portsSSAB Information Portfolio

PROCESS BUILDING D&D

Scope of RI/FS

What is Process Building D&D?

Process Building D&D is the decontamination and decommissioning of the buildings and structures directly involved in the gaseous diffusion process to enrich uranium at the Portsmouth Site. There are 255 facilities included in the evaluation, including the three main process buildings known as X-326, X-330, and X-333. Process Building D&D includes removing the equipment in these buildings and then demolishing the structures.

What is the scope of the Process Building D&D RI/FS?

The purpose of the Process Building D&D RI/FS is to evaluate whether or not to demolish 255 gaseous diffusion plant facilities and man-made structures. This does not include the American Centrifuge Plant and Depleted Uranium Hexafluoride Conversion Facility. This evaluation will be used by DOE to select a preferred alternative for Process Building D&D. The scope of the Process Building RI/FS alternative being evaluated for the D&D of the facilities does provides an option for individual buildings or structures to be left in place if a viable reuse has been identified and the building or structure is free of contamination or can be decontaminated for the purpose of reuse.

What criteria are used to evaluate the alternatives in the RI/FS?

The DFF&O evaluation criteria are used to complete the evaluation:

- Overall protection of human health and the environment.
- Compliance with ARARs.
- Long-term effectiveness and permanence.
- Reduction of contaminant toxicity, mobility, and volume through treatment.
- Short-term effectiveness.
- Implementability.
- Cost.
- State acceptance (this criteria will be addressed in the final version of the FS and in the Proposed Plan).
- Community acceptance (this criteria will be addressed in the responsiveness summary and ROD).

Will there be any utilities left at PORTS after the D&D to facilitate redevelopment?

A post cleanup configuration plan to support the desired future use of the site will be implemented as D&D progresses over the next 10 years. Fluor-B&W Portsmouth entered into a contract with a civil engineering firm to evaluate site topography, transportation systems, and the existing capabilities, capacities, and remaining useful life of site infrastructure. The plan will include the economic benefits and practicality of preserving or in some cases improving the onsite infrastructure and potentially utilizing local utility providers to serve some of the infrastructure needs of the site. The end product will be a report that includes a Post Cleanup Site

PRELIMINARY

Information compiled for PORTS SSAB use by Fluor-B&W Portsmouth, LLC
December 2011
This information represents work in progress for discussion purposes only

