NETL F 451.1-1/3
Revised: 11/7/2011
Reviewed: 11/7/2011
(Previous Editions Obsolete)

U.S. DEPARTMENT OF ENERGY

ENVIRONMENTAL QUESTIONNAIRE

I. BACKGROUND

The Department of Energy (DOE) National Environmental Policy Act (NEPA) Implementing Procedures (10 CFR 1021) require careful consideration of the potential environmental consequences of all proposed actions during the early planning stages of a project or activity. DOE policy directs at the earliest possible stage in a project whether such actions will require preparation of an Environmental Assessment, an Environmental Impact Statement, or a Categorical Exclusion. To comply with these requirements, an Environmental Questionnaire (NETL Form 451.1-1/3) must be completed for each proposed action to provide DOE with the information necessary to determine the appropriate level of NEPA review and documentation. If the proposed project qualifies for Categorical Exclusion designation, a Categorical Exclusion Designation Form (NETL Form 451.1-1/1) will also be completed in addition to the Environmental Questionnaire.

II. INSTRUCTIONS

Separate copies of the Environmental Questionnaire and Categorical Exclusion Designation Form (if required) should be completed by the principal proposer and principal subcontractor(s). In addition, if the proposed project includes activities at different locations, an independent questionnaire should be prepared for each location. Supporting information can be provided as attachments.

In completing this Questionnaire, the proposer is requested to provide specific information and quantities, when applicable, regarding air emissions, wastewater discharges, solid wastes, etc., to facilitate the necessary review. The proposer should identify the location of the project and specifically describe the activities that would occur at that location. In addition, the proposer will be required to submit an official copy of the project's statement of work (SOW) or statement of project objective (SOPO) that will be used in the contract/agreement between the proposer and DOE.

III. QUESTIONNAIRE

A. PROJECT SUMMARY

1. Solicitation/Project Number: DE-FE0024297 – "Marcellus Shale Energy and Environment Laboratory"
2. Proposer and Subcontractor(s): West Virginia University, Northeast Natural Energy
3. Principal Investigator: Dr. Tim Carr (WVU)

   Telephone Number: 304-293-9660 (Dr. Carr)
4. Project Title: Marcellus Shale Energy and Environment Laboratory (MSEEL)
5. Duration: 5 Years – 10/1/2014 – 9/30/2019
6. Location(s) of Performance (City/Township, County, State):
   Morgantown Industrial Park, Morgantown, Monongalia County, West Virginia
7. Identify and select the checkbox with the predominant project work activities under Group A-7a, A-7b, or A-7c.

Group A-7a

□ Categorical Exclusion CX-A: Routine administrative, procurement, training, and personnel actions. Contract activities/awards for management support, financial assistance, and technical services in support of agency business, programs, projects, and goals. Literature searches and information gathering, material inventories, property surveys; data analysis, computer modeling, analytical reviews, technical summary, conceptual design, feasibility studies, document preparation, data dissemination, and paper studies. Technical assistance including financial planning, assistance, classroom training, public meetings, management training, survey participation, academic contribution, technical consultation, and stakeholders surveys. Workshop and conference planning, preparation, and implementation which may involve promoting energy efficiency, renewable energy, and energy conservation.

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Group A-7b

□ Categorical Exclusion CX-B: Laboratory Scale Research, Bench Scale Research, Pilot Scale Research, Proof-of-Concept Scale Research, or Field Test Research. Work DOES NOT involve new building/facilities construction and site excavation/groundbreaking activities. This work typically involves routine operation of existing laboratories, commercial buildings/properties, offices and homes, project test facilities, factories/power plants, vehicles test stands and components, refueling facilities, utility systems, or other existing structures/facilities. Work will NOT involve major change in facilities missions and operations, land use planning, new/modified regulatory/operating permit requirements. Includes work specific to routine DOE Site operations and Lab research work activities, but NOT building construction and site preparation. DOE work typically involves laboratory facilities and lab equipment operations, buildings and grounds management activities; and buildings and facilities maintenance, repairs, reconfiguration, remodeling, equipment use and replacement.

Group A-7c

X Categorical Exclusion CX-B, Environmental Assessment (EA), Environmental Impact Statement (EIS): Pilot Test Facilities Construction, Pilot Scale Research, Field Scale Demonstration, or Commercial Scale Application. Work typically involves facility construction, site preparation/excavation/groundbreaking, and/or demolition. This work would include construction, retrofit, replacement, and/or major modifications of laboratories, test facilities, energy system prototypes, and power generation infrastructure. Work may also involve construction and maintenance of utilities system right-of-ways, roads, vehicle test facilities, commercial buildings/properties, fuel refinery/mixing facilities, refueling facility, power plants, underground wells, and pipelines, and other types of energy research related facilities. This work may require new or modified regulatory permits, environmental sampling and monitoring requirements, master planning, public involvement, and environmental impact review. Includes work specific to DOE Site Operations and Lab operation activities involving building and facilities construction, replacement, decommissioning/demolition, site preparation, land use changes, or change in research facilities mission or operations.

