

FY 2022 INITIAL PLANNING AND BUDGET GUIDANCE

Overview

This document provides the Environmental Management's (EM) fiscal year (FY) 2022 planning and budget formulation overarching guidance.

EM continues to work towards fully integrating budget formulation, end state objectives, and life-cycle planning to ensure that senior management has understanding of the effects of near-term budget decisions on life-cycle estimates and schedule. Each site's annual budget formulation process should be conducted within the context of life-cycle baselines, goals and objectives, while paying close attention to Key Performance Metrics, milestones and contract terms and conditions. After your initial FY 2022 submission to Headquarters, it is important that you provide both your FY 2022 request and your site's life-cycle projected profile based on your FY 2022 request. The FY 2023 – FY 2026 timeframe and the less detailed outyear component of this request is the basis for understanding the impacts of a FY 2022 formulation year decision. Projected cost should assume no more than 2% per year overall escalation rate. Assumptions regarding priorities and technical approach should be made consistent with current life-cycle planning, as modified by the specific planning guidance provided to each site under separate cover. For the initial submittal, cost profiles must initially reflect scope within the funding target (the "blue" section). Additional compliance-related scope above target ("the "orange" section—representing the 12088 compliance case) and any additional scope constituting the site full requirements case (the "red" section) will also be provided.

Once senior management has made decisions regarding the FY 2022 budget (late May timeframe), sites will be asked to update the FY 2022-FY 2026 window, as well as the remaining life-cycle estimate, to reflect any material changes. Sites will also refresh their full requirements to reflect the 12088 Compliance Request for the site. This data will also be maintained for potential additional planning scenarios as the budget request advances through review by the Office of Management and Budget (OMB) and the congressional process. In order to reconcile life-cycle profiles in the budget planning cases to those which were part of the most recent Environmental Liability, documentation of key assumptions with each update of the planning data will be requested. These documented assumptions will help to distinguish each planning case that may differ from what resides in IPABS as the current approved life-cycle profile. We need to work corporately to develop a single-source data set for Headquarters that will remain traceable for consistency across the program.

Planning and Budget Deliverables

The FY 2022 process will begin with the Field Managers meeting the week of April 6, 2020, where high level priorities and potential trade-off investments. These discussion will utilize a combination of your detailed FY 2022 – FY 2026 budget submittals, as well as your life-cycle planning profiles.

In support of this meeting, site offices will develop and submit their FY 2022 – life-cycle planning update through the Planning and Budget Integration Tool. TEXT DELETED c) any additional required compliance over target and/or site specific over target provided under

separate direction. Consistent with previous years, funding profiles will be required for the prior year (FY 2020 Enacted), budget year (FY 2021 Request), and fiscal years for the next planning and budget cycle (FY 2022 – FY 2026). These targets will generally assume 2% annual escalation annually beyond the 5-year budget window. **This data will be due in the Planning and Budget Integration Tool (i.e., red/blue module) by March 12, 2020**, in preparation for discussion at the Field Managers meeting in early April.

The Planning and Budget Integration Tool has been seeded with the final FY 2021 Congressional Budget Request data for each site (FY 2021 through FY 2026). Additionally, the tool has been updated to add fields to capture the remaining life-cycle estimate associated with each ABB. These profiles are as captured in the most recent Environmental Liability update and should be the basis for the ABB profiles populated for the outyears, adjusted to budget targets. Funding target assumptions for each site will be provided separately. For the initial submittal, cost profiles must initially reflect scope within the funding target (the “blue” section). If additional scope is required to meet the intent of the specific site guidance, this should be added as over-target. Otherwise, additional compliance-related scope above target (“the “orange” section—representing the 12088 compliance case) and any additional scope constituting the site full requirements case (the “red “section) should be added incrementally above the site target level.