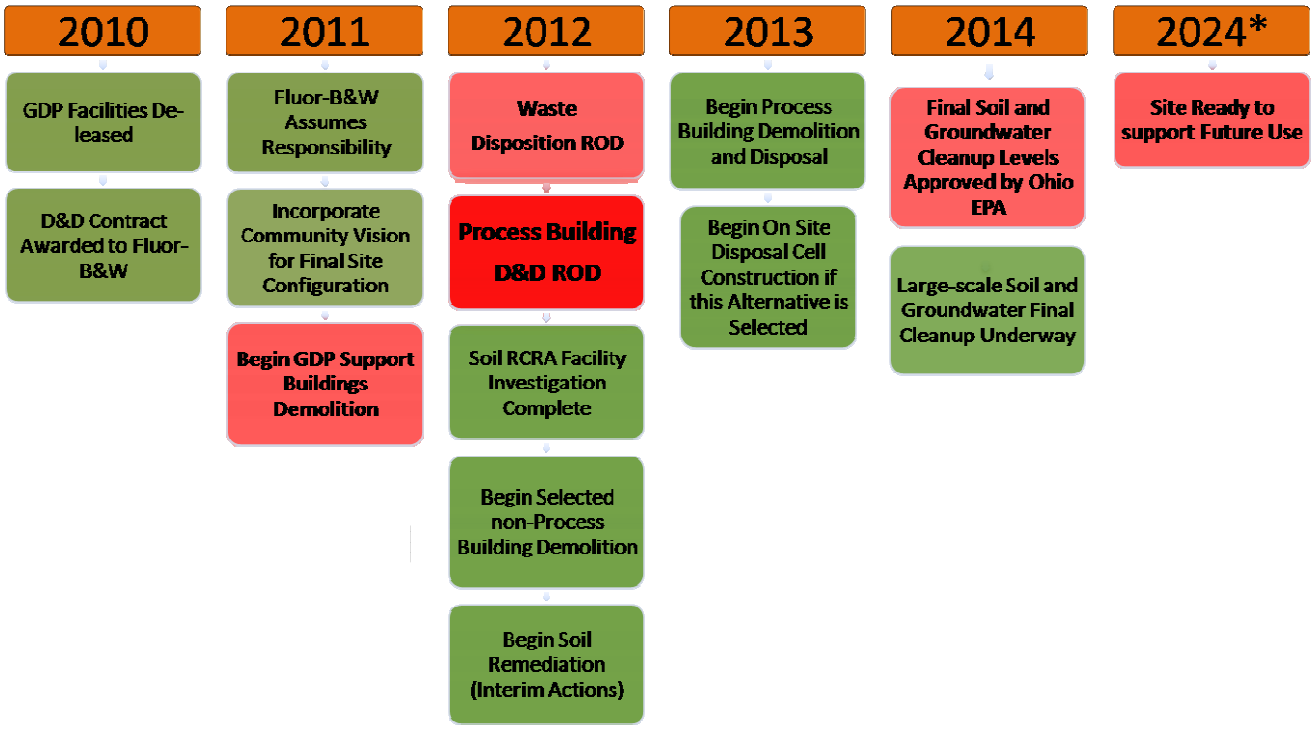
PROCESS BUILDING D&D

Scope of RI/FS

Configuration Map and recommendations for how to achieve the desired end result for each utility system and transportation infrastructure evaluated.

What is the relationship of this decision to the other decisions being made?

The Process Building RI/FS is expected to result in the issuance of a Record of Decision (ROD), as shown below, signed by USDOE and Ohio EPA. This decision is one of a series of decision critical to defining the total scope of the D&D and environmental restoration scope for the former Gaseous Diffusion Plant (GDP) facilities at PORTS. The other critical decision include: 1) issuance of an Action Memorandum on a decision to demolish the GDP support buildings; 2) issuance of a Record of Decision for the ultimate disposal path of the demolition debris and contaminated soil generated during the cleanup; and 3) issuance of a Corrective Action Decision establishing the final soil and other environmental media cleanup levels for the site. The demolition debris generated by the implementation of the decision for the Process Buildings RI/FS will be disposed off consistent with the decision issued for the sitewide Waste Disposition RI/FS. Any contaminated soil underlying the process buildings would be cleaned up and dispositioned consistent with the Corrective Action decision issued for soil and environmental media.



Information compiled for PORTS SSAB use by Fluor-B&W Portsmouth, LLC
December 2011
This information represents work in progress for discussion purposes only

PROCESS BUILDING D&D

Description of Alternatives

What alternatives are being evaluated for the Process Building D&D RI/FS?

Alternative 1 – No Action. The no action alternative is required under the DFF&O, CERCLA, and NEPA to establish and document baseline conditions and provide a basis for comparison to the other remedial action alternative.

Alternative 2 - Remove Structures and Prepare Waste for Final Disposition.

What will be done under these alternatives?

Alternative 1 – No Action. This alternative would consist of no D&D of the site buildings, their contents, or other man-made features. Buildings would eventually degrade, resulting in releases of contaminants with migration to areas where exposure to human and ecological receptors may occur. Further, this alternative does not include controls to prevent access to the buildings, their contaminants, or the associated physical hazards they present. The following are key components of this alternative:

- Buildings and associated equipment would not be removed or demolished but instead would be left to degrade.
- The radiological and hazardous contaminants associated with the buildings and equipment would remain on site.
- No S&M of the facilities to prevent degradation or migration of contaminants would occur.
- No institutional controls would be implemented to control access to radioactive and hazardous waste contaminants or physical hazards.

This alternative is being examined for purposes of baseline comparison only. DOE is not considering for implementation an option which includes removing the necessary surveillance and maintenance activities to mitigate the potential public health and environmental risk associated with the uncontrolled degradation of the existing conditions at the GDP facilities.

Alternative 2 – Remove Structures and Prepare Waste for Final Disposition. This alternative includes the removal of stored waste, materials, hazards, process equipment, and process piping. It also includes demolition of the buildings or structures; characterization and demolition of subsurface man-made features, if required; and required packaging of the waste for disposition. Key components of this alternative include the following:

- Before and during demolition, physical barriers, surveillance and maintenance, and monitoring activities would continue.

