMillan, (301) 903-7701)

EM sites initiate projects routinely with proposed scopes of work to restore capabilities to support mission and to support new missions. These projects may include construction, procurement of equipment, maintenance activities, and environmental remediation activities. To ensure that EM sites properly categorize these various project types and comply with the requirements of Title 50, War and National Defense, subsections 2741 – 2754 and revisions per the FY 2017 National Defense Authorization Act and the FY 2018 National Defense Authorization Act, a Work Scope Categorization and Funding / Authorization Requirements Checklist has been developed (Attachment A). For each project initiated, EM sites should complete the checklist as accurately and completely as possible. EM sites should follow the instructions in the checklist to ensure that the correct funding type is identified for each project and that the appropriate DOE Order or Federal Code is followed.

EM sites should also review existing projects in the early stages of planning and execution using the checklist to verify that the Site has correctly categorize the work scope and is pursuing the correct type of funding for the project.

Deactivation & Decommissioning (D&D) and Facility Transfer Assumptions (HQ POC: Andrew Szilagyi, (301) 903-4278)

EM typically performs D&D under the Comprehensive Environmental Response, Compensation, and Liability Act (CERCLA) as a "non-time critical" removal action. However, there have been few regulatory compliance agreements that specify D&D activities. Integration of facility D&D with soil and groundwater clean-up, as a part of "Area Closure" or facility modernization actions, enhances the need for an accelerated and more cost effective D&D program. Furthermore, delays in the final disposition of contaminated facilities further increases deterioration, thus targeted accelerated investments in D&D can significantly reduce life-cycle costs.

For the FY 2020 through FY 2024 budget cycle, the sites should focus on six broad D&D areas. These include (1) planning and analysis, prioritizing surveillance and maintenance activities needed to avoid costly degradation and unanticipated conditions during D&D; additionally, efforts should focus on, at a minimum, minimizing the growth, or even reversing the trend in deferred maintenance (2) sites should ensure and verify that deferred maintenance for excess facilities are based on the current status (i.e., excess) and not based on the previous operating status of the facility which would significantly over estimate maintenance required and deferred maintenance. (3) characterization, including chemical (including asbestos), radiological structural characterization and (4) deactivation, decontamination and decommissioning/demolition, identifying technical solutions to enhance use of cost effective sustainable approaches and to reduce all waste generation, and cleanup schedule and costs over the baseline estimates; (5) closure, including assessment of experience with in-situ decommissioning (entombment) and applicability to implement this closure strategy at selective site facilities; and (6) sites should also evaluate a strategy that focuses on prioritizing deactivation, (i.e., the primary risk reduction phase of

D&D), across the site's facilities and deferring the final decommissioning/demolition. Analysis of this scenario should take into account the cost of surveillance and maintenance, the risk of degradation and concomitant spread of contamination, the cost of money, and any resulting additional decommissioning/demolition costs.

To facilitate D&D program planning and analysis we are requesting that sites ensure D&D scope is separated from Non-D&D scope in their FY 2020 – FY 2024 planning data update. Also, please ensure "min-safe" scope continues to be separated from active cleanup scope. The following table illustrates the required separation.

	D&D Scope	Non-D&D Scope
Min-Safe	<ul style="list-style-type: none"> • S&M of <i>excess</i> facilities awaiting D&D 	<ul style="list-style-type: none"> • S&M of operational facilities • Essential site services • Groundwater monitoring
Active Cleanup	<ul style="list-style-type: none"> • Stabilization/risk reduction • Deactivation • Waste removal • Decontamination • Decommissioning • Characterization to support decommissioning • Demolition • Slab removal (including up to 3' of surrounding soil) 	<ul style="list-style-type: none"> • Soil remediation • Development/implementation of groundwater remedy • Waste treatment/disposal • Cleanup of lagoons, evaporation ponds, sludge pits, trenches • Disposal cell construction or expansion • Development of D&D prerequisite/pre-treatment capabilities • Infrastructure upgrades

The prioritization of D&D projects should focus primarily on risk reduction/elimination and the extent of cost savings associated with the otherwise annually increasing surveillance and maintenance. Detailed thought should also be given to the concept of "bundling" the D&D of the primary (high risk) facility with adjacent (co-located) lower-risk "industrial" facilities in order to take advantage of the mobilized and experienced work force. Recognizing the relatively inevitable "down time" that occurs during the D&D of complex high-hazard facilities, planning and initiating work in the adjacent industrial facilities will greatly increase progress.

For the FY 2020 – FY 2024 budget development, the sites should continue to address D&D work on facilities representing the highest site risks. For example, at Savannah River Site Building 235-F, DOE, in its response to the Defense Nuclear Safety Board's (DNFSB) Recommendation 2012-1, stated that action must be taken to reduce the hazards associated with the material at risk that remains as residual contamination and address safety issues at Building 235-F. SRS should submit a request that supports planned risk reduction activities associated with the residual Pu-238 in accordance with Implementation Plan, November 2014 and follow on updates, which supports DOE's commitment with DNFSB on Recommendation 2012-1. At the Hanford site,

with the excavation of high radioactive contaminated soils beneath Building 324 complete, planning for and initiating the demolition of the Building should be a priority. Similarly, other EM sites should evaluate and prioritize funding needs for handling the highest risk D&D work to make cleanup progress.