Prior to the Field Managers meeting, a “mini” workshop will be held via VTC and/or teleconference with individual sites to help further refine and understand each sites submittal. These discussion are tentatively scheduled to occur March 18 – 19, 2020. Additional guidance will be provided on a case-by-case basis prior to these discussions. Materials resulting from these discussions will be utilized for the Field Managers meeting in April.

Following the Field Managers meeting, the full Budget and Planning Workshop will be held May 6 – 7, 2020. This workshop will be utilized to finalize the FY 2022 – FY 2026 proposal to be submitted in mid-May.

Programmatic Assumptions

Continuing Resolution (CR) Planning (HQ POC: Robin Osik (301) 903-4825

Operating a portion of the fiscal year under a CR is highly anticipated. As such, sites should assume that FY 2022 will operate under a CR for the first 3 months of the fiscal year. This would include assumptions associated with the startup of new projects for FY 2022, as well as a ramp of project activities.

Project Work Scope Categorization and Funding / Authorization Requirements (HQ POC: Connie Walter (301) 903-1620)

EM sites initiate projects routinely with proposed scopes of work to restore capabilities to support on-going 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 2018 National Defense Authorization Act and the FY 2019 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 categorized the work scope and is pursuing the correct type of funding for the project.

Deactivation & Decommissioning (D&D) of Excess Facilities (HQ POC: Jeffrey Burnett, (301) 903-9464)

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, but recent congressional interest fueled by GAO and IG reports on excess facility management has elevated the interest and focus on D&D of excess facilities. 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 2022 through FY 2026 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 and structural characterization; (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 2022 – FY 2026 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
<ul style="list-style-type: none"> • S&M of <i>excess</i> facilities awaiting D&D • 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"> • S&M of operational facilities • Essential site services • Groundwater monitoring • 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 2022 – FY 2026 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, once the excavation of high radioactive contaminated soils beneath Building 324 is complete, planning for and initiating the demolition of the Building should be a priority.

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 December 2016 and October 2018 Reports 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." The 2016 Report required a specific data call, but in 2018, 2020 and for all future reports, DOE streamlined this effort and used data collected in the Facilities Information Management System (FIMS); as such, it is imperative for EM sites continue to routinely ensure that data in FIMS is comprehensive and accurate. The ECFWG has begun preparation for the 2022 Report to Congress and requires continued efforts by each EM Site to ensure their FIMS data are up to date, and that each site has corrected prior year discrepancies pointed out during the FY 2016, FY 2018 and FY 2020 report generation process. EM in coordination with DOE's other Program Offices will continue conducting additional "walkdowns" of newly identified high risk facilities across the DOE Complex. 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 non-EM facilities at Y-12 and LLNL. These sites should continue this focus in Fiscal Years 2021-2025.

New Collaborative Focused Approach to D&D – In FY 2018 and 2019 Congress included additional appropriations specifically designated for EM to perform D&D on non-EM facilities. The Consolidated Appropriations Act, 2018 provided \$225 million for EM to address certain higher-risk facilities at Y-12 (\$125 million to D&D the Biology Complex) and Lawrence Livermore National Laboratory (LLNL) (\$100 million to D&D Building 280, Livermore Pool Type Reactor, and other excess facilities), and \$10 M for the D&D of excess facilities and infrastructure at INL. In FY 2019, Congress added an additional \$25 million to continue addressing high risk facilities at LLNL and \$75 million for cleanup at the ORNL Central Campus. In FY 2020, Congress added an additional \$75 M for D&D at Oak Ridge, and \$65 M for D&D at LLNL. As a result, EM and NNSA began working on a new plan of collaboration for D&D. Rather than transferring ownership to EM, this approach focuses on risk reduction, stabilization and D&D. Under this plan, significant deactivation and stabilization is completed by the Program Office in collaboration and with advice from EM, then EM performs the final D&D with funds specifically appropriated by Congress for that purpose. EM and NNSA are developing a tailored contracting strategy to facilitate the D&D of three facilities at LLNL (Buildings 280, 251, and 175) with a specific contract tailored approach for each facility. Oak Ridge is moving forward with its ETPP Vision 2020 accelerated D&D and has already moved some of the supervisory workforce over to the Biology Complex at Y-12 and will transfer the remaining D&D workforce to projects at ORNL and Y-12 as work completes at ETPP. As a result of this funding, the Biology Complex will be demolished more than 10 years earlier than planned; and funding at LLNL will accelerate completion of Building 280 and its ancillary

facilities by almost 20 years.

