Number	Workgroup	Recommendation Number	Recommendation	Recommended Lead Agency	Overlap?	To Which One(s)
1	Agriculture	1	Educate Landowners on Pipeline Development Issues	PDA	Yes	4, 34, 56, 123, 127, 150
4	Conservation and Natural Resources	1	Communicate Pipeline Development Conservation Practices to the Public	DCNR & DEP	Partially	1, 34, 123
34	County Government	5	Develop Tools to Educate the Public on Pipeline Development	DEP - OPI	Yes	1, 4, 123, 127, 150
56	Environmental Protection	3	Establish Early Coordination with Local Landowners and Lessors	DEP - Internal Workgroup	Yes	4, 34, 123, 150, 151, 163
123	Historical/Cultural/Tribal	1	Improve Communication with Landowners	Industry	Yes	1, 4, 35, 56, 127, 150
127	Historical/Cultural/Tribal	5	Conduct Early Outreach with Affected Communities		Yes	1, 4, 34, 123, 150, 151, 163
150	Public Participation	1	Establish Statewide Pipeline Information Resource Center	DCED or Gov's Office	Yes	1, 4, 33, 34, 35, 39, 40, 55, 56, 123, 129, 147
151	Public Participation	2	Adopt Guidelines for Public Participation	Gov's Office	Yes	1, 4, 33, 34, 35, 39, 40, 55, 56, 123, 129, 147
163	Siting and Routing	8	Pipeline Developers Should Engage with Private and Governmental Stakeholder Engagement and Educate Landowners	Industry	Yes	1, 4, 34, 123
35	County Government	6	Operators Should Engage in Timely Communication	County Government	Yes	1, 34, 54, 123, 129, 151
129	Local Government	1	Communicate Early and Often with Local Government Officials	County & Local Government	Yes	30, 31, 54, 150, 151
55	Environmental Protection	2	Establish Early Coordination with Local Non- Governmental Groups	DEP - Internal Workgroup	Yes	123, 151
40	County Government	11	Create a Commonwealth Library of Pipeline Information	DCED	Yes	150
147	Pipeline Safety and Integrity	11	Create A Public Education Program on Gathering Systems	County & Local Government	Yes	30, 31, 123, 127, 129, 148, 150
148	Pipeline Safety and Integrity	12	Enhance Public Awareness of Pipeline Location	County & Local Government	Yes	5, 30, 31, 32, 39, 44, 123, 127, 129, 146, 147, 150, 164,171

Number	Workgroup	Recommendation Number	Recommendation	Recommended Lead Agency	Overlap?	To Which One(s)
149	Pipeline Safety and Integrity	13	Develop Public Education Program for Emergencies	County & Local Government	Yes	5, 32, 39, 44, 49, 144, 146, 148, 150, 164, 171
139	Pipeline Safety and Integrity	3	Establish Publicly Available Pipeline Inspection Information	DEP	Yes	40, 150
2	Agriculture	2	Build a GIS Database of PA's Farms	PDA	Yes	5, 32, 39, 44, 144, 146, 164, 171
5	Conservation and Natural Resources	2	Develop Public Access to Pipeline GIS Information	DEP - Internal Workgroup	Yes	32, 39, 146, 164, 171
32	County Government	3	Counties Should Make GIS Mapping Available to Operators and Require Them to Provide Their Mapping to Counties and Municipalities	County Government	Yes	5, 39, 44, 144, 164, 171
39	County Government	10	Empower GIS Mapping	OA	No	
44	Emergency Preparedness	3	Require Infrastructure Mapping	General Assembly	Yes	5, 32, 39, 44, 144, 146, 164, 171
144	Pipeline Safety and Integrity	8	Establish Mapping/GIS for Emergency Response	PUC	Yes	5, 32, 39, 44, 146, 164, 171
146	Pipeline Safety and Integrity	10	Enhance Public Awareness via Mapping/GIS	PUC	Yes	5, 32, 39, 44, 144, 150, 151, 164, 171
164	Siting and Routing	9	Invest in Digital Infrastructure to Improve Data Availability		Yes	5, 32, 144, 171
171	Economic Development	1	Develop a Pipeline Map	PUC	Yes	5, 32, 39, 44, 144, 146, 164, 171
3	Agriculture and Conservation and Natural Resources	1	Develop Best Management Practices for Pipeline Development on Agricultural Operations	PDA/DCNR	Partially	116
	Resources		Development on rightentular operations			
6	Conservation and Natural Resources	3	Use a Landscape Approach for Planning and Siting Rights-of-Way Corridors	DEP - Internal Workgroup	Yes	31, 63
31	County Government	2	Counties Should Include Pipelines Development in County Comprehensive Plans	County Government	Yes	6?, 7