In 2008, EM agreed that many excess facilities and ancillary structures from NNSA, SC and NE met the acceptance criteria for eventual transfer to EM for D&D. The candidate facilities were identified following comprehensive in-person facility assessments ("walkdowns") and are required to meet the mandatory generic and specific pre-transfer requirements for each facility, including compliant safety basis documents pursuant to 10 CFR 830, Nuclear Safety Management. As the owning programs fulfill their stabilization responsibilities and EM target funding becomes available, EM will initiate planning and the conduct of D&D. In January 2015, DOE's Secretary of Energy established the Excess Contaminated Facilities Working Group (ECFWG) to develop analysis and options for how DOE may prioritize and address the numerous excess contaminated facilities owned by the various DOE Program Offices. Additionally, in early 2015, the DOE Inspector General and the Government Accountability Office issued reports that raised concerns regarding DOE's management of high-risk excess facilities, particularly those awaiting transition to the Office of Environmental Management. The ECFWG collected enterprise-wide data to obtain updated inventory and cost estimates to D&D these facilities and developed a qualitative assessment of the risk they may pose. DOE used this data to define the scope of the challenge and to identify better approaches for prioritizing excess facilities. The results of this analysis were documented in a December 2016 Report to Congress, "Plan for Deactivating and Decommissioning of Nonoperational Defense Nuclear Facilities." As stated in the National Defense Authorization Act for Fiscal Year 2016 Sections 3133, "The Secretary of Energy shall, during each even-numbered year, beginning in 2016, develop and subsequently carry out a plan for the activities of the Department of Energy relating to the deactivation and decommissioning of nonoperational defense nuclear facilities." While the 2016 Report required a specific data call, DOE's intent is to streamline this effort and use data collected in the Facilities Information Management System (FIMS); as such, it is imperative for EM sites to ensure that data in FIMS is comprehensive and accurate. In late 2016/early 2017, EM in coordination with DOE's other Program Offices conducted additional "walkdowns" at the Oak Ridge Y-12 Complex, Lawrence Livermore National Laboratory (LLNL), Los Alamos National Laboratory, Sandia National Laboratory, and at Savannah River Site. As a result of these combined efforts, significant additional funding for EM was identified in the President's 2019 Budget with direction to focus EM D&D efforts on high risk facilities at Y-12 and LLNL. These sites should continue this focus in Fiscal Year 20120-2024.

LLW and MLLW Disposal Assumptions (HQ POC: Doug Tonkay, (301) 903-7212)

As DOE O435.1 requires, where feasible, LLW and MLLW should be disposed at the site where they are generated. For those wastes that require off-site disposal, the Nevada National Security Site (NNSS) is currently the only Federally-owned, disposal facility available to receive waste generated by other DOE sites. As established in FY 2009, the base operations of the disposal LLW and MLLW disposal facilities at the NNSS are direct funded. This direct funding provides for at least 1.2 million cubic feet of waste receipts. Therefore, generator sites are not charged disposal fees during project execution, unless the waste streams require special handling or receipt which results in incremental costs. *However, this disposal service is predicated on*

generator sites providing accurate and detailed waste forecasts and NNSS optimizing receipts and monitoring actual shipment rates. The underutilization of the NNSS capacity in recent years challenges the continued viability of this approach. A revised funding strategy may be required and subsequent guidance would be provided. Also, there continues to be considerable sensitivity with unique and high-activity LLW and MLLW streams proposed for disposal at NNSS. To the extent that EM sites and projects identify new, potentially controversial waste streams for disposal at NNSS in future FYs, the viability of this waste being ultimately approved for disposal at NNSS should be discussed with EM-4. It may be more appropriate to conservatively assume commercial disposal, if practical, for budget planning purposes. Each year, the Nevada Site Office (NSO) issues "Program Management Strategy for Disposal Operations," which delineates the waste forecasting and receipt considerations. Wastes must meet the NNSS Waste Acceptance Criteria, and waste forecasts must be coordinated with the NSO's annual waste forecasting process. For questions, call Mr. Jhon Carilli, NSO at (702) 295-0672.

DOE has committed to the State of Nevada that the NNSS will not be the sole site receiving off-site waste shipments from DOE generators. Therefore, consistent with prior guidance, generator sites must evaluate commercial disposal alternatives for those wastes requiring off-site disposal, to evaluate whether commercial disposal does not provide a cost-effective alternative when considering packaging, certification, transportation, and disposal costs. Although generators are generally not charged for disposal at NNSS, it is possible and necessary to compare NNSS and commercial alternatives using the "analytical unit rate" for disposal at NNSS (currently \$21.09 per cubic foot). This analytical unit rate is published annually in the NNSS "Program Management Strategy for Disposal Operations." The Office of Waste Disposal (EM-4.22) is available to support these cost comparisons. Information on the availability and capabilities of commercial disposal facilities can also be obtained from EM-4.22.