New Nation-wide EM Deactivation, Decommissioning, And Removal (DD&R) Contract - To better prepare for additional D&D work, EM is initiating a new nationwide DD&R Indefinite Delivery/Indefinite Quantity (IDIQ) Contract procurement and released a draft RFP for industry comment on September 5, 2019. The final RFP was issued December 18, 2019. The Office of Environmental Management Consolidated Business Center (EMCBC) is seeking contractors to perform DD&R of Facilities, Waste Management, and Program Support. The services to be acquired may be performed at various locations across the United States in support of EM, NNSA, Office of Naval Reactors (NR), SC, as well as other DOE Offices that may request EM assistance in accomplishing their DD&R requirements. The contract is currently planned for a 10-year IDIQ cost plus award fee contract, with a contract ceiling of \$3 billion.

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

As DOE M435.1 currently requires, where feasible, LLW and MLLW should be disposed at the site where they are generated. In the near future this policy for EM sites is likely to change to require analysis of all options with decisions made considering best value to the government. For those wastes that require off-site disposal at the Nevada National Security Site (NNS), 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 NNS 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 NNS optimizing receipts and monitoring actual shipment rates.* Also, there continues to be considerable sensitivity with unique and high-activity LLW and MLLW streams proposed for disposal at NNS. To the extent that EM sites and projects identify new, potentially controversial waste streams for disposal at NNS in future FYs, the viability of this waste being ultimately approved for disposal at NNS should be discussed with EM-4.2. 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 NNS Waste Acceptance Criteria, and waste forecasts must be coordinated with the NSO’s annual waste forecasting process. For questions, call Mr. John Carilli, NSO at (702) 295-0672.

Generator sites must evaluate both Federal and commercial disposal alternatives, considering all lifecycle costs including packaging, certification, transportation, and disposal costs. Although generators are generally not charged for disposal at NNS, it is necessary to compare NNS and commercial alternatives using the “analytical unit rate” for disposal at NNS (currently \$29.85 per cubic foot). This analytical unit rate is published annually in the NNS “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 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 currently unable to receive wastes containing concentrations of depleted uranium greater than 5 percent by weight, but licensing is underway to allow depleted uranium disposal and may be available in FY2021. 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/89303318DEM000005.pdf> The DOE contracting officer is Ian Rexroad, EMCBC (Ian Rexroad ian.rexroad@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/89303318DEM000004.pdf> The DOE contracting officer is Ian Rexroad, EMCBC (Ian Rexroad ian.rexroad@emcbc.doe.gov)
- Six treatment basic ordering agreements (BOAs) were awarded in July 2015, providing a wide range of MLLW treatment and LLW processing services available to all DOE waste generators. The BOA 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. The ability to place orders under these BOAs terminates in June 2020 (with a year for services); however, EM is planning to subsequently award new BOAs. Information on the current and new BOAs (when available) is posted at <https://www.emcbc.doe.gov/About/PrimeContracts>. Details on the current BOA 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 FY 2019 for the update of the BLDD is complete. 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 Office of Field Operations (EM-3) and leads the WIPP Users Group 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 emplacements and shipments are expected to remain at current

levels until degraded critical infrastructure is repaired and the new permanent ventilation system at WIPP is operating, expected in FY 2023. Given these conditions, the following assumptions apply to the FY 2022 budget request:

