

MITIGATION ACTION PLAN

April 21, 2008 (Revision 0)

INTRODUCTION:

The General Services Administration (GSA) and the National Nuclear Security Administration (NNSA) have prepared this Mitigation Action Plan (MAP) for the following project: Modernization of Facilities and Infrastructure for the Non-Nuclear Production Activities Conducted at the NNSA's Kansas City Plant. Based on the analysis in the Environmental Assessment (EA) (DOE/EA-1592, April 2008) prepared for the proposal by the GSA and NNSA, neither the construction nor operation of the selected alternative would have a significant environmental impact. This conclusion is explained in the Finding of No Significant Impact (FONSI) issued by the GSA and NNSA on April 21, 2008.

This MAP contains mitigation and monitoring commitments for the project, including commitments set (or that would be set) in permits for the new facility. These commitments are designed to mitigate any adverse environmental consequences (even though they are not significant) associated with the relocation of NNSA's non-nuclear component production and procurement activities to a new facility at the intersection of Botts Road and Missouri Highway 150 in Kansas City, Missouri. This plan covers both implementation of mitigation measures and monitoring to ensure the efficacy of the mitigation techniques. As details of specific mitigation actions are further developed, this MAP will be updated. In addition, if, as a result of monitoring, the GSA or NNSA identify additional steps to reduce adverse environmental impacts this MAP will be updated, as appropriate. This MAP and related documentation, including the EA and FONSI, will be available on the following Websites: <http://www.gsa.gov/kansascityplant> and <http://www.eh.doe.gov/nepa>.

MITIGATION MEASURES

The mitigation measures identified in the table below address all phases of the project, from planning and design, through construction, and into facility operation. As some of the mitigation measures are applicable to more than one phase of the project, the tasks associated with each measure have been categorized as relating to either the Planning/Construction phase or the Operations phase in the coordinating tasks column of the table. Coordinating tasks designated as "Planning/Construction Phase" are associated with site planning and preparation, facility design, and facility construction. Much of this activity will be the responsibility of the selected project developer or the construction contractor. However, the GSA and NNSA will place appropriate requirements on the developer to ensure proper mitigation of impacts during the construction phase. In limited cases, the agencies can initiate certain mitigation measures or required permitting actions in advance of developer selection and contract award. "Operations Phase" mitigation measures identified in the coordinating tasks column are associated with facility management and production operations after the construction phase is complete. Under the selected alternative post-construction facility infrastructure management will primarily be the responsibility of the developer. NNSA will be responsible for production operations.

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In addition to the mitigation measures listed below, the GSA and NNSA understand that additional laws and mitigation measures may be triggered during any phase of the project (e.g. if cultural resources are encountered during land excavation; if petroleum is detected during the relocation of the subsurface pipeline, etc.). Both agencies recognize the obligation of themselves and their contractors to comply with such laws and other requirements although not specifically referenced in the tables below.

The following table describes the MAP and the actions that have been or will be implemented.

Affected Environment	Mitigation Action	Purpose	Coordinating Tasks	Party Responsible for Implementing	Status
Surface Water Hydrology - Wetlands	The facility will be designed to avoid and minimize impacts to the approximately 1.37 acres of wetlands and 0.26 acres of streams. For any unavoidable impacts, mitigation will be performed through on-site wetland creation or restoration, stream enhancement, or participation in a mitigation bank or in-lieu fee mitigation agreement. ¹	To minimize negative wetland and stream impacts and to enhance the overall quality of existing wetlands and streams which are considered functionally impaired and are unlikely to recovery naturally. Mitigation will comply with 10 CFR Part 1022, Executive Order 11990 and Clean Water Act Section 404.	<p><u>Planning/Construction Phase:</u> Task A: Delineate wetlands and streams on the proposed site Task B: Assess wetland and stream impacts as related to site planning and facility placement Task C: Identify opportunities for on-site mitigation of impacts to water resources to include expansion of wetlands, stream relocation and restoration, and establishment of riparian buffer areas Task D: Implement on-site mitigation and compensatory mitigation as defined in the Section 404 permit.</p> <p><u>Operation Phase:</u> Task E: Maintain and monitor mitigation measures for needed remedial action.</p>	<p>A: GSA B: GSA and Developer C: GSA and Developer D: Developer E: Developer</p>	<p>A: Complete B: Open C: Open D: Open E: Open</p>

¹ Mitigation banks are trust funds established for payment of fees where on-site mitigation is not, or cannot be, implemented. The in-lieu fee is a payment made to a mitigation bank in compensation for impacts to water resources. The fee is then used by the managers of the trust to improve or expand water resources in other locations.

