



































Appendix B

USACE Routine Wetland Delineation Forms

Project/Site: Avon Lake Gas	s Addition Project	С	ity/County: Lorain County	,	Sampling Date: 5/16/14		
Applicant/Owner: NRG Gas	Pipeline Company LI						
· · · · · · · · · · · · · · · · · · ·			ection, Township, Range:	Not available			
					Slope (%): 0 - 2		
Applicant/Owner: NRG Gas Pipeline Company LLC Investigator(s): Travis Kesaler, Lauren Zielek, Aaron Gordon, Jeff Williams Section, Township, Range: Not available Landform (hillside, terrace, etc.): Till plain/Lake Plain Local relief (concave, cornex, none): Concave Slope (%): O Subregion (LRR or MLRA): LRR R, MLRA 139 Lat: 41.49303088 Long: -20.533475294 Datum: WGS 8: Soil Map Unin Name: Haskins silt loam, O to 2 percent slopes NWI classification: none Are climatic / hydrologic conditions on the site typical for this time of year? Yes x No (if no, explain in Remarks.) Are Vegetation Soil of Hydrology indicators: Not yes a significantly disturbed? Are "Normal Circumstances" present? Yes x No are Vegetation Soil of Hydrology naturally problematic? (if needed, explain any answers in Remarks.) SUMMARY OF FINDINGS – Attach site map showing sampling point locations, transects, important features, etc. Hydrophytic Vegetation Present? Yes No X If yes, optional Wetland Pydrology Present? Yes No X If yes, optional Wetland Site ID: HYDROLOGY Wetland Hydrology Indicators: Primary Indicators (minimum of one is required; check all that appty) Surface Water (A1) Water-Stained Leaves (B9) High Water Table (A2) Aquatic Fauna (B13) Surface Water (A1) Water-Stained Leaves (B9) High Water Table (A2) Aquatic Fauna (B13) Saturation (A3) Man Deposits (B15) Sediment Deposits (B2) Oxidized Rhizospheres on Living Roots (C3) Saturation (Visible on Aerial Imagery (C9) Drift Deposits (B2) Oxidized Rhizospheres on Living Roots (C3) Saturation Visible on Aerial Imagery (C9) Agail Mat or Crust (B4) Recent Iron Reduction in Tilled Soils (C6) FAC-Neutral Test (D5) Field Observations: Surface Water Present? Yes No Depth (inches): Water Table Present? Yes No Depth (inches): Water Table Present? Yes No Depth (inches): Surface Water Present? Yes No Depth (inches): Surface Water Present? Yes No Depth (inches):							
	_	·					
·	·	·	? Yes x No				
	-						
					<u></u>		
·		·		ons, transects	, important features, etc.		
Hydrophytic Vegetation Pres		No X	Is the Sampled Area				
Hydric Soil Present?	Yes	X No			No X		
Wetland Hydrology Present?	Yes	NoX	If yes, optional Wetland	d Site ID:			
-	of one is required; cl				, ,		
l 	,						
 -							
			· · · · · · · · · · · · · · · · · · ·				
l ——							
· ` ` ′	(DZ)		` '		. , ,		
	•	Other (Explain in	Remarks)				
	icave Surface (B8)			FAC-Neuti	al Test (D5)		
					- v		
	Yes No	x Depth (inches):	Wetland	Hydrology Presen	nt? Yes No X		
		U	' 'tions' if a	9 11			
Describe Recorded Data (str	eam gauge, monitorii	ng well, aerial photos,	previous inspections), if a	vailable:			
Domorko	_		_				
IN/A							

VEGETATION – Use scientific names of plants. Sampling Point: UPL 1 Absolute Dominant Indicator Tree Stratum (Plot size: 30' radius) % Cover **Dominance Test worksheet:** Species? Status Fraxinus pennsylvanica 30 **FACW** Yes **Number of Dominant Species** 2. That Are OBL, FACW, or FAC: (A) **Total Number of Dominant** 4. Species Across All Strata: 4 (B) 5. Percent of Dominant Species 6. That Are OBL, FACW, or FAC: 50.0% (A/B) Prevalence Index worksheet: 30 =Total Cover Total % Cover of: Sapling/Shrub Stratum (Plot size: 15' radius) OBL species x 1 = 30 Cornus racemosa 5 FAC FACW species x 2 = x 3 = 2. FAC species 7 21 **FACU** species 77 x 4 = UPL species 0 x 5 = 0 Column Totals: 114 389 (A) (B) 6. Prevalence Index = B/A = 3.41 **Hydrophytic Vegetation Indicators:** 5 =Total Cover 1 - Rapid Test for Hydrophytic Vegetation 5' radius) 2 - Dominance Test is >50% Herb Stratum (Plot size: Solidago canadensis 40 Yes **FACU** 3 - Prevalence Index is ≤3.01 2. Alliaria petiolata 2 No **FACU** 4 - Morphological Adaptations¹ (Provide supporting data in Remarks or on a separate sheet) 5 3. Glechoma hederacea No **FACU** 20 **FACU** Problematic Hydrophytic Vegetation¹ (Explain) Yes 4. Geranium maculatum 10 FACU 5. Ambrosia artemisiifolia No ¹Indicators of hydric soil and wetland hydrology must 6. be present, unless disturbed or problematic. **Definitions of Vegetation Strata:** 8. Tree - Woody plants 3 in. (7.6 cm) or more in 9. diameter at breast height (DBH), regardless of height. Sapling/shrub - Woody plants less than 3 in. DBH and greater than or equal to 3.28 ft (1 m) tall. Herb - All herbaceous (non-woody) plants, regardless 77 =Total Cover of size, and woody plants less than 3.28 ft tall. (Plot size: 15' radius) Woody Vine Stratum Woody vines - All woody vines greater than 3.28 ft in Toxicodendron radicans height. 2. Hydrophytic 3. Vegetation Present? Yes No X 2 =Total Cover Remarks: (Include photo numbers here or on a separate sheet.)

SOIL

Profile Description: (Describe to the depth needed to document the indicator or confirm the absence of indicators.)

Depth Matrix Redox Features

Depth inches)	Matrix Color (moist)	%	Color (moist)	x Feature %	es Type ¹	Loc ²	Texture	Remarks
			Color (molot)	70	Турс			remano
0-10	7.5YR 4/1	100					Loamy/Clayey	
0-20	10YR 5/1	60	10YR 6/8	40		M	Loamy/Clayey	Prominent redox concentrations
<u> </u>		<u> </u>						
·								
<u> </u>		<u> </u>		_				
 ype: C=0	Concentration, D=De	epletion, RI	 M=Reduced Matrix, C	S=Cove	red or Coa	ted San	d Grains. ² Loc	cation: PL=Pore Lining, M=Matrix.
dric Soi	l Indicators:							r Problematic Hydric Soils ³ :
Histoso	ol (A1)		Polyvalue Below	/ Surface	e (S8) (LR	R R,	2 cm Mud	ck (A10) (LRR K, L, MLRA 149B)
_	Epipedon (A2)		MLRA 149B)					airie Redox (A16) (LRR K, L, R)
	Histic (A3)		Thin Dark Surfa				-	cky Peat or Peat (S3) (LRR K, L, R)
	gen Sulfide (A4)		High Chroma Sa			-		e Below Surface (S8) (LRR K, L)
_	ed Layers (A5)		Loamy Mucky M			(, L)		k Surface (S9) (LRR K, L)
_	ed Below Dark Surfa	ice (A11)	Loamy Gleyed N		2)			ganese Masses (F12) (LRR K, L, R)
	Dark Surface (A12)		X Depleted Matrix					t Floodplain Soils (F19) (MLRA 149B)
_	Mucky Mineral (S1)		Redox Dark Sur					odic (TA6) (MLRA 144A, 145, 149B)
	Gleyed Matrix (S4)		Depleted Dark S					ent Material (F21)
	Redox (S5)		Redox Depressi	, ,				illow Dark Surface (TF12)
_ ``	ed Matrix (S6) Surface (S7)		Marl (F10) (LRR	(K , L)			Other (Ex	xplain in Remarks)
			wetland hydrology mu	st be pre	esent, unle	ess distur	bed or problematic.	
strictive Type:	Layer (if observed):						
	-L \.						Undela Call Bas	vario Vario V
Depth (in	icnes):						Hydric Soil Pre	esent? Yes X No
emarks:								

Project/Site: Avon Lake Gas	s Addition Project	City	/County: Lorain		Sampling Date:	5/16/14	
Applicant/Owner: NRG Ohio	Pipeline Company LLC		<u>-</u>	State:	— OH Sampling	Point: WET 1	
Investigator(s): Travis Kessler		lon Jeff Williams Sect	ion Township Range	T4N R17W			
Landform (hillside, terrace, etc			relief (concave, convex,		Slc	ope (%): 0 to 2	
Subregion (LRR or MLRA): L	·	-	•	32.0537333419		m: WGS 84	
			Long. <u>-</u>				
Soil Map Unit Name: Haskins	·	•			fication: Not availa	ible	
Are climatic / hydrologic condi		-	Yes x No	(If no, explair	n in Remarks.)		
Are Vegetation, Soil	, or Hydrology _	significantly dis	turbed? Are "Normal	Circumstances" pr	resent? Yes_	x No	
Are Vegetation, Soil	, or Hydrology	naturally proble	matic? (If needed, e	explain any answer	s in Remarks.)		
SUMMARY OF FINDING	GS – Attach site m	ap showing sam	pling point location	ons, transects	, important fea	itures, etc.	
Hydrophytic Vegetation Pres	sent? Yes X	No	Is the Sampled Area				
Hydric Soil Present?	Yes X		within a Wetland?	Yes X	No		
Wetland Hydrology Present?			If yes, optional Wetland				
Remarks: (Explain alternative			, , ,				
Tromano. (Explain alternativ	o procoduros noro or in	a coparato roporti)					
HYDROLOGY							
Wetland Hydrology Indicat	ors:			Secondary Indi	cators (minimum of	f two required)	
Primary Indicators (minimum		k all that apply)		-	oil Cracks (B6)		
x Surface Water (A1)	X	Water-Stained Leav	es (B9)		Patterns (B10)		
High Water Table (A2)		– Aquatic Fauna (B13			Lines (B16)		
Saturation (A3)		Marl Deposits (B15)		Dry-Season Water Table (C2)			
Water Marks (B1)		Hydrogen Sulfide O	dor (C1)	Crayfish Burrows (C8)			
Sediment Deposits (B2)	_	Oxidized Rhizosphe	res on Living Roots (C3	Saturation	Visible on Aerial Im	nagery (C9)	
Drift Deposits (B3)	_	Presence of Reduce	uced Iron (C4) Stunted or Stressed Plants (D1)				
Algal Mat or Crust (B4)	_	Recent Iron Reducti	eduction in Tilled Soils (C6) Geomorphic Position (D2)				
Iron Deposits (B5)		Thin Muck Surface (
Inundation Visible on Ae	rial Imagery (B7)	Other (Explain in Re	emarks)	x Microtopog	graphic Relief (D4)		
x Sparsely Vegetated Con	icave Surface (B8)			FAC-Neutr	al Test (D5)		
Field Observations:							
Surface Water Present?	Yes x No	Depth (inches):	0				
Water Table Present?	Yes x No	Depth (inches):	10				
Saturation Present?	Yes x No	Depth (inches):	8 Wetland I	Hydrology Presen	t? Yes X	No	
(includes capillary fringe)							
Describe Recorded Data (str	eam gauge, monitoring v	well, aerial photos, pre	evious inspections), if a	/ailable:			
Domarko							
Remarks: Site was seasonably wet due	e to recent spring rains: r	normal for May					
l che was sousshasiy wet aus	to recent opining rame, r	iornarior may					

VEGETATION – Use scientific names of plants. Sampling Point: WET 1 Absolute Dominant Indicator Tree Stratum (Plot size: 30' radius) **Dominance Test worksheet:** % Cover Species? Status Acer saccharinum 60 **FACW** Yes **Number of Dominant Species** That Are OBL, FACW, or FAC: Fraxinus pennsylvanica **FACW** (A) 3. **Total Number of Dominant** 4. Species Across All Strata: 6 (B) 5. Percent of Dominant Species 6. That Are OBL, FACW, or FAC: 83.3% (A/B) Prevalence Index worksheet: 80 =Total Cover Total % Cover of: Sapling/Shrub Stratum (Plot size: 15' radius) OBL species x 1 = 90 Acer saccharinum **FACW** FACW species x 2 = 180 Fraxinus pennsylvanica 5 Yes **FACW** FAC species 5 x 3 = 15 3. **FACU** species 5 x 4 = 4. UPL species 0 x 5 = 5. Column Totals: 102 217 (A) (B) 6. Prevalence Index = B/A = 2.13 **Hydrophytic Vegetation Indicators:** 10 =Total Cover 1 - Rapid Test for Hydrophytic Vegetation Herb Stratum (Plot size: 5' radius) X 2 - Dominance Test is >50% Rosa palustris 2 OBL X 3 - Prevalence Index is ≤3.0¹ Nο 2. Parthenocissus quinquefolia 5 Yes **FACU** 4 - Morphological Adaptations¹ (Provide supporting data in Remarks or on a separate sheet) 5 3. Carex blanda Yes FAC Problematic Hydrophytic Vegetation¹ (Explain) 4. 5. ¹Indicators of hydric soil and wetland hydrology must 6. be present, unless disturbed or problematic. **Definitions of Vegetation Strata:** 8. Tree - Woody plants 3 in. (7.6 cm) or more in 9. diameter at breast height (DBH), regardless of height. Sapling/shrub - Woody plants less than 3 in. DBH and greater than or equal to 3.28 ft (1 m) tall. Herb - All herbaceous (non-woody) plants, regardless 12 =Total Cover of size, and woody plants less than 3.28 ft tall. Woody Vine Stratum (Plot size: 15' radius) Woody vines - All woody vines greater than 3.28 ft in 1. height. Hydrophytic Vegetation Present? Yes X _ No ____ =Total Cover Remarks: (Include photo numbers here or on a separate sheet.) Predominantly bare ground/leaf litter

SOIL Sampling Point: WET 1

Profile Des	scription: (Describe	to the d	epth needed to docu	ment the	e indicate	or or con	firm the absence	of indicators.)
Depth	Matrix		Redo	x Feature	es			
(inches)	Color (moist)	%	Color (moist)	%	Type ¹	Loc ²	Texture	Remarks
0-6	10YR 4/1	100					Loamy/Clayey	9
6-20	10YR 6/1	60	10YR 6/6	40	<u>C</u>	<u>M</u>	Loamy/Clayey	Prominent redox concentrations
		oletion, R	M=Reduced Matrix, C	S=Cover	ed or Co	ated Sand		ocation: PL=Pore Lining, M=Matrix.
-	I Indicators:		Dalvaralus Balav	Curtoso	(CO) /I D	D D		or Problematic Hydric Soils ³ :
Histoso			Polyvalue Below	Surface	(So) (LR	ĸĸ,		uck (A10) (LRR K, L, MLRA 149B)
	Epipedon (A2)		MLRA 149B)	(00) (DD D M	U D A 440		rairie Redox (A16) (LRR K, L, R)
	Histic (A3)		Thin Dark Surfa					ucky Peat or Peat (S3) (LRR K, L, R)
	gen Sulfide (A4)		High Chroma Sa			-		ue Below Surface (S8) (LRR K, L)
	ed Layers (A5)		Loamy Mucky M			(, L)		rk Surface (S9) (LRR K, L)
Deplete	ed Below Dark Surfac	e (A11)	Loamy Gleyed N	∕latrix (F2	2)		Iron-Mai	nganese Masses (F12) (LRR K, L, R)
Thick D	Dark Surface (A12)		X Depleted Matrix	(F3)			Piedmor	nt Floodplain Soils (F19) (MLRA 149B)
Sandy	Mucky Mineral (S1)		Redox Dark Sur	face (F6))		Mesic S	podic (TA6) (MLRA 144A, 145, 149B)
Sandy	Gleyed Matrix (S4)		Depleted Dark S	Surface (F	- 7)		Red Par	rent Material (F21)
Sandy	Redox (S5)		Redox Depressi	ons (F8)			Very Sh	allow Dark Surface (TF12)
Strippe	ed Matrix (S6)		Marl (F10) (LRR	(K, L)			Other (E	Explain in Remarks)
Dark S	urface (S7)							
³ Indicators	of hydrophytic vegeta	tion and	wetland hydrology mu	ıst be pre	sent, unle	ess distur	bed or problemation	3 .
Restrictive	Layer (if observed)	:						
Type:								
Depth (in	ches):						Hydric Soil Pr	esent? Yes X No
Remarks:								

Project/Site: Avon Lake Ga	s Addition Project	C	ity/County: Lorain County	1	Sampling Date: 5/16/14		
Applicant/Owner: NRG Gas	Pipeline Company LL			State:			
Investigator(s): Travis Kessle			ection. Township. Range:	Not available			
Landform (hillside, terrace, et			al relief (concave, convex		Slope (%): 0 - 2		
Subregion (LRR or MLRA): L	RR R, MLRA 139	Lat: 41.4941548323	Long:	-82.0569044391	Datum: WGS 84		
Soil Map Unit Name: Haskins		'		NWI classi	ification: none		
Are climatic / hydrologic cond	litions on the site typica	al for this time of year	? Yes x No	(If no, explain	n in Remarks.)		
Are Vegetation, Soil	, or Hydrology	significantly	disturbed? Are "Norma	l Circumstances" p			
Are Vegetation, Soil	, or Hydrology	naturally prol	blematic? (If needed,	explain any answer	s in Remarks.)		
SUMMARY OF FINDIN	GS – Attach site	map showing sa	ampling point locati	ons, transects	, important features, etc.		
Hydrophytic Vegetation Pres	sent? Yes	No_X	Is the Sampled Area				
Hydric Soil Present?	Yes	No X	within a Wetland?	Yes	No X		
Wetland Hydrology Present	? Yes	NoX	If yes, optional Wetlan	d Site ID:			
HYDROLOGY							
Wetland Hydrology Indica					icators (minimum of two required)		
Primary Indicators (minimun	n of one is required; ch				oil Cracks (B6)		
Surface Water (A1)	-	Water-Stained Le			Patterns (B10)		
High Water Table (A2)	-	Aquatic Fauna (B			Lines (B16)		
Saturation (A3)	-	Marl Deposits (B					
Water Marks (B1)	_	Hydrogen Sulfide					
Sediment Deposits (B2)	' -		cheres on Living Roots (C3) Saturation Visible on Aerial Imagery (C9)				
Drift Deposits (B3)	-		educed Iron (C4) Stunted or Stressed Plants (D1)				
Algal Mat or Crust (B4)	-		uction in Tilled Soils (C6)		omorphic Position (D2)		
Iron Deposits (B5)		Thin Muck Surface	` '		allow Aquitard (D3)		
Inundation Visible on A	_	Other (Explain in	Remarks)		graphic Relief (D4)		
Sparsely Vegetated Cor	ncave Surface (B8)			FAC-Neuti	ral Test (D5)		
Field Observations:							
Surface Water Present?	Yes No						
Water Table Present?		x Depth (inches):					
Saturation Present?	Yes No	Depth (inches):	Wetland	Hydrology Preser	nt? Yes No X		
(includes capillary fringe)	., .			2.11			
Describe Recorded Data (st	ream gauge, monitorin	ig well, aerial photos,	previous inspections), if a	ivailable:			
Domorko							
Remarks: N/A							
10/7							

	Absolute	Dominant	Indicator	
ree Stratum (Plot size: 30' radius)	% Cover	Species?	Status	Dominance Test worksheet:
			FACW	Number of Dominant Species
				That Are OBL, FACW, or FAC:(A)
				Total Number of Dominant
				Species Across All Strata: 3 (B)
		-		Percent of Dominant Species
				That Are OBL, FACW, or FAC: 33.3% (A/E
				Prevalence Index worksheet:
		=Total Cover		Total % Cover of: Multiply by:
apling/Shrub Stratum (Plot size: 15' radius)				OBL species 0 x 1 = 0
Robinia pseudoacacia	20	Yes	FACU	FACW species 0 x 2 = 0
Acer rubrum	10	Yes	FAC	FAC species 10 x 3 = 30
				FACU species 113 x 4 = 452
				UPL species 5 x 5 = 25
				· — —
				Column Totals: 128 (A) 507 (E
	Specing Spec			Prevalence Index = B/A = 3.96
				Hydrophytic Vegetation Indicators:
	30	=Total Cover		1 - Rapid Test for Hydrophytic Vegetation
rb Stratum (Plot size: 5' radius)				2 - Dominance Test is >50%
Solidago canadensis	3	No	FACU	3 - Prevalence Index is ≤3.0 ¹
Rubus allegheniensis	60	Yes	FACU	4 - Morphological Adaptations ¹ (Provide supporti
Daucus carota	5	No	UPL	data in Remarks or on a separate sheet)
Festuca rubra	10	No	FACU	Problematic Hydrophytic Vegetation ¹ (Explain)
Vicia americana	10	No	FACU	1 Indicators of hydric soil and watland hydrology must
Solidago canadensis	10	No	FACU	¹ Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic.
				Definitions of Vegetation Strata:
				Tree – Woody plants 3 in. (7.6 cm) or more in diameter at breast height (DBH), regardless of height
				diameter at broadt floight (BBH), regardede of floight
				Sapling/shrub – Woody plants less than 3 in. DBH
				and greater than or equal to 3.28 ft (1 m) tall.
				Herb – All herbaceous (non-woody) plants, regardles
	98	=Total Cover		of size, and woody plants less than 3.28 ft tall.
oody Vine Stratum (Plot size: 15' radius)				Woody vines – All woody vines greater than 3.28 ft i
				height.
				Hydrophytic
				Vegetation
				Present? Yes No X
		=Total Cover		

SOIL Sampling Point: UPL_2

Profile Do	Profile Description: (Describe to the depth needed to document the indicator or confirm the absence of indicators.)										
Depth	Matrix			x Feature							
(inches)	Color (moist)	%	Color (moist)	%	Type ¹	Loc ²	Texture		Remarks		
0-12	10YR 4/1	50	10YR 3/6	50	<u>C</u>	<u>M</u>	Loamy/Clayey	Promin	ent redox cond	centratio	ns
12-20									Gravel and san	ıd fill	
	<u> </u>										
	=Concentration, D=Dep	oletion, RM	=Reduced Matrix, C	S=Cover	red or Co	ated Sand			Pore Lining, M	•	
-	oil Indicators:		5 5.		(OO) (I =				atic Hydric So		
	osol (A1)	-	Polyvalue Below	/ Surface	: (S8) (LR	RR,		, , ,	RR K, L, MLR		1
	Epipedon (A2)		MLRA 149B)	(00) (1 DD D A	II D A 446			(A16) (LRR K		D)
	K Histic (A3)	_	Thin Dark Surface					-	Peat (S3) (LR		R)
	ogen Sulfide (A4)	_	High Chroma Sa			-			rface (S8) (LRI		
	ified Layers (A5)	-	Loamy Mucky M			(, L)			69) (LRR K, L)		
	eted Below Dark Surfac	ce (A11) _	Loamy Gleyed N		2)		Iron-Manganese Masses (F12) (LRR K, L, R)				
	Dark Surface (A12)	_	Depleted Matrix				Piedmont Floodplain Soils (F19) (MLRA 149B)				
Sand	ly Mucky Mineral (S1)	_	Redox Dark Sur				Mesic S	podic (TA6)	(MLRA 144A,	145, 14	9B)
Sand	ly Gleyed Matrix (S4)	_	Depleted Dark S	Jurface (F	F7)		Red Par	ent Material	(F21)		
Sand	ly Redox (S5)	_	Redox Depression	ons (F8)			Very Sha	allow Dark S	Surface (TF12)		
Stripp	ped Matrix (S6)	_	Marl (F10) (LRR	(K, L)			Other (E	xplain in Re	marks)		
Dark	Surface (S7)	_	<u> </u>								
3, ,, ,											
	s of hydrophytic vegeta		etiand hydrology mu	st be pre	sent, unie	ess distur	Ted or problemation	<u>). </u>			
	ve Layer (if observed)										
	(inches):						Hydric Soil Pro	esent?	Yes	No	×
Remarks:	•						1 Trydino Com T I				
	Ited adjacent to road be	ed with distr	urbed soils.								

Project/Site: Avon Lake Ga	s Addition Project	City/Co	ounty: Lorain		Sampling Date:	5/16/14	
Applicant/Owner: NRG Ohio	Pipeline Company LL(State:	OH Sampling	Point: WET 2	
Investigator(s): Travis Kessle			Township Range	Not available			
Landform (hillside, terrace, et			ef (concave, convex,		Slo	pe (%): 0 to 2	
Subregion (LRR or MLRA): L	·		•	32.0578302412		m: WGS 84	
_		at. 41.4941139071	Longc				
Soil Map Unit Name: Mermill					fication: Not availa	bie	
Are climatic / hydrologic cond	• •	•	Yes x No		n in Remarks.)		
Are Vegetation, Soil				Circumstances" pr	esent? Yes_	x No	
Are Vegetation, Soil	, or Hydrology	naturally problema	atic? (If needed, e	explain any answer	s in Remarks.)		
SUMMARY OF FINDIN	GS – Attach site r	map showing samp	ling point location	ons, transects	, important fea	tures, etc.	
Lludranhutia Vagatatian Drag	nont? You V	No. lo	the Compled Area				
Hydrophytic Vegetation Pres Hydric Soil Present?	sent? Yes X Yes X		the Sampled Area thin a Wetland?	Yes X	No		
Wetland Hydrology Present			es, optional Wetland				
Remarks: (Explain alternati			, 00, 00, 00, 00, 00, 00, 00, 00, 00, 0	<u> </u>			
Remarks. (Explain alternati	ve procedures here or in	r a separate report.					
HYDROLOGY							
Wetland Hydrology Indica	tors:			Secondary Indi	cators (minimum of	two required)	
Primary Indicators (minimun		eck all that apply)		-	oil Cracks (B6)	tiro roquirou j	
x Surface Water (A1)		Water-Stained Leaves	(B9)		Patterns (B10)		
x High Water Table (A2)	_	Aquatic Fauna (B13)	,		Lines (B16)		
x Saturation (A3)		Marl Deposits (B15)		Dry-Season Water Table (C2)			
Water Marks (B1)		x Hydrogen Sulfide Odo	r (C1)	Crayfish Burrows (C8)			
Sediment Deposits (B2)		Oxidized Rhizospheres	s on Living Roots (C3	Roots (C3) Saturation Visible on Aerial Imagery (C9)			
Drift Deposits (B3)	_	Presence of Reduced	duced Iron (C4) Stunted or Stressed Plants (D1)				
Algal Mat or Crust (B4)	_	Recent Iron Reduction	eduction in Tilled Soils (C6) Geomorphic Position (D2)				
Iron Deposits (B5)	_	Thin Muck Surface (C7	')	Shallow Ac	quitard (D3)		
Inundation Visible on A	erial Imagery (B7)	Other (Explain in Rema	arks)	Microtopog	raphic Relief (D4)		
Sparsely Vegetated Co	ncave Surface (B8)			FAC-Neutr	al Test (D5)		
Field Observations:							
Surface Water Present?	Yes x No	Depth (inches):	0				
Water Table Present?	Yes x No	Depth (inches):	4				
Saturation Present?	Yes x No	Depth (inches):	Wetland H	Hydrology Presen	t? Yes X	No	
(includes capillary fringe)							
Describe Recorded Data (st	ream gauge, monitoring	well, aerial photos, previ	ous inspections), if av	/ailable:			
Remarks:							
Site was seasonably wet du	e to recent spring rains:	normal for May					
	· . · . · . · . · . · . · . · . ·	,,					

VEGETATION – Use scientific names of plants.	Sampling
--	----------

VEGETATION – Use scientific names of pla	ınts.			Sampling Point:	WET 2		
Tree Stratum (Plot size: 30' radius)	Absolute % Cover	Dominant Species?	Indicator Status	Dominance Test worksheet:			
Populus deltoides	20	Yes	FAC	Number of Dominant Species			
2. Fraxinus pennsylvanica	30	Yes	FACW	That Are OBL, FACW, or FAC:	8 (A)		
3.				Total Number of Dominant			
4.				Species Across All Strata:	11 (B)		
5. 6.				Percent of Dominant Species That Are OBL, FACW, or FAC:	70.70/ (A/D)		
				Prevalence Index worksheet:	72.7% (A/B)		
7.	50	=Total Cover			/lultiply by:		
Sapling/Shrub Stratum (Plot size: 15' radius)		Total Cover		OBL species 10 x 1 =			
1. Cornus racemosa	20	Yes	FAC	FACW species 50 x 2 =	100		
Fraxinus pennsylvanica	20	Yes	FACW	FAC species 60 x 3 =			
3.				FACU species 18 x 4 =	72		
4.				UPL species 0 x 5 =	0		
5.				Column Totals: 138 (A)	362 (B)		
6.				Prevalence Index = B/A =	2.62		
7.				Hydrophytic Vegetation Indicators	 5:		
	40	=Total Cover		1 - Rapid Test for Hydrophytic V	'egetation		
Herb Stratum (Plot size: 5' radius)		_		X 2 - Dominance Test is >50%			
Alliaria petiolata	3	No	FACU	X 3 - Prevalence Index is ≤3.0 ¹			
2. Solidago canadensis	5	Yes	FACU	4 - Morphological Adaptations ¹ (Provide support			
3. Juncus tenuis	5	Yes	FAC	data in Remarks or on a sepa	rate sheet)		
4. Rosa palustris	10	Yes	OBL	Problematic Hydrophytic Vegeta	ıtion ¹ (Explain)		
5. Geranium maculatum6.	5	Yes	FACU	¹ Indicators of hydric soil and wetland be present, unless disturbed or probl			
7.				Definitions of Vegetation Strata:	ematic.		
8.							
9.				Tree – Woody plants 3 in. (7.6 cm) o diameter at breast height (DBH), reg			
10				Sapling/shrub – Woody plants less	than 3 in. DBH		
11				and greater than or equal to 3.28 ft (
12				Herb – All herbaceous (non-woody)	plants, regardless		
	28	=Total Cover		of size, and woody plants less than 3			
Woody Vine Stratum (Plot size: 15' radius)				Woody vines – All woody vines grea	ater than 3.28 ft in		
1. Vitis riparia	10	Yes	FAC	height.			
2. Parthenocissus quinquefolia	5	Yes	FACU	Unideanhistia			
3. Toxicodendron radicans	5	Yes	FAC	Hydrophytic Vegetation			
4.	20	=Total Cover		Present? Yes X	No		
Demonstrate (Include abote combine to an analysis				<u> </u>			
Remarks: (Include photo numbers here or on a sepa	rate sheet.)						

SOIL Sampling Point: WET 2

Profile De	escription: (Describe	to the de	-			or or con	firm the absence	of indicators.)		
Depth	Matrix			x Feature						
(inches)	Color (moist)	%	Color (moist)	%	Type ¹	Loc ²	Texture	Remarks		
0-8	10YR 4/1	90	10YR 5/6	10	С	M	Loamy/Clayey	Prominent redox concentrations		
8-20	10YR 4/1	90	10YR 4/6	10	С	M	Loamy/Clayey	Prominent redox concentrations		
¹Type: C:	=Concentration, D=Dep	letion RI	M=Reduced Matrix C:	S=Cover	red or Co:	ated San	d Grains ² I o	ocation: PL=Pore Lining, M=Matrix.		
	oil Indicators:	netion, rei	Treddoca Matrix, Co	5 00101	<u>ca or cor</u>	ated earl		or Problematic Hydric Soils ³ :		
-	sol (A1)		Polyvalue Below	Surface	(S8) (LR	RR,		uck (A10) (LRR K, L, MLRA 149B)		
Histic	Epipedon (A2)		MLRA 149B)				Coast P	rairie Redox (A16) (LRR K, L, R)		
Black	(Histic (A3)		Thin Dark Surface	e (S9) (l	LRR R, M	LRA 149	3B) 5 cm Mu	ucky Peat or Peat (S3) (LRR K, L, R)		
X Hydro	ogen Sulfide (A4)		High Chroma Sa	nds (S1	1) (LRR 🛚	(, L)	Polyvalu	ie Below Surface (S8) (LRR K, L)		
Strati	ified Layers (A5)		Loamy Mucky Mi	ineral (F	1) (LRR k	(, L)	Thin Dar	rk Surface (S9) (LRR K, L)		
	eted Below Dark Surfac	e (A11)	Loamy Gleyed M	latrix (F2	2)		Iron-Manganese Masses (F12) (LRR K, L, R)			
Thick	Dark Surface (A12)		X Depleted Matrix	(F3)			Piedmor	nt Floodplain Soils (F19) (MLRA 149B)		
	ly Mucky Mineral (S1)		Redox Dark Surf					podic (TA6) (MLRA 144A, 145, 149B)		
	ly Gleyed Matrix (S4)		Depleted Dark S					rent Material (F21)		
	y Redox (S5)		Redox Depression					allow Dark Surface (TF12)		
	ped Matrix (S6)		Marl (F10) (LRR	K , L)			Other (E	explain in Remarks)		
Dark	Surface (S7)									
3Indicator	s of hydrophytic vegeta	tion and v	wetland hydrology mus	st he nre	esent unle	ess distur	rhed or problematic	,		
	ve Layer (if observed):		vetiana nyarology mas	or pe pre	Joent, and	233 distai	T Problematic	<u>'-</u>		
Type:	, ,									
_	inches):						Hydric Soil Pro	esent? Yes X No		
Remarks:							_1			

Project/Site: Avon Lake Gas	Addition Project	C	ity/County: Lorain County	/	Sampling Date: 5/16/14		
Applicant/Owner: NRG Gas I	Pipeline Company LI			State:			
Investigator(s): Travis Kessler,			ection, Township, Range:	Not available			
Landform (hillside, terrace, etc			al relief (concave, convex		Slope (%):	0 - 2	
Subregion (LRR or MLRA): LF	· — ·		·	-82.0592654809	Datum: WGS		
Soil Map Unit Name: Mahonin					fication: none		
Are climatic / hydrologic condi	<u> </u>	·	? Yes x No		n in Remarks.)		
		•				_	
Are Vegetation , Soil				al Circumstances" p		'——	
Are Vegetation, Soil				explain any answer			
SUMMARY OF FINDING	3S – Attach site	map showing sa	impling point locati	ions, transects	, important features, e	etc.	
Hydrophytic Vegetation Prese	ent? Yes	X No	Is the Sampled Area				
Hydric Soil Present?	Yes		within a Wetland?	Yes	No X	ļ	
Wetland Hydrology Present?	Yes	No X	If yes, optional Wetlan	d Site ID:			
Remarks: (Explain alternativ	e procedures here or	r in a separate report.)					
						ļ	
						ļ	
						ļ	
HYDROLOGY			_		_		
Wetland Hydrology Indicate	ors:			Secondary Indi	cators (minimum of two requ	<u>uired)</u>	
Primary Indicators (minimum	of one is required; cl	heck all that apply)		Surface So	oil Cracks (B6)		
Surface Water (A1)		Water-Stained Le			Patterns (B10)		
High Water Table (A2)	,	Aquatic Fauna (B	13)	Moss Trim	Lines (B16)		
Saturation (A3)	,	Marl Deposits (B1					
Water Marks (B1)	,	Hydrogen Sulfide					
Sediment Deposits (B2)	,		spheres on Living Roots (C3) Saturation Visible on Aerial Imagery (C9)				
Drift Deposits (B3)	,	Presence of Redu					
Algal Mat or Crust (B4)	,		Reduction in Tilled Soils (C6) Geomorphic Position (D2)				
Iron Deposits (B5)	,	Thin Muck Surfac		quitard (D3)			
Inundation Visible on Ae		Other (Explain in	Remarks)		graphic Relief (D4)		
Sparsely Vegetated Con	cave Surface (B8)			X FAC-Neuti	al Test (D5)		
Field Observations:							
Surface Water Present?	Yes No						
Water Table Present?		x Depth (inches):					
Saturation Present?	Yes No	x Depth (inches):	Wetland	Hydrology Preser	nt? Yes No No	X	
(includes capillary fringe)							
Describe Recorded Data (stre	eam gauge, monitorii	ng well, aerial photos,	previous inspections), if a	available:			
Remarks:							
N/A							
1073							

VEGETATION – Use scientific names of plants. UPL 3 Sampling Point: Absolute Dominant Indicator Tree Stratum (Plot size: 30' radius) % Cover **Dominance Test worksheet:** Species? Status Fraxinus pennsylvanica 5 **FACW** Yes **Number of Dominant Species** That Are OBL, FACW, or FAC: 2. Quercus palustris **FACW** (A) 3. **Total Number of Dominant** 4. Species Across All Strata: 6 (B) 5. Percent of Dominant Species 6. That Are OBL, FACW, or FAC: 66.7% (A/B) Prevalence Index worksheet: 10 =Total Cover Total % Cover of: Sapling/Shrub Stratum (Plot size: 15' radius) OBL species x 1 = 30 Fraxinus pennsylvanica 10 Yes **FACW** FACW species x 2 = 60 2. Quercus palustris 10 Yes **FACW** FAC species 5 x 3 = 15 3. Rubus allegheniensis 5 No **FACU FACU** species 25 x 4 = 5 No FAC UPL species 0 x 5 = 4. Cornus racemosa 5. Column Totals: 60 (A) 175 (B) 6. Prevalence Index = B/A = 2.92 **Hydrophytic Vegetation Indicators:** 30 =Total Cover 1 - Rapid Test for Hydrophytic Vegetation X 2 - Dominance Test is >50% Herb Stratum (Plot size: 5' radius) Alliaria petiolata 5 Yes **FACU** 3 - Prevalence Index is ≤3.01 Glechoma hederacea 15 **FACU** 4 - Morphological Adaptations¹ (Provide supporting data in Remarks or on a separate sheet) 3. Problematic Hydrophytic Vegetation¹ (Explain) 4. 5. ¹Indicators of hydric soil and wetland hydrology must 6. be present, unless disturbed or problematic. **Definitions of Vegetation Strata:** 8. Tree - Woody plants 3 in. (7.6 cm) or more in 9. diameter at breast height (DBH), regardless of height. Sapling/shrub - Woody plants less than 3 in. DBH and greater than or equal to 3.28 ft (1 m) tall. Herb - All herbaceous (non-woody) plants, regardless 20 =Total Cover of size, and woody plants less than 3.28 ft tall. Woody Vine Stratum (Plot size: 15' radius) Woody vines - All woody vines greater than 3.28 ft in 1. height. Hydrophytic Vegetation Present? Yes X _ No ____ =Total Cover Remarks: (Include photo numbers here or on a separate sheet.) N/A

SOIL Sampling Point: UPL_3

Profile De	Profile Description: (Describe to the depth needed to document the indicator or confirm the absence of indicators.)									
Depth Matrix		Redox Features								
(inches)	Color (moist)	%	Color (moist)	%	Type ¹	Loc ²	Texture		Remarks	
0-8	10YR 4/2	100					Loamy/Clayey			
8-20	10YR 4/2	40	10YR 5/8	60	С	М	Loamy/Clayey			
			_							
¹ Type: C=Concentration, D=Depletion, RM=Reduced Matrix, CS=Covered or Coated Sand Grains. ² Location: PL=Pore Lining, M=Matrix.										
-	oil Indicators:			_					tic Hydric Soi	
	sol (A1)		Polyvalue Below	Surface	e (S8) (LR	RR,			RR K, L, MLRA	
	Epipedon (A2)		MLRA 149B)				Coast Prairie Redox (A16) (LRR K, L, R)			
	Histic (A3)		Thin Dark Surfac				DB)5 cm Mucky Peat or Peat (S3) (LRR K, L, R)			
Hydro	ogen Sulfide (A4)		High Chroma Sa	ınds (S1	1) (LRR K	(, L)	Polyvalue Below Surface (S8) (LRR K, L)			
Strati	fied Layers (A5)		Loamy Mucky M	ineral (F	1) (LRR k	(, L)	Thin Dark Surface (S9) (LRR K, L)			
Deple	eted Below Dark Surface	e (A11)	Loamy Gleyed M	1atrix (F2	2)		Iron-Manganese Masses (F12) (LRR K, L, R)			
Thick	Dark Surface (A12)		x Depleted Matrix	(F3)			Piedmont Floodplain Soils (F19) (MLRA 149B)			
				Dark Surface (F6) Mesic Spodic (TA6) (MLRA 144A, 145, 1						•
							Red Parent Material (F21)			
					Very Shallow Dark Surface (TF12)					
Sandy Redox (S5)				, ,			Other (Explain in Remarks)			
Stripped Matrix (S6)			Marl (F10) (LRR	K, L)			Other (Ex	plain in Rei	marks)	
Dark	Surface (S7)									
3Indicators	s of hydrophytic vegetat	ion and v	votland hydrology mu	et ha nro	scont unle	see dietuu	thad or problematic			
	e Layer (if observed):		vetiand flydrology fild	ot be pie	zsent, unic	os distui	Ded of problematic.			
Type:										
Depth (i	inches):						Hydric Soil Pres	sent?	Yes X	No
Remarks:										

Project/Site: Avon Lake Gas Addition Project	City/County: Lorain		Sampling Date: 5/16/14			
Applicant/Owner: NRG Ohio Pipeline Company LLC	<u> </u>	State:				
Investigator(s): Travis Kessler, Lauren Zielke, Aaron Gordon, Jeff Wil	liams Section, Township,	Range: Not available				
Landform (hillside, terrace, etc.): Till plain/Lake Plain	·	convex, none): concave	Slope (%): 0 to 2			
Subregion (LRR or MLRA): LRR R, MLRA 139 Lat: 41.49088	 373274	Long: -82.0591358336	Datum: WGS 84			
Soil Map Unit Name: Mahoning silt loam, 0 to 2 percent slopes	<u> </u>		ssification: Not available			
Are climatic / hydrologic conditions on the site typical for this time	e of year? Yes x	-	ain in Remarks.)			
Are Vegetation, Soil, or Hydrologysign		Normal Circumstances"				
Are Vegetation, Soil, or Hydrologynatu		eeded, explain any answe				
SUMMARY OF FINDINGS – Attach site map show		ocations, transect	s, important features, etc.			
Hydrophytic Vegetation Present? Yes X No_	Is the Sampled	Area				
Hydric Soil Present? Yes X No	within a Wetlar	nd? Yes	X No			
Wetland Hydrology Present? Yes X No	If yes, optional	Wetland Site ID: WET_3	3			
HYDROLOGY						
Wetland Hydrology Indicators:			dicators (minimum of two required)			
Primary Indicators (minimum of one is required; check all that a		Surface Soil Cracks (B6)				
<u> </u>	ained Leaves (B9)		Drainage Patterns (B10)			
	Fauna (B13)		Moss Trim Lines (B16)			
	oosits (B15)		son Water Table (C2)			
l ——	n Sulfide Odor (C1)		Burrows (C8)			
	Rhizospheres on Living Ro	· · · —	Saturation Visible on Aerial Imagery (C9)			
	e of Reduced Iron (C4)		Stunted or Stressed Plants (D1) Geomorphic Position (D2)			
l ——	ron Reduction in Tilled Soils		Geomorphic Position (D2) Shallow Aquitard (D3)			
	ck Surface (C7)		Microtopographic Relief (D4)			
	xplain in Remarks)					
x Sparsely Vegetated Concave Surface (B8)		FAC-Neu	utral Test (D5)			
Field Observations:						
	inches):					
Water Table Present? Yes x No Depth (-dd-b-dlB				
	(inches): 0 W	etland Hydrology Prese	ent? Yes <u>X</u> No			
(includes capillary fringe)	nhataa nraviaya inanastia	as) if available:				
Describe Recorded Data (stream gauge, monitoring well, aerial	pnotos, previous inspectio	is), if available:				
Remarks:	Mari					
Site was seasonably wet due to recent spring rains; normal for	мау					