- NNSS will continue to receive approved LLW and MLLW streams at Area 5. The EnergySolutions' facility in Clive, Utah, remains available for LLW and MLLW streams that do not exceed Nuclear Regulatory Commission's (NRC) classification for Class A LLW. Currently, the Clive Facility is unable to receive wastes containing concentrations of depleted uranium greater than 5 percent by weight. Details on this and other Waste Acceptance Criteria limitations should be discussed with EnergySolutions personnel. DOE awarded a prime indefinite quantity/indefinite deliverable contract for commercial disposal services to EnergySolutions, which includes fixed unit pricing. The contract can be found at <https://www.emcbc.doe.gov/Content/Office/DE-EM0002406%20Combined%20with%20Mod%20006.pdf>. The DOE contracting officer is Bill Hensley, EMCBC (Bill Hensley bill.hensley@emcbc.doe.gov).
- The Federal Waste Disposal Facility at Waste Control Specialists (WCS) in Andrews, Texas remains available for disposal of LLW and MLLW disposal up to NRC Class C limits. DOE awarded a prime indefinite quantity/indefinite deliverable contract for commercial disposal services to WCS, which includes fixed unit pricing. WCS is licensed to dispose of depleted uranium. The contract can be found at <https://www.emcbc.doe.gov/Content/Office/DE-EM0002405%20Combined%20Mod%20004.pdf>. The DOE contracting officer is Bill Hensley, EMCBC (Bill Hensley bill.hensley@emcbc.doe.gov).
- Seven treatment basic ordering agreements were awarded in July 2015, providing a wide range of MLLW treatment and LLW processing services available to all DOE waste

generators. The basic ordering agreement with WCS includes low activity waste services for LLW and MLLW (below 10% of the NRC Class A LLW limit) resulting in disposal as exempt waste in WCS' permitted Resource Conservation and Recovery Act disposal cell. Similarly, four other treatment basic ordering agreements also provide bulk survey for release services for low activity waste. Details on this vehicle can be obtained by contacting Lee Bishop, the technical representative lee.bishop@em.doe.gov or the DOE Contracting Office, Bill Hensley bill.hensley@emcbc.doe.gov)

To facilitate complex-wide planning and analysis, EM-4.22 continues to collect updated forecasts for the volumes of LLW and MLLW that will be generated by EM and other DOE programs. The annual update of the Baseline Disposition Data (BLDD) is conducted each winter. The update of the BLDD for 2017 is now complete based on site input requested in early FY 2017; site input was requested in early FY 2018 for the update of the BLDD and is currently in progress. It is expected the FY 2018 will generally align with the sites' FY 2018 Congressional Request and the developing FY 2019 budget request. For questions regarding cost-benefit analyses, commercial disposal options, and BLDD forecasts, contact Doug Tonkay, EM-4.22, and (301) 903-7212.

Transuranic Waste Disposal Assumptions (HQ POC: Betsy Forinash, (202) 586-1467)

The National Transuranic (TRU) Program, led by Carlsbad Field Office (CBFO), works with the EM-Headquarters National TRU Program Office (EM-4.21) and leads the TRU Corporate Board to integrate TRU waste management activities throughout the complex in order to make optimal use of the National TRU Program assets and WIPP disposal capacity. Waste emplacement safely resumed on January 4, 2017 and waste shipments on April 10, 2017. However, waste emplacements and shipments will be limited until degraded critical infrastructure is repaired and the new permanent ventilation system at WIPP is operating. Given these conditions, the following assumptions apply to the FY 2020 budget request:

- In FY 2020, TRU waste sites should plan for a continued limited rate of contact-handled (CH) TRU waste shipments for disposal of up to 10 shipments per week. The Office of Field Operations (EM-3), EM-4.21, and CBFO will continue to work closely with the waste generator sites to ensure current understanding of status and future outlook.
- Waste characterization at DOE waste generator sites will be funded by the respective site and includes activities such as Visual Examination, Real Time Radiography, Non Destructive Assay, Dose to Curie Conversion, and Flammable Gas Analysis.
- Waste characterization certification of legacy transuranic waste at Savannah River Site, Oak Ridge National Laboratory, and Los Alamos National Laboratory will be funded by Project Baseline Summary Central Characterization Project CB-0081, whereas the Idaho National Laboratory funds its waste characterization certification through their own approved program. Transportation certification for all TRU generator sites is funded by CB-0081.
- A total of up to approximately 400 shipments are projected for FY 2020. The exact allocation and sequence for shipping will be adjusted based on the emplacement rate at WIPP, operational needs at WIPP and generator sites, and logistical issues (e.g., weather) that affect shipping.

