

APPENDIX S

Existing or Proposed Projects in the Region of Influence Evaluated for Potential Cumulative Impacts

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Project <u>a</u>	County, State	Description	Approximate Closest Distance to Project (miles)	Watershed <u>b</u>	Project Status <u>c</u>	Potential Resources Affected	Air Quality Control Region (AQCR)
SHALE DEVELOPMENT							
Wells <u>d</u>							
Gulfport Energy - Amanda	Belmont, OH	Oil and gas well-site production facility.	29.7	Upper Ohio-Wheeling	In Service / Complete	Air/Socio	5
Hess - Kirkwood A Production Facility	Belmont, OH	Oil and gas production facility.	6.7	Tuscarawas	Ongoing	Air/Socio	5
Gulfport Energy - Brothers	Belmont, OH	Oil and gas well-site production facility.	10.4	Wills	In Service / Complete	Air/Socio	5
Gulfport Energy - Duvall	Belmont, OH	Oil and gas well-site production facility.	8.4	Upper Ohio-Wheeling	In Service / Complete	Air/Socio	5
Gulfport Energy - Perkins	Belmont, OH	Oil and gas well-site production facility.	5.0	Upper Ohio-Wheeling	In Service / Complete	Land Use, Air/Socio	5
Gulfport Energy - Sandra	Belmont, OH	Oil and gas well-site production facility.	7.7	Tuscarawas	In Service / Complete	Air/Socio	5
Gulfport Energy - Swallie	Belmont, OH	Oil and gas well-site production facility.	8.8	Tuscarawas	In Service / Complete	Air/Socio	5
American Energy - Utica LLC - Lawson 19-11N-7W	Harrison, OH	High volume horizontal hydraulic fracturing oil and gas well site production operations, including development of unpaved roadways and parking areas.	13.7	Tuscarawas	Ongoing	Air/Socio	5
Antero Resources - Urban Pad	Monroe, OH	Oil and gas production facility with associated unpaved roadways and parking areas.	1.7	Wills	In Service / Complete	Land Use, Air/Socio	5
Gulfport Energy - Jones Pad	Monroe, OH	Oil and gas well-site production facility.	1.2	Little Muskingum-Middle Island	In Service / Complete	Land Use, Air/Socio	5
CNX Gas Company - Noble 18 Well Pad	Noble, OH	Natural gas production facility.	2.9	Wills	Pending	Land Use, Air/Socio	5
Eclipse Resources 1 LP - Duane Weisend Pad	Noble, OH	Minor source construction and operation permit.	0.9	Little Muskingum-Middle Island	In Service / Complete	Land Use, Air/Socio	5

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Antero Resources - Monroe Pad	Noble, OH	Oil and gas production facility with associated unpaved roadways and parking areas.	3.4	Wills	Ongoing	Land Use, Air/Socio	5
Range Resources - A & D Ferguson Dev Unit 6H & 7H	Washington, PA	Drill and operate well permit.	10.1	Upper Ohio	In Service / Complete	Air/Socio	3
Rice Drilling B LLC - Captain Jack Sparrow 1H & 3H	Washington, PA	Drill and operate well permit.	29.7	NA	In Service / Complete	Air/Socio	3
CNX Gas Co LLC - Colvin Mor42ahs	Washington, PA	Drill and operate well permit.	6.7	Upper Ohio-Wheeling	Pending	Air/Socio	3
CNX Gas Co LLC - Consol Mor30ahs, Mor30chs, Mor30dhs, Mor30ehs, and Mor30hhs	Washington, PA	Drill and operate well permit.	6.8	Upper Ohio-Wheeling	In Service / Complete	Air/Socio	3
Range Resources - DMC Properties (East) Unit 12H and 13 H	Washington, PA	Drill and operate well permit.	13.3	Upper Ohio-Wheeling	In Service / Complete	Air/Socio	3
Range Resources - Jeffries Elisabeth 11512 2H & 4H	Washington, PA	Drill and operate well permit.	17.6	Upper Ohio	In Service / Complete	Air/Socio	3
Range Resources - Kendall Unit 10H	Washington, PA	Drill and operate well permit.	1.7	Upper Ohio	In Service / Complete	Land Use, Air/Socio	3
Range Resources - Malachosky Edward 11752 2H, 3H, and 4H	Washington, PA	Drill and operate well permit.	19.6	NA	In Service / Complete	Air/Socio	3
Range Resources - MCC Partners (West) Unit 9H	Washington, PA	Drill and operate well permit.	6.4	Upper Ohio	In Service / Complete	Air/Socio	3
Range Resources - Parees Unit 6H	Washington, PA	Drill and operate well permit.	3.4	Upper Ohio	In Service / Complete	Land Use, Air/Socio	3
EQT Production Co - R. Smith 592298	Washington, PA	Drill and operate well permit.	17.7	NA	In Service / Complete	Air/Socio	3
Chevron - Sargent Unit 10H	Washington, PA	Drill and operate well permit.	25.3	NA	In Service / Complete	Air/Socio	3
Range Resources Stewart Trust Unit 2H	Washington, PA	Drill and operate well permit.	14.4	Upper Ohio	In Service / Complete	Air/Socio	3

