

NEPA REVIEW SCREENING FORM
for Actions Included in CXs

Document ID #:
DOE/CX-00161

I. Project Title:

Activity-Specific Categorical Exclusion for Shallow Hand-Shovel and Hand-Auger Cultural Resource Investigations along the Proposed Natural Gas Pipeline Route

II. Describe the proposed action, including: location, time period over which proposed action will occur, project dimension (e.g., acres displaced/disturbed, excavation length/depth), area/location/number of buildings. Attach maps and drawings, as applicable. Describe existing environmental conditions and potential for environmental impacts from the proposed action. If the proposed action is not a project, describe the action or plan.

The U. S. Department of Energy (DOE) is in the process of preparing an Environmental Impact statement (EIS) for the acquisition of a natural gas utility service. DOE is proposing to enter into a contract with Cascade Natural Gas Corporation (Cascade), a local natural gas utility supplier, to provide natural gas to support facilities in the Hanford Site's Central Plateau located in the center of the site. This EIS will evaluate potential environmental effects of constructing, operating, and maintaining an approximately 48-kilometer (30-mile) pipeline from an existing gas transmission line near the Tri-Cities Airport in Pasco, Washington, to the 200 East Area on the Hanford Site. An Engineering Feasibility Study (EFS) prepared by Cascade was issued in November 2013 and is being updated to address changes and new information. The EFS is a supporting technical and engineering document which will be independently evaluated in the draft EIS (DOE/EIS-0467). Additional site characterization for ecological and cultural resources is needed to support the EFS and draft EIS revisions for portions of the Alder Road, Esquatzel, and Selph Landing natural gas pipeline alternative routes that are located on DOE-controlled land in Benton County (Attachment 1).

This National Environmental Policy Act (NEPA) Review Screening Form (NRSF) addresses the additional site characterization needed for ecological and cultural resources along the proposed pipeline routes using shallow hand-shovel and hand-auger investigations. The field work is planned for initiation during the second-half of calendar year 2017 and would be completed over several months. Approximately forty (40) shallow hand-shovel investigations (roughly 12-inches square by 36-inches deep) would be performed for the ecological and cultural resources investigation (Attachment 2). Depending on the soil stratigraphy, a hand-auger may be used. The hand-auger would be approximately 3-inches in diameter and would reach a depth of 6-feet below grade. Cultural resources characterization and additional ecological surveys would involve walking surveys along the pipeline alternative routes.

Mission Support Alliance (MSA) Environmental Compliance performed walking surveys within the area of the proposed action on April 24, 2017 (ECR-2017-623) and August 15, 2017 (ECR-2017-309). Numerous native and nonnative plant and animal species were observed. Some areas are primarily graveled surfaces devoid of significant vegetation and no wildlife was observed. A historic Townsend's ground squirrel colony was observed; however, ground squirrel activity was not observed. The Townsend's ground squirrel is listed as a "State Candidate" species by the Washington Department of Fish and Wildlife and is a Level 3 resource in accordance with the Hanford Site Biological Resources Management Plan (DOE/RL-96-32, Revision 2). The preferred management action for Level 3 biological resources is to avoid or minimize potential impacts; as such, vehicles would remain on established roadways. If Townsend's ground squirrels are detected, then MSA Environmental Compliance would be contacted for recommendations.

The Washington State listed noxious weed "rush skeletonweed" was noted within the area of the proposed action. To avoid inadvertent spreading of this noxious weed, hand-shovel and hand-auger testing would be conducted using best management practices to minimize the potential for transporting any plant material to or from the site.

No plant or animal species protected under the Endangered Species Act, candidates for

NEPA REVIEW SCREENING FORM
for Actions Included in CXs (Continued)

Document ID #:
DOE/CX-00161

II. Describe the proposed action, including: location, time period over which proposed action will occur, project dimension (e.g., acres displaced/disturbed, excavation length/depth), area/location/number of buildings. Attach maps and drawings, as applicable. Describe existing environmental conditions and potential for environmental impacts from the proposed action. If the proposed action is not a project, describe the action or plan.

such protection, or species listed by the Washington State government as threatened or endangered were observed in the vicinity of the proposed action. Personnel working on the proposed action would watch for nesting birds. If any nesting birds (if not a nest, a pair of birds of the same species or a single bird that will not leave the area when disturbed) are encountered or suspected, or bird defensive behaviors (flying at workers, refusal to leave the area, strident vocalizations) are observed within the area of the proposed action, then MSA Environmental Compliance would be contacted for recommendations. No adverse impacts are anticipated from the proposed action if these recommendations are followed (Attachments 3 and 4).

The proposed hand-shovel and hand-auger testing would be completed in support of the "Updated Area of Potential Effect" (HCRC#2012-600-031a, dated July 14, 2017). Because this sub-surface testing would be completed in support of an ongoing cultural resources review, no additional National Historic Preservation Act (NHPA) Section 106 actions are required prior to the cultural resource sub-surface testing (Attachments 3 and 4).

The Council on Environmental Quality (CEQ) Regulations (40 CFR 1500-1508) and DOE's NEPA Implementing Procedures (10 CFR 1021) require that DOE shall determine whether any proposed action requires preparation of an Environmental Impact Statement (EIS), an Environmental Assessment (EA), or is categorically excluded from preparation of either an EIS or EA (10 CFR 1021.300). Furthermore, in accordance with 10 CFR 1021.410(3)(e), categorical exclusion determinations shall be documented and made available to the public by posting online, generally within two weeks of the determination.

DOE NEPA Implementing Procedures found at 10 CFR 1021, Subpart D, Appendix B, B3.1, contains provisions for categorically excluding from further NEPA review classes of actions involving "Site Characterization and Environmental Monitoring." Such actions would be designed in conformance with applicable requirements and use best management practices to limit the potential effects of any resultant ground disturbance. Covered activities would include, but are not limited to:

(a) Geological, geophysical (such as gravity, magnetic, electrical, seismic, radar, and temperature gradient), geochemical, and engineering surveys and mapping, and the establishment of survey marks.

(i) Sampling of flora or fauna.

(j) Archaeological, historic, and cultural resource identification in compliance with 36 CFR part 800 and 43 CFR part 7.

This NRSF is based on consideration of the proposed action described herein, MSA's cultural and ecological resources clearance reviews, and DOE's NEPA Implementing Procedures (10 CFR 1021). DOE finds the proposed action fits within a class of actions listed in 10 CFR 1021, Subpart D, Appendix B that do not individually or cumulatively have a significant effect on the human environment (i.e., categorical exclusions), including consideration of conditions that are integral elements; there are no extraordinary circumstances related to the proposal that may affect the significance of the environmental effects of the proposal; and the proposal has not been segmented to meet the definition of a categorical exclusion (10 CFR 1021.410). Furthermore, this NRSF satisfies the requirement to document application of 10 CFR 1021, Subpart D, Appendix B, Categorical Exclusion B3.1 to DOE's proposed action and would facilitate public availability of the NEPA determination by posting online.

NEPA REVIEW SCREENING FORM
for Actions Included in CXs (Continued)

Document ID #:
DOE/CX-00161

II. Describe the proposed action, including: location, time period over which proposed action will occur, project dimension (e.g., acres displaced/disturbed, excavation length/depth), area/location/number of buildings. Attach maps and drawings, as applicable. Describe existing environmental conditions and potential for environmental impacts from the proposed action. If the proposed action is not a project, describe the action or plan.