- In FY 2022, TRU waste sites should plan for a continued rate of contact-handled (CH) TRU waste shipments for disposal of up to 10 shipments per week. 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.
- The Idaho National Laboratory funds its waste characterization certification through its own approved program. Waste characterization certification of legacy transuranic waste at all other sites will be funded by Project Baseline Summary Central Characterization Project CB-0081.
- Transportation certification for all TRU generator sites is funded by CB-0081.
- While weekly shipping rates are expected to remain steady, the number of shipping weeks will be reduced to accommodate readiness activities and tie-in of the new ventilation system. Given this, a total of up to approximately 350 shipments are projected for FY 2022. 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 the availability of Panel 11 at WIPP, expected in calendar year 2025 except for remote-handled waste packaged in approved shielded container assemblies (SCAs) (able to be emplaced as CH waste).
- Additional Half-PACTS and trailers will be necessary to support any increases in SCA shipments. CBFO plans to submit a centralized request to cover this procurement, but sites should not assume availability of additional SCAs in FY 2022 without confirmation.
- To the extent that 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 Director of the Office of Business Operations, J.R. Stroble, 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 EM-HQ and CBFO on at least an annual basis. The TRU-related corporate metrics included in the FY 2022 budget request will be carefully reviewed and modified as necessary to ensure the integrated plans and collective commitments, accurately reflect Departmental priorities and WIPP operational capability.

Specific questions regarding challenging TRU waste streams (e.g., suspect non-defense TRU wastes) and requests for additional guidance should be directed to 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 2022 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 DOE Order 414.1D, Quality Assurance, Change 1, dated April 5, 2013. 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, 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.

Note: There is currently ongoing an Integrated Project Team to conduct an Analysis of Alternatives to evaluate options for SNF facilities at the Idaho Site. A recommendation will be addressed once the final decision is received and will be sent out in future budget submittal information.

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. When a minor construction project is planned, the following provisions apply:

- (1) A minor construction project's approved total cost may not exceed the minor construction threshold, currently \$20 million. The total cost includes all direct costs incurred in the construction activity, including construction design, and indirect costs allocated to the project in accordance with the contractor's approved Cost Accounting Standards (CAS) disclosure statement.
- (2) The construction design, including architectural and engineering services, in connection with any proposed minor construction project may not exceed \$2 million unless specifically authorized by law.
- (3) A minor construction project must have a clear project definition, be complete, and used for the intended purpose without additional expenditures above the segments of larger projects or other minor construction projects.
- (4) Minor construction projects require full funding within a single budget year request with the exception that, in accordance with OMB Circular A-11 Section 31.5, and

subject to OMB approval, planning and design activities may be fully funded in one year, and construction activities may be fully funded in another year. In these specific circumstances, separate funding of these distinct activities in two different fiscal years satisfies the full funding requirement, and in these circumstances, the combined amounts of funding for the planning and design activities and funding for construction activities comprise the estimated total cost of the minor construction project.

Site submissions should clearly incorporate and identify infrastructure activities that are included within the site planning submissions. This information should be captured, by project, in the EM-FIS, Red Blue Module.

Contractor Defined Benefit (DB) Pension Plans and Post-Retirement Benefits (PRB) (HQ POC: Melanie Holt, (301) 903-7277)

Contractors are contractually required by DOE to assume sponsorship of the existing contractor Defined Benefit (DB) pension plans and other postretirement benefit plans for incumbent employees. DOE reimburses the indirect costs of the contractors' contributions to DB pension plans and the benefits paid from other postretirement benefit plans, with the exception of the East Tennessee Technology Park Pension Plan for Grandfathered Employees, which DOE directly pays the costs for this legacy plan. The funding for the ETPP plan is from the Decontamination and Decommissioning Fund.

Contractors are required to fund their DB pension plans at the minimum required contribution (MRC) level as determined by the Employee Retirement Income Security Act (ERISA) and applicable laws. Contractors are required to maintain an 80 percent funding level status for single and multiple employer pension plans to avoid benefit restrictions. The MRC is determined on a plan year basis. Contractors of single or multiple employer plans in which the plan assets were less than liabilities in the prior year must make quarterly contributions during the plan year with the first contribution due 3½ months after the beginning of the plan year and any outstanding amount due 8½ months after the plan year ends.