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Gathering Systems d							
Gulfport Energy - Bahmer	Belmont, OH	Facility extracts natural gas from on-site wells, separates the water and the condensate and pipes natural gas off-site.	10.1	Wills	Ongoing	Air/Socio	5
Triad Hunter, LLC – Stadler Production Facility	Monroe, OH	The facility (located 12 miles north-northwest of Sardis) will receive natural gas and produced water from production wells located on a contiguous well pad. The gas will be dehydrated and injected into pipelines for transportation to facilities owned by others for further processing.	0.1	Little Muskingum-Middle Island	In Service / Complete	Waters, Land Use, Noise, Air/Socio	5
Blue Racer Midstream LLC - Berne Plant	Monroe, OH	Initial permit-to-install and operate for an oil and gas processing plant.	0.2	Little Muskingum-Middle Island	In Service / Complete	Waters, Land Use, Noise, Air/Socio	5
EQT Gathering, LLC - Mercury Station	Wetzel, WV	Facility revises the gas throughputs for the existing glycol dehydration units and liquid throughputs for the existing produced fluids tanks, as well as adding a minor source to the equipment list. The Mercury Station consists of two (2) triethylene glycol (TEG) dehydration units each permitted at 120 million standard cubic feet per day (mmscfd) with associated reboilers (each rated at 154 MMBTU/hr) and enclosed flares (rated at 12 MMBTU/ hr), miscellaneous heating sources, two (2) produced fluids tanks (8,820 gallons each), and two (2) 2,000 gallon TEG storage tanks.	17.1	NA	In Service / Complete	Air/Socio	3

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Antero Resources Corporation - Forest Pad	Tyler, WV	Modification of a natural gas production facility to install and operate a production unit compressor, eight (8) additional heater treaters, eight (8) additional condensate tanks and increase in condensate production.	3.2	NA	Ongoing	Land Use, Air/Socio	3
Triad Hunter, LLC - Spencer Well Pad Station	Tyler, WV	Install two additional condensate tanks, a vapor combustor and four additional line heaters.	2.2	Little Muskingum-Middle Island	In Service / Complete	Waters, Land Use, Air/Socio	3
FERC – Jurisdictional Natural Gas Pipeline Projects							
Spectra Energy - NEXUS Gas Transmission (NEXUS) Project (FERC Docket No. CP16-22-000)	Columbiana, Lorain, Medina, Stark, Summit, Wayne, and Carroll, Erie, Sandusky, Wood, Lucas, and Fulton, OH; Washtenaw, Lenawee, Monroe, Oakland, Macomb, and St. Clair, MI	The NEXUS project would originate in northeastern Ohio, and include approximately 250 miles of large diameter pipe capable of transporting at least 2 billion cubic feet per day of natural gas. The greenfield pipeline will extend from receipt points in eastern Ohio to interconnections with the existing pipeline grid in southeastern Michigan. The project will utilize both existing and expansion capacity on the DTE Gas transportation system and the Vector Pipeline (Vector) System to access Michigan markets, Chicago and the Dawn Hub. Construction of NEXUS is expected to start in the winter of 2016 and may be completed by fall of 2017, with an anticipated in-service date of November 2017.	7.0	Huron; Raisin; Upper Ohio; Tuscarawas; Lower Maumee; Cedar-Portage; Sandusky;	Pending	Waters, Air/Socio	5