VEGETATION – Use scientific names of plants. Sampling Point: WET 3 Absolute Dominant Indicator Tree Stratum (Plot size: 30' radius) **Dominance Test worksheet:** % Cover Species? Status Populus deltoides 70 FAC Yes **Number of Dominant Species** That Are OBL, FACW, or FAC: Fraxinus pennsylvanica **FACW** (A) 3. **Total Number of Dominant** 4. Species Across All Strata: 5 (B) 5. Percent of Dominant Species (A/B) 6. That Are OBL, FACW, or FAC: 60.0% Prevalence Index worksheet: 80 =Total Cover Total % Cover of: Sapling/Shrub Stratum (Plot size: 15' radius) OBL species x 1 = Rubus allegheniensis 5 Yes **FACU** FACW species 15 x 2 = x 3 = 2. Fraxinus pennsylvanica 5 Yes **FACW** FAC species 75 3. Acer rubrum 5 Yes FAC **FACU** species 10 x 4 = Prunus virginiana 5 Yes **FACU** UPL species 0 x 5 = 4. 5. Column Totals: 100 295 (A) (B) 6. Prevalence Index = B/A = 2.95 **Hydrophytic Vegetation Indicators:** 20 =Total Cover 1 - Rapid Test for Hydrophytic Vegetation Herb Stratum (Plot size: 5' radius) X 2 - Dominance Test is >50% X 3 - Prevalence Index is ≤3.0¹ 2. 4 - Morphological Adaptations¹ (Provide supporting data in Remarks or on a separate sheet) Problematic Hydrophytic Vegetation¹ (Explain) 5. ¹Indicators of hydric soil and wetland hydrology must 6. be present, unless disturbed or problematic. **Definitions of Vegetation Strata:** 8. Tree - Woody plants 3 in. (7.6 cm) or more in 9. diameter at breast height (DBH), regardless of height. Sapling/shrub - Woody plants less than 3 in. DBH and greater than or equal to 3.28 ft (1 m) tall. Herb - All herbaceous (non-woody) plants, regardless =Total Cover of size, and woody plants less than 3.28 ft tall. Woody Vine Stratum (Plot size: 15' radius) Woody vines - All woody vines greater than 3.28 ft in 1. height. Hydrophytic Vegetation Present? Yes X No No =Total Cover Remarks: (Include photo numbers here or on a separate sheet.) No herbaceous layer - leaf litter and bare ground

SOIL Sampling Point: WET 3

Profile De	escription: (Describe	to the de	firm the absence	of indicators.)								
Depth	Matrix		Redox	r Feature	es							
(inches)	Color (moist)	%	Color (moist)	%	Type ¹	Loc ²	Texture	Remarks				
0-3	10YR 4/2	100					Sandy	sandy-silt				
3-20	10YR 4/1	50	10YR 4/6	50	<u>C</u>	M	Loamy/Clayey	Prominent redox concentrations				
¹ Type: C	=Concentration, D=Dep	letion P	M=Reduced Matrix C	S=Cove	red or Co		d Grains ² Lo	ocation: PL=Pore Lining, M=Matrix.				
	oil Indicators:	netion, K	VI-Reduced Matrix, C.	3-Cover	eu oi coa	aleu San		or Problematic Hydric Soils ³ :				
_	sol (A1)		Polyvalue Below	Surface	(S8) (I R	R R		uck (A10) (LRR K, L, MLRA 149B)				
	Epipedon (A2)		MLRA 149B)	Ouriaco	(00) (LI	,		rairie Redox (A16) (LRR K, L, R)				
	Histic (A3)		Thin Dark Surface	ار (QQ) را	I DD D M	I DA 1/0		ucky Peat or Peat (S3) (LRR K, L, R)				
	ogen Sulfide (A4)		High Chroma Sa					ie Below Surface (S8) (LRR K, L)				
	-					-						
	fied Layers (A5)	- (0.4.4)	Loamy Mucky M			∖ , ∟)		rk Surface (S9) (LRR K, L)				
	eted Below Dark Surfac	e (A11)	Loamy Gleyed M		2)		Iron-Manganese Masses (F12) (LRR K, L, R)					
	Dark Surface (A12)		x Depleted Matrix				Piedmont Floodplain Soils (F19) (MLRA 149B)					
	y Mucky Mineral (S1)		Redox Dark Surf	ace (F6))		Mesic Spodic (TA6) (MLRA 144A, 145, 149B)					
	y Gleyed Matrix (S4)		Depleted Dark S	urface (F	=7)		Red Parent Material (F21)					
Sand	y Redox (S5)		Redox Depression	ons (F8)			Very Shallow Dark Surface (TF12)					
Stripp	oed Matrix (S6)		Marl (F10) (LRR	K, L)			Other (E	Explain in Remarks)				
Dark	Surface (S7)											
³ Indicators	s of hydrophytic vegeta	tion and	wetland hydrology mu	et he nre	seant unla	see dietur	thed or problematic					
	e Layer (if observed)		wettand flydrology fild	st be pre	Sent, unit	sss uistui	The distribution of the di	<i>.</i>				
Type:	,											
_	inches):						Hydric Soil Pr	esent? Yes X No				
Remarks:							1					

Project/Site: Avon Lake Gas	s Addition Project	С	ity/County: Lorain Cou	nty	Sampling Date: 5/16/14				
Applicant/Owner: NRG Gas	Pipeline Company LLC			State:					
Investigator(s): Travis Kessler			ection, Township, Ranç	e: Not available					
Landform (hillside, terrace, etc			al relief (concave, conv		Slope (%): 0				
Subregion (LRR or MLRA): L	RR R. MLRA 139 L	at: 41.4895381051	Long	: -82.0586037508	Datum: WGS 84				
Soil Map Unit Name: Miner sil		<u></u>			sification: none				
Are climatic / hydrologic condi		I for this time of year	? Yes x N		in in Remarks.)				
Are Vegetation, Soil		-		mal Circumstances" p					
Are Vegetation , Soil				d, explain any answe					
	·				s, important features, etc				
Hydrophytic Vegetation Pres	ent? Yes	No X	Is the Sampled Are	a					
Hydric Soil Present?	Yes X	No	within a Wetland?	Yes	NoX				
Wetland Hydrology Present?	Yes	No X	If yes, optional Wetla	and Site ID:	-				
Remarks: (Explain alternativ	o p. 000000.	ii u oopalato (Egene)							
HYDROLOGY									
Wetland Hydrology Indicat					licators (minimum of two required				
Primary Indicators (minimum	of one is required; che				oil Cracks (B6)				
Surface Water (A1)	_	Water-Stained Le			Patterns (B10)				
High Water Table (A2)	_	Aquatic Fauna (B			Lines (B16)				
Saturation (A3)	_	Marl Deposits (B1			on Water Table (C2)				
Water Marks (B1)	_	Hydrogen Sulfide			Burrows (C8)				
Sediment Deposits (B2)	_		heres on Living Roots	· · —	Visible on Aerial Imagery (C9)				
Drift Deposits (B3)	_	Presence of Redu	` '		Stunted or Stressed Plants (D1) Geomorphic Position (D2)				
Algal Mat or Crust (B4)	_		iction in Tilled Soils (C6	· — ·	Geomorphic Position (D2)				
Iron Deposits (B5)	——————————————————————————————————————	Thin Muck Surfac	` '		Shallow Aquitard (D3)				
Inundation Visible on Ae		Other (Explain in	Remarks)		graphic Relief (D4)				
Sparsely Vegetated Con	cave Surface (B8)			FAC-Neut	ral Test (D5)				
Field Observations:									
Surface Water Present?	Yes No x	' ' '.							
Water Table Present?	Yes No x			· · · · · · · · · · · · · · · · · · ·	No. V				
Saturation Present?	Yes No x	Depth (inches):	Wetian	nd Hydrology Prese	nt? Yes No _X				
(includes capillary fringe)			====deve inencetions)	f - vellebler					
Describe Recorded Data (str	eam gauge, monitoring	g well, aerial priotos,	previous inspections),	f available:					
Domorko	_		_						
Remarks: N/A									
IN/A									

	ants.	Dominant	Indicator	Sampling Point: UF	L_4
Tree Stratum (Plot size: 30' radius)	Absolute % Cover	Dominant Species?	Indicator Status	Dominance Test worksheet:	
1. Betula lenta	10	Yes	FACW	Number of Dominant Species	
2.				That Are OBL, FACW, or FAC:1	(A)
3.				Total Number of Dominant	
i				Species Across All Strata: 4	(B)
5.				Deposit of Depoisont Consise	
S.				Percent of Dominant Species That Are OBL, FACW, or FAC: 25.0%	(A/B
,				Prevalence Index worksheet:	<u> </u>
	10	=Total Cover		Total % Cover of: Multiply b	y:
Sapling/Shrub Stratum (Plot size: 15' radius)		!		OBL species 0 x 1 = 0	
. Fraxinus americana	10	Yes	FACU	FACW species 10 x 2 = 2	
	-			FAC species 0 x 3 = 0	
·				FACU species 40 x 4 = 16	
				UPL species 10 x 5 = 5	
				Column Totals: 60 (A) 23	
				Prevalence Index = B/A = 3.83	
,				Hydrophytic Vegetation Indicators:	
··	10	=Total Cover			n
Jorb Stratum (Plataine) El radius		- Total Cover		1 - Rapid Test for Hydrophytic Vegetatio 2 - Dominance Test is >50%	11
Herb Stratum (Plot size: 5' radius)	E	No	FACIL		
1. Alliaria petiolata	5	No	FACU	3 - Prevalence Index is ≤3.0¹	anaartin
2. Glechoma hederacea	20	Yes	FACU	4 - Morphological Adaptations ¹ (Provide data in Remarks or on a separate she	
3. Rosa multiflora	5	No No	FACU		
l. Malva neglecta	10	Yes	UPL	Problematic Hydrophytic Vegetation ¹ (Ex	kplain)
5				¹ Indicators of hydric soil and wetland hydrolo	gy must
5				be present, unless disturbed or problematic.	
7				Definitions of Vegetation Strata:	
3.				Tree – Woody plants 3 in. (7.6 cm) or more i	
9				diameter at breast height (DBH), regardless	of height.
10				Sapling/shrub – Woody plants less than 3 in	n. DBH
11				and greater than or equal to 3.28 ft (1 m) tall	
12				Herb – All herbaceous (non-woody) plants, r	egardles
	40	=Total Cover		of size, and woody plants less than 3.28 ft ta	II.
Woody Vine Stratum (Plot size: 15' radius)				Woody vines – All woody vines greater than	3.28 ft ir
l				height.	
2					
3.				Hydrophytic Vegetation	
				Present? Yes No X	_
4. <u> </u>		=Total Cover			

SOIL Sampling Point: UPL_4

	escription: (Describe t	o the de				or or con	firm the absence	of indicators.)	
Depth	Matrix			Feature		12	Taydyna	Domonto	
(inches)	Color (moist)	<u>%</u>	Color (moist)	<u>%</u>	Type ¹	Loc ²	Texture	Remarks	
0-10	10YR 3/2	90	10YR 5/8	10	<u>C</u>	<u>M</u>	Loamy/Clayey	Prominent redox concentration	ions
10-20								Gravel/slag/sand fill	
					-				
			_						
1									
	=Concentration, D=Depl	etion, RM	l=Reduced Matrix, CS	S=Cover	red or Coa	ated Sand		cation: PL=Pore Lining, M=Matri	Χ.
-	oil Indicators: sol (A1)		Polyvalue Below	Surface	(S8) (I D	D D		or Problematic Hydric Soils ³ : ck (A10) (LRR K, L, MLRA 149E	3/
	Epipedon (A2)	-	MLRA 149B)	Juliace	(30) (LI	ix ix,		rairie Redox (A16) (LRR K, L, R)	3)
	Histic (A3)		Thin Dark Surfac	e (S9) (I	LRR R, M	LRA 149		cky Peat or Peat (S3) (LRR K, L	, R)
	ogen Sulfide (A4)	-	High Chroma Sa					e Below Surface (S8) (LRR K, L)	
Strati	fied Layers (A5)	_	Loamy Mucky Mi	ineral (F	1) (LRR k	(, L)	Thin Dar	k Surface (S9) (LRR K, L)	
Deple	eted Below Dark Surface	(A11) _	Loamy Gleyed M	latrix (F2	2)		Iron-Mar	nganese Masses (F12) (LRR K, L	_, R)
	Dark Surface (A12)	_	x Depleted Matrix					nt Floodplain Soils (F19) (MLRA 1	
	y Mucky Mineral (S1)	-	x Redox Dark Surf					oodic (TA6) (MLRA 144A, 145, 1	49B)
	y Gleyed Matrix (S4) y Redox (S5)	-	Depleted Dark S Redox Depression	•	•			ent Material (F21) allow Dark Surface (TF12)	
	ped Matrix (S6)	-	Marl (F10) (LRR					xplain in Remarks)	
	Surface (S7)	-		, _/				Apidin in Homanic)	
	, ,								
³ Indicators	s of hydrophytic vegetati	on and w	etland hydrology mus	st be pre	esent, unle	ess distur	bed or problematic		
Restrictiv	ve Layer (if observed):								
Type:									
Depth (i	inches):						Hydric Soil Pro	esent? Yes X No	
Remarks:							_		
Area locat	ted adjacent to disturbed	l area wit	h evidence of constru	uction ar	nd demolit	ion debri	s dumping/filling.		

Project/Site: Avon Lake Gas	Addition Project	City/C	ounty: Lorain		Sampling Date	: 5/16/14
Applicant/Owner: NRG Ohio	Pipeline Company LLC			State:		g Point: WET 4
Investigator(s): Travis Kessler,			n, Township, Range:	Not available		
Landform (hillside, terrace, etc.		_	ief (concave, convex,		S	lope (%): 0-2
Subregion (LRR or MLRA): LR	· — ·	nt: 41.4896153967	Long: -8	32.0586135988	•	um: WGS 84
Soil Map Unit Name: Miner silt	<u> </u>				fication: PUBGx	<u>110001</u>
•	•	for this time of year?	Voc v No			
Are climatic / hydrologic condit	-	-	Yes x No		n in Remarks.)	y No
Are Vegetation, Soil _				Circumstances" p		xNo
Are Vegetation, Soil _				xplain any answer	,	
SUMMARY OF FINDING		nap snowing samp	ing point location	ons, transects	, important re	atures, etc.
Hydrophytic Vegetation Prese	ent? Yes X	No Is	the Sampled Area			
Hydric Soil Present?	Yes X		ithin a Wetland?	Yes X	No	
Wetland Hydrology Present?	Yes X	No If	yes, optional Wetland	Site ID: WET_4		
Remarks: (Explain alternative	e procedures here or in	a separate report.)				
HYDROLOGY						
Wetland Hydrology Indicato	ors:			Secondary Indi	cators (minimum	of two required)
Primary Indicators (minimum		ck all that apply)		-	oil Cracks (B6)	
x Surface Water (A1)	•	Water-Stained Leaves	(B9)		Patterns (B10)	
x High Water Table (A2)		Aquatic Fauna (B13)	, (20)		Lines (B16)	
x Saturation (A3)	_	Marl Deposits (B15)			n Water Table (C	2)
Water Marks (B1)		Hydrogen Sulfide Odo	or (C1)		urrows (C8)	-)
	_				Visible on Aerial I	(CO)
Sediment Deposits (B2)	_	Oxidized Rhizosphere	= -	· 		,
Drift Deposits (B3)	_	Presence of Reduced			Stressed Plants (טו)
Algal Mat or Crust (B4)	_	Recent Iron Reduction			ic Position (D2)	
Iron Deposits (B5)		Thin Muck Surface (C			quitard (D3)	
Inundation Visible on Aer		Other (Explain in Rem	arks)		graphic Relief (D4))
Sparsely Vegetated Cond	cave Surface (B8)			FAC-Neutr	ral Test (D5)	
Field Observations:						
Surface Water Present?	Yes x No	_ · · · /	0			
Water Table Present?	Yes x No	_ ` `	10			
Saturation Present?	Yes x No	Depth (inches):	8 Wetland H	lydrology Presen	nt? Yes X	No
(includes capillary fringe)						
Describe Recorded Data (stre	am gauge, monitoring	well, aerial photos, previ	ious inspections), if av	ailable:		
Remarks:						
Site was seasonably wet due	to recent spring rains;	normal for May				

VEGETATION – Use scientific names of plants. Sampling Point: WET 4 Absolute Dominant Indicator Tree Stratum (Plot size: 30' radius) % Cover **Dominance Test worksheet:** Species? Status Fraxinus pennsylvanica 10 **FACW** Yes **Number of Dominant Species** That Are OBL, FACW, or FAC: 2. Prunus virginiana 10 Yes **FACU** (A) Crataegus spp. 10 Yes FAC **Total Number of Dominant** 4. Species Across All Strata: 6 (B) 5. Percent of Dominant Species 6. That Are OBL, FACW, or FAC: 66.7% (A/B) Prevalence Index worksheet: 30 =Total Cover Total % Cover of: Sapling/Shrub Stratum (Plot size: 15' radius) OBL species x 1 = Lonicera tatarica Yes **FACU** FACW species 55 x 2 = 110 x 3 = Fraxinus pennsylvanica 5 Yes **FACW** FAC species 15 45 3. **FACU** species 20 x 4 = 4. UPL species 0 x 5 = 5. Column Totals: 90 235 (A) (B) 6. Prevalence Index = B/A = 2.61 **Hydrophytic Vegetation Indicators:** 10 =Total Cover 1 - Rapid Test for Hydrophytic Vegetation 5' radius) X 2 - Dominance Test is >50% Herb Stratum (Plot size: Phragmites australis 40 Yes **FACW** X 3 - Prevalence Index is ≤3.0¹ 2. Glechoma hederacea 5 No **FACU** 4 - Morphological Adaptations¹ (Provide supporting data in Remarks or on a separate sheet) 5 3. Ranunculus acris FAC No Problematic Hydrophytic Vegetation¹ (Explain) 4. 5. ¹Indicators of hydric soil and wetland hydrology must 6. be present, unless disturbed or problematic. **Definitions of Vegetation Strata:** 8. Tree - Woody plants 3 in. (7.6 cm) or more in 9. diameter at breast height (DBH), regardless of height. Sapling/shrub - Woody plants less than 3 in. DBH and greater than or equal to 3.28 ft (1 m) tall. Herb - All herbaceous (non-woody) plants, regardless 50 =Total Cover of size, and woody plants less than 3.28 ft tall. Woody Vine Stratum (Plot size: 15' radius) Woody vines - All woody vines greater than 3.28 ft in 1. height. Hydrophytic Vegetation Present? Yes X No No =Total Cover Remarks: (Include photo numbers here or on a separate sheet.)

SOIL Sampling Point: WET 4

Profile De	escription: (Describe	to the de	pth needed to docu	ment th	e indicato	or or con	firm the absence	of indicator	rs.)	
Depth	Matrix		Redox	k Featur	es					
(inches)	Color (moist)	%	Color (moist)	%	Type ¹	Loc ²	Texture		Remarks	
0-4	10YR 4/2	100					Loamy/Clayey			
4-20	10YR 5/3	60	10YR 5/6	40	С	М	Loamy/Clayey	Distin	ct redox conce	ntrations
			_							
								-		
	-									
1 _{Type: C}	=Concentration, D=Dep	lotion DI	4-Reduced Matrix C	S=Covo	rod or Cod	tod Son	d Craina ² L a	ootion: DI =	Pore Lining, M:	-Motriy
	oil Indicators:	ellon, Ri	vi=Reduced Matrix, C	S=Cove	red or Coa	aleu San			ntic Hydric Soi	
-	sol (A1)		Polyvalue Below	Surface	(S8) (I R	R R			RR K, L, MLRA	
	Epipedon (A2)		MLRA 149B)	Suriace	(30) (LI	ix ix,			(A16) (LRR K,	-
	: Histic (A3)		Thin Dark Surface	re (S9) (IRRR M	Ι R Δ 140			Peat (S3) (LRI	-
	ogen Sulfide (A4)		High Chroma Sa					-	face (S8) (LRF	-
	fied Layers (A5)		Loamy Mucky M			-			69) (LRR K, L)	(IX, L)
	eted Below Dark Surface	o (A11)				K, L)				DKID)
	Dark Surface (A12)	= (A11)	Loamy Gleyed M		<u>~)</u>			-	sses (F12) (LR	-
			x Depleted Matrix		`				Soils (F19) (M	
	y Mucky Mineral (S1)		Redox Dark Surf					ent Material	(MLRA 144A,	145, 1496)
	y Gleyed Matrix (S4)		Depleted Dark S						• •	
	y Redox (S5)		Redox Depression	, ,					Surface (TF12)	
	ped Matrix (S6)		Marl (F10) (LRR	K, L)			Other (E	xplain in Re	marks)	
Dark	Surface (S7)									
³ Indicators	s of hydrophytic vegetat	ion and v	vetland hydrology mu	st be pre	esent, unle	ess distur	bed or problemation) .		
	ve Layer (if observed):		, 0,							
Type:										
Depth (i	inches):						Hydric Soil Pr	esent?	Yes X	No
Remarks:										

Project/Site: Avon Lake Gas Addition Project	City/County: Lorain County	Sampling Date: 5/15/14			
Applicant/Owner: NRG Gas Pipeline Company LLC		State: OH Sampling Point: UPL_5			
Investigator(s): Travis Kessler, Lauren Zielke, Aaron Gordo	on, Jeff Williams Section, Township, Range:				
Landform (hillside, terrace, etc.): Till Plains	Local relief (concave, convex,				
Subregion (LRR or MLRA): LRR R, MLRA 139 Lat:	<u> </u>	32.0586037508 Datum: WGS 84			
Soil Map Unit Name: Mahoning silt loam, 0 to 2 percent		NWI classification: none			
Are climatic / hydrologic conditions on the site typical fo	·	(If no, explain in Remarks.)			
Are Vegetation x , Soil x , or Hydrology	<u> </u>	Circumstances" present? Yes x No			
Are Vegetation, Soil, or Hydrology		explain any answers in Remarks.)			
SUMMARY OF FINDINGS – Attach site ma					
Hydrophytic Vegetation Present? Yes	No x Is the Sampled Area				
Hydric Soil Present? Yes X	No x within a Wetland?	Yes NoX			
Wetland Hydrology Present? Yes X	No If yes, optional Wetland	Site ID:			
Remarks: (Explain alternative procedures here or in a Previously clear-cut and stripped/filled for adjacent rail					
HYDROLOGY					
Wetland Hydrology Indicators:		Secondary Indicators (minimum of two required)			
Primary Indicators (minimum of one is required; check		Surface Soil Cracks (B6)			
<u> </u>	Water-Stained Leaves (B9)	Drainage Patterns (B10)			
<u> </u>	Aquatic Fauna (B13)	Moss Trim Lines (B16)			
	Marl Deposits (B15)	Dry-Season Water Table (C2)			
	Hydrogen Sulfide Odor (C1) Ovidized Phizospheres on Living Poots (C3)	Crayfish Burrows (C8) Saturation Visible on Aerial Imagery (C9)			
	Oxidized Rhizospheres on Living Roots (C3) Presence of Reduced Iron (C4)	Stunted or Stressed Plants (D1)			
	Recent Iron Reduction in Tilled Soils (C6)				
	Thin Muck Surface (C7)	Geomorphic Position (D2) Shallow Aquitard (D3)			
<u> </u>	Other (Explain in Remarks)	Microtopographic Relief (D4)			
Sparsely Vegetated Concave Surface (B8)	Other (Explain in Nemarks)	FAC-Neutral Test (D5)			
Field Observations:					
	Donth (inches):				
Saturation Present? Yes No x	Depth (inches): 4 Depth (inches): Wetland H	Hydrology Present? Yes X No			
(includes capillary fringe)	Deptir (mones).	iyurology i resent: 165 // 110			
Describe Recorded Data (stream gauge, monitoring w					
Remarks: Water table appears to be perched on top of fill layer.					

	Absolute	Dominant	Indicator		
ree Stratum (Plot size: 30' radius)	% Cover	Species?	Status	Dominance Test worksheet:	
		·			
				Number of Dominant Species That Are OBL, FACW, or FAC: 0	(A)
				matric obl., raow, or rao.	(/\)
				Total Number of Dominant	
l		· 		Species Across All Strata: 1	(B)
				Percent of Dominant Species	
i				That Are OBL, FACW, or FAC: 0.0%	(A/B)
·				Prevalence Index worksheet:	
		=Total Cover		Total % Cover of: Multiply	by:
Sapling/Shrub Stratum (Plot size: 15' radius)				OBL species 0 x 1 =	0
				FACW species 0 x 2 =	0
					0
					28
				· —	10
					
·					38 (B
·		· 		Prevalence Index = B/A = 4.0)2
				Hydrophytic Vegetation Indicators:	
		=Total Cover		1 - Rapid Test for Hydrophytic Vegetati	on
<u>lerb Stratum</u> (Plot size: <u>5' radius</u>)				2 - Dominance Test is >50%	
. Vicia americana	10	No	FACU	3 - Prevalence Index is ≤3.0 ¹	
. Taraxacum officinale	2	No	FACU	4 - Morphological Adaptations ¹ (Provide	supportin
3. Asclepias syriaca	2	No	UPL	data in Remarks or on a separate sh	eet)
Poa pratensis	95	Yes	FACU	Problematic Hydrophytic Vegetation ¹ (E	Explain)
		<u> </u>		¹ Indicators of hydric soil and wetland hydrol be present, unless disturbed or problematic	
·					•
-				Definitions of Vegetation Strata:	
				Tree – Woody plants 3 in. (7.6 cm) or more	
)				diameter at breast height (DBH), regardless	of height.
0				Sapling/shrub – Woody plants less than 3	in. DBH
1				and greater than or equal to 3.28 ft (1 m) ta	I.
				Herb – All herbaceous (non-woody) plants,	regardless
2.	400	=Total Cover		of size, and woody plants less than 3.28 ft to	
2	109	-		of size, and woody plants less than 6.20 it to	all.
2	109	-			
Voody Vine Stratum (Plot size: 15' radius)		•		Woody vines – All woody vines greater that height.	
Voody Vine Stratum (Plot size: 15' radius)		•		Woody vines – All woody vines greater that	
Voody Vine Stratum (Plot size: 15' radius)		•		Woody vines – All woody vines greater that height. Hydrophytic	
Voody Vine Stratum (Plot size: 15' radius)		•		Woody vines – All woody vines greater that height. Hydrophytic Vegetation	n 3.28 ft ir
Voody Vine Stratum (Plot size: 15' radius)		•		Woody vines – All woody vines greater that height. Hydrophytic	n 3.28 ft in

SOIL Sampling Point: UPL_5

	scription: (Describe	to the de	-			or or con	firm the absence	of indicato	ers.)	
Depth (inches)	Matrix Color (moist)	%	Color (moist)	Featur %	es Type ¹	Loc ²	Texture		Remarks	
0-4	10YR 4/2	100	Color (moist)		Турс		Loamy/Clayey		Silty clay with gr	ravel
4-20									Gravel/shale	TIII
1 _{Type:} C=	 Concentration, D=Dep	lotion DI	M-Boduood Motrix, C		rod or Cod	atad San	d Craina 21 o	ootion: DI =	Pore Lining, M	-Motrix
	il Indicators:	ielion, Ki	VI-Reduced Matrix, C.	3-Cove	red or Coa	aleu San			atic Hydric So	
-	ol (A1)		Polyvalue Below	Surface	e (S8) (LR	RR,			RR K, L, MLR	
	Epipedon (A2)		MLRA 149B)		`	,			((A16) (LRR K ,	*
Black	Histic (A3)		Thin Dark Surface	e (S9) (LRR R, M	ILRA 149	9B) 5 cm Mu	icky Peat or	Peat (S3) (LR	R K, L, R)
	gen Sulfide (A4)		High Chroma Sa			-			rface (S8) (LRF	-
	ed Layers (A5)		Loamy Mucky Mi			(, L)			S9) (LRR K, L)	
	ted Below Dark Surfac	e (A11)	Loamy Gleyed M		2)			_	asses (F12) (LR	
	Dark Surface (A12)		x Depleted Matrix		`				n Soils (F19) (N	•
	Mucky Mineral (S1) Gleyed Matrix (S4)		Redox Dark Surf Depleted Dark S					ent Material	(MLRA 144A,	143, 1496)
	Redox (S5)		Redox Depression						Surface (TF12)	
	ed Matrix (S6)		Marl (F10) (LRR					xplain in Re		
Dark S	Surface (S7)									
	of hydrophytic vegeta		wetland hydrology mus	st be pre	esent, unle	ess distur	rbed or problematio).		
	e Layer (if observed):									
	III material									
Depth (ir	nches):	4					Hydric Soil Pr	esent?	Yes X	No x
Remarks:	ad adiacont to rail yard	00000	ro to bo tongoil on ton	of fill ma	storial					
Area locate	ed adjacent to rail yard	- appear	s to be topsoil on top	OI IIII III	ateriai.					

Project/Site: Avon Lake Gas	s Addition Project	City/Co	unty: Lorain		Sampling Date:	5/15/14
Applicant/Owner: NRG Ohio	Pipeline Company LLC			State:	— OH Sampling	Point: WET 5
Investigator(s): Travis Kessler		don Jeff Williams Section	Township Range	Not available		
Landform (hillside, terrace, et			ef (concave, convex,		Sic	ope (%): 0-2
,	, 		,	·		ım: WGS 84
Subregion (LRR or MLRA): L		1	Long. <u>-c</u>	32.0586135988		III. <u>VVGS 04</u>
Soil Map Unit Name: Mahonir	·	·		NWI classi		
Are climatic / hydrologic cond		-	Yes x No	(If no, explair	n in Remarks.)	
Are Vegetationx, Soil	x , or Hydrology	x significantly disturb	ed? Are "Normal	Circumstances" pr	resent? Yes_	x No
Are Vegetation, Soil	, or Hydrology	naturally problema	tic? (If needed, e	xplain any answer	s in Remarks.)	
SUMMARY OF FINDIN	GS – Attach site m	ap showing sampli	ing point location	ons, transects	, important fea	atures, etc.
Hydrophytic Vegetation Pres	sent? Yes X	No ls t	he Sampled Area			
Hydric Soil Present?	Yes x		hin a Wetland?	Yes X	No	
Wetland Hydrology Present?			es, optional Wetland			
Remarks: (Explain alternative	ve procedures here or in	a separate report.)				
Previously clear-cut and strip	•					
LIVERGLOOV						
HYDROLOGY Western delivers leave to disease				Cacandan Indi	actors (minimum o	f two required)
Wetland Hydrology Indicat Primary Indicators (minimum		ok all that annly)		•	cators (minimum o oil Cracks (B6)	<u>r two required)</u>
x Surface Water (A1)	Tor one is required, chec	Water-Stained Leaves	(B9)		Patterns (B10)	
x High Water Table (A2)		Aquatic Fauna (B13)	(50)		Lines (B16)	
x Saturation (A3)		Marl Deposits (B15)			n Water Table (C2))
Water Marks (B1)		Hydrogen Sulfide Odor	(C1)		urrows (C8)	,
Sediment Deposits (B2)		Oxidized Rhizospheres			Visible on Aerial In	nagery (C9)
Drift Deposits (B3)		Presence of Reduced In	-		Stressed Plants (D	
Algal Mat or Crust (B4)		Recent Iron Reduction	in Tilled Soils (C6)	Geomorph	ic Position (D2)	
Iron Deposits (B5)	<u> </u>	Thin Muck Surface (C7)	Shallow Ac	quitard (D3)	
Inundation Visible on Ae	erial Imagery (B7)	Other (Explain in Rema	ırks)	Microtopog	graphic Relief (D4)	
Sparsely Vegetated Cor	ncave Surface (B8)			FAC-Neutr	al Test (D5)	
Field Observations:						
Surface Water Present?	Yes x No	Depth (inches): 0)			
Water Table Present?	Yes x No	Depth (inches): 4	<u> </u>			
Saturation Present?	Yes x No	Depth (inches): 0	Wetland H	lydrology Presen	t? Yes X	No
(includes capillary fringe)				7		
Describe Recorded Data (str	ream gauge, monitoring	well, aerial photos, previo	ous inspections), if av	allable:		
Remarks:						
Site was seasonably wet due	e to recent spring rains;	normal for May. Water tab	ole appears to be per	ched on top of fill I	laver.	
Í	, ,	,		•	•	

าเร.	/EGETATION – Use scientific names of plants.						
Absolute % Cover	Dominant Species?	Indicator Status	Dominance Test worksheet:				
			Number of Dominant Species That Are OBL, FACW, or FAC: 2	(A)			
		FAC	Total Number of Dominant Species Across All Strata: 3	(B)			
			Percent of Dominant Species That Are OBL, FACW, or FAC: 66.7%	(A/B			
			Prevalence Index worksheet:	`			
	=Total Cover		Total % Cover of: Multiply	by:			
			OBL species 20 x 1 = 2	20			
			<u> </u>	0			
				90			
				00			
			· —	0			
			' -	10 (B			
	·						
	=Total Cover			on			
			I 				
50	Yes	FACII					
				sunnortii			
			— · · · · · · · · · · · · · · · · · ·				
20	165	OBL	Problematic Hydrophytic Vegetation ¹ (F	(volain			
	· ——						
			Definitions of Vegetation Strata:				
			Tree – Woody plants 3 in (7.6 cm) or more	in			
	·						
			and greater than or equal to 3.26 it (1 iii) tai	I.			
100	=Total Cover						
	•		Woody vines – All woody vines greater that height.	n 3.28 ft i			
			noight.				
			Hydrophytic Vegetation				
			Hydrophytic Vegetation Present? Yes X No				
	% Cover	**Cover Species?	% Cover Species? Status FAC FAC =Total Cover =Total Cover 50 Yes FACU 30 Yes OBL	% Cover Species? Status Dominance Test worksheet: Number of Dominant Species That Are OBL, FACW, or FAC: 2 Total Number of Dominant Species Across All Strata: 3 Percent of Dominant Species That Are OBL, FACW, or FAC: 66.7% Prevalence Index worksheet: Total Cover Prevalence Index worksheet: Total % Cover of: Multiply: OBL species 20 x1 = 2 FACW species 30 x3 = 5 FACW species 0 x5 = 1 UPL species 50 x4 = 2 UPL species 0 x5 = 1 Column Totals: 100 (A) 3 Prevalence Index = B/A = 3.1 Hydrophytic Vegetation Indicators: 1 - Rapid Test for Hydrophytic Vegetation X 2 - Dominance Test is >50% 3 - Prevalence Index is ≤3.0¹ 4 - Morphological Adaptations¹ (Provide data in Remarks or on a separate she Problematic Hydrophytic Vegetation Indicators of hydric soil and wetland hydrole be present, unless disturbed or problematic. Definitions of Vegetation Strata: Tree – Woody plants 3 in. (7.6 cm) or more diameter at breast height (DBH), regardless Sapling/shrub – Woody plants less than 3 and greater than or			

SOIL Sampling Point: WET 5

Profile De	escription: (Describe	to the de	epth needed to docu	ment th	e indicate	or or con	firm the absence	of indicators	s.)	
Depth	Matrix		-	(Feature					,	
(inches)	Color (moist)	%	Color (moist)	%	Type ¹	Loc ²	Texture		Remarks	
0-6	2.5Y 2.5/1	100					Mucky Loam/Clay	S	andy, mucky	clay
6-20								Shale	e bedrock or s	shale fill
								-		
								1		
										_
								-		
								-		
¹ Type: C=	=Concentration, D=Dep	oletion, R	M=Reduced Matrix, C	S=Cove	red or Co	ated Sand	d Grains. ² Lo	cation: PL=F	ore Lining, M	=Matrix.
Hydric So	oil Indicators:						Indicators f	or Problemat	tic Hydric So	ils³:
Histo:	sol (A1)		Polyvalue Below	Surface	e (S8) (LR	RR,	2 cm Mu	uck (A10) (LR	RR K, L, MLR	A 149B)
Histic	Epipedon (A2)		MLRA 149B)				Coast P	rairie Redox ((A16) (LRR K	, L, R)
	(Histic (A3)		Thin Dark Surface				Β)5 cm Μι	ucky Peat or F	Peat (S3) (LR	R K, L, R)
Hydro	ogen Sulfide (A4)		High Chroma Sa	nds (S1	1) (LRR F	(, L)	Polyvalu	ue Below Surf	face (S8) (LRI	R K, L)
	fied Layers (A5)		Loamy Mucky M			(, L)			9) (LRR K, L)	
	eted Below Dark Surfac	ce (A11)	Loamy Gleyed M		2)			-	ses (F12) (LR	
	Dark Surface (A12)		Depleted Matrix						Soils (F19) (N	
	y Mucky Mineral (S1)		Redox Dark Surf						MLRA 144A,	145, 149B)
	y Gleyed Matrix (S4)		Depleted Dark S					rent Material (
	y Redox (S5)		Redox Depression						urface (TF12)	
	ped Matrix (S6)		Marl (F10) (LRR	K , L)			Other (E	Explain in Ren	narks)	
Dark	Surface (S7)									
31		.4:		. 4 1			h - d bl 4:	_		
	s of hydrophytic vegeta		wetland hydrology mu	st be pre	esent, uni	ess distur	bed or problemation	C.		
	ve Layer (if observed)):								
Type:									.,	
Depth (inches):						Hydric Soil Pr	esent?	Yes x	No
Remarks:										
	Area located ad	jacent to	rail yard - appears to b	e topso	il on top o	f fill mate	rial.			