- All TRU waste is required to meet the requirements of the National TRU Program (NTP), e.g., WIPP Waste Acceptance Criteria (latest revision); enhanced Acceptable Knowledge process including chemical compatibility evaluations; Basis of Knowledge for waste with oxidizing constituents; Generator Site Technical Reviews; site self-assessments; NTP review, facility qualification evaluation, site recertification audit, etc.
- Planning for shipment/emplacement of remote-handled waste is expected to be delayed until at least FY 2021 due to operational constraints at WIPP. Use of the shielded container assemblies (SCAs) may be considered (emplaced as CH waste) prior to FY 2021.
- To the extent the additional storage investments are required at TRU waste generator sites, these emergent requirements should be clearly identified.
- To the extent that existing compliance milestones or compliance targets are anticipated to be impacted, these should be clearly identified.

Please contact the WIPP Program Manager, James Rhoades, at the Carlsbad Field Office or Betsy Forinash, EM-4.21 for any questions regarding these assumptions.

Prior to developing or modifying compliance commitments involving disposition of TRU waste, DOE sites should notify and discuss the activities with EM-3, EM-4, and the Carlsbad Field Office Manager.

Similarly, the identification and modification of performance based incentives related to TRU disposition will also be coordinated through the National TRU Corporate Board on at least an annual basis. The TRU-related corporate metrics included in the FY 2020 budget request will be carefully reviewed and modified as necessary to ensure the integrated, National TRU Strategy is accurately reflected in the metrics.

Specific questions regarding challenging TRU waste streams (e.g., suspect non-defense TRU wastes) and requests for additional guidance should be requested from EM-4.21. Sites should not assume that waste streams are eligible for shipment to WIPP if they are not certifiable for disposal within the WIPP baseline inventory or do not have a defense determination. However, to facilitate visibility and resolution of these waste challenges, the impacts and costs associated with on-site storage of these wastes should be identified, to the extent possible, within the FY 2020 budget request.

High Level Waste (HLW) Disposal Assumptions (HQ POC: Steve Schneider, (301) 903-7198)

Due to the uncertainty regarding the availability of a geologic repository for DOE-managed HLW, EM sites must continue to assume the need to store immobilized HLW on-site through, at least, 2048. After that date, sites must re-evaluate plans regarding availability of the capability to load HLW canisters into transportation casks for shipment of HLW offsite. Under special circumstances, EM sites may assume that a centralized interim storage facility may accept limited quantities of HLW for off-site storage subject to EM/HQ approval. However, sites should not unilaterally take action to significantly revise currently approved baseline plans. In addition, sites should continue to implement technical compliance requirements for treatment and packaging these materials previously established with the Office of Civilian Radioactive Waste Management (RW), as needed. These compliance requirements are identified in RW

documents issued in support of the Yucca Mountain License Application (LA), and associated EM specification and compliance strategy documents. These documents remain valid unless and until alternative requirements are approved by EM-HQ. Changes to EM-developed and site/contractor developed documents that could impact acceptability of HLW in a future disposal system must be reviewed and approved/concurrence in by EM-HQ. EM sites should continue to support effective quality assurance oversight of their programs consistent with *Quality Assurance Requirements Document*, Rev 20 effective October 1, 2008. Tank waste treatment programs at Hanford, Idaho, and Savannah River should continue the cost effective treatment and packaging activities for HLW consistent with existing compliance and regulatory requirements.

Spent Nuclear Fuel (SNF) and Nuclear Material Management and Disposition Assumptions (HQ POC: Steve Schneider, (301) 903-7198)

EM sites should safely and securely manage EM's inventory of spent nuclear fuel and nuclear materials, and should submit requests to fully fund the facilities and operations required to meet mission objectives. Due to the uncertainty regarding the availability of a geologic repository, EM sites should assume the need to manage SNF through at least 2048. Under special circumstances, EM sites may assume that a centralized interim storage facility may accept limited quantities of SNF for off-site storage (subject to EM/HQ approval). However, sites should not unilaterally take action to significantly revise currently approved baseline plans. In addition, the request should include funding required to maintain EM's facilities and infrastructure while reducing the amount of deferred maintenance. The request should also include funding required to evaluate and conduct feasibility studies for alternate processing capabilities and/or dry storage facilities. Sites should request funding sufficient to meet safeguards and security and project management requirements and continue to implement effective quality assurance oversight of their programs and projects consistent with site contract requirements.

The Idaho and Savannah River sites should continue to receive and manage foreign research reactor and domestic research reactor SNF, consistent with the Department's missions/decisions. Idaho should continue to support activities for multi-site participation in SNF strategy implementation and program management tasks, as established in FY 2018/FY 2019 and consistent with approved program planning and management guidance. EM sites should comply with all regulatory agreements and Records of Decision, including, but not limited to, the Idaho Settlement Agreement and the March 2013 Amended Record of Decision for processing aluminum-clad SNF and target material. The Savannah River site should submit a request to fully fund the receipt and management of nuclear materials to support the Department's nuclear nonproliferation and other missions.