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Spectra Energy - Ohio Pipeline Energy Network (OPEN) (FERC Docket No. CP14-68-000)	Columbiana, Carroll, Jefferson, Belmont, and Monroe, OH	The OPEN project consists of approximately 76 miles of new 30-inch diameter pipeline and associated pipeline support facilities in Ohio, including a new compressor station, capable of transporting 550,000 dekatherms per day. Also included are reverse flow modifications at existing compressor stations along Texas Eastern's existing mainline in Ohio, Kentucky, Mississippi, and Louisiana. Spectra Energy completed construction of the OPEN Project in the fall of 2015, and filed an in-service request on November 4, 2015.	0.0	Upper Ohio; Upper Ohio-Wheeling	In-service / Complete	Waters, Air/Socio	5
Columbia Gas Transmission - Leach XPress Project (FERC Docket No. CP15-514-000)	Marshall, WV; Fairfield, Hocking, Monroe, Morgan, Muskingum, Noble, Perry, Vinton, and Jackson, OH	The Leach XPress project will involve construction of approximately 127 miles of greenfield pipeline and two loops totaling 30 miles, abandonment of 27 miles of pipeline, three new compressor stations, and modifications at two existing stations. The project will increase the capacity of Columbia Transmission's system by 15 billion cubic feet per day and will move regional gas supplies to various markets, including interconnections with Columbia Gulf in Leach, Kentucky. Columbia Gas anticipates construction of the project to begin in November 2016, with a planned in-service date of November 1, 2017.	Parallels Seneca Lateral in Monroe County, OH	Wills; Upper Ohio-Wheeling	Pending	Waters, Air/Socio	3, 5

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Equitrans - Ohio Valley Connector (OVC) Project (FERC Docket No. CP15-41-000)	Marion, Wetzel, Marshall, WV; and Monroe, OH	The OVC project consists of about 50 miles of pipeline and two new compressor stations to transport about 900,000 dekatherms per day of natural gas produced in the central Appalachian Basin to interconnections with the Texas Eastern and Rockies Express pipelines. Equitrans originally anticipated construction to begin in October 2015 and a projected in-service date of June 2016, but this date is infeasible at this point.	Northern terminus of Equitrans Project is in vicinity of the Seneca Lateral	NA	Approved	Waters, Air/Socio	3, 5
Mountain Valley Pipeline - MVP Project (FERC Docket No. CP16-10-000)	Located in 16 counties beginning in Wetzel County, WV to the terminus in Pittsylvania County, VA	The 36-42-inch diameter, 2,917 mile pipeline would deliver gas from Equitrans' Mainline and Sunrise Transmission Systems, and from gathering systems and natural gas production facilities located near the pipeline to the proposed tie-in point near the Transco Zone 5 compressor station 165. Pipeline construction is anticipated to begin in February 2017 with a target in-service date of December 2018.	6.5	NA	Pending	Air/Socio	3, 4

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ANR East Pipeline Project	Originating at the Cadiz Gas Plant in southeastern OH and terminating at the ANR Joliet Hub in Lake County, IN	The ANR East Pipeline Project would include the construction of a new pipeline originating at the Cadiz Gas Plant in southeastern Ohio and terminating at the ANR Joliet Hub in Lake County, Indiana. The new build would consist of approximately 320 miles of large diameter, 1,440 pounds per square inch (psig) maximum allowable operating pressure (MAOP) pipeline and up to 140,000 horsepower (HP) of compression.	0.0	Lower Maumee; Sandusky; Tuscarawas; Upper Ohio-Wheeling; Mohican; Walhonding; Tiffin; Auglaize; Cedar-Portage	Proposed	Waters, Air/Socio	5
Kinder Morgan - UTOPIA Project	Harrison County, OH, to Kinder Morgan's Cochin Pipeline near Riga, MI	The project is a 240-mile, 12-inch diameter pipeline from Harrison County, Ohio, to Kinder Morgan's Cochin Pipeline near Riga, Michigan, where the company would then move product eastward to Windsor, Ontario, Canada. UTOPIA would transport previously refined or fractionated natural gas liquids (NGLs), including ethane and propane, with an initial 50,000 barrels per day (bpd) of capacity, which is expandable to more than 75,000 bpd.	0.0	Huron; Raisin; Upper Ohio-Wheeling; Tuscarawas; Mohican, Walhonding; Lower Maumee; Sandusky	Proposed	Waters, Air/Socio	5

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Tennessee Gas Pipeline Abandonment and Capacity Restoration Project (FERC Docket No. CP15-88-000) and Kinder Morgan Utica Marcellus Texas Pipeline	Multiple Counties beginning in LA and terminating in PA	The project involves the abandonment and conversion of over 1,000 miles of natural gas service on Tennessee Gas pipelines to natural gas liquids. The project involves construction of approximately 200 miles of new pipeline from Louisiana to Texas, and 155 miles of new laterals in Pennsylvania, Ohio, and West Virginia. The pipeline, which will provide connectivity to major processing and fractionation hubs in the basin, will terminate in Mont Belvieu, Texas, and have a maximum design capacity of 375,000 bpd for transporting Y-grade natural gas liquids.	0.0 (existing pipeline)	Upper Ohio; Tuscarawas; Wills	Pending / Proposed	Waters, Air/Socio	3, 4, 5, 6
Dominion Supply Header (FERC Docket No. CP15-555-000)	Multiple counties in WV, VA, and NC	The project will deliver up to 15 billion cubic feet per day (bcf/d) of natural gas from supply areas in West Virginia to demand areas in West Virginia, Virginia, and North Carolina.	0.0	Little Muskingum-Middle Island	Pending	Air/Socio	3