Project/Site: Avon Lake Gas	s Addition Project	С	ity/County: Lorain Co	unty	Sampling Date: 5/15/14			
Applicant/Owner: NRG Gas	Pipeline Company LLC			State:	OH Sampling Point: UPI			
Investigator(s): Travis Kessler			ection, Township, Rar	nge: Not available				
Landform (hillside, terrace, etc			al relief (concave, con	•	Slope (%): 0-			
Subregion (LRR or MLRA): L	.RR R, MLRA 139 L	_at: 41.4793534527	Lor	ng: -82.0600936787	Datum: WGS 84			
Soil Map Unit Name: Miner si				-	sification: none			
Are climatic / hydrologic cond		al for this time of year	? Yes x I		in in Remarks.)			
Are Vegetation x , Soil		-		rmal Circumstances" p				
Are Vegetation, Soil				ed, explain any answe				
·	·	·			s, important features, etc			
Hydrophytic Vegetation Pres	sent? Yes	No_x	Is the Sampled Ar	ea				
Hydric Soil Present?	Yes >	X No	within a Wetland?	Yes	NoX			
Wetland Hydrology Present?	? Yes	No x	If yes, optional We	tland Site ID:				
Remarks: (Explain alternative Previously clear-cut and stripe str								
HYDROLOGY								
Wetland Hydrology Indicat					licators (minimum of two require			
Primary Indicators (minimum	of one is required; che				oil Cracks (B6)			
Surface Water (A1)	_	Water-Stained Le			Patterns (B10)			
High Water Table (A2)	_	Aquatic Fauna (B			Moss Trim Lines (B16)			
Saturation (A3)	_	Marl Deposits (B1			Dry-Season Water Table (C2) Crayfish Burrows (C8)			
Water Marks (B1)	_	Hydrogen Sulfide						
Sediment Deposits (B2)	_		heres on Living Roots		r Stranged Plants (D4)			
Drift Deposits (B3)	_	Presence of Redu			r Stressed Plants (D1)			
Algal Mat or Crust (B4)	_		ction in Tilled Soils (C		hic Position (D2)			
Iron Deposits (B5)		Thin Muck Surfac			quitard (D3)			
Inundation Visible on Ae		Other (Explain in	Remarks)		graphic Relief (D4)			
Sparsely Vegetated Cor	icave Surface (B8)		Т	FAC-Neu	tral Test (D5)			
Field Observations:								
Surface Water Present?	Yes No >							
Water Table Present?		Depth (inches):						
Saturation Present?	Yes No	Depth (inches):	Wetia	and Hydrology Prese	nt? Yes No x			
(includes capillary fringe)		0	· · · · · · · · · · · · · · · · · · ·	9 61.				
Describe Recorded Data (str	eam gauge, monitoring	g well, aerial photos,	previous inspections)	, if available:				
D and								
Remarks:								

	Absolute	Dominant	Indicator		
Tree Stratum (Plot size: 30' radius)	% Cover	Species?	Status	Dominance Test worksheet:	
1					
2				Number of Dominant Species That Are OBL, FACW, or FAC: 0	(A)
2. 3.					(/ //
	-			Total Number of Dominant	(D)
4		·		Species Across All Strata: 1	(B)
5				Percent of Dominant Species	
5				That Are OBL, FACW, or FAC: 0.0%	(A/B)
7				Prevalence Index worksheet:	
		=Total Cover		Total % Cover of: Multiply b	<u>y:</u>
Sapling/Shrub Stratum (Plot size: 15' radius)				OBL species 0 x 1 = 0	
l				FACW species 0 x 2 = 0	
2				FAC species0 x 3 =0	
3.				FACU species 100 x 4 = 40	0
				UPL species 0 x 5 = 0	
i				Column Totals: 100 (A) 40	0 (B)
				Prevalence Index = B/A = 4.00	
7.	-			Hydrophytic Vegetation Indicators:	
·		=Total Cover			n
	-	- Total Cover		1 - Rapid Test for Hydrophytic Vegetatio	П
Herb Stratum (Plot size: 5' radius)				2 - Dominance Test is >50%	
1. Vicia americana	90	Yes	FACU	3 - Prevalence Index is ≤3.0 ¹	
2. Poa pratensis	5	<u>No</u>	FACU	4 - Morphological Adaptations ¹ (Provide	
3. Fragaria virginiana	5	No	FACU	data in Remarks or on a separate she	et)
1.				Problematic Hydrophytic Vegetation ¹ (Ex	(plain)
5				¹ Indicators of hydric soil and wetland hydrolog	av must
3				be present, unless disturbed or problematic.	9,
·.				Definitions of Vegetation Strata:	
3.		<u> </u>		To a Manda de desta O in (7 O and) an mana in	_
).				Tree – Woody plants 3 in. (7.6 cm) or more in diameter at breast height (DBH), regardless of	
0.					_
1				Sapling/shrub – Woody plants less than 3 ir and greater than or equal to 3.28 ft (1 m) tall.	
ll.				and greater than or equal to 3.20 it (1 iii) tail.	
				Herb - All herbaceous (non-woody) plants, re	anardlace
	400	T-4-1 0			-
2	100	=Total Cover		of size, and woody plants less than 3.28 ft tal	-
12	100	=Total Cover		of size, and woody plants less than 3.28 ft tal Woody vines – All woody vines greater than	I.
12		•		of size, and woody plants less than 3.28 ft tal	I.
Noody Vine Stratum (Plot size: 15' radius)		•		of size, and woody plants less than 3.28 ft tal Woody vines – All woody vines greater than height.	I.
Noody Vine Stratum (Plot size: 15' radius) 1.		•		of size, and woody plants less than 3.28 ft tal Woody vines – All woody vines greater than height. Hydrophytic	I.
Noody Vine Stratum (Plot size: 15' radius) 1		•		of size, and woody plants less than 3.28 ft tal Woody vines – All woody vines greater than height.	3.28 ft in

SOIL Sampling Point: UPL_6

	scription: (Describe	to the de				or or con	firm the absence	of indicators	s.)	
Depth	Matrix			Feature						
(inches)	Color (moist)	<u></u> %	Color (moist)	<u>%</u>	Type ¹	Loc ²	Texture		Remarks	
0-8	2.5Y 5/2	95	10YR 6/8	5	<u>C</u>	<u>M</u>	Loamy/Clayey		Clay with gra	vel
8-20									Gravel/shale	fill
	_									
·	_		_							
¹ Type: C=0	Concentration, D=Dep	letion, RM	I=Reduced Matrix, C	S=Cover	ed or Coa	ated Sand	d Grains. ² Lo	cation: PL=P	ore Lining, M	∕I=Matrix.
	I Indicators:	· · · · · · · · · · · · · · · · · · ·	,				Indicators fo			-
Histoso	ol (A1)	_	Polyvalue Below	Surface	(S8) (LR	RR,	2 cm Mu	ıck (A10) (LR	R K, L, MLR	A 149B)
Histic E	Epipedon (A2)	_	MLRA 149B)				Coast Pr	rairie Redox ((A16) (LRR K	(, L, R)
Black I	Histic (A3)	_	Thin Dark Surfac	e (S9) (I	LRR R, M	LRA 149	B)5 cm Mu	icky Peat or F	Peat (S3) (LR	R K, L, R)
Hydrog	gen Sulfide (A4)	_	High Chroma Sa	nds (S1	1) (LRR K	(, L)	Polyvalu	e Below Surf	ace (S8) (LR	R K, L)
Stratifie	ed Layers (A5)	_	Loamy Mucky Mi	ineral (F	1) (LRR k	(, L)	Thin Dar	rk Surface (S	9) (LRR K, L))
Deplete	ed Below Dark Surfac	e (A11)	Loamy Gleyed M	latrix (F2	2)		Iron-Mar	nganese Mas	ses (F12) (LF	RR K, L, R)
	Dark Surface (A12)	_	x Depleted Matrix					nt Floodplain		*
	Mucky Mineral (S1)	=	Redox Dark Surf					podic (TA6) (I		145, 149B)
	Gleyed Matrix (S4)	_	Depleted Dark S	•	- 7)			ent Material (
	Redox (S5)	-	Redox Depression					allow Dark Su		
	ed Matrix (S6) Jurface (S7)	-	Marl (F10) (LRR	N, L)			Other (E	xplain in Rem	iaiks)	
Daik S	unace (37)									
³ Indicators	of hydrophytic vegetat	ion and w	etland hydrology mus	st be pre	sent. unle	ess distur	bed or problemation	<u>.</u>		
	Layer (if observed):		, , , , , , , , , , , , , , , , , , ,		,					
Type: Fil	Il material									
Depth (in	ches):	3					Hydric Soil Pro	esent?	Yes X	No
Remarks:							1 ,			
	ed adjacent to rail yard	- appears	to be topsoil on top	of fill ma	terial.					
		• •								

Project/Site: Avon Lake Gas Addition Project	City/County: Lorain Cou	nty	Sampling Date: 5/15/14			
Applicant/Owner: NRG Gas Pipeline Company LLC			OH Sampling Point: UPL_6.1			
Investigator(s): Travis Kessler, Lauren Zielke, Aaron Gordo	on, Jeff Williams Section, Township, Rang					
Landform (hillside, terrace, etc.): Depressions	Local relief (concave, conv	•	Slope (%): 0-2			
Subregion (LRR or MLRA): LRR R, MLRA 139 Lat:		: -82.0577146506	Datum: WGS 84			
Soil Map Unit Name: Lorain silty clay loam			cation: none			
Are climatic / hydrologic conditions on the site typical fo	or this time of year? Yes x N		-			
Are Vegetation, Soil, or Hydrology		mal Circumstances" pre				
Are Vegetation, Soil, or Hydrology		d, explain any answers	<u></u>			
SUMMARY OF FINDINGS – Attach site ma						
Hydrophytic Vegetation Present? Yes	No X Is the Sampled Are	a				
Hydric Soil Present? Yes X		Yes	No X			
Wetland Hydrology Present? Yes X	No If yes, optional Wetl	and Site ID:				
HYDROLOGY						
Wetland Hydrology Indicators:		Secondary Indica	ators (minimum of two required)			
Primary Indicators (minimum of one is required; check			Cracks (B6)			
Surface Water (A1)	Water-Stained Leaves (B9)		atterns (B10)			
	Aquatic Fauna (B13)		Moss Trim Lines (B16)			
	Marl Deposits (B15)	Dry-Season Water Table (C2)				
Water Marks (B1)	Hydrogen Sulfide Odor (C1)	Crayfish Bur				
Sediment Deposits (B2)	Oxidized Rhizospheres on Living Roots	· · —	(isible on Aerial Imagery (C9)			
Drift Deposits (B3)	Presence of Reduced Iron (C4)		Stressed Plants (D1)			
Algal Mat or Crust (B4)	Recent Iron Reduction in Tilled Soils (C6	·	Geomorphic Position (D2)			
Iron Deposits (B5)	Thin Muck Surface (C7)		Shallow Aquitard (D3)			
Inundation Visible on Aerial Imagery (B7)	Other (Explain in Remarks)		aphic Relief (D4)			
Sparsely Vegetated Concave Surface (B8)		FAC-Neutra	Test (D5)			
Field Observations:						
Surface Water Present? Yes No x	· · · · 					
Water Table Present? Yes x No	· · · · · · · · · · · · · · · · · · ·					
Saturation Present? Yes x No	Depth (inches): 10 Wetlan	d Hydrology Present	? Yes X No			
(includes capillary fringe)		f - railabla:				
Describe Recorded Data (stream gauge, monitoring w	'ell, aeriai priotos, previous irispections),	f avallable.				
Remarks:						
N/A						

VEGETATION – Use scientific names of plants. UPL 6.1 Sampling Point: Absolute Dominant Indicator Tree Stratum (Plot size: 30' radius) % Cover **Dominance Test worksheet:** Species? Status 10 **FACW** Acer rubrum Yes **Number of Dominant Species** That Are OBL, FACW, or FAC: 2. Betula lenta **FACU** (A) 3. **Total Number of Dominant** 4. Species Across All Strata: 5 (B) 5. Percent of Dominant Species (A/B) 6. That Are OBL, FACW, or FAC: 40.0% Prevalence Index worksheet: 35 =Total Cover Total % Cover of: Sapling/Shrub Stratum (Plot size: 15' radius) OBL species x 1 = 10 Acer rubrum 10 Yes FAC FACW species x 2 = 20 x 3 = Lonicera tatarica 5 Yes **FACU** FAC species 12 3. **FACU** species 95 x 4 = 0 4. **UPL** species x 5 = 0 5. Column Totals: 117 436 (A) (B) 6. Prevalence Index = B/A = 3.73 **Hydrophytic Vegetation Indicators:** 15 =Total Cover 1 - Rapid Test for Hydrophytic Vegetation Herb Stratum (Plot size: 5' radius) 2 - Dominance Test is >50% Alliaria petiolata 55 Yes **FACU** 3 - Prevalence Index is ≤3.01 2. Geranium maculatum 5 No **FACU** 4 - Morphological Adaptations¹ (Provide supporting data in Remarks or on a separate sheet) 2 3. Prunella vulgaris No FAC 5 **FACU** Problematic Hydrophytic Vegetation¹ (Explain) 4. Rubus allegheniensis No 5. ¹Indicators of hydric soil and wetland hydrology must 6. be present, unless disturbed or problematic. **Definitions of Vegetation Strata:** 8. Tree - Woody plants 3 in. (7.6 cm) or more in 9. diameter at breast height (DBH), regardless of height. Sapling/shrub - Woody plants less than 3 in. DBH and greater than or equal to 3.28 ft (1 m) tall. Herb - All herbaceous (non-woody) plants, regardless 67 =Total Cover of size, and woody plants less than 3.28 ft tall. Woody Vine Stratum (Plot size: 15' radius) Woody vines - All woody vines greater than 3.28 ft in 1. height. Hydrophytic Vegetation Present? Yes ____ No _X =Total Cover Remarks: (Include photo numbers here or on a separate sheet.) N/A

SOIL Sampling Point: UPL_6.1

Profile De	escription: (Describe t	o the de	pth needed to docu	ment th	e indicato	or or cor	firm the absence of	indicator	rs.)	
Depth	Matrix		Redox	k Featur	es					
(inches)	Color (moist)	%	Color (moist)	%	Type ¹	Loc ²	Texture		Remarks	
0-16	2.5Y 4/1	100					Loamy/Clayey			
16-20	2.5Y 4/1	97	10YR 6/6	3	С	М	Loamy/Clayey			
			_							
¹ Type: C=	-Concentration, D=Deple	etion Pl	M=Peduced Matrix C	S=Cove	red or Co		d Grains ² Locat	tion: PI =	Pore Lining, M	=Matrix
	oil Indicators:	elion, Ki	vi-Reduced Matrix, C	3-00/6	ieu oi coa	aleu San	Indicators for I			
_	sol (A1)		Polyvalue Below	Surface	- (S8) (I R	RR			RR K, L, MLRA	
			MLRA 149B)	Suriace	5 (30) (LK	κκ,		. , ,		•
	Epipedon (A2)		,	oo (CO) (IDDD M	II D A 440			(A16) (LRR K,	
	Histic (A3)		Thin Dark Surface					-	Peat (S3) (LRI	
	ogen Sulfide (A4)		High Chroma Sa			-			face (S8) (LRF	K K, L)
	fied Layers (A5)		Loamy Mucky M			(, L)			89) (LRR K, L)	
Deple	eted Below Dark Surface	e (A11)	Loamy Gleyed N	1atrix (F	2)		Iron-Manga	anese Ma	sses (F12) (LR	R K, L, R)
Thick	Dark Surface (A12)		x Depleted Matrix	(F3)			Piedmont F	loodplain	Soils (F19) (M	ILRA 149B)
Sand	y Mucky Mineral (S1)		x Redox Dark Sur	face (F6	i)		Mesic Spoo	dic (TA6)	(MLRA 144A,	145, 149B)
	y Gleyed Matrix (S4)		Depleted Dark S				Red Parent			-, - ,
	y Redox (S5)		Redox Depressi						Surface (TF12)	
				, ,	,					
	ped Matrix (S6)		Marl (F10) (LRR	K, L)			Other (Exp	iain in Re	marks)	
Dark	Surface (S7)									
³ Indicators	s of hydrophytic vegetati	on and v	vetland hydrology mu	st be pre	esent, unle	ess distu	rbed or problematic.			
Restrictiv	e Layer (if observed):									
Type:										
	nches):						Hydric Soil Prese	ent?	Yes X	No
Remarks:	end adjacent to disturbed	l araa w	th avidance of constr	uation a	nd damalit	ion dobri	a dumning/filling			
Area local	ed adjacent to disturbed	a area w	un evidence of constr	uction at	na aemoni	ion debii	s dumping/illing.			

Project/Site: Avon Lake Gas	s Addition Project	City/County: Lo	orain	Sampling Date: 5/15/14
Applicant/Owner: NRG Ohio	Pipeline Company LLC		State:	OH Sampling Point: WET 6
Investigator(s): Travis Kessler		eff Williams Section Towns	hip Range. Not available	
Landform (hillside, terrace, et			ave, convex, none): concave	Slope (%): 0 to 2
Subregion (LRR or MLRA): L	′ 	47950844	Long: -82.0597412163	
_		47950044		
Soil Map Unit Name: Miner si	•			sification: Not available
Are climatic / hydrologic cond		•		in in Remarks.)
Are Vegetation, Soil		='	ا "Are "Normal Circumstances	present? Yes x No
Are Vegetation, Soil	, or Hydrology	naturally problematic?	(If needed, explain any answe	ers in Remarks.)
SUMMARY OF FINDIN	GS – Attach site map	showing sampling po	int locations, transect	s, important features, etc.
Lludraphytia Vagatatian Drag	oont? Voc V	No. la the Com	mlad Araa	
Hydrophytic Vegetation Pres Hydric Soil Present?		No Is the Sam within a W		X No
Wetland Hydrology Present?			onal Wetland Site ID: WET_6	
	ve procedures here or in a se			
Previously clear-cut area bet				
HYDROLOGY				
Wetland Hydrology Indicat			<u> </u>	dicators (minimum of two required)
	n of one is required; check all			Soil Cracks (B6)
Surface Water (A1)		ter-Stained Leaves (B9)		Patterns (B10)
x High Water Table (A2)		uatic Fauna (B13)		m Lines (B16)
x Saturation (A3)		rl Deposits (B15)		on Water Table (C2)
Water Marks (B1) Sediment Deposits (B2)		drogen Sulfide Odor (C1) dized Rhizospheres on Livir		Burrows (C8) n Visible on Aerial Imagery (C9)
Drift Deposits (B3)		esence of Reduced Iron (C4)	· · · —	r Stressed Plants (D1)
Algal Mat or Crust (B4)		cent Iron Reduction in Tilled		hic Position (D2)
Iron Deposits (B5)		n Muck Surface (C7)	· · · — ·	Aquitard (D3)
Inundation Visible on Ae		ner (Explain in Remarks)		ographic Relief (D4)
Sparsely Vegetated Cor		(=:		tral Test (D5)
Field Observations:				
Surface Water Present?	Yes No x D	epth (inches):		
Water Table Present?	Yes x No D			
Saturation Present?	Yes x No D		Wetland Hydrology Prese	nt? Yes X No
(includes capillary fringe)				
Describe Recorded Data (str	ream gauge, monitoring well,	aerial photos, previous insp	ections), if available:	
Domorko				
Remarks: Site was seasonably wet due	e to recent spring rains; norm	al for May		
Total was sousonasty were aux	s to recent opining rame, norm	ar for may		

Tree Stratum (Plot size: 30' radius)	Absolute	Dominant	Indicator	Sampling Point:	WET 6
	% Cover	Species?	Status	Dominance Test worksheet:	
				Number of Dominant Species That Are OBL, FACW, or FAC:	2 (A)
2. 3.					(/,/
				Total Number of Dominant	2 (B)
				Species Across All Strata:	2 (B)
5.				Percent of Dominant Species	
5					0.0% (A/B)
,				Prevalence Index worksheet:	
		=Total Cover		Total % Cover of: Multi	iply by:
Sapling/Shrub Stratum (Plot size: 15' radius)				OBL species 0 x 1 =	0
. Fraxinus nigra	5	Yes	FACW	FACW species 103 x 2 =	206
•				FAC species0 x 3 =	0
				FACU species 0 x 4 =	0
				UPL species 0 x 5 =	0
				Column Totals: 103 (A)	206 (B)
				Prevalence Index = B/A =	2.00
·				Hydrophytic Vegetation Indicators:	2.00
•	5	=Total Cover		1 - Rapid Test for Hydrophytic Vege	otation
lank Charles (Disk size). El radius		- Total Cover			cialion
Herb Stratum (Plot size: 5' radius)	0.5	.,	E4 0)4/	X 2 - Dominance Test is >50%	
Phragmites australis	95	Yes	FACW	X 3 - Prevalence Index is ≤3.0 ¹	
Onoclea sensibilis	3	No	FACW	4 - Morphological Adaptations ¹ (Production data in Remarks or on a separate	
3.				·	
l				Problematic Hydrophytic Vegetation	n ¹ (Explain)
5				¹ Indicators of hydric soil and wetland hydric	drology must
3.				be present, unless disturbed or problem	
7				Definitions of Vegetation Strata:	
3.				Trace Manda distribute 2 in (7.0 cm) or m	
).				Tree – Woody plants 3 in. (7.6 cm) or m diameter at breast height (DBH), regard	
					•
10.					
				Sapling/shrub – Woody plants less that and greater than or equal to 3.28 ft (1 m	
11.				and greater than or equal to 3.28 ft (1 m	n) tall.
11.		-Total Cover		and greater than or equal to 3.28 ft (1 m Herb – All herbaceous (non-woody) plan	n) tall. nts, regardless
11		=Total Cover		and greater than or equal to 3.28 ft (1 m	n) tall. nts, regardless
11	98			and greater than or equal to 3.28 ft (1 m Herb – All herbaceous (non-woody) plat of size, and woody plants less than 3.28 Woody vines – All woody vines greater	n) tall. nts, regardless 3 ft tall.
1	98			and greater than or equal to 3.28 ft (1 m Herb – All herbaceous (non-woody) plat of size, and woody plants less than 3.28	n) tall. nts, regardless 3 ft tall.
Noody Vine Stratum (Plot size: 15' radius)	98			and greater than or equal to 3.28 ft (1 m Herb – All herbaceous (non-woody) plan of size, and woody plants less than 3.28 Woody vines – All woody vines greater height.	n) tall. nts, regardless 3 ft tall.
Noody Vine Stratum (Plot size: 15' radius) 1	98			and greater than or equal to 3.28 ft (1 m Herb – All herbaceous (non-woody) plat of size, and woody plants less than 3.28 Woody vines – All woody vines greater	n) tall. nts, regardless 3 ft tall.
Moody Vine Stratum (Plot size: 15' radius) 1	98			and greater than or equal to 3.28 ft (1 m Herb – All herbaceous (non-woody) plan of size, and woody plants less than 3.28 Woody vines – All woody vines greater height. Hydrophytic Vegetation	n) tall. nts, regardless 3 ft tall.

SOIL Sampling Point: WET 6

Profile De	escription: (Describe	to the d	epth needed to docu	ment th	e indicate	or or con	firm the absence	of indicators	i.)	
Depth	Matrix			x Featur	es					
(inches)	Color (moist)	%	Color (moist)	%	Type ¹	Loc ²	Texture		Remarks	
0-6	10YR 4/1	100					Loamy/Clayey		Gravely clay	У
6-20	10YR 5/2	95	10YR 6/8	5	C	M	Loamy/Clayey	Prominer	nt redox cond	centrations
		_				_				
1 _{T. max} C-			IM-Daduard Matrix C	<u> </u>			21.0		ana Linina. M	
	=Concentration, D=Depoil Indicators:	oletion, R	IM=Reduced Matrix, C	S=Cove	rea or Co	ated San		cation: PL=Poor Problemati		
•	sol (A1)		Polyvalue Below	Surface	- (S8) (I R	RR		ick (A10) (LR f	-	
	Epipedon (A2)		MLRA 149B)	Curiaco	3 (00) (Li t	,		rairie Redox (<i>I</i>		
	: Histic (A3)		Thin Dark Surface	ce (S9) (IRRR M	II RA 140		icky Peat or P		
	ogen Sulfide (A4)		High Chroma Sa					ie Below Surfa		
	fied Layers (A5)		Loamy Mucky M			-		rk Surface (S9		
		oo (A11)				 L)				
	eted Below Dark Surface	Se (ATT)	Loamy Gleyed N		۷)			nganese Mass		
	Dark Surface (A12)		x Depleted Matrix		Α.			nt Floodplain S		
	y Mucky Mineral (S1)		Redox Dark Sur					podic (TA6) (N		145, 149B)
	y Gleyed Matrix (S4)		Depleted Dark S					ent Material (F		
	y Redox (S5)		Redox Depressi)			allow Dark Su		
	ped Matrix (S6)		Marl (F10) (LRR	K, L)			Other (E	xplain in Rem	iarks)	
Dark	Surface (S7)									
3Indicators	s of hydrophytic vegeta	ation and	wetland hydrology mu	st be pre	esent unle	ess distur	rbed or problemation	:		
	e Layer (if observed)			от 50 р.				·		
Type:	• • •									
_	inches):						Hydric Soil Pr	esent?	Yes X	No
Remarks:							L			

Project/Site: Avon Lake Ga	s Addition Project	Ci	ty/County: Lorain		Sampling Date	: 5/15/14		
Applicant/Owner: NRG Ohio	Pipeline Company LLC			State:	OH Samplin	g Point: UP 7		
Investigator(s): Travis Kessler		on loff Williams Se	action Township Pange			<u> </u>		
Landform (hillside, terrace, et			al relief (concave, convex			long (%): 0 to 2		
, , ,	, 		,	· · · · · · · · · · · · · · · · · · ·		lope (%): 0 to 2		
Subregion (LRR or MLRA): <u>L</u>	RR R, MLRA 139 Lat:	41.47269967	Long:	-82.06369165	Dat	um: WGS 84		
Soil Map Unit Name: Lorain s	ilty clay loam			NWI class	ification: Not avai	lable		
Are climatic / hydrologic cond	itions on the site typical fo	or this time of year?	Yes x No	(If no, explai	n in Remarks.)			
Are Vegetation, Soil	, or Hydrology	significantly d	listurbed? Are "Norma	al Circumstances" p	resent? Yes	x No		
Are Vegetation , Soil	, or Hydrology	naturally prob	elematic? (If needed,	explain any answe	rs in Remarks.)			
SUMMARY OF FINDIN	GS – Attach site ma	ap showing sa	mpling point locat	ions, transects	s, important fe	atures, etc.		
Hydrophytic Vegetation Pres	sent? Yes	No X	Is the Sampled Area					
Hydric Soil Present?	Yes		within a Wetland?	Yes	No X			
Wetland Hydrology Present?		No X	If yes, optional Wetlan	d Site ID:				
Remarks: (Explain alternative Previously clear-cut area be	•	a separate report.)						
HYDROLOGY								
1				0		- f to		
Wetland Hydrology Indicat					icators (minimum	of two required)		
Primary Indicators (minimum Surface Water (A1)	i or one is required; check		avos (P0)		oil Cracks (B6)			
		Water-Stained Le			Patterns (B10)			
High Water Table (A2) Saturation (A3)		Aquatic Fauna (B Marl Deposits (B1			Moss Trim Lines (B16)			
Water Marks (B1)		Hydrogen Sulfide		Dry-Season Water Table (C2)				
Sediment Deposits (B2)		• •	heres on Living Roots (C		Crayfish Burrows (C8) Saturation Visible on Aerial Imagery (C9)			
Drift Deposits (B3)		Presence of Redu	=	· —	r Stressed Plants (
Algal Mat or Crust (B4)		-	ction in Tilled Soils (C6)		nic Position (D2)	51)		
Iron Deposits (B5)		Thin Muck Surface			quitard (D3)			
Inundation Visible on A	erial Imagery (B7)	Other (Explain in I			graphic Relief (D4)		
Sparsely Vegetated Cor		Other (Explain in I	tomano)		ral Test (D5)	,		
Field Observations:	(20)							
Surface Water Present?	Ves No Y	Denth (inches):						
Water Table Present?	Yes No X Yes No X	Depth (inches):						
Saturation Present?	Yes No X			Hydrology Preser	nt? Yes	NoX		
(includes capillary fringe)	<u>//</u>	2004. (666).		,				
Describe Recorded Data (st	ream gauge, monitoring w	vell, aerial photos, i	previous inspections), if	available:				
Remarks: Site was seasonably wet due	e to recent spring rains; no	ormal for May						

VEGETATION – Use scientific names of plants. Sampling Point: UP 7 Absolute Dominant Indicator Tree Stratum (Plot size: 30' radius) % Cover **Dominance Test worksheet:** Species? Status **Number of Dominant Species** That Are OBL, FACW, or FAC: 2. (A) **Total Number of Dominant** Species Across All Strata: 5 (B) Percent of Dominant Species 6. That Are OBL, FACW, or FAC: 0.0% (A/B) Prevalence Index worksheet: =Total Cover Total % Cover of: Sapling/Shrub Stratum (Plot size: 15' radius) OBL species x 1 = 0 1. FACW species x 2 = 2. FAC species 0 x 3 = **FACU** species 60 x 4 = x 5 = UPL species 40 200 Column Totals: 100 440 (A) (B) 6. Prevalence Index = B/A = 4.40 **Hydrophytic Vegetation Indicators:** 1 - Rapid Test for Hydrophytic Vegetation =Total Cover 2 - Dominance Test is >50% Herb Stratum (Plot size: 5' radius) Trifolium pratense 20 Yes **FACU** 3 - Prevalence Index is ≤3.01 2. Plantago lanceolata 20 Yes **FACU** 4 - Morphological Adaptations¹ (Provide supporting data in Remarks or on a separate sheet) 3. Cirsium arvense 20 Yes **FACU** 20 UPL Yes Problematic Hydrophytic Vegetation¹ (Explain) Daucus carota 20 Yes UPL 5. Leucanthemum vulgare ¹Indicators of hydric soil and wetland hydrology must 6. be present, unless disturbed or problematic. **Definitions of Vegetation Strata:** 8. Tree - Woody plants 3 in. (7.6 cm) or more in 9. diameter at breast height (DBH), regardless of height. Sapling/shrub - Woody plants less than 3 in. DBH and greater than or equal to 3.28 ft (1 m) tall. Herb - All herbaceous (non-woody) plants, regardless 100 =Total Cover of size, and woody plants less than 3.28 ft tall. Woody Vine Stratum (Plot size: 15' radius) Woody vines - All woody vines greater than 3.28 ft in height. Hydrophytic Vegetation Present? Yes No X =Total Cover Remarks: (Include photo numbers here or on a separate sheet.) Previously clear-cut area between 2007 and 2009

SOIL Sampling Point: Profile Description: (Describe to the depth needed to document the indicator or confirm the absence of indicators.) Depth Redox Features (inches) Color (moist) % Color (moist) % Loc² Type¹ Texture Remarks 0-20 10YR 3/2 100 Loamy/Clayey sandy loam ²Location: PL=Pore Lining, M=Matrix. ¹Type: C=Concentration, D=Depletion, RM=Reduced Matrix, CS=Covered or Coated Sand Grains. **Hydric Soil Indicators:** Indicators for Problematic Hydric Soils³: Histosol (A1) Polyvalue Below Surface (S8) (LRR R, 2 cm Muck (A10) (LRR K, L, MLRA 149B) Coast Prairie Redox (A16) (LRR K, L, R) Histic Epipedon (A2) MLRA 149B) Black Histic (A3) Thin Dark Surface (S9) (LRR R, MLRA 149B) 5 cm Mucky Peat or Peat (S3) (LRR K, L, R) Hydrogen Sulfide (A4) High Chroma Sands (S11) (LRR K, L) Polyvalue Below Surface (S8) (LRR K, L) Stratified Layers (A5) Loamy Mucky Mineral (F1) (LRR K, L) Thin Dark Surface (S9) (LRR K, L) Iron-Manganese Masses (F12) (LRR K, L, R) Depleted Below Dark Surface (A11) Loamy Gleyed Matrix (F2) Thick Dark Surface (A12) Depleted Matrix (F3) Piedmont Floodplain Soils (F19) (MLRA 149B) Mesic Spodic (TA6) (MLRA 144A, 145, 149B) Sandy Mucky Mineral (S1) Redox Dark Surface (F6) Depleted Dark Surface (F7) Sandy Gleyed Matrix (S4) Red Parent Material (F21) Sandy Redox (S5) Redox Depressions (F8) Very Shallow Dark Surface (TF12) Stripped Matrix (S6) Marl (F10) (LRR K, L) Other (Explain in Remarks) Dark Surface (S7) ³Indicators of hydrophytic vegetation and wetland hydrology must be present, unless disturbed or problematic. Restrictive Layer (if observed): Type: Depth (inches): **Hydric Soil Present?** Yes No Remarks:

Project/Site: Avon Lake Gas	Addition Project	Ci	ity/County: Lorain		Samp	ling Date:	5/15/1	4
Applicant/Owner: NRG Ohio	Pipeline Company LLC			State:		Sampling		
Investigator(s): Travis Kessler,		on, Jeff Williams Se	ection, Township, Range:	Not available		-		
Landform (hillside, terrace, etc.			al relief (concave, convex,			Slo	pe (%):	0 to 2
Subregion (LRR or MLRA): LF	· ———		•	82.0638303574		_	n: WG	
Soil Map Unit Name: Lorain sil		71.77 11.77			ification:	Not availa		<u> </u>
·		this time of year'	2 Yes v No				DIE	
Are climatic / hydrologic condit	• •	-		(If no, explai				
Are Vegetation, Soil _				Circumstances" p			<u>x</u> N	10
Are Vegetation, Soil _				explain any answe		ŕ		
SUMMARY OF FINDING	SS – Attach site ma	ap showing sa	mpling point location	ons, transects	, impo	rtant fea	tures,	, etc.
Hydrophytic Vegetation Prese	ent? Yes	No X	Is the Sampled Area					
Hydric Soil Present?	Yes		within a Wetland?	Yes	No	X		
Wetland Hydrology Present?	Yes	No X	If yes, optional Wetland					
Remarks: (Explain alternative			11 700, 22					
Previously clear-cut area betv		a separate report.						
								ļ
								ļ
								ļ
								ļ
HYDROLOGY						_	_	_
Wetland Hydrology Indicato	ors:			Secondary Ind	icators (r	ninimum of	two rec	quired)
Primary Indicators (minimum		k all that apply)		Surface So				
Surface Water (A1)		Water-Stained Le	aves (B9)	Drainage I	Patterns	(B10)		
High Water Table (A2)	<u></u>	Aquatic Fauna (B	13)	Moss Trim Lines (B16)				
Saturation (A3)	<u>-</u>	Marl Deposits (B1	5)	Dry-Season Water Table (C2)				
Water Marks (B1)	<u> </u>	Hydrogen Sulfide	Odor (C1)	Crayfish Burrows (C8)				
Sediment Deposits (B2)	<u>-</u>	Oxidized Rhizosp	heres on Living Roots (C3					
Drift Deposits (B3)	<u></u>	Presence of Redu	iced Iron (C4)	Stunted or	Stresse	d Plants (D	1)	
Algal Mat or Crust (B4)	<u> </u>	Recent Iron Redu	ction in Tilled Soils (C6)	Geomorph	nic Positio	on (D2)		
Iron Deposits (B5)	<u> </u>	Thin Muck Surface	e (C7)	Shallow A	quitard ([D3)		
Inundation Visible on Aer	ial Imagery (B7)	Other (Explain in I	Remarks)	Microtopo	graphic F	Relief (D4)		
Sparsely Vegetated Cond	cave Surface (B8)			FAC-Neut	ral Test (D5)		
Field Observations:								
Surface Water Present?	Yes No X							
Water Table Present?	Yes No X							
Saturation Present?	Yes No X			Hydrology Preser	nt?	Yes	No	X
(includes capillary fringe)								
Describe Recorded Data (stre	am gauge, monitoring w	vell, aerial photos, i	previous inspections), if a	vailable:				
Demodes								
Remarks: Site was seasonably wet due	to recent enring rains: n	ormal for May						
Sile was seasonably wet add	to recent spring rains, in	Official for Ividy						

VEGETATION – Use scientific names of plants. Sampling Point: UP 7.1 Absolute Dominant Indicator Tree Stratum (Plot size: 30' radius) % Cover **Dominance Test worksheet:** Species? Status **Number of Dominant Species** That Are OBL, FACW, or FAC: 2. (A) **Total Number of Dominant** Species Across All Strata: 3 (B) 5. Percent of Dominant Species (A/B) 6. That Are OBL, FACW, or FAC: 0.0% Prevalence Index worksheet: =Total Cover Total % Cover of: Sapling/Shrub Stratum (Plot size: 15' radius) OBL species x 1 = 0 1. FACW species x 2 = x 3 = 2. FAC species 10 **FACU** species 70 x 4 = UPL species 20 x 5 = 100 Column Totals: 100 (A) 410 (B) 6. Prevalence Index = B/A = 4.10 **Hydrophytic Vegetation Indicators:** 1 - Rapid Test for Hydrophytic Vegetation =Total Cover 2 - Dominance Test is >50% Herb Stratum (Plot size: 5' radius) Trifolium pratense 20 Yes **FACU** 3 - Prevalence Index is ≤3.01 2. Plantago lanceolata 20 Yes **FACU** 4 - Morphological Adaptations¹ (Provide supporting data in Remarks or on a separate sheet) 3. Cirsium arvense 20 Yes **FACU** UPL 10 Problematic Hydrophytic Vegetation¹ (Explain) No 4. Daucus carota 10 UPL 5. Leucanthemum vulgare No ¹Indicators of hydric soil and wetland hydrology must 6. Festuca rubra 10 No **FACU** be present, unless disturbed or problematic. Prunella vulgaris 7. 10 No FAC **Definitions of Vegetation Strata:** 8. Tree - Woody plants 3 in. (7.6 cm) or more in 9. diameter at breast height (DBH), regardless of height. 10 Sapling/shrub - Woody plants less than 3 in. DBH and greater than or equal to 3.28 ft (1 m) tall. Herb - All herbaceous (non-woody) plants, regardless 100 =Total Cover of size, and woody plants less than 3.28 ft tall. Woody Vine Stratum (Plot size: 15' radius) Woody vines - All woody vines greater than 3.28 ft in 1. height. Hydrophytic Vegetation Present? Yes No X =Total Cover Remarks: (Include photo numbers here or on a separate sheet.) Plot was located along actively farmed field with planted grass.

SOIL Sampling Point: UP 7.1

Profile De	escription: (Describe	to the de	oth needed to docu	ment th	e indicato	or or con	firm the absence of in	dicators.)		
Depth	Matrix		Redox	x Featur	es					
(inches)	Color (moist)	%	Color (moist)	%	Type ¹	Loc ²	Texture	Rem	arks	
0-16	10YR 3/3	100	_				Loamy/Clayey			
16-20	10YR 3/2	100	_				Loamy/Clayey			
										_
										_
										_
										_
										_
										_
										_
	-Concentration, D=Dep	oletion, RM	=Reduced Matrix, C	S=Cove	red or Coa	ated San		n: PL=Pore Lini		
-	oil Indicators:						Indicators for Pro	-		
	sol (A1)	_	Polyvalue Below	/ Surface	(S8) (LR	RR,		10) (LRR K, L ,		
	Epipedon (A2)		MLRA 149B)					Redox (A16) (L		
	Histic (A3)	_	Thin Dark Surface				B)5 cm Mucky F	Peat or Peat (S3) (LRR K, L, R)	
Hydro	ogen Sulfide (A4)	_	High Chroma Sa	ands (S1	1) (LRR K	(, L)	Polyvalue Bel	ow Surface (S8)) (LRR K, L)	
Strati	fied Layers (A5)	_	Loamy Mucky M	lineral (F	1) (LRR k	(, L)	Thin Dark Su	face (S9) (LRR	K, L)	
Deple	eted Below Dark Surfac	e (A11)	Loamy Gleyed N	/latrix (F2	2)		Iron-Mangane	ese Masses (F12	2) (LRR K, L, R)	
Thick	Dark Surface (A12)	_	Depleted Matrix	(F3)			Piedmont Flo	odplain Soils (F	19) (MLRA 149B	3)
Sand	y Mucky Mineral (S1)	_	Redox Dark Sur	face (F6)		Mesic Spodic	(TA6) (MLRA 1	44A, 145, 149B)	
	y Gleyed Matrix (S4)	_	Depleted Dark S				Red Parent M		, -, - ,	
	y Redox (S5)	-	Redox Depressi					Dark Surface (T	F12)	
	ped Matrix (S6)	-		, ,				n in Remarks)	1 12)	
		-	Marl (F10) (LRR	K, L)			Other (Explain	i iii Reiliaiks)		
Dark	Surface (S7)									
³ Indicators	s of hydrophytic vegeta	tion and w	etland hydrology mu	st be pre	esent. unle	ess distur	bed or problematic.			
	e Layer (if observed)		y		,					
Type:										
Depth (i	inches):						Hydric Soil Presen	t? Yes_	No X	_
Remarks:										

Addition Project	City/County: Lo	rain	Sampling Date: 5/15/14			
Pipeline Company LLC		State:	OH Sampling Point: WET7			
	Williams Section, Townsh	nip, Range: Not available	<u> </u>			
): depression			Slope (%): 0 to 2			
	 '201495	Long: -82.0635079205	Datum: WGS 84			
			ification: Not available			
	time of year? Yes					
	-					
						
nt? Yes X No	Is the Sam	pled Area				
			(No			
Yes X No	If yes, optio	nal Wetland Site ID: WET_7				
procedures here or in a sepa een 2007 and 2009	rate report.)					
rs:		· · · · · · · · · · · · · · · · · · ·	icators (minimum of two required)			
•			oil Cracks (B6)			
			Patterns (B10)			
			Moss Trim Lines (B16)			
			on Water Table (C2)			
	-					
			r Stressed Plants (D1)			
			nic Position (D2)			
	(Explain in Remarks)		graphic Relief (D4)			
ave Surface (B8)		X FAC-Neut	ral Test (D5)			
	· · · · — —					
Yes X No Dep	oth (inches): 0	Wetland Hydrology Preser	nt? Yes X No			
	prial photos, previous inens	actions) if available:				
am gauge, monitoring weil, as	Mai priotos, previous irispe	ctions), ii available.				
o recent spring rains; normal	for May					
	ripeline Company LLC auren Zielke, Aaron Gordon, Jeff depression R R, MLRA 139 Lat: 41.47 y clay loam ons on the site typical for this, or Hydrologys, or Hydrologys	ripeline Company LLC auren Zielke, Aaron Gordon, Jeff Williams Section, Townshing depression Local relief (concast R, MLRA 139 Lat: 41.47201495 y clay loam Conson the site typical for this time of year? Yes Gray on Hydrology Significantly disturbed? In this site map showing sampling points on the site map showing sampling points? Yes X No Significantly disturbed? In this site map showing sampling points? Yes X No Significantly disturbed? In this site map showing sampling points? Yes X No Significantly disturbed? In this site map showing sampling points? Yes X No Significantly disturbed? In this significantly disturbed? In this sampling points? Yes X No Significantly disturbed? In this sampling points? Yes X No Significantly disturbed? In this sampling points? Yes X No Significantly disturbed? Yes X No Signifi	ipeline Company LLC auren Zielke, Aaron Gordon, Jeff Williams depression Local relief (concave, convex, none): concave R R, MLRA 139 Lat: 41.47201495 Long: -82.0635079205 y clay loam NWI class ons on the site typical for this time of year? yes x No (If no, explaint or Hydrology naturally problematic? To Hydrology naturally problematic? Yes X No With a Wetland? Fone is required; check all that apply) Surface Solution and 2009 Secondary Ind Marl Deposits (B15) Hydrogen Sulfide Odor (C1) Oxidized Rhizospheres on Living Roots (C3) All Imagery (B7) Other (Explain in Remarks) Yes X No Depth (inches): 0 Wetland Hydrology Preser we gauge, monitoring well, aerial photos, previous inspections), if available:			

VEGETATION – Use scientific names of plants. Sampling Point: WET7 Absolute Dominant Indicator Tree Stratum (Plot size: 30' radius) **Dominance Test worksheet:** % Cover Species? Status 45 Acer rubrum Yes FAC **Number of Dominant Species** 40 That Are OBL, FACW, or FAC: 2. Ulmus americana Yes **FACW** (A) Quercus macrocarpa 15 No **FACU Total Number of Dominant** 4. Species Across All Strata: 8 (B) 5. Percent of Dominant Species 6. That Are OBL, FACW, or FAC: 100.0% (A/B) Prevalence Index worksheet: 100 =Total Cover Total % Cover of: Sapling/Shrub Stratum (Plot size: 15' radius) OBL species x 1 = 70 80 Cornus sericea 40 Yes **FACW FACW** species x 2 = 160 x 3 = 2. Acer rubrum 30 Yes FAC FAC species 125 375 3. Rosa palustris 30 Yes OBL **FACU** species 25 x 4 = 4. UPL species 0 x 5 = 0 5. Column Totals: 300 705 (A) (B) 6. Prevalence Index = B/A = 2.35 **Hydrophytic Vegetation Indicators:** 100 =Total Cover 1 - Rapid Test for Hydrophytic Vegetation Herb Stratum (Plot size: 5' radius) X 2 - Dominance Test is >50% Ranunculus acris 25 Yes FAC X 3 - Prevalence Index is ≤3.0¹ 2. Persicaria hydropiper 25 Yes OBL 4 - Morphological Adaptations¹ (Provide supporting data in Remarks or on a separate sheet) 3. Juncus tenuis 25 Yes FAC 15 OBL Problematic Hydrophytic Vegetation¹ (Explain) No 4. Juncus effusus 10 No FACU 5. Parthenocissus quinquefolia ¹Indicators of hydric soil and wetland hydrology must 6. be present, unless disturbed or problematic. **Definitions of Vegetation Strata:** 8. Tree - Woody plants 3 in. (7.6 cm) or more in 9. diameter at breast height (DBH), regardless of height. Sapling/shrub - Woody plants less than 3 in. DBH and greater than or equal to 3.28 ft (1 m) tall. Herb - All herbaceous (non-woody) plants, regardless 100 =Total Cover of size, and woody plants less than 3.28 ft tall. Woody Vine Stratum (Plot size: 15' radius) Woody vines - All woody vines greater than 3.28 ft in 1. height. Hydrophytic Vegetation Present? Yes X No No =Total Cover Remarks: (Include photo numbers here or on a separate sheet.)