This NRSF documents application of an Activity-Specific Categorical Exclusion (ASCX) to a non-routine, non-recurring proposed action based on the provisions of 10 CFR 1021, Subpart D, Appendix B, Categorical Exclusion B3.1. This ASCX only applies to the proposed action discussed herein. Any changes to the proposed action or future requests for site characterization and monitoring activities would be evaluated on a case-by-case basis by the NEPA Compliance Officer.

III. Applicable Reviews (attach to NRSF):

Biological Review Report #: ECR-2017-623, ECR-2017-309

Cultural Review Report #: HCRC#2012-600-031a

Additional Attachments:

ATTACHMENT 1 - Preliminary Natural Gas Pipeline Route Alternatives, DOE Hanford Site Area, Cultural Resource Survey Area.

ATTACHMENT 2 - Map Showing Approximate Locations of Proposed Cultural Resource Characterization Hand-Shovel Sites near Hanford's 300 Area.

ATTACHMENT 3 - Ecological and Cultural Clearance for NEPA Natural Gas Pipeline EIS Support Project in the 600 Area, Hanford Site, Benton County, Washington (ECR-2017-623).

ATTACHMENT 4 - Ecological and Cultural Clearance for NEPA Natural Gas Pipeline EIS Support Project - Additional Locations in the 300 Area, Hanford Site, Benton County, Washington (ECR-2017-309).

IV. Existing Documentation:

Are the impacts of the proposed action evaluated in a previous EA, EIS, or CERCLA document? Yes No

If "YES", use Site Form A-6006-948, *Actions Adequately Evaluated in NEPA or CERCLA Document*

V. Categorical Exclusion:

Does the proposed action fall within a category of actions that is listed in Appendixes A or B to Subpart D of 10 CFR 1021? If extraordinary circumstances or integral elements would preclude the use of a CX, check "No". Yes No

Are there extraordinary circumstances related to the proposal that may affect the significance of the environmental effects of the proposal? Yes No

Is the proposal connected to other actions with potentially significant impacts or result in cumulatively significant impacts (not precluded by 40 CFR 1506.1 or 10 CFR 1021.211)? Yes No

List CX to be applied and complete Categorical Exclusion Integral Elements (where an action might fit within multiple CXs, use the CX that best fits the proposed action):
10 CFR 1021, Subpart D, Appendix B, Categorical Exclusion B3.1, "Site Characterization and Environmental Monitoring"

**NEPA REVIEW SCREENING FORM
for Actions Included in CXs (Continued)**

Document ID #:
DOE/CX-00161

Categorical Exclusion Integral Elements:

Would the proposed action threaten a violation of applicable statutory, regulatory, or permit requirements for environmental, safety, or health, including DOE and/or Executive Orders?	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No
Would the proposed action require siting, construction, or major expansion of waste storage, disposal, recovery, or treatment facilities?	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No
Would the proposed action disturb hazardous substances, pollutants, contaminants, or CERCLA-excluded petroleum and natural gas products that pre-exist in the environment such that there would be uncontrolled or unpermitted releases?	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No
Would the proposed action adversely affect environmentally sensitive resources?	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No
Would the proposed action involve genetically engineered organisms, synthetic biology, governmentally designated noxious weeds, or invasive species such that the action is not contained or confined in a manner designed, operated, and conducted in accordance with applicable requirements to prevent unauthorized release into the environment?	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No

If "NO" to all Integral Elements questions above, complete Section VI, and provide NRSF to DOE NCO for review.
If "YES" to any of the Categorical Exclusion Integral Elements questions above, contact DOE NCO for additional NEPA Review.

VI. Approval Signatures:

DOE-RL NEPA Document Manager for NGP-EIS (DOE/EIS-0467)

Douglas H. Chapin, DOE-RL ISD

Name *Print*

[Signature]
Signature

09/11/17
Date

Cognizant Environmental Compliance Officer:

Jerry W. Cammann, MSA

Name *Print*

[Signature]
Signature

9/11/2017
Date

VII. DOE Approval/Determination

DOE NEPA Compliance Officer: Mark D. Silberstein, NCO for NGP-EIS (DOE/EIS-0467)

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 451.1B), the proposed action fits within the specified class of action:

NCO Determination: CX *NCO Recommendation: EA EIS

[Signature]
Signature

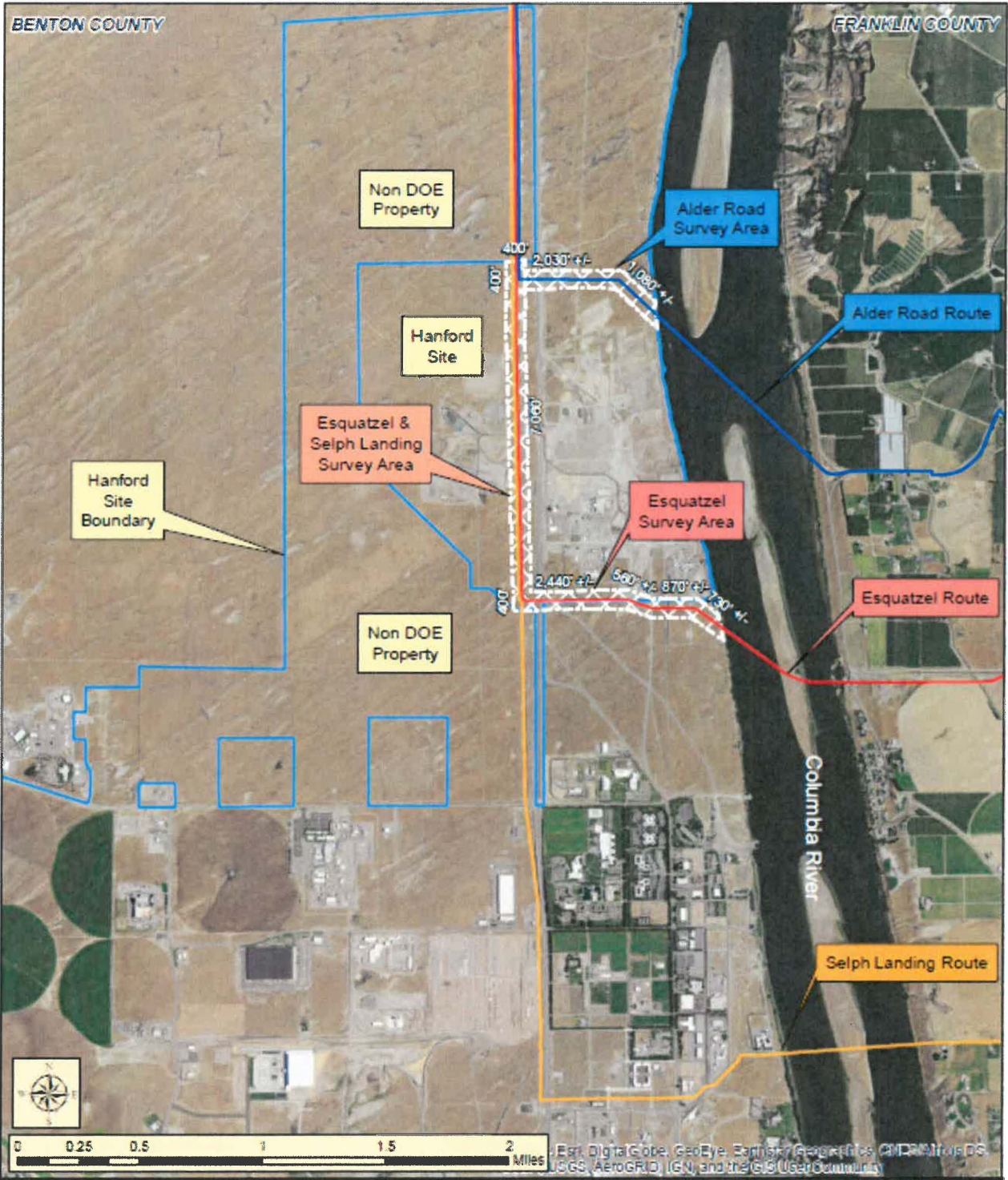
9/11/17
Date

*NRSF A-6006-950 would be completed by responsible contractor

ATTACHMENT 1

**Preliminary Natural Gas Pipeline Route Alternatives, DOE Hanford Site Area, Cultural
Resource Survey Area**

(1 Page)