Number	Workgroup	Recommendation Number	Recommendation	Recommended Lead Agency	Overlap?	To Which One(s)
63	Environmental Protection	10	Sponsors Should Use Landscape Level Planning	DEP - Internal Workgroup	Yes	6, 31
7	Conservation and Natural Resources	4	Give Special Consideration to Protected / Designated Lands in Pipeline Siting	DEP - Internal Workgroup	Yes	31, 37
156	Siting and Routing	1	Utilize Planning Process Appropriate for the Scale of the Pipeline Project		Yes	6, 31, 63
8	Conservation and Natural Resources	5	Mitigate the Loss of Public Use of Public Lands Resulting from Pipeline Development	DEP - Internal Workgroup	No	
105	Environmental Protection	52	Establish Forest Mitigation Program	DCNR	Yes	8, 16
9	Conservation and Natural Resources	6	Avoid Geologic Hazards During Planning	DCNR	No	
10	Conservation and Natural Resources	7	Implement Full-Time Environmental Inspections During Pipeline Construction	DEP	No	
11	Conservation and Natural Resources	8	Monitor Water Quality During Construction	DEP	No	
12	Conservation and Natural Resources	9	Require Post-Construction Monitoring for 5 Years	'	No	
100	Environmental Protection	47	Conduct Quantitatively Site Monitoring	Industry	Yes	12
13	Conservation and Natural Resources	10	Tie Permitting Standards to the Duration of Impact	DEP - BWEW	No	
14	Conservation and Natural Resources	11	Implement a Mitigation Bank to Improve Water Quality	DEP - BWEW	Yes	28?, 78
28	Conservation and Natural Resources	25	Finalize Functional Protocols for Impacts and Offsets	DEP - BWEW	Yes	14?, 78
78	Environmental Protection	25	Implement Wetland Banking/Mitigation Measures	DEP - BWEW	Yes	14, 28

Number	Workgroup	Recommendation Number	Recommendation	Recommended Lead Agency	Overlap?	To Which One(s)
15	Conservation and Natural Resources	12	Reduce Forest Fragmentation in Pipeline Development	DCNR	Yes	21
21	Conservation and Natural Resources	18	Minimize Aesthetic Impacts in Pipeline Development	DCNR	Yes	15, 20
20	Conservation and Natural Resources	17	Restore and Maintain a Border Zone in Forested Areas	DCNR	Yes	21
68	Environmental Protection	15	Route Pipelines to Minimize Disturbance to Forest Interiors	DEP - Internal Workgroup	Yes	15, 20, 21
96	Environmental Protection	43	Soften Forest/Right-of-Ways Edges and Promote Canopy Closure	DEP - Internal Workgroup	Yes	15, 20, 21
16	Conservation and Natural Resources	13	Promote Biodiversity in Pipeline Development	DCNR	Yes	19
19	Conservation and Natural Resources	16	Promote Wildlife Habitat Opportunities Along Pipeline Corridors	DCNR	Yes	16
97	Environmental Protection	44	Create Onsite Habitat	DEP - Internal Workgroup	Yes	15, 16, 19
99	Environmental Protection	46	Ensure Ecologically Sensitive Revegetation of Right-of-Ways	DEP - Internal Workgroup	No	15 - 20, 24 - 27
17	Conservation and Natural Resources	14	Develop Rare Species Work Windows to Avoid Impacts	DCNR	No	
18	Conservation and Natural Resources	15	Minimize Impacts to Riparian Areas at Stream Crossings	DCNR	No	
87	Environmental Protection	34	Minimize Impacts of Stream Crossings	DEP - Internal Workgroup	Yes	18
22	Conservation and Natural Resources	19	Minimize Recreational Impacts in Pipeline Development	DCNR	No	
23	Conservation and Natural Resources	20	Provide Recreational Opportunities in Pipeline Development	DCNR	No	