Infrastructure (HQ POC: Connie Walter, (301) 903-1620)

The Department has been increasing its focus on addressing failing infrastructure across the complex, as well as, investing in existing infrastructure upgrades in order to avoid potential future incidents.

Infrastructure needs must be identified by functional areas (e.g., Spent Nuclear Fuel, High-Level Waste, Low-Level Waste, TRU Waste, etc.) and by facility.

Site submissions should clearly incorporate and identify infrastructure activities that are included within the site planning submissions.

Contractor Pension Plans and Post-Retirement Benefits (PRB) (HQ POC: Angela Watmore, (202) 253-0993)

Pensions contributions as an indirect cost should follow the Department's January 2010 revised policy which eliminated its requirement that every contractor employee Defined Benefit (DB) pension plan maintain an 80 percent funded status. Contractors will now be required to fund their DB pension plans at a level equivalent to the minimum required by Employee Retirement Income Security Act (ERISA), or higher if necessary, for a DB pension plan to have a funded status to at least 60 percent to keep DB pension plans active participants earning a benefit each year. DOE's reimbursement of contractor costs in excess of the ERISA required minimum contribution will require approval by the Office of Environmental Management Head of Contracting Activity in consultation with the Chief Financial Officer, the General Counsel, and affected HQ's Program Offices.

Capital Line-Item Construction and Capital Asset Cleanup Projects (HQ POC: Rodney Lehman (301) 903-6104)

Each project's funding profile should be developed to support the optimum project schedule to deliver the project and any inter-related activities at lowest cost. This applies to all capital projects regardless of size or funding type, including minor construction projects.

The following provisions apply to projects below the minor construction project threshold (currently set at a Total Estimated Cost (TEC) of \$20M):

Identifying minor construction projects: If TEC design is expected to exceed \$2M for any minor construction project, the project must be identified and the funds for the design must be requested. For minor construction projects with an estimated TEC which exceeds \$5M, the project should also be identified in the budget request.

The following provisions apply for current and future capital projects above the minor construction project threshold:

Project Rankings: Sites are to identify capital project rankings, drivers, and internal and external ranking factors with their budget submission regardless of Critical Decision (CD) and funding type (Line-Item or operating expense).

Project Data Sheets: For Line-Item Construction Projects, a Project Data Sheet (PDS) must be prepared if the project is requesting TEC funds in the budget request.

Line-Item Funding Types: For Line-Item Construction Projects, the request should include all funding types including Other Project Costs (OPC); TEC Design; and TEC

Construction funds.

CD Levels Required for Budget Submissions: Line-Item Construction Projects need CD-0 to be included in the Congressional budget submission to request PED funds for use in preliminary design, final design and baseline development. The funding profile for projects at CD-0/1 should match the upper end of the approved cost range.

Conceptual Design Threshold: If the cost of a conceptual design is estimated to exceed \$5M, the project must be identified and the funds for the conceptual design must be specifically requested in the Congressional budget submission prior to start of the conceptual design.

Project Engineering and Design (PED) Funds: Estimates for PED funds should be reflected in the site submission. PED duration should be limited to two years for projects with a total project cost under \$100 million.

OMB Non-IT Capital Asset Business Cases: An OMB Business Case (aka, Exhibit 300) is to be prepared for all Line Item construction projects and for any non-Line Item (operating expense) capital projects above \$50M. DOE-specific guidance and templates will be separately provided at a later date for Business Case development based on OMB requirements.

The following provisions apply only to capital projects with a Total Project Cost (TPC) above \$50M:

DOE Order 413.3B Compliance: Consistent with S-1 direction, sites should ensure capital project compliance with DOE Order 413.3B requirements is fully reflected as appropriate in the funding scenarios, except the 5% funding reduction scenario where the site should specify instances where the direction would not be met. DOE Order 413.3B requirements apply to all capital projects with a TPC above \$50M.

CD Levels Required for Construction Funds: A CD-1 project requesting construction funds must have CD-2 prior to the Congressional Budget submission, unless the Project Management Executive accepts specific conditions as enumerated in DOE Order 413.3B. A CD-0 project requesting construction funds must get approval for a waiver from this DOE Order 413.3B requirement. For long-lead items (i.e., procurements or other activities needed prior to CD-3 including site preparation, site characterization, limited access, safety and security issues), the project can have a CD-3A (before the CD-2) to request construction funds for long lead items or indicate the use of PED funds for long-lead items.

Innovation and Technology Development (formerly Technology Development) Guidance
(HQ POC: Rod Rimando, (240) 676-6470)

The development and deployment of innovative technologies can significantly reduce EM life-cycle cost and mission schedule. There are many examples of EM-funded Cleanup Innovation and Technology (CIT) activities giving rise to new and innovative solutions that

have resulted in more efficient and effective cleanup methods, improved processing technologies, and decreased worker exposure. For these reasons, EM believes that investments in technology activities are a high priority even given the tight fiscal constraints in which we operate.