CASCADE NATURAL GAS CORPORATION
In the Community to Serve

DOE Hanford Natural Gas Pipeline Project
 Richland/Pasco, Washington

Preliminary Natural Gas Pipeline Route Alternatives
 DOE Hanford Site Area
 Cultural Resource Survey Area

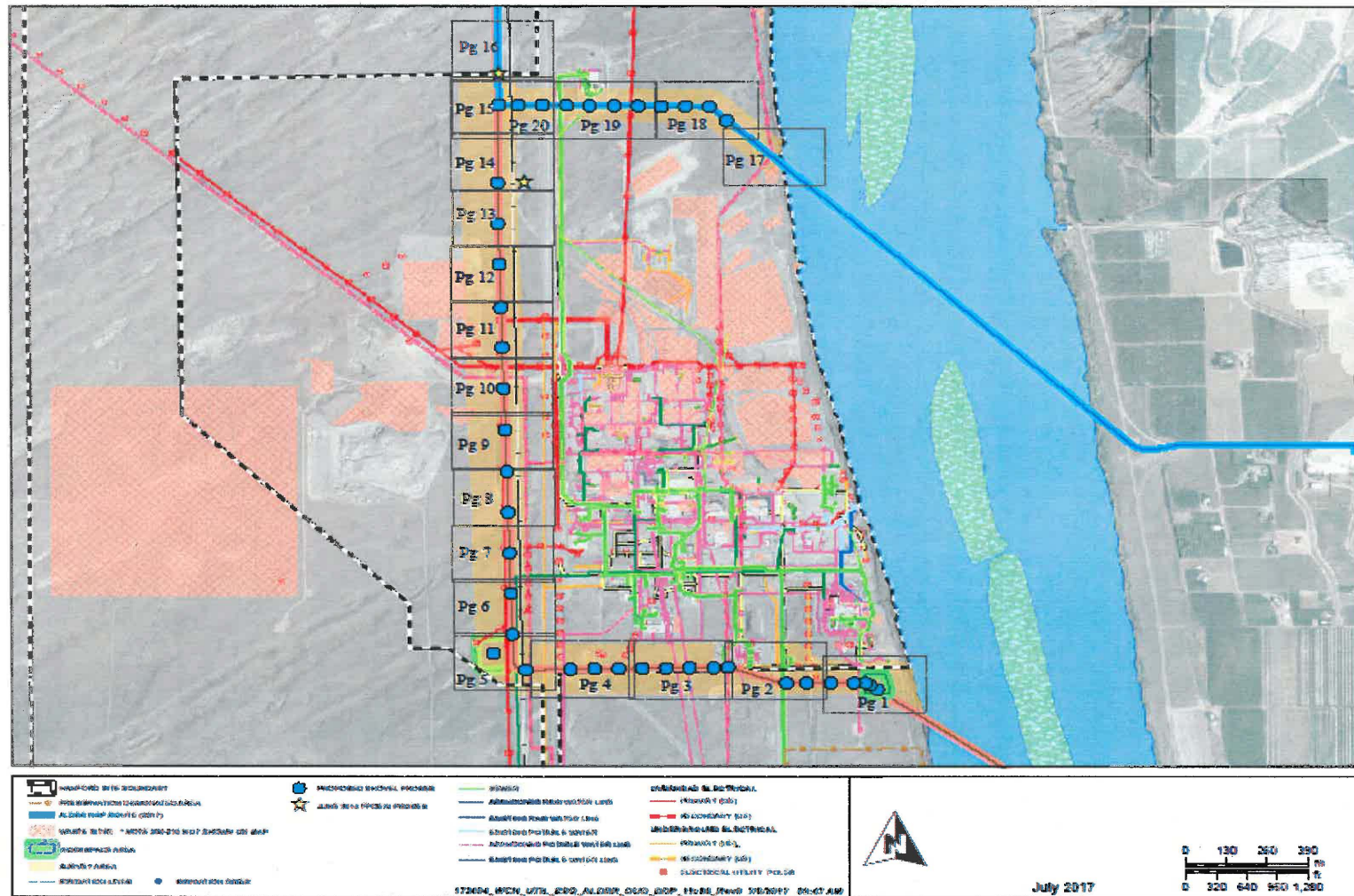
ProSource TECHNOLOGIES

ATTACHMENT 2

**Map Showing Approximate Locations of Proposed Cultural Resource Characterization
Hand-Shovel Sites near Hanford's 300 Area**

(1 Page)

Map Showing Approximate Location of Proposed Cultural Resource Characterization Hand-Shovel Sites near Hanford's 300 Area



ATTACHMENT 3

**Ecological and Cultural Clearance for NEPA Natural Gas Pipeline EIS Support Project in
the 600 Area, Hanford Site, Benton County, Washington (ECR-2017-623)**

(7 Pages)

Mission Support Alliance
Post Office Box 650
Richland, Washington 99352



MSA-1701791
REISSUE

September 6, 2017

Greg T. Berlin
Mission Support Alliance
P. O. Box 650
Richland, WA 99352

Dear Mr. Berlin:

ECOLOGICAL AND CULTURAL CLEARANCE FOR NEPA NATURAL GAS
PIPELINE EIS SUPPORT PROJECT IN THE 600 AREA, HANFORD SITE, BENTON
COUNTY, WASHINGTON (ECR-2017-623)

Reference: MSA Service Catalog Request#KSR00000301647, G. T. Berlin, MSA,
dated March 30, 2017.

This letter is being reissued to clarify cultural requirements.

PROJECT DESCRIPTION

The U.S. Department of Energy (DOE) is in the process of preparing an Environmental Impact Statement (EIS) for the acquisition of a natural gas pipeline and natural gas utility service. DOE is proposing to enter into a contract with Cascade Natural Gas Corporation (Cascade), a local natural gas utility supplier, to provide natural gas to support facilities in the Hanford Site's Central Plateau located in the center of the site. The EIS will evaluate potential environmental impacts of constructing, operating, and maintaining an approximately 48 kilometers (30-mile) pipeline (Project) from an existing gas transmission line near the Tri-Cities Airport in Pasco, Washington, to the 200 East Area on the Hanford Site.

As part of the environmental and cultural resources reviews for the proposed pipeline route, the contractor will conduct surface, visual environmental surveys and archaeological subsurface testing survey. The archaeological subsurface testing survey will include excavation of archaeological test units within the area identified on Figure 1. Access to the shovel probe sites will be on foot, all vehicles will park on established roadways or road shoulders, and all excavation will be with hand tools.

This review letter has been prepared solely to evaluate the potential impacts of the archeological test pits used for the subsurface evaluation. Environmental surveys conducted will utilize surface, visual methods and does not include ground disturbing activities.

