PMC-EF2a
(2.06.02)

U.S. DEPARTMENT OF ENERGY
EERE PROJECT MANAGEMENT CENTER
NEPA DETERMINATION

RECIPIENT: Blaine County School District #61 **STATE:** ID

PROJECT TITLE : GTP: Blaine School District Geothermal Project (Phase 2)

Funding Opportunity Announcement Number	Procurement Instrument Number	NEPA Control Number	CID Number
DE-FOA-0000116	DE-EE0002967	GFO-10-303 -001	2967

Based on my review of the information concerning the proposed action, as NEPA Compliance Officer (authorized under DOE Order 451.1A), I have made the following determination:

CX, EA, EIS APPENDIX AND NUMBER:
Description:

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. These actions may involve financial and technical assistance to individuals (such as builders, owners, consultants, designers), organizations (such as utilities), and state and local governments. Covered actions include, but are not limited to: programmed lowering of thermostat settings, placement of timers on hot water heaters, installation of solar hot water systems, installation of efficient lighting, 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. The actions could involve building renovations or new structures in commercial, residential, agricultural, or industrial sectors. These actions do not include rulemakings, standard-settings, or proposed DOE legislation.

Rational for determination:

The Blaine County School District is proposing to install 4 Open-Looped Ground Source Heat Pump Systems at 4 schools. The Blaine County School District has applied for and obtained "Injection Well Permits" from the Idaho Department of Water Resources for 3 of the 4 proposed injection well locations. The Fox Acres campus has applied but has not yet received their determination.

The Underground Injection Control (UIC) program was delegated by EPA to the Idaho Department of Water Resources (IDWR) in 1985. The Idaho Department of Water Resources (IDWR) regulates the construction, operation, and abandonment of all injection wells through the Idaho Underground Injection Control Program. The Blaine County School District has also obtained the Water Rights permits from the Idaho Department of Water Resources for the associated production wells for 3 of the 4 proposed production wells. The Fox Acres campus has applied but has not yet received their determination. This determination is for the Carey Elementary School, Bellevue Elementary School, and Hailey Elementary School. The Fox Acres Campus is not assessed under this determination.

Water quality data for Wood River High School, Wood River Middle School, Hailey Elementary School and Carey School area is presented in "Roy Mink Water Report"-Attached. The data indicate ground water in the Hailey, Bellevue and Carey area is of good quality with low total dissolved solid values and near neutral pH values.

No local or state permitting for stormwater is required. The projects will use a combination of buffer areas, with silt fences and straw waddles as needed when acceptable buffer areas are not present. Storm drains and catch basins will be protected with silt sacks as needed. The site conditions will be returned to a state equal to the conditions prior to installation of the GSHP systems. No special permits are required for the proposed projects other than those required for the installation of the injection and production wells.

Carey Elementary School and High School, 20 Panther Lane, Carey, ID 83320

- Total tonnage of systems: 149.4 Tons & 180 Tons.
- The building condenser loop will use potable water/30% propylene glycol mixture. The system will be routed between the plate and frame heat exchanger and the distributed heat pump units, no exchange of fluids will occur between the condenser loop and the ground loop. However if there was a spill or transfer only food-grade/non-toxic propylene gycol would be introduced to the ground water at a small and limited volume.
- Wells required: 3 (two production wells and a single injection well)
- Will follow IDWR Regulations for well construction
- No Wetlands or Floodplains present
- All well drilling (production and re-injection water wells) will be performed by a state licensed or certified driller.

• Area of Installation: Previously disturbed; Production Wells: Playfield. Injection Well: SE Corner of HS access road.
• This project will comply with all applicable state and local regulations regarding geothermal installations.
• Waste materials will be standard well drill cuttings and fluids that will be disposed as standard waste in a local certified landfill.

Bellevue Elementary School, 305 North 5th Street, Bellevue, ID 83313

• Total tonnage of system: 114 Tons.
• The building condenser loop will use potable water/30% propylene glycol mixture. The system will be routed between the plate and frame heat exchanger and the distributed heat pump units, no exchange of fluids will occur between the condenser loop and the ground loop. However if there was a spill or transfer only food-grade/non-toxic propylene gycol would be introduced to the ground water at a small and limited volume.
• Wells required: 2 (one production well and a single injection well)
• Will follow IDWR Regulations for well construction
• No Wetlands or Floodplains present
• All well drilling (production and re-injection water wells) will be performed by a state licensed or certified driller.
• Area of Installation: Previously disturbed; Production Wells: Playfield. Injection Well: Ballfield.
• This project will comply with all applicable state and local regulations regarding geothermal installations.
• Waste materials will be standard well drill cuttings and fluids that will be disposed as standard waste in a local certified landfill.

Hailey Elementary School, 520 South First Avenue, Hailey, ID 83333

• Total tonnage of system: 105.3 Tons.
• The building condenser loop will use potable water/30% propylene glycol mixture. The system will be routed between the plate and frame heat exchanger and the distributed heat pump units, no exchange of fluids will occur between the condenser loop and the ground loop. However if there was a spill or transfer only food-grade/non-toxic propylene gycol would be introduced to the ground water at a small and limited volume.
• Wells required: 3 (two production wells and a single injection well)
• Will follow IDWR Regulations for well construction
• No Wetlands or Floodplains present
• All well drilling (production and re-injection water wells) will be performed by a state licensed or certified driller.
• Area of Installation: Previously disturbed; Production Wells: Playfield. Injection Well: Ballfield.
• This project will comply with all applicable state and local regulations regarding geothermal installations.
• Waste materials will be standard well drill cuttings and fluids that will be disposed as standard waste in a local certified landfill.