Sites offices are encouraged to identify within their planning submission proposals for CIT activities that have the potential to enhance safety and reduce worker exposures; improve mission effectiveness and quality; and to reduce life-cycle costs, schedules, and technical uncertainties and risks. The proposed site CIT activities should not include ongoing or currently-required operational activities at the site; rather, these activities should be aimed at providing scientific understanding, technical knowledge, and advanced technologies to enable accelerated cleanup and reduced cost through use of alternative, more effective and/or efficient approaches to site cleanup. The site proposals should meet the guidelines for Technology Readiness Levels 4-6, per DOE Guide 413.3-4A.

Administrative Guidance

Acquisition Services (POC: Norbert Doyle, (202) 287-5591)

Planning and budget for current, follow-on contracts, and new major acquisition needs in FY 2019 and beyond is the responsibility of end-users of the resulting contract award (e.g., each EM Program Office, Field Office, and Small Site Project Office). The annual planning and budget formulation process should include funding requests necessary for the development of technically sound and credible requests for acquisition planning, proposal and technical evaluation of the offeror's technical approach and cost proposal as well as technical and contract oversight of the resulting award. The end user organization of the resulting contract award is accountable for ensuring adequate staffing and appropriate technical resources are available to develop a statement of work, evaluate all aspects of the technical approach from the offeror(s) and perform technical cost reviews to determine most probable cost. In addition, complex acquisition may require budgeting for analysis of workforce and pension/benefit plans. End users must plan and budget for internal controls, including pre and post award audit support, technical specialty areas needed to validate the contractor has delivered the technical quality required by its contract, and other advisory services. Of specific mention, end-users are responsible for funding to cover the applicable audits for each contract as required by federal laws and regulations, including the following: Accounting System; Purchasing Systems, Cost Estimating Systems; Incurred Cost Audits; and Property Management Systems and cost proposal evaluation and assistance, such as DCAA or independent contractor assistance. Costs associated with end user participation in source selections may include Federal staff travel costs, source evaluation board secure space, industry interface, and technical support contractors and are to be covered by the end user. Sites should assume the Environmental Management Acquisition Center (EMAC) will lead all major EM procurement planning activities, source selection, cost estimating, and contract administration. In addition to providing assistance from a cadre of skilled acquisition personnel, the EMAC is a central repository of acquisition procedures, policies, and best practices.

Real Property, Infrastructure/Integrated Facilities Infrastructure (IFI) Crosscut and Sustainability Guidance (HQ POC: Andrew Szilagyi, (301) 903-4278)

Department of Energy (DOE) Order (O) 430.1C, *Real Property Asset Management* (hereinafter referred to as DOE O 430.1C) requires that annually DOE elements conduct real property planning and provide 5-year real property planning and budget documentation, which is used to develop infrastructure budget requirements in accordance with Administration, Department and Program Office budgetary guidance. In addition, DOE O 430.1C specifically requires real property plans address reduction or consolidation of space, specifically addressing space policy, program benchmarks for space utilization, and space assignment and utilization standards.

The Five-Year Site Plan (FYSP) is the foundation for strategic planning for EM's physical complex, incorporating the performance measures, budget and cost projections, and all real property projects prioritized within the five-year planning horizon. The FYSP covers both direct and indirect funded facility and infrastructure activities, and identifies the site requirements and priorities that form the basis for final decisions. Each FYSP will include a prioritized list of facilities and infrastructure projects for use by EM leadership in support of budget and resource decision-making. At the full planning level, sites should request funding and resources needed to prepare the annual FYSP and carry out the implementation of departmental real property requirements identified in their FYSP.

EM typically transfers excess asset (most commonly land parcels) pursuant to DOE O 430.1C policy to external private organizations (such as Community Reuse Organizations) for economic development or other reuse based on reviews such as, but not limited to – the Comprehensive Environmental Response, Compensation, and Liability Act; the Resource Conservation and Recovery Act; the National Environmental Policy Act; and property valuation and business case justification. The information on real property assets under site purview is maintained and updated in the DOE Facilities Information Management System (FIMS) and the FIMS information is certified annually by site. Sites should ensure that the excess asset information in FIMS is consistent with other documentation such as the Five Year Site Plans, Land Use Management Plans and EM's IPABS.

For the FY 2020 through FY 2024 budget cycle, sites should provide information on the excess assets that are planned for transfer through a specified authority (e.g., DOE 10CFR770, General Services Administration or special statute). The site Real Property Office and other planning personnel should refer to DOE O 430.1C and DOE Real Estate Property Guide 2014 at <https://energy.gov/sites/prod/files/2014/09/f18/Real%20Estate%20Desk%20Guide%20-%202014%20update.pdf>, for further clarification on excess assets transfer.