SOIL Sampling Point: WET7

Profile De	escription: (Describe	to the d	epth needed to docu	ment th	e indicate	or or cor	nfirm the absence	of indicators.)			
Depth Matrix			Redox Features								
(inches)	Color (moist)	%	Color (moist)	%	Type ¹	Loc ²	Texture	Remarks			
0-12	2.5Y 5/1	95	10YR 5/8	5	С	M	Mucky Loam/Clay	sandy loam			
12-20	2.5Y 3/1	100					Mucky Loam/Clay				
¹ Type: C=Concentration, D=Depletion, RM=Reduced Matrix, CS=Covered or Coated Sand Grains. ² Location: PL=Pore Lining, M=Matrix.											
Hydric So	oil Indicators:						Indicators f	or Problematic Hydric Soils ³ :			
Histo:	sol (A1)		Polyvalue Below	Surface	e (S8) (LR	RR,	2 cm Mu	uck (A10) (LRR K, L, MLRA 149B)			
Histic	Epipedon (A2)		MLRA 149B))			Coast Prairie Redox (A16) (LRR K, L, R)				
	Histic (A3)		Thin Dark Surface					ucky Peat or Peat (S3) (LRR K, L, R)			
Hydro	ogen Sulfide (A4)		High Chroma Sa	nds (S1	1) (LRR 🗜	(, L)	Polyvalu	ue Below Surface (S8) (LRR K, L)			
Strati	fied Layers (A5)		Loamy Mucky Mi	neral (F	1) (LRR I	(, L)	Thin Da	rk Surface (S9) (LRR K, L)			
Deple	eted Below Dark Surfac	e (A11)	Loamy Gleyed M	latrix (F2	2)		Iron-Manganese Masses (F12) (LRR K, L, R)				
Thick	Dark Surface (A12)	X Depleted Matrix	C Depleted Matrix (F3)				Piedmont Floodplain Soils (F19) (MLRA 149B)				
Sand	y Mucky Mineral (S1)		Redox Dark Surface (F6)				Mesic S	podic (TA6) (MLRA 144A, 145, 149B))		
Sand	y Gleyed Matrix (S4)	Depleted Dark Surface (F7)				Red Parent Material (F21)					
Sand	y Redox (S5)	Redox Depressions (F8)				Very Shallow Dark Surface (TF12)					
Stripp	ped Matrix (S6)		Marl (F10) (LRR K, L)				Other (Explain in Remarks)				
Dark	Surface (S7)										
2											
	s of hydrophytic vegeta		wetland hydrology mus	st be pre	esent, unle	ess distu	rbed or problemation	C.			
	e Layer (if observed)	:									
Type:							Heatele Oall De				
	inches):						Hydric Soil Pr	resent? Yes X No	_		
Remarks:											

Project/Site: Avon Lake Gas A	ddition Project	Ci	City/County: Lorain			Sampling Date: 5/15/14				
Applicant/Owner: NRG Ohio Pi	ipeline Company LLC			State:		Sampling				
Investigator(s): Travis Kessler, La	auren Zielke, Aaron Gordon	, Jeff Williams Se	ection, Township, Range	: Not available		=	-			
Landform (hillside, terrace, etc.):			I relief (concave, conve	•		Slo	pe (%):	0 to 2		
Subregion (LRR or MLRA): LRR	-82.06541246			n: WGS						
Soil Map Unit Name: Lorain silty					ification:	Not availa		, , ,		
Are climatic / hydrologic conditio		this time of years	Yes x No	•			DIC			
Are Vegetation, Soil	• •	•		al Circumstances" p			x N	lo		
Are Vegetation , Soil,				explain any answe				<u> </u>		
SUMMARY OF FINDINGS				, ,		,	tures,	etc.		
Hydrophytic Vegetation Presen	t? Yes	No X	Is the Sampled Area							
Hydric Soil Present?	Yes	No X		Yes No _ X						
Wetland Hydrology Present?	Yes	No X	If yes, optional Wetlar	nd Site ID:						
Remarks: (Explain alternative previously clear-cut area between		795.835 - 5								
HYDROLOGY										
Wetland Hydrology Indicators					Secondary Indicators (minimum of two required)					
Primary Indicators (minimum of					Surface Soil Cracks (B6)					
Surface Water (A1)		Vater-Stained Lea			Drainage Patterns (B10)					
High Water Table (A2)		Aquatic Fauna (B1		Moss Trim Lines (B16)						
Saturation (A3)		Marl Deposits (B1		Dry-Season Water Table (C2)						
Water Marks (B1)		Hydrogen Sulfide		Crayfish Burrows (C8)						
Sediment Deposits (B2)			eres on Living Roots (C3) Saturation Visible on Aerial Imagery (C9)					J9)		
Drift Deposits (B3)		Presence of Redu		Stunted or Stressed Plants (D1)						
Algal Mat or Crust (B4)		Recent Iron Reduc		Geomorphic Position (D2)						
Iron Deposits (B5)		Thin Muck Surface		Shallow Aquitard (D3)						
Inundation Visible on Aeria		Other (Explain in F		Microtopographic Relief (D4) FAC-Neutral Test (D5)						
Sparsely Vegetated Conca	ve Surface (B8)			FAC-Neut	ral lest (D5)				
Field Observations:										
		Depth (inches):								
	Yes No X					- •		.,		
	Yes NoX	Depth (inches):	Wetland	l Hydrology Presei	nt?	Yes	No	X		
(includes capillary fringe)		" assist photos r	inencations) if	a railabla.						
Describe Recorded Data (strea	m gauge, monitoring wei	II, аепагриою», _к)revious irispections), ii	avaliable.						
Remarks: Site was seasonably wet due to	recent spring rains; nor	mal for May								

VEGETATION – Use scientific names of plants. Sampling Point: UP8 Absolute Dominant Indicator Tree Stratum (Plot size: 30' radius) % Cover **Dominance Test worksheet:** Species? Status **Number of Dominant Species** That Are OBL, FACW, or FAC: 2. (A) **Total Number of Dominant** Species Across All Strata: 4 (B) 5. Percent of Dominant Species 6. That Are OBL, FACW, or FAC: 0.0% (A/B) Prevalence Index worksheet: =Total Cover Total % Cover of: Sapling/Shrub Stratum (Plot size: 15' radius) OBL species x 1 = 0 1. FACW species x 2 = 2. FAC species 0 x 3 = **FACU** species 100 x 4 = 0 **UPL** species x 5 = Column Totals: 100 400 (A) (B) 6. Prevalence Index = B/A = 4.00 **Hydrophytic Vegetation Indicators:** 1 - Rapid Test for Hydrophytic Vegetation =Total Cover Herb Stratum (Plot size: 5' radius) 2 - Dominance Test is >50% Festuca rubra 40 Yes **FACU** 3 - Prevalence Index is ≤3.01 2. Taraxacum officinale 20 Yes **FACU** 4 - Morphological Adaptations¹ (Provide supporting data in Remarks or on a separate sheet) 20 3. Plantago lanceolata Yes **FACU** 20 **FACU** Problematic Hydrophytic Vegetation¹ (Explain) Lotus corniculatus Yes 5. ¹Indicators of hydric soil and wetland hydrology must 6. be present, unless disturbed or problematic. **Definitions of Vegetation Strata:** 8. Tree - Woody plants 3 in. (7.6 cm) or more in 9. diameter at breast height (DBH), regardless of height. Sapling/shrub - Woody plants less than 3 in. DBH and greater than or equal to 3.28 ft (1 m) tall. Herb - All herbaceous (non-woody) plants, regardless 100 =Total Cover of size, and woody plants less than 3.28 ft tall. Woody Vine Stratum (Plot size: 15' radius) Woody vines - All woody vines greater than 3.28 ft in height. Hydrophytic Vegetation Present? Yes No X =Total Cover Remarks: (Include photo numbers here or on a separate sheet.) Previously clear-cut area between 2007 and 2009

SOIL Sampling Point: Profile Description: (Describe to the depth needed to document the indicator or confirm the absence of indicators.) Depth Redox Features (inches) Color (moist) % Color (moist) Loc² Texture % Type¹ Remarks 0-20 10YR 3/3 100 Sandy sandy loam ²Location: PL=Pore Lining, M=Matrix. ¹Type: C=Concentration, D=Depletion, RM=Reduced Matrix, CS=Covered or Coated Sand Grains. Indicators for Problematic Hydric Soils³: **Hydric Soil Indicators:** Histosol (A1) Polyvalue Below Surface (S8) (LRR R, 2 cm Muck (A10) (LRR K, L, MLRA 149B) Coast Prairie Redox (A16) (LRR K, L, R) Histic Epipedon (A2) MLRA 149B) Black Histic (A3) Thin Dark Surface (S9) (LRR R, MLRA 149B) 5 cm Mucky Peat or Peat (S3) (LRR K, L, R) Hydrogen Sulfide (A4) High Chroma Sands (S11) (LRR K, L) Polyvalue Below Surface (S8) (LRR K, L) Stratified Layers (A5) Loamy Mucky Mineral (F1) (LRR K, L) Thin Dark Surface (S9) (LRR K, L) Iron-Manganese Masses (F12) (LRR K, L, R) Depleted Below Dark Surface (A11) Loamy Gleyed Matrix (F2) Thick Dark Surface (A12) Depleted Matrix (F3) Piedmont Floodplain Soils (F19) (MLRA 149B) Mesic Spodic (TA6) (MLRA 144A, 145, 149B) Sandy Mucky Mineral (S1) Redox Dark Surface (F6) Depleted Dark Surface (F7) Sandy Gleyed Matrix (S4) Red Parent Material (F21) Sandy Redox (S5) Redox Depressions (F8) Very Shallow Dark Surface (TF12) Stripped Matrix (S6) Marl (F10) (LRR K, L) Other (Explain in Remarks) Dark Surface (S7) ³Indicators of hydrophytic vegetation and wetland hydrology must be present, unless disturbed or problematic. Restrictive Layer (if observed): Type: Depth (inches): **Hydric Soil Present?** Yes No Remarks:

Project/Site: Avon Lake Gas A	Addition Project	City/Co	unty: Lorain		Sampling Date: 5/15/14					
Applicant/Owner: NRG Ohio P	Pipeline Company LLC			State:	OH Sa	_				
Investigator(s): Travis Kessler, L		on, Jeff Williams Section	, Township, Range:	Not available		-	-			
Landform (hillside, terrace, etc.)			ef (concave, convex,	,		Slope	e (%):	0 to 2		
Subregion (LRR or MLRA): LRI	`		•	82.06553256		 Datum:	•			
Soil Map Unit Name: Lorain silty			~ _		ification: No			-		
Are climatic / hydrologic condition	•	or this time of vear?	Yes x No	(If no, explain			-			
Are Vegetation, Soil		-		Circumstances" p		Yes	x N	10		
Are Vegetation , Soil				explain any answer						
SUMMARY OF FINDING							ures,	etc.		
Hydrophytic Vegetation Preser	nt? Yes X	No ls t	Is the Sampled Area							
Hydric Soil Present?	Yes X	No wit	hin a Wetland?	Yes X	No_			ļ		
Wetland Hydrology Present?	Yes X	No If y	es, optional Wetland	Site ID: WET_8						
Remarks: (Explain alternative Previously clear-cut area between		ı separate report.)								
HYDROLOGY										
Wetland Hydrology Indicator				-	Secondary Indicators (minimum of two required)					
Primary Indicators (minimum o	of one is required; check		(DA)		oil Cracks (E	,				
X Surface Water (A1)		Water-Stained Leaves	(B9)	Drainage Patterns (B10)						
x High Water Table (A2)		Aquatic Fauna (B13)	Moss Trim Lines (B16)							
x Saturation (A3)		Marl Deposits (B15)	(24)	Dry-Season Water Table (C2)						
Water Marks (B1)		Hydrogen Sulfide Odor (C1) Crayfish Burrows (C8)					(20)			
Sediment Deposits (B2)			Rhizospheres on Living Roots (C3) x Saturation Visible on Aerial Imagery (C9)							
Drift Deposits (B3) Algal Mat or Crust (B4)		Presence of Reduced I		Stunted or Stressed Plants (D1) Geomorphic Position (D2)						
Iron Deposits (B5)		Recent Iron Reduction Thin Muck Surface (C7	Shallow Aquitard (D3)							
Inundation Visible on Aeria	ol Imagon/ (R7)	Other (Explain in Rema	Microtopographic Relief (D4)							
Sparsely Vegetated Conca		Offici (Explain in Nema	X FAC-Neutral Test (D5)							
	ave ourlace (Do)				di lesi (Do)				
Field Observations:	Van V Na	Donath (inches)	_							
Surface Water Present? Water Table Present?	Yes X No	Depth (inches): 0. Depth (inches): 0								
Saturation Present?	Yes X No	Depth (inches): 0		Hydrology Preser	-42 Vc	es X	No			
(includes capillary fringe)	162 × NO	Deptii (iiiciicə).	vvenana .	1yurulugy i reser	ILf 10	,s <u>^</u>	No			
Describe Recorded Data (stream	am gauge monitoring w	ell aerial photos previo		vailahle.						
Describe Neocraed Para (53.55)	ani gaage, monitoring	ell, actiai priotos, provid	us mopeonomy, n a	railable.						
Remarks: Site was seasonably wet due to	o recent spring rains; no	ormal for May								

VEGETATION – Use scientific names of plants. Sampling Point: WET 8 Absolute Dominant Indicator Tree Stratum (Plot size: 30' radius) % Cover **Dominance Test worksheet:** Species? Status **Number of Dominant Species** That Are OBL, FACW, or FAC: 2. (A) **Total Number of Dominant** Species Across All Strata: 5 (B) Percent of Dominant Species 6. That Are OBL, FACW, or FAC: 100.0% (A/B) Prevalence Index worksheet: =Total Cover Total % Cover of: Sapling/Shrub Stratum (Plot size: 15' radius) OBL species x 1 = 40 x 2 = 1. FACW species 80 x 3 = 2. FAC species 20 **FACU** species 0 x 4 = UPL species 0 x 5 = Column Totals: 100 180 (A) (B) 6. Prevalence Index = B/A = 1.80 **Hydrophytic Vegetation Indicators:** 1 - Rapid Test for Hydrophytic Vegetation =Total Cover X 2 - Dominance Test is >50% 5' radius) Herb Stratum (Plot size: Phragmites australis 20 Yes **FACW** X 3 - Prevalence Index is ≤3.0¹ 2. Juncus effusus 20 Yes OBL 4 - Morphological Adaptations¹ (Provide supporting data in Remarks or on a separate sheet) 3. Typha latifolia 20 Yes OBL 20 **FACW** Problematic Hydrophytic Vegetation¹ (Explain) Phalaris arundinacea Yes 20 Yes FAC 5. Juncus tenuis ¹Indicators of hydric soil and wetland hydrology must 6. be present, unless disturbed or problematic. **Definitions of Vegetation Strata:** 8. Tree - Woody plants 3 in. (7.6 cm) or more in 9. diameter at breast height (DBH), regardless of height. Sapling/shrub - Woody plants less than 3 in. DBH and greater than or equal to 3.28 ft (1 m) tall. Herb - All herbaceous (non-woody) plants, regardless 100 =Total Cover of size, and woody plants less than 3.28 ft tall. Woody Vine Stratum (Plot size: 15' radius) Woody vines - All woody vines greater than 3.28 ft in height. Hydrophytic Vegetation Present? Yes X No No =Total Cover Remarks: (Include photo numbers here or on a separate sheet.) Previously clear-cut area between 2007 and 2009

SOIL Sampling Point: WET 8

Profile De	escription: (Describe	to the de	epth needed to docu	ment th	e indicato	or or con	firm the absence	of indicators	s.)	
Depth	Matrix		Redox	c Feature	es					
(inches)	Color (moist)	%	Color (moist)	%	Type ¹	Loc ²	Texture		Remarks	
0-16	10YR 4/1	100	, ,				Mucky Sand		Gravely clay	
16-20	10YR 5/2	98	10YR 5/8	10	С	М	Sandy	faint r	edox concent	rations
¹ Type: C:	=Concentration, D=Dep	letion R	M=Reduced Matrix C	S=Cove	red or Co:	ated Sand	1 Grains ² Lo	cation: PL=P	ore Lining Ma	=Matrix
	oil Indicators:	iction, ix	VI-I COUCCO IVIALITY, O	5-00vci	Cu 01 000	ated Garie		or Problemati		
-	sol (A1)		Polyvalue Below	Surface	(S8) (I D	D D		ick (A10) (LRI	-	
	Epipedon (A2)		MLRA 149B)	Suriace	(30) (LI	ix ix,		rairie Redox (/		*
			,	o (SO) (IDDD M	I D A 140				*
	(Histic (A3)		Thin Dark Surface					icky Peat or P		-
	ogen Sulfide (A4)		High Chroma Sa			-		e Below Surfa		(K , L)
	fied Layers (A5)	(* 4 4)	Loamy Mucky M			(, L)		rk Surface (S9		
	eted Below Dark Surfac	e (A11)	Loamy Gleyed M		2)			nganese Mass		*
	Dark Surface (A12)		X Depleted Matrix					nt Floodplain S		-
	y Mucky Mineral (S1)		Redox Dark Surf					podic (TA6) (N		145, 149B)
	y Gleyed Matrix (S4)		Depleted Dark S	urface (l	=7)			ent Material (F		
Sand	y Redox (S5)		Redox Depression	ons (F8)			Very Sh	allow Dark Su	rface (TF12)	
Stripp	oed Matrix (S6)		Marl (F10) (LRR	K, L)			Other (E	xplain in Rem	narks)	
Dark	Surface (S7)									
³ Indicators	s of hydrophytic vegeta	tion and	wetland hydrology mu	st be pre	esent. unle	ess distur	bed or problemation	.		
	ve Layer (if observed)			- 1 - 1 - 1 - 1 - 1 - 1 - 1 - 1 - 1 - 1	, , , , , , , , , , , , , , , , , , , ,			-		
Type:										
Depth (inches):						Hydric Soil Pr	esent?	Yes X	No
Remarks:							•			

Project/Site: Avon Lake Gas	Addition Project	Ci	ty/County: Lorain		Sampling Date	e: 5/15/14
Applicant/Owner: NRG Ohio	Pipeline Company LLC			State:	OH Samplir	ng Point: UP 8.1
Investigator(s): Travis Kessler,		on Jeff Williams Se	ection Township Range	Not available	<u> </u>	
Landform (hillside, terrace, etc.			al relief (concave, convex			Slope (%): 0 to 2
•	, 		•	·		
Subregion (LRR or MLRA): LR		41.45911575	Long: -	-82.06461914		tum: WGS 84
Soil Map Unit Name: Miner silt	•			NWI class	ification: Not ava	ilable
Are climatic / hydrologic condit	ions on the site typical for	or this time of year	? Yes <u>x</u> No_	(If no, explai	n in Remarks.)	
Are Vegetation, Soil _	, or Hydrology	significantly o	listurbed? Are "Norma	l Circumstances" p	resent? Yes	s <u>x</u> No
Are Vegetation, Soil _	, or Hydrology	naturally prob	olematic? (If needed,	explain any answe	rs in Remarks.)	
SUMMARY OF FINDING	SS – Attach site ma	ap showing sa	mpling point locati	ons, transects	i, important fe	eatures, etc.
Hydrophytic Vegetation Prese	ent? Yes_	No_X	Is the Sampled Area			
Hydric Soil Present?	Yes	No X	within a Wetland?	Yes	No X	
Wetland Hydrology Present?	Yes	No X	If yes, optional Wetland	d Site ID:		
Remarks: (Explain alternative Previously clear-cut area between the second sec		a separate report.)				
HYDROLOGY						
Wetland Hydrology Indicato	ors:			Secondary Ind	icators (minimum	of two required)
Primary Indicators (minimum	of one is required; check	k all that apply)		Surface So	oil Cracks (B6)	
X Surface Water (A1)		Water-Stained Le	aves (B9)	Drainage I	Patterns (B10)	
x High Water Table (A2)		Aquatic Fauna (B	13)	Moss Trim	Lines (B16)	
x Saturation (A3)		Marl Deposits (B1			on Water Table (C	;2)
Water Marks (B1)	<u>—</u>	Hydrogen Sulfide			Burrows (C8)	
Sediment Deposits (B2)		-	heres on Living Roots (C	· —	Visible on Aerial	
Drift Deposits (B3)		Presence of Redu			Stressed Plants	(D1)
Algal Mat or Crust (B4)			ction in Tilled Soils (C6)		nic Position (D2)	
Iron Deposits (B5)		Thin Muck Surfac			quitard (D3)	4.
Inundation Visible on Aer		Other (Explain in	Remarks)		graphic Relief (D4	ł)
Sparsely Vegetated Cond	ave Surface (B8)			X FAC-Neut	rai Test (D5)	
Field Observations:	V V N	5 " "	0.5			
Surface Water Present?	Yes X No	Depth (inches):				
Water Table Present?	Yes X No	-		Hydrology Drocor	-+2 V \	/ Na
Saturation Present? (includes capillary fringe)	Yes X No	Depth (inches):	0 Wetland	Hydrology Preser	nt? Yes >	<u> No</u>
Describe Recorded Data (stre	am gauge monitoring v	vell aerial photos	previous inspections) if a	vailable:		
Dooding Noodland Data (elle	am gaage, memering v	voii, donai priotoo, j	providuo mopositorio), me	.valiable.		
Remarks:						
Site was seasonably wet due	to recent spring rains: n	ormal for Mav				
l chie mae eeaeemas, met aae	to rootin opinig ramo, ii	oa. ioi iiiaj				

VEGETATION – Use scientific names of plants. Sampling Point: UP 8.1 Absolute Dominant Indicator Tree Stratum (Plot size: 30' radius) % Cover **Dominance Test worksheet:** Species? Status **Number of Dominant Species** That Are OBL, FACW, or FAC: 2. (A) **Total Number of Dominant** Species Across All Strata: 2 (B) 5. Percent of Dominant Species 6. That Are OBL, FACW, or FAC: 0.0% (A/B) Prevalence Index worksheet: =Total Cover Total % Cover of: Sapling/Shrub Stratum (Plot size: 15' radius) OBL species x 1 = ____15 0 Quercus macrocarpa **FACU** FACW species x 2 = x 3 = 2. FAC species 0 **FACU** species 115 x 4 = 0 **UPL** species x 5 = Column Totals: 115 460 (A) (B) 6. Prevalence Index = B/A = 4.00 **Hydrophytic Vegetation Indicators:** 15 =Total Cover 1 - Rapid Test for Hydrophytic Vegetation Herb Stratum (Plot size: 5' radius) 2 - Dominance Test is >50% Festuca rubra 75 Yes **FACU** 3 - Prevalence Index is ≤3.01 Taraxacum officinale 15 No **FACU** 4 - Morphological Adaptations¹ (Provide supporting data in Remarks or on a separate sheet) 10 3. Lotus corniculatus No **FACU** Problematic Hydrophytic Vegetation¹ (Explain) 4. 5. ¹Indicators of hydric soil and wetland hydrology must 6. be present, unless disturbed or problematic. **Definitions of Vegetation Strata:** 8. Tree - Woody plants 3 in. (7.6 cm) or more in 9. diameter at breast height (DBH), regardless of height. Sapling/shrub - Woody plants less than 3 in. DBH and greater than or equal to 3.28 ft (1 m) tall. Herb - All herbaceous (non-woody) plants, regardless 100 =Total Cover of size, and woody plants less than 3.28 ft tall. Woody Vine Stratum (Plot size: 15' radius) Woody vines - All woody vines greater than 3.28 ft in height. Hydrophytic Vegetation Present? Yes No X =Total Cover Remarks: (Include photo numbers here or on a separate sheet.) Previously clear-cut area between 2007 and 2009

SOIL Sampling Point: UP 8.1

Profile Do	escription: (Describe	to the de	•			or or con	firm the absence	of indicator	·s.)		·
Depth	Matrix			x Feature							
(inches)	Color (moist)	%	Color (moist)	%	Type ¹	Loc ²	Texture		Remarks		
0-16	10YR 4/3	100					Mucky Sand		Gravely clay	/	
16-20	10YR 5/2	98	10YR 5/8	2	<u>C</u>	M	Sandy	faint	redox concen	trations	
1 _{T, max} C			4-Dadwaad Matrix C	<u></u>			21 22	tion DI-	Dana Linina M		
	=Concentration, D=Dep	Dietion, Ri	/I=Reduced Matrix, C	S=Cove	red or Coa	ated Sand			Pore Lining, M		
-	oil Indicators:		Dobavoluo Bolov	Curtoss	(CO) /I D	D D			tic Hydric So		
	osol (A1)		Polyvalue Below	Surrace	; (58) (LR	кк,			RR K, L, MLR)
	Epipedon (A2)		MLRA 149B)	(00) (U D A 440			(A16) (LRR K		D)
	K Histic (A3)		Thin Dark Surface					-	Peat (S3) (LR		R)
	ogen Sulfide (A4)		High Chroma Sa			-			face (S8) (LRI		
Strati	ified Layers (A5)		Loamy Mucky M	ineral (F	1) (LRR K	(, L)	Thin Dar	k Surface (S	89) (LRR K, L)		
Deple	eted Below Dark Surfac	ce (A11)	Loamy Gleyed M	1atrix (F2	2)		Iron-Man	ganese Mas	sses (F12) (LR	R K, L	R)
Thick	C Dark Surface (A12)		Depleted Matrix	(F3)			Piedmon	t Floodplain	Soils (F19) (N	ILRA 1	49B)
Sand	ly Mucky Mineral (S1)		Redox Dark Surf	face (F6)		Mesic Sp	odic (TA6) ((MLRA 144A,	145, 14	9B)
Sand	ly Gleyed Matrix (S4)		Depleted Dark S	urface (l	F7)		Red Pare	ent Material	(F21)		
Sand	ly Redox (S5)		Redox Depression	ons (F8)			Very Sha	allow Dark S	urface (TF12)		
	ped Matrix (S6)		Marl (F10) (LRR	K, L)			Other (Ex	xplain in Rer	marks)		
	Surface (S7)			, ,				•	,		
	s of hydrophytic vegeta		vetland hydrology mu	st be pre	esent, unle	ess disturl	bed or problematic	•			
Restrictiv	ve Layer (if observed)):									
Type:											
Depth ((inches):						Hydric Soil Pre	esent?	Yes	No_	Χ
Remarks:				,							

Project/Site: Avon Lake Gas Addition Project	City/County: Lorain Sampling Date: 5/15/14
Applicant/Owner: NRG Ohio Pipeline Company LLC	State: OH Sampling Point: WET 8.1
Investigator(s): Travis Kessler, Lauren Zielke, Aaron Gordon, Jeff Will	iliams Section Township Range: Not available
Landform (hillside, terrace, etc.): Depressions	Local relief (concave, convex, none): concave Slope (%): 0 to 2
Subregion (LRR or MLRA): LRR R, MLRA 139 Lat: 41.45911	
Soil Map Unit Name: Miner silty clay loam	NWI classification: Not available
Are climatic / hydrologic conditions on the site typical for this time	· · · · · _ · _ ·
Are Vegetation, Soil, or Hydrologysigni	
Are Vegetation, Soil, or Hydrologynatu	rally problematic? (If needed, explain any answers in Remarks.)
SUMMARY OF FINDINGS – Attach site map show	ving sampling point locations, transects, important features, etc.
Libration by the Managarda Comment of the Mana	In the Complet Area
Hydrophytic Vegetation Present? Yes X No Hydric Soil Present? Yes X No	Is the Sampled Area within a Wetland? Yes X No
Wetland Hydrology Present? Yes X No	If yes, optional Wetland Site ID: WET_8.1
Remarks: (Explain alternative procedures here or in a separate	
Previously clear-cut area between 2007 and 2009	,
HYDROLOGY	
Wetland Hydrology Indicators: Primary Indicators (minimum of one is required; check all that a	Secondary Indicators (minimum of two required) pply) Surface Soil Cracks (B6)
	ained Leaves (B9) Drainage Patterns (B10)
	Fauna (B13) Moss Trim Lines (B16)
	posits (B15) Dry-Season Water Table (C2)
	n Sulfide Odor (C1) Crayfish Burrows (C8)
Sediment Deposits (B2) Oxidized	Rhizospheres on Living Roots (C3) x Saturation Visible on Aerial Imagery (C9)
Drift Deposits (B3)	e of Reduced Iron (C4) Stunted or Stressed Plants (D1)
Algal Mat or Crust (B4)Recent Ir	ron Reduction in Tilled Soils (C6) Geomorphic Position (D2)
	ck Surface (C7) Shallow Aquitard (D3)
	xplain in Remarks) Microtopographic Relief (D4)
Sparsely Vegetated Concave Surface (B8)	X FAC-Neutral Test (D5)
Field Observations:	
	inches): 2
Water Table Present? Yes X No Depth (
Saturation Present? Yes X No Depth ((includes capillary fringe)	inches): 0 Wetland Hydrology Present? Yes X No
Describe Recorded Data (stream gauge, monitoring well, aerial	photos, previous inspections), if available:
	F
Remarks:	
Site was seasonably wet due to recent spring rains; normal for I	May

VEGETATION – Use scientific names of plants. Sampling Point: WET 8.1 Absolute Dominant Indicator Tree Stratum (Plot size: 30' radius) % Cover **Dominance Test worksheet:** Species? Status **Number of Dominant Species** That Are OBL, FACW, or FAC: 2. (A) **Total Number of Dominant** Species Across All Strata: 5 (B) 5. Percent of Dominant Species (A/B) 6. That Are OBL, FACW, or FAC: 80.0% Prevalence Index worksheet: =Total Cover Total % Cover of: Sapling/Shrub Stratum (Plot size: 15' radius) OBL species 10 x 1 = 103 Salix nigra 10 Yes OBL FACW species x 2 = 206 2. Crataegus douglasii 5 Yes FAC FAC species 5 x 3 = 3. Rubus arcticus 5 Yes **FACW FACU** species 5 x 4 = 4. Juniperus communis 5 Yes **FACU** UPL species 0 x 5 = 5. Column Totals: 123 251 (A) (B) 6. Prevalence Index = B/A = 2.04 **Hydrophytic Vegetation Indicators:** 25 =Total Cover 1 - Rapid Test for Hydrophytic Vegetation X 2 - Dominance Test is >50% 5' radius) Herb Stratum (Plot size: Phragmites australis 95 Yes **FACW** X 3 - Prevalence Index is ≤3.0¹ Onoclea sensibilis **FACW** 4 - Morphological Adaptations¹ (Provide supporting data in Remarks or on a separate sheet) 3. Problematic Hydrophytic Vegetation¹ (Explain) 4. 5. ¹Indicators of hydric soil and wetland hydrology must 6. be present, unless disturbed or problematic. **Definitions of Vegetation Strata:** 8. Tree - Woody plants 3 in. (7.6 cm) or more in 9. diameter at breast height (DBH), regardless of height. Sapling/shrub - Woody plants less than 3 in. DBH and greater than or equal to 3.28 ft (1 m) tall. Herb - All herbaceous (non-woody) plants, regardless 98 =Total Cover of size, and woody plants less than 3.28 ft tall. Woody Vine Stratum (Plot size: 15' radius) Woody vines - All woody vines greater than 3.28 ft in 1. height. Hydrophytic Vegetation Present? Yes X No No =Total Cover Remarks: (Include photo numbers here or on a separate sheet.) Previously clear-cut area between 2007 and 2009

SOIL Sampling Point: WET 8.1

Profile De	escription: (Describe	to the de	pth needed to docu	ment th	e indicato	or or con	firm the absence	of indicator	rs.)	
Depth	Matrix		Redox	k Featur	es					
(inches)	Color (moist)	%	Color (moist)	%	Type ¹	Loc ²	Texture		Remarks	
0-8	10YR 4/1	100					Loamy/Clayey		Gravely clay	
8-20	10YR 5/2	95	10YR 5/8	5	С	М	Sandy	Promine	ent redox conc	entrations
								-		
								-		
								-		
¹ Type: C=	=Concentration, D=Dep	letion, RI	M=Reduced Matrix, C	S=Cove	red or Coa	ated San	d Grains. ² Lo	cation: PL=F	Pore Lining, M=	=Matrix.
	oil Indicators:	· · · · · ·	•						tic Hydric Soi	
-	sol (A1)		Polyvalue Below	Surface	e (S8) (LR	RR,			RR K, L, MLRA	
Histic	Epipedon (A2)		MLRA 149B)				Coast Pi	rairie Redox	(A16) (LRR K,	L, R)
Black	Histic (A3)		Thin Dark Surface	ce (S9) (LRR R, M	LRA 149	9B) 5 cm Mu	icky Peat or	Peat (S3) (LRF	R K, L, R)
Hydro	ogen Sulfide (A4)		High Chroma Sa	ınds (S1	1) (LRR K	(, L)	Polyvalu	ie Below Sur	face (S8) (LRR	k K, L)
Strati	fied Layers (A5)		Loamy Mucky M	ineral (F	1) (LRR K	(, L)	Thin Dar	rk Surface (S	89) (LRR K, L)	
Deple	eted Below Dark Surface	e (A11)	Loamy Gleyed N	1atrix (F	2)		Iron-Mar	nganese Mas	sses (F12) (LR	R K, L, R)
Thick	Dark Surface (A12)		x Depleted Matrix	(F3)			Piedmor	nt Floodplain	Soils (F19) (M	LRA 149B)
Sand	y Mucky Mineral (S1)		Redox Dark Sur	face (F6)		Mesic S _l	podic (TA6) ((MLRA 144A, 1	145, 149B)
Sand	y Gleyed Matrix (S4)		Depleted Dark S	urface (F7)		Red Par	ent Material	(F21)	
Sand	y Redox (S5)		Redox Depressi	ons (F8))		Very Sha	allow Dark S	urface (TF12)	
Stripp	oed Matrix (S6)		Marl (F10) (LRR	K , L)			Other (E	xplain in Rer	marks)	
Dark	Surface (S7)									
	s of hydrophytic vegetat		vetland hydrology mu	st be pre	esent, unle	ess distur	bed or problemation). 		
	ve Layer (if observed):									
Type:										
Depth (i	inches):						Hydric Soil Pr	esent?	Yes X	No
Remarks:										

Project/Site: Avon Lake G	as Addition Project	С	ity/County: Lorain Cour	nty	Sampling Date:	5/14/14
Applicant/Owner: NRG Ga	as Pipeline Company LL(State:	— OH Sampling	Point: UPL_9
Investigator(s): Travis Kes			ection, Township, Rang	e. Not available	<u> </u>	
Landform (hillside, terrace,			al relief (concave, conve		Sic	ppe (%): 0 - 2
,	, 		•	, <u> </u>		
Subregion (LRR or MLRA):		.at: 41.4500220956	Long	-82.0668603432		m: <u>WGS 84</u>
Soil Map Unit Name: Miner	s silty loam				ification: none	
Are climatic / hydrologic cor	nditions on the site typica	al for this time of year	? Yes <u>x</u> No	(If no, explai	n in Remarks.)	
Are Vegetation X, So	il X, or Hydrology	significantly o	disturbed? Are "Norn	nal Circumstances" p	resent? Yes_	x No
Are Vegetation, So	il, or Hydrology	naturally prob	olematic? (If needed	d, explain any answe	rs in Remarks.)	
SUMMARY OF FINDI	NGS – Attach site ı	map showing sa	ampling point loca	tions, transects	s, important fea	tures, etc.
Hydrophytic Vegetation Pro	esent? Yes	No_X	Is the Sampled Area	a		
Hydric Soil Present?	Yes	No X	within a Wetland?	Yes	No X	
Wetland Hydrology Preser	nt? Yes	No X	If yes, optional Wetla	nd Site ID:		
Remarks: (Explain alterna Upland point in corn field	tive procedures here or i	in a separate report.)				
HYDROLOGY						
Wetland Hydrology Indic				-	icators (minimum of	two required)
Primary Indicators (minimu	m of one is required; che		(DO)		oil Cracks (B6)	
Surface Water (A1)	_	Water-Stained Le			Patterns (B10)	
High Water Table (A2)	'	Aquatic Fauna (B			n Lines (B16)	
Saturation (A3) Water Marks (B1)	-	Marl Deposits (B1 Hydrogen Sulfide			on Water Table (C2) Burrows (C8)	,
Sediment Deposits (B)			heres on Living Roots (i Visible on Aerial Im	nagery (C9)
Drift Deposits (B3)		Presence of Redu	-		r Stressed Plants (D	
Algal Mat or Crust (B4	·)		ction in Tilled Soils (C6		nic Position (D2)	.,
Iron Deposits (B5)	· _	Thin Muck Surfac		· — ·	quitard (D3)	
Inundation Visible on A	Aerial Imagery (B7)	Other (Explain in			graphic Relief (D4)	
Sparsely Vegetated C	_			FAC-Neut	ral Test (D5)	
Field Observations:						
Surface Water Present?	Yes No x	Depth (inches):				
Water Table Present?	Yes No x	Depth (inches):				
Saturation Present?	Yes No x	Depth (inches):	Wetlan	d Hydrology Preser	nt? Yes	No X
(includes capillary fringe)						
Describe Recorded Data (stream gauge, monitorino	g well, aerial photos,	previous inspections), if	favailable:		
Remarks: N/A						

VEGETATION – Use scientific names of pla	ants.			Sampling	Point:	UPL_9
Tree Stratum (Plot size: 30' radius)	Absolute % Cover	Dominant Species?	Indicator Status	Dominance Test worksheet	:	
1. 2.				Number of Dominant Species That Are OBL, FACW, or FAC		(A)
3.				Total Number of Dominant		``
4.				Species Across All Strata:		(B)
5				Percent of Dominant Species		
6.				That Are OBL, FACW, or FAC		(A/B
7		=Total Cover		Prevalence Index workshee		ply by
Conline/Chruh Ctrotum (Diet eine 45! radius)		= rotal Cover		Total % Cover of:		ply by:
Sapling/Shrub Stratum (Plot size: 15' radius)				OBL species		
1.				FACW species		
2.				FAC species		
3				FACU species		
4				UPL species		
5				Column Totals:	(A)	(B
6				Prevalence Index = B/	A =	
7.				Hydrophytic Vegetation Ind	icators:	
		=Total Cover		1 - Rapid Test for Hydrop	hytic Vege	tation
Herb Stratum (Plot size: 5' radius)				2 - Dominance Test is >5	0%	
1			FACU	3 - Prevalence Index is ≤	3.0 ¹	
2 3.				4 - Morphological Adapta data in Remarks or on		
4.				Problematic Hydrophytic	Vegetation	າ ¹ (Explain)
5.6.				¹ Indicators of hydric soil and v be present, unless disturbed of		
7.				Definitions of Vegetation St	rata:	
8. 9.				Tree – Woody plants 3 in. (7.6 diameter at breast height (DB		
10.				Sapling/shrub – Woody plan		
11				and greater than or equal to 3	.28 ft (1 m)) tall.
12		=Total Cover		Herb – All herbaceous (non-wof size, and woody plants less		
Woody Vine Stratum (Plot size: 15' radius) 1.				Woody vines – All woody vin	es greater	than 3.28 ft ir
2				height.		
2				Hydrophytic		
				Vegetation	N-	
4				Present? Yes	NO_	
Demonstrate (Include whate worshore have a company		=Total Cover				
Remarks: (Include photo numbers here or on a sepa only corn in agriculture field	rate sneet.)					

