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Public Meeting Minutes, March 15, 2018
50% Remedial Design, Water Distribution System

Project Title:	Nemo Work Center CERCLA Support
Project Site:	Rocky Mountain Region - USFS
Contract Number:	GS-10F-026BA
Delivery Order Number:	AG-82X9-D-17-0015
Applied Intellect Project Manager:	Jeff Hart
USFS Contracting Officer:	Marty Martinez
USFS Contracting Officer's Representative:	Kurt Muenchow
Contract Period of Performance:	March 27, 2017 through December 28, 2022
Reporting Period:	June 29, 2018

Meeting Location, Time and Date: The Public Meeting was held at the Nemo Community Hall at 6:30 pm on Thursday, March 15. Eight members of the community attended. A copy of the sign-in sheet is attached.

Meeting Attendees: USFS Attendees included Ralph Adam, Brian Beam, and Tony Balistreri from the Black Hills National Forest, and USFS contractors, John DeAngelis (Applied Intellect), and Al Berreth (TriHydro). The Sign-in Sheet of Nemo Public Attendees is attached.

Purpose: The purpose of the meeting was to provide the community an opportunity to review the 50% remedial design, which includes upgrades and improvements to the water barn storage and pumping facility and apparatus, and the water distribution piping system. Copies of the 50% plan view water distribution network were provided for viewing, and an open forum was provided for discussion, questions, and comments regarding the design and proposed construction.

Comments and Questions:

As indicated above comments and questions were requested under an open forum format, and therefore the following notes and comments do not identify specific commenters:

1. Why are the main lines 3-inch instead of 6-inch? didn't anyone do a cost evaluation to show that it might have not cost much more to install 6-inch and then for future you could have included fire protection?
   USFS Response: This project is funded to provide potable water to the affected Nemo community members as described in the Comprehensive Environmental Response, Compensation and Liability Act (CERCLA) Record of Decision (ROD) (USFS 2016). These funds cannot be used to provide fire protection. However, based on a cost-benefits analysis, the USFS has upgraded the main lines to 4-inch. See the Comment 6, General Response, below for more details.

2. Was a cost comparison conducted to evaluate using Polyvinyl Chloride (PVC) pipe systems rather than High-Density Polyethylene (HDPE)?
   USFS Response: The US Forest Service uses HDPE in many of their campground settings and it is a durable material. The US Forest Service conducted a cost/benefit assessment between PVC and HDPE, and has determined that HDPE is the proper material for this system.

3. What About Future Residential Expansion and Fire Protection?
   USFS Response: See the response to Comment 1, above. The system is not funded to accommodate unknown future expansion of the residential community.

4. Are you still using the same tanks and wells?
   USFS Response Yes. The USFS will continue to use the same 10,000-gallon capacity storage tanks, although there will be many other upgrades to the system. In addition, the same two supply wells will be used to supply potable water to the system.

5. Can the USFS allow a water connection to the cemetery to water the grass?
   USFS Response: This project is funded to providing potable water to the affected Nemo community members as described in the Comprehensive Environmental Response, Compensation and Liability Act (CERCLA) Record of Decision (ROD) (USFS 2016). These funds cannot be used to provide cemetery irrigation.

General Response:

6. The CERLCA Record of Decision (ROD) for the Nemo Work Center, December 2016, description of the selected remedy states: "Potable water from RW-8 and RW-21 supply the *remaining affected properties* including: the Hood residence (formerly Cooper), the Keller residence (formerly Krahn), the Lattin residence (formerly Langley), two Scott residences (formerly Troxell), the USFS onsite residence (formerly Spleies), and the Wolf residence (formerly Adams), the Church, the Community Center, the Nemo Work Center, the Post Office/Fire Department, the Schoolhouse, and the USFS bunkhouse. The *response action includes continuing to provide the affected property owners* with potable water by upgrading and maintaining the USFS' permanent water supply system and implementing LUCs/ICs to protect the public health and welfare." The CERCLA response action cannot include fire suppression, irrigation, or any other requirements not related to the project authorization.

Remaining Meeting Questions and Discussion

The remaining questions (7 through 11) were answered during the meeting by USFS supported by the Applied Intellect team, or can be reviewed on the Nemo Work Center Administrative Record http://www.nemoadministrativerecord.com/

7. Is the (EDB) plume stable?
   USFS Response: The CERLCA ROD – December 2016 for the Nemo Work Center (http://www.nemoadministrativerecord.com/) states that: "the maximum concentrations of EDB in the groundwater are found in the general vicinity of the USFS drinking water treatment and storage facility, known as the Water Barn. The plume extends to the north, east, west, and

south of this area and appears to be bounded by distinct features of geology and hydrology. The most contaminated areas are believed to be bordered on the east by the taconite formation, Boxelder Creek to the north, the valley floor hydraulic divide to the west, and Nemo Road to the southeast. The approximate area of the projected plume is 5.9 acres" (shown on Figure 2-3 of the ROD).