□ Other (please describe):

8. Summarize the objectives of the proposed work. List activities planned at the location as covered by this Environmental Questionnaire.

The WVU Team will provide a well-documented baseline of subsurface and environmental characterization. Northeast Natural Energy (NNE) plans multiple drilling events at their Morgantown Industrial Park location separated by sufficient time to analyze data. This will allow for the collection of samples and data, and the testing and demonstration of advanced technologies as part of the MSEEL project. The project's phased approach allows for flexibility to identify and incorporate new, cost-effective technology and science focused on increasing production rates and ultimate recovery, while reducing environmental and societal impacts.

Initially, in Phase I (Year 1), subsurface measurements will consist of drilling, coring, and logging a vertical stratigraphic test well. Cores and samples from the test wells will be collected and analyzed for geological, physical, chemical, and biological factors. During Phase II (Year 2), NNE plans to drill a horizontal well into the Marcellus shale.

Subsurface geological and geophysical measurements will be made in the horizontal well, and data collected for analyses with the primary goal of developing a thorough understanding of natural fractures in the shale. Microseismic measurements from the vertical well will be made to map the distribution of fractures caused by the hydraulic fracturing operations. The objective in the second year is to develop, demonstrate, and document integrated technologies that provide the data and modeling approaches to
(a) maximize the efficiency of shale-gas production and
(b) minimize environmental impact by increasing the producible volume of the reservoir.

The WVU Team and this project will address the objectives of DOEs Unconventional Resources Program and the Research Program to Secure Energy for America. Leveraging university, government, and industry research, the project will provide a real-world test environment for emerging technologies employed in shale energy production and environmental monitoring, thereby dealing with environmental and safety concerns.

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9. List all other locations where work would be performed by the primary contractor of the project and primary subcontractor(s). (Note: An environmental questionnaire may be required for each new location after reviewing the SOW/SOPO, project scope, tasks, and environmental affects).

West Virginia University, Morgantown, Monongalia County, West Virginia Ohio State University, Columbus, Franklin County, Ohio (see separate Environmental Questionnaires for each location)

10. Identify major materials that would be used and produced by the project when projects are larger than lab or bench scale.

Materials Used (input)	Estimate Quantity	Materials Produced (output)	Estimate Quantity
G Coal		G Wastewater	Tbd – part of study. Expect low quantity due to recycling
G Natural Gas		G Air Emissions	TBD – part of study. Operation of diesel engines and vehicles, emission proportional to fuel use.
G Oil	1000gal diesel fuel	G Solid Waste	TBD – part of study. Estimated at ~500 tons, drill cuttings.
G Electricity		G Hazardous Waste	None
G Water	2-4,000,000 gal – (hydraulic fracturing)	G Others -- List: Produced Water (Brine)	210,000-450,000 gal first year, 5000 gal/year in subsequent years.
G Others -- List:			

B. PROPOSED PROJECT ALTERNATIVES

1. If applicable, list any project alternative considered to achieve the project objectives.

   Project involves monitoring and instrumentation of entire shale well process, at two different sites. To acquire this data would require development of a well site. Only alternatives would involve alternate locations, no other alternate methods exist.

C. PROJECT LOCATION

1. Provide a brief description of the project location (physical location, surrounding area, adjacent structures).
   The Morgantown Industrial Park is located outside of Morgantown and Westover, West Virginia, bordering the Monongahela River. It is approximately 10 minutes from the I-79 Westover exit. The site is a brown-field industrial facility on reclaimed property. Other industrial operations are present on the site, and other industrial structures are present in the area.

2. Attach a project site location map of the project work area. Project site photos and topographical maps may be requested for further review.

   Site maps and photos are appended at the end of this document.

D. ENVIRONMENTAL IMPACTS

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This section is designed to obtain information concerning environmental impacts and regulatory compliance of a proposed project. NEPA procedures require evaluations of possible effects (including land use, energy resource use, natural, historic and cultural resources, and pollutants) from proposed projects on the environment. The Environmental Virtual Campus website has valuable information concerning environment impacts and regulatory compliance.

1. Land Use

a. Characterize present land use where the proposed project would be located.

□	Urban	X	Industrial	□	Commercial	□	Agricultural
□	Suburban	□	Rural	□	Residential	□	Research Facilities
□	Forest	□	University Campus	□	Other: _____		

b. Identify the total size of the facility, structure, or system and what portion would be used for the proposed project.
Total industrial park size is approximately 800 acres. Existing horizontal well pad 4.13 acres, adding existing access road and freshwater impoundment is approximately 24 acres total. Proposed vertical well pad and access road will utilize approximately 2.0 acres.

c. Describe planned construction, installation, and/or demolition activities, i.e., roads, utilities system right-of-ways, parking lots, buildings, laboratories, storage tanks, fueling facilities, underground wells, pipelines, or other structures.

□ No construction would be anticipated for this project.