SOIL Sampling Point: UPL_9

Profile De	escription: (Describe	to the de	pth needed to docu	ment th	e indicato	or or con	firm the absence of ir	dicators	s.)	
Depth	Matrix		Redox	Featur	es					
(inches)	Color (moist)	%	Color (moist)	%	Type ¹	Loc ²	Texture		Remarks	s
0-14	10YR 4/1	98	10YR 6/4	2	С	М	Loamy/Clayey			
14-20	10YR 5/1	50	10YR 5/8	50	С	M	Loamy/Clayey			
			_							
			_							
1- 0	0 1 5 5 5						2			
	=Concentration, D=Dep	letion, RN	/I=Reduced Matrix, C	S=Cove	red or Coa	ated San			Pore Lining,	
-	oil Indicators:		Dalumalua Dalau	C. unfo o o	(CO) /I D	D D	Indicators for Pr		-	
	sol (A1)	-	Polyvalue Below	Surface	(S8) (LR	кк,	2 cm Muck (A			
	Epipedon (A2)		MLRA 149B)	(00) (Coast Prairie			
	Histic (A3)	-	Thin Dark Surfac							
	ogen Sulfide (A4)	-	High Chroma Sa			-	Polyvalue Be			
Strati	fied Layers (A5)	-	Loamy Mucky Mi	neral (F	1) (LRR k	(, L)	Thin Dark Su	rface (S	9) (LRR K, I	L)
Deple	eted Below Dark Surfac	e (A11)	Loamy Gleyed M	latrix (F2	2)		Iron-Mangan	ese Mas	ses (F12) (L	RR K, L, R)
Thick	Dark Surface (A12)	-	Depleted Matrix	(F3)			Piedmont Flo	odplain :	Soils (F19)	(MLRA 149B)
	y Mucky Mineral (S1)	-	Redox Dark Surf)					A, 145, 149B)
	y Gleyed Matrix (S4)	-	Depleted Dark S				Red Parent N			1, 140, 1400)
		-						,	,	2)
	y Redox (S5)	-	Redox Depression	, ,			Very Shallow			2)
	oed Matrix (S6)	-	Marl (F10) (LRR	K, L)			Other (Explain	n in Ren	narks)	
Dark	Surface (S7)									
³ Indicators	s of hydrophytic vegeta	tion and w	vetland hydrology mus	st be pre	esent, unle	ess distur	bed or problematic.			
	ve Layer (if observed):									
Type:										
	inches):						Hydric Soil Presen	t?	Yes	No
Remarks:										

Project/Site: Avon Lake Gas Additi	ion Project	City/County: Lorain		Sampling Date	: 5/14/14
Applicant/Owner: NRG Ohio Pipelir	ne Company LLC	· <u></u>	State:		g Point: WET_9
Investigator(s): Travis Kessler, Lau		Section, Township, Range:	Not available		
Landform (hillside, terrace, etc.): de	·	ocal relief (concave, convex,		S	lope (%): 0 to 2
Subregion (LRR or MLRA): LRR R, I	•		82.0670318029		um: WGS 84
Soil Map Unit Name: Miner silty loam				ification: Not avai	
· · · · · · · · · · · · · · · · · · ·		Voc v No		n in Remarks.)	IdDIC
Are climatic / hydrologic conditions of Are Vegetation, Soil			(ir no, explair l Circumstances" p		x No
Are Vegetation , Soil			explain any answer		
SUMMARY OF FINDINGS -			,	,	atures, etc.
Hydrophytic Vegetation Present?	Yes X No	Is the Sampled Area			
Hydric Soil Present?	Yes X No	within a Wetland?	Yes X	No	
Wetland Hydrology Present?	Yes X No	If yes, optional Wetland	Site ID: WET_9	<u> </u>	
Remarks: (Explain alternative proce PSS/PEM wetland	edures here or in a separate repo	t.)			
HYDROLOGY					
Wetland Hydrology Indicators:			-	icators (minimum o	of two required)
Primary Indicators (minimum of one		. (50)		oil Cracks (B6)	
X Surface Water (A1)	X Water-Stained			Patterns (B10)	
X High Water Table (A2)	Aquatic Fauna			Lines (B16)	^ `
X Saturation (A3)	Marl Deposits			on Water Table (C2	2)
Water Marks (B1) Sediment Deposits (B2)	Hydrogen Sulfi			urrows (C8) Visible on Aerial I	
Sediment Deposits (B2) Drift Deposits (B3)		ospheres on Living Roots (C3 educed Iron (C4)	· 	Stressed Plants (
Algal Mat or Crust (B4)		eduction in Tilled Soils (C6)		ic Position (D2)	D1)
Iron Deposits (B5)	Thin Muck Sur	` ,		quitard (D3)	
Inundation Visible on Aerial Ima				graphic Relief (D4))
Sparsely Vegetated Concave S		in remarks)	x FAC-Neutr		,
Field Observations:	,			<u> </u>	
	X No Depth (inches	s): 0.1			
	X No Depth (inches	· ——			
	X No Depth (inches		Hydrology Presen	nt? Yes X	No
(includes capillary fringe)			,		
Describe Recorded Data (stream ga	auge, monitoring well, aerial photo	os, previous inspections), if a	vailable:		
Remarks: Site was seasonably wet due to rec	ent heavy spring rains				

VEGETATION – Use scientific names of plants. Sampling Point: WET 9 Absolute Dominant Indicator Tree Stratum (Plot size: 30' radius) % Cover **Dominance Test worksheet:** Species? Status Populus deltoides 20 FAC Yes **Number of Dominant Species** 2. That Are OBL, FACW, or FAC: (A) **Total Number of Dominant** 4. Species Across All Strata: 8 (B) 5. Percent of Dominant Species 6. That Are OBL, FACW, or FAC: 100.0% (A/B) Prevalence Index worksheet: 20 =Total Cover Total % Cover of: Sapling/Shrub Stratum (Plot size: 15' radius) OBL species 10 x 1 = 10 1. Cornus alba 30 Yes **FACW** FACW species 65 x 2 = 130 x 3 = 2. Populus deltoides 20 Yes FAC FAC species 240 3. Fraxinus pennsylvanica 20 Yes **FACW FACU** species 5 x 4 = 5 No **FACU** UPL species 0 x 5 = 4. Prunus virginiana 5. 5 **FACW** Column Totals: 160 400 Ulmus americana No (A) (B) 6. Prevalence Index = B/A = 2.50 **Hydrophytic Vegetation Indicators:** 80 =Total Cover 1 - Rapid Test for Hydrophytic Vegetation 5' radius) X 2 - Dominance Test is >50% Herb Stratum (Plot size: Anemone canadensis 30 FAC X 3 - Prevalence Index is ≤3.0¹ Yes 2. Eutrochium maculatum 10 Yes OBL 4 - Morphological Adaptations¹ (Provide supporting data in Remarks or on a separate sheet) Carex blanda 10 Yes FAC 10 **FACW** Problematic Hydrophytic Vegetation¹ (Explain) Poa trivialis Yes 5. ¹Indicators of hydric soil and wetland hydrology must 6. be present, unless disturbed or problematic. **Definitions of Vegetation Strata:** 8. Tree - Woody plants 3 in. (7.6 cm) or more in 9. diameter at breast height (DBH), regardless of height. Sapling/shrub - Woody plants less than 3 in. DBH and greater than or equal to 3.28 ft (1 m) tall. Herb - All herbaceous (non-woody) plants, regardless 60 =Total Cover of size, and woody plants less than 3.28 ft tall. Woody Vine Stratum (Plot size: 15' radius) Woody vines - All woody vines greater than 3.28 ft in 1. height. Hydrophytic Vegetation Present? Yes X No No =Total Cover Remarks: (Include photo numbers here or on a separate sheet.) Very heavy leaf litter limited herbaceous stratum growth. .

SOIL Sampling Point: WET_9

Profile De	escription: (Describe	to the de	epth needed to docu	ment th	e indicato	or or cor	nfirm the absence o	of indicators.	.)	
Depth	Matrix		Redox	Featur	es					
(inches)	Color (moist)	%	Color (moist)	%	Type ¹	Loc ²	Texture		Remarks	
0-10	10YR 3/1	100	, , ,				Mucky Loam/Clay			
10-20	10YR 5/1	98	10YR 5/8	2	С	M	Mucky Loam/Clay			
¹ Type: C=	=Concentration, D=Dep	oletion, R	M=Reduced Matrix, C	S=Cove	red or Coa	ated San	d Grains. ² Loca	ation: PL=Po	ore Lining, M	=Matrix.
	oil Indicators:						Indicators for			
Histo	sol (A1)		Polyvalue Below	Surface	e (S8) (LR	RR,	2 cm Muc	k (A10) (LRF	R K, L, MLRA	149B)
Histic	Epipedon (A2)		MLRA 149B)				Coast Pra	airie Redox (A	A16) (LRR K ,	L, R)
Black	Histic (A3)		Thin Dark Surfac	e (S9) (LRR R, M	LRA 149	9B) 5 cm Muc	ky Peat or Pe	eat (S3) (LRF	R K, L, R)
	ogen Sulfide (A4)		High Chroma Sa					-	ice (S8) (LRF	-
	fied Layers (A5)		Loamy Mucky M			-		Surface (S9		, ,
	eted Below Dark Surfac	· Δ(Δ11)	Loamy Gleyed M			- , - ,			ses (F12) (LR	RKIR)
	Dark Surface (A12)	<i>(</i> A11)			<i>-</i>)					-
			Depleted Matrix		`				Soils (F19) (M	-
	y Mucky Mineral (S1)		X Redox Dark Surf						/ILRA 144A, 1	145, 1496)
	y Gleyed Matrix (S4)		Depleted Dark S					nt Material (F		
	y Redox (S5)		Redox Depression	, ,				llow Dark Sur		
	oed Matrix (S6)		Marl (F10) (LRR	K , L)			Other (Ex	plain in Rema	arks)	
Dark	Surface (S7)									
³ Indicators	s of hydrophytic vegeta	tion and	wetland hydrology mu	st be pre	esent, unle	ess distu	rbed or problematic.			
Restrictiv	e Layer (if observed)	:								
Type:										
Depth (inches):						Hydric Soil Pres	sent?	Yes X	No
Remarks:										

Project/Site: Avon Lake Gas Addition Project	ct Cit	ty/County: Lorain County		Sampling Date: 5/14/14
Applicant/Owner: NRG Gas Pipeline Compa			State:	OH Sampling Point: UPL_10
Investigator(s): Travis Kessler, Lauren Zielke	-	ection, Township, Range:	Not available	
Landform (hillside, terrace, etc.): depression	-	Il relief (concave, convex,		Slope (%): 0 - 2
Subregion (LRR or MLRA): LRR R, MLRA 13			82.0669460513	Datum: WGS 84
Soil Map Unit Name: Miners silty loam				cation: none
Are climatic / hydrologic conditions on the site	tunical for this time of year?	Yes x No	(If no, explain	
Are Vegetation , Soil , or Hydr			Circumstances" pre	
Are Vegetation, Soil, or Hydr SUMMARY OF FINDINGS – Attach			explain any answers ons, transects,	
Hydrophytic Vegetation Present? You	es No X	Is the Sampled Area		
	es No X	within a Wetland?	Yes	No X
	es No X	If yes, optional Wetland		<u> </u>
Remarks: (Explain alternative procedures he	ere or in a separate report.)			
HYDROLOGY			C I multiplife	· · · · · · · · · · · · · · · · · · ·
Wetland Hydrology Indicators:	:		-	ators (minimum of two required)
Primary Indicators (minimum of one is require		- (DO)		Cracks (B6)
Surface Water (A1)	Water-Stained Lea			atterns (B10)
High Water Table (A2)	Aquatic Fauna (B1		Moss Trim L	
Saturation (A3) Water Marks (B1)	Marl Deposits (B1			Water Table (C2)
Water Marks (B1) Sediment Deposits (B2)	Hydrogen Sulfide		Crayfish Bu	rrows (C8) /isible on Aerial Imagery (C9)
Sediment Deposits (B2) Drift Deposits (B3)	Presence of Redu	heres on Living Roots (C3	· 	Stressed Plants (D1)
Algal Mat or Crust (B4)		ction in Tilled Soils (C6)		Position (D2)
Iron Deposits (B5)	Thin Muck Surface		Shallow Aqu	
Inundation Visible on Aerial Imagery (B7		, ,		aphic Relief (D4)
Sparsely Vegetated Concave Surface (E	· — · ·	(Ciliaiks)	FAC-Neutra	
Field Observations:	70)			. 1001 (20)
	No x Depth (inches):			
	No x Depth (inches):			
<u></u>	No x Depth (inches):		Hydrology Present	? Yes No_X_
(includes capillary fringe)	10 X Boptii (lydrology	
Describe Recorded Data (stream gauge, mo	nitoring well, aerial photos, r	previous inspections), if a	/ailable:	
3.13,	, , , , , , , , , , , , , , , , , , ,	,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,		
Remarks: N/A				

VEGETATION – Use scientific names of plants. Sampling Point: UPL 10 Absolute Dominant Indicator Tree Stratum (Plot size: 30' radius) % Cover **Dominance Test worksheet:** Species? Status 1. **Number of Dominant Species** That Are OBL, FACW, or FAC: 2. (A) **Total Number of Dominant** (B) Species Across All Strata: 7 5. Percent of Dominant Species 6. That Are OBL, FACW, or FAC: 28.6% (A/B) Prevalence Index worksheet: =Total Cover Total % Cover of: Sapling/Shrub Stratum (Plot size: 15' radius) OBL species x 1 = 0 Acer rubrum 50 Yes FAC FACW species x 2 = x 3 = 2. Quercus rubra Yes FACU FAC species 70 210 3. **FACU** species 110 x 4 = 4. **UPL** species 20 x 5 = 100 5. Column Totals: 200 750 (A) (B) 6. Prevalence Index = B/A = 3.75 **Hydrophytic Vegetation Indicators:** 100 =Total Cover 1 - Rapid Test for Hydrophytic Vegetation Herb Stratum (Plot size: 5' radius) 2 - Dominance Test is >50% Dactylis glomerata 20 Yes **FACU** 3 - Prevalence Index is ≤3.01 2. Trifolium pratense 20 Yes **FACU** 4 - Morphological Adaptations¹ (Provide supporting data in Remarks or on a separate sheet) 3. Plantago rugelii 20 Yes FAC 20 FACU Problematic Hydrophytic Vegetation¹ (Explain) Taraxacum officinale Yes 4. 20 Yes UPL 5. Daucus carota ¹Indicators of hydric soil and wetland hydrology must 6. be present, unless disturbed or problematic. **Definitions of Vegetation Strata:** 8. Tree - Woody plants 3 in. (7.6 cm) or more in 9. diameter at breast height (DBH), regardless of height. Sapling/shrub - Woody plants less than 3 in. DBH and greater than or equal to 3.28 ft (1 m) tall. Herb - All herbaceous (non-woody) plants, regardless 100 =Total Cover of size, and woody plants less than 3.28 ft tall. Woody Vine Stratum (Plot size: 15' radius) Woody vines - All woody vines greater than 3.28 ft in 1. height. Hydrophytic Vegetation Present? Yes No X =Total Cover Remarks: (Include photo numbers here or on a separate sheet.)

SOIL Sampling Point: UPL_10

Profile De	escription: (Describe	to the dep	th needed to docu	ment the	e indicato	or or con	firm the absence of inc	dicators.)	
Depth	Matrix		Redox	x Feature	es				
(inches)	Color (moist)	%	Color (moist)	%	Type ¹	Loc ²	Texture	Remark	(S
0-17	2 EVD 2 E/1	100			<u> </u>		Loomy/Clayov		_
0-17	2.5YR 2.5/1	100					Loamy/Clayey		
					·	·			
					·	·			
¹ Type: C=	=Concentration, D=Dep	letion RM:	=Reduced Matrix. C	S=Cove	red or Co:	ated Sano	d Grains. ² Location	: PL=Pore Lining,	M=Matrix.
	oil Indicators:	,					Indicators for Pro		
-	sol (A1)		Polyvalue Below	/ Surface	e (S8) (LR	RR.		10) (LRR K, L, ML	
	Epipedon (A2)	_	MLRA 149B)	Canacc	, (00) (= :t	,		Redox (A16) (LRR	
	: Histic (A3)		Thin Dark Surface	ca (SQ) (I DD D M	II DA 140		eat or Peat (S3) (I	
	ogen Sulfide (A4)	_	High Chroma Sa					ow Surface (S8) (L	
	-	_				-			
	fied Layers (A5)	- (011)	Loamy Mucky M			∖ , ∟)		face (S9) (LRR K,	
	eted Below Dark Surfac	e (A11) _	Loamy Gleyed M		2)			se Masses (F12) (
	Dark Surface (A12)	_	Depleted Matrix					odplain Soils (F19)	
	y Mucky Mineral (S1)	_	Redox Dark Surf					(TA6) (MLRA 144	A, 145, 149B)
	y Gleyed Matrix (S4)	_	Depleted Dark S				Red Parent M		
	y Redox (S5)	_	Redox Depression					Dark Surface (TF1	2)
	ped Matrix (S6)	_	Marl (F10) (LRR	K , L)			Other (Explain	in Remarks)	
Dark	Surface (S7)								
³ Indicators	s of hydrophytic vegeta	tion and we	tland hydrology mu	st be pre	esent, unle	ess distur	bed or problematic.		
Restrictiv	e Layer (if observed):	:							
Type:									
Depth (i	inches):						Hydric Soil Present	? Yes	No X
Remarks:	-								
Nemaiks.									

Applicant/Owner: NRG Ohio Pipeline Company LLC Investigator(s): Travis Kessler, Lauren Zeike, Aaron Gordon Section, Township, Range: Not available Investigator(s): Travis Kessler, Lauren Zeike, Aaron Gordon Section, Township, Range: Not available Investigator(s): Travis Kessler, Lauren Zeike, Aaron Gordon Section, Township, Range: Not available Investigator(s): Travis Kessler, Lauren Zeike, Aaron Gordon Subregion (LRR or MLRA): LRR R. MLRA 139 Lat: 41.4469030241 Long: 82.0668241189 Datum: WGS & Soil Map Unit Name: Minor sitly Joan Are climatic / hydrologic conditions on the site typical for this time of year? Yes x No (If no. explain in Remarks.) Are Vegetation , Soil , or Hydrology significantly disturbed? Are "Normal Circumstances" present? Yes x No (If needed, explain any answers in Remarks.) SUMMARY OF FINDINGS – Attach site map showing sampling point locations, transects, important features, etc. Hydrophylic Vegetation Present? Yes X No (If needed, explain any answers in Remarks.) SUMMARY OF FINDINGS – Attach site map showing sampling point locations, transects, important features, etc. Hydrophylic Vegetation Present? Yes X No (If needed, explain any answers in Remarks.) SUMMARY OF FINDINGS – Attach site map showing sampling point locations, transects, important features, etc. Hydrophylic Vegetation Present? Yes X No (If needed, explain any answers in Remarks.) SUMMARY OF FINDINGS – Attach site map showing sampling point locations, transects, important features, etc. Hydrophylic Vegetation Present? Yes X No (If needed, explain any answers in Remarks.) Sufface Soil Cracks (Bi) X Suffa	Project/Site: Avon Lake Gas	Addition Project	City	/County: Lorain		Sampling [)ate: 5/14	/14
Investigator(s): Travis Kessler, Lauren Zleike, Aaron Gordon Section, Township, Range: Not available Landform (hilliside, terrace, etc.): depressions Local relief (concave, convex, none): concave Slope (%): 0 the Subregion (LRR or MLRA): LRR R, MLRA 139 Lat. 41.4469030241 Long: 82.0669241169 NWI classification: Not available Are climatic / hydrologic conditions on the site typical for this time of year? Yes X No (If no, explain in Remarks.) Are Vegetation Soil or Hydrology significantly disturbed? Are "Normal Circumstances" present? Yes X No Are Vegetation Soil or Hydrology asignificantly disturbed? Are "Normal Circumstances" present? Yes X No Nare Vegetation Present? Yes X No Inturally problematic? (If needed, explain any answers in Remarks.) SUMMARY OF FINDINGS — Attach site map showing sampling point locations, transects, important features, etc Hydrophytic Vegetation Present? Yes X No Is the Sampled Area within a Wetland? Yes X No If yes, optional Wetland Site ID. WET_10 Wetland Hydrology Indicators: Yes X No If yes, optional Wetland Site ID. WET_10 Wetland Hydrology Indicators: Aquatic Fauna (813) Aquatic Fauna (813) Aguatic Fauna	Applicant/Owner: NRG Ohio	Pipeline Company LLC	<u>.</u>	·	State:			
Landform (hilliside, terrace, etc.): depressions	· · · · · · · · · · · · · · · · · · ·			tion, Township, Range:	Not available			
Subregion (LRR or MLRA): LRR R, MLRA 139 Lat: 41.4469030241 Long: _82.0669241169 Datum: WGS 84 Soil Map Unit Name: Miner silty loam	· , ,		-				Slope (%	6): 0 to 2
Are climatic / hydrologic conditions on the site typical for this time of year? Yes X No (If no, explain in Remarks.) Are Vegetation , Soil , or Hydrology	•	· ———			-			
Are climatic / hydrologic conditions on the site typical for this time of year? Yes x No (If no, explain in Remarks.) Are Vegetation , Soll , or Hydrology significantly disturbed? Are "Normal Circumstances" present? Yes x No_Are Vegetation , Soll , or Hydrology maturally problematic? (If needed, explain any answers in Remarks.) SUMMARY OF FINDINGS – Attach site map showing sampling point locations, transects, important features, etc. Hydrophytic Vegetation Present? Yes X No_ Is the Sampled Area within a Wetland? Yes X No_ If yes, optional Wetland? Yes X No_ If yes, optional Wetland? Yes X No_ If yes, optional Wetland Site ID: WET_10 HYDROLOGY Wetland Hydrology Indicators: Primary Indicators (Explain alternative procedures here or in a separate report.) HYDROLOGY Wetland Hydrology Indicators: Primary Indicators (Ininimum of one is required; check all that apply) Surface Soil Cracks (B6) X Surface Water (A1) X Water-Stained Leaves (B9) Drainage Patients (B10) X Surface Water (A2) Aquatic Fauna (B13) Moss Trim Lines (B16) X Saturation (A3) Mari Deposits (B15) Dry-Season Water Table (C2) Water Marks (B1) Hydrogen Sulfide Odor (C1) Crayfish Burrows (C8) Dry-Season Water (B4) Presence of Reduced Iron (C4) Saturation Visible on Aerial Imagery (C9) Drift Deposits (B3) Presence of Reduced Iron (C4) Saturation Visible on Aerial Imagery (B7) Sparsely Vegetated Concave Surface (B8) Field Observations: Surface Water Present? Yes X No Depth (inches): 0.1 Saturation Present? Yes X No Depth (inches): 16 Saturation Present? Yes X						ification: Not		
Are Vegetation Soil or Hydrology significantly disturbed? Are "Normal Circumstances" present? Yes x No Are Vegetation Soil or Hydrology naturally problematic? (If needed, explain any answers in Remarks.) SUMMARY OF FINDINGS – Attach site map showing sampling point locations, transects, important features, etc. Hydrophytic Vegetation Present? Yes X No Is the Sampled Area within a Wetland? Yes X No If yes, optional Wetland Site ID: WET_10 Wetland Hydrology Present? Yes X No If yes, optional Wetland Site ID: WET_10 Wetland Hydrology Indicators: Primary Indicators (minimum of one is required; check all that apply) Surface Soil Cracks (86) X Surface Water (A1) X Water-Stained Leaves (B9) Drainage Patterns (B10) X High Water Table (A2) Aquatic Fauna (B13) Moss Trim Lines (B16) X Saturation (A3) Mart Deposits (B15) Dry-Season Water Table (C2) Water Marks (B1) Hydrogen Sulfide Odor (C1) Saturation Visible on Aerial Imagery (C9) Drift Deposits (B3) Presence of Reduced Iron (C4) Stunded or Stressed Plants (D1) Algal Mat or Crust (B4) Recent Iron Reduction in Tilled Soils (C6) Shallow Aquitard (D3) Microtopographic Position (D2) In no Deposits (B5) Thin Muck Surface (C7) Shallow Aquitard (D3) Microtopographic Relief (D4) Surface (C7) Shallow Aquitard (D3) Surface Water Present? Yes X No Depth (inches): 0.1 Water Table Present? Yes X No Depth (inches): 16 Saturation Present? Yes X No Depth (inches): 16 Saturation Present? Yes X No Depth (inches): 16 Remarks:	· · · · · · · · · · · · · · · · · · ·		for this time of year?	Vos v No				
Are Vegetation, Soil, or Hydrology			-		,			No
SUMMARY OF FINDINGS – Attach site map showing sampling point locations, transects, important features, etc. Hydrophytic Vegetation Present? Yes X No Wetland Hydrology Present? Wetland Hydrology Present? Wetland Hydrology Present? Wetland Hydrology Indicators: Primary Indicators (minimum of one is required; check all that apply) X Surface Water (A1) X High Water Table (A2) Aquatic Fauna (B13) Moss Trim Lines (B16) Adard Deposits (B15) Dry-Season Water Table (C2) Water Marks (B1) Hydrogen Sulfide Odor (C1) Sediment Deposits (B2) Drift Deposits (B3) Presence of Reduced Iron (C4) Algal Mat or Crust (B4) Recent Iron Reduction in Tilled Soils (C6) January Reduction in Remarks) Microtopographic Relief (D4) Sparsely Vegetated Concave Surface (B8) Presence of Reduced Iron (C4) Sparsely Vegetated Concave Surface (B8) Presence of Reduction in Remarks) Microtopographic Relief (D4) Sparsely Vegetated Concave Surface (B8) Present? Yes X No Depth (inches): 0.1 Water Marks: Wetland Hydrology Present? Yes X No Depth (inches): 0.1 Water Table Present? Yes X No Depth (inches): 16 Wetland Hydrology Present? Yes X No Depth (inches): 16 Wetland Hydrology Present? Yes X No Depth (inches): 16 Wetland Hydrology Present? Yes X No Depth (inches): 16 Wetland Hydrology Present? Yes X No Depth (inches): 16 Wetland Hydrology Present? Yes X No Depth (inches): 16 Wetland Hydrology Present? Yes X No Depth (inches): 16 Wetland Hydrology Present? Yes X No Depth (inches): 16 Wetland Hydrology Present? Yes X No Depth (inches): 16 Wetland Hydrology Present? Yes X No Depth (inches): 16 Wetland Hydrology Present? Yes X No Depth (inches): 16 Wetland Hydrology Present? Yes X No Depth (inches): 16 Wetland Hydrology Present? Yes X No Depth (inches): 16 Wetland Hydrology Present? Yes X No Depth (inches): 16 Wetland Hydrology Present? Yes X No Depth (inches): 16 Wetland Hydrology Present? Yes X No Depth (inches): 16 Wetland Hydrology Present? Yes X No Depth (inches): 16 Wetland Hydrology Present? Yes X No Dept					•			
Hydric Soil Present? Yes X No If yes, optional Wetland? Yes X No If yes, optional Wetland Site ID: WET_10 Remarks: (Explain alternative procedures here or in a separate report.) PFO wetland HYDROLOGY Wetland Hydrology Indicators: Primary Indicators (minimum of one is required; check all that apply) X Surface Water (A1) X Water-Stained Leaves (B9) X Inja Water Table (A2) X Saturation (A3) Marl Deposits (B15) Marl Deposits (B1) Marl Deposits (B2) Drift Deposits (B3) Algal Mat or Crust (B4) Algal Mat or Crust (B4) Algal Mat or Crust (B4) Ir yes, optional Wetland? Yes X No Secondary Indicators (minimum of two required) Surface Soil Cracks (B6) Drainage Patterns (B10) Moss Trim Lines (B16) Dry-Season Water Table (C2) Crayfish Burrows (C8) Seturation (A3) Seturation Visible on Aerial Imagery (C9) Drift Deposits (B3) Presence of Reduced Iron (C4) Stunted or Stressed Plants (D1) Algal Mat or Crust (B4) Recent Iron Reduction in Tilled Soils (C6) Iron Deposits (B5) Thin Muck Surface (C7) Shallow Aquitard (D3) Inundation Visible on Aerial Imagery (B7) Sparsely Vegetated Concave Surface (B8) Field Observations: Surface Water Present? Yes X No Depth (inches): 0.1 Water Table Present? Yes X No Depth (inches): 16 Saturation Present? Yes X No Depth (inches): 16 Saturation Present? Yes X No Depth (inches): 16 Wetland Hydrology Present? Yes X No Occurrence Note Inches (Note Inches): 16 Wetland Hydrology Present? Yes X No Occurrence Note Inches (Note Inches): 16 Wetland Hydrology Present? Yes X No Depth (inches): 16 Wetland Hydrology Present? Yes X No Depth (inches): 16 Wetland Hydrology Present? Yes X No Depth (inches): 16 Wetland Hydrology Present? Yes X No Micrologographic Relief (D4) Wetland Hydrology Present? Yes X No Depth (inches): 16 Wetland Hydrology Present? Yes X No Micrologographic Plants Wetland Hydrology Present? Yes X No Depth (inches): 16 Wetland Hydrology Present? Yes X No Wetland Hydrology Present? Yes X No Depth (inches): 16 Wetland Hydrology Pre	·				•		,	s, etc.
Hydric Soil Present? Yes X No If yes, optional Wetland? Yes X No If yes, optional Wetland Site ID: WET_10 Remarks: (Explain alternative procedures here or in a separate report.)	Hydrophytic Vegetation Prese	ent? Yes X	No	Is the Sampled Area				
Remarks: (Explain alternative procedures here or in a separate report.) HYDROLOGY Wetland Hydrology Indicators: Primary Indicators (minimum of one is required; check all that apply). X Surface Water (A1) X High Water Table (A2) Aquatic Fauna (B13) Moss Trim Lines (B16) Y Sutartation (A3) Marl Deposits (B15) Dry-Season Water Table (C2) Water Marks (B1) Sediment Deposits (B2) Drift Deposits (B3) Presence of Reduced Iron (C4) Algal Mat or Crust (B4) Recent Iron Reduction in Tilled Soils (C6) Inundation Visible on Aerial Imagery (B7) Sparsely Vegetated Concave Surface (B8) Field Observations: Surface Water Pasent? Yes X No Depth (inches): Under Marks: Wetland Hydrology Present? Yes X No Depth (inches): Includes capillary fringe) Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available:					Yes_X	No		
Wetland Hydrology Indicators:	Wetland Hydrology Present?	Yes X	No	If yes, optional Wetland	Site ID: WET_10)		
Wetland Hydrology Indicators: Secondary Indicators (minimum of two requires) Primary Indicators (minimum of one is required; check all that apply) Surface Soil Cracks (B6) X Surface Water (A1) X Water-Stained Leaves (B9) Drainage Patterns (B10) X High Water Table (A2) Aquatic Fauna (B13) Moss Trim Lines (B16) X Saturation (A3) Marl Deposits (B15) Dry-Season Water Table (C2) Water Marks (B1) Hydrogen Sulfide Odor (C1) Crayfish Burrows (C8) Sediment Deposits (B2) Oxidized Rhizospheres on Living Roots (C3) Saturation Visible on Aerial Imagery (C9) Drift Deposits (B3) Presence of Reduced Iron (C4) Stunted or Stressed Plants (D1) Algal Mat or Crust (B4) Recent Iron Reduction in Tilled Soils (C6) Geomorphic Position (D2) Inon Deposits (B5) Thin Muck Surface (C7) Shallow Aquitard (D3) Inundation Visible on Aerial Imagery (B7) Other (Explain in Remarks) Microtopographic Relief (D4) Sparsely Vegetated Concave Surface (B8) X No Depth (inches): 16 Surface Water Present? Yes X No Depth (inches): 16 Wetland Hydrology Present? Yes X No Saturation Present? Yes X No Depth (inches): 16 Wetland Hydrolog		e procedures here of in	a separate report.					
Primary Indicators (minimum of one is required; check all that apply) X Surface Water (A1) X Water-Stained Leaves (B9) Drainage Patterns (B10) X High Water Table (A2) Aquatic Fauna (B13) Moss Trim Lines (B16) X Saturation (A3) Marl Deposits (B15) Dry-Season Water Table (C2) Water Marks (B1) Sediment Deposits (B2) Drift Deposits (B3) Algal Mat or Crust (B4) Inon Deposits (B5) Inundation Visible on Aerial Imagery (B7) Sparsely Vegetated Concave Surface (B8) Field Observations: Surface Water Present? Yes X No Depth (inches): Saturation Present? Yes X No Depth (inches): Grayfish Burrows (C8) Saturation Visible on Aerial Imagery (B7) Sparsely Vegetated Concave Surface (B8) Field Observations: Surface Water Present? Yes X No Depth (inches): Saturation Present? Yes X No Depth (inches): Grayfish Burrows (C8) Saturation Visible on Aerial Imagery (C9) Shallow Aquitard (D3) Microtopographic Relief (D4) X FAC-Neutral Test (D5) Wetland Hydrology Present? Yes X No Depth (inches): Grayfish Burrows (C8) Saturation Present? Yes X No Depth (inches): Grayfish Burrows (B16) Crayfish Burrows (C8) Saturation Present? Yes X No Depth (inches): Grayfish Burrows (B16) Crayfish Burrows (C9) Crayfish Burrows (C8) Saturation Visible on Aerial Imagery (C9) Shallow Aquitard (D1) Microtopographic Relief (D4) X FAC-Neutral Test (D5) Field Observations: Surface Water Present? Yes X No Depth (inches): 16 Wetland Hydrology Present? Yes X No Remarks:								
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High Water Table (A2)		•		(DA)		,	,	
X Saturation (A3)			_					
Water Marks (B1)	I ——	_	_				(00)	
Sediment Deposits (B2) Drift Deposits (B3) Algal Mat or Crust (B4) Iron Deposits (B5) Inundation Visible on Aerial Imagery (B7) Sparsely Vegetated Concave Surface (B8) Field Observations: Surface Water Present? Water Table Present? Yes X No Depth (inches): Saturation Visible on Aerial Imagery (B7) Saturation Visible on Aerial Imagery (B7) Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available: Oxidized Rhizospheres on Living Roots (C3) Saturation Visible on Aerial Imagery (C9) Stunted or Stressed Plants (D1) Stunted or Stressed Plants (D1) Geomorphic Position (D2) Shallow Aquitard (D3) Microtopographic Relief (D4) x FAC-Neutral Test (D5) Field Observations: Surface Water Present? Yes X No Depth (inches): 16 Wetland Hydrology Present? Yes X No (includes capillary fringe) Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available:) (C2)	
Drift Deposits (B3)		_					∽ial Imager	· (C0)
Algal Mat or Crust (B4) Recent Iron Reduction in Tilled Soils (C6) Geomorphic Position (D2) Iron Deposits (B5) Thin Muck Surface (C7) Shallow Aquitard (D3) Inundation Visible on Aerial Imagery (B7) Other (Explain in Remarks) Microtopographic Relief (D4) Sparsely Vegetated Concave Surface (B8) X FAC-Neutral Test (D5) Field Observations: Surface Water Present? Yes X No Depth (inches): 0.1 Water Table Present? Yes X No Depth (inches): 16 Saturation Present? Yes X No Depth (inches): 16 Saturation Present? Yes X No Depth (inches): 16 Secondary Fraction Present? Yes X No Depth (inches): 16 Wetland Hydrology Present? Yes X No Remarks:		_		= -	· 			/ (Ca)
Iron Deposits (B5) Thin Muck Surface (C7) Shallow Aquitard (D3) Inundation Visible on Aerial Imagery (B7) Other (Explain in Remarks) Microtopographic Relief (D4) Sparsely Vegetated Concave Surface (B8) Thin Muck Surface (C7) Microtopographic Relief (D4) Sparsely Vegetated Concave Surface (B8) Thin Muck Surface (B8) Microtopographic Relief (D4) Thin Muck Surface (C7) Shallow Aquitard (D3) Microtopographic Relief (D4) Thin Muck Surface (C7) Shallow Aquitard (D3) Microtopographic Relief (D4) Thin Muck Surface (C7) Shallow Aquitard (D3) Microtopographic Relief (D4) Thin Muck Surface (C7) Shallow Aquitard (D3) Microtopographic Relief (D4) Thin Muck Surface (C7) Shallow Aquitard (D3) Thin Muck Surface (C7) Microtopographic Relief (D4) Thin Muck Surface (C7) Thin Muck Surface (C7) Microtopographic Relief (D4) Thin Muck Surface (C7) Thin Muck Su		_						
Inundation Visible on Aerial Imagery (B7) Other (Explain in Remarks) Microtopographic Relief (D4) Sparsely Vegetated Concave Surface (B8) X FAC-Neutral Test (D5) Field Observations: Surface Water Present? Yes X No Depth (inches): 0.1 Water Table Present? Yes X No Depth (inches): 16 Saturation Present? Yes X No Depth (inches): 16 Wetland Hydrology Present? Yes X No (includes capillary fringe) Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available: Remarks:		_					<u>~)</u>	
Sparsely Vegetated Concave Surface (B8) Field Observations: Surface Water Present? Yes X No Depth (inches): 0.1 Water Table Present? Yes X No Depth (inches): 16 Saturation Present? Yes X No Depth (inches): 16 Wetland Hydrology Present? Yes X No (includes capillary fringe) Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available: Remarks:		rial Imagery (B7)					(D4)	
Field Observations: Surface Water Present? Yes X No Depth (inches): 0.1 Water Table Present? Yes X No Depth (inches): 16 Saturation Present? Yes X No Depth (inches): 16 (includes capillary fringe) Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available: Remarks:			_ Outer (Explain in 1.5	illaiko)			(04)	
Surface Water Present? Yes X No Depth (inches): 0.1 Water Table Present? Yes X No Depth (inches): 16 Saturation Present? Yes X No Depth (inches): 16 (includes capillary fringe) Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available: Remarks:				T				
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Saturation Present? Yes X No Depth (inches): 16 Wetland Hydrology Present? Yes X No (includes capillary fringe) Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available: Remarks:			_ ' ' _					
(includes capillary fringe) Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available: Remarks:			_		Hvdrology Preser	nt? Yes	X N	lo
Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available: Remarks:					.,			
Remarks:		eam gauge, monitoring	well, aerial photos, pre	evious inspections), if av	vailable:			
			•					
		to recent heavy spring	rains					

/EGETATION – Use scientific names of plants.	Sampling Point:
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VEGETATION – Use scientific names of pla	ints.			Sampling Point:	WET_10
Tree Stratum (Plot size: 30' radius)	Absolute % Cover	Dominant Species?	Indicator Status	Dominance Test worksheet:	
1. Ulmus americana	50	Yes	FACW	Number of Dominant Species	
2. Acer rubrum	30	Yes	FAC	That Are OBL, FACW, or FAC:	7 (A)
3. Fraxinus pennsylvanica	20	Yes	FACW	Total Number of Dominant	
4.				Species Across All Strata:	7 (B)
5.				Percent of Dominant Species	
6.				That Are OBL, FACW, or FAC:	100.0% (A/B)
7				Prevalence Index worksheet:	
	100	=Total Cover		Total % Cover of: N	lultiply by:
Sapling/Shrub Stratum (Plot size: 15' radius)				OBL species 0 x 1 =	0
1. Ulmus americana	50	Yes	FACW	FACW species 150 x 2 =	300
2. Fraxinus pennsylvanica	30	Yes	FACW	FAC species120 x 3 =	360
3. Acer rubrum	20	Yes	FAC	FACU species 0 x 4 =	0
4.				UPL species 0 x 5 =	0
5.				Column Totals: 270 (A)	660 (B)
6.				Prevalence Index = B/A =	2.44
7.				Hydrophytic Vegetation Indicators	
	100	=Total Cover		1 - Rapid Test for Hydrophytic V	egetation
Herb Stratum (Plot size: 5' radius)		-		X 2 - Dominance Test is >50%	
1. Hydrophyllum virginianum	50	Yes	FAC	X 3 - Prevalence Index is ≤3.0 ¹	
2. Trillium cernuum	10	No	FAC	4 - Morphological Adaptations ¹ (l	Provide supporting
3. Enemion biternatum	10	No	FAC	data in Remarks or on a separ	rate sheet)
4.				Problematic Hydrophytic Vegeta	tion ¹ (Explain)
5				¹ Indicators of hydric soil and wetland	hydrology must
6.				be present, unless disturbed or probl	ematic.
7				Definitions of Vegetation Strata:	
8				Tree – Woody plants 3 in. (7.6 cm) o	r more in
9.	-	_		diameter at breast height (DBH), reg	ardless of height.
10.				Sapling/shrub – Woody plants less	
11.				and greater than or equal to 3.28 ft (ı m) talı.
12	70	=Total Cover		Herb – All herbaceous (non-woody) of size, and woody plants less than 3	
Woody Vine Stratum (Plot size: 15' radius)				Woody vines – All woody vines grea	ater than 3.28 ft in
1				height.	
2				Hydrophytic	
3				Hydrophytic Vegetation	
4				_	No
		=Total Cover		<u> </u>	
		-			

Remarks: (Include photo numbers here or on a separate sheet.) Very heavy leaf litter limited herbaceous stratum growth. .

SOIL Sampling Point: WET_10

Profile De	escription: (Describe	to the de	epth needed to docu	ment the	e indicato	or or cor	nfirm the absence	of indicators.)
Depth	Matrix		Redox	r Feature	es			
(inches)	Color (moist)	%	Color (moist)	%	Type ¹	Loc ²	Texture	Remarks
0-8	10YR 3/1	100					Mucky Loam/Clay	
8-20	10YR 3/1	90	10YR 5/6	10	<u>C</u>	M	Mucky Loam/Clay	Prominent redox concentrations
	-							
	-							
	-							
¹ Type: C=		letion, RI	——————————————————————————————————————	S=Cover	red or Coa	ated San	d Grains. ² Lo	ocation: PL=Pore Lining, M=Matrix.
Hydric So	oil Indicators:						Indicators for	or Problematic Hydric Soils ³ :
-	sol (A1)		Polyvalue Below	Surface	(S8) (LR	RR,		uck (A10) (LRR K, L, MLRA 149B)
	Epipedon (A2)		MLRA 149B)		`	,		rairie Redox (A16) (LRR K, L, R)
	Histic (A3)		Thin Dark Surfac	e (S9) (I	I RR R. M	II RA 149		ucky Peat or Peat (S3) (LRR K, L, R)
	ogen Sulfide (A4)		High Chroma Sa					ue Below Surface (S8) (LRR K, L)
	fied Layers (A5)		Loamy Mucky M			-		
		- (444)				(, L)		rk Surface (S9) (LRR K, L)
	eted Below Dark Surfac	e (A11)	Loamy Gleyed M		2)			nganese Masses (F12) (LRR K, L, R)
	Dark Surface (A12)		Depleted Matrix					nt Floodplain Soils (F19) (MLRA 149B)
Sand	y Mucky Mineral (S1)		X Redox Dark Surf	ace (F6))		Mesic S	podic (TA6) (MLRA 144A, 145, 149B)
Sand	y Gleyed Matrix (S4)		Depleted Dark S	urface (F	- 7)		Red Par	rent Material (F21)
Sand	y Redox (S5)		Redox Depression	ons (F8)			Very Sh	allow Dark Surface (TF12)
Stripp	ped Matrix (S6)		Marl (F10) (LRR	K, L)			Other (E	Explain in Remarks)
	Surface (S7)			, ,				,
	cultude (e.)							
³ Indicators	s of hydrophytic vegeta	tion and v	vetland hydrology mu	st be pre	esent, unle	ess distu	rbed or problemation	C.
Restrictiv	e Layer (if observed)	:						
Type:								
Depth (inches):						Hydric Soil Pr	resent? Yes X No
Remarks:								

Project/Site: Avon Lake Ga	s Addition Project	C	ity/County: Lorain		Sampling Date:	: 5/14/14
Applicant/Owner: NRG Ohio	Pipeline Company LLC			State:	OH Sampline	g Point: UP_11
Investigator(s): Travis Kessl		Gordon Se	ection, Township, Range:			<u> </u>
Landform (hillside, terrace, et			al relief (concave, convex,	•	9	lope (%): 0 to 2
, , ,	′ 		·	· —		
Subregion (LRR or MLRA): L			Long:	82.0666250192		um: WGS 84
Soil Map Unit Name: Mahoni	ng silt loam, 0 to 2 percer	nt slopes		NWI class	ification: Not avai	lable
Are climatic / hydrologic cond	itions on the site typical for	or this time of year	? Yes <u>x</u> No_	(If no, explain	n in Remarks.)	
Are Vegetation, Soil	, or Hydrology	significantly o	disturbed? Are "Norma	l Circumstances" p	resent? Yes	x No
Are Vegetation, Soil	, or Hydrology	naturally prob	olematic? (If needed,	explain any answei	rs in Remarks.)	
SUMMARY OF FINDIN	GS – Attach site m	ap showing sa	impling point locati	ons, transects	s, important fe	atures, etc.
Hydrophytic Vegetation Pres	sent? Yes	No X	Is the Sampled Area			
Hydric Soil Present?	Yes	No X	within a Wetland?	Yes	No X	
Wetland Hydrology Present?	? Yes	No X	If yes, optional Wetland	d Site ID:		
Remarks: (Explain alternative Upland adjacent to PEM were	•	a separate report.)				
HYDROLOGY						
Wetland Hydrology Indicat				-	icators (minimum o	of two required)
Primary Indicators (minimum	of one is required; checl				oil Cracks (B6)	
Surface Water (A1)		Water-Stained Le			Patterns (B10)	
High Water Table (A2)		Aquatic Fauna (B			Lines (B16)	- `
Saturation (A3)		Marl Deposits (B1			on Water Table (C2	2)
Water Marks (B1) Sediment Deposits (B2)		Hydrogen Sulfide	heres on Living Roots (C		Burrows (C8) ı Visible on Aerial I	magen/ (CQ)
Drift Deposits (B3)		Presence of Redu	= -		r Stressed Plants (
Algal Mat or Crust (B4)		_	ction in Tilled Soils (C6)		nic Position (D2)	51)
Iron Deposits (B5)		Thin Muck Surfac			quitard (D3)	
Inundation Visible on A	erial Imagery (B7)	Other (Explain in			graphic Relief (D4))
Sparsely Vegetated Cor		_ ` '	,		ral Test (D5)	
Field Observations:	· · ·					
Surface Water Present?	Yes No X	Depth (inches):				
Water Table Present?	Yes No X Yes No X	Depth (inches):				
Saturation Present?	Yes No X			Hydrology Preser	nt? Yes	NoX
(includes capillary fringe)						
Describe Recorded Data (st	ream gauge, monitoring v	vell, aerial photos,	previous inspections), if a	vailable:		
Remarks: Site was seasonably wet due	e to recent heavy spring r	rains				

VEGETATION - Use scientific names of pla	ınts.			Sampling Point:	UP_11
<u>Tree Stratum</u> (Plot size:30' radius)	Absolute % Cover	Dominant Species?	Indicator Status	Dominance Test worksheet:	
1. 2.	30	Yes		Number of Dominant Species That Are OBL, FACW, or FAC:	0 (A)
3. 4.				Total Number of Dominant Species Across All Strata:	4 (B)
5.6.		<u> </u>		Percent of Dominant Species That Are OBL, FACW, or FAC:	0.0% (A/B)
7				Prevalence Index worksheet:	
	30	=Total Cover		Total % Cover of: Mu	ultiply by:
Sapling/Shrub Stratum (Plot size: 15' radius)				OBL species0 x 1 =	0
1.				FACW species 0 x 2 =	0
2.				FAC species 0 x 3 =	0
3.				FACU species 30 x 4 =	120
4.				UPL species 0 x 5 =	0
5.				Column Totals: 30 (A)	120 (B
6.				Prevalence Index = B/A =	4.00
7				Hydrophytic Vegetation Indicators:	
		=Total Cover		1 - Rapid Test for Hydrophytic Ve	
Herb Stratum (Plot size: 5' radius)		-		2 - Dominance Test is >50%	gotation
Taraxacum officinale	10	Yes	FACU	3 - Prevalence Index is ≤3.0 ¹	
	10	Yes	FACU	4 - Morphological Adaptations ¹ (P	rovide supportin
				data in Remarks or on a separa	
3. Festuca rubra4.	10	Yes	FACU	Problematic Hydrophytic Vegetati	
6.				¹ Indicators of hydric soil and wetland he present, unless disturbed or proble	
7				Definitions of Vegetation Strata:	
8 9.				Tree – Woody plants 3 in. (7.6 cm) or diameter at breast height (DBH), regal	
10				Sapling/shrub – Woody plants less th	
11				and greater than or equal to 3.28 ft (1	
12.	30	=Total Cover		Herb – All herbaceous (non-woody) plof size, and woody plants less than 3.3	-
Woody Vine Stratum (Plot size: 15' radius) 1.		_		Woody vines – All woody vines great height.	
2.					
3.				Hydrophytic	
				Vegetation Present? Yes N	o_X_
4		=Total Cover			
Remarks: (Include photo numbers here or on a sepa	rate sheet)			<u> </u>	
Ground surface is disturbed from recent excavation.			d soils exist v	within plot.	