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Dominion - Atlantic Coast Pipeline Project (FERC Docket No. CP15-554-000)	Multiple counties in WV, VA, and eastern NC	Dominion proposes to build and operate a 550-mile interstate natural gas pipeline from West Virginia, through Virginia and into eastern North Carolina to meet the region's rapidly growing demand for natural gas. The pipeline has an estimated cost of between \$45 billion and \$5 billion, an initial capacity of 15 bcf/d of natural gas, and a target in-service date of late 2018. Gas will be carried through a 42-inch-diameter pipe in West Virginia and Virginia, and a 36-inch-diameter pipe in North Carolina.	10.0	NA	Pending	Air/Socio	3
OTHER PROJECTS							
Electric Generation and Transmission							
Robinson Power Co/ Beech Hollow Energy	Washington, PA	650 MW combined cycle gas turbine plant.	1.2	Upper Ohio	Proposed	Land use, Air/Socio	3
Moundsville Power, LLC – Combined-Cycle Power Plant Project	Marshall, WV	A new combined-cycle combustion turbine (CT) electric power plant.	5.6	Upper Ohio-Wheeling	Pending	Waters, Air/Socio	3
Blackfork Wind Energy Project	Richland, OH	Includes 91 turbines, 494 feet high, capable of generating 200 MW of power with a life span of 20 to 25 years. In addition to the turbines, the project includes access roads, electrical collection lines, a construction-staging area, concrete-batch plant, substation, and an operation and maintenance facility.	0.3	NA	Pending	Land Use, Noise, Air/Socio	5

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Transportation							
Hummel Road Bridge Project	Richland, OH	Bridge replacement project scheduled for 2017.	0.9	Mohican	Pending	Waters, Air/Socio	5
I-75 Widening - Perrysburg to Findlay	Hancock & Wood, OH	Widen both directions of I-75 to three lanes. Started June 2013. Estimated end date is November 2017.	0.0	Lower Maumee	Under Construction	Waters, Land Use, Cultural, Noise, Air/Socio	5
US 42/SR 96/US 250 Intersection Improvement	Ashland, OH	Reconstruction of 8 miles of US 42 and replacement of the existing grade separated intersection with SR 96/US 250 with an at-grade signalized intersection. Widening and resurfacing of SR 96/US 250 to accommodate the intersection improvements. Bridge widening and culvert work to accommodate the intersection improvements. Started in May 2015, with estimated completion in November 2015.	3.6	Mohican	Under Construction	Air/Socio	5
SR 800 Widening	Stark, OH	Widening of SR 800 from 33rd Street to 43rd Street to include turn lanes. Project also includes access management to improve side street identification and driveway definition. One lane of traffic will be maintained in each direction on SR 800 and Faircrest Street. Various 30 day side street closures will occur throughout the project. Started December 2014, with estimated end date of September 2016.	6.1	Tuscarawas	Under Construction	Air/Socio	5

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I-70 Bridge Replacement at Marion St in Bridgeport	Belmont, OH	Three structures to be replaced at Bridgeport interchange, including Marion Street Bridge over I-70, and the eastbound on- and off-ramp structures to I-70. Various Marion Street and ramp closures during construction. Access to Bridgeport is maintained; local traffic is detoured on US 40 from Bridgeport to the Belmont CR 214 exit. Thru truck traffic is encouraged to use I-470 to avoid congestion and possible delays. Started January 2015, with estimated end date of November 2015.	6.2	Upper Ohio-Wheeling	Under Construction	Waters, Air/Socio	5
I-70 Bridge Replacement at Lady Bend Hill near Exit 204	Belmont, OH	Eastbound and westbound structures to be replaced and widened approximately 2 miles east of SR 800. Two lanes of traffic will be maintained in each direction. Started July 2015, to be completed by November 2016.	6.8	Tuscarawas	Under Construction	Air/Socio	5
I-70 Bridge Removal and Replacement just east of SR 800 and Hendrysburg	Belmont, OH	Rehabilitation of eastbound and westbound bridges over Spencer Creek and removal of eastbound and westbound pair of bridges over an abandoned railroad just east of exit 202. Two lanes of traffic will be maintained in each direction. Started June 2014, with an estimated end date of May 2016.	7.4	Tuscarawas	Under Construction	Air/Socio	5