ECOLOGICAL RESOURCES (ECR-2017-623)

Mission Support Alliance (MSA) Environmental Compliance staff performed a pedestrian survey of the project area on April 24, 2017. The following paragraphs describe the ecological resources observed at each site. Sites are grouped where multiple sites were found within the same vegetation cover type.

S1 - S5: This area is dominated by gray rabbitbrush (*Ericameria nauseosa*) with a cheatgrass (*Bromus tectorum*) understory. Other native species observed in the area include green rabbitbrush (*Chrysothamnus viscidiflorus*), Sandberg's bluegrass (*Poa secunda*), hoary aster (*Machaeranthera canescens*), western tansymustard (*Descurainia pinnata*), and tarweed fiddleneck (*Amsinckia lycopsoides*). Other nonnative species observed include Russian thistle (*Salsola tragus*), Jim Hill's tumbledustard (*Sisymbrium altissimum*), jagged chickweed (*Holosteum umbellatum*), and bulbous bluegrass (*Poa bulbosa*). Wildlife observed in this area included Common Raven (*Corvus corax*), Black-billed Magpie (*Pica pica*), Red-winged Blackbird (*Agelaius phoeniceus*), Osprey (*Pandion haliaetus*), Rock Dove (*Columba livia*), Mourning Dove (*Zenaida macroura*), and Cliff Swallow (*Hirundo pyrrhonota*).

S6 & S7: Native shrubs prevalent in this area include bitterbrush (*Purshia tridentata*), gray rabbitbrush, green rabbitbrush, and snow buckwheat (*Erigonum niveum*) with an understory comprised primarily of nonnative species and dominated by cheatgrass. Other native plants observed include Sandberg's bluegrass, western tansymustard, tarweed fiddleneck, and Douglas' clusterlily (*Brodiaea douglasii*). Other nonnative species found in this area include Russian thistle, storksbill (*Erodium cicutarium*), jagged chickweed, and Jim Hill's tumbledustard. Wildlife observed include Horned Lark (*Eremophila alpestris*) and Western Meadowlark (*Sturnella neglecta*).

S8 - S10: These three sites are within the 300 Area adjacent to the southern fence line and near several mobile offices. The area surrounding the sites are highly disturbed parking, staging, and access roadway areas. The ground cover consists primarily of graveled and cobble surfaces that are devoid of significant vegetation. No wildlife was observed.

S11 - S16: These six sites are located near the southern fence of the 300 Area on the East side of Route 4S parallel to an elevated telecom line. The area is dominated by bitterbrush, gray rabbitbrush, and cheatgrass. Other native species include small patches of needle-and-thread grass (*Hesperostipa comata*) and scattered green rabbitbrush, snow buckwheat, Sandberg's bluegrass, hoary aster, western tansymustard, and upland larkspur (*Delphinium nuttalianum*). Other nonnative species present include Russian thistle, Jim Hill's tumbledustard, bulbous bluegrass, and jagged chickweed. Wildlife observed in this area include White-crowned Sparrow (*Zonotrichia leucophrys*), European Starling (*Sturnus vulgaris*), Western Meadowlark, American Robin (*Turdus migratorius*), Black-billed Magpie, and California Quail (*Callipepla californica*). Several dead Great Basin pocket mice (*Perognathus parvus*) were found inside fence posts that were cut off at ground level.

An historic Townsend's ground squirrel (*Urocitellus townsendii*) colony is located ~30 meters North of Site 11. Activity was not observed during the survey. The Townsend's ground squirrel is considered a "State Candidate" by the Washington Department of Fish and Wildlife. The Hanford Site Biological Resource Management Plan (BRMP, DOE/RL-96-32 Rev 2) which is the primary implementation control for managing and protecting natural

resources on the Hanford Site ranks wildlife species and habitats (Levels 0-5) based on the level of concern for each resource. The BRMP ranks the Townsend's ground squirrel as a Level 3 resource. The management goal for Level 3 resources is conservation and the preferred management action is avoidance or minimization. **Project personnel shall be instructed to keep vehicles on established roads and to avoid all disturbance to the historic ground squirrel colony.** If ground squirrels are detected, contact the author of this section for recommendations.

S17: This site is located between Route 4 South and the railroad tracks and the vegetation is dominated by nonnative invasive species such as cheatgrass, Russian thistle, and Jim Hill's tumbledustard. Other nonnative species present include bulbous bluegrass and Washington State listed noxious rush skeletonweed (*Chondrilla juncea*). Scattered native plants at this site include big sagebrush, gray rabbitbrush, Sandberg's bluegrass, tarweed fiddleneck, hoary aster, and needle-and-thread grass. A Long-billed Curlew (*Numenius americanus*) was observed southwest of the site.

S18 - S23: These sites are located east of the railroad tracks that run parallel to Route 4 South and are in an area dominated by cheatgrass and Sandberg's bluegrass. Other native species scattered in this area include snow buckwheat, needle-and-thread grass, and turpentine spring parsley (*Cymopterus terebinthinus*). Other nonnative species prevalent in this area include Jim Hill's tumbledustard and jagged chickweed. Wildlife observed include Long-billed Curlew, Horned Lark, and Western Meadowlark.

S24 & S25: The vegetation surrounding these two sites is dominated by gray rabbitbrush with a cheatgrass and Sandberg's bluegrass understory that includes scattered patches of needle-and-thread grass. Other native species present include bitterbrush, snow buckwheat, and tarweed fiddleneck. Jim Hill's tumbledustard was also prevalent. White-crowned Sparrows and Western Meadowlarks were observed.

S26 & S27: The vegetation in this area is dominated by cheatgrass and Sandberg's bluegrass with intermittent patches of gray rabbitbrush and needle-and-thread grass. Other native species found include turpentine spring parsley, snow buckwheat, tarweed fiddleneck, Douglas' clusterlily, longleaf phlox (*Phlox longifolia*), and western tansymustard. Nonnative species present include bulbous bluegrass, jagged chickweed, and Jim Hill's tumbledustard. Wildlife observed include Western Meadowlark and Horned Lark.

S28 - S30: These sites are located in an area dominated by cheatgrass, Sandberg's bluegrass, and needle-and-thread grass. Scattered native species present include gray rabbitbrush, snow buckwheat, and tarweed fiddleneck. Other nonnative species prevalent include bulbous bluegrass and Jim Hill's tumbledustard. Western Meadowlarks were observed.

The Washington State listed noxious weed rush skeletonweed was noted within the project area. Seeds from these plants can easily be transported among work sites. Therefore, **project staff performing the shovel probe tests should use care to minimize the transport of any plant material to or from the shovel test sites.**

No plant or animal species protected under the Endangered Species Act, candidates for such protection, or species listed by the Washington State government as threatened or endangered were observed in the vicinity of the proposed project site.

There is always the potential for birds to nest within the project area on the ground, on buildings, or equipment. The nesting season in our area is typically from mid-March to mid-July. The active nests (containing eggs or young) of migratory birds are protected by the Migratory Bird Treaty Act (MBTA) of 1918. The MBTA makes it illegal for people to "take" migratory birds, their eggs, feathers, or nests. Take is defined in the MBTA to include by any means or in any manner, any attempt at hunting, pursuing, wounding, killing, possessing, or transporting any migratory bird, nest, egg, or part thereof. **Personnel working on this project must be instructed to watch for nesting birds.** If any nesting birds (if not a nest, a pair of birds of the same species or a single bird that will not leave the area when disturbed) are encountered or suspected, or bird defensive behaviors (flying at workers, refusal to leave area, strident vocalizations) are observed within the project area, contact the author of this section to evaluate the situation.