As this project location is sited in an existing Industrial Park, construction and utilities are readily available and require little to no new construction. The gas producer (Northeast Energy) currently operates and maintains the facilities that will be utilized for operations of this project. Approximately 2.0 acres of new construction in the drilling and preparation of the new vertical well pad and access road will be required.

d. Describe how land use would be affected by operational activities associated with the proposed project.

□ No land areas would be affected.

Activities at this location are in existing Industrial Park, and so no new land areas would be affected.

e. Describe any plans to reclaim areas that would be affected by the proposed project.

□ No land areas would be affected.

Subject project location is in existing Industrial Park, no reclamation is required for the drilling of horizontal wells on the existing pad. Reclamation of the vertical well pad and access road will be completed per WVDEP laws and regulations.

f. Would the proposed project affect any unique or unusual landforms (e.g., cliffs, waterfalls, etc.)?

X No □ Yes (describe)

g. Would the proposed project be located in or near local, state, or federal parks; forests; monuments; scenic waterways; wilderness; recreation facilities; or tribal lands? X No □ Yes (describe)

If all work activities related to this project can be classified and described within categories under Group A-7a, it is a categorically excluded action. Proceed directly to Section IV CERTIFICATION BY PROPOSER, completing information and signatures as requested. The questionnaire is now complete and no additional information is required.

If project work activities are described under either Group(s) A-7b, or A-7c.; then continue filling out questionnaire.

2. Construction Activities and/or Operation

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a. Identify project structure(s), power line(s), pipeline(s), utilities system(s), right-of-way(s) or road(s) that will be constructed and clearly mark them on a project site map or topographic map as appropriate. □ None
Site Maps are attached to this document.

b. Would the proposed project require the construction of waste pits or settling ponds?
X No* □ Yes (describe and identify location, and estimate surface area disturbed)
*Existing freshwater impoundment will be utilized.

c. Would the proposed project affect any existing body of water? X No □ Yes (describe)

d. Would the proposed project impact a floodplain or wetland? X No □ Yes (describe)

e. Would the proposed project cause runoff/sedimentation/erosion? X No □ Yes (describe)

f. Describe any instability (e.g., subsidence, perma-frost, erosion, faulting/fracturing) affecting building construction, site development, and/or project operation.
None.

3. Vegetation and Wildlife Resources

a. Identify any State or Federal-listed endangered or threatened plant or animal species affected by the proposed project.
X None

b. Would any threatened or endangered species habitat be affected by the proposed project? X No □ Yes (describe)

c. Describe any impacts that construction would have on any other types of sensitive or unique habitats.
□ No planned construction □ No habitats X None □ Impact (describe)

d. Would any unnatural substances/materials be introduced into ground or surface waters, soil, or other earth/geologic resource because of project activities? How would these foreign substances/materials affect the water, soil, and geologic resources? □ No X Yes (describe) Hydraulic fracturing fluid consisting of 99.5% water and sand with 0.5% chemical additives will be injected in the horizontal well at depth of approximately 7500 feet (Marcellus Shale Formation). The hydraulic fracturing activity will have no effect on surface waters or groundwater. Induced fractures are expected to be contained within the Marcellus Shale formation. Results of this study will assist in determining the extent and effectiveness of the hydraulic fractures in the formation.

e. Would any migratory animal corridors be impacted or disrupted by the proposed project? X No □ Yes (describe)

4. Socioeconomic and Infrastructure Conditions

a. Would local socio-economic changes result from the proposed project? □ No □ Yes (describe)
Socio-economic impacts from the industrial portion at this location are minor, and limited to direct construction/well development activities.

b. Would the proposed project generate increased traffic use of roads through local neighborhoods, urban or rural areas?
□ No X Yes (describe)
Activities at this location will temporarily increase traffic to the well site for transport of well materials and drilling, completion, and production equipment. Well site is within existing industrial park, and would minimally impact traffic on surrounding urban and rural roads.

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c. Would the proposed project require new transportation access (roads, rail, etc.)? Describe location, impacts, costs.
X No □ Yes (describe)
Activities at this location will take place in existing Industrial Park, and will require no new transportation access.

d. Would the proposed project create a significant increase in local energy usage? X No □ Yes (describe)

5. Historical/Cultural Resources

a. Describe any historical, archaeological, or cultural sites in the vicinity of the proposed project; note any sites included on the National Register of Historic Places. X None

b. Would construction or operational activities planned under the proposed project disturb any historical, archaeological, or cultural sites? □ No planned construction X No historic sites □ Yes (describe) □ No Impact (discuss)

c. Has the State Historic Preservation Office been contacted with regard to this project? X No □ Yes (describe)

d. Would the proposed project interfere with visual resources (e.g., eliminate scenic views) or alter the present landscape?
X No □ Yes (describe)

For all proposed project work activities identified under Group A-7b, respond to item D6 directly below and continue filling out environmental questionnaire.

