

**Revised Finding of No Significant Impact
for
Expansion and Operation of the Central Shops Borrow Pit
at the Savannah River Site**

Agency: U. S. Department of Energy

Action: Revised Finding of No Significant Impact

Summary: The Department of Energy (DOE) prepared an environmental assessment (EA) (DOE/EA-1194) in 1997 for the expansion and operation of the existing Central Shops Borrow Pit (i.e., SRS Facility 632-G) at the Savannah River Site (SRS), located near Aiken, South Carolina. This EA was prepared in accordance with the National Environmental Policy Act (NEPA) of 1969, as amended; the requirements of the Council on Environmental Quality Regulations for Implementing NEPA (40 CFR 15400-1508); and the DOE Regulations for Implementing NEPA (10 CFR 1021). Based on the analyses in the EA, DOE determined that the action was not a major Federal action significantly affecting the quality of the human environment within the meaning of NEPA. Therefore, the preparation of an environmental impact statement (EIS) was not required, and DOE issued a Finding of No Significant Impact (FONSI) dated March 13, 1997.

In an effort to provide the site with cost-effective future landfill capacity for construction and demolition (C&D) debris/structural fill, DOE is considering redefining the closure of the 632-G facility to encompass the permitted disposal of inert C&D debris into the excavation areas, which would then be closed as per regulatory requirements. Based on the existing infrastructure at the 632-G facility that would support a permitted Part III C&D Landfill, DOE has concluded that the environmental impacts of the proposed use of the excavated portions of this facility as an inert debris landfill is not a major Federal action significantly affecting the quality of the human environment within the meaning of NEPA. Therefore, the preparation of an EIS is not required, and DOE is issuing this revised FONSI.

Public Availability: Copies of the existing EA and FONSI or further information on the DOE NEPA process are available from:

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Background: The original proposed action addressed in DOE/EA-1194 entailed the enlargement, continued operation, and eventual close-out of the 632-G facility. The South Carolina Department of Health and Environmental Control (SCDHEC) permitted the operation of this borrow pit. The facility was intended to support both planned and potential future activities at SRS that would involve the use of fill material for a variety of site operations, maintenance, and new construction. The projected operational lifetime of the 632-G facility was 10 years.

Early in 2003, the State of South Carolina drafted new landfill regulations, which are expected to be promulgated in calendar year 2004. In May of 2003, SCDHEC advised SRS to proceed with registration of any new Part III C&D landfills this year if the site intended to operate such landfills on SRS at any time in the near future. Based on this, the site began to explore the need for such a new permitted C&D landfill. Concurrently, some thought was being given to disposing of inert C&D debris generated from the demolition and removal (D&R) activities onsite rather than going to the Three Rivers Authority Regional Solid Waste (TRA) Landfill. However, diversion of the C&D debris to the existing SRS C&D landfill along with the increased needs for disposal of land clearing debris from new facility construction at SRS would exceed the current available remaining capacity of that disposal facility. This conceptual change of disposal destination for the C&D debris (i.e., onsite as opposed to TRA Landfill) would therefore require the construction of a new C&D landfill at SRS.

On June 9, 2003, an SRS position paper was issued documenting a cost savings (i.e., \$1,177,375 annually) associated with disposal of inert debris from the D&R activities into an onsite SRS C&D landfill rather than the existing plan to use the TRA Landfill. Discussions were held with SCDHEC regarding the feasibility of permitting the 632-G facility for use as the new SRS disposal facility. SCDHEC visited that facility on July 30, 2003, and concurred that it was suitable for use as a permitted Part III C&D landfill.

Purpose and Need for Agency Action: The purpose of this revision to the proposed action is to provide for the cost-effective disposal of inert C&D debris at an onsite SRS facility. DOE needs to implement the action of modifying the closure scope of the 632-G facility to enable the disposal of these wastes to support the ongoing D&R activities onsite.