No adverse impacts are anticipated from the proposed projects if these recommendations are followed. If there are any changes in the scope of these activities that could result in disturbances outside of the description of this review please complete a Service Catalog Request <http://msc.rl.gov/ServiceCatalog/index.cfm> for an additional ecological review and reference the ecological review number above to determine if a follow-up Ecological Resources clearance should be conducted.

This review is valid for one year from the letter date listed above.

Technical questions should be directed to K. J. Cranna at 376-6180.

CULTURAL RESOURCES

The proposed shovel testing will be completed in support of the Cultural Resources Review for Five Proposed Alternatives for the U.S. Department of Energy (DOE) National Environmental Policy Act (NEPA) Natural Gas Pipeline and Natural Gas Utility Service Environmental Impact Statement, Hanford Site, Richland, Washington (HCRC# 2012-600-031a). Because this sub-surface testing will be completed in support of an ongoing cultural resources review, no additional 106 actions are required prior to the cultural resource sub-surface testing.

If there are changes in the scope of activities that could result in disturbances outside of the description of this project or outside the boundary of the project boundary identified on the attached map, contact K. M. Mendez at 376-1013 and submit a new Request for Cultural Resources Review through the MSA Service Catalog for a follow-up Cultural Resources Review and referencing the HCRC number listed above to determine if a follow-up Cultural Resources review should be conducted.

This Cultural Resources Review was written by K. M. Mendez, who meets the Secretary of the Interior's Professional Qualification Standards for Archaeology.

G. T. Berlin
September 6, 2017
Page 5

MSA-1701791 REISSUE
ECR-2017-623

Technical questions should be directed to K. M. Mendez at 376-1013.

Sincerely,



April L. Johnson, Manager
Ecological Monitoring and Compliance

kjc:kmm

Attachment(s) 1

Cc: ^MSA Correspondence Distribution
^MSA Cultural Resources Program Admin Record
A. P. Fergusson, MSA
K. A. George, MSA
A. L. Johnson, MSA
K. M. Mendez, MSA
K. J. Cranna, MSA

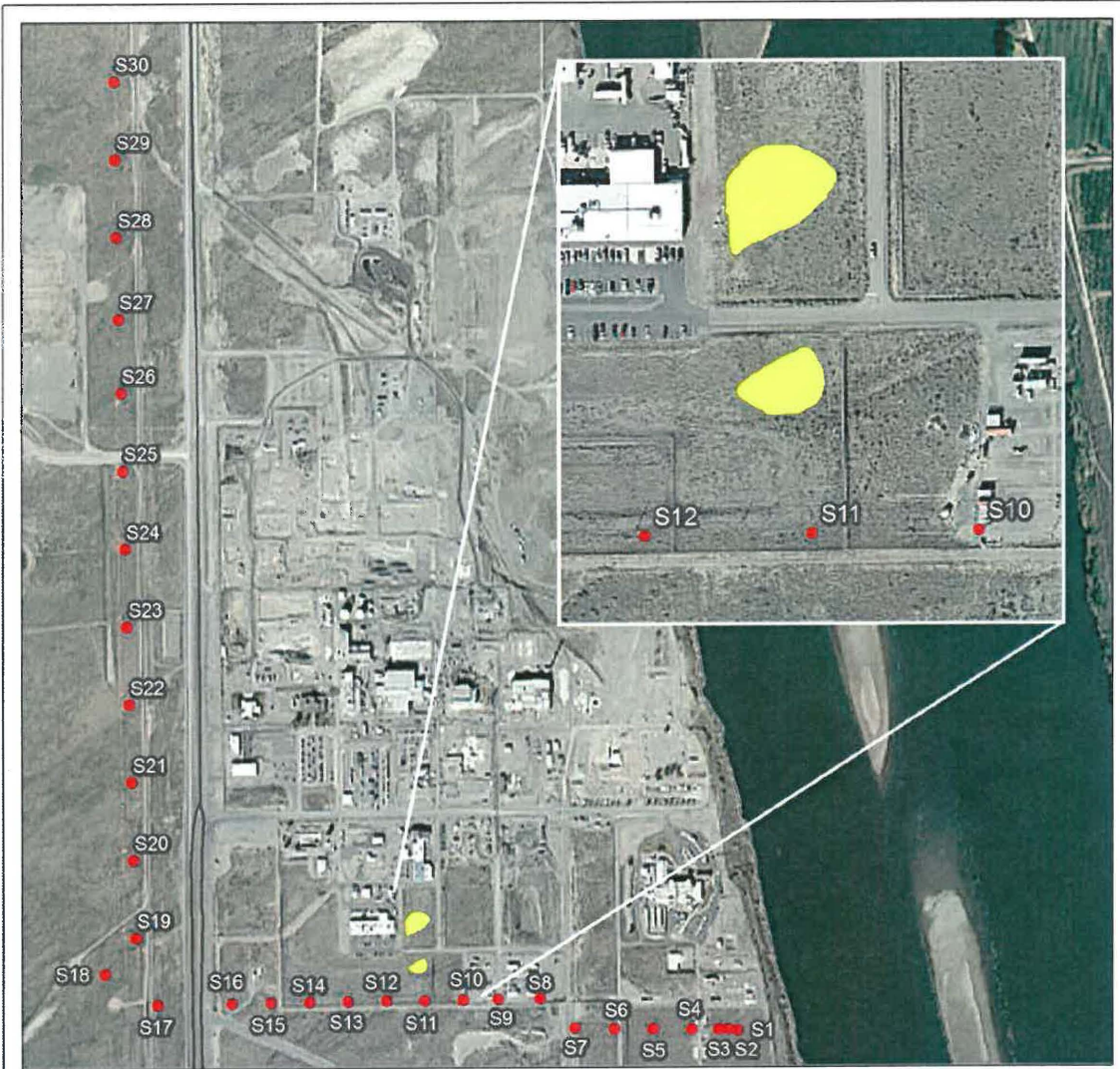
MSA-1701791
REISSUE

ATTACHMENT

September 6, 2017

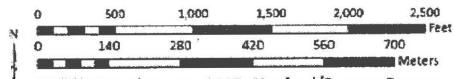
PROJECT LOCATION FOR THE NEPA NATURAL GAS PIPELINE EIS SUPPORT
PROJECT IN THE 600 AREA, HANFORD SITE, BENTON COUNTY, WASHINGTON
(ECR-2017-623)

Consisting of 2 pages,
Including this cover page



Legend

- Project Area
- Ground Squirrel Colony



NOTES: Aerial Image, 2012, Hanford/Benton County.

Natural Gas Pipeline Cultural Resource Shovel Tests
 ECR-2017-623 | Gas Pipeline
 Hanford Site, Benton County, WA

ATTACHMENT 4

**Ecological and Cultural Clearance for NEPA Natural Gas Pipeline EIS Support Project –
Additional Locations in the 300 Area, Hanford Site, Benton County, Washington
(ECR-2017-309)**

(14 Pages)

Mission Support Alliance
Post Office Box 650
Richland, Washington 99352



MSA-1703930
REISSUE

September 6, 2017

Greg T. Berlin
Mission Support Alliance
P. O. Box 650
Richland, WA 99352

Dear Mr. Berlin:

ECOLOGICAL AND CULTURAL CLEARANCE FOR NEPA NATURAL GAS
PIPELINE EIS SUPPORT PROJECT – ADDITIONAL LOCATIONS IN THE 300 AREA,
HANFORD SITE, BENTON COUNTY, WASHINGTON (ECR-2017-309)

Reference: MSA Service Catalog Request#KSR00000323768, G. T. Berlin, MSA,
dated July 24, 2017.