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SR 149 at I-70 Morristown Interchange	Belmont, OH	Safety improvement project, including signals and widening from I-70 westbound exit ramp to (TR 1569) Bond Road at Morristown Interchange. Traffic will be maintained. Started July 2015, estimated completion by October 2015.	4.0	Upper Ohio-Wheeling	Ongoing	Land use, Air/Socio	5
SR 7 at I-470 Ramp Intersection	Belmont, OH	Safety improvement project, including signals at I-470 ramp intersection. Traffic will be maintained.	4.6	Upper Ohio-Wheeling	In Service / Complete	Waters, Land Use, Air/Socio	5
SR 7 Slope Repairs	Jefferson, OH	Two projects within 5 miles from Rush Run to north of Brilliant. SR 7 has been reduced to one lane due to multiple rock slides on both sides of Brilliant since 2011. Started April 2015, with an estimated end date of June 2018.	16.3	Upper Ohio-Wheeling	Under Construction	Waters, Air/Socio	5
I-77 Bridge Removal	Tuscarawas, OH	Remove northbound and southbound bridges over abandoned railroad about 1 mile north of the CR 80 exit in Dover Twp. Traffic will be maintained.	8.9	Tuscarawas	In Service / Complete	Air/Socio	5
US 250 Interchange Improvements at Strasburg	Tuscarawas, OH	I-77/US 250 interchange improvements at Strasburg, including widening and signals. Traffic will be maintained.	6.1	Tuscarawas	In Service / Complete	Air/Socio	5
I-75 resurfacing and joint repair, south of Findlay	Hancock, OH	Grind and resurface pavement, repair pavement joints on I-75 from just south of the CR 60 overpass to just north of the CR 313 overpass.	14.4	NA	In Service / Complete	Air/Socio	5
US 68/SR 15 resurfacing, Findlay	Hancock, OH	Grind and resurface pavement on US 68/SR 15 from south of Lima Avenue to SR 37.	12.8	NA	In Service / Complete	Air/Socio	5

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I-96 Reconstruction Project	Livingston, MI	The Michigan Department of Transportation (MDOT) is reconstructing a 7-mile stretch of I-96 from Newburgh Road in the city of Livonia to Telegraph Road in Redford Township. It will require complete closure of the interstate for approximately 1 year. Work includes reconstructing the road and repairing 37 bridges, including on and off ramps. The project will bring the corridor to current design standards and improve safety. Clearances at the 37 bridges/overpasses also will be increased to improve safety.	23.6	NA	In Service / Complete	Air/Socio	5
I-96/US-23 Interchange Improvements	Livingston, MI	MDOT will make major safety and operational improvements to the I-96/US-23 interchange in Brighton Township, Livingston County. The project includes: constructing new through-lanes on I-96 between the current eastbound and westbound lanes; building three new bridges over northbound and southbound US-23, and over Old US-23; changing the existing lanes of I-96 to collector-distributor (CD) lanes for easier and safer lane changes for ramp traffic; and rebuilding the existing six bridges over US-23 and Old US-23. Started Spring 2015 with completion by 2016.	11.2	Huron	Under Construction	Air/Socio	5

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Double Divergent Interchange at Murtland Avenue	Washington, PA	Construction consists of building a Double Divergent Interchange at the intersection of I-70 and SR 0019 located at Murtland Avenue. I-70 will be constructed for three lanes in each direction from Beau Street to the North Junction. Mainline bridge structures will be reconstructed as well as the roadway on SR 0019 and new ramps. Started September 2014 with an estimated end date of February 2017.	17.1	Upper Ohio	Under Construction	Air/Socio	3
South Junction	Washington, PA	The description of the project is as follows: replace I-70 structures over B&O RR, I-70 structures over I-79, SR 2002 structure over I-79, construct structure on new ramp to carry I-79 NB to I-79 WB, reconstruct I-70 pavement and other miscellaneous construction.	16.4	Upper Ohio	In Service / Complete	Air/Socio	3
Ginger Hill Intersection	Washington, PA	Work involves reconstruction of SR 136, SR 917, SR 1067, and SR 1087 for improved sight distance. All state routes will be reconstructed and paved, including new drainage and guiderail, and widening.	24.1	NA	In Service / Complete	Air/Socio	3