The actions involved with the proposed projects are consistent with activities outlined in B5.1; therefore, they are categorically excluded from further NEPA review.

The Fox Acres campus has applied but has not yet received their determination from the Idaho Department of Water Resources. IDWR has not made their determination on the proposed injection and production wells. The Fox Acres project also cannot provide a clear scope of the engineering and construction of the project. The locations of the wells and the system's size/requirements have not been determined to date. For these reasons DOE cannot make a NEPA determination for this project. DOE requires the project proponent to create a new EF-1 for the Fox Acres project once all the information is available and ready for NEPA review.

NEPA PROVISION

DOE has made a conditional NEPA determination for this award, and funding for certain tasks under this award is contingent upon the final NEPA determination.

Insert the following language in the award:

You are restricted from taking any action using federal funds, which would have an adverse affect on the environment or limit the choice of reasonable alternatives prior to DOE/NNSA providing either a NEPA clearance or a final NEPA decision regarding the project.

Prohibited actions include:
The Fox Acres Campus Proposed Project

This restriction does not preclude you from:
Carey Elementary School and High School project
Bellevue Elementary School project

Hailey Elementary School project

If you move forward with activities that are not authorized for federal funding by the DOE Contracting Officer in advance of the final NEPA decision, you are doing so at risk of not receiving federal funding and such costs may not be recognized as allowable cost share.

Insert the following language in the award:

You are required to:
The Fox Acres Proposed Project is still conditioned until the project proponent submits detailed project information: the water rights associated with the production well, the underground injection control permit for the proposed injection well, clear scope of work, the engineering documents, an aerial image with the locations of the wells plotted, and the system's size/requirements.

For these reasons DOE cannot make a NEPA determination for the proposed Fox Acres project. DOE requires the project proponent to create a new EF-1 for the Fox Acres project once all the information is available and ready for NEPA review.

Conditions of Approval (Based off IDWR UIC Permit):

1. This injection well is administered under IDAPA 37.03.03, Rules and Regulations for the Construction and Use of Injection Wells, and IDAPA 37.03.09, Well Construction Standards & Rules.
2. The facility owner and operator bear sole responsibility to mitigate for harm or degradation resulting from the injection activities authorized in the Idaho Injection Well Permit.
3. Violating the water quality standards stated in IDAPA 37.03.03.050, degrading the quality of the groundwater, or impacting a beneficial use of the groundwater resource through the use of this injection well is prohibited and is cause for cancellation of the Idaho Injection Well Permit.
4. In the event that existing or future points of diversion for beneficial use are suspected of being contaminated, as defined by IDAPA 37.03.03.010.57, by the permitee's injection activities, injection activities at this well shall cease immediately.
5. Burden of proof that injection activities at this well are not contaminating existing or future points of diversion is entirely the responsibility of the facility owner and operator.
6. Approval of the Idaho Injection Well Permit does not authorize diversion or beneficial use of water. The permit is not a Water Right nor does approval of this permit guarantee the approval of any Water Right Application being sought for this well.
7. If use of this injection well at any injection rate is desired after the expiration date of The Idaho Injection Well Permit permit, the Idaho Injection Well Permit must be renewed. If at any time use of this injection well is not desired, the owner/operator must contact the IDWR UIC Program to obtain approval prior to decommissioning.
8. The system shall be closed to the surface to prevent contamination of the injectate. A protected air vent may be installed if needed, and a sampling port is required.
9. Discharge water from the heat exchange into the well is recommended to be delivered via a drop pipe that terminates below the static water level in the well. Seasonal fluctuations in groundwater levels should be considered when determining the depth of the drop pipe to insure that the outflow end is submerged at all times. A pitless adaptor should be used to create a watertight seal between the drop pipe and conductance pipe delivering water to the well to prevent contamination of the discharge water.
10. The temperature of injected water shall be maintained below 85° F. If the injectate temperature exceeds 85° F, the Idaho Department of Water Resources shall be notified within 48-hours of the increased injectate temperature.

This project shall be administered in accordance with Idaho law and applicable rules of the Idaho Department of Water Resources.

Note to Specialist :

This EF-2A was completed by John Jediny

SIGNATURE OF THIS MEMORANDUM CONSTITUTES A RECORD OF THIS DECISION.

NEPA Compliance Officer Signature: _____ Date: 9/20/10

NEPA Compliance Officer

FIELD OFFICE MANAGER DETERMINATION

☐ Field Office Manager review required

NCO REQUESTS THE FIELD OFFICE MANAGER REVIEW FOR THE FOLLOWING REASON:

☐ Proposed action fits within a categorical exclusion but involves a high profile or controversial issue that warrants Field Office Manager's attention.
☐ Proposed action falls within an EA or EIS category and therefore requires Field Office Manager's review and determination.

BASED ON MY REVIEW I CONCUR WITH THE DETERMINATION OF THE NCO :

Field Office Manager's Signature: _____ Date: _____

Field Office Manager