PRELIMINARY

Information compiled for PORTS SSAB use by Fluor-B&W Portsmouth, LLC
December 2011
This information represents work in progress for discussion purposes only

- Additional building characterization would be performed, as needed, to support remedial design, develop worker safety protocols, and facilitate segregation of waste streams and waste disposition planning.
- The asbestos containing materials would be removed, bagged, and disposed appropriately. Any remaining fluids would be drained, drummed, and disposed at a permitted off-site disposal facility.
- The majority of the hazardous materials (e.g., mercury switches, PCB ballasts, transite panels) would be removed prior to demolition.
- Decontamination of building components would be performed, as needed, to protect the workers, meet regulatory requirements, facilitate material reuse or building demolition, or meet disposal facility acceptance criteria.
- Utilities and specialty systems (e.g., criticality alarms and security alarms) would be deactivated in concert with termination of need or removal of the hazards.
- The gaseous diffusion process equipment (i.e., converters, compressors, coolers, and valves) and process piping would be removed from the three process buildings (X-333, X-330, and X-326). The process equipment, process piping, and solidified uranium deposit materials would be prepared for transportation and disposal at an on-site disposal cell (OSDC) or the Nevada National Security Site (NNSS), as decided in the Waste Disposition Record of Decision (ROD) and Waste Acceptance Criteria.
- Above-grade structures, including slabs, would be demolished.
- Controls would be used to minimize fugitive dust during demolition. Storm water runoff would be controlled and monitored.
- Subsurface man-made structures would be removed. The removal effort would be coordinated with any RCRA Consent Decree Corrective Actions for soils in the area. If uncontaminated relative to RCRA subsurface remediation levels, subsurface structures may be considered to be left behind.
- Waste streams would be segregated by waste types.
- Treatment or size reduction of waste to meet disposal facility Waste Acceptance Criteria or transportation requirements may occur on-site or off-site.
- Uncontaminated equipment or recyclable materials would be considered for recycling or reuse.
- Decontamination of materials to support recycling would be considered if deemed feasible (technology and regulatory based) and economical, based on the results of a cost benefit analysis conducted on a waste stream basis.
- Demolition areas would be backfilled and graded, as needed, to promote positive drainage. They would then be seeded to promote re-vegetation. The alternative will support alternate site end state configurations based on the ongoing efforts between the DOE and SODI.
- Wastes would be disposed as specified in the Waste Disposition ROD.

PRELIMINARY

Could any buildings be saved for reuse under Alternative 2?

If a reuse potential for a building or structure is identified in the future, a remedial decision selecting this alternative could be modified to remove the building from the consideration for demolition.

How will the Process Building D&D RI/FS address recycling?

The current internal draft version of the Process Building D&D RI/FS includes the potential for recycling and reuse of site materials as a component of both remedial action alternatives (not including the "no action" alternative). It is planned that the description of the remedial alternatives would use the same wording that appeared in the Balance of Plant EE/CA in regards to recycling and reuse, with some modification to account for the scope of the Process Building D&D RI/FS. Consistent with the EE/CA, the remedial alternatives in the preliminary RI/FS would not make a specific commitment on the amount of recycling, state that recycling and reuse would be conducted when it is in the best interests of the government considering economic and other considerations, and acknowledge the potential for recycling and reuse to reduce the volume of material requiring disposal.

The preliminary Process Building RI/FS projects the volume of materials that will be generated from the D&D of the process buildings. An initial estimate of 110,000cy has been identified from this overall project waste volume as being highly probable of meeting criteria for recycle. This volume includes:

- Carbon steel,
- Copper wire and other metals in facilities outside the radiological boundaries,
- Inventoried materials stored outside and within warehouses and buildings that can be potentially radiologically scanned, economically and free released, and
- Some metals within the radiological boundary that have the potential to be cost effectively cleaned and released for recycle or reuse.

Alternative 2 in the RI/FS will provide that DOE conduct cost benefit analyses on materials at the facility that are no longer needed to support the site mission. These cost benefit analyses will evaluate whether recycling or reusing a given waste stream or material would be in the best overall interests of the government. Following this determination, the DOE will have its D&D contractor implement the decision of the analysis.