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PA 481/Pigeon Creek Bridge	Washington, PA	The scope of work for the SR 0481 Section K00 project will consist of replacing the existing single span Steel Thru-Truss structure over Pigeon Creek with a P/S Concrete Box Beam structure, reconstructing the approach roadway, and updating the guiderail, pavement marking and signing for State Route 0481, Section K00, in Washington County, Carroll Township. The project begins approximately 300 feet south of the SR 481/SR 2023 (Van Voorhis Road) intersection (segment 0240/2894) and ends 200 feet north of the SR 481/SR 2023 (Van Voorhis Road) intersection (segment 0250/0202). The length of the project is 400 feet (0076 miles). A detour will be utilized during construction. In addition, utilities will have to be relocated either prior or during construction. Started in April 2015, with an estimated completion of January 2016.	27.2	NA	Under Construction	Air/Socio	3
Double Roundabout in 84	Washington, PA	This work involves the realignment of SR 519 at the intersection of Thomas and Dunningsville Roads. A new double round-about will be constructed, as well as new drainage, guiderail, and demolition of an existing building structure.	18.8	Upper Ohio	In Service / Complete	Air/Socio	3

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Pike Street / Country Club Road	Washington, PA	Project involves the demolition of one structure and the widening of the intersection of Pike Street and Country Club Road. New drainage, signal, railroad crossing, and bituminous overlay will take place as well.	15.2	Upper Ohio	In Service / Complete	Air/Socio	3
Donora-Webster Bridge	Washington, PA	Currently the Donora-Webster Bridge is closed. This project will involve the complete demolition of the existing bridge and its approach spans as well. No new bridge is going to be built.	31.0	NA	In Service / Complete	Air/Socio	3
Proctor Bridge Renovation	Wetzel, WV	Work to be completed FFY 2016.	4.2	NA	Unknown	Waters, Air/Socio	3
Moore Bridge (S352 7 01007 00)	Wetzel, WV	Moore Bridge Replacement.	7.0	NA	In Service / Complete	Air/Socio	3
Pike Fork Bridge (S309 23 00820 00)	Doddridge, WV	Bridge replacement.	5.1	NA	In Service / Complete	Air/Socio	3
Tate Bridge (S309 23 01234 00)	Doddridge, WV	Bridge replacement to be completed FFY 2016.	3.6	NA	Unknown	Air/Socio	3
Tarklin Run Slab Bridge (s309 23 01519 00)	Doddridge, WV	Bridge replacement.	2.4	NA	In Service / Complete	Air/Socio	3
Shiloh Bridge (S348 14/4 00027 00)	Tyler, WV	Replace bridge downstream.	3.6	NA	In Service / Complete	Waters, Air/Socio	3
Centerville Bridge (S348 18 01011 00)	Tyler, WV	Bridge replacement.	2.2	NA	In Service / Complete	Waters, Air/Socio	3
Wells Bridge (S348 18 00445 00)	Tyler, WV	Bridge replacement.	1.7	NA	In Service / Complete	Waters, Air/Socio	3
McDonalds/Upper Plaza (S326 2 01950 00)	Marshall, WV	Five lane widening. Replacement of two bridges.	3.7	Upper Ohio-Wheeling	In Service / Complete	Waters, Air/Socio	3
Jefferson Ave Ext Bridge (S236 250 03134 00)	Marshall, WV	Bridge replacement.	3.2	Upper Ohio-Wheeling	In Service / Complete	Waters, Air/Socio	3

APPENDIX S (continued)

Existing or Proposed Projects in the Region of Influence Evaluated for Potential Cumulative Impacts

Project <u>a</u>	County, State	Description	Approximate Closest Distance to Project (miles)	Watershed <u>b</u>	Project Status <u>c</u>	Potential Resources Affected	Air Quality Control Region (AQCR)
Rude Bridge (S326 5 00398 00)	Marshall, WV	Bridge replacement.	2.1	Upper Ohio-Wheeling	In Service / Complete	Waters, Air/Socio	3
Commercial/Residential Development							
Sullivan Dohp IX, LLC	Ashland, OH	Wastewater Treatment Facilities for Dollar General - Installation of a septic tank and mound system at 493 US Route 224.	14.8	NA	Unknown	Air/Socio	5
Belmont Better Hunting & Fishing Club	Belmont, OH	Onsite Sewage Treatment and Disposal System for the Belmont Club.	8.3	Tuscarawas	Unknown	Air/Socio	5
Bailey-PVS Oxides, LLC	Fulton, OH	Hazardous waste closure plan for clean closure by removal and decontamination of the retention pond, soils, and storage tank area of the former Bailey-PVS Oxides, LLC facility.	10.2	Lower Maumee	Unknown	Air/Socio	5
Tall Timbers West	Hancock, OH	Sanitary Sewers for Tall Timbers West on south side of County Road 212.	8.0	Cedar-Portage	Unknown	Air/Socio	5
Findlay Water Treatment Plant	Hancock, OH	Phase 1 & 2 Waterline.	11.3	NA	Unknown	Air/Socio	5
Hopedale Fractionation Facility	Harrison, OH	Initial installation PTIO for B003 (natural gas-fired process heater rated at a heat input capacity of 145 MMBtu/hr) and T002 (40,000-barrel natural gasoline storage tank equipped with a redundant mechanical VRU with a design control efficiency of 100%). The companies operating the Hopedale fractionation plant have announced plans to double capacity at the facility by the first quarter of 2015.	7.2	Tuscarawas	Unknown	Air/Socio	5