6. Atmospheric Conditions/Air Quality

a. Identify air quality conditions in the immediate vicinity of the proposed project with regard to attainment of National Ambient Air Quality Standards (NAAQS). This information is available under the Green Book Non-Attainment Areas for Criteria Pollutants located at http://epa.gov.oar/oaqps/greenbk or http://www.epa.gov/air/oaqps/greenbk/astate.html

	Attainment	Non-Attainment
O_3 - 1 Hour	X	□
O_3 - 8 Hour	X	□
SO_x	X	□
PM - 2.5	X	□
PM - 10	X	□
CO	X	□
NO_2	X	□
Lead	X	□

b. Would proposed project require issuance of new or modified local, state, or federal air permits to perform project related work and activities? X No □ Yes (describe)

c. Would the proposed project be in compliance with local and state air quality requirements? □ No (explain) X Yes

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d. Would the proposed project be classified as either a New Source or a major modification to an existing source?
X No □ Yes (describe)

e. What types of air emissions, including fugitive emissions, would be anticipated from the proposed project, and what would be the maximum annual rate of emissions for the project?

	Maximum per Year	Total for Project
□ SO_x		
□ NO_x		
□ PM - 2.5		
□ PM - 10		
□ CO		
□ CO_2		
□ Lead		
□ H_2S		
□ Organic solvent vapors or other volatile organic compounds--List:		
□ Hazardous air pollutants -- List:		
X Other -- List: NOx, PM and CO2 emissions primarily from operation of diesel vehicles in support of project. Purpose of project is to quantify these emissions.		
□ None		

f. Would any types of emission control or particulate collection devices be used?
□ No X Yes (describe, including collection efficiencies)
Vehicle emissions control equipment would be operated as per OEM installation. No bleed pneumatic controllers will be utilized on pressure vessels. "Green Completion" technology per USEPA OOOO requirements will be utilized.

g. If no control devices are used, how would emissions be vented?

7. Hydrologic Conditions/Water Quality

a. What is the closest body of water to the proposed project area and what is its distance from the project site?
Monongahela River, adjacent.

b. What sources would supply potable and process water for the proposed project?
Potable water provided by the Morgantown Utility Board.
Process water provided by the Monongahela River. A Water Management Plan detailing the water use will be submitted to WVDEP for approval as part of the well work permit application.

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c. Quantify the daily or annual amount of wastewater that would be generated by the proposed project.

		Gallons
□	Non-contact cooling water	
□	Process water	
□	Sanitary and/or grey water	
□	Other -- describe: Produced water (Brine)	**
□	None	

** See page 3

d. What would be the major components of each type of wastewater (e.g., coal fines)? □ No wastewater produced

Salt Water (Brine)

e. Identify the local treatment facility that would receive wastewater from the proposed project.

X No discharges to local treatment facility

f. Describe how wastewater would be collected and treated. Waste water will be collected in storage tanks and re-used/recycled in future projects or disposed of via third party approved Class II disposal wells, approved waste disposal or waste treatment facilities.

g. Would any run-off or leachates be produced from storage piles or waste disposal sites? X No □ Yes (describe source)

h. Would project require issuance of new or modified water permits to perform project work or site development activities?

□ No X Yes (describe) A water management plan will be submitted for approval for use of water from the Monongahela River. The water will be used in the drilling and hydraulic fracturing operations.

i. Where would wastewater effluents from the proposed project be discharged? □ No wastewater produced

There will be no discharge of wastewater. Wasterwater will be re-used/rcycled or disposed of in approved disposal facilities.

j. Would the proposed project be permitted to discharge effluents into an existing body of water?

X No □ Yes (describe water use and effluent impact) The proposed project will not include acquiring an NPDES permit.

k. Would a new or modified National Pollutant Discharge Elimination System (NPDES) permit be required?

X No □ Yes (describe)

l. Would the proposed project adversely affect the quality or movement of groundwater? X No □ Yes (describe)

m. Would the proposed project require issuance of an Underground Injection Control (UIC) permit?

X No □ Yes (describe)

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8. Solid and Hazardous Wastes

a. Identify and estimate major non-hazardous solid wastes that would be generated from the project. Solid wastes are defined as any solid, liquid, semi-solid, or contained gaseous material that is discarded or has served its intended purpose, or is a manufacturing or mining by-product (See EPA Municipal Solid Waste and Municipal Solid by State).

	Annual Quantity
□ **Municipal solid waste, i.e., paper, plastic, etc.**	500 lbs.
□ **Coal or coal by-products**	
□ **Other -- Identify: Drill cuttings**	**700 tons**
□ **None**	

b. Would project require issuance of new or modified solid waste and/or hazardous waste related permits to perform project work activities? X No □ Yes (explain)

c. How and where would solid waste disposal be accomplished?

□ On-site (identify and describe location)

X Off-site (identify location and describe facility and treatment) Landfill, UIC Class II disposal well, Other approved treatment or disposal facilities.

d. How would wastes for disposal be transported? Trucking.

e. Identify hazardous wastes that would be generated, used, or stored under this project. Hazardous waste information can be found at EPA Hazardous Waste website. X None

f. How would hazardous or toxic waste be collected and stored? X None used or produced

g. If hazardous wastes would require off-site disposal, have arrangements been made with a certified TSD (Treatment, Storage, and Disposal) facility?