This letter is being reissued to clarify cultural requirements.

PROJECT DESCRIPTION

The U.S. Department of Energy (DOE) is in the process of preparing an Environmental Impact Statement (EIS) for the acquisition of a natural gas pipeline and natural gas utility service. DOE is proposing to enter into a contract with Cascade Natural Gas Corporation (Cascade), a local natural gas utility supplier, to provide natural gas to support facilities in the Hanford Site's Central Plateau located in the center of the site. The EIS will evaluate potential environmental impacts of constructing, operating, and maintaining an approximately 48 kilometers (30-mile) pipeline (Project) from an existing gas transmission line near the Tri-Cities Airport in Pasco, Washington, to the 200 East Area on the Hanford Site.

As part of the environmental and cultural resources reviews for the proposed pipeline route, the contractor will conduct surface, visual environmental surveys and archaeological subsurface testing survey. The archaeological subsurface testing survey will include excavation of archaeological test units within the area identified on Attachment 1 Figure 1. Access to the shovel probe sites will be on foot, all vehicles will park on established roadways or road shoulders, and all excavation will be with hand tools.

This review letter has been prepared solely to evaluate the potential impacts of the archeological test pits used for the subsurface evaluation. Environmental surveys conducted will utilize surface, visual methods and does not include ground disturbing activities.

ECOLOGICAL RESOURCES (ECR-2017-309)

This ecological resources review is an evaluation of the archaeological subsurface testing survey in the 300 Area for an alternative route for the natural gas utility service. An evaluation of the archaeological subsurface testing survey for the original route(s) in the 300 Area were performed in April 2017 ([MSA-1701791 REISSUE/ECR-2017-623](#)) and are included in Attachment 2.

Mission Support Alliance (MSA) Environmental Compliance staff performed a pedestrian survey of project area on August 15, 2017. The following paragraphs describe the ecological resources observed at each excavation site. Sites are grouped below if the observations at multiple sites were consistent.

AS1: This site is dominated by a climax stand of big sagebrush (*Artemisia tridentata*) with an understory comprised of cheatgrass (*Bromus tectorum*), Sandberg's bluegrass (*Poa secunda*), and bluebunch wheatgrass (*Pseudoroegneria spicata*). Other plants scattered around the site include bitterbrush (*Purshia tridentata*), green rabbitbrush (*Chrysothamnus viscidiflorus*), gray rabbitbrush (*Ericameria nauseosa*), snow buckwheat (*Erigonum niveum*), yarrow (*Achillea millefolium*), and Russian thistle (*Salsola tragus*). Wildlife observed at this site include an Eastern Kingbird (*Tyrannus tyrannus*) that was perched on a tree near the shoreline, a pair of Cooper's Hawks (*Accipiter cooperii*) that flew overhead, and several Barn Swallows (*Hirundo rustica*) flying nearby. Coyote scat and tracks were also prevalent at the site.

AS2: The vegetation at this site was similar to AS1 without the shrub component. The prominent species observed include cheatgrass, Sandberg's bluegrass, and bluebunch wheatgrass with scattered Jim Hill's tumbled mustard (*Sisymbrium altissimum*), hoary aster (*Machaeranthera canescens*), and tarweed fiddleneck (*Amsinckia lycopsoides*). A patch of the Washington State listed noxious weed rush skeletonweed (*Chondrilla juncea*) was present at this site. An Eastern Kingbird was perched on a shrub near the site.

AS3 - AS6: The vegetation at these sites was primarily comprised of several shrub species including bitterbrush, snow buckwheat, gray rabbitbrush, and green rabbitbrush with an understory of cheatgrass, Sandberg's bluegrass, and dune scurfpea (*Psoralea lanceolata*). Other plant species scattered throughout these sites include longleaf phlox (*Phlox longifolia*), prickly lettuce (*Lactuca serriola*), and rush skeletonweed. No wildlife was observed.

AS7: This site is situated on a sandy berm along the edge of a large gravel pad. The sparse vegetation at this site consists of gray rabbitbrush, green rabbitbrush, snow buckwheat, and Indian ricegrass (*Achnatherum hymenoides*) with small patches of cheatgrass and Sandberg's bluegrass. No wildlife was observed.

AS8: This site is located in a sand blowout near the southwest corner of a large gravel pad. Much of this site is bare sand with scattered occurrences of cheatgrass, Sandberg's bluegrass, snow buckwheat, gray rabbitbrush, bitterbrush, Indian ricegrass, and threadleaf scorpion weed (*Phacelia linearis*). No wildlife was observed.

AS9: This site is located on the paved surface of Route 4 South.

AS10: This site is located on a small dune between Route 4 South and the railroad tracks. Vegetation observed at this site includes bitterbrush, snow buckwheat, Indian ricegrass, gray rabbitbrush, longleaf phlox, turpentine spring parsley (*Cymopteris terebinthinus*), prickly lettuce, cheatgrass, and rush skeletonweed. No wildlife was observed.

AS11: The vegetation at this site is dominated by needle-and-thread grass (*Hesperostipa comata*), cheatgrass, and Sandberg's bluegrass. Other scattered plants at this location include snow buckwheat, Russian thistle, Jim Hill's tumbledustard, yellow salsify (*Tragopogon dubius*), sand dropseed (*Sporobolus cryptandrus*), and rush skeletonweed. No wildlife was observed.

The Washington State listed noxious weed rush skeletonweed was noted at several excavation areas within the project area. Seeds from these plants can easily be transported among work sites. Therefore, **project staff performing the shovel probe tests should use care to minimize the transport of any plant material to or from the shovel test sites.**

No plant or animal species protected under the Endangered Species Act, candidates for such protection, or species listed by the Washington State government as threatened or endangered were observed in the vicinity of the proposed project site. Sites AS-1, AS-4, AS-10, and AS-11 traverse vegetative communities that are considered BRMP 3 and are considered Important resources. While the excavations are not anticipated to adversely impact the resources due to the small size of each site, project personnel must be advised of ecological importance of the surrounding habitat

There is always the potential for birds to nest within the project area on the ground, on buildings, or equipment. The nesting season in our area is typically from mid-March to mid-July. The active nests (containing eggs or young) of migratory birds are protected by the Migratory Bird Treaty Act (MBTA) of 1918. The MBTA makes it illegal for people to "take" migratory birds, their eggs, feathers, or nests. Take is defined in the MBTA to include by any means or in any manner, any attempt at hunting, pursuing, wounding, killing, possessing, or transporting any migratory bird, nest, egg, or part thereof. **Personnel working on this project must be instructed to watch for nesting birds.** If any nesting birds (if not a nest, a pair of birds of the same species or a single bird that will not leave the area when disturbed) are encountered or suspected, or bird defensive behaviors (flying at workers, refusal to leave area, strident vocalizations) are observed within the project area, contact the author of this section to evaluate the situation.

No adverse impacts are anticipated from the proposed projects if these recommendations are followed. If there are any changes in the scope of these activities that could result in disturbances outside of the description of this review please complete a Service Catalog Request <http://msc.rl.gov/ServiceCatalog/index.cfm> for an additional ecological review and reference the ecological review number above to determine if a follow-up Ecological Resources clearance should be conducted.

This review is valid for one year from the letter date listed above.