8. Is the ethylene dibromide (EDB) plume being monitored?
   USFS Response: Monitoring of select wells continued in 2017 and is scheduled annually thereafter at this time. The results of the most recent monitoring event in 2017 are posted on the administrative website (see link above).

9. What kind of interruptions to our service can we expect?
   USFS Response: The 50% specifications currently provide that "the construction contractor will be responsible for a temporary water plan" in the construction contract that will be managed by the USFS. This contract may allow the contractor "to interrupt water service for up to 4 hours, but water service must be restored to residents at the end of each working day. Also 48-hour notice will be provided for disruptions of over four hours. Disruption of water service to adjacent properties shall be kept to a minimum". The temporary water plan must be submitted and approved by the USFS Contracting Officer for approval.

10. What is the anticipated construction schedule?
    USFS Response: See response to question 11.

11. Will the construction occur during the rally (August 3-12)?
    USFS Response: Construction schedule will seek to minimize impacts around the time of the rally and are scheduled to begin after the rally.

Follow-up Written Comments/Questions

Note: The following additional comments and questions were received by USFS on March 30, 2018 in a letter from a Nemo, SD resident. USFS responses follow each comment.

Comments:

1. If the 10 State Standards are required for design of the proposed work, why weren't they used for design and construction of the original water system and the replacement of the water line for the Post Office and buildings and residences across the highway completed a few years ago?
   USFS Response: The original, temporary water system constructed in 1997 was part of the USFS' time-critical response to discovery of EDB in Nemo groundwater impacting certain potable water wells. This initial response (begun in 1996) focused on replacing the potable water that was no longer available to affected residents and began with provision of bottled water. This was quickly-followed by the installation of the temporary water system. This initial water system met all applicable and appropriate standards at the time and was not intended to remain in-place as a permanent system. Instead, it was constructed in an attempt to quickly-eliminate use of contaminated water and replace it with clean, potable water instead. As the project continued to proceed, this temporary system was variously upgraded and maintained to ensure that Nemo residents were not exposed to EDB from groundwater. The USFS has always known that the system was intended to be temporary and worked to operate and maintain this interim system as efficiently and cost-effectively as possible while working toward a remedy at

the site.

2. Per Tony Balistreri at the meeting, the source wells produce 16 gpm and 8 gpm. 10 State Standards state that "the source capacity shall equal or exceed the design maximum day demand with the largest producing well out of service". Will 8 gpm meet the current system demands/future maximum day demand? Has this been considered and if not, will it be? Ensuring that the well production meets the needs of the community is probably more important than upgrading the existing distribution system. Will there be a moratorium for new connections? Will there be water use restrictions?
   USFS Response: The Interim Record of Decision (iRoD) that authorizes this work establishes design requirements for the system (at pp. 34 & 35). These design requirements, along with the recommended 10-State Standards form the design envelope for the system design. Coupled with the system storage capacity, the smaller, 8 gpm well exceeds the 6.9 gpm maximum daily demand for the system. As indicated in the iRoD, this remedy is limited to replacing the access to potable water due to EDB contamination in an affected groundwater well – it does not anticipate future demand. This matter has been studied and was considered in the Remedial Investigation and Feasibility Study that revealed the groundwater contamination appears to be stable and unlikely to affect wells that have not already been impacted by EDB. The Nemo water system is not a publicly-owned, community water utility, but is a remedy to ensure residents with EDB-contaminated groundwater wells have a reliable source of clean, potable water. As such, the system design is limited to affected properties. Water use restrictions are not contemplated based on the (standard design) parameters used for the system (iRoD at pp. 34 & 35).

3. The water line for the Post Office and buildings and residences across the highway were replaced a few years ago. Why replace them again?
   USFS Response: The USFS intends to build a permanent, sustainable potable water supply system that minimizes service interruptions and operations and maintenance costs. The final design will keep the existing 1.5-inch HDPE water line extending from Nemo Road to the Post Office, but will upgrade each service connection with new curb stops and water meters.

4. A couple of water works suppliers in Rapid City were contacted. One does not carry 3" HDPE and would not even provide a price for it and the other one does not stock it and said that they would have a 14 week lead time for special orders if it is available. They said that 6" bell and gasket PVC pipe of comparable pressure would be approximately $3/ft higher than the proposed 3" HDPE. With that in mind, why would material that is not locally available be required for this project? **If the project requires 2000 If of water main, the cost for upgrading to 6" PVC** pipe would be approximately $6000 and would have the system meeting the 10 State Standards well into the future.
   USFS Response: The system authorization and design parameters are to replace potable water services lost due to the contamination of groundwater with EDB. There is no justification for the USFS to expend response funding to provide capability that greatly-exceeds these requirements. Additionally, while the USFS seeks first to support local businesses, the USFS is obligated to balance this priority with contracting requirements that seek to ensure cost-effective and high-quality materials and workmanship in the larger, competitive business environment. The USFS recognizes the Nemo community desire to enhance local fire protection capabilities and will continue to cooperate with Nemo to accomplish this within the constraints of applicable authorities and funding. This project has neither the authority nor the funding to design for and provide fire-flow capability via the limited, potable water system intended to replace multiple residents' groundwater wells. In fact, this design provides a greater quantity of

free, known-quality water to each impacted resident. Absent the EDB contamination of impacted residents' groundwater wells, the properties served will have lower-costs and better water quality than if each were to have to continue to maintain personal groundwater wells and attendant potable water systems in each location.