SOIL Sampling Point: UP_11

Profile De	escription: (Describe	to the de	pth needed to docu	ment th	e indicate	or or con	firm the absence	of indicator	·s.)		
Depth	Matrix		Redo	x Featur	es						
(inches)	Color (moist)	%	Color (moist)	%	Type ¹	Loc ²	Texture		Remarks		
0-5	10YR 3/6	100					Mucky Loam/Clay	Soils are dis	turbed from rec	ent excav	ation
	10111070	100	_				Wacky Loans Clay	Oolio are dis	tarbea iroin rec	CHI CAGGIV	20011.
			-								
	=Concentration, D=De	pletion, RN	M=Reduced Matrix, C	S=Cove	red or Co	ated San			Pore Lining, M		
-	oil Indicators:								tic Hydric So		
	sol (A1)	-	Polyvalue Below	/ Surface	e (S8) (LR	RR,			RR K, L, MLRA		
	Epipedon (A2)		MLRA 149B)						(A16) (LRR K ,		
	Histic (A3)	-	Thin Dark Surface					-	Peat (S3) (LR I)
	ogen Sulfide (A4)	-	High Chroma Sa			-			face (S8) (LRF	R K, L)	
	fied Layers (A5)	.	Loamy Mucky M			(, L)			89) (LRR K, L)		
	eted Below Dark Surface	ce (A11)	Loamy Gleyed N		2)			_	sses (F12) (LR		
	Dark Surface (A12)	-	Depleted Matrix		,				Soils (F19) (N		
	y Mucky Mineral (S1)	-	Redox Dark Sur						(MLRA 144A,	145, 149	B)
	y Gleyed Matrix (S4)	-	Depleted Dark S					rent Material			
	y Redox (S5) ped Matrix (S6)	-	Redox Depressi Marl (F10) (LRR		1			Explain in Rer	urface (TF12)		
	Surface (S7)	-	IVIAIT (I TO) (LKK	K, L)			Other (L		iliaiks)		
	ourlace (or)										
3Indicators	s of hydrophytic vegeta	ation and w	vetland hydrology mu	ist be nre	esent unle	ess distur	bed or problemation	r.			
	e Layer (if observed)		rotalia nyarology ma	ot bo pit	occini, arm	oco alotai	The state of the s	<u>. </u>			
Type:	• ` `										
_	inches):						Hydric Soil Pr	rocont?	Voc	No. V	,
							Hydric 30ii Fi	esent:	Yes	No_>	
Remarks:											

Addition Project	City/County: Lo	rain	Sampling Date: 5/14/14
ipeline Company LLC		State:	OH Sampling Point: WET_11
	Section, Towns	hip, Range: Not available	
: depressions	<u> </u>		Slope (%): 0 to 2
		· ·	Datum: WGS 84
	000000		ification: Not available
	ma of year? Voc		
	-		
		(If needed, explain any answer	
			,
nt? Yes X No	Is the Sam	pled Area	
			(No
Yes X No	If yes, option	onal Wetland Site ID: WET_1	1
procedures here or in a separa	ate report.)		
s:		•	icators (minimum of two required)
			oil Cracks (B6)
			Patterns (B10)
			Lines (B16)
			on Water Table (C2)
		· · · —	Visible on Aerial Imagery (C9)
	, ,		r Stressed Plants (D1)
		· · · · · · · · · · · · · · · · · · ·	
			graphic Relief (D4)
	Exhigiii ili Kemarva)		
1ve Surface (DO)			
Voc V No Dont	h (inches): 0.1		
	`		
	· · · · · · · · · · · · · · · · · · ·	Motland Hydrology Preser	nt? Yes X No
Tes No Dopo	1 (IIICHES)	Wellallu Hyulology i 1000.	III. 169 V 140
 am gauge, monitoring well, aer	ial photos, previous inspe	ections), if available:	
gauge,	idi pilotos, piertese	, ii a . a . a . a . a . a . a . a . a .	
o recent heavy spring rains			
	ipeline Company LLC Lauren Zielke, Aaron Gordon depressions R R, MLRA 139 Lat: 41.444 loam ons on the site typical for this ti , or Hydrology sig, or Hydrology na S - Attach site map sho at? Yes X No	Injeline Company LLC Lauren Zielke, Aaron Gordon Section, Townsl depressions Local relief (concal R R, MLRA 139 Lat: 41.444399663 loam Inso on the site typical for this time of year? Yes significantly disturbed? Inso on the site typical for this time of year? Yes significantly disturbed? Inso on the site typical for this time of year? Yes yes X No maturally problematic? Inso on the site typical for this time of year? Yes significantly disturbed? Inso on the site typical for this time of year? Yes yes X No maturally problematic? Inso on the site typical for this time of year? Yes yes X No maturally problematic? Inso on the site typical for this time of year? Yes yes X No maturally problematic? Inso on the site typical for this time of year? Yes yes X No maturally problematic? Inso on the site typical for this time of year? Yes X No maturally problematic? Inso on the site typical for this time of year? Yes X No maturally problematic? Inso on the site typical for this time of year? Yes X No maturally problematic? Inso on the site typical for this time of year? Yes X No maturally problematic? Inso on the site typical for this time of year? Yes X No maturally problematic? Inso on the site typical for this time of year? Yes X No maturally problematic? Inso on the site typical for this time of year? Yes X No maturally problematic? Inso on the site typical for this time of year? Yes X No maturally problematic? Inso on the site typical for this time of year? Inso on the site typical for this time of year? Inso on the site typical for this time of year? Inso on the site typical for this time of year? Inso on the site typical for this time of year? Inso on the site typical for this time of year? Inso on the site typical for this time of year? Inso on the site typical for this time of year? Inso on the site typical for this time of year? Inso on the site typical for this time of year? Inso on the site of the stance of the st	pleline Company LLC Lauren Zielke, Aaron Gordon Section, Township, Range: Not available depressions Local relief (concave, convex, none): concave R.R. MLRA 139 Lat: 41.444399663 Long: -82.066798597 loam NWI class ons on the site typical for this time of year? yes x No (If no, explaint or Hydrology significantly disturbed? or Hydrology naturally problematic? (If needed, explain any answer of Hydrology naturally problematic? It? Yes X No (If needed, explain any answer of Hydrology naturally problematic? Its the Sampled Area within a Wetland? Yes X No (If yes, optional Wetland Site ID: WET_1: procedures here or in a separate report.) s: Secondary Ind fone is required; check all that apply) Aquatic Fauna (B13) Marl Deposits (B15) Hydrogen Sulfide Odor (C1) Oxidized Rhizospheres on Living Roots (C3) All Imagery (B7) Other (Explain in Remarks) Yes X No Depth (inches): 0.1 Yes X No Depth (inches): 8 Yes X No Depth (inches): 7 Wetland Hydrology Preser Im gauge, monitoring well, aerial photos, previous inspections), if available:

VEGETATION – Use scientific names of plants. Sampling Point: WET 11 Absolute Dominant Indicator Tree Stratum (Plot size: 30' radius) % Cover **Dominance Test worksheet:** Species? Status 30 FAC Acer rubrum Yes **Number of Dominant Species** 2. That Are OBL, FACW, or FAC: (A) **Total Number of Dominant** Species Across All Strata: 2 (B) 5. Percent of Dominant Species 6. That Are OBL, FACW, or FAC: 100.0% (A/B) Prevalence Index worksheet: 30 =Total Cover Total % Cover of: Sapling/Shrub Stratum (Plot size: 15' radius) OBL species 100 x 1 = 100 0 1. FACW species x 2 = x 3 = 2. FAC species 30 **FACU** species 0 x 4 = 0 UPL species x 5 = Column Totals: 130 190 (A) (B) 6. Prevalence Index = B/A = 1.46 **Hydrophytic Vegetation Indicators:** 1 - Rapid Test for Hydrophytic Vegetation =Total Cover Herb Stratum (Plot size: 5' radius) X 2 - Dominance Test is >50% Carex emoryi 80 Yes OBL X 3 - Prevalence Index is ≤3.0¹ Juncus effusus 10 No OBL 4 - Morphological Adaptations¹ (Provide supporting data in Remarks or on a separate sheet) Scirpus cyperinus 10 No OBL Problematic Hydrophytic Vegetation¹ (Explain) 4. 5. ¹Indicators of hydric soil and wetland hydrology must 6. be present, unless disturbed or problematic. **Definitions of Vegetation Strata:** 8. Tree - Woody plants 3 in. (7.6 cm) or more in 9. diameter at breast height (DBH), regardless of height. Sapling/shrub - Woody plants less than 3 in. DBH and greater than or equal to 3.28 ft (1 m) tall. Herb - All herbaceous (non-woody) plants, regardless 100 =Total Cover of size, and woody plants less than 3.28 ft tall. Woody Vine Stratum (Plot size: 15' radius) Woody vines - All woody vines greater than 3.28 ft in 1. height. Hydrophytic Vegetation Present? Yes X No No =Total Cover Remarks: (Include photo numbers here or on a separate sheet.) Very heavy leaf litter limited herbaceous stratum growth. .

SOIL Sampling Point: WET_11

Profile De	escription: (Describe	to the de	epth needed to docu	ment the	e indicato	or or cor	nfirm the absence	of indicators.)
Depth	Matrix			r Feature				
(inches)	Color (moist)	%	Color (moist)	%	Type ¹	Loc ²	Texture	Remarks
0-5	10YR 3/2	100					Mucky Loam/Clay	
5-20	10YR 3/1	90	10YR 5/8	10	C	<u>M</u>	Mucky Loam/Clay	Prominent redox concentrations
	-							
1 _{Type: C}		lotion DI	4-Paduood Matrix C		rod or Cor	atod San	d Crains 2l o	ocation: PL=Pore Lining, M=Matrix.
		netion, Ki	vi-Reduced Matrix, C	3-Cover	red or Coa	ateu San		
-	oil Indicators:		Dobarduo Dolou	Curfoss	(CO) /I D	D D		or Problematic Hydric Soils ³ :
	sol (A1)		Polyvalue Below	Surrace	(58) (LK	KK,		uck (A10) (LRR K, L, MLRA 149B)
	Epipedon (A2)		MLRA 149B)					rairie Redox (A16) (LRR K, L, R)
	Histic (A3)		Thin Dark Surface					ucky Peat or Peat (S3) (LRR K, L, R)
Hydro	ogen Sulfide (A4)		High Chroma Sa	nds (S1	1) (LRR K	(, L)	Polyvalu Polyvalu	ue Below Surface (S8) (LRR K, L)
Strati	fied Layers (A5)		Loamy Mucky M	ineral (F	1) (LRR k	(, L)	Thin Da	rk Surface (S9) (LRR K, L)
Deple	eted Below Dark Surfac	e (A11)	Loamy Gleyed M	latrix (F2	2)		Iron-Mai	nganese Masses (F12) (LRR K, L, R)
	Dark Surface (A12)	, ,	Depleted Matrix		,			nt Floodplain Soils (F19) (MLRA 149B)
	y Mucky Mineral (S1)		X Redox Dark Surf		١			podic (TA6) (MLRA 144A, 145, 149B)
	y Gleyed Matrix (S4)		Depleted Dark S	,				rent Material (F21)
	y Redox (S5)		Redox Depression					allow Dark Surface (TF12)
	ped Matrix (S6)		Marl (F10) (LRR	K , L)			Other (E	Explain in Remarks)
Dark	Surface (S7)							
³ Indicators	s of hydrophytic vegeta	tion and v	wetland hydrology mu	st be pre	esent, unle	ess distu	rbed or problemation	D.
Restrictiv	e Layer (if observed)	:						
Type:								
Depth (i	inches):						Hydric Soil Pr	esent? Yes X No No
Remarks:							•	

Project/Site: Avon Lake Ga	as Addition Project	C	ity/County: Lorain Cou	nty	Sampling Date:	5/14/14		
Applicant/Owner: NRG Gas	Pipeline Company LLC			State:	— OH Sampling	Point: UPL_12		
Investigator(s): Travis Kess			ection, Township, Rang	ie. Not available				
Landform (hillside, terrace, e			al relief (concave, conv		Sk	ope (%): 0 - 2		
,	, 	-	•	· /				
Subregion (LRR or MLRA): L	<u> </u>	at: 41.440098505	Long	g: <u>-82.0667782429</u>		m: WGS 84		
Soil Map Unit Name: Miners	silty loam			NWI class	sification: none			
Are climatic / hydrologic cond	ditions on the site typical	for this time of year'	? Yes <u>x</u> N	o (If no, explai	in in Remarks.)			
Are Vegetation, Soil	, or Hydrology	significantly o	listurbed? Are "Nor	mal Circumstances" p	oresent? Yes_	x No		
Are Vegetation, Soil	, or Hydrology	naturally prob	olematic? (If neede	d, explain any answe	rs in Remarks.)			
SUMMARY OF FINDIN	IGS – Attach site m	nap showing sa	mpling point loca	ations, transects	s, important fea	atures, etc.		
Hydrophytic Vegetation Pre	sent? Yes	No_X	Is the Sampled Are	a				
Hydric Soil Present?	Yes X		within a Wetland?	Yes	No X			
Wetland Hydrology Present	? Yes	No X	If yes, optional Wetla	and Site ID:				
Remarks: (Explain alternati	ve procedures here or in	a separate report.)						
HYDROLOGY								
Wetland Hydrology Indica	tore:			Socondary Ind	licators (minimum o	f two required)		
Primary Indicators (minimur		ck all that annly)		-	oil Cracks (B6)	<u>r two required)</u>		
Surface Water (A1)	ir or one to required, one	Water-Stained Le	aves (B9)		Patterns (B10)			
High Water Table (A2)	_	Aquatic Fauna (B			n Lines (B16)			
Saturation (A3)	_	Marl Deposits (B1			on Water Table (C2)		
Water Marks (B1)	_	Hydrogen Sulfide			Burrows (C8)	,		
Sediment Deposits (B2)	Oxidized Rhizosp	heres on Living Roots	(C3) Saturation	Nisible on Aerial In	nagery (C9)		
Drift Deposits (B3)	_	Presence of Redu	iced Iron (C4)	Stunted o	r Stressed Plants (D)1)		
Algal Mat or Crust (B4)	_	Recent Iron Redu	ction in Tilled Soils (C6					
Iron Deposits (B5)	_	Thin Muck Surfac	e (C7)	Shallow Aquitard (D3)				
Inundation Visible on A	erial Imagery (B7)	Other (Explain in	Remarks)	Microtopo	graphic Relief (D4)			
Sparsely Vegetated Co	ncave Surface (B8)			FAC-Neut	tral Test (D5)			
Field Observations:								
Surface Water Present?	Yes No x							
Water Table Present?	Yes No x							
Saturation Present?	Yes No x	Depth (inches):	Wetlar	nd Hydrology Prese	nt? Yes	No <u>X</u>		
(includes capillary fringe)								
Describe Recorded Data (st	ream gauge, monitoring	well, aerial photos,	previous inspections),	f available:				
Remarks:	 		 					
N/A								
l								

VEGETATION – Use scientific names of plants. Sampling Point: UPL 12 Absolute Dominant Indicator Tree Stratum (Plot size: 30' radius) % Cover **Dominance Test worksheet:** Species? Status **Number of Dominant Species** That Are OBL, FACW, or FAC: 2. (A) **Total Number of Dominant** Species Across All Strata: 5 (B) 5. Percent of Dominant Species (A/B) 6. That Are OBL, FACW, or FAC: 20.0% Prevalence Index worksheet: =Total Cover Total % Cover of: Sapling/Shrub Stratum (Plot size: 15' radius) OBL species x 1 = 0 1. 20 Yes FACW species x 2 = x 3 = 2. Yes FAC species 20 **FACU** species 90 x 4 = 0 **UPL** species x 5 = Column Totals: 110 420 (A) (B) 6. Prevalence Index = B/A = 3.82 **Hydrophytic Vegetation Indicators:** 40 =Total Cover 1 - Rapid Test for Hydrophytic Vegetation 2 - Dominance Test is >50% Herb Stratum (Plot size: 5' radius) Dactylis glomerata 70 Yes **FACU** 3 - Prevalence Index is ≤3.01 2. Taraxacum officinale 20 Yes **FACU** 4 - Morphological Adaptations¹ (Provide supporting data in Remarks or on a separate sheet) 3. Ranunculus hispidus 10 No FAC Problematic Hydrophytic Vegetation¹ (Explain) 4. 5. ¹Indicators of hydric soil and wetland hydrology must 6. be present, unless disturbed or problematic. **Definitions of Vegetation Strata:** 8. Tree - Woody plants 3 in. (7.6 cm) or more in 9. diameter at breast height (DBH), regardless of height. Sapling/shrub - Woody plants less than 3 in. DBH and greater than or equal to 3.28 ft (1 m) tall. Herb - All herbaceous (non-woody) plants, regardless 100 =Total Cover of size, and woody plants less than 3.28 ft tall. Woody Vine Stratum (Plot size: 15' radius) Woody vines - All woody vines greater than 3.28 ft in 1. Vitis riparia Yes height. Hydrophytic 3. Vegetation Present? Yes No X 10 =Total Cover Remarks: (Include photo numbers here or on a separate sheet.) very heavy leaf litter did not allow abundant herbaceous stratum growth

SOIL Sampling Point: UPL_12

	scription: (Describe	to the de	-			or or con	firm the absence of	f indicators.)	
Depth (inches)	Matrix Color (moist)	%		x Feature		Loc ²	Toyturo	Domarka	
(inches)	Color (moist)		Color (moist)	%	Type ¹	LOC	Texture	Remarks	
0-17	7.5YR 3/1	90	7.5YR 4/6	10	С	PL	Loamy/Clayey		
			_						
1									
	Concentration, D=Dep	letion, RI	M=Reduced Matrix, C	S=Cove	red or Coa	ated San		ation: PL=Pore Lining, M	
_	il Indicators:		D D.	0 ((00) (1.5			Problematic Hydric Soi	
	ol (A1)		Polyvalue Below	Surface	e (S8) (LR	RR,		k (A10) (LRR K, L, MLRA	-
	Epipedon (A2)		MLRA 149B)	(00) (irie Redox (A16) (LRR K,	-
	Histic (A3)		Thin Dark Surface					ky Peat or Peat (S3) (LRF	•
	gen Sulfide (A4)		High Chroma Sa			-		Below Surface (S8) (LRF	₹ K , L)
	ied Layers (A5)		Loamy Mucky M			(, L)	Thin Dark	Surface (S9) (LRR K, L)	
Deple	ted Below Dark Surfac	e (A11)	Loamy Gleyed N	/latrix (F2	2)		Iron-Mang	anese Masses (F12) (LR	R K, L, R)
Thick	Dark Surface (A12)		Depleted Matrix	(F3)			Piedmont	Floodplain Soils (F19) (M	LRA 149B)
Sandy	Mucky Mineral (S1)		X Redox Dark Sur	face (F6)		Mesic Spo	odic (TA6) (MLRA 144A ,	145, 149B)
Sandy	Gleyed Matrix (S4)		Depleted Dark S	Surface (l	F7)		Red Parer	nt Material (F21)	
Sandy	Redox (S5)		Redox Depressi	ons (F8)			Very Shall	ow Dark Surface (TF12)	
Strippe	ed Matrix (S6)		Marl (F10) (LRR	K, L)			Other (Exp	olain in Remarks)	
	Surface (S7)			, ,			<u> </u>	,	
	,								
³ Indicators	of hydrophytic vegetat	tion and v	wetland hydrology mu	st be pre	esent, unle	ess distur	bed or problematic.		
	e Layer (if observed):		7		,				
Type:	,								
Depth (ir	achee).						Hydric Soil Pres	sent? Yes X	No
	<u> </u>						Tryunc con ries	<u> </u>	
Remarks:									

Project/Site: Avon Lake Gas Addition	on Project	City/County: Lorain		Sampling Date: 5	/14/14
Applicant/Owner: NRG Ohio Pipelin	ne Company LLC		State:	OH Sampling Po	
Investigator(s): Travis Kessler, Laur		Section, Township, Range:	Not available		
Landform (hillside, terrace, etc.): de		Local relief (concave, convex, n		Slope	(%): 0 to 2
Subregion (LRR or MLRA): LRR R, M			2.0668589548		WGS 84
Soil Map Unit Name: Miner silty loam		<u></u>		fication: Not available	1
· · · · · · · · · · · · · · · · · · ·		·oor? Vos v No		n in Remarks.)	-
Are climatic / hydrologic conditions or Are Vegetation, Soil			(ii rio, expiair Circumstances" pr		. No
Are Vegetation, Soil	<u></u>		xplain any answer		
SUMMARY OF FINDINGS –	<u> </u>		•	,	res, etc.
Hydrophytic Vegetation Present?	Yes X No	Is the Sampled Area			
Hydric Soil Present?	Yes X No	within a Wetland?	Yes X	No	
Wetland Hydrology Present?	Yes X No	If yes, optional Wetland S	Site ID: WET_12		
Remarks: (Explain alternative proce PFO wetland feature, primarily.	edures here or in a separate repo	ort.)			
HYDROLOGY					
Wetland Hydrology Indicators:			-	cators (minimum of tw	o required)
Primary Indicators (minimum of one				oil Cracks (B6)	
X Surface Water (A1)	X Water-Stained			Patterns (B10)	
X High Water Table (A2)	Aquatic Fauna			Lines (B16)	
X Saturation (A3)	Marl Deposits			n Water Table (C2)	
Water Marks (B1) Sediment Denosits (B2)		fide Odor (C1)		urrows (C8) Visible on Aerial Imag	·on/(C0)
Sediment Deposits (B2) Drift Deposits (B3)		cospheres on Living Roots (C3) Reduced Iron (C4)		Stressed Plants (D1)	jery (Ga)
Algal Mat or Crust (B4)		Reduced from (C4) Reduction in Tilled Soils (C6)		ic Position (D2)	
Iron Deposits (B5)	Thin Muck Su	` '		uitard (D3)	
Inundation Visible on Aerial Ima				raphic Relief (D4)	
Sparsely Vegetated Concave S		TIII Remaine,	x FAC-Neutr		
Field Observations:				ui 1001 (20)	
Surface Water Present? Yes	X No Depth (inche	es): 0.1			
•	X No Depth (inche	· ———			
•	X No Depth (inche		ydrology Presen	t? Yes X	No
(includes capillary fringe)		, <u> </u>	,,	··	
Describe Recorded Data (stream ga	auge, monitoring well, aerial phot	os, previous inspections), if ava	ailable:		
, -	5	, , ,			
Remarks: Site was seasonably wet due to rece	ent heavy spring rains				

VEGETATION – Use scientific names of plants. Sampling Point: WET 12 Absolute Dominant Indicator Tree Stratum (Plot size: 30' radius) % Cover **Dominance Test worksheet:** Species? Status 30 FAC Acer rubrum Yes **Number of Dominant Species** 2. That Are OBL, FACW, or FAC: (A) **Total Number of Dominant** 4. Species Across All Strata: 4 (B) 5. Percent of Dominant Species 6. That Are OBL, FACW, or FAC: 100.0% (A/B) Prevalence Index worksheet: 30 =Total Cover Total % Cover of: Sapling/Shrub Stratum (Plot size: 15' radius) OBL species 60 x 1 = 60 Acer rubrum 50 Yes FAC FACW species x 2 = 120 x 3 = Ulmus americana 50 Yes **FACW** FAC species 3. **FACU** species 0 x 4 = 4. **UPL** species 0 x 5 = 5. Column Totals: 210 (A) 450 (B) 6. Prevalence Index = B/A = 2.14 **Hydrophytic Vegetation Indicators:** 100 =Total Cover 1 - Rapid Test for Hydrophytic Vegetation Herb Stratum (Plot size: 5' radius) X 2 - Dominance Test is >50% Carex emoryi 60 Yes OBL X 3 - Prevalence Index is ≤3.0¹ 2. Anemone canadensis 10 No **FACW** 4 - Morphological Adaptations¹ (Provide supporting data in Remarks or on a separate sheet) 3. Toxicodendron radicans 10 No Problematic Hydrophytic Vegetation¹ (Explain) 4. 5. ¹Indicators of hydric soil and wetland hydrology must 6. be present, unless disturbed or problematic. **Definitions of Vegetation Strata:** 8. Tree - Woody plants 3 in. (7.6 cm) or more in 9. diameter at breast height (DBH), regardless of height. Sapling/shrub - Woody plants less than 3 in. DBH and greater than or equal to 3.28 ft (1 m) tall. Herb - All herbaceous (non-woody) plants, regardless 80 =Total Cover of size, and woody plants less than 3.28 ft tall. Woody Vine Stratum (Plot size: 15' radius) Woody vines - All woody vines greater than 3.28 ft in 1. height. Hydrophytic Vegetation Present? Yes X No No =Total Cover Remarks: (Include photo numbers here or on a separate sheet.) Very heavy leaf litter limited herbaceous stratum growth. .

SOIL Sampling Point: WET_12

Profile Description: (Describe to the depth needed to document the indicator or confirm the absence of indicators.)										
Depth Matrix			Redox Features							
(inches)	Color (moist)	%	Color (moist)	%	Type ¹	Loc ²	Texture		Remarks	
0-3	10YR 3/1	100					Mucky Sand			
3-20	10YR 4/1	80	10YR 5/8	20	С	М	Mucky Loam/Clay	Promin	ent redox conc	entrations
			_							
								-		
¹ Type: C=	Concentration, D=Deple	etion, RN	/I=Reduced Matrix, C	S=Cove	red or Coa	ated San	d Grains. ² Lo	cation: PL=	Pore Lining, Ma	=Matrix.
Hydric So	oil Indicators:						Indicators for	or Problema	atic Hydric Soi	ls³:
	sol (A1)		Polyvalue Below	Surface	(S8) (LR	RR,			RR K, L, MLRA	
	Epipedon (A2)		MLRA 149B)				Coast Prairie Redox (A16) (LRR K, L, R)			
	Histic (A3)	•	Thin Dark Surface							
	ogen Sulfide (A4)	•	High Chroma Sa				Polyvalue Below Surface (S8) (LRR K, L)			
	fied Layers (A5) eted Below Dark Surface	. (Λ11)	Loamy Mucky M			, L)	Thin Dark Surface (S9) (LRR K, L) Iron-Manganese Masses (F12) (LRR K, L, R)			
	Dark Surface (A12)	(A11)	Loamy Gleyed M Depleted Matrix		<u> </u>		Piedmont Floodplain Soils (F19) (MLRA 149B)			
	y Mucky Mineral (S1)		X Redox Dark Surf)		Mesic Spodic (TA6) (MLRA 144A, 145, 149B)			
	y Gleyed Matrix (S4)	•	Depleted Dark S				Red Parent Material (F21)			
	y Redox (S5)	•	Redox Depression				Very Shallow Dark Surface (TF12)			
	ped Matrix (S6)	•	Marl (F10) (LRR				Other (Explain in Remarks)			
Dark	Surface (S7)	•					<u> </u>			
	s of hydrophytic vegetati	on and v	vetland hydrology mu	st be pre	esent, unle	ess distu	rbed or problemation	С.		
	e Layer (if observed):									
Type:										
Depth (i	inches):						Hydric Soil Pr	esent?	Yes X	No
Remarks:										

Project/Site: Avon Lake Ga	s Addition Project	C	ity/County: Lorain Cοι	ınty	Sampling Date:	5/13/14		
Applicant/Owner: NRG Gas	Pipeline Company LLC			State:	OH Sampling	Point: UPL_13		
Investigator(s): Travis Kessler, Lauren Zielke, Aaron Gordon Section, Township, Range: Not available								
Landform (hillside, terrace, et			al relief (concave, con		Slo	pe (%): 0 - 2		
,	, 	-		g: -82.0670705344				
Subregion (LRR or MLRA): <u>L</u>		1. 41.4200117344	LON			n: WGS 84		
Soil Map Unit Name: Holly sil					sification: none			
Are climatic / hydrologic cond	litions on the site typical f	for this time of year'	? Yes <u>x</u> N	lo (If no, expla	in in Remarks.)			
Are Vegetation, Soil	, or Hydrology	significantly o	disturbed? Are "No	mal Circumstances" p	oresent? Yes _	x No		
Are Vegetation, Soil	, or Hydrology	naturally prob	olematic? (If neede	ed, explain any answe	rs in Remarks.)			
SUMMARY OF FINDIN	GS – Attach site m	ap showing sa	mpling point loc	ations, transects	s, important feat	tures, etc.		
Hydrophytic Vegetation Pres	sent? Yes	No X	Is the Sampled Ar	ea				
Hydric Soil Present?	Yes		within a Wetland?		No X			
Wetland Hydrology Present?	? Yes	No X	If yes, optional Wet	land Site ID:				
Remarks: (Explain alternativ	ve procedures here or in	a separate report.)						
HYDROLOGY								
Wetland Hydrology Indicat					dicators (minimum of	two required)		
Primary Indicators (minimum	n of one is required; chec		(50)		Surface Soil Cracks (B6)			
Surface Water (A1)		_Water-Stained Le			Drainage Patterns (B10)			
High Water Table (A2)		_ Aquatic Fauna (B			Moss Trim Lines (B16)			
Saturation (A3)		Marl Deposits (B1			Dry-Season Water Table (C2) Crayfish Burrows (C8)			
Water Marks (B1) Sediment Deposits (B2)		Hydrogen Sulfide	heres on Living Roots		n Visible on Aerial Im	ageny (CQ)		
Drift Deposits (B3)	<u> </u>	Presence of Redu	_					
Algal Mat or Crust (B4)		_	ction in Tilled Soils (C		Stunted or Stressed Plants (D1) Geomorphic Position (D2)			
Iron Deposits (B5)		Thin Muck Surfac	<u> </u>					
Inundation Visible on A	erial Imagery (B7)	Other (Explain in			Microtopographic Relief (D4)			
Sparsely Vegetated Cor			, , , , , , , , , , , , , , , , , , , ,		tral Test (D5)			
Field Observations:	. ,							
Surface Water Present?	Yes No x	Depth (inches):						
Water Table Present?	Yes No x	_						
Saturation Present?	Yes No x			nd Hydrology Prese	nt? Yes	No X		
(includes capillary fringe)			_			·		
Describe Recorded Data (st	ream gauge, monitoring	well, aerial photos,	previous inspections),	if available:				
Remarks:								
N/A								
I								

VEGETATION – Use scientific names of plants. UPL 13 Sampling Point: Absolute Dominant Indicator Tree Stratum (Plot size: 30' radius) % Cover **Dominance Test worksheet:** Species? Status 1. **Number of Dominant Species** That Are OBL, FACW, or FAC: 2. (A) **Total Number of Dominant** Species Across All Strata: 4 (B) 5. Percent of Dominant Species (A/B) 6. That Are OBL, FACW, or FAC: 50.0% Prevalence Index worksheet: =Total Cover Total % Cover of: Sapling/Shrub Stratum (Plot size: 15' radius) OBL species x 1 = 0 Prunus serotina 20 Yes **FACU** FACW species x 2 = x 3 = 2. Acer negundo 20 Yes FAC FAC species 30 3. **FACU** species 120 x 4 = 4. **UPL** species 0 x 5 = 0 5. Column Totals: 150 570 (A) (B) 6. Prevalence Index = B/A = 3.80 **Hydrophytic Vegetation Indicators:** 40 =Total Cover 1 - Rapid Test for Hydrophytic Vegetation Herb Stratum (Plot size: 5' radius) 2 - Dominance Test is >50% Poa pratensis 70 Yes **FACU** 3 - Prevalence Index is ≤3.01 2. Alliaria petiolata 10 No **FACU** 4 - Morphological Adaptations¹ (Provide supporting data in Remarks or on a separate sheet) 10 3. Rosa multiflora No **FACU** 10 **FACU** Problematic Hydrophytic Vegetation¹ (Explain) Arctium minus No 5. ¹Indicators of hydric soil and wetland hydrology must 6. be present, unless disturbed or problematic. **Definitions of Vegetation Strata:** 8. Tree - Woody plants 3 in. (7.6 cm) or more in 9. diameter at breast height (DBH), regardless of height. Sapling/shrub - Woody plants less than 3 in. DBH and greater than or equal to 3.28 ft (1 m) tall. Herb - All herbaceous (non-woody) plants, regardless 100 =Total Cover of size, and woody plants less than 3.28 ft tall. Woody Vine Stratum (Plot size: 15' radius) Woody vines - All woody vines greater than 3.28 ft in 1. Vitis riparia Yes height. Hydrophytic 3. Vegetation Present? Yes No X 10 =Total Cover Remarks: (Include photo numbers here or on a separate sheet.) very heavy leaf litter did not allow abundant herbaceous stratum growth

SOIL Sampling Point: UPL_13

Profile Description: (Describe to the depth needed to document the indicator or confirm the absence of indicators.)												
Depth Matrix			Redox Features									
(inches)	Color (moist)	%	Color (moist)	%	Type ¹	Loc ²	Texture	Rema	arks			
0-8	10YR 3/3	100	, , , ,				Sandy	mixed wit	h gravel			
8-20	10YR 3/6	100	•				Sandy					
0-20	10111 0/0	100					Gariay					
			_									
									_			
									_			
¹ Type: C=	=Concentration, D=Dep	oletion, RI	M=Reduced Matrix, C	S=Cove	red or Co	ated Sand	I Grains. ² Locati	on: PL=Pore Linir	ng, M=Matrix.			
¹ Type: C=Concentration, D=Depletion, RM=Reduced Matrix, CS=Covered or Coated Sand Grains. ² Location: PL=Pore Lining, M=Matrix. Hydric Soil Indicators: Indicators for Problematic Hydric Soils ³ :									c Soils³:			
Histo	sol (A1)		Polyvalue Below	lyvalue Below Surface (S8) (LRR R,				2 cm Muck (A10) (LRR K, L, MLRA 149B)				
Histic	Epipedon (A2)		MLRA 149B)				Coast Prairie Redox (A16) (LRR K, L, R)					
Black	Histic (A3)		Thin Dark Surface	ce (S9) (LRR R, M	LRA 149	B) 5 cm Mucky Peat or Peat (S3) (LRR K, L, R)					
Hydro	ogen Sulfide (A4)		High Chroma Sa	inds (S1	1) (LRR 🗜	(, L)	Polyvalue Below Surface (S8) (LRR K, L)					
	fied Layers (A5)		Loamy Mucky M			-	Thin Dark Surface (S9) (LRR K, L)					
	eted Below Dark Surfac	e (A11)	Loamy Gleyed N			, ,	Iron-Manganese Masses (F12) (LRR K, L, R)					
	Dark Surface (A12)	(, ,	Depleted Matrix		-,		Piedmont Floodplain Soils (F19) (MLRA 149B)					
	y Mucky Mineral (S1)		Redox Dark Sur		`		Mesic Spodic (TA6) (MLRA 144A, 145, 149B)					
							Red Parent Material (F21)					
	y Gleyed Matrix (S4)		Depleted Dark S				Very Shallow Dark Surface (TF12)					
	y Redox (S5)		Redox Depressi				Other (Explain in Remarks)					
	ped Matrix (S6)		Marl (F10) (LRR	K, L)			Other (Explain in Remarks)					
Dark	Surface (S7)											
³ Indicators	s of hydrophytic vegeta	tion and v	vetland hydrology mu	st be pre	esent, unle	ess disturt	oed or problematic.					
Restrictiv	e Layer (if observed)	:										
Type:												
Depth (i	inches):						Hydric Soil Prese	nt? Yes	No X			
Remarks:							•					

Project/Site: Avon Lake Gas Add	ition Project	City/County: Lo	orain	Sampling Date: 5/14/14				
Applicant/Owner: NRG Ohio Pipe	line Company LLC		State:					
Investigator(s): Travis Kessler, La		n Section, Towns	ship, Range: Not available					
Landform (hillside, terrace, etc.):			eave, convex, none):	Slope (%): 0 to 2				
Subregion (LRR or MLRA): LRR R	· · · · · · · · · · · · · · · · · · ·		Long: -82.0673968104	Datum: WGS 84				
Soil Map Unit Name: Holly silt loam		01.000.0		sification: Not available				
Are climatic / hydrologic conditions		time of year? Yes		in in Remarks.)				
Are Vegetation, Soil		-	Are "Normal Circumstances" p					
Are Vegetation , Soil			(If needed, explain any answe	rs in Remarks.)				
SUMMARY OF FINDINGS -	_		oint locations, transects	s, important features, etc.				
Hydrophytic Vegetation Present?	Yes X No	Is the San	npled Area					
Hydric Soil Present?	Yes X No	within a W	Vetland? Yes>	Yes X No				
Wetland Hydrology Present?	Yes X No	If yes, option	onal Wetland Site ID: WET_1	3				
Remarks: (Explain alternative pro PEM wetland feature within existing the second secon	·	rate report.)						
HYDROLOGY								
Wetland Hydrology Indicators:				licators (minimum of two required)				
Primary Indicators (minimum of or	•			oil Cracks (B6)				
X Surface Water (A1)		er-Stained Leaves (B9)						
X High Water Table (A2)		tic Fauna (B13)	· · · · · · · · · · · · · · · · · · ·					
X Saturation (A3)		Deposits (B15)	Dry-Season Water Table (C2) Crayfish Burrows (C8)					
Water Marks (B1) Sediment Deposits (B2)		ogen Sulfide Odor (C1)		n Visible on Aerial Imagery (C9)				
Sediment Deposits (B2) Drift Deposits (B3)		zed Rhizospheres on Livi ence of Reduced Iron (C4	· · · · —	• • • •				
Algal Mat or Crust (B4)		ent Iron Reduction in Tilled	· —	Stunted or Stressed Plants (D1) Geomorphic Position (D2)				
Iron Deposits (B5)		Muck Surface (C7)		Shallow Aquitard (D3)				
Inundation Visible on Aerial In		r (Explain in Remarks)		Microtopographic Relief (D4)				
Sparsely Vegetated Concave		(Explain in Remarks)	x FAC-Neut	• , , ,				
Field Observations:			<u></u>					
	es X No Dep	oth (inches): 0.1						
		oth (inches): 10						
		oth (inches): 4	Wetland Hydrology Prese	nt? Yes X No				
(includes capillary fringe)		· · · · · · · · · · · · · · · · · · ·						
Describe Recorded Data (stream	gauge, monitoring well, as	erial photos, previous insp	ections), if available:					
Remarks: Site was seasonably wet due to re	ecent heavy spring rains							

VEGETATION – Use scientific names of plants. Sampling Point: **WET 13** Absolute Dominant Indicator Tree Stratum (Plot size: 30' radius) % Cover **Dominance Test worksheet:** Species? Status **Number of Dominant Species** 2. That Are OBL, FACW, or FAC: (A) **Total Number of Dominant** (B) Species Across All Strata: 8 5. Percent of Dominant Species 6. That Are OBL, FACW, or FAC: 87.5% (A/B) Prevalence Index worksheet: =Total Cover Total % Cover of: Sapling/Shrub Stratum (Plot size: 15' radius) OBL species 10 x 1 = 40 Rubus multiformis ___ 20 FACW species x 2 = 80 x 3 = 2. FAC species **FACU** species 10 x 4 = UPL species 0 x 5 = 0 Column Totals: 120 310 (A) (B) 6. Prevalence Index = B/A = 2.58 **Hydrophytic Vegetation Indicators:** 20 =Total Cover 1 - Rapid Test for Hydrophytic Vegetation Herb Stratum (Plot size: 5' radius) X 2 - Dominance Test is >50% Typha angustifolia 30 Yes FAC X 3 - Prevalence Index is ≤3.0¹ 2. Solidago gigantea 20 Yes **FACW** 4 - Morphological Adaptations¹ (Provide supporting data in Remarks or on a separate sheet) 3. Rosa palustris 10 Yes OBL 10 **FACW** Problematic Hydrophytic Vegetation¹ (Explain) Yes 4. Anemone canadensis 10 **FACW** 5. Alliaria petiolata Yes ¹Indicators of hydric soil and wetland hydrology must 6. Cirsium arvense 10 Yes **FACU** be present, unless disturbed or problematic. Toxicodendron radicans 10 Yes FAC **Definitions of Vegetation Strata:** 8. Tree - Woody plants 3 in. (7.6 cm) or more in 9. diameter at breast height (DBH), regardless of height. 10 Sapling/shrub - Woody plants less than 3 in. DBH and greater than or equal to 3.28 ft (1 m) tall. Herb - All herbaceous (non-woody) plants, regardless 100 =Total Cover of size, and woody plants less than 3.28 ft tall. Woody Vine Stratum (Plot size: 15' radius) Woody vines - All woody vines greater than 3.28 ft in 1. height. Hydrophytic Vegetation Present? Yes X No No =Total Cover Remarks: (Include photo numbers here or on a separate sheet.) Very heavy leaf litter limited herbaceous stratum growth. .