DOE's reimbursement of contractor costs in excess of the MRC, supplemental requests, or alternative funding strategies, require approval by the Office of Environmental Management Head of Contracting Activity in consultation with the EM Budget Office, Chief Financial Officer, General Counsel, and Office of Management.

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 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.

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. 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: Kurt Gerdes, (301) 903-7289)

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: Chris Van Horn, (202) 586-8881)

Planning and budget for current, follow-on contracts, and new major acquisition needs in FY 2022 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, requests for proposals (RFPs) and other supporting solicitation documents, and for evaluation of the offeror's technical approach and cost proposal. Funding requests should also be sufficient to cover technical and contract oversight of the resulting award. The end user organization of the resulting contract award is accountable for ensuring that 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 to perform technical reviews of cost proposals. In addition, complex acquisitions 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 and other advisory services, and technical specialty services needed to validate that the contractor has delivered the products and services on cost, on schedule, and of a technical quality required by its contract. Furthermore, end-users are responsible for funding audits for each contract as required by federal laws and regulations, including the following: Accounting System; Purchasing Systems, Cost Estimating Systems, Property Management System, Incurred Cost Audits, and audits of contractor proposals for new awards and contract modifications. Such audits are conducted by the Defense Contract Audit Agency (DCAA) or by an independent commercial accounting firm. 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. Such costs 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: Dinesh Gupta, (301) 903-7990)

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.

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. As DOE O430.1C requires, the Site Offices should continue with the self-validation of the overall real property assets, including facility and infrastructure portfolio needs, to accomplish the mission work efficiently and effectively, and should request adequate funding for its management in support of EM mission.

DOE real estate functions encompass several key activities over the life cycle of real property assets including planning, acquisition, full utilization, management, and disposition. The disposal of excess real property assets is accomplished in general by the Department pursuant to Atomic Energy Act and 10 CFR 770 requirements or through the General Service Administration requirements. The EM site offices should request funding for day-to-day activities for overall real estate asset management, including disposal or transfer of real property assets that are excess to the DOE as well as EM mission. As required by the Federal Assets Sale and Transfer Act (Public Law 114-287) and the Office of Management and Budget policy, the site offices should identify opportunities to reduce the inventory of EM real property - namely through accelerated sales of approved properties, more efficient utilization of existing properties, and reduction of cost for maintaining these properties. To implement these requirements, the site offices should identify opportunities in the budget requests as to how the Site plans to reduce the EM inventory of real property that is not needed for the DOE, including the EM mission.

For the FY 2022 through FY 2026 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 Desk 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.

The information on real property assets under site purview is maintained and updated in the DOE Facilities Information Management System (FIMS). FIMS is the Department's corporate real property database as mandated by [DOE Order 430.1C](#) (Real Property Asset Management). Real property includes land and anything permanently affixed to it, such as buildings, fences, bridges, etc. Building fixtures and equipment, such as plumbing, electrical, heating and elevators, which are installed in a building in a more or less permanent manner usually are held to be part of the real property. FIMS offers the Department an effective management and planning tool that provides an accurate inventory of all real property assets that DOE has a legal interest in or right to use. It is relied upon extensively by DOE Headquarters for making daily management decisions as they relate to condition, utilization, mission, status, maintenance and operations costs as well as dispositions and future acquisitions of real property. Complete and accurate information on real property assets is critical to the Department for managing facilities and satisfying several external reporting requirements which include the Federal Real Property Profile (FRPP) which is managed by the General Services Administration (GSA), Office and Management and Budget (OMB), Congress and the taxpayers. Data quality is enforced through annual FIMS data validations and the FIMS information is certified annually by sites. Sites should request adequate funding to 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.

