

NEPA COMPLIANCE SURVEY

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Project Information			
Project Title:	Binary Power Unit Test	Date:	3-29-2010
DOE Code:	6730.020.61045	Contractor Code:	8067-768
Project Lead:	Lyle Johnson		
Project Overview 1. What are the environmental impacts? 2. What is the legal location? 3. What is the duration of the project? 4. What major equipment will be used if any (work over rig, drilling rig, etc.)?		The purpose of the project is to do confirmation testing of the binary power unit at several different temperatures and rates. This test will be conducted in a location covered in the Site Wide EA. It will use infrastructure installed for another project consisting of a hot-water source and a cooling water source. The hot water is from well 17-WX-21, a Madison well adjacent to the siting location. The cooling water will be pumped from Little Teapot Creek through an existing line and then returned to Teapot Creek. There should be no environmental impacts. The location of the unit will be south of the building at the NWF facility. There will be several short term tests (hrs) over a month or two period. A crane will be rented to off-load the equipment. A fork lift or picker will be required to assemble the unit and hook it up. A welder and electrician will also be necessary	

The table below is to be completed by the Project Lead and reviewed by the Environmental Specialist and the DOE NEPA Compliance Officer. NOTE: If Change of Scope occurs, Project Lead must submit a new NEPA Compliance Survey and contact the Technical Assurance Department.

	Impacts Anticipated?			If YES, then complete below
	Yes	No	NA	If the anticipated impact might be unacceptable, recommend mitigation measures:
Water Quality				
Does the proposed project present potential for impacts on water resources or water quality?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	
Does the project affect surface water quantity or quality under both normal operations and accident conditions?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	Cooling water will be removed/pumped from Little Teapot Creek and returned to Teapot Creek. The removal point is approximately 75 feet from the merge point of Little Teapot and Teapot Creeks.
Does the proposed project effect groundwater quantity or quality under both normal operations and accident conditions?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	
Will the project area include "Waters of the State?"	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	
Will the project area require a Corps of Engineers permit?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	

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	Impacts Anticipated?			If YES, then complete below.
	Yes	No	NA	If the anticipated impact might be unacceptable, recommend mitigation measures:
Geology & Soils				
Does the proposed project present potential for impacts related to geology or soils?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	
Does the proposed project alter, excavate or otherwise disturb land area consistent with other land use and habitat area?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	
Is the proposed project likely to impact local seismicity?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	
If the project involved disturbance of surface soils, are erosion and storm water control measures addressed?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	
Air Quality				
Does the proposed action present potential for impacts on ambient air quality under both normal and accident conditions?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	
Are potential emissions (gases and/or airborne particulates including dust) outside of the normal scope for oil field operations?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	The unit has an ammonia-water working fluid system. The system has an emergency vent system. The system will be piped to a water tank to capture any ammonia released.
Does the project present risk to human health and the environment from exposure to radiation and hazardous chemicals in emissions?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	
Is the project subject to New Source Performance Standards?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	
Is the project subject to National Emissions Standards for Hazardous Air Pollutants?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	
Is the project subject to emissions limitations in an Air Quality Control Region?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	

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	Impacts Anticipated?			If YES, then complete below.
	Yes	No	NA	If the anticipated impact might be unacceptable, recommend mitigation measures:
Wildlife and Habitat				
Does the proposed action present potential for impacts on wildlife or habitat?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	
Does the project impact state or federally listed threatened and endangered species?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	
Human Health Effects				
Does the proposed project present potential for effects on human health? e.g.: Hanta virus, radiological exposure, or chemical exposure (must provide MSDS)	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	The unit has an ammonia-water working fluid system. The system has an emergency vent system. The system will be piped to a water tank to capture any ammonia released. The ammonia will be handled utilizing standard industrial practices designed to prevent releases to the environment. Personal will be properly trained in accidental release response and spill kits will be available onsite as a precautionary measure. MSDS sheet for the ammonia will be on-site
Transportation				
Does the proposed project involve transportation of radiological sources or hazardous materials (including explosives)?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	Ammonia will be transported to the site to fill the unit. Quantity should be approximately 1,000 lbs (230 gal). The ammonia will be transported utilizing standard industrial practices designed to prevent releases to the environment.
Waste Management and Waste Minimization				
Are pollution prevention and waste minimization practices needed in the proposed project?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	The unit has an ammonia-water working fluid system. The system has a demergency vent system. The system will be piped to a water tank to capture any ammonia released. The ammonia will be handled utilizing standard industrial practices designed to prevent releases to the environment. Personal will be properly trained in accidental release response and spill kits will be available onsite as a precautionary measure.
Does project plan establish procedures in compliance with local, state and/or federal laws and guidelines affecting the generation, transportation, treatment, storage or disposal of hazardous and other wastes?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	Ammonia will be transported to the site to fill the unit. Quantity should be approximately 1,000 lbs (230 gal). The ammonia will be transported and stored utilizing standard industrial practices designed to prevent releases to the environment. The ammonia/water mixture will be disposed of on-site as fertilizer, on the landfarm.