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Affected Environment	Mitigation Action	Purpose	Coordinating Tasks	Party Responsible for Implementing	Status
Surface Water Hydrology - Stormwater	Develop and use strategies to maintain or restore, to the maximum extent technically feasible, the predevelopment hydrology of the property with regard to the temperature, rate, volume and duration of flow.	To minimize impacts to the environment associated with stormwater runoff. Mitigation will comply with the Energy Independence and Security Act of 2007, Section 438.	<p><u>Planning/Construction Phase:</u> Task A: Establish baseline conditions and incorporate design features (e.g. preservation of existing vegetation, establishment of vegetated open space, disconnection of areas of impervious surfaces, stormwater treatment utilizing engineered best management practices, minimizing paved surfaces, directing surface runoff of parking areas through vegetated drainages and waterways to the greatest extent practicable) to maintain or restore predevelopment hydrology. Task B: Implement stormwater management features per the final design Task C: Monitor effectiveness of control measures in achieving mitigation goal of maintaining predevelopment hydrology and implement corrective actions as needed.</p>	<p>A: Developer B: Developer C: Developer</p>	<p>A: Open B: Open C: Open</p>

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Affected Environment	Mitigation Action	Purpose	Coordinating Tasks	Party Responsible for Implementing	
Socioeconomic - Environmental Justice	Develop and implement a community involvement plan.	To help communicate with the public and provide a community contact to respond to public questions or concerns.	<p>All Phases: Task A: Identify local community and community organizations Task B: Determine appropriate communication mediums (e.g. website, newsletter, public meeting) and implement communications related to construction progress and status of operations, including responses to concerns that may be expressed by the public during either phase of the project. Task C: Designate and communicate to the public a facility community contact to respond to public questions or concerns</p>	<p>A: GSA and NNSA B: GSA, NNSA, and the Developer C: GSA and NNSA</p>	<p>A: Open B: Open C: Open</p>
Socioeconomic Resources - Transportation	Provide road improvements to alleviate cumulative projected traffic congestion in the area.	To alleviate potential future traffic congestion in the vicinity of the Botts Road site during both construction and operation.	<p>Planning/Construction Phase: Task A: Conduct study to evaluate cumulative traffic impacts and recommend road improvements Task B: Provide improvements as needed. At a minimum road improvements will include addition of turn lanes and traffic signals at Botts Road. Other road improvements which may be provided in phases as traffic demand increases include addition of turn lanes and traffic signals at Thunderbird Road, new interchanges between Missouri Highway 150, Botts Road and Thunderbird Road, and a Thunderbird Road bridge over Missouri Highway 150.</p>	<p>A: GSA and NNSA B: Missouri Department of Transportation and Kansas City, Missouri</p>	<p>A: Complete B: Open</p>

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Air Quality	Prevent fugitive dust emissions during facility construction, and strive to reduce total facility operating annual air emissions to approximately 28% less than the 2006 annual air emissions levels of the current Kansas City Plant.	To minimize air emissions levels produced by the construction and operation of the new plant.	<p>Planning/Construction Phase: Task A: Utilize control measures for lowering on-site fugitive dust emission (i.e. water or chemical dust suppressants) during construction of the facility Task B: Implement solutions for achieving reduction in site air emissions (e.g. Low NOx burners)</p> <p>Operations Phase: Task C: Identify and implement practicable technology and manufacturing process improvement solutions</p>	<p>A: Developer and Construction Contractor B: Developer C: NNSA</p>	<p>A: Open B: Open C: Open</p>
Groundwater Hydrology, Surface Water Hydrology, Flora and Fauna, Air Quality, Socioeconomic Resources, and Solid and Hazardous Waste	Obtain certification in U.S. Green Building Council's Leadership in Energy and Environmental Design (LEED). Strive for Gold Certification for New Construction. ²	To promote energy efficiency and sustainable environments by utilizing green design principles.	<p>All Phases: Task A: Incorporate energy efficient and environmentally sustainable design principles. Required green design features include: construction activity pollution prevention, fundamental commissioning of the building energy systems, establishing minimum energy performance, fundamental refrigerant management, optimizing energy performance by 30%, storage &</p>	<p>A: Developer B: GSA C: Developer</p>	<p>A: Open B: Complete C: Open</p>