Consistent with previous year's requirements, for the FY 2020 through FY 2024 budget cycle, the Sites are required to provide an Integrated Facilities Infrastructure (IFI) Crosscut Budget table. Guidance for the IFI is provided by DOE's Office of Asset Management and DOE's Office of Chief Financial Officer as well as herein. Sites should ensure that the IFI information is consistent with the language in specific site budget write-ups. Specifically the IFI sub-element "D&D" must be consistent with the D&D information provided in your FY 2020-FY 2024 planning data update; as well as with data in FIMS and the Five Year Site Plan. To ensure consistency, the "Excess Facilities Disposition" row in the IFI will be populated from the planning/budget data.

EM is required to comply with EO 13693, *Planning for Federal Sustainability in the Next Decade and DOE Order 436.1 Departmental Sustainability*, and is committed to achieve the Department sustainability goals set to meet these requirements. Integrating the sustainability requirements within the budget information is necessary to provide the Site Office and EM/DOE insight to meeting the sustainability goals at each Site. Integrating sustainability can significantly advance efficient, reliable and renewable energy for the future. Energy represents approximately one fourth of the Departments operating costs and reducing these costs will have the greatest impact on reducing overall operating costs. Implementing both energy efficiency and alternate-renewable energy projects will help EM contribute to energy independence, and save funds in the long term. Investing now in sustainability will not only contribute to DOE's goal for meeting departmental requirements, but will also save future operating and maintenance costs. EM believes sustainable initiatives should be a high priority and will result in positive Return on Investment.

Sites should prepare funding requests and resources needed in two parts: Part One should include must-fund projects that will meet min-safe categories, including but not limited to the infrastructure, fleet, energy conservation measures, and analysis of and adaptation to extreme weather and other events. Other sustainability related projects should be included within a site's submitted planning documents, but do not need to be within the "blue" narrative of your submission.

At the full planning level, sites should request funding and resources needed to carry out the implementation of departmental sustainability requirements identified in their Site Sustainability Plans: these include efforts required for fleet management, increases in alternative fuel use and reduction in petroleum use, metering at individual source points for energy use, data center optimization, and high performance sustainable buildings (for new construction). The funding request for energy efficiency improvement investments should include the initial cost of performing energy and water evaluations for one-fourth of covered facilities on an annual basis, in compliance with the Energy Independence and Security Act of 2005, Section 432 (which requires that all covered facilities be assessed every four years). Before investments can be made, these evaluations must be done to assess the existing improvement opportunities and provide more detailed estimates of Return on Investments. Where possible, available appropriations should either be applied to a privately financed project as a one-time payment from savings (i.e., as a "buydown") or used to directly fund longer-payback energy conservation measures (e.g., renewable energy projects) that cannot be included in the privately financed projects.

Designed to offset energy costs, energy incentive programs are typically offered by state agencies and utility providers. Federal entities are eligible for a variety of incentives, including incentives for energy-efficient, new construction and energy conservation measures in existing facilities. According to the *National Energy Conservation Policy Act (Act)*, as amended in 2005, Federal agencies are directed to take maximum advantage of financial incentives and other forms of financing to reduce direct energy costs to the Government. Although available incentive programs vary from site to site, numerous incentive opportunities exist. The Office of Inspector General's audit, conducted between FY2013 – 2014 highlighted that federal facilities should be

in compliance with this requirement, and as such, sites should apply for this funding to meet this requirement when applicable.

Cyber Security (HQ POC: Brad Harshman (202) 586-7741)

In FY 2020, all Cyber Security requirements should be requested as part of the sites Safeguards and Security request consistent with Congressional direction for FY 2019. For sites with no Safeguards and Security funding, Cyber Security will continue to be funded through indirect funding allocations.

Sites should coordinate the requirements of the Cyber Security budget with their Chief Information Officer in order to ensure cohesion of information is being requested and reported in the Departments Cyber Security Crosscut. For sites with an EM Safeguards and Security program, all cyber activities that are currently indirect funded should be consolidated and requested as direct funding in the FY 2020 request.

Planning and budget for current, follow-on contracts, and new major acquisition needs in FY 2020 and beyond is the responsibility of end-users of the resulting contract award (e.g., each EM Program Office, Field Office, and Small Site Project Office). The annual planning and budget formulation process should include funding requests that support the following activities on systems that are used for general support, classified processing, and industrial control, physical protection, emergency operations, site communications and safety.

1. Implementation and compliance of the most current DOE and federal cybersecurity requirements.
2. Upgrading and retiring legacy information systems.
3. Identification and securing of site High Value Assets.
4. Remediation of critical and high risk vulnerabilities.
5. Development and sustainment of employee cyber security awareness and privilege user training programs.
6. Sustainment of Level 4 multifactor authentication for all standard and privilege users,
7. Development and sustainment of site incident response resources and capabilities.
8. Plan of Action and Milestone development tracking and completion

The site formulation process should include all current or future activities that align with National Institute of Standards Cyber Security Framework (Identify, Protect, Detect, Respond, Recover).