PRELIMINARY

Information compiled for PORTS SSAB use by Fluor-B&W Portsmouth, LLC
December 2011
This information represents work in progress for discussion purposes only

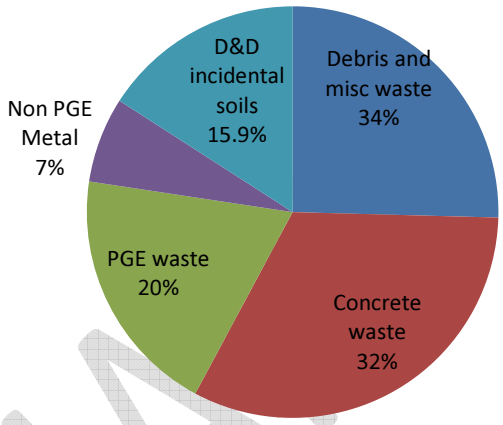
portsSSAB Information Portfolio

PROCESS BUILDING D&D

Volumes and Waste Streams

What are the current waste streams?

Waste Streams	Volume (in cubic yards)
Debris and miscellaneous waste	416,000
Concrete waste	530,000
Process Gas Equipment (PGE)	320,000
Non-Process Gas Equipment	110,000
D&D incidental soils	270,000
Total	1,646,000



What are the current volume estimates?

The volume of materials anticipated to be generated from D&D of the Process Building related facilities included within the scope of this RI/FS is 1,646,000 cy.

What are the estimate assumptions and basis?

The volume estimates evolved from field studies, process knowledge, facility walk downs (including measurements of building structures and components), and engineering studies, including review of as-built drawings. The estimated waste volumes are based on a "snap-shot" in time and are considered to be within the uncertainty/variability range of -30/+50 percent.

Are there treatment requirements for waste disposal?

- Grouting of large process equipment, as needed, to minimize void space is assumed to meet waste disposal requirements.
- Targeted mining of uranium deposits from equipment is assumed to meet both DOT requirements to transport waste and to meet waste disposal facility requirements.
- Decontamination to facilitate recycle to the extent deemed feasible and economically viable based on the waste stream specific cost benefit analyses.

PRELIMINARY

Information compiled for PORTS SSAB use by Fluor-B&W Portsmouth, LLC
December 2011
This information represents work in progress for discussion purposes only

portsSSAB Information Portfolio

PROCESS BUILDING D&D

Protection of Human Health and the Environment

What is the protectiveness evaluation?

The scope of this criterion is broad and reflects assessments discussed under other evaluation criteria, especially long-term effectiveness and permanence and short-term effectiveness. This criterion addresses how site risks associated with each pathway would be eliminated, reduced, or mitigated through treatment, engineering controls, or institutional controls. It also evaluates impacts to the site resulting from implementation of the remedial action.

What protectiveness criteria are being analyzed?

- How site risks associated with each pathway would be eliminated, reduced, or mitigated through treatment, engineering controls, or institutional controls.
- Impacts to the site resulting from implementation of the remedial action.

How do the D&D alternatives compare for protectiveness?

Alternative 1 – No Action. Under no action, there would be no overall protection of human health and the environment. This alternative would not meet Remedial Action Objectives (RAOs).

Alternative 2 - Remove Structures and Prepare Waste for Final Disposition.

- The remove structures and package wastes alternative, when combined with the waste disposition alternative selected in the Site Wide Waste Disposition Evaluation Project ROD, would meet risk-based RAOs and protect human health and the environment by placing all generated waste into an engineered disposal cell (either on site or off site) or at a permitted treatment facility, thereby isolating the wastes from the environment.
- The projected future unacceptable risk to a hypothetical industrial worker or resident is removed by demolishing the buildings and appropriately disposing of the waste. There would be no need for long-term S&M or monitoring.
- Risks to other workers at PORTS and environmental risks from releases occurring during the removal of the structures and packaging of the waste would be minimized through compliance with ARARs, DOE Orders, and health and safety plans developed in compliance with 29 *CFR* 1910.120(b)(4).
- Releases from the buildings or from equipment would be controlled during implementation through the use of appropriate hazard/release controls, including process gas system controls, storm water controls, misters, equipment maintenance, and monitoring.