Number	Workgroup	Recommendation Number	Recommendation	Recommended Lead Agency	Overlap?	To Which One(s)
24	Conservation and Natural Resources	21	Reseed Right-of-Ways Using Native Plants	DCNR	No	
88	Environmental Protection	35	Conduct Research to Improve Revegetation BMPs	DCNR	Yes	24
25	Conservation and Natural Resources	22	Use Pennsylvania-Sourced Plant and Seed Vendors and Landscape Services		No	
26	Conservation and Natural Resources	23	Require Performance-Based Metrics for Long- Term Maintenance of Right-of-Ways	DEP	No	
27	Conservation and Natural Resources	24	Prevent Invasive Plant Species Establishment	DCNR	Yes	98
98	Environmental Protection	45	Prevent Invasive Species from Entering Sites	DEP - Internal Workgroup	Yes	27
101	Environmental Protection	48	Conduct Regular Site Maintenance	DEP	Yes	27
29	Conservation and Natural Resources	26	DEP Should Follow the 2008 Final Mitigation Rule for All Mitigation Sites	DEP - O&G	No	
		County Government				
30	County Government	1	Counties Should Partner in Implementation of Task Force Recommendations	County Government	Yes	54, 128, 163
54	Environmental Protection	1	Establish Early Partnerships and Coordination in Relationships with Regulatory Agencies	DEP - Internal Workgroup	Yes	30, 163
128	Historical/Cultural/Tribal	6	Conduct County-Based Siting and Mitigation Research	County & Local Government	Yes	30, 31, 129
33	County Government	4	Develop Training Opportunities for County Officials	DEP - Communications	No	
36	County Government	7	Develop Advisory Standards for Pipeline Setback and Buffers	DEP - BWEW	Yes	65, 72

Number	Workgroup	Recommendation Number	Recommendation	Recommended Lead Agency	Overlap?	To Which One(s)
65	Environmental Protection	12	Do Not Locate Pipelines Parallel to Streams Within its 100-Year Floodway	DEP - Internal Workgroup	Yes	36, 72
72	Environmental Protection	19	Establish Setbacks from Wetlands and Watercourses	DEP - Internal Workgroup	Yes	36, 65
136	Natural Gas End Use	5	Develop Municipal Guidelines for Natural Gas Distribution Lines	DCED	Yes	36
37	County Government	8	Amend Municipalities Planning Code to Empower County Comprehensive Plan	General Assembly	Yes	7
38	County Government	9	Require Shared Rights-of-Ways	General Assembly	Yes	6, 15, 18, 21, 70, 71, 130
70	Environmental Protection	17	Share Rights-of-Ways	DEP - Internal Workgroup	Yes	6, 15, 18, 21, 38, 62, 63, 68, 71, 130
71	Environmental Protection	18	Identify Barriers to Sharing Rights-of-Ways	DEP	Yes	15, 21, 38, 68, 70
130	Local Government	2	Minimize Impact on Local Roads	DOT	Yes	38
41	County Government	12	Require Pipeline Abandonment Plans	PUC	No	
42	Emergency Preparedness	1	Standardize Emergency Response Plans	PEMA & DEP	No	
43	Emergency Preparedness	2	Train Emergency Responders	PEMA & PSP	No	
45	Emergency Preparedness	4	Coordinate Pipeline Mapping Plans	PEMA	No	
46	Emergency Preparedness	5	PUC Should Develop a Comprehensive List of Pipeline Classifications	PUC	No	
47	Emergency Preparedness	6	Enhance Emergency Response Training for Responder Agencies	PEMA	No	
48	Emergency Preparedness	7	Create County/Regional Safety Task Forces	County Government	No	
49	Emergency Preparedness	8	Provide Training to Local Emergency Responders	Office of State Fire Commissioner	No	
50	Emergency Preparedness	9	Assess Need for Additional Training for Local Responders	PEMA	No	
51	Emergency Preparedness	10	Establish Protocol for Emergency Movement of Heavy Equipment during Off-Hours	DOT	No	