Emergency Management (HQ POC: Frank Moussa, (301-903-8650)

Sites shall continue in FY 2020 the implementation of DOE Order 151.1D, *Comprehensive Emergency Management System*, and identify resource requirements beyond baseline S&S/PBS-

20 program activities for the timely completion of required assessments and/or required emergency preparedness enhancements. DOE recognizes implementation of the DOE Order is a multi-year endeavor, and continued progress should be achieved.

DOE Could Improve Aspects of the Defense Facility Safety Board recommendations that DOE developed for addressing Emergency Preparedness infrastructure needs. Within the Safeguards and Security (PBS 0020), sites should identify within their FY 2020 request, and for the out-year planning period, the resources necessary to ensure site readiness and recovery programs and assets are maintained or replaced to maintain effective protection against accidents or incidents.

Emergency Management shall continue to promote operability, modernization and integration of efficient and effective Emergency Operation Centers (EOCs); and plan for integration notification on all emergency notification between the sites and DOE HQ.

Safeguards and Security (HQ POC: Dave Bivans, (301) 903-5909)

Based on Congressional action, the FY 2020 budget request for safeguards and security (S&S)/PBS-20 shall continue to include cyber security funding, to include site allotments for the government-wide Cyber One initiative. For sites with no S&S funding, cyber security will continue to be funded through indirect funding allocations. Sites should insure that cyber security, Cyber One and Emergency Management activities are fully funded within your S&S request (i.e., PBS 0020).

Sites shall continue in FY 2020 the implementation of DOE Order 470.3C, Design Basis Threat (DBT), and identify resource requirements beyond baseline S&S/PBS-20 program activities for the timely completion of required security analyses and/or required security enhancements. DOE recognizes implementation of the DBT is a multi-year endeavor, and continued progress should be achieved. Sites should also capture the cost(s) associated with assessments/audits they are spearheading/sponsoring.

The Government Accountability Office report, NUCLEAR SECURITY: DOE Could Improve Aspects of Nuclear Security Reporting (GAO-17-239, April 2017), issued a recommendation that DOE develop a plan for addressing physical security infrastructure needs. Sites should identify within their FY 2020 request, and for the out-year planning period, the resources necessary to ensure site security programs and assets are maintained or replaced to maintain effective protection. These needs should include new resources for DBT implementation, as may be identified at this time. This can be captured as a part of EM's Security Road Map (SRM). The 2020 SRM will outline four Key Strategies, supporting initiatives, and specific milestones to drive improvement within EM's nuclear security program. This is a primary strategic planning document with consistent broader strategies and goals.

Based on budgetary constraints, EM will initially focus on the following two Key Strategies:

- Modernize, Revitalize and Recapture the Physical Security Infrastructure
- Develop and Sustain a Highly Capable Security Workforce

The remaining two Key Strategies will be developed when funding becomes available:

- Strive for Operational Excellence
- Drive an Effective, Efficient and Sustainable Field Security Program

Security Infrastructure Planning:

Security infrastructure planning is for the larger, non-recurring costs such as replacement of and/or major upgrades to aging security systems, and construction of new S&S facilities. This includes capital equipment (CE), major items of equipment (MIE), general plant projects (GPP), and line item construction projects.

S&S programs shall continue to execute existing program requirements for HSPD-12 implementation and workplace violence/active shooter training and protection; and plan for evolving requirements, to include Human Reliability Program adjustment and unauthorized Unmanned Aerial Systems (UASs) reporting and protective measures.

DOE transmitted the Environmental Management (EM) FY2020 Planning and Budget Guidance to Ecology on 4/19/18 and EPA on 5/2/18 via email as provided below and as required by TPA Commitment C-149-01A:

From: Urban, Jim
Sent: Thursday, April 19, 2018 4:25 PM
To: Brown, Melinda (ECY) <mbro461@ecy.wa.gov>
Cc: Coronado, Mark A <mark.coronado@rl.doe.gov>; Zimmerman, Pam J <pam.zimmerman@rl.doe.gov>
Subject: FY20 Initial Planning and Budget Guidance

Melinda,

The subject document is attached for your information. Please contact me if you have any questions. Thanks.

Jim A. Urban
Budget Execution Team Lead, Budget Division
US Department of Energy, Richland Operations Office
(509) 376-8856 Landline
(509) 713-4870 Smartphone
Email: Jim.Urban@rl.doe.gov

From: Zimmerman, Pam J
Sent: Wednesday, May 02, 2018 6:29 AM
To: Einan, David (EPA) <einan.david@epa.gov>
Cc: Coronado, Mark A <mark.coronado@rl.doe.gov>; Urban, Jim <jim.urban@rl.doe.gov>
Subject: FY 2020 Budget Formulation Guidance

David

For your information and reference, please find attached the final guidance issued by HQ to the Field for development of the FY 2020 Budget Request. Please feel free to contact me directly if you have any questions.

Thank you.

Pam Zimmerman, PMP
Budget Formulation Team Lead, Budget Division
U.S. Department of Energy, Richland Operations Office
(509) 376-5882 – site phone
(509) 713-4987 – mobile phone