PRELIMINARY

Information compiled for PORTS SSAB use by Fluor-B&W Portsmouth, LLC
December 2011
This information represents work in progress for discussion purposes only

PROCESS BUILDING D&D

Compliance with other laws

How do other laws apply to work under CERCLA?

The D&D of the GDP facilities is being conducted consistent with the DFF&O. The DFF&O utilizes CERCLA as the regulatory framework under which the D&D decisions will be made and the work with be implemented. CERCLA reaches out to the universe of available regulatory requirements to determine which should be applied to the guide the implementation of the selected remedial alternative. The requirements to apply to specific sites are defined in the Record of Decision and are termed Applicable or Relevant and Appropriate Requirements (ARARs). To provide for a more expeditious and cost effective cleanup, the CERCLA statute provides that only the substantive portions of the selected ARARs must be complied with in the implementation of the on- site portion of the cleanup activities. CERCLA provides relief, therefore, from the meeting the non-substantive portions of the ARARs for the on-site portion of the cleanup including the administrative provisions of the regulations such as permitting. For the Process Building RI/FS, DOE is working with the Ohio EPA to come to agreement on the right ARARs to apply to the RI/FS. Any off-site component of a selected cleanup decision must meet all provisions of the prevailing regulatory requirements, including both substantive and administrative. Safety requirements are typically not identified as ARARs but are a requirement of the cleanup.

ARARs must be promulgated. Other non promulgated standards or guides may be selected for application to the implementation of the selected alternative. These non promulgated standards are identified as To Be Considered (TBCs) requirements.

What kinds of rules do we expect will apply to the D&D alternatives?

There are currently over 175 rules, regulations, orders, and guides that are currently under consideration for being defined as ARARs/TBCs for the Process Building RI/FS. These ARARs/TBCs apply to all components of the alternatives including demolition, waste staging, waste packaging, waste movement, water management, and the preservation of cultural resources.

Examples of ARARs include those associated with hazardous waste management, wetlands, aquatic resources, and cultural resources. If the Structure Removal alternative is chosen as the preferred alternative, a wetlands delineation and assessment may need to be completed, along with mitigation plans if any wetlands would be impacted by the implementation of the D&D remedial alternative.

DOE plans to implement and in certain instances is already implementing a variety of activities to fulfill the substantive portions for the requirements of the National Historic Preservation Act in its role as an ARARs to the Process Building RI/FS. The implementation of the Structure Removal alternative would involve, if selected, the demolition of 255 existing buildings associated with former GDP operations. DOE is working with

Information compiled for PORTS SSAB use by Fluor-B&W Portsmouth, LLC
December 2011
This information represents work in progress for discussion purposes only

PRELIMINARY

the Ohio Historic Preservation Office to define the appropriate set of actions to take to preserve the historic significance of the impacted facilities.

What are some of the key ARARS for D&D?

WETLANDS

- Ohio EPA substantive requirements for a Section 401 Water Quality Certification must be met for wetlands alteration, dredging, or debris removal from an aquatic resource. In addition, 10 *CFR* 1022, a DOE regulation, requires that the impacts of any actions taken in wetlands be considered and avoided wherever possible or mitigated.

CULTURAL RESOURCES

- Cultural resources include historic buildings/structures and prehistoric sites such as farmsteads considered important to a culture, subculture, or community for scientific, traditional, religious, or any other reason. When these resources meet any one of the National Register Criteria for Evaluation (36 *CFR* Part 60.4), they are termed historic properties and eligible for inclusion on the National Register of Historic Places (NRHP). If avoidance or minimization of impacts to these properties is not possible, DOE will coordinate development of a mitigation strategy. As identified above, DOE is presently working the Ohio Historic Preservation Office in this regard.

ASBESTOS-CONTAINING MATERIAL

- Many of the buildings contain asbestos that may be removed beforehand or may remain in the facilities at the time of demolition. Engineering controls, including wetting methods, negative pressure air units, or containment structures, would be used to control air emissions to meet Clean Air Act NESHAPs standards for asbestos (40 *CFR* 61). Air monitoring would also be conducted to assure adequacy of engineering controls and personal protective equipment.