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		Impacts Anticipated?			If YES, then complete below.	
Cultural Impact		Yes	No	NA	If the anticipated impact might be unacceptable, recommend mitigation measures:	
Is there potential for impact on cultural (historic) resources?		<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	The project will utilize existing infrastructure and no ground disturbance is proposed. Piping for the hot water and cooling water lines will be temporary and placed above ground. Precautions will be taken to assure that there is no disturbance of any cultural resources in the pipe laydown areas.	
Community Impact		Yes	No	NA	If the anticipated impact might be unacceptable, recommend mitigation measures:	
Will the proposed project introduce significantly adverse auditory, visual, or other impact?		<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>		
Will the proposed project adversely affect the community's use of public land/resources?		<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>		
Will the proposed project adversely affect the community's access to private land?		<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>		
NOTE: Topography Map and Wetlands Map are required to be attached. Attach applicable SOPs for Risk Assessment Level 2 & 3 and specific test procedures.						
Are permits required? If YES, list below:					Yes <input type="checkbox"/>	No <input checked="" type="checkbox"/>
Section below to be reviewed by Environmental Specialist and DOE NCO.						
Adequate Mitigation Measures Provided?			Adequate Mitigation Measures Provided?			
	Yes	No		Yes	No	
Water Quality Impacts	<input checked="" type="checkbox"/>	<input type="checkbox"/>	Transportation Impacts	<input checked="" type="checkbox"/>	<input type="checkbox"/>	
Air Quality Impacts	<input checked="" type="checkbox"/>	<input type="checkbox"/>	Waste Management Impacts	<input checked="" type="checkbox"/>	<input type="checkbox"/>	
Wildlife and Habitat Impacts	<input checked="" type="checkbox"/>	<input type="checkbox"/>	Cultural Impacts	<input checked="" type="checkbox"/>	<input type="checkbox"/>	
Geology and Soils Impacts	<input checked="" type="checkbox"/>	<input type="checkbox"/>	Community Impact	<input checked="" type="checkbox"/>	<input type="checkbox"/>	
Human Health Impacts	<input checked="" type="checkbox"/>	<input type="checkbox"/>	Categorical Exclusion	<input checked="" type="checkbox"/>	<input type="checkbox"/>	
Approvals						
Comments and Conditions:	<p>B5 Categorical exclusions applicable to conservation, fossil, and renewable energy activities. B5.1 Actions to conserve energy, demonstrate potential energy conservation, and promote energy-efficiency that do not increase the indoor concentrations of potentially harmful substances... improvements in generator efficiency and appliance efficiency ratings, development of energy-efficient manufacturing or industrial practices, and small-scale conservation and renewable energy research and development and pilot projects.</p>					
Contractor ESS&H	<i>Stephen Ames</i>				Date 4-8-10	
Comments and Conditions:	NEED TO CONFIRM PERMIT TO DRAW WATER FROM LITTLE TEAPOT CREEK PRIOR TO STARTUP.					
	Based on my review of information conveyed to me and in my possession (or attached) concerning the proposed action, as NEPA Compliance Officer (as authorized under DOE Order 451.1A), I have determined that the proposed action fits within the specified class of actions, the other regulatory requirements set forth above are met, and the proposed action					

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	is hereby categorically excluded from further NEPA review.	
DOE NEPA Compliance Officer	CXB5.1 <i>Michael J Taylor</i>	Date 7/13/10

North Water Flood Hot Lines



Legend

- Section Line
- NWF Hot Lines
- Facilities

Wetlands

- Palustrine, Aquatic Bed (PAB)
- Palustrine, Emergent (PEM)

	Geothermal Technology Program		
	Author: J Buelt	Project Manager: L Johnson	
	GIS-Pj-6730 020 610d1-121509	Date: 12/15/2009	Rev Date:
	WY State Plane / East Central Zone / NAD27		Scale = 1:1,500

0 125 250 500 Feet

RMOTC
907 N Poplar, Suite 150
Casper, WY 82601
307-233-4800

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