APPENDIX S (continued)

Existing or Proposed Projects in the Region of Influence Evaluated for Potential Cumulative Impacts

<u>Project a</u>	<u>County, State</u>	<u>Description</u>	<u>Approximate Closest Distance to Project (miles)</u>	<u>Watershed b</u>	<u>Project Status c</u>	<u>Potential Resources Affected</u>	<u>Air Quality Control Region (AQCR)</u>
Napoleon City	Henry, OH	Detail plan for PWSID:OH3500811 PLAN NO:870643 regarding General Plan.	5.8	Lower Maumee	Unknown	Waters, Air/Socio	5
Gerken Materials Plant 18	Henry, OH	Permit renewal using the General Permit Models for Roadways and Storage Piles.	0.7	Tiffin	Unknown	Air/Socio	5
D&I Silica Mingo Junction	Jefferson, OH	New installation of D&I Silica, a frac sand transload facility at a railyard location. Includes paved roadways and an initial installation PTIO for sand handling.	11.2	Upper Ohio	Unknown	Air/Socio	5
Moorhead Brothers Inc.	Noble, OH	Permission to open burn woody debris, shrubs, tree branches, and stumps for disposal of land clearing waste along the pipeline corridor north of Ogles Ridge Road.	9.3	Little Muskingum-Middle Island	Unknown	Air/Socio	5
AK Steel Corp - Mansfield Operations	Richland, OH	Increase burner capacity for three ladle preheaters from 10 million British thermal units per hour (MMBtu/hr) to 164 MMBtu/hr by installing new, low-NOX burners.	4.2	Mohican	Unknown	Air/Socio	5
Sewer Replacement - Hammond Ave & West Temple Court	Richland, OH	Replacement of Sanitary Sewer.	6.5	Mohican	Unknown	Air/Socio	5
Tappan Park Drive Pump Station Installation	Richland, OH	City of Ontario – Install Pump Station and Force Main.	6.2	Mohican	Unknown	Waters, Air/Socio	5
Bellville Village Water	Richland, OH	Water Distribution System, Phase 1A Improvements.	15.0	Mohican	Unknown	Waters, Air/Socio	5
North Township Road Tank Installation	Seneca, OH	Installation of a 2,000 gallon holding tank for wastewater treatment.	12.8	Sandusky	Unknown	Air/Socio	5

APPENDIX S (continued)

Existing or Proposed Projects in the Region of Influence Evaluated for Potential Cumulative Impacts

Project <u>a</u>	County, State	Description	Approximate Closest Distance to Project (miles)	Watershed <u>b</u>	Project Status <u>c</u>	Potential Resources Affected	Air Quality Control Region (AQCR)
Church and Dwight Co Inc.	Seneca, OH	Modification to Permit to include two (2) additional unloading emission units.	12.8	Sandusky	Unknown	Waters, Air/Socio	5
Roppe Corporation	Seneca, OH	Renewal permit for a Banbury mixer, two calendar lines, and an accessory line.	3.6	Cedar-Portage	Unknown	Waters, Air/Socio	5
Aqua Ohio - Massillon PWS	Stark, OH	12" Waterline Project.	8.8	Tuscarawas	Unknown	Waters, Air/Socio	5
Massillon Asphalt Co	Stark, OH	Renewal permit for drum mix, hot mix asphalt (HMA) plant. Continuous operation, maximum production capacity 300 tons per hour. The aggregate dryer, rated heat input capacity of 120 MMBtu/hr, burns natural gas, on-spec used oil and #2 fuel oil. The aggregate mix includes limestone, sand, and gravel. Recycled asphalt pavement (RAP) added to the raw ingredient mix. Particulate matter emissions controlled by a fabric filter (baghouse).	9.2	Tuscarawas	Unknown	Waters, Air/Socio	5
Canton Drop Forge	Stark, OH	Hazardous waste closure plan for clean closure at the Canton facility.	7.8	Tuscarawas	Unknown	Air/Socio	5
Alliance Casting Co LLC	Stark, OH	Installation of an EMI CB800 Core Making Line at an existing steel foundry. Core Making Line to consist of three sand silos, three electrically heated sand heaters, a sand/resin mixer, and the CB800. Core Machine Sources controlled by baghouse and scrubber.	24.3	NA	Unknown	Air/Socio	5