Number	Workgroup	Recommendation Number	Recommendation	Recommended Lead Agency	Overlap?	To Which One(s)
52	Emergency Preparedness	11	Assigning a 9-1-1 Address to Pipeline-Related Facilities	PEMA	No	
53	Emergency Preparedness	12	Authorize a Fee for Emergency Response to Pipeline Incidents	General Assembly	No	
57	Environmental Protection	4	Project Sponsors Should Review Pennsylvania Stormwater BMP Manual	DEP - Internal Workgroup	No	
58	Environmental Protection	5	Sponsors Should Review the Pennsylvania Erosion and Sediment Pollution Control Program	DEP - Internal Workgroup	No	
20	Zivii oliitelitti Trottettoit		Manual	DEI memai workgroup	110	
59	Environmental Protection	6	Sponsors Should Request Pre-Application Meetings with Regulatory Agencies	DEP - Internal Workgroup	Yes	121
121	Environmental Protection	68	Conduct Joint Agency Coordination Meetings During Pre-Application and Planning	DEP - Internal Workgroup	Yes	59
60	Environmental Protection	7	Sponsors Should Perform Alternatives Analysis to Avoid/Minimize Impacts	DEP - Internal Workgroup	Yes	9, 17?, 62, 63, 66, 67, 69, 80, 81
62	Environmental Protection	9	Develop An Advanced High-Quality Environmental Resources Planning Tool	DEP - Internal Workgroup	No	
66	Environmental Protection	13	Employ Smart Timing of Construction	DEP - Internal Workgroup	Yes	17, 60
67	Environmental Protection	14	Assess Potential Subsurface Hazards in Planning	DEP - Internal Workgroup	Yes	9, 60, 62, 63
69	Environmental Protection	16	Avoid Steep Slopes and Highly Erodible Soils	DEP - Internal Workgroup	Yes	60
80	Environmental Protection	27	Avoid Dams and Reservoirs	DEP - Internal Workgroup	Yes	60
81	Environmental Protection	28	Avoid Water and/or Wastewater Discharges	DEP - Internal Workgroup	Yes	60
			Develop Stondard Water Ovelite Manifesia			
61	Environmental Protection	8	Develop Standard Water Quality Monitoring Practices	DEP	Yes	11
64	Environmental Protection	11	Minimize Water Withdrawals for Testing	DEP - Internal Workgroup	No	
73	Environmental Protection	20	Use Dry Seals for Centrifugal Compressors	DEP - WARR	Yes	70, 74, 77, 86

Number	Workgroup	Recommendation Number	Recommendation	Recommended Lead Agency	Overlap?	To Which One(s)
74	Environmental Protection	21	Minimize Methane Emissions During Compressor Station Shutdown Periods	DEP - WARR	Yes	70, 73, 77, 86
75	Environmental Protection	22	Use Pump-Down Techniques Before Maintenance and Repair	DEP - WARR	Yes	73, 74, 77, 86
76	Environmental Protection	23	Develop Plans for Construction, Operation, and Maintenance	DEP - Internal Workgroup	Yes	94, 95
77	Environmental Protection	24	Implement Directed Inspection and Maintenance Program for Compressor Stations	DEP - Internal Workgroup	Yes	26, 73, 74, 77, 86
86	Environmental Protection	33	Minimize Methane Emissions	DEP - WARR	Yes	73, 74, 75
94	Environmental Protection	41	Develop Construction Sequencing Plan	DEP - Internal Workgroup	Yes	76, 95
95	Environmental Protection	42	Stockpile Topsoil During Construction for Use in Restoration	DEP - Internal Workgroup	Yes	76, 94
102	Environmental Protection	49	Properly Use and Maintain Pipeline Components	DEP - O&G	Yes	76
79	Environmental Protection	26	Use Antidegredation Best Available Combination of Technologies to Protect EV and HQ Waters	DEP - Internal Workgroup	No	
82	Environmental Protection	29	Develop Plans for No Net Loss of Forests in Headwater Watersheds	DEP - Internal Workgroup	Yes	83
83	Environmental Protection	30	Develop Plans for No Net Loss of Forested Riparian Buffers	DEP - Internal Workgroup	Yes	82
84	Environmental Protection	31	Develop Plans for No Net Loss of Wetlands	DEP - Internal Workgroup	No	
85	Environmental Protection	32	Study Long-Term Impacts of Pipeline Infrastructure on Water Resources and Sensitive Landscape	All Agencies	No	
89	Environmental Protection	36	Require Shutoff Valves for Liquid Product Pipelines	DEP - Internal Workgroup	No	
90	Environmental Protection	37	Use Dust Suppression Controls Near Water Resources	DEP - Internal Workgroup	No	