5. At the meeting, Tony Balistreri stated that one of the reasons that the water lines are to be replaced is because substandard or inferior materials were used in the construction of the original system, in particular hose clamps. If this is the case, why aren't the service lines being replaced? The service lines probably have more hose clamps than the rest of the system. What about the water transmission line from the wells? Will there be qualified inspectors on-site during construction to ensure that this does not happen again? If not, what will prevent this from happening again?
   USFS Response: Service lines from the main to each home remain the responsibility of the property owner, the same as would be the case with service from a residential well or for a public, community water system. This industry standard is reflected in the Nemo water system design and is anticipated to cost residents less than maintaining a well and attendant water system at each property. The USFS intends to operate and maintain the USFS' Nemo water system while resident's potable water supply wells are unavailable due to EDB contamination exceeding the applicable drinking water standards. There are no service fees, system charges, or obligation to residents that are served by this system. If a residential service line on private property fails or requires replacement, the resident will be responsible to accomplish that work in order to continue to keep taking advantage of the free, high-quality water being provided by the USFS' water system. In addition to the Black Hills National Forest Water & Wastewater Engineer, the USFS intends to hire an independent, qualified inspector to monitor and inspect construction and testing.

6. Per Tony Balistreri, the location of the Wolf service line is shown in the wrong location.
   USFS Response: The Wolf service line location has been corrected on the final drawings.

7. With the upgraded pressure system, if the pressure system is down, will the distribution system have gravity pressure like the current system? A simple control system should be considered.
   USFS Response: Gravity will continue to provide water pressure in the new water distribution system. Various control systems are being contemplated and simplicity of system operation is a consideration.

8. Will flush hydrants be installed in the lower end of the distribution system for flushing sediment and flushing the lines if additional disinfection is required in the event of a positive bacti?
   USFS Response: Flushing hydrants are included in the design at the lower end of the water distribution system.

9. Will isolation valves be installed?
   USFS Response: Isolation valves are included in the design for the water distribution system.

10. The proposed plans show water meters for each connection. It was stated that the water meters will be installed so that water balance calculations can be completed to determine if there are any water leaks. Will the water meters be read and water balance calculations completed on a routine basis? Will the meters be manually read? Equipment and software for touch and remote reading is expensive. The cost and installation for meter boxes and meter assemblies for 12-13 connections is expensive. With meter boxes, additional pipe connections are required which increases leak potential. The meter boxes must be installed at depths that prevent freezing

along with adequate insulation above the meter assembly. In addition to these added costs and potential problems are the increased costs for operation and maintenance of the meters. The meters require scheduled maintenance and calibration to be accurate. Will calibration equipment be purchased? If the meter readings are only going to be checked and a water balance completed if there is a suspected leak, the meters are probably not worth the added costs to the project.
USFS Response: The meter design details are included in the 90 and 100 percent designs. The Contract Operations and Maintenance (O&M) Plan Documentation will address metering instrumentation, calibration, and frequency of measurement.

11. Will the plans be stamped by a P.E.?
USFS Response: Yes, final plans will be stamped by a PE.

12. Will an O&M manual be completed with standard operating procedures to ensure proper maintenance, testing, meter reading, valve exercising, etc. This will also **make it easier for future operators to operate this system?**
USFS Response: Yes, the USFS already has a contract in-place to create the systems operation and maintenance documentation.

13. Will there be permanent utility right-of-ways/easements for the existing and proposed water facilities to provide access for operation, maintenance, and repair of the facilities in the future? Recorded right-of-ways/easements would prevent conflicts with other utilities that may be proposed in the future.
USFS Response: No permanent utility right-of-ways/easements are planned. The main system is: 1) primarily on USFS managed lands, 2) has an existing ROW, or 3) will be managed with temporary construction access agreements.

14. Will "as-builts" of the existing and proposed water facilities be part of this project? As-builts will provide a record of where the facilities are installed making them easier to locate in the future.
USFS Response: "As-Builts" will be produced as part of this project and will be included in the system O&M documentation.

USDA Forest Service
Black Hills National Forest

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MEETING SIGN-IN

50% Design Water Distribution System Improvements
Nemo, South Dakota

Public Meeting
~~July 13, 2017~~ March 15, 2018
Nemo Community Center

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