X Not Required □ Arrangements not yet made □ Arrangements made with a certified TSD facility (identify)

9. Health/Safety Factors

a. Identify hazardous or toxic materials that would be used in the proposed project.

X None □ Hazardous or toxic materials that would be used (identify):

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b. What would be the likely impacts of these project related hazardous materials on human health and the environment?
X None □ Yes (explain)

c. Would there be any special physical hazards or health risks associated with the project? □ No X Yes (describe)
Well drilling and completion activities are an industrial process that requires awareness and safety protocols for the prevention of accidents. All operations are conducted with safety as the highest priority. Trips and falls, equipment malfunction that can cause injury are all a concern while conducting any activity on an active well site.

d. Does a worker safety program exist at the location of the proposed project? □ No X Yes (describe)
Third party contractors i.e. drilling contractors, completion contractors, and trucking companies have extensive safety programs required by OSHA and required by the master service agreement between all third parties and the project sponsor. The project sponsors have worker safety programs in place and will secure approval of its well site safety plan from the WVDEP prior to commencement of activities.

e. Would safety training be necessary for any laboratory, equipment, or processes involved with the project?
□ No X Yes (describe) All workers on site are trained in the safety protocols listed in (d) above.

f. Describe any increases in ambient noise levels to the public from construction and operational activities.
□ None X Increase in ambient noise level (describe) Well drilling and completion is an industrial activity and as such will result in a temporary increase in noise levels above ambient conditions. Increase in noise level is due to engine noise during drilling and completion activities.

g. Would project construction result in the removal of natural barriers that act as noise screens?
□ No construction planned X No □ Yes (describe)

h. Would hearing protection be required for workers? □ No X Yes (describe)
Hearing protection is utilized during some drilling and completion activities.

10. Environmental Restoration and/or Waste Management

a. Would the proposed project include CERCLA removals or similar actions under RCRA or other authorities?
X No □ Yes (describe)

b. Would the proposed project including siting, construction, and operation of temporary pilot-scale waste collection and treatment facilities or pilot-scale waste stabilization and containment facilities? X No □ Yes (describe)

c. Would the proposed project involve operations of environmental monitoring and control systems?
□ No X Yes (describe) The sponsors will monitor erosion and sediment control structures during construction activities and project development. Leak detection will be conducted, consisting of visual inspection of synthetic liners that will be utilized on the well pad during drilling and completion operations.

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d. Would the proposed project involve siting, construction, operation, and decommissioning of a facility for storing packaged hazardous waste for 90 days or less? X No □ Yes (describe)

E. REGULATORY COMPLIANCE

1. For the following laws, describe any existing permits, new or modified permits, manifests, responsible authorities or agencies, contacts, etc., that would be required for the proposed project (Information on the following environmental laws can be found at Major Environmental Law website):

a. Resource Conservation and Recovery Act (RCRA): X None □ Required (describe)

b. Comprehensive Environmental Response, Compensation, and Liability Act (CERCLA):
X None □ Required (describe)

c. Toxic Substance Control Act (TSCA): X None □ Required (describe)

d. Clean Water Act (CWA): □ None X Required (describe)
New permits will be required for the control of erosion and sediment runoff during construction and operational activities. The permit is issued by WVDEP. Storage of waste water will comply with all WVDEP and CWA requirements regarding secondary containment and leak detection.

e. Underground Storage Tank Control Program (UST): X None □ Required (describe)

f. Underground Injection Control Program (UIC): X None □ Required (describe)

g. Clean Air Act (CAA): X None □ Required (describe)

h. Endangered Species Act (ESA): □ None X Required (describe)
Environmental assessment will be conducted to determine if any potential impact exists and coordination with USFW will be done if necessary. No impacts are anticipated, the project is to take place within the boundaries of an existing industrial park.

i. Floodplains and Wetlands Regulations: □ None X Required (describe)

Environmental assessment will be conducted to determine the presence of wetlands and avoidance measures will be taken if necessary.

j. Fish and Wildlife Coordination Act (FWCA): □ None X Required (describe)
Coordination with the USFW will be part of the well work permit application process.

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k. National Historic Preservation Act (NHPA): X None □ Required (describe)

l. Coastal Zone Management Act (CZMA): X None □ Required (describe)

2. Identify any other environmental laws and regulations (Federal, state, and local) for which compliance would be necessary for this project, and describe the permits, manifests, and contacts that would be required. Compliance with WV Code 22-6 and 22-6A and associated regulations governing site construction and well drilling and completion activities. Permits issued by the WVDEP are required for the drilling and completion well work activities.

F. DESCRIBE ANY ISSUES THAT WOULD GENERATE PUBLIC CONTROVERSY REGARDING THE PROPOSED PROJECT. □ None

Some members of the general public have expressed anti-hydraulic fracturing sentiment. This is a general statement and is applicable to all areas of the United States. Two unconventional wells have already been drilled and hydraulically fractured on the project site.