Technical questions should be directed to K. J. Cranna at 376-6180.

CULTURAL RESOURCES

The proposed shovel testing will be completed in support of the Cultural Resources Review for Five Proposed Alternatives for the U.S. Department of Energy (DOE) National Environmental Policy Act (NEPA) Natural Gas Pipeline and Natural Gas Utility Service Environmental Impact Statement, Hanford Site, Richland, Washington (HCRC# 2012-600-031a). Because this sub-surface testing will be completed in support of an ongoing cultural resources review, no additional 106 actions are required prior to the cultural resource sub-surface testing.

If there are changes in the scope of activities that could result in disturbances outside of the description of this project or outside the boundary of the project boundary identified on the attached map, contact K. M. Mendez at 376-1013 and submit a new Request for Cultural Resources Review through the MSA Service Catalog for a follow-up Cultural Resources Review and referencing the HCRC number listed above to determine if a follow-up Cultural Resources review should be conducted.

This Cultural Resources Review was written by K. M. Mendez, who meets the Secretary of the Interior's Professional Qualification Standards for Archaeology.

Technical questions should be directed to K. M. Mendez at 376-1013.

Sincerely,



April L. Johnson, Manager
Ecological Monitoring and Compliance

kjc:cdc

Attachment(s) 2

Cc: ^MSA Correspondence Distribution
^MSA Cultural Resources Program Admin Record
J. W. Cammann, MSA
K. J. Cranna, MSA
A. P. Fergusson, MSA
K. A. George, MSA
A. L. Johnson, MSA
K. M. Mendez, MSA

MSA-1703930
REISSUE

ATTACHMENT 1

September 6, 2017

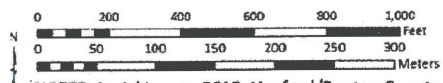
PROJECT LOCATION FOR THE NEPA NATURAL GAS PIPELINE EIS SUPPORT
PROJECT – ADDITIONAL LOCATIONS IN THE 300 AREA, HANFORD SITE,
BENTON COUNTY, WASHINGTON (ECR-2017-309)

Consisting of 2 pages,
Including this cover page



Legend

- Project Area



NOTES: Aerial Image, 2015, Hanford/Benton County.

Project Area
 ECR-2017-309 | Gas Pipeline Archaeological Test Locations
 Hanford Site, Benton County, WA

MSA-1703930
REISSUE

ATTACHMENT 2

September 6, 2017

ECOLOGICAL AND CULTURAL CLEARANCE FOR NEPA NATURAL GAS
PIPELINE EIS SUPPORT PROJECT IN THE 600 AREA, HANFORD SITE, BENTON
COUNTY, WASHINGTON (ECR-2017-623)

Consisting of 8 pages,
Including this cover page

Mission Support Alliance
Post Office Box 650
Richland, Washington 99352



September 6, 2017

MSA-1701791
REISSUE

Greg T. Berlin
Mission Support Alliance
P. O. Box 650
Richland, WA 99352

Dear Mr. Berlin:

ECOLOGICAL AND CULTURAL CLEARANCE FOR NEPA NATURAL GAS
PIPELINE EIS SUPPORT PROJECT IN THE 600 AREA, HANFORD SITE, BENTON
COUNTY, WASHINGTON (ECR-2017-623)

Reference: MSA Service Catalog Request#KSR00000301647, G. T. Berlin, MSA,
dated March 30, 2017.

This letter is being reissued to clarify cultural requirements.

PROJECT DESCRIPTION

The U.S. Department of Energy (DOE) is in the process of preparing an Environmental Impact Statement (EIS) for the acquisition of a natural gas pipeline and natural gas utility service. DOE is proposing to enter into a contract with Cascade Natural Gas Corporation (Cascade), a local natural gas utility supplier, to provide natural gas to support facilities in the Hanford Site's Central Plateau located in the center of the site. The EIS will evaluate potential environmental impacts of constructing, operating, and maintaining an approximately 48 kilometers (30-mile) pipeline (Project) from an existing gas transmission line near the Tri-Cities Airport in Pasco, Washington, to the 200 East Area on the Hanford Site.

As part of the environmental and cultural resources reviews for the proposed pipeline route, the contractor will conduct surface, visual environmental surveys and archaeological subsurface testing survey. The archaeological subsurface testing survey will include excavation of archaeological test units within the area identified on Figure 1. Access to the shovel probe sites will be on foot, all vehicles will park on established roadways or road shoulders, and all excavation will be with hand tools.

This review letter has been prepared solely to evaluate the potential impacts of the archeological test pits used for the subsurface evaluation. Environmental surveys conducted will utilize surface, visual methods and does not include ground disturbing activities.

ECOLOGICAL RESOURCES (ECR-2017-623)

Mission Support Alliance (MSA) Environmental Compliance staff performed a pedestrian survey of the project area on April 24, 2017. The following paragraphs describe the ecological resources observed at each site. Sites are grouped where multiple sites were found within the same vegetation cover type.

S1 - S5: This area is dominated by gray rabbitbrush (*Ericameria nauseosa*) with a cheatgrass (*Bromus tectorum*) understory. Other native species observed in the area include green rabbitbrush (*Chrysothamnus viscidiflorus*), Sandberg's bluegrass (*Poa secunda*), hoary aster (*Machaeranthera canescens*), western tansymustard (*Descurainia pinnata*), and tarweed fiddleneck (*Amsinckia lycopsoides*). Other nonnative species observed include Russian thistle (*Salsola tragus*), Jim Hill's tumbledustard (*Sisymbrium altissimum*), jagged chickweed (*Holosteum umbellatum*), and bulbous bluegrass (*Poa bulbosa*). Wildlife observed in this area included Common Raven (*Corvus corax*), Black-billed Magpie (*Pica pica*), Red-winged Blackbird (*Agelaius phoeniceus*), Osprey (*Pandion haliaetus*), Rock Dove (*Columba livia*), Mourning Dove (*Zenaida macroura*), and Cliff Swallow (*Hirundo pyrrhonota*).

S6 & S7: Native shrubs prevalent in this area include bitterbrush (*Purshia tridentata*), gray rabbitbrush, green rabbitbrush, and snow buckwheat (*Erigonum niveum*) with an understory comprised primarily of nonnative species and dominated by cheatgrass. Other native plants observed include Sandberg's bluegrass, western tansymustard, tarweed fiddleneck, and Douglas' clusterlily (*Brodiaea douglasii*). Other nonnative species found in this area include Russian thistle, storksbill (*Erodium cicutarium*), jagged chickweed, and Jim Hill's tumbledustard. Wildlife observed include Horned Lark (*Eremophila alpestris*) and Western Meadowlark (*Sturnella neglecta*).

S8 - S10: These three sites are within the 300 Area adjacent to the southern fence line and near several mobile offices. The area surrounding the sites are highly disturbed parking, staging, and access roadway areas. The ground cover consists primarily of graveled and cobble surfaces that are devoid of significant vegetation. No wildlife was observed.

S11 - S16: These six sites are located near the southern fence of the 300 Area on the East side of Route 4S parallel to an elevated telecom line. The area is dominated by bitterbrush, gray rabbitbrush, and cheatgrass. Other native species include small patches of needle-and-thread grass (*Hesperostipa comata*) and scattered green rabbitbrush, snow buckwheat, Sandberg's bluegrass, hoary aster, western tansymustard, and upland larkspur (*Delphinium nuttalianum*). Other nonnative species present include Russian thistle, Jim Hill's tumbledustard, bulbous bluegrass, and jagged chickweed. Wildlife observed in this area include White-crowned Sparrow (*Zonotrichia leucophrys*), European Starling (*Sturnus vulgaris*), Western Meadowlark, American Robin (*Turdus migratorius*), Black-billed Magpie, and California Quail (*Callipepla californica*). Several dead Great Basin pocket mice (*Perognathus parvus*) were found inside fence posts that were cut off at ground level.