Consistent with previous year's requirements, for the FY 2021 through FY 2025 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 2021-FY 2025 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 13834, Regarding Efficient Federal Operations *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 is helping EM contribute to energy independence, and saving funds in the long term. Continued investment 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 2007, 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.

The Site Offices should continue with self-validation of the Fleet management needs to accomplish the EM mission efficiently and should request adequate funding in support of EM Fleet management. Fleet management for the EM program includes agency owned, GSA leased, and commercially leased motor vehicles such as cars, vans, trucks, etc. Excess fleet needs to be disposed/transferred out of EM in a timely manner to effectively reduce the mission cost. Sites should ensure their Fleet management is complying with the DOE requirements including the use General Services Administration as a mandatory source for purchases of new non-tactical vehicles; the vehicle data base management systems such as the Federal Automotive Statistical Tool FAST and GSA's Federal Fleet Management System; and with the provisions of the 41 CFR Part 102-34, Motor Vehicle Management for the execution of EM mission.

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 request to apply for available energy incentive programs and to reduce direct energy costs, as accessible.

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

In FY 2022, all Cyber Security requirements should be requested as part of the sites Safeguards and Security request consistent with Congressional direction for FY 2020. 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 2021 request.

Planning and budget for current, follow-on contracts, and new major acquisition needs in FY 2022 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 2022 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 Safeguards and Security (PBS 0020), sites should identify within their FY 2022 request, and for the out-year planning period, the resources necessary to ensure site readiness, recovery programs and assets are maintained or replaced to maintain effective protection against accidents or incidents.

Emergency Management shall continue to promote continuity of mission through 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 2022 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 ensure that cyber security, Cyber One and Emergency Management activities are fully funded within your S&S request (i.e., PBS 0020).

Consistency with end-state contracting and moving to completion should be recognized by sites when developing requirements. Alignment of key strategies internal and external to PBS-20 should be exercised to ensure efficiencies and effective operational success.

Sites shall continue in FY 2022 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. 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. Sites should also capture the cost(s) associated with assessments/audits they are spearheading/sponsoring.

Sites should identify within their FY 2022 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 is being captured as a part of EM's Security Road Map (SRM) to develop and implement a 10-Year Refresh Plan for physical security infrastructure at EM sites. This includes the following specific activities:

- Task 1 - Identify EM assets requiring protections and their associated security risks.
- Task 2 - Perform condition assessments of identified physical security systems and equipment;
- Task 3 - Develop a priority list of assets based on the results of the condition assessments;
- Task 4 - Write and publish a 10-Year Refresh Plan; and
- Task 5 - Implement the 10-Year Refresh Plan for the top five (5) assets based on security risk.

Security infrastructure at EM sites is aging but must be maintained in operational condition for those facilities where the need for protection of sensitive information and materials exceeds the remaining operating life of the infrastructure assets (e.g., access controls, intrusion detection systems, barriers and delay mechanisms). In addition, as the mission changes at EM sites, the security infrastructure must be evaluated and changed in some cases to reduce costs through implementation of innovative security solutions and to enable the cleanup mission for the site. This initiative will establish a consistent mechanism to assess the infrastructure at EM sites to assess the remaining life of the assets, to rank the refresh needs across the enterprise based on security risk, and to establish the basis for prioritization and planning of refresh projects at the EM sites. These results will be documented in a formal 10-Year Refresh Plan which can be used to guide funding allocation to the highest priority security projects. Elements of this include conducting the condition assessments, and costs for implementation of the five (5) highest risk security infrastructure projects based on the final plan.

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.

From: Hamel, William F <william.hamel@rl.doe.gov>

Sent: Thursday, September 17, 2020 1:47 PM

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Subject: Draft Budget Guidance for FY2022

Dave & John - Final FY2022 Budget Guidance will not be issued by DOE-HQ. In lieu of the final guidance, RL has received permission from DOE-HQ to share the Draft Budget Guidance for FY2022 only. Future draft guidance received will not be shared outside of the DOE until permission is received from DOE-HQ. Thanks - Bill