G. WOULD THE PROPOSED PROJECT PRODUCE ADDITIONAL DEVELOPMENT, OR ARE OTHER MAJOR DEVELOPMENTS PLANNED OR UNDERWAY, IN THE PROJECT AREA?

□ No □ Yes (describe)

H. SUMMARIZE THE SIGNIFICANT IMPACTS THAT WOULD RESULT FROM THE PROPOSED PROJECT.

□ None (provide supporting detail) X Significant impacts (describe)

The additional production of natural gas to supply the local community with a clean burning, affordable energy source will be an immediate impact. Long term impacts include the development of more effective completion techniques that will ultimately lead to more efficient production of our nation's oil and natural gas resources, ensuring our energy security through an abundant supply of affordable and clean burning natural gas.

IV. CERTIFICATION BY PROPOSER

I hereby certify that the information provided herein is current, accurate, and complete as of the date shown immediately below.

Signature: _____ Date (mm/dd/yyyy): 16 Sept 2014

Typed Name: J. Steven Kite

Title: Chair of Geology & Geography

Organization: West Virginia University

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V. REVIEW AND APPROVAL BY DOE

I hereby certify that I have reviewed the information provided in this questionnaire, have determined that all questions have been appropriately answered, and judge the responses to be consistent with the efforts proposed. Based on the information in the questionnaire, I conclude the following (check the appropriate box):

□ The proposed action falls under one or more of the categorical exclusions (CXes) listed in Appendix A or B of Subpart D of the DOE NEPA Implementing Procedures and would not (1) violate applicable ES&H requirements, (2) require siting of waste transportation, storage and disposal or recovery facilities, (3) disturb hazardous materials (excluding naturally occurring petroleum and natural gas), thus producing uncontrolled or unpermitted releases, and (4) adversely affect environmentally sensitive resources.

Additionally, the proposed action (1) would not present any extraordinary circumstances such that the action might have a significant impact upon the human environment, (2) is not connected to other actions with potentially significant impacts, and (3) is not related to other actions with cumulatively significant impacts.

Based on the Environmental Questionnaire and these conclusions, Categorical Exclusion of the proposed action would be appropriate.

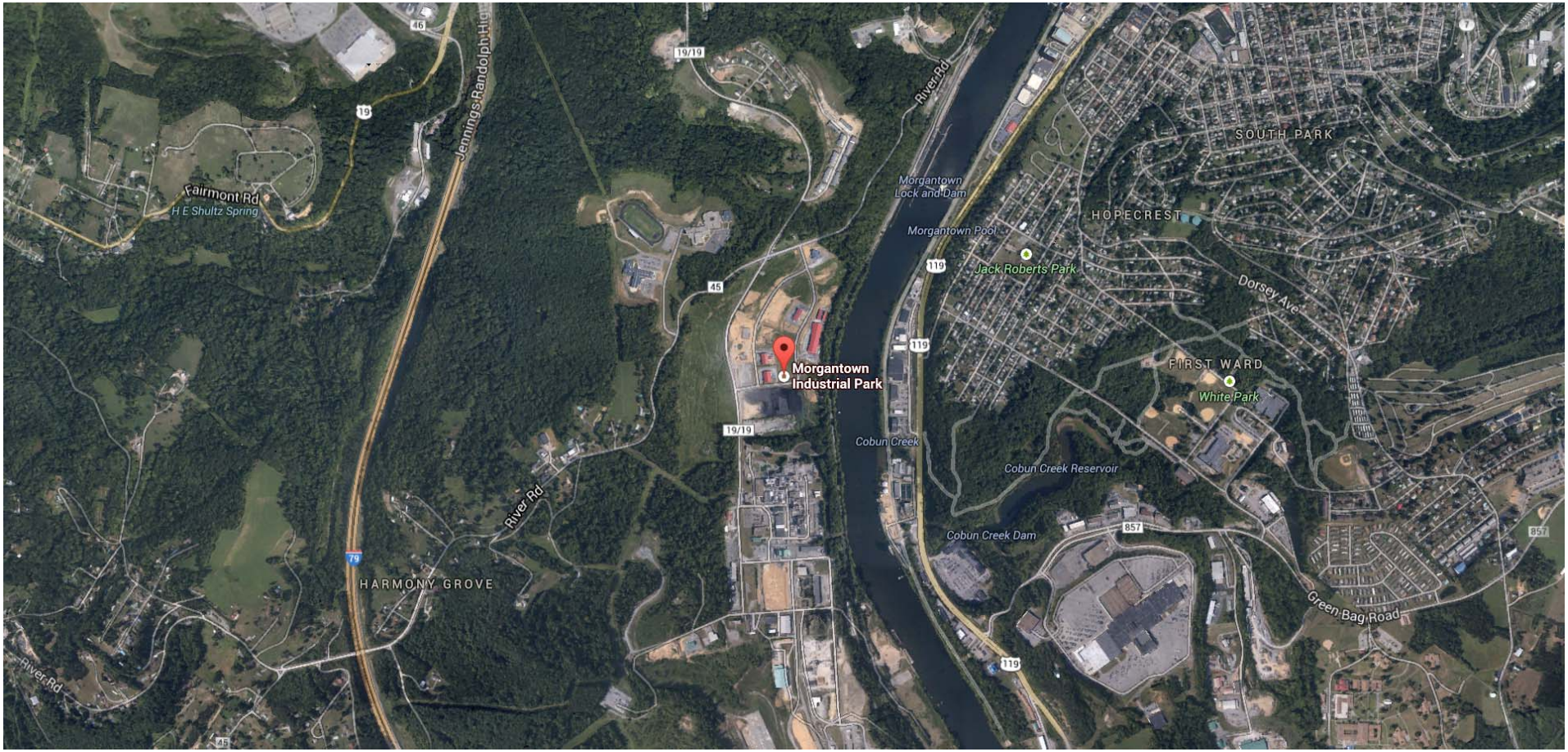
□ The proposed action does not qualify as a CX as identified in Subpart D of DOE's NEPA Implementing Procedures; therefore, the proposed action may require further documentation in the form of an Environmental Assessment of Environmental Impact Statement.