Proposed Action: The revision to the proposed action is to allow SRS to dispose of inert C&D debris into a permitted landfill implemented in the existing SRS Facility 632-G. This revision to the original scope described in DOE/EA-1194 would modify the closure scope for the excavation areas of the borrow pit. This scope revision was developed using regulatory requirements stipulated in Part III of SC R.61-107.11. - *Solid Waste Management: Construction, Demolition and Land-Clearing Debris Landfills*. The existing engineered infrastructure at the 632-G facility that would support a Part III C&D landfill includes controlled access (i.e., locked gate), vehicle access road, an SCDHEC-permitted storm water collection system (i.e., including a sedimentation basin), and four groundwater monitoring wells.

Inert C&D debris is defined as materials that are generated as a result of construction, remodeling, repair and demolition of structures, road building, and land clearing in the course of operations on property under the same ownership or control as the structural fill activity and that have not been in direct contact with hazardous constituents (e.g., pesticides, etc.), petroleum products, or painted with lead-based paint. Acceptable debris for disposal would include the following: hardened concrete; brick; block; untreated lumber; and, other items specifically approved in writing by SCDHEC.

The 632-G borrow pit is planned to be excavated in two phases. The proposed C&D landfill will be in only Phase One of the borrow pit. This phase has an area of 39.8 acres. Soil borrowing is specifically planned for this pit for another 6 to 7 years. Current borrowing operations of the existing facility would not be impacted since the layout of the site would allow land filling and soil borrowing at the same time. The 632-G facility would provide disposal capacity of projected SRS C&D debris for 50 years or longer.

Groundwater is 37 feet below the base of the excavation areas of the 632-G facility. In addition, there are 32 feet of clay below the excavation area base. Given this condition along with the existing infrastructure, no impacts to either surface or ground water would be expected from this proposed revision.

As per regulations, closure of the filled excavation areas would entail the placement of a final cover. This must consist of a two-foot thick final earth cover with at least a 1 percent but not greater than 4 percent surface slope, graded to promote positive drainage. The side slope cover shall not exceed three horizontal feet to one vertical foot (i.e., a 3:1 slope). The finished surface of the disposal area has to be seeded with native grasses or other suitable ground cover. The integrity of the final cover has to be maintained. The final cover would be expected to be approximately 20 feet above the existing grade.

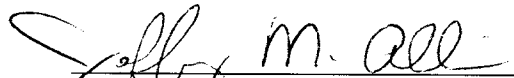
Alternatives: The other alternative considered would be the no action alternative, which would include the closure of the excavation areas of the 632-G facility as stated in the existing EA. This would entail not using these portions of the borrow pit for the proposed disposal of C&D debris. Because of the lack of onsite disposal capacity, this waste would be taken to the TRA Landfill.

Environmental Impacts: Implementation of this proposed change in the closure scope would result in the continuation of the same principal cumulative impact that resulted from the original proposed action (i.e., the long-term loss of these SRS lands for potential timber production). The loss of such land use would be less than 0.001 percent on an annual basis, with the estimated losses for the entire proposed action at less than 0.01 percent. The primary difference from the original closure scope would be that the closed excavation areas would now consist of above-grade mounded areas rather than open pits, potentially collecting rain water over time. No new infrastructure would have to be built at the 632-G facility in support of this scope change. Employees supporting the proposed disposal activities would be taken from the

existing site workforce; so there would be no measurable impact on the local economy because of the proposed action. With the existing infrastructure in place at the 632-G facility, no adverse impacts to either site surface or groundwater quality would be expected from the proposed use of the existing borrow pit. The proposed action would have no adverse impacts on threatened and endangered species. There would be no impacts to cultural and archaeological resources. Cumulative ambient air quality impacts would be negligible. Assuming that both protective clothing and adequate safety measures are employed, the proposed action should not pose any potential problems for either human health or worker safety. There would be no measurable impact to either public health or safety as a consequence of the proposed action.

Determination: Based on the information and analyses in the original EA (DOE/EA-1194) and the additional examination of the scope change, DOE has determined that the proposed use of the 632-G borrow pit at SRS for the disposal of inert C&D debris as part of closure does not constitute a major Federal action significantly affecting the quality of the human environment within the meaning of NEPA. Therefore, an EIS is not required and DOE is issuing this revised FONSI.

Signed in Aiken, South Carolina, this 29 day of October, 2003.



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