Number	Workgroup	Recommendation Number	Recommendation	Recommended Lead Agency	Overlap?	To Which One(s)
91	Environmental Protection	38	Test Efficacy of Silt Fencing	DEP - Internal Workgroup	No	
92	Environmental Protection	39	Test Soils in Acid Deposition Impaired Watersheds to Identify Need for Additional Liming	DEP - Internal Workgroup	No	
93	Environmental Protection	40	Sponsors Should Review the Pennsylvania Natural Diversity Inventory (PNDI) Environmental Review Tool	DCNR	Yes	184
184	For Other Workgroups	3	Reform Application of the Pennsylvania Natural Diversity Index (PNDI)	DCNR	No	,
103	Environmental Protection	50	Implement Leak Detection and Repair for all Above-Ground Components of Pipeline Infrastructure	DEP - WARR	Yes	137, 138
137	Pipeline Safety and Integrity	1	Require Leak Detection Survey Schedules	DEP - WARR	Yes	103
138	Pipeline Safety and Integrity	2	Require Leak Repair Schedules	DEP - WARR	Yes	103
104	Environmental Protection	51	Clarify Remediation of Spills Under Shale Regulation	DEP	No	
106	Environmental Protection	53	Implement Electronic Permit Submissions for Chapters 102 and 105	DEP - IT	No	
107	Environmental Protection	54	Establish Electronic Payment for Chapters 102 and 105 Permit Fees	DEP - IT	No	
108	Environmental Protection	55	Evaluate Need for Hard Copies of Chapter 102 and 105 Permit Submissions	DEP - Internal Workgroup	No	
109	Environmental Protection	56	Evaluate Erosion and Sediment Control General Permit (ESCGP-2) Expedited Review	DEP - Internal Workgroup	No	

Number	Workgroup	Recommendation Number	Recommendation	Recommended Lead Agency	Overlap?	To Which One(s)
110	Environmental Protection	57	Ensure Adequate Agency Staffing for Reviewing Pipeline Infrastructure Projects	DEP	No	
111	Environmental Protection	58	Evaluate DEP Retention and Attrition of Staff and Succession Planning	DEP	No	
112	Environmental Protection	59	Evaluate the Effectiveness of the Permit Decision Guarantee Policy	DEP	No	
113	Environmental Protection	60	Evaluate the Permit Decision Guarantee Priority Status Hierarchy	DEP - Policy	No	
114	Environmental Protection	61	Increase DEP Staff Training	DEP	No	
122	Environmental Protection	69	Assess Oil and Gas Program Chapter 102 Training	DEP - BWEW	Yes	114
115	Environmental Protection	62	Eliminate Duplicate Questions in Erosion and Sediment Control General Permit (ESCGP-2) Notice of Intent (NOI)	DEP - Internal Workgroup	No	
116	Environmental Protection	63	Create Pipeline Erosion and Sediment Control Manual	DEP - Internal Workgroup	Yes	3, 160
160	Siting and Routing	5	Create DEP Plans and Procedures Design Manual for Pipeline Construction	DEP - Internal Workgroup	Yes	116
117	Environmental Protection	64	Consider Limited Permit Review Assistance Using Qualified Contractors	DEP	Yes	132, 161, 182
161	Siting and Routing	6	Create Third Party Consultant Staffing at DEP	DEP		
182	For Other Workgroups	1	Assess Requirement of Consulting Services for Permitting	DEP	Yes	117, 132, 161
110	E	(5	Convers Annual Descriptions Assess Market	DED Literal W. Long	NT.	
118	Environmental Protection	65	Convene Annual Regulatory Agency Meetings Re-Assess and Update Standing Memoranda of	DEP - Internal Workgroup	No	
119	Environmental Protection	66	Understanding (MOUs) Between State and Federal Agencies	DEP - Internal Workgroup	No	