HAZARDOUS WASTE

- The generation, characterization, treatment, and storage of various types of liquid and solid hazardous waste generated during demolition of these buildings is regulated under the federal Resource Conservation and Recovery Act, Subtitle C (40 *CFR* 260 – 268) and State of Ohio hazardous waste regulations (OAC 3745-51 through 57, -205, -266, -65 through -69, -256, -270). Hazardous waste determinations will be made based on available process knowledge, materials of construction calculations, and sampling/analysis results.

POLYCHLORINATED BIPHENYLS (PCB) WASTES

- Specific standards exist under the Toxic Substances Control Act (40 *CFR* 761) for PCB wastes depending on the particular type of PCB waste (e.g., transformer, capacitor, electrical equipment, PCB oils, fluorescent light ballasts, PCB-contaminated bulk product waste) and the concentration of PCBs in the

PRELIMINARY

waste. PCB bearing wastes are anticipated to be generated during the execution of the Remove the Structures alternative in the RI/FS.

DOE ORDER REQUIREMENTS

- DOE Orders (DOE orders 458.1 and 435.1-1) contain requirements for the safe management of low-level radioactively contaminated wastes that will be generated during building demolition.

WATER MANAGEMENT

- Wastewater (e.g., rinsate and decontamination fluids) and storm water must be managed and treated appropriately to ensure surface water quality standards are not exceeded..

Are waivers to any requirements anticipated?

No waivers are anticipated to be needed.

PRELIMINARY

PROCESS BUILDING D&D

Short Term Risk to Workers and the Community

What type of risks are short term risks?

- Exposure to contaminants of concern (chemical and/or radiological)
- Standard industrial risks associated with D&D activities

How does the risk for each alternative compare for site workers?

Alternative 1 – No Action. The no action alternative would present no specific short-term risks or benefits to the workers.

Alternative 2 - Remove Structures and Prepare Waste for Final Disposition. The risk of radiological exposure or physical hazards to workers would be minimized by characterizing the facilities prior to demolition; compliance with approved work procedures, health and safety plans, and regulatory requirements; and work place monitoring.

How does the risk for each alternative compare for the local community?

Alternative 1 – No Action. The no action alternative would present no specific short-term risks or benefits to the community.

Alternative 2 - Remove Structures and Package Waste for Final Disposition. The potential risk to the public could result from runoff or windborne dispersion of contaminants, or from an increase in local traffic during demolition operations; these risks to the public would be low because of the robust and conservative protective systems that would be implemented during the project and the slight increase in traffic. The impacts of disposing the waste generated by D&D are addressed in the Waste Disposition RI/FS.

PRELIMINARY

Information compiled for PORTS SSAB use by Fluor-B&W Portsmouth, LLC
December 2011
This information represents work in progress for discussion purposes only

PROCESS BUILDING D&D

Cost

What assumptions were used to develop the cost estimate?

The RI/FS process requires that a cost estimate be developed for purposes of evaluating and selecting the final cleanup alternative.

- No cost would be directly associated with implementing Alternative 1 (no action); however, the contamination of surrounding environmental media resulting from the release of contaminants during building degradation could result in Notice of Violation fines, as well as ultimately more difficult remedial activities and higher costs, once a future remediation decision is reached.

- Costs for Alternative 2 are still being developed and are not presently available to present
  - The cost estimate for Alternative 2 include costs for planning and management, characterization, deactivation of the facilities, hazard abatement, equipment removal, demolition, size reduction, and packaging and/or staging of the waste, including the deactivation and demolition of any temporary facilities erected for D&D.
  - The costs for disposal of the generated wastes are not included in the Process Building RI/FS alternative analysis. These costs are considered in the Waste Disposition RI/FS.
  - The following are additional assumptions that significantly affect total project costs:
    - Davis-Bacon regulations regarding local prevailing wage rates would apply as specified by law.
    - No contingency costs are added to the remove structures and package waste alternative cost estimate.
    - It is assumed that all wastes would meet the on-site or off-site disposal facilities' WAC; there are no wastes without a disposal path.

What is the range of accuracy of the cost estimate?

- Based on EPA guidance, the cost estimates will be in the range of -30% to +50%. Consistent with EPA guidance the present worth (current year) cost of the alternative is to be presented. For purposes of clarity to the reviewers, a future year based cost estimate will also be presented for Alternative 2. This future year based cost estimate is more aligned with the annual funding process of the federal government.