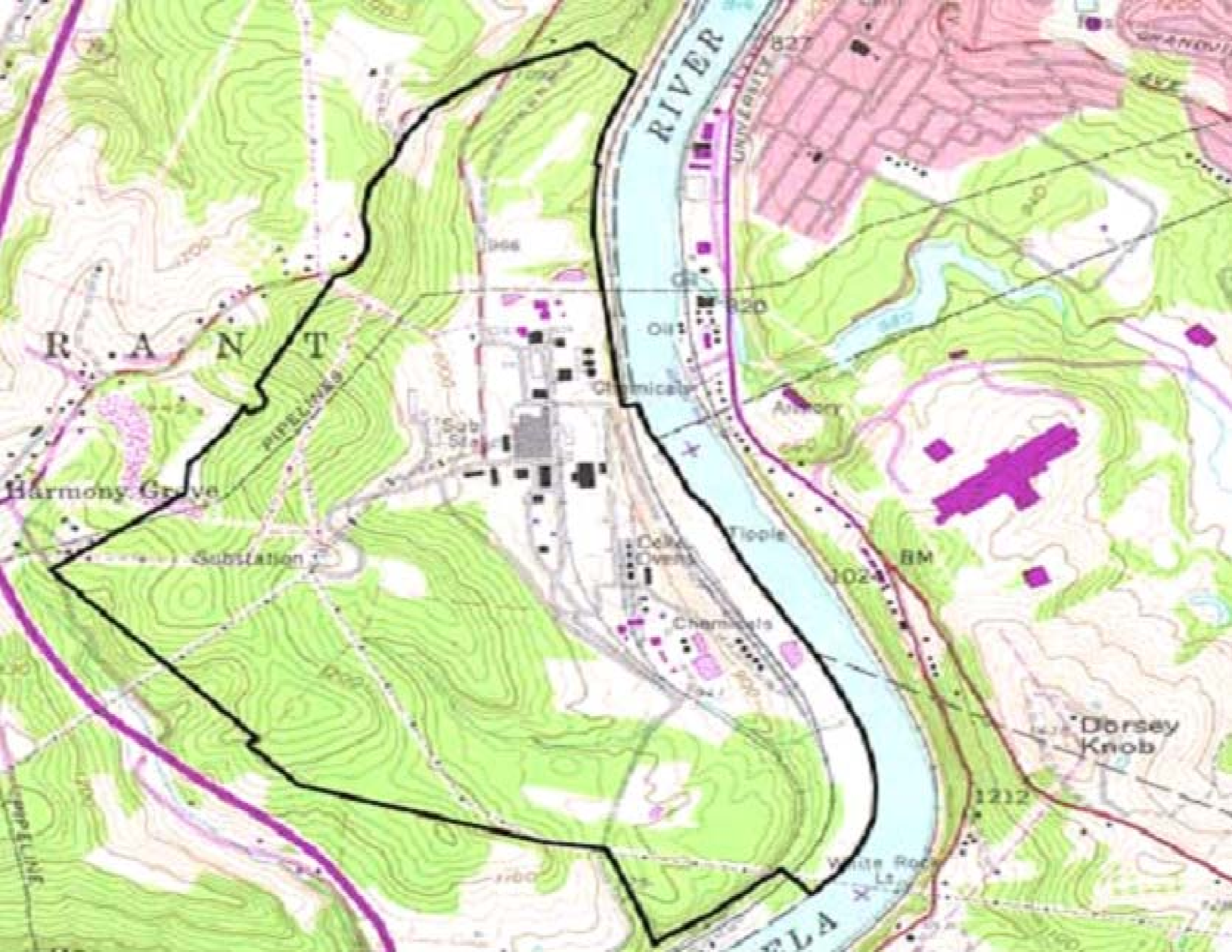
Project Manager

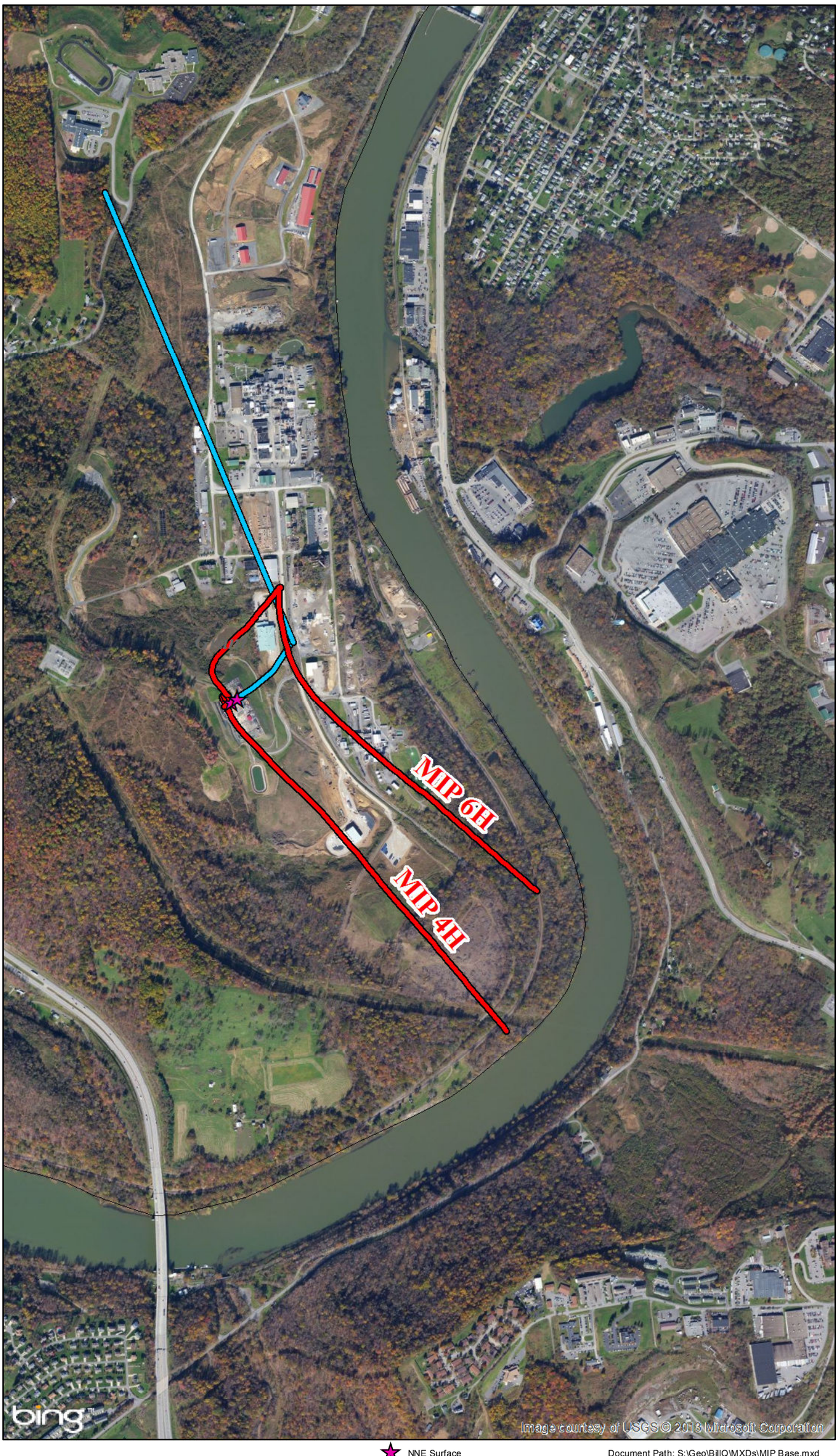
Signature: _____ Date (mm/dd/yyyy): _____

Typed Name: _____


I-79
Route 45
I-79
k Southern Railroad
River


Fairmont Rd
H E Shultz Spring
Jennings Randolph Hwy
River Rd
HARMONY GROVE
Morgantown Industrial Park
Morgantown Lock and Dam
Morgantown Pool
Jack Roberts Park
HOPECREST
SOUTH PARK
Dorsey Ave
FIRST WARD
White Park
Cobun Creek
Cobun Creek Reservoir
Cobun Creek Dam
Green Bag Road
River Rd
46
19
10/19
45
119
79
857


RIVER
UNIVERSITY
827
820
Oil
Chemicals
Armory
Sub Sta
R A N T
PIPELINES
Harmony Grove
Substation
Coke Ovens
Tipple
BM
1024
Chemicals
Dorsey Knob
1212
White Rock Lt
ELA
PIPELINE



0 0.05 0.1 0.2
Miles

NNE Surface
NNE Drilled
NNE Planned

Document Path: S:\Geo\BillQ\MXDs\MIP Base.mxd