² LEED is a voluntary, consensus-based national standard for developing high-performance, sustainable buildings. The green building rating system developed by the U.S. Green Building Council promotes a whole-building approach to sustainability by recognizing performance in five areas: sustainable site development, water savings, energy efficiency, materials selection, and indoor environmental quality. LEED Gold certification is the second highest level of certification offered by the U.S. Green Building Council. GSA and NNSA have committed to Gold Certification for New Construction (LEED rating system 2.2-NC) for this project. In pursuing this level of certification the agencies are demonstrating their commitment to sustainable green building and development practices.

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Affected Environment	Mitigation Action	Purpose	Coordinating Tasks	Party Responsible for Implementing	Status
			collection of recyclables, establishing minimum indoor air quality performance. Task B: Register project with the U.S. Green Building Council Task C: Go through LEED review and certification process.		

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ENVIRONMENTAL PERMITS

Implementation of the selected alternative will require that certain construction and operating environmental permits be obtained. These permits provide a structure for identifying actual or potential impacts of the construction and operating phases of a project. The permits also provide an opportunity for the permitting authorities to identify controls and limits of operation to ensure the impacts are minimized or eliminated, a mechanism of surveillance and reporting to assist both the permitting agency and the permit holder to monitor compliance with the permit conditions and the effectiveness of the implemented controls, and an enforcement process to address noncompliance. The specific environmental permits required for this action include the following:

Permit	Issuing Agency	Permit Timing	Permittee	Requirements
Section 404 Individual Permit, Discharge of Dredge or Fill Material into Water (See Surface Water Hydrology – Wetlands)	U. S. Army Corps of Engineers (with 401 Water Quality Certification from the Missouri Department of Natural Resources (MDNR))	Prior to site work or construction.	Initially GSA. Upon receipt, the permit will be transferred to the developer.	<p>Permit will be issued based on a mitigation plan developed for impacts to waters of the U.S.</p> <ol style="list-style-type: none"> 1. Yearly biological assessment (typically for the first five years) of the mitigation site to ensure that the mitigation is in keeping with the development plan and the permit conditions 2. An annual report submitted to the U. S. Army Corps of Engineers in support of the monitoring 3. Remedial actions taken during the monitoring period to ensure that compliance requirements are met by year five. If the mitigation site is not successful, the applicant takes remedial action. 4. The mitigation site is set aside in perpetuity.
General Permit for Construction or Land Disturbance	MDNR (the City of Kansas City, Missouri, has a similar permit requirement that must also be obtained and will contain many of the same requirements.)	Prior to site work.	Construction contractor	<ol style="list-style-type: none"> 1. Requires that controls be put in place to ensure the water quality standards are not violated. 2. Housekeeping must be maintained to prevent solid waste from entering the waters of the state. 3. Places requirements on fueling facilities and hazardous material storage and use. 4. Requires the development of a stormwater pollution prevention plan that describes the control features and best management practices the developer will employ to ensure compliance with the permit.

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Permit	Issuing Agency	Permit Timing	Permittee	Requirements
Air Construction Permit	Kansas City, Missouri	Prior to implementation of improvements to the site.	NNSA and Developer	This permit will allow for the installation of regulated air emission sources associated with both the facility construction and ongoing production operations. The permit will include federally enforceable emission limits for criteria pollutants and hazardous air pollutants that will be established below the levels of a basic air source. Monitoring and annual compliance reporting will be required by the permit. If federally enforceable emission limits are established, an air operating permit will likely not be required. Operations will be governed by the construction air permit.
Stormwater Operating Permit	MDNR	Prior to startup of production operations.	NNSA and its Operating Contractor	This permit will provide the requirements for discharge of stormwater from the site into waters of the state. The permit will include specific discharge limits, discharge monitoring requirements, and requirements for reporting monitoring results and events.
Industrial Wastewater Discharge Permit	KCMO	Prior to discharge from the industrial wastewater treatment system.	NNSA and its Operating Contractor	This permit regulates the discharge of industrial wastewater from the facility to the sanitary sewer system. It will provide discharge limits, describe monitoring frequencies and requirements, and define reporting requirements.