What are the costs for each alternative?

- No cost for Alternative 1 (no action)
- Costs for Alternative 2 is still being developed

PRELIMINARY

Information compiled for PORTS SSAB use by Fluor-B&W Portsmouth, LLC
December 2011
This information represents work in progress for discussion purposes only

PROCESS BUILDING D&D

Impact on site and regional employment

What are the employment needs for each alternative?

Alternative 1 – No Action. This alternative assumes the cessation of all activities associate with the 255 GDP process related facilities. As such, employment levels associated with this alternative would be minimal.

Alternative 2 - Remove Structures and Package Waste for Final Disposition. Alternative 2 would see a continuation of employment levels at a level commensurate with the project scope and annual funding allocation. The mix of personnel would change across the duration of the project based on the needs and scope of the project at the time. The RI/FS process does not typically analyze staffing levels associated with cleanup alternatives. It is sometimes evaluated, while not at PORTS, as a consideration in the implementability of the potential alternatives. Staffing levels and skill mix requirements to support implementation of the selected cleanup decision are established through a federal cost and schedule baseline and annual funds authorization process.

How would each alternative impact the local economy?

Alternative 1 – No Action. The continuing presence of contaminated buildings and facilities on the PORTS site would limit or preclude future development of PORTS land and some land in its immediate vicinity. Potential new jobs associated with such development would be lost. Eventually, a loss of population would occur as some unemployed workers and their families leave the region of influence (ROI) for new job opportunities. Therefore, implementation of the no action alternative would result in adverse socioeconomic impacts on the population living in the four-county ROI.

Alternative 2 - Remove Structures and Prepare Waste for Final Disposition. The local economy would be impacted through the expenditure of the annual allocation of funding for cleanup on salaries, equipment and purchased commodities. Because of the orientation towards local hiring, population increase in the region of influence would be minimal. Initially, Alternative 2 would have beneficial socioeconomic impacts on the population of the ROI. Employment and income levels would gradually decline as D&D work is completed, causing an increase in adverse impacts to the local economy. However future new construction jobs may be created by private industries in the re-industrialization of the remediated site.

PRELIMINARY

Information compiled for PORTS SSAB use by Fluor-B&W Portsmouth, LLC
December 2011
This information represents work in progress for discussion purposes only

PROCESS BUILDING D&D

Schedule

What assumptions were made to develop the schedule?

- The RI/FS guidance requires the development of an initial schedule for the implementation of each of the alternatives under consideration. This schedule is used for the evaluation and selection of the final cleanup alternative.
- The RI/FS typically does not deal with the annual funding process. For the Process Building RI/FS the schedule will adopt the approved project baseline schedule available at the time of the issuance of the document. This schedule will be based on the current knowledge base of the sequence of the D&D activities and the available funding profile forecasted across time.
- The sequence of the structures within the schedule will be linked to an assessment of the near term needs of the individual facilities and the costs of the ongoing maintenance attributed to these facilities..
- Pre-demolition activities in the process buildings will occur in parallel with the demolition of the process support buildings and structures.
- Demolition of smaller facilities under this RI/FS will begin when they are no longer in use and the funding and resources become available.

What is the range of accuracy of the schedule estimate?

The detailed schedule for Alternative 2 is still being developed as part of the baseline development.

What is the schedule for each alternative?

Alternative 1 – No Action. There is no schedule for Alternative 1 as no activities would be performed

Alternative 2 - Remove Structures and Package Waste for Final Disposition. Implementation of Alternative 2 is expected to take 8-10 years. No S&M or long-term monitoring would be needed after the action. The detailed schedule for Alternative 2 is still being developed as part of the baseline development.

How will the waste disposal decision impact the schedule?

Since the Process Building RI/FS schedule is proposed to adopt the available and approved federal baseline at the time of the issuance of the document, the schedule must also adopt a preliminary unapproved decision for the Waste Disposition RI/FS in order to provide a technically defensible forecast of the time to implement the Process Building alternative. The costs associated with the waste disposition portion of the schedule will not, as previously discussed, be presented in the Process Building RI/FS document.

PRELIMINARY

Information compiled for PORTS SSAB use by Fluor-B&W Portsmouth, LLC
This information represents work in progress for discussion purposes only