Number	Workgroup	Recommendation Number	Recommendation	Recommended Lead Agency	Overlap?	To Which One(s)
120	Environmental Protection	67	Incorporate Cumulative Impacts into Applications and Review Process	DEP - Internal Workgroup	No	
124	Historical/Cultural/Tribal	2	Consult with Federally Recognized Tribes on Section 106-Related Projects	USACE & FERC	No	
125	Historical/Cultural/Tribal	3	Consult with Citizens' Groups, Including Heritage and Historical Organizations and Non-Federally Recognized (NFR) Tribes for Oil and Gas Development	DEP - Internal Workgroup	No	
126	Historical/Cultural/Tribal	4	Implement Best Practices for Upstream and Midstream Oil and Gas Development that Fall Outside of USACE Permit Areas	DEP - Internal Workgroup	No	
131	Local Government	3	Allow Local Regulation of Surface Facilities	DCED	No	
122	N. I.G. F. IV			DED		
132	Natural Gas End Use	1	Create A State Level Permit Coordinator	DEP	No	
172	Economic Development	2	Coordinate Project Management for Projects Using Natural Gas in PA	DCED	Yes	132, 158
158	Siting and Routing	3	Create Statewide Technical Review Committee Within DEP for Multi-Region Pipeline Applications	DEP	Yes	132
133	Natural Gas End Use	2	Create Regional Energy Corridors and Energy Action Teams	DCED	No	
134	Natural Gas End Use	3	Create Energy Opportunity Zones	DCED	No	
135	Natural Gas End Use	4	Expand Distribution System Improvement Charge (DSIC), Act 11 of 2012	PUC	Yes	174
174	Economic Development	4	Expand Distribution System Improvement Charge (DSIC) to Cover Pipeline Payback Period Extension, Advertising Costs	General Assembly	Yes	135

Overlap?	To Which One(s)
No	
No	
No	
No	
No	
Yes	145
No	
No	
No	
No	
No	
	No

Number	Workgroup	Recommendation Number	Recommendation	Recommended Lead Agency	Overlap?	To Which One(s)
159	Siting and Routing	4	Create a Taskforce of Affected Stakeholders to Study the Creation of a New Regulatory Entity, or Empower Existing Regulatory Entity to Review and Approve the Siting and Routing of Intrastate Gas Transmission Lines	Gov's Office	No	
165	Workforce Development	1	Commission Workforce Assessment and Economic Development Impact Study	DCED	No	
166	Workforce Development	2	Enhance STEM Education	DCED	No	
167	Workforce Development	3	Promote Apprenticeship and On-the-Job Training	DCED	No	
168	Workforce Development	4	Attract Military Veterans to the Energy Workforce	L&I	No	
169	Workforce Development	5	Conduct a State Employee Workforce Audit to Identify Training and Other Needs of Pertinent State Agencies	L&I	No	
170	Workforce Development	6	Enhance Workforce Training	L&I	No	
173	Economic Development	3	Create Last Mile Funding	DCED	No	
175	Economic Development	5	Encourage Natural Gas Use in Ports	DCED	No	
176	Economic Development	6	Develop Targeted Investment, Business Attraction Effects and Regional Energy Hubs	DCED	No	
177	Economic Development	7	Collaborate to Promote Downstream Shale Manufacturing Opportunity	DCED	No	
178	Economic Development	8	Encourage Virtual Pipeline (Trucking) Delivery Systems	DCED	No	
179	Economic Development	9	Allow Creation of Natural Gas Municipal Authorities	PUC	No	
180	Economic Development	10	Compile Funding and Resource Guidebook	DCED	No	
181	Economic Development	11	Support Natural Gas for Compliance with Pennsylvania's Clean Power Plan (CPP)	All Agencies	No	
183	For Other Workgroups	2	Ensure Pipeline Permit Consistency	DEP	No	

Number	Workgroup	Recommendation Number	Recommendation	Recommended Lead Agency	Overlap?	To Which One(s)
	NOTE: Workforce and					
	Economic Development					
	Workgroup has been					
	separated as Workforce					
	Development, Economic					
	Development, and For Other					
	Workgroups					