APPENDIX S (continued)

Existing or Proposed Projects in the Region of Influence Evaluated for Potential Cumulative Impacts

<u>Project a</u>	<u>County, State</u>	<u>Description</u>	<u>Approximate Closest Distance to Project (miles)</u>	<u>Watershed b</u>	<u>Project Status c</u>	<u>Potential Resources Affected</u>	<u>Air Quality Control Region (AQCR)</u>
Fairhope Pump Station Rehabilitation	Stark, OH	Add Gravity Sewer, Pump Station, and Force Main for the Fairhope Pump Station Rehabilitation - Project 577.	12.5	Tuscarawas	Unknown	Air/Socio	5
Gradall Industries Inc.	Tuscarawas, OH	Renewal permit for touch-up/repair and to transition the facility from synthetic minor status due to the replacement of emissions units R001 and R003-R005 with a powder coating system.	8.3	Tuscarawas	Unknown	Waters, Air/Socio	5
The Belden Brick Company	Tuscarawas, OH	Modify the crushing and screening equipment on its property.	12.5	Tuscarawas	Unknown	Air/Socio	5
Aniie Tremblay, Chief Operating Off, Tremcar USA, Inc.	Tuscarawas, OH	Hazardous waste closure plan for the outside soils and interior paint room of the Tremcar facility.	4.3	Tuscarawas	Unknown	Air/Socio	5
Akron Brass Co	Wayne, OH	Initial installation of sand handling system for brass foundry.	4.0	Walhonding	Unknown	Air/Socio	5
Jefferson Street Sanitary Sewer Extension	Wood, OH	Sanitary Sewer Extension.	19.8	Lower Maumee	Unknown	Air/Socio	5
Christian Life Mennonite Church Project	Stark, OH	Construction of two additions (40' x 160' and 100' x 96') and parking.	2.6	Tuscarawas	Unknown	Air/Socio	5
The Regents of University of Michigan	Washtenaw, MI	Staff gauge.	7.7	Huron	Unknown	Waters, Air/Socio	5
Michael Poupore – Driveway Modifications	Washtenaw, MI	Driveway construction with associated culverts.	10.0	Raisin	Unknown	Air/Socio	5
Robert Thrasher – Culvert installation	Washtenaw, MI	Culverts for driveway.	3.5	Huron	Unknown	Air/Socio	5
Washtenaw County Road Commission - Trib To Saline River	Washtenaw, MI	Culverts-Public Transportation Dredge and fill activity.	6.4	Huron	Unknown	Air/Socio	5

APPENDIX S (continued)

Existing or Proposed Projects in the Region of Influence Evaluated for Potential Cumulative Impacts

Project <u>a</u>	County, State	Description	Approximate Closest Distance to Project (miles)	Watershed <u>b</u>	Project Status <u>c</u>	Potential Resources Affected	Air Quality Control Region (AQCR)
<p><u>a</u> Projects documented are within the counties that are covered within the Area of Influence.</p> <p><u>b</u> Watersheds listed are National Hydrography Datasets (NHD) Hydrologic Unit Code (HUC) -8 watersheds that are crossed both by the project listed in the table and the proposed projects.</p> <p><u>c</u> Proposed = Project has been identified but applications have not been submitted; Pending = Permit applications have been submitted but regulatory approvals have not been obtained; Ongoing = Regulatory permits have been issued; Approved = the action has been approved by the regulating agency; Under Construction = construction has commenced; In service/Complete = Construction has been completed and the project is in operation; TBD = to be determined; Unknown = Project details and/or status are not available.</p> <p><u>d</u> Proposed well drilling activity located in counties within 10 miles of the proposed projects; see text for additional information.</p> <p><u>e</u> Projects recently completed, under construction, or expected to be under construction in the same timeframe as and located within 10 miles of Rover's projects.</p>							
<p>Sources: ANR, 2015; Columbia, 2015; Equitrans, 2015; Dominion, 2015a; Dominion, 2015b; Kinder Morgan, 2015a; Kinder Morgan, 2015b; OHDOT, 2015; OHEPA, 2015f; OHPSB, 2015; MIDEQ, 2015d; MIDEQ, 2015d; MIDOT, 2015; MVP, 2015; PADEP, 2015c; PADOT, 2015; Spectra, 2015a; Spectra, 2015b; WVDEP, 2015c; WVDOT, 2015.</p>							