SOIL Sampling Point: WET_13

Profile De	Profile Description: (Describe to the depth needed to document the indicator or confirm the absence of indicators.)											
Depth	Matrix		Redox	r Feature	es							
(inches)	Color (moist)	%	Color (moist)	%	Type ¹	Loc ²	Texture	Remarks				
0-8	10YR 3/1	100					Mucky Sand					
8-20	10YR 3/1	95	10YR 5/6	5	С	M	Sandy	Prominent redox concer	ntrations			
¹ Type: C=	Concentration, D=Dep	lotion D	M-Poducod Matrix, Ct	S=Covo	rod or Co	atod Sand	I Grains ² Lo	cation: PL=Pore Lining, M=N	Antrix			
	oil Indicators:	netion, K	VI-Reduced Matrix, C.	3-C0VE	red or Coa	aleu Sano		or Problematic Hydric Soils	_			
-	sol (A1)		Polyvalue Below	Surface	(S8) (I R	R R		ick (A10) (LRR K, L, MLRA				
	Epipedon (A2)		MLRA 149B)	Ouriace	, (00) (LI	ιν ιν,	Coast Prairie Redox (A16) (LRR K, L, R)					
			? Thin Dark Surfac	o (SO) (IDDD M	I DA 140						
	Histic (A3)							icky Peat or Peat (S3) (LRR	·			
	ogen Sulfide (A4)		High Chroma Sa			-		e Below Surface (S8) (LRR	N, L)			
	fied Layers (A5)		Loamy Mucky M			(, L)		k Surface (S9) (LRR K, L)				
	ted Below Dark Surfac	e (A11)	Loamy Gleyed M		2)		Iron-Manganese Masses (F12) (LRR K, L, R)					
	Dark Surface (A12)		Depleted Matrix				Piedmont Floodplain Soils (F19) (MLRA 149B)					
X Sandy	y Mucky Mineral (S1)		X Redox Dark Surf	ace (F6)		Mesic Spodic (TA6) (MLRA 144A, 145, 149B)					
Sandy	y Gleyed Matrix (S4)		Depleted Dark S	urface (l	F7)		Red Parent Material (F21)					
Sandy	y Redox (S5)		Redox Depression	ons (F8)			Very Shallow Dark Surface (TF12)					
Stripp	ed Matrix (S6)		Marl (F10) (LRR	K , L)			Other (E	xplain in Remarks)				
Dark S	Surface (S7)											
_												
	of hydrophytic vegeta		wetland hydrology mus	st be pre	esent, unle	ess disturi	bed or problematio). -				
	e Layer (if observed)											
Type:												
Depth (i	nches):						Hydric Soil Pr	esent? Yes X	No			
Remarks:												

Project/Site: Avon Lake Gas Add	lition Project (City/County: Lorain County		Sampling Date: 5/13/14		
Applicant/Owner: NRG Gas Pipeli				OH Sampling Point: UPL_14		
	auren Zielke, Aaron Gordon	Section, Township, Range:				
Landform (hillside, terrace, etc.):		cal relief (concave, convex,		Slope (%): 0 - 2		
` ' ' -	R, MLRA 139 Lat: 41.4266117344		, 32.0670705344	Datum: WGS 84		
Soil Map Unit Name: Holly silt loam				cation: none		
· · · · · · · · · · · · · · · · · · ·	on the site typical for this time of yea	r? Yes x No	(If no, explain			
			Circumstances" pre			
	, or Hydrologysignificantly , or Hydrologynaturally pro		xplain any answers			
	- Attach site map showing s					
Hydrophytic Vegetation Present?	Yes No X	Is the Sampled Area				
Hydric Soil Present?	Yes No X	within a Wetland?	Yes	No X		
Wetland Hydrology Present?	Yes No X	If yes, optional Wetland				
	ocedures here or in a separate report.					
HYDROLOGY						
Wetland Hydrology Indicators:			-	ators (minimum of two required)		
	ne is required; check all that apply)			Cracks (B6)		
Surface Water (A1)	Water-Stained Lo			atterns (B10)		
High Water Table (A2)	Aquatic Fauna (E		Moss Trim L			
Saturation (A3)	Marl Deposits (B			Water Table (C2)		
Water Marks (B1)	Hydrogen Sulfide		Crayfish Bu			
Sediment Deposits (B2)		pheres on Living Roots (C3)	Saturation Visible on Aerial Imagery (C9) Stunted or Stressed Plants (D1)			
Drift Deposits (B3)	Presence of Red					
Algal Mat or Crust (B4) Iron Deposits (B5)	Thin Muck Surfa	uction in Tilled Soils (C6)	Geomorphic Position (D2)			
Inundation Visible on Aerial In			Shallow Aquitard (D3) Microtopographic Relief (D4)			
Sparsely Vegetated Concave		Remarks)	FAC-Neutra			
 : _ · ·	Surface (DO)		I AO-NGUIIA	il Test (D3)		
Field Observations: Surface Water Present? Ye	es No x Depth (inches):					
	es Nox Depth (inches): es Nox Depth (inches):					
	es No x Depth (inches):		lydrology Present	? Yes No_X_		
(includes capillary fringe)	5 NO A Dopur (110.100).		lyurology i roos	1 163 <u>N</u>		
	gauge, monitoring well, aerial photos,	previous inspections), if av	railable:			
2000,000,000,000,000	gaago,og, 22 p	providuo mopositiono, ii ali	uliusis.			
Remarks: N/A						

VEGETATION – Use scientific names of plants. UPL 14 Sampling Point: Absolute Dominant Indicator Tree Stratum (Plot size: 30' radius) % Cover **Dominance Test worksheet:** Species? Status 1. **Number of Dominant Species** That Are OBL, FACW, or FAC: 2. (A) **Total Number of Dominant** Species Across All Strata: 4 (B) 5. Percent of Dominant Species (A/B) 6. That Are OBL, FACW, or FAC: 50.0% Prevalence Index worksheet: =Total Cover Total % Cover of: Sapling/Shrub Stratum (Plot size: 15' radius) OBL species x 1 = 0 Prunus serotina 20 Yes **FACU** FACW species x 2 = x 3 = 2. Acer negundo 20 Yes FAC FAC species 30 3. **FACU** species 120 x 4 = 4. **UPL** species 0 x 5 = 0 5. Column Totals: 150 570 (A) (B) 6. Prevalence Index = B/A = 3.80 **Hydrophytic Vegetation Indicators:** 40 =Total Cover 1 - Rapid Test for Hydrophytic Vegetation Herb Stratum (Plot size: 5' radius) 2 - Dominance Test is >50% Poa pratensis 70 Yes **FACU** 3 - Prevalence Index is ≤3.01 2. Alliaria petiolata 10 No **FACU** 4 - Morphological Adaptations¹ (Provide supporting data in Remarks or on a separate sheet) 10 3. Rosa multiflora No **FACU** 10 **FACU** Problematic Hydrophytic Vegetation¹ (Explain) Arctium minus No 5. ¹Indicators of hydric soil and wetland hydrology must 6. be present, unless disturbed or problematic. **Definitions of Vegetation Strata:** 8. Tree - Woody plants 3 in. (7.6 cm) or more in 9. diameter at breast height (DBH), regardless of height. Sapling/shrub - Woody plants less than 3 in. DBH and greater than or equal to 3.28 ft (1 m) tall. Herb - All herbaceous (non-woody) plants, regardless 100 =Total Cover of size, and woody plants less than 3.28 ft tall. Woody Vine Stratum (Plot size: 15' radius) Woody vines - All woody vines greater than 3.28 ft in 1. Vitis riparia Yes height. Hydrophytic 3. Vegetation Present? Yes No X 10 =Total Cover Remarks: (Include photo numbers here or on a separate sheet.) very heavy leaf litter did not allow abundant herbaceous stratum growth

SOIL Sampling Point: UPL_14

Profile De	escription: (Describe	to the dep	pth needed to docu	ment th	e indicato	or or conf	firm the absence of indica	ators.)			
Depth	Matrix		Redox	k Feature	es						
(inches)	Color (moist)	<u>%</u>	Color (moist)	%	Type ¹	Loc ²	Texture	Remark	S		
0-8	10YR 3/3	100					Sandy	mixed with g	gravel		
8-20	10YR 3/6	100					Sandy				
									_		
			_								
¹ Type: C=	-Concentration, D=Dep	oletion, RM	l=Reduced Matrix, C	S=Cove	red or Coa	ated Sand	I Grains. ² Location: F	PL=Pore Lining,	M=Matrix.		
	oil Indicators:						Indicators for Proble	ematic Hydric S	Soils ³ :		
Histos	sol (A1)	_	Polyvalue Below	Surface	(S8) (LR	RR,	2 cm Muck (A10)	(LRR K, L, ML	RA 149B)		
Histic	Epipedon (A2)		MLRA 149B)				Coast Prairie Red	dox (A16) (LRR	K, L, R)		
	Histic (A3)	_	Thin Dark Surface				B)5 cm Mucky Peat	or Peat (S3) (L	.RR K, L, R)		
	ogen Sulfide (A4)	_	High Chroma Sa			-	Polyvalue Below				
	fied Layers (A5)	_	Loamy Mucky M			(, L)	Thin Dark Surfac				
	eted Below Dark Surface	ce (A11) _	Loamy Gleyed N		2)		Iron-Manganese				
	Dark Surface (A12)	_	Depleted Matrix				Piedmont Floodp				
	y Mucky Mineral (S1)	_	Redox Dark Surf				Mesic Spodic (TA		A, 145, 149B)		
	y Gleyed Matrix (S4)	-	Depleted Dark S				Red Parent Mate	, ,	2)		
	y Redox (S5) ped Matrix (S6)	_	Redox Depression Marl (F10) (LRR				Very Shallow Dark Surface (TF12) Other (Explain in Remarks)				
	Surface (S7)	-	Wan (i 10) (ERR	IX, L)							
Baik	ounace (or)										
3Indicators	s of hydrophytic vegeta	ition and w	etland hydrology mu	st be pre	esent unle	ess disturt	ned or problematic				
	re Layer (if observed)										
Type:	, ,										
Depth (i	inches):						Hydric Soil Present?	Yes	No X		
Remarks:											
rtomanto.											

Applicant/Owner: NRG Ohio Pipeline Company LLC Investigator(s): Travis Kessler, Lauren Zielke, Aaron Gordon Section, Township, Range: Not available Landform (hillside, terrace, etc.): floodplains Local relief (concave, convex, none): Slope (%) Subregion (LRR or MLRA): LRR R, MLRA 139 Lat: 41.4264980851 Long: -82.0670262728 Datum: WC Soil Map Unit Name: Holly silt loam Are climatic / hydrologic conditions on the site typical for this time of year? Are Vegetation Soil On Hydrology Inturally problematic? (If needed, explain any answers in Remarks.) SUMMARY OF FINDINGS – Attach site map showing sampling point locations, transects, important features Hydrophytic Vegetation Present? Yes X No Hydrology Present? Yes X No If yes, optional Wetland Site ID: WET_14 Remarks: (Explain alternative procedures here or in a separate report.)	: 0 to 2 SS 84					
Investigator(s): Travis Kessler, Lauren Zielke, Aaron Gordon Section, Township, Range: Not available Landform (hillside, terrace, etc.): floodplains Local relief (concave, convex, none): Slope (%) Subregion (LRR or MLRA): LRR R, MLRA 139 Lat: 41.4264980851 Long: -82.0670262728 Datum: WC Soil Map Unit Name: Holly silt loam NWI classification: Not available Are climatic / hydrologic conditions on the site typical for this time of year? Yes x No (If no, explain in Remarks.) Are Vegetation , Soil , or Hydrology significantly disturbed? Are "Normal Circumstances" present? Yes x No Are Vegetation , Soil , or Hydrology naturally problematic? (If needed, explain any answers in Remarks.) SUMMARY OF FINDINGS – Attach site map showing sampling point locations, transects, important features Hydrophytic Vegetation Present? Yes X No Is the Sampled Area Hydric Soil Present? Yes X No If yes, optional Wetland? Yes X No If yes, optional Wetland Site ID: WET_14 Remarks: (Explain alternative procedures here or in a separate report.)	: 0 to 2 SS 84					
Landform (hillside, terrace, etc.): floodplains	SS 84					
Subregion (LRR or MLRA): LRR R, MLRA 139 Lat: 41.4264980851 Long: -82.0670262728 Datum: WC Soil Map Unit Name: Holly silt loam NWI classification: Not available Are climatic / hydrologic conditions on the site typical for this time of year? Yes x No (If no, explain in Remarks.) Are Vegetation , Soil , or Hydrology significantly disturbed? Are "Normal Circumstances" present? Yes x Are Vegetation , Soil , or Hydrology naturally problematic? (If needed, explain any answers in Remarks.) SUMMARY OF FINDINGS – Attach site map showing sampling point locations, transects, important features Hydrophytic Vegetation Present? Yes X No Is the Sampled Area within a Wetland? Yes X No Wetland Hydrology Present? Yes X No If yes, optional Wetland Site ID: WET_14 Remarks: (Explain alternative procedures here or in a separate report.)	SS 84					
Soil Map Unit Name: Holly silt loam Are climatic / hydrologic conditions on the site typical for this time of year? Are Vegetation, Soil, or Hydrologysignificantly disturbed? Are "Normal Circumstances" present? Yesx No (If no, explain in Remarks.) Are Vegetation, Soil, or Hydrologysignificantly disturbed? Are "Normal Circumstances" present? Yesx No (If needed, explain any answers in Remarks.) SUMMARY OF FINDINGS – Attach site map showing sampling point locations, transects, important features Hydrophytic Vegetation Present? YesX No Is the Sampled Area	No					
Are climatic / hydrologic conditions on the site typical for this time of year? Are Vegetation, Soil, or Hydrology significantly disturbed? Are "Normal Circumstances" present? Yesx No (If no, explain in Remarks.) Are Vegetation, Soil, or Hydrology naturally problematic? (If needed, explain any answers in Remarks.) SUMMARY OF FINDINGS – Attach site map showing sampling point locations, transects, important features Hydrophytic Vegetation Present? YesX No						
Are Vegetation, Soil, or Hydrology significantly disturbed? Are "Normal Circumstances" present? Yesx In the Vegetation, Soil, or Hydrology naturally problematic? (If needed, explain any answers in Remarks.) SUMMARY OF FINDINGS — Attach site map showing sampling point locations, transects, important features Hydrophytic Vegetation Present? YesX No Is the Sampled Area Hydric Soil Present? YesX No within a Wetland? YesX No Wetland Hydrology Present? YesX No If yes, optional Wetland Site ID: WET_14 Remarks: (Explain alternative procedures here or in a separate report.)						
Are Vegetation, Soil, or Hydrologynaturally problematic? (If needed, explain any answers in Remarks.) SUMMARY OF FINDINGS – Attach site map showing sampling point locations, transects, important features Hydrophytic Vegetation Present?						
SUMMARY OF FINDINGS – Attach site map showing sampling point locations, transects, important features Hydrophytic Vegetation Present? Yes X No	, etc.					
Hydric Soil Present? Yes X No within a Wetland? Yes X No Uf yes, optional Wetland Site ID: WET_14 Remarks: (Explain alternative procedures here or in a separate report.)						
Hydric Soil Present? Yes X No within a Wetland? Yes X No Uf yes, optional Wetland Site ID: WET_14 Remarks: (Explain alternative procedures here or in a separate report.)						
Wetland Hydrology Present? Yes X No If yes, optional Wetland Site ID: WET_14 Remarks: (Explain alternative procedures here or in a separate report.)						
HYDROLOGY						
Wetland Hydrology Indicators: Secondary Indicators (minimum of two re	<u>quired)</u>					
Primary Indicators (minimum of one is required; check all that apply) Surface Soil Cracks (B6)						
X Surface Water (A1) x Water-Stained Leaves (B9) Drainage Patterns (B10)						
X High Water Table (A2) Aquatic Fauna (B13) Moss Trim Lines (B16) And Reposition (A2)						
X Saturation (A3)						
1 						
Drift Deposits (B3) Presence of Reduced Iron (C4) Stunted or Stressed Plants (D1) Algal Mat or Crust (B4) Recent Iron Reduction in Tilled Soils (C6) Geomorphic Position (D2)						
Algal Mat or Crust (B4) Iron Deposits (B5) Recent Iron Reduction in Tilled Soils (C6) Thin Muck Surface (C7) Geomorphic Position (D2) Shallow Aquitard (D3)						
Inundation Visible on Aerial Imagery (B7) Other (Explain in Remarks) Microtopographic Relief (D4)						
Sparsely Vegetated Concave Surface (B8) Sparsely Vegetated Concave Surface (B8) The introduction Visible on Aerial Imagery (B7) Other (Explain in Remarks) X FAC-Neutral Test (D5)						
Field Observations:						
Surface Water Present? Yes X No Depth (inches): 0.1 Water Table Present? Yes X No Depth (inches): 5						
Saturation Present? Yes X No Depth (inches): 0 Wetland Hydrology Present? Yes X No (includes capillary fringe)						
Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available:						
Describe Necorded Data (Stream gauge, monitoring wen, acriai priotos, provided inspections), il divalable.						
Remarks: Site was seasonably wet due to recent heavy spring rains						

1. Ulmus americana	/EGETATION – Use scientific names of pla	nts.			Sampling Point: WET_14				
2. Carpinus caroliniana 3. Acer rubrum 30 Yes FAC 4. Carya condiformis 5. 10 No FAC 6. Species Across Al Strata: 7. Species Across Al Strata: 8. Species Across Al Strata: 9. Species Across Al Strata: 9. Species Across Al Actor Across Ac	Tree Stratum (Plot size: 30' radius)				Dominance Test worksheet:				
2. Carpinus caroliniana 30 Yes FAC Total Number of Dominant 4. Carya cordiformis 10 No FAC Species Across All Stratus 6 Percent of Dominant Species That Are OBL FACW, or FAC: 100.0% Prevalence Index worksheet: Total Number of Dominant Species That Are OBL FACW, or FAC: 100.0% Prevalence Index worksheet: Total % Cover of Multiply by: OBL species 0 x 1 = 0 OBL speci	1. Ulmus americana	30	Yes	FACW	Number of Dominant Species				
	2. Carpinus caroliniana	30	Yes	FAC	•	6	(A)		
A	3. Acer rubrum	30	Yes	FAC	Total Number of Dominant				
Percent of Dominant Species That Ave OBL, FAC: 100.0% or FAC: 100.0%	4. Carya cordiformis	10	No	FAC		6	(B)		
					•	400.00/			
Total % Cover of:			· ——		_	100.0%	(A/B)		
Sapling/Shrub Stratum Plot size: 15' radius 1. Ulmus americana 50 Yes FACW	7								
1. Ulmus americana		100	=Total Cover				_		
2. Carpinus caroliniana 10 No FAC FAC species 150 x 3 = 450 3. Carya cordiformis 10 No FAC FAC FAC species 150 x 3 = 450 4.	Sapling/Shrub Stratum (Plot size: 15' radius)				OBL species 0 x 1	= 0	_		
3. Carya cordiformis	1. Ulmus americana	50	Yes	FACW	FACW species 80 x 2	= 160	_		
1.	2. Carpinus caroliniana	10	No	FAC	FAC species 150 x 3	= 450			
Column Totals:	3. Carya cordiformis	10	No	FAC	FACU species 10 x 4	. = 40	_		
Prevalence Index = BIA = 2.71	4				UPL species 0 x 5	; = <u>0</u>			
Herb Stratum (Plot size: 5' radius) Total Cover Herb Stratum (Plot size: 5' radius) Total Cover Total	5				Column Totals: 240 (A)	650	(B)		
Total Cover Total Cover 1 - Rapid Test for Hydrophytic Vegetation X 2 - Dominance Test is >50% X 3 - Prevalence Index is ≤3.0¹ 4 - Morphological Adaptations¹ (Provide suppose data in Remarks or on a separate sheet) Problematic Hydrophytic Vegetation¹ (Explain to the present, unless disturbed or problematic. Tree – Woody plants 3 in. (7.6 cm) or more in diameter at breast height (DBH), regardless of he saping/shrub – Woody plants less than 3 in. De and greater than or equal to 3.28 ft (1 m) tall. Herb – All herbaceous (non-woody) plants, regardless of size, and woody vines greater than 3.28 ft tall. Woody vines – All woody vines greater than 3.28 ft tall. Hydrophytic Vegetation Tree – Woody plants less than 3.28 ft tall. Hydrophytic Vegetation Tree – Woody plants less than 3.28 ft tall. Hydrophytic Vegetation Tree – Woody plants less than 3.28 ft tall. Hydrophytic Vegetation Tree – Woody plants less than 3.28 ft tall. Hydrophytic Vegetation Tree – Woody plants less than 3.28 ft tall. Hydrophytic Vegetation Tree – Woody plants less than 3.28 ft tall. Hydrophytic Vegetation Tree – Woody plants less than 3.28 ft tall. Hydrophytic Vegetation Tree – Total Cover Tree – Tree	6.				Prevalence Index = B/A =	2.71			
Herb Stratum (Plot size: 5' radius)	7.				Hydrophytic Vegetation Indicate	ors:			
Herb Stratum (Plot size: 5' radius)		70	=Total Cover		1 - Rapid Test for Hydrophytic	c Vegetation			
1. Poa trivialis 2. Acer rubrum 2.0 Yes FAC 3. Rosa multiflora 4. Enemion biternatum 10 No FAC 5. 6. 7. 8. 9. 10. 10. 10. 10. 10. 10. 10. 10. 10. 10	Herb Stratum (Plot size: 5' radius)		•		1 	-			
2. Acer rubrum 2. Acer rubrum 3. Rosa multiflora 4. Enemion bitematum 5. Enemion bitematum 10. No. FACU 4. Enemion bitematum 10. No. FAC 5. Enemion bitematum 10. No. FAC 11 Problematic Hydrophytic Vegetation (Explain to present, unless disturbed or problematic.) 7. Enemion bitematum 8. Enemion bitematum 9. Enemion bitematum 10. Enemion bitematum 11. Enemion bitematum 12. Enemion bitematum 13. No. FAC 14 - Morphological Adaptations (Provide support data in Remarks or on a separate sheet) 14. Enemion bitematum 15 No. FAC 16 Problematic Hydrophytic Vegetation (Explain to present, unless disturbed or problematic. 16 Definitions of Vegetation Strata: 17 Tree - Woody plants 3 in. (7.6 cm) or more in diameter at breast height (DBH), regardless of he and greater than or equal to 3.28 ft (1 m) tall. 16 Herb - All herbaceous (non-woody) plants, regard of size, and woody plants less than 3.28 ft tall. 17 Woody Vines - All woody vines greater than 3.28 height. 18 Hydrophytic Vegetation 19 Yes X No Present? 19 Yes X No Problematic Hydrophytic Vegetation Present? 10 Problematic Hydrophytic Vegetation Present? 10 Problematic Hydrophytic Vegetation Present? 11 Problematic Hydrophytic Vegetation Present? 12 Problematic Hydrophytic Vegetation Present? 13 No Present? 14 - Morphological Adaptations (Provide supported that in Remarks or on a separate sheet) 15 Problematic Hydrophytic Vegetation Present? 15 No Problematic Hydrophytic Vegetation Present? 16 No Problematic Hydrophytic Vegetation Present? 16 No Problematic Hydrophytic Vegetation Present? 17 No Problematic Hydrophytic Vegetation Present? 18 No Problematic Hydrophytic Vegetation Present? 18 No Problematic Hydrophytic Vegetation Present? 19 No Problematic Hydrophytic Vegetation Present? 19 No Problematic Hydrophytic Vegetation Present? 10 No Problematic Hydrophytic Vegetation Present? 10 No Problematic Hydrophytic Vegetation Present? 10 No Problematic Hydrophytic Vegetation Present Problematic Hydrophytic Vegetation Present Problematic Hydrophyti		30	Yes	FAC					
3. Rosa multiflora 4. Enemion biternatum 5.		20				s1 (Provide sup	porting		
4. Enemion biternatum 10 No FAC Problematic Hydrophytic Vegetation 1 (Explain 5. 1 Indicators of hydric soil and wetland hydrology metapresent, unless disturbed or problematic. Definitions of Vegetation Strata: Tree – Woody plants 3 in. (7.6 cm) or more in diameter at breast height (DBH), regardless of hee and greater than or equal to 3.28 ft (1 m) tall. Sapling/shrub – Woody plants less than 3 in. DE and greater than or equal to 3.28 ft (1 m) tall. Herb – All herbaceous (non-woody) plants, regard of size, and woody plants less than 3.28 ft tall. Woody Vine Stratum (Plot size: 15' radius) 1. Woody vines – All woody vines greater than 3.28 height. Hydrophytic Vegetation Present? Yes X No =Total Cover					1 <u> </u>				
1 Indicators of hydric soil and wetland hydrology method be present, unless disturbed or problematic. Definitions of Vegetation Strata: Tree — Woody plants 3 in. (7.6 cm) or more in diameter at breast height (DBH), regardless of he and greater than or equal to 3.28 ft (1 m) tall. Herb — All herbaceous (non-woody) plants, regard of size, and woody plants less than 3.28 ft tall. Woody Vine Stratum (Plot size: 15' radius) 1.					Problematic Hydrophytic Vege	etation ¹ (Expla	in)		
Indicators of hydric soil and wetland hydrology in be present, unless disturbed or problematic.		10	140	TAO					
7. Definitions of Vegetation Strata: 8. Tree – Woody plants 3 in. (7.6 cm) or more in diameter at breast height (DBH), regardless of he sand greater than or equal to 3.28 ft (1 m) tall. 11. Sapling/shrub – Woody plants less than 3 in. DE and greater than or equal to 3.28 ft (1 m) tall. Herb – All herbaceous (non-woody) plants, regard of size, and woody plants less than 3.28 ft tall. Woody Vine Stratum (Plot size: 15' radius) 1. Woody vines – All woody vines greater than 3.28 height. Hydrophytic Vegetation Present? Yes X No			· <u></u>				must		
Tree – Woody plants 3 in. (7.6 cm) or more in diameter at breast height (DBH), regardless of he sapling/shrub – Woody plants less than 3 in. DE and greater than or equal to 3.28 ft (1 m) tall. Herb – All herbaceous (non-woody) plants, regard of size, and woody plants less than 3.28 ft tall. Woody Vine Stratum (Plot size: 15' radius) 1.									
10.									
Sapling/shrub – Woody plants less than 3 in. DE and greater than or equal to 3.28 ft (1 m) tall. Herb – All herbaceous (non-woody) plants, regard of size, and woody plants less than 3.28 ft tall. Woody Vine Stratum (Plot size: 15' radius) 1.			· ——				eiaht		
11	· · · · · · · · · · · · · · · · · · ·				diameter at breast neight (DBH), i	cgaraicss of it	cigiit.		
Herb – All herbaceous (non-woody) plants, regard of size, and woody plants less than 3.28 ft tall. Woody Vine Stratum (Plot size: 15' radius) 1.							ВН		
Total Cover					and greater than or equal to 3.26 i	t (1 III) tall.			
1	12.	70	=Total Cover				rdless		
3 Hydrophytic Vegetation Present? Yes X No =Total Cover	· · · · · · · · · · · · · · · · · · ·				-	reater than 3.2	28 ft in		
3 Hydrophytic Vegetation Present? Yes X No =Total Cover					_ ĭ				
4	2		· ——						
=Total Cover						No			
	·		=Total Cavar		11636III: 163 <u>\</u>	140			
Remarks: (Include photo numbers here or on a separate sheet.)	Demorko: //poludo photo purchare hare as as as				<u> </u>				

Very heavy leaf litter limited herbaceous stratum growth. .

SOIL Sampling Point: WET_14

Profile Description: (Describe to the d	•	or or conf	firm the absence of	of indicators.)					
Depth Matrix		Feature		. 2	- .				
(inches) Color (moist) %	Color (moist)	<u>%</u>	Type ¹	Loc ²	Texture		Remarks		
0-8 10YR 3/1 100					Mucky Sand				
8-20 10YR 3/1 95	10YR 5/6	5	С	M	Sandy	Prominent	redox cond	centrations	
<u> </u>									
					 ·				
									
¹ Type: C=Concentration, D=Depletion, R	M=Reduced Matrix, CS	3=Cover	red or Coa	ated Sand		ation: PL=Por			
Hydric Soil Indicators:						r Problematic	-		
Histosol (A1)	Polyvalue Below	Surface	: (S8) (LR	R R,	2 cm Muck (A10) (LRR K, L, MLRA 149B) Coast Prairie Redox (A16) (LRR K, L, R)				
Histic Epipedon (A2)	MLRA 149B)	- (00) (I D A 440					
Black Histic (A3)	? Thin Dark Surface					cky Peat or Pea			
Hydrogen Sulfide (A4)	High Chroma Sar			-		Below Surface			
Stratified Layers (A5) Depleted Below Dark Surface (A11)	Loamy Mucky Min			∖, ∟)		Surface (S9)			
Thick Dark Surface (A12)	Loamy Gleyed M. Depleted Matrix (<u>-)</u>		Iron-Manganese Masses (F12) (LRR K, L, R)				
X Sandy Mucky Mineral (S1)	X Redox Dark Surfa		`		Piedmont Floodplain Soils (F19) (MLRA 149B) Mesic Spodic (TA6) (MLRA 144A, 145, 149B)				
Sandy Gleyed Matrix (S4)	Depleted Dark Su					ent Material (F2		140, 1405)	
Sandy Redox (S5)	Redox Depressio					llow Dark Surfa			
Stripped Matrix (S6)	Marl (F10) (LRR	, ,				plain in Remar			
Dark Surface (S7)									
									
³ Indicators of hydrophytic vegetation and	wetland hydrology mus	st be pre	esent, unle	ess disturt	oed or problematic.				
Restrictive Layer (if observed):									
Type:									
Depth (inches):					Hydric Soil Pre	sent? Y	es X	No	
Remarks:									

Project/Site: Avon Lake Ga	s Addition Project	C	ity/County: Lorain Cour	nty	Sampling Date: 5/13/14			
Applicant/Owner: NRG Gas	Pipeline Company LLC			State:				
Investigator(s): Travis Kess			ection, Township, Rang	e: Not available				
Landform (hillside, terrace, et			al relief (concave, conve		s Slope (%): 0 - 2			
Subregion (LRR or MLRA): L	RR R. MLRA 139 La			: -82.0675396935	Datum: WGS 84			
Soil Map Unit Name: Haskins					ification: none			
Are climatic / hydrologic cond		for this time of year	? Yes x No		n in Remarks.)			
Are Vegetation, Soil	-	-		nal Circumstances" p				
Are Vegetation, Soil				d, explain any answe				
· 	·	<u> </u>		tions, transects	s, important features, etc.			
Hydrophytic Vegetation Pres	sent? Yes	No_X	Is the Sampled Area					
Hydric Soil Present?	Yes		within a Wetland?	Yes	NoX			
Wetland Hydrology Present	? Yes	No X	If yes, optional Wetla	ind Site ID:	-			
HYDROLOGY								
Wetland Hydrology Indica				-	icators (minimum of two required)			
Primary Indicators (minimun	n of one is required; chec				oil Cracks (B6)			
Surface Water (A1)	_	Water-Stained Le			Patterns (B10)			
High Water Table (A2)	_	Aquatic Fauna (B			Lines (B16)			
Saturation (A3)	_	Marl Deposits (B1			on Water Table (C2)			
Water Marks (B1)	_	Hydrogen Sulfide			Burrows (C8)			
Sediment Deposits (B2)			heres on Living Roots (
Drift Deposits (B3)	_	Presence of Redu			Stunted or Stressed Plants (D1)			
Algal Mat or Crust (B4) Iron Deposits (B5)			ction in Tilled Soils (C6	· — ·	Geomorphic Position (D2)			
l — ' ' '		Thin Muck Surfac			Shallow Aquitard (D3)			
Inundation Visible on Ad		Other (Explain in	Remarks)		Microtopographic Relief (D4) FAC-Neutral Test (D5)			
Sparsely Vegetated Co	ncave Surface (B8)			FAC-Neut	rai Test (D5)			
Field Observations:	Was No	Dan Ha (in ala aa)						
Surface Water Present?	Yes No x	_ ' ' '						
Water Table Present? Saturation Present?	Yes No x			d Hydrology Presei	nt2 Von No V			
(includes capillary fringe)	Yes No x	Depth (inches):	wellan	a nyarology Fresei	nt? Yes No X			
Describe Recorded Data (st	ream gauge monitoring	well aerial photos	previous inspections) it	f available				
Describe recorded bata (or	Team gauge, monitoring	Well, aeriai priotos,	previous irispediacio, i	avallabic.				
Remarks: N/A								

VEGETATION – Use scientific names of plants. UPL 15 Sampling Point: Absolute Dominant Indicator Tree Stratum (Plot size: 30' radius) **Dominance Test worksheet:** % Cover Species? Status 50 **FACU** Acer rubrum Yes **Number of Dominant Species** That Are OBL, FACW, or FAC: 2. Acer saccharum **FACU** (A) 3. **Total Number of Dominant** (B) 4. Species Across All Strata: 8 5. Percent of Dominant Species 6. That Are OBL, FACW, or FAC: 37.5% (A/B) Prevalence Index worksheet: 100 =Total Cover Total % Cover of: Sapling/Shrub Stratum (Plot size: 15' radius) OBL species x 1 = 0 Acer rubrum 50 Yes FAC FACW species x 2 = x 3 = 2. Ulmus rubra 30 Yes FAC FAC species 90 270 3. Prunus serotina 20 Yes **FACU FACU** species 150 x 4 = 4. **UPL** species 0 x 5 = 0 5. Column Totals: 240 870 (A) (B) 6. Prevalence Index = B/A = 3.63 **Hydrophytic Vegetation Indicators:** 100 =Total Cover 1 - Rapid Test for Hydrophytic Vegetation 5' radius) 2 - Dominance Test is >50% Herb Stratum (Plot size: Carex pensylvanica 20 Yes **FACU** 3 - Prevalence Index is ≤3.01 2. Geranium maculatum 10 Yes **FACU** 4 - Morphological Adaptations¹ (Provide supporting data in Remarks or on a separate sheet) 3. Plantago rugelii 10 Yes FAC Problematic Hydrophytic Vegetation¹ (Explain) 4. 5. ¹Indicators of hydric soil and wetland hydrology must 6. be present, unless disturbed or problematic. **Definitions of Vegetation Strata:** 8. Tree - Woody plants 3 in. (7.6 cm) or more in 9. diameter at breast height (DBH), regardless of height. Sapling/shrub - Woody plants less than 3 in. DBH and greater than or equal to 3.28 ft (1 m) tall. Herb - All herbaceous (non-woody) plants, regardless 40 =Total Cover of size, and woody plants less than 3.28 ft tall. Woody Vine Stratum (Plot size: 15' radius) Woody vines - All woody vines greater than 3.28 ft in 1. height. Hydrophytic Vegetation Present? Yes ____ No _X =Total Cover Remarks: (Include photo numbers here or on a separate sheet.) very heavy leaf litter did not allow abundant herbaceous stratum growth

SOIL Sampling Point: UPL_15

		to the de	-	or or conf	firm the absence of ind	cators.)				
Depth (inches)	Matrix Color (moist)	%		c Feature		Loc ²	Touturo	Remar	leo.	
(inches)	Color (moist)	70	Color (moist)	%	Type ¹	LOC	Texture	Remai	KS	
0-8	10YR 3/3	100					Sandy	mixed with	gravel	
8-20	10YR 3/6	100					Sandy			
1- 0							2 2			
	Concentration, D=De	pletion, RI	M=Reduced Matrix, C	S=Cove	red or Coa	ated Sand		PL=Pore Lining		
-	oil Indicators: sol (A1)		Polyvalue Below	Surface	\ (SQ\ (I D	D D	Indicators for Prob	olematic Hydric 0) (LRR K, L, Mi		
	Epipedon (A2)		MLRA 149B)	Suriace	; (30) (LK	κκ,		edox (A16) (LRF		1
	Histic (A3)		Thin Dark Surfac	e (S9) (LRR R. M	ILRA 149		at or Peat (S3) (R)
	gen Sulfide (A4)		High Chroma Sa					w Surface (S8) (I		,
	fied Layers (A5)		Loamy Mucky M			-		ace (S9) (LRR K		
	ted Below Dark Surfa	ce (A11)	Loamy Gleyed M			, ,		e Masses (F12)		R)
	Dark Surface (A12)	` ,	Depleted Matrix		,			lplain Soils (F19		
Sandy	y Mucky Mineral (S1)		Redox Dark Surf	ace (F6)		Mesic Spodic (ΓA6) (MLRA 14 4	IA, 145, 14	9B)
Sandy	y Gleyed Matrix (S4)		Depleted Dark S	urface (l	F7)		Red Parent Ma	terial (F21)		
Sandy	y Redox (S5)		Redox Depression	ons (F8)			Very Shallow D	ark Surface (TF	12)	
Stripp	ed Matrix (S6)		Marl (F10) (LRR	K , L)			Other (Explain	n Remarks)		
Dark	Surface (S7)									
2										
	of hydrophytic vegeta		wetland hydrology mu	st be pre	esent, unle	ess disturl	bed or problematic.			
	e Layer (if observed)):								
Type:										
Depth (i	nches):						Hydric Soil Present?	Yes	No	X
Remarks:										

Project/Site: Avon Lake Gas Addition Project	City/County: Lorain	Sampling Date: 5/13/14				
Applicant/Owner: NRG Ohio Pipeline Company LLC		State: OH Sampling Point: WET_15				
Investigator(s): Travis Kessler, Lauren Zielke, Aaron Gord	on Section, Township, Range:					
Landform (hillside, terrace, etc.): tillplains, lakeplains	Local relief (concave, convex, r					
Subregion (LRR or MLRA): LRR R, MLRA 139 Lat: 41.4	·	2.0673322504 Datum: WGS 84				
	242030773 Long0.					
Soil Map Unit Name: Haskins loam		NWI classification: Not available				
Are climatic / hydrologic conditions on the site typical for this		(If no, explain in Remarks.)				
Are Vegetation, Soil, or Hydrology		Circumstances" present? Yes x No No				
Are Vegetation, Soil, or Hydrology	naturally problematic? (If needed, ex	xplain any answers in Remarks.)				
SUMMARY OF FINDINGS – Attach site map s	howing sampling point locatio	ns, transects, important features, etc.				
Lludraphytic Vegetation Present?	lo the Compled Area					
	lo Is the Sampled Area within a Wetland?	Yes X No				
	If yes, optional Wetland					
Remarks: (Explain alternative procedures here or in a sep		<u> </u>				
PFO wetland feature	arate report.)					
LIVERGIAGY						
HYDROLOGY						
Wetland Hydrology Indicators:		Secondary Indicators (minimum of two required)				
Primary Indicators (minimum of one is required; check all t		Surface Soil Cracks (B6) Drainage Patterns (B10)				
	er-Stained Leaves (B9) atic Fauna (B13)	Moss Trim Lines (B16)				
	l Deposits (B15)	Dry-Season Water Table (C2)				
	rogen Sulfide Odor (C1)	Crayfish Burrows (C8)				
	dized Rhizospheres on Living Roots (C3)	Saturation Visible on Aerial Imagery (C9)				
	sence of Reduced Iron (C4)	Stunted or Stressed Plants (D1)				
Algal Mat or Crust (B4) Rec	ent Iron Reduction in Tilled Soils (C6)	Geomorphic Position (D2)				
Iron Deposits (B5) Thir	Muck Surface (C7)	Shallow Aquitard (D3)				
Inundation Visible on Aerial Imagery (B7) Other	er (Explain in Remarks)	Microtopographic Relief (D4)				
Sparsely Vegetated Concave Surface (B8)		x FAC-Neutral Test (D5)				
Field Observations:						
	epth (inches): 0.1					
	epth (inches): 12					
	epth (inches): 8 Wetland H	ydrology Present? Yes X No No				
(includes capillary fringe) Describe Recorded Data (stream gauge, monitoring well, a		nilable:				
Describe Recorded Data (Stream gauge, monitoring well, a	eriai priotos, previous irispections), ii ava	allable.				
Remarks:						
Site was seasonably wet due to recent heavy spring rains						

VEGETATION – Use scientific names of plants. Sampling Point: WET 15 Absolute Dominant Indicator Tree Stratum (Plot size: 30' radius) % Cover **Dominance Test worksheet:** Species? Status 100 FAC Acer rubrum Yes **Number of Dominant Species** 2. That Are OBL, FACW, or FAC: (A) **Total Number of Dominant** 4. Species Across All Strata: 3 (B) 5. Percent of Dominant Species 6. That Are OBL, FACW, or FAC: 100.0% (A/B) Prevalence Index worksheet: 100 =Total Cover Total % Cover of: Sapling/Shrub Stratum (Plot size: 15' radius) OBL species x 1 = 0 Acer rubrum 100 FAC FACW species x 2 = x 3 = 2. FAC species 240 **FACU** species 0 x 4 = UPL species 0 x 5 = Column Totals: 240 720 (A) (B) 6. Prevalence Index = B/A = 3.00 **Hydrophytic Vegetation Indicators:** 100 =Total Cover 1 - Rapid Test for Hydrophytic Vegetation Herb Stratum (Plot size: 5' radius) X 2 - Dominance Test is >50% Acer rubrum 40 X 3 - Prevalence Index is ≤3.0¹ Yes 2. 4 - Morphological Adaptations¹ (Provide supporting data in Remarks or on a separate sheet) Problematic Hydrophytic Vegetation¹ (Explain) 5. ¹Indicators of hydric soil and wetland hydrology must 6. be present, unless disturbed or problematic. **Definitions of Vegetation Strata:** 8. Tree - Woody plants 3 in. (7.6 cm) or more in 9. diameter at breast height (DBH), regardless of height. Sapling/shrub - Woody plants less than 3 in. DBH and greater than or equal to 3.28 ft (1 m) tall. Herb - All herbaceous (non-woody) plants, regardless 40 =Total Cover of size, and woody plants less than 3.28 ft tall. Woody Vine Stratum (Plot size: 15' radius) Woody vines - All woody vines greater than 3.28 ft in 1. height. Hydrophytic Vegetation Present? Yes X_ No ____ =Total Cover Remarks: (Include photo numbers here or on a separate sheet.) Very heavy leaf litter limited herbaceous stratum growth. .