An historic Townsend's ground squirrel (*Urocitellus townsendii*) colony is located ~30 meters North of Site 11. Activity was not observed during the survey. The Townsend's ground squirrel is considered a "State Candidate" by the Washington Department of Fish and Wildlife. The Hanford Site Biological Resource Management Plan (BRMP, DOE/RL-96-32 Rev 2) which is the primary implementation control for managing and protecting natural

resources on the Hanford Site ranks wildlife species and habitats (Levels 0-5) based on the level of concern for each resource. The BRMP ranks the Townsend's ground squirrel as a Level 3 resource. The management goal for Level 3 resources is conservation and the preferred management action is avoidance or minimization. **Project personnel shall be instructed to keep vehicles on established roads and to avoid all disturbance to the historic ground squirrel colony.** If ground squirrels are detected, contact the author of this section for recommendations.

S17: This site is located between Route 4 South and the railroad tracks and the vegetation is dominated by nonnative invasive species such as cheatgrass, Russian thistle, and Jim Hill's tumbledustard. Other nonnative species present include bulbous bluegrass and Washington State listed noxious rush skeletonweed (*Chondrilla juncea*). Scattered native plants at this site include big sagebrush, gray rabbitbrush, Sandberg's bluegrass, tarweed fiddleneck, hoary aster, and needle-and-thread grass. A Long-billed Curlew (*Numenius americanus*) was observed southwest of the site.

S18 - S23: These sites are located east of the railroad tracks that run parallel to Route 4 South and are in an area dominated by cheatgrass and Sandberg's bluegrass. Other native species scattered in this area include snow buckwheat, needle-and-thread grass, and turpentine spring parsley (*Cymopterus terebinthinus*). Other nonnative species prevalent in this area include Jim Hill's tumbledustard and jagged chickweed. Wildlife observed include Long-billed Curlew, Horned Lark, and Western Meadowlark.

S24 & S25: The vegetation surrounding these two sites is dominated by gray rabbitbrush with a cheatgrass and Sandberg's bluegrass understory that includes scattered patches of needle-and-thread grass. Other native species present include bitterbrush, snow buckwheat, and tarweed fiddleneck. Jim Hill's tumbledustard was also prevalent. White-crowned Sparrows and Western Meadowlarks were observed.

S26 & S27: The vegetation in this area is dominated by cheatgrass and Sandberg's bluegrass with intermittent patches of gray rabbitbrush and needle-and-thread grass. Other native species found include turpentine spring parsley, snow buckwheat, tarweed fiddleneck, Douglas' clusterlily, longleaf phlox (*Phlox longifolia*), and western tansymustard. Nonnative species present include bulbous bluegrass, jagged chickweed, and Jim Hill's tumbledustard. Wildlife observed include Western Meadowlark and Horned Lark.

S28 - S30: These sites are located in an area dominated by cheatgrass, Sandberg's bluegrass, and needle-and-thread grass. Scattered native species present include gray rabbitbrush, snow buckwheat, and tarweed fiddleneck. Other nonnative species prevalent include bulbous bluegrass and Jim Hill's tumbledustard. Western Meadowlarks were observed.

The Washington State listed noxious weed rush skeletonweed was noted within the project area. Seeds from these plants can easily be transported among work sites. Therefore, **project staff performing the shovel probe tests should use care to minimize the transport of any plant material to or from the shovel test sites.**

No plant or animal species protected under the Endangered Species Act, candidates for such protection, or species listed by the Washington State government as threatened or endangered were observed in the vicinity of the proposed project site.

There is always the potential for birds to nest within the project area on the ground, on buildings, or equipment. The nesting season in our area is typically from mid-March to mid-July. The active nests (containing eggs or young) of migratory birds are protected by the Migratory Bird Treaty Act (MBTA) of 1918. The MBTA makes it illegal for people to "take" migratory birds, their eggs, feathers, or nests. Take is defined in the MBTA to include by any means or in any manner, any attempt at hunting, pursuing, wounding, killing, possessing, or transporting any migratory bird, nest, egg, or part thereof. **Personnel working on this project must be instructed to watch for nesting birds.** If any nesting birds (if not a nest, a pair of birds of the same species or a single bird that will not leave the area when disturbed) are encountered or suspected, or bird defensive behaviors (flying at workers, refusal to leave area, strident vocalizations) are observed within the project area, contact the author of this section to evaluate the situation.

No adverse impacts are anticipated from the proposed projects if these recommendations are followed. If there are any changes in the scope of these activities that could result in disturbances outside of the description of this review please complete a Service Catalog Request <http://msc.rl.gov/ServiceCatalog/index.cfm> for an additional ecological review and reference the ecological review number above to determine if a follow-up Ecological Resources clearance should be conducted.

This review is valid for one year from the letter date listed above.

Technical questions should be directed to K. J. Cranna at 376-6180.

CULTURAL RESOURCES

The proposed shovel testing will be completed in support of the Cultural Resources Review for Five Proposed Alternatives for the U.S. Department of Energy (DOE) National Environmental Policy Act (NEPA) Natural Gas Pipeline and Natural Gas Utility Service Environmental Impact Statement, Hanford Site, Richland, Washington (HCRC# 2012-600-031a). Because this sub-surface testing will be completed in support of an ongoing cultural resources review, no additional 106 actions are required prior to the cultural resource sub-surface testing.

If there are changes in the scope of activities that could result in disturbances outside of the description of this project or outside the boundary of the project boundary identified on the attached map, contact K. M. Mendez at 376-1013 and submit a new Request for Cultural Resources Review through the MSA Service Catalog for a follow-up Cultural Resources Review and referencing the HCRC number listed above to determine if a follow-up Cultural Resources review should be conducted.

This Cultural Resources Review was written by K. M. Mendez, who meets the Secretary of the Interior's Professional Qualification Standards for Archaeology.

G. T. Berlin
September 6, 2017
Page 5

MSA-1701791 REISSUE
ECR-2017-623

Technical questions should be directed to K. M. Mendez at 376-1013.

Sincerely,



April L. Johnson, Manager
Ecological Monitoring and Compliance

kjc:kmm

Attachment(s) 1

Cc: ^MSA Correspondence Distribution
^MSA Cultural Resources Program Admin Record
A. P. Fergusson, MSA
K. A. George, MSA
A. L. Johnson, MSA
K. M. Mendez, MSA
K. J. Cranna, MSA

MSA-1701791
REISSUE

ATTACHMENT

September 6, 2017

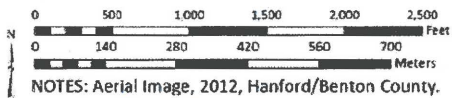
PROJECT LOCATION FOR THE NEPA NATURAL GAS PIPELINE EIS SUPPORT
PROJECT IN THE 600 AREA, HANFORD SITE, BENTON COUNTY, WASHINGTON
(ECR-2017-623)

Consisting of 2 pages,
Including this cover page



Legend

- Project Area
- Ground Squirrel Colony



Natural Gas Pipeline Cultural Resource Shovel Tests
 ECR-2017-623 | Gas Pipeline
 Hanford Site, Benton County, WA