SOIL Sampling Point: WET_15

Profile De	Profile Description: (Describe to the depth needed to document the indicator or confirm the absence of indicators.)											
Depth	Matrix		Redox	r Feature	es							
(inches)	Color (moist)	%	Color (moist)	%	Type ¹	Loc ²	Texture	Remarks				
0-8	2.5Y 2.5/1	100					Mucky Sand					
8-20	2.5Y 6/4	90	10YR 4/6	10	С	M	Sandy	Distinct redox concentrations				
¹ Type: C=	=Concentration, D=Dep	letion, RI	M=Reduced Matrix, C	S=Cover	red or Coa	ated Sand	Grains. ² Lo	cation: PL=Pore Lining, M=Matrix.				
	oil Indicators:	•	•					or Problematic Hydric Soils ³ :				
Histo	sol (A1)		Polyvalue Below	Surface	(S8) (LR	RR,	2 cm Mu	ick (A10) (LRR K, L, MLRA 149B)				
Histic	Epipedon (A2)		MLRA 149B)				Coast Pr	rairie Redox (A16) (LRR K, L, R)				
Black	Histic (A3)		Thin Dark Surface	e (S9) (l	LRR R, M	LRA 149	B)5 cm Mu	icky Peat or Peat (S3) (LRR K, L, R)				
Hydro	ogen Sulfide (A4)		High Chroma Sa	nds (S1	1) (LRR 🛚	(, L)	Polyvalu	e Below Surface (S8) (LRR K, L)				
Strati	fied Layers (A5)		Loamy Mucky M	ineral (F	1) (LRR k	(, L)	Thin Dar	rk Surface (S9) (LRR K, L)				
Deple	eted Below Dark Surfac	e (A11)	Loamy Gleyed M	latrix (F2	2)		Iron-Manganese Masses (F12) (LRR K, L, R)					
Thick	Dark Surface (A12)		Depleted Matrix	(F3)			Piedmont Floodplain Soils (F19) (MLRA 149B)					
X Sand	y Mucky Mineral (S1)		X Redox Dark Surf	ace (F6))		Mesic Spodic (TA6) (MLRA 144A, 145, 149B)					
Sand	y Gleyed Matrix (S4)		Depleted Dark S	urface (F	- 7)		Red Parent Material (F21)					
Sand	y Redox (S5)		Redox Depression	ons (F8)			Very Sha	allow Dark Surface (TF12)				
Stripp	ped Matrix (S6)		Marl (F10) (LRR	K , L)			Other (E	xplain in Remarks)				
Dark	Surface (S7)											
	s of hydrophytic vegeta		vetland hydrology mu	st be pre	esent, unle	ess disturl	bed or problematio) <u>. </u>				
	e Layer (if observed)											
Type:												
Depth (i	inches):						Hydric Soil Pro	esent? Yes X No No				
Remarks:												

Project/Site: Avon Lake Ga	s Addition Project	С	ity/County: Lorain		Sampli	ing Date:	5/13/1	4
Applicant/Owner: NRG Ohio	Pipeline Company LLC			State:	<u>—</u> ОН :	Sampling F	oint:	UP_16
Investigator(s): Travis Kess		Gordon Se	ection, Township, Range	: Not available	_		•	
Landform (hillside, terrace, et			al relief (concave, convex			Slop	e (%):	0 to 2
Subregion (LRR or MLRA): L	· ———			-82.06738212		 Datum		
Soil Map Unit Name: Holly sil			· · ·		ification:	Not availab		<u> </u>
Are climatic / hydrologic cond		or this time of year	? Yes x No		_			
Are Vegetation , Soil	-	-		al Circumstances" p		Yes	x N	٧o
Are Vegetation , Soil				explain any answe				_
SUMMARY OF FINDIN						,	ures,	, etc.
Hydrophytic Vegetation Pres	sent? Yes	No X	Is the Sampled Area					
Hydric Soil Present?	Yes		within a Wetland?	Yes	No	X		
Wetland Hydrology Present	? Yes	No X	If yes, optional Wetlan	d Site ID:				
Remarks: (Explain alternati Upland terrace adjacent to F	•							
HYDROLOGY								
Wetland Hydrology Indica				Secondary Ind			wo rec	<u>uired)</u>
Primary Indicators (minimum	n of one is required; check			Surface S		' '		
Surface Water (A1)		Water-Stained Le		Drainage				
High Water Table (A2)		Aquatic Fauna (B		Moss Trim				
Saturation (A3)		Marl Deposits (B1		Dry-Season Water Table (C2)				
Water Marks (B1)		Hydrogen Sulfide		<u> </u>				
Sediment Deposits (B2)	·	-	· · · · · · · · · · · · · · · · · · ·			Saturation Visible on Aerial Imagery (C9)		
Drift Deposits (B3)		-		Stunted or Stressed Plants (D1) Geomorphic Position (D2)				
Algal Mat or Crust (B4) Iron Deposits (B5)		-	ction in Tilled Soils (C6)	Geomorphic Position (D2)				
l — ' ' '		Thin Muck Surfac		Shallow Aquitard (D3)				
Inundation Visible on A		Other (Explain in	Remarks)	Microtopographic Relief (D4) FAC-Neutral Test (D5)				
Sparsely Vegetated Cor	ncave Surface (B8)			FAC-Neut	rai Test (D	(35)		
Field Observations:	V N- V	Daniel (in the sale						
Surface Water Present?	Yes No X	_						
Water Table Present?	Yes No X			Understand Descen		V	Na	V
Saturation Present? (includes capillary fringe)	Yes NoX	Depth (inches):	vveiland	Hydrology Presei	IL? 1	Yes	NO	X
Describe Recorded Data (st	ream gauge monitoring v	vell aerial photos.	nrevious inspections), if a	availahle:				
Describe Notorided Data (of	ream gauge, monitoring .	veli, aciiai priotoo,	previous inspections, i	avallabic.				
Remarks:								
Site was seasonably wet du	e to recent heavy spring r	ains						
	, , , , , , , , , , , , , , , , , , ,							

VEGETATION – Use scientific names of plants. UP 16 Sampling Point: Absolute Dominant Indicator Tree Stratum (Plot size: 30' radius) % Cover **Dominance Test worksheet:** Species? Status 30 **FACU** Acer saccharum Yes **Number of Dominant Species** That Are OBL, FACW, or FAC: 2. Acer rubrum Yes FAC (A) Quercus macrocarpa 30 Yes **FACU Total Number of Dominant** (B) 4. Species Across All Strata: 7 5. Percent of Dominant Species 6. That Are OBL, FACW, or FAC: 42.9% (A/B) Prevalence Index worksheet: 90 =Total Cover Total % Cover of: Sapling/Shrub Stratum (Plot size: 15' radius) **OBL** species x 1 = 75 Cornus sericea 30 Yes **FACW FACW** species x 2 = 150 x 3 = 2. Ulmus americana 30 Yes **FACW** FAC species 45 135 3. Acer saccharum 40 Yes **FACU FACU** species 160 x 4 = 4. **UPL** species 0 x 5 = 0 5. Column Totals: 280 (A) 925 (B) 6. Prevalence Index = B/A = 3.30 **Hydrophytic Vegetation Indicators:** 100 =Total Cover 1 - Rapid Test for Hydrophytic Vegetation 5' radius) 2 - Dominance Test is >50% Herb Stratum (Plot size: Podophyllum peltatum 60 Yes **FACU** 3 - Prevalence Index is ≤3.01 2. Anemone canadensis 15 No **FACW** 4 - Morphological Adaptations¹ (Provide supporting data in Remarks or on a separate sheet) 3. Enemion biternatum 15 FAC No Problematic Hydrophytic Vegetation¹ (Explain) 4. 5. ¹Indicators of hydric soil and wetland hydrology must 6. be present, unless disturbed or problematic. **Definitions of Vegetation Strata:** 8. Tree - Woody plants 3 in. (7.6 cm) or more in 9. diameter at breast height (DBH), regardless of height. Sapling/shrub - Woody plants less than 3 in. DBH and greater than or equal to 3.28 ft (1 m) tall. Herb - All herbaceous (non-woody) plants, regardless 90 =Total Cover of size, and woody plants less than 3.28 ft tall. Woody Vine Stratum (Plot size: 15' radius) Woody vines - All woody vines greater than 3.28 ft in 1. height. Hydrophytic Vegetation Present? Yes ____ No _X =Total Cover Remarks: (Include photo numbers here or on a separate sheet.) Very heavy leaf litter limited herbaceous stratum growth.

SOIL Sampling Point: UP_16

Profile Description: (Describe to the depth needed to document the indicator or confirm the absence of indicators.)										·		
Depth	Matrix			k Feature								
(inches)	Color (moist)	%	Color (moist)	%	Type ¹	Loc ²	Texture		Remarks			
0-18	2.5Y 3/3	100					Loamy/Clayey					
18-20	2.5Y 5/1	90	10YR 5/8 2 C M Mucky Loam/Clay Faint redox concentred							ntrations	3	
			_									
								-				
¹ Type: C=	=Concentration, D=Dep	oletion, RI	M=Reduced Matrix, C	S=Cove	red or Coa	ated San	d Grains. ² Lo	cation: PL=	Pore Lining, M	l=Matrix	ζ.	
Hydric So	oil Indicators:						Indicators for	or Problema	atic Hydric So	ils³:		
Histo	sol (A1)		Polyvalue Below	Surface	(S8) (LR	RR,	2 cm Mu	ıck (A10) (LF	RR K, L, MLR	A 149B)	
Histic	Epipedon (A2)		MLRA 149B)				Coast P	rairie Redox	(A16) (LRR K	, L, R)		
Black	Histic (A3)		Thin Dark Surface	e (S9) (LRR R, M	LRA 149	9Β) 5 cm Μι	icky Peat or	Peat (S3) (LR	RK, L,	R)	
Hydro	ogen Sulfide (A4)		High Chroma Sa	nds (S1	1) (LRR K	(, L)	Polyvalu	ie Below Sur	rface (S8) (LRI	R K, L)		
	fied Layers (A5)		Loamy Mucky M			-			69) (LRR K, L)			
		o (A11)				 L)					D)	
	eted Below Dark Surfac	æ (ATT)	Loamy Gleyed N		<u>2)</u>			_	sses (F12) (LF			
	Dark Surface (A12)		Depleted Matrix						Soils (F19) (N			
	y Mucky Mineral (S1)		Redox Dark Sur						(MLRA 144A,	145, 14	19B)	
Sand	y Gleyed Matrix (S4)		Depleted Dark S	urface (l	F7)		Red Parent Material (F21)					
Sand	y Redox (S5)		Redox Depressi	ons (F8)			Very Shallow Dark Surface (TF12)					
Stripp	oed Matrix (S6)		Marl (F10) (LRR	K , L)			Other (Explain in Remarks)					
	Surface (S7)			,					ŕ			
³ Indicators	s of hydrophytic vegeta	ition and v	vetland hydrology mu	st be pre	esent, unle	ess distu	bed or problemation	Э.				
Restrictiv	e Layer (if observed)	:										
Type:												
Depth (inches):						Hydric Soil Pr	esent?	Yes	No_	X	
Remarks:												

Project/Site: Avon Lake Gas Addition Project	City/County: Lorain	Sampling Date: 5/13/14
Applicant/Owner: NRG Ohio Pipeline Company		State: OH Sampling Point: WET_16
Investigator(s): Travis Kessler, Lauren Zielke, A		
Landform (hillside, terrace, etc.): depressions	Local relief (concave, convex,	
Subregion (LRR or MLRA): LRR R, MLRA 139		82.06738133 Datum: WGS 84
Soil Map Unit Name: Mahoning silt loam, 0 to 2 p		NWI classification: Not available
Are climatic / hydrologic conditions on the site type	•	(If no, explain in Remarks.)
Are Vegetation, Soil, or Hydrolo		Circumstances" present? Yes x No
Are Vegetation , Soil , or Hydrolo		explain any answers in Remarks.)
<u>——</u> ——		ons, transects, important features, etc.
Hydrophytic Vegetation Present? Yes	X No Is the Sampled Area	
Hydric Soil Present? Yes	X No within a Wetland?	YesX No
Wetland Hydrology Present? Yes	X No If yes, optional Wetland	Site ID: WET_16
Remarks: (Explain alternative procedures here PFO/PSS wetland feature	or in a separate report.)	
HYDROLOGY		
Wetland Hydrology Indicators:		Secondary Indicators (minimum of two required)
Primary Indicators (minimum of one is required;	* * * * *	Surface Soil Cracks (B6)
X Surface Water (A1)	Water-Stained Leaves (B9)	Drainage Patterns (B10)
X High Water Table (A2)	Aquatic Fauna (B13)	Moss Trim Lines (B16)
X Saturation (A3)	Marl Deposits (B15)	Dry-Season Water Table (C2)
Water Marks (B1)	Hydrogen Sulfide Odor (C1)	Crayfish Burrows (C8)
Sediment Deposits (B2)	Oxidized Rhizospheres on Living Roots (C3	·
Drift Deposits (B3)	Presence of Reduced Iron (C4)	Stunted or Stressed Plants (D1)
Algal Mat or Crust (B4)	Recent Iron Reduction in Tilled Soils (C6)	Geomorphic Position (D2)
Iron Deposits (B5)	Thin Muck Surface (C7)	Shallow Aquitard (D3)
Inundation Visible on Aerial Imagery (B7)	Other (Explain in Remarks)	Microtopographic Relief (D4)
Sparsely Vegetated Concave Surface (B8)		x FAC-Neutral Test (D5)
Field Observations:		
Surface Water Present? Yes X No	· · · /	
Water Table Present? Yes X No	· · · /	· · · · · · · · · · · · · · · · ·
Saturation Present? Yes X No	Depth (inches): 0 Wetland I	Hydrology Present? Yes X No
(includes capillary fringe)	pring well, aerial photos, previous inspections), if av	il-blo.
Describe Recorded Data (Siteam gauge, monito	яппд well, aeriai priotos, previous інэрестіоня <i>)</i> , ії av	/allable:
Remarks: Site was seasonably wet due to recent heavy sp	oring rains	

VEGETATION – Use scientific names of plants. Sampling Point: **WET 16** Absolute Dominant Indicator Tree Stratum (Plot size: 30' radius) **Dominance Test worksheet:** % Cover Species? Status 50 FAC Acer rubrum Yes **Number of Dominant Species** That Are OBL, FACW, or FAC: 2. Ulmus americana **FACW** (A) 3. **Total Number of Dominant** 4. Species Across All Strata: 8 (B) 5. Percent of Dominant Species 6. That Are OBL, FACW, or FAC: 100.0% (A/B) Prevalence Index worksheet: 100 =Total Cover Total % Cover of: Sapling/Shrub Stratum (Plot size: 15' radius) OBL species x 1 = 140 Cornus sericea 50 Yes **FACW** FACW species x 2 = 280 x 3 = Ulmus americana 25 Yes **FACW** FAC species 110 3. Acer rubrum 25 Yes FAC **FACU** species 0 x 4 = 4. UPL species 0 x 5 = 5. Column Totals: 250 (A) 610 (B) 6. Prevalence Index = B/A = 2.44 **Hydrophytic Vegetation Indicators:** 100 =Total Cover 1 - Rapid Test for Hydrophytic Vegetation 5' radius) X 2 - Dominance Test is >50% Herb Stratum (Plot size: Arisaema triphyllum 20 Yes FAC X 3 - Prevalence Index is ≤3.0¹ 2. Anemone canadensis 15 Yes **FACW** 4 - Morphological Adaptations¹ (Provide supporting data in Remarks or on a separate sheet) 3. Enemion biternatum 15 Yes FAC Problematic Hydrophytic Vegetation¹ (Explain) 4. 5. ¹Indicators of hydric soil and wetland hydrology must 6. be present, unless disturbed or problematic. **Definitions of Vegetation Strata:** 8. Tree - Woody plants 3 in. (7.6 cm) or more in 9. diameter at breast height (DBH), regardless of height. Sapling/shrub - Woody plants less than 3 in. DBH and greater than or equal to 3.28 ft (1 m) tall. Herb - All herbaceous (non-woody) plants, regardless 50 =Total Cover of size, and woody plants less than 3.28 ft tall. Woody Vine Stratum (Plot size: 15' radius) Woody vines - All woody vines greater than 3.28 ft in 1. height. Hydrophytic Vegetation Present? Yes X_ No ____

=Total Cover

Remarks: (Include photo numbers here or on a separate sheet.) Very heavy leaf litter limited herbaceous stratum growth.

SOIL Sampling Point: WET_16

Profile De	Profile Description: (Describe to the depth needed to document the indicator or confirm the absence of indicators.)										
Depth	Matrix		Redox	k Feature	es						
(inches)	Color (moist)	%	Color (moist)	%	Type ¹	Loc ²	Texture	Remarks			
0-8	2.5Y 3/1	100					Mucky Sand				
8-20	2.5Y 5/1	90	10YR 5/8	10	<u>C</u>	M	Mucky Loam/Clay	Prominent redox concentrations	_		
								_			
									_		
									_		
									_		
									_		
								-			
									_		
1Type: C=		letion P	M=Reduced Matrix C	S=Cove	red or Co		d Grains ² Lo	ocation: PL=Pore Lining, M=Matrix.			
	oil Indicators:	delion, Ki	VI-Reduced Matrix, C	3-Cove	eu oi coa	aleu San		or Problematic Hydric Soils ³ :			
-	sol (A1)		Polyvalue Below	Surface	(SQ) /I D	D D		uck (A10) (LRR K, L, MLRA 149B)			
	, ,			Suriace	: (36) (LK	ĸĸ,					
	Epipedon (A2)		MLRA 149B)	- (00) (U D A 446		rairie Redox (A16) (LRR K, L, R)			
	Histic (A3)		Thin Dark Surface					ucky Peat or Peat (S3) (LRR K, L, R)			
	ogen Sulfide (A4)		High Chroma Sa			-		ue Below Surface (S8) (LRR K, L)			
Strati	fied Layers (A5)		Loamy Mucky M	ineral (F	1) (LRR k	(, L)	Thin Da	rk Surface (S9) (LRR K, L)			
X Deple	eted Below Dark Surfac	e (A11)	Loamy Gleyed M	1atrix (F2	2)		Iron-Mai	nganese Masses (F12) (LRR K, L, R)			
Thick	Dark Surface (A12)		Depleted Matrix	(F3)			Piedmoi	nt Floodplain Soils (F19) (MLRA 149B)		
	y Mucky Mineral (S1)		X Redox Dark Surf)			podic (TA6) (MLRA 144A, 145, 149B)			
	y Gleyed Matrix (S4)		Depleted Dark S				Red Parent Material (F21)				
	y Redox (S5)		Redox Depression				Very Shallow Dark Surface (TF12)				
			Marl (F10) (LRR								
	ped Matrix (S6)		Wall (F10) (LKK	K, L)			Other (Explain in Remarks)				
Dark	Surface (S7)										
³ Indicators	s of hydrophytic vegeta	tion and	wetland hydrology mu	st be pre	esent, unle	ess distu	rbed or problemation	c.			
Restrictiv	e Layer (if observed)	:									
Type:											
Depth (i	inches):						Hydric Soil Pr	resent? Yes X No No	-		
Remarks:											

Project/Site: Avon Lake Ga	as Addition Project	С	ity/County: Lorain C	county	Sampling Date: 5/13/14	
Applicant/Owner: NRG Gas	Pipeline Company LLC			State:	OH Sampling Point: UPL	. 17
Investigator(s): Travis Kess			ection Township Ra	ange: Not available		_
Landform (hillside, terrace, e		_	·	onvex, none): concave	Slope (%): 0 -	- 2
•	, 	nt: 41.4152022053	•	ong: -82.0682596092		
Subregion (LRR or MLRA): L		ii. 41.4152022055				
Soil Map Unit Name: Miner s					sification: none	
Are climatic / hydrologic cond	• •	•		No (If no, explain	in in Remarks.)	
Are Vegetation, Soil	, or Hydrology	significantly o	disturbed? Are "N	Iormal Circumstances" p	oresent? Yes x No	
Are Vegetation, Soil	, or Hydrology	naturally prob	olematic? (If nee	eded, explain any answe	rs in Remarks.)	
SUMMARY OF FINDIN	IGS – Attach site m	nap showing sa	ampling point lo	ocations, transects	s, important features, etc	٥.
Hydrophytic Vegetation Pre	sent? Yes	No X	Is the Sampled A	Area		
Hydric Soil Present?	Yes		within a Wetland		No X	
Wetland Hydrology Present		No X	If yes, optional W		<u> </u>	
Remarks: (Explain alternati						_
Tromano. (Explain alternati	vo procoduros noro or in	a doparato roporti,				
HYDROLOGY						
Wetland Hydrology Indica	tors:			Secondary Ind	licators (minimum of two required	d)
Primary Indicators (minimur		ck all that apply)			oil Cracks (B6)	
Surface Water (A1)		Water-Stained Le	aves (B9)		Patterns (B10)	
High Water Table (A2)		— Aquatic Fauna (B			n Lines (B16)	
Saturation (A3)	_	Marl Deposits (B1	15)	Dry-Seaso	on Water Table (C2)	
Water Marks (B1)	_	Hydrogen Sulfide	Odor (C1)	Crayfish E	Burrows (C8)	
Sediment Deposits (B2)	Oxidized Rhizosp	heres on Living Roo	ots (C3) Saturation	No Visible on Aerial Imagery (C9)	
Drift Deposits (B3)	_	Presence of Redu	uced Iron (C4)	Stunted o	r Stressed Plants (D1)	
Algal Mat or Crust (B4)	_	Recent Iron Redu	ction in Tilled Soils	(C6) Geomorpl	hic Position (D2)	
Iron Deposits (B5)	_	Thin Muck Surfac			quitard (D3)	
Inundation Visible on A	erial Imagery (B7)	Other (Explain in	Remarks)	Microtopo	graphic Relief (D4)	
Sparsely Vegetated Co	ncave Surface (B8)			FAC-Neut	tral Test (D5)	
Field Observations:						
Surface Water Present?	Yes No x					
Water Table Present?	Yes No x					
Saturation Present?	Yes No x	Depth (inches):	Wet	land Hydrology Prese	nt? Yes No_X	
(includes capillary fringe)				\		
Describe Recorded Data (st	iream gauge, monitoring	well, aerial photos,	previous inspections	s), if available:		
Domorko						
Remarks: N/A						

VEGETATION – Use scientific names of plants. Sampling Point: UPL 17 Absolute Dominant Indicator Tree Stratum (Plot size: 30' radius) % Cover **Dominance Test worksheet:** Species? Status 50 **FACU** Prunus serotina Yes **Number of Dominant Species** That Are OBL, FACW, or FAC: 2. Acer saccharum 20 Yes **FACU** (A) 3. Quercus rubra 20 Yes **FACU Total Number of Dominant** (B) 4. Species Across All Strata: 7 5. Percent of Dominant Species 6. That Are OBL, FACW, or FAC: 0.0% (A/B) Prevalence Index worksheet: 90 =Total Cover Total % Cover of: Sapling/Shrub Stratum (Plot size: 15' radius) OBL species x 1 = 0 Prunus serotina 30 Yes **FACU FACW** species x 2 = x 3 = 2. Quercus rubra 30 Yes FACU FAC species 10 30 3. **FACU** species 230 x 4 = 4. **UPL** species 10 x 5 = 5. Column Totals: 250 (A) 1000 (B) 6. Prevalence Index = B/A = 4.00 **Hydrophytic Vegetation Indicators:** 60 =Total Cover 1 - Rapid Test for Hydrophytic Vegetation Herb Stratum (Plot size: 5' radius) 2 - Dominance Test is >50% Festuca rubra 40 Yes **FACU** 3 - Prevalence Index is ≤3.01 2. Poa pratensis 30 Yes **FACU** 4 - Morphological Adaptations¹ (Provide supporting data in Remarks or on a separate sheet) 3. Daucus carota 10 No UPL 10 FACU Problematic Hydrophytic Vegetation¹ (Explain) Taraxacum officinale No 4. FAC 10 5. Toxicodendron radicans No ¹Indicators of hydric soil and wetland hydrology must 6. be present, unless disturbed or problematic. **Definitions of Vegetation Strata:** 8. Tree - Woody plants 3 in. (7.6 cm) or more in 9. diameter at breast height (DBH), regardless of height. Sapling/shrub - Woody plants less than 3 in. DBH and greater than or equal to 3.28 ft (1 m) tall. Herb - All herbaceous (non-woody) plants, regardless 100 =Total Cover of size, and woody plants less than 3.28 ft tall. Woody Vine Stratum (Plot size: 15' radius) Woody vines - All woody vines greater than 3.28 ft in 1. height. Hydrophytic Vegetation Present? Yes ____ No _X =Total Cover

Remarks: (Include photo numbers here or on a separate sheet.) very heavy leaf litter did not allow abundant herbaceous stratum growth

SOIL Sampling Point: UPL_17

		to the de	pth needed to docu			or or con	firm the absence	of indicato	ors.)	
Depth	Matrix	%		Featur		Loc ²	Toyturo		Remarks	
(inches)	Color (moist)	70	Color (moist)	<u>%</u>	Type ¹	LOC	Texture		Remarks	<u>;</u>
0-17	10YR 3/3	100					Sandy		mixed with g	ravel
1Typo: C=(Concontration D=Dor	olotion DA	//=Reduced Matrix, C		rod or Co	atod Sano	Grains ² Lo	cation: DI -	Pore Lining, l	M-Matrix
	I Indicators:	Dietion, Ki	/i-Reduced Matrix, C.	3-C0ve	red or Coa	aleu Sanc			atic Hydric S	
Histoso			Polyvalue Below	Surface	(S8) (I R	R R			RR K, L, MLF	
	Epipedon (A2)	•	MLRA 149B)	Ouridoc) (00) (L IX	,			k (A16) (LRR I	· ·
	Histic (A3)		Thin Dark Surfac	e (S9) (LRR R. M	ILRA 149			Peat (S3) (L l	-
	gen Sulfide (A4)	•	High Chroma Sa						ırface (S8) (LF	
	ed Layers (A5)		Loamy Mucky M			-			S9) (LRR K, L	*
	ed Below Dark Surfac	ce (A11)	Loamy Gleyed M			, ,			asses (F12) (L	-
	Dark Surface (A12)	, ,	Depleted Matrix		,					(MLRA 149B)
	Mucky Mineral (S1)	•	Redox Dark Surf)				(MLRA 144A	
	Gleyed Matrix (S4)	•	Depleted Dark S					ent Materia		, ,
	Redox (S5)	•	Redox Depression						Surface (TF12	<u>2)</u>
	ed Matrix (S6)	•	Marl (F10) (LRR					xplain in Re		,
	Surface (S7)	•		. ,				•	,	
	` ,									
³ Indicators	of hydrophytic vegeta	ition and v	vetland hydrology mus	st be pre	esent, unle	ess disturl	bed or problemation	.		
	Layer (if observed)									
Type:										
Depth (in	iches):						Hydric Soil Pro	esent?	Yes	No X
Remarks:	' <u>'</u>								<u></u>	

Project/Site: Avon Lake Ga	s Addition Project	City/County:	Lorain		Sampling Date:	5/13/14
Applicant/Owner: NRG Ohio	Pipeline Company LLC			State:	— OH Sampling	Point: WET_17
Investigator(s): Travis Kessl		ordon Section, Tow	nship, Range: No	ot available		
Landform (hillside, terrace, et			ncave, convex, no		Sle	ope (%): 0 to 2
Subregion (LRR or MLRA): L	, 	11.414900215		.0684155028		ım: WGS 84
_		11.414900213	Long. <u>-62.</u>			
Soil Map Unit Name: Miner si	•				fication: Not avail	able
Are climatic / hydrologic cond		-	es <u>x</u> No		in Remarks.)	
Are Vegetation, Soil			Are "Normal Ci	rcumstances" pr	esent? Yes	x No
Are Vegetation, Soil	, or Hydrology	naturally problematic?	(If needed, exp	lain any answers	s in Remarks.)	
SUMMARY OF FINDIN	GS – Attach site ma	p showing sampling	point location	s, transects,	, important fea	atures, etc.
Lludraphytic Vacatation Drag	nont? Van V	No. lo the C	ampled Area			
Hydrophytic Vegetation Pres Hydric Soil Present?	sent? Yes X Yes X		ampled Area Wetland?	Yes X	No	
Wetland Hydrology Present?			otional Wetland Sit			
Remarks: (Explain alternative			Thorial Victiana On	<u> </u>		
PFO wetland feature	re procedures here or in a	separate report.)				
HYDROLOGY						
Wetland Hydrology Indicat				Secondary India	cators (minimum o	of two required)
Primary Indicators (minimum	•		 .		il Cracks (B6)	
X Surface Water (A1)		Water-Stained Leaves (B9)			Patterns (B10)	
X High Water Table (A2)		Aquatic Fauna (B13)			Lines (B16)	
X Saturation (A3)		Marl Deposits (B15)			n Water Table (C2	.)
Water Marks (B1)		Hydrogen Sulfide Odor (C1)	ining Doots (C2)		urrows (C8)	(00)
Sediment Deposits (B2)		Oxidized Rhizospheres on L			Visible on Aerial Ir	
Drift Deposits (B3) Algal Mat or Crust (B4)		Presence of Reduced Iron (G Recent Iron Reduction in Till			Stressed Plants (Dicentification (D2)	J1)
Iron Deposits (B5)		Thin Muck Surface (C7)	ed Solis (CO)	Shallow Aq	, ,	
Inundation Visible on Ae		Other (Explain in Remarks)	•		raphic Relief (D4)	
Sparsely Vegetated Cor		Stron (Explain in Nomanto)	•	x FAC-Neutra		
Field Observations:						
Surface Water Present?	Yes X No	Depth (inches): 0.1				
Water Table Present?						
Saturation Present?	Yes X No	Depth (inches): 0	Wetland Hyd	drology Present	t? Yes X	No
(includes capillary fringe)						
Describe Recorded Data (str	ream gauge, monitoring we	ell, aerial photos, previous in	spections), if avail	lable:		
Domorko						
Remarks: Site was seasonably wet due	e to recent heavy spring rai	ins				
l che mue coucemus, met uu	o to recent meany opining ran					
l						

 VEGETATION – Use scientific names of plants.
 Sampling Point:
 WET_17

<u>Tree Stratum</u> (Plot size:30' radius)	Absolute % Cover	Dominant Species?	Indicator Status	Dominance Test worksheet:
1. Acer rubrum	50	Yes	FAC	Number of Dominant Species
2. Ulmus americana	50	Yes	FACW	That Are OBL, FACW, or FAC: 7 (A)
3.				Total Number of Dominant
4.				Species Across All Strata: 7 (B)
5.				Percent of Dominant Species
6.				That Are OBL, FACW, or FAC:100.0% (A/B)
7				Prevalence Index worksheet:
	100	=Total Cover		Total % Cover of: Multiply by:
Sapling/Shrub Stratum (Plot size: 15' radius)				OBL species0 x 1 =0
1. Acer rubrum	50	Yes	FAC	FACW species 115 x 2 = 230
2. Ulmus americana	50	Yes	FACW	FAC species130 x 3 =390
3				FACU species 0 x 4 = 0
4				UPL species 0 x 5 = 0
5				Column Totals: 245 (A) 620 (B)
6				Prevalence Index = B/A = 2.53
7				Hydrophytic Vegetation Indicators:
	100	=Total Cover		1 - Rapid Test for Hydrophytic Vegetation
Herb Stratum (Plot size:5' radius)				X 2 - Dominance Test is >50%
1. Arisaema triphyllum	15	Yes	FAC	X 3 - Prevalence Index is ≤3.0 ¹
2. Anemone canadensis	15	Yes	FACW	4 - Morphological Adaptations ¹ (Provide supporting
3. Enemion biternatum	15	Yes	FAC	data in Remarks or on a separate sheet)
4				Problematic Hydrophytic Vegetation ¹ (Explain)
5				¹ Indicators of hydric soil and wetland hydrology must
6				be present, unless disturbed or problematic.
7				Definitions of Vegetation Strata:
8				Tree – Woody plants 3 in. (7.6 cm) or more in
9.				diameter at breast height (DBH), regardless of height.
10				Sapling/shrub – Woody plants less than 3 in. DBH
11				and greater than or equal to 3.28 ft (1 m) tall.
12.	45	=Total Cover		Herb – All herbaceous (non-woody) plants, regardless of size, and woody plants less than 3.28 ft tall.
Woody Vine Stratum (Plot size: 15' radius)		-		
1		<u> </u>		Woody vines – All woody vines greater than 3.28 ft in height.
2.	(
3				Hydrophytic Vegetation
4.				Present? Yes X No No
		=Total Cover		
Remarks: (Include photo numbers here or on a sepa Very heavy leaf litter limited herbaceous stratum grov	,			

SOIL Sampling Point: WET_17

	escription: (Describe	to the de	-			or or cor	nfirm the absence	of indicators.)	
Depth (inches)	Matrix Color (moist)	%	Color (moist)	x Feature	es Type ¹	Loc ²	Texture	Remark	e
_			Color (moist)		Турс	Loc		Remain	<u> </u>
<u>0-8</u>	2.5Y 3/1	100	·				Mucky Sand		
8-20	2.5Y 6/4	90	2.5Y 6/8	10	С	М	Mucky Loam/Clay	Prominent redox co	ncentrations
¹ Type: C=	Concentration, D=De	pletion, R	M=Reduced Matrix, C	S=Cove	red or Coa	ated San	d Grains. ² Lo	cation: PL=Pore Lining,	M=Matrix.
	oil Indicators:	· · · · · ·	·					or Problematic Hydric S	
Histos	sol (A1)		Polyvalue Below	Surface	e (S8) (LR	RR,		ıck (A10) (LRR K, L, M L	
Histic	Epipedon (A2)		MLRA 149B)				Coast P	rairie Redox (A16) (LRR	K, L, R)
Black	Histic (A3)		Thin Dark Surface	ce (S9) (LRR R, M	ILRA 149	9B)5 cm Μι	icky Peat or Peat (S3) (L	.RR K, L, R)
	gen Sulfide (A4)		High Chroma Sa			-		e Below Surface (S8) (L	
	fied Layers (A5)		Loamy Mucky M			(, L)		k Surface (S9) (LRR K,	•
	ted Below Dark Surfa	ce (A11)	Loamy Gleyed N		2)			nganese Masses (F12) (I	•
	Dark Surface (A12)		Depleted Matrix					nt Floodplain Soils (F19)	
	y Mucky Mineral (S1)		X Redox Dark Sur					podic (TA6) (MLRA 144)	A, 145, 149B)
	y Gleyed Matrix (S4) y Redox (S5)		Depleted Dark S					ent Material (F21) allow Dark Surface (TF1	2)
	ed Matrix (S6)		Marl (F10) (LRR					xplain in Remarks)	2)
	Surface (S7)		Wan (i 10) (LKK	rx, ∟ <i>)</i>			Other (E	Apiaiii iii Neiliaiks)	
Bank	ounder (or)								
³ Indicators	of hydrophytic vegeta	ation and	wetland hydrology mu	st be pre	esent, unle	ess distu	rbed or problemation	: .	
	e Layer (if observed)		, ,				·		
Type:									
Depth (i	nches):						Hydric Soil Pr	esent? Yes X	No
Remarks:							•		

Project/Site: Avon Lake Gas	Addition Project	Ci	ity/County: Lorain Coun	ty	Sampling Date: 5	/13/1 <u>4</u>
Applicant/Owner: NRG Gas	Pipeline Company LLC			State:		
Investigator(s): Travis Kessle		Gordon Se	ection, Township, Range	: Not available		
Landform (hillside, terrace, etc	c.): depressions	Loca	al relief (concave, conve	x, none): concave	Slope	e (%): 0 - 2
Subregion (LRR or MLRA): LF	RR R, MLRA 139 La			-82.0683496339		WGS 84
Soil Map Unit Name: Miner sil					ification: none	
Are climatic / hydrologic condi	•	for this time of year	? Yes x No		n in Remarks.)	
Are Vegetation, Soil		-		al Circumstances" p		, No
Are Vegetation, Soil				, explain any answe		'``
SUMMARY OF FINDING						res, etc.
Hydrophytic Vegetation Prese	ent? Yes	No X	Is the Sampled Area			
Hydric Soil Present?	Yes		within a Wetland?	Yes	NoX	
Wetland Hydrology Present?	Yes	No X	If yes, optional Wetlar	nd Site ID:	<u> </u>	
HYDROLOGY						
Wetland Hydrology Indicate	ors:			Secondary Ind	icators (minimum of tw	o required)
Primary Indicators (minimum	of one is required; chec	ck all that apply)		Surface S	oil Cracks (B6)	
Surface Water (A1)		_Water-Stained Le			Patterns (B10)	
High Water Table (A2)		_Aquatic Fauna (B			Lines (B16)	
Saturation (A3)		Marl Deposits (B1			on Water Table (C2)	
Water Marks (B1)	<u>—</u>	_ Hydrogen Sulfide			Burrows (C8)	
Sediment Deposits (B2)	<u>—</u>		heres on Living Roots (0	· —	Visible on Aerial Imag	
Drift Deposits (B3)		Presence of Redu			Stressed Plants (D1)	
Algal Mat or Crust (B4)			ction in Tilled Soils (C6)		nic Position (D2)	
Iron Deposits (B5)		_ Thin Muck Surfac	, ,		quitard (D3)	
Inundation Visible on Ae		Other (Explain in	Remarks)		graphic Relief (D4)	
Sparsely Vegetated Con	cave Surface (B8)			FAC-Neut	ral Test (D5)	
Field Observations:						
Surface Water Present?	Yes No x	_ ' ' '				
Water Table Present?	Yes No x				-	
Saturation Present?	Yes No x	Depth (inches):	Wetland	d Hydrology Preser	nt? Yes	No X
(includes capillary fringe)		O wiel obsess		9 11		
Describe Recorded Data (stre	eam gauge, monitoring	well, aerial photos,	previous inspections), it	available:		
Remarks:						
N/A						
1477						

VEGETATION – Use scientific names of plants.

	Absolute	Dominant	Indicator	
ree Stratum (Plot size: 30' radius)	% Cover	Species?	Status	Dominance Test worksheet:
. Acer saccharum	50	Yes	FACU	Number of Dominant Species
. Acer rubrum	50	Yes	FAC	That Are OBL, FACW, or FAC:(A)
	. <u></u>			Total Number of Dominant
i				Species Across All Strata: 6 (B)
j				Percent of Dominant Species
S				That Are OBL, FACW, or FAC:16.7% (A/E
·				Prevalence Index worksheet:
	100	=Total Cover		Total % Cover of: Multiply by:
sapling/Shrub Stratum (Plot size: 15' radius))			OBL species 0 x 1 = 0
. Rubus allegheniensis	30	Yes	FACU	FACW species 0 x 2 = 0
. Prunus serotina	30	Yes	FACU	FAC species 60 x 3 = 180
i				FACU species 190 x 4 = 760
				UPL species 10 x 5 = 50
i				Column Totals: 260 (A) 990 (B
i.				Prevalence Index = B/A = 3.81
				Hydrophytic Vegetation Indicators:
	60	=Total Cover		1 - Rapid Test for Hydrophytic Vegetation
Herb Stratum (Plot size: 5' radius)				2 - Dominance Test is >50%
Festuca rubra	40	Yes	FACU	3 - Prevalence Index is ≤3.0 ¹
2. Poa pratensis	30	Yes	FACU	4 - Morphological Adaptations ¹ (Provide supporti
3. Viola sororia	10	No	FAC	data in Remarks or on a separate sheet)
. Taraxacum officinale	10	No	FACU	Problematic Hydrophytic Vegetation ¹ (Explain)
. Trifolium arvense	10	No	UPL	The disease of heads and head heads are made
<u> </u>				¹ Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic.
·				Definitions of Vegetation Strata:
				Tree – Woody plants 3 in. (7.6 cm) or more in diameter at breast height (DBH), regardless of heigh
0.				
1.				Sapling/shrub – Woody plants less than 3 in. DBH and greater than or equal to 3.28 ft (1 m) tall.
2.				
	100	=Total Cover		Herb – All herbaceous (non-woody) plants, regardles of size, and woody plants less than 3.28 ft tall.
Voody Vine Stratum (Plot size: 15' radius	100	rotal Gover		
. (Flot size. 13 radius)	1			Woody vines – All woody vines greater than 3.28 ft height.
				neight.
				Hydrophytic
i				Vegetation No. Veg
·				Present? Yes No _X
		=Total Cover		

SOIL Sampling Point: UPL_19,18

	Profile Description: (Describe to the depth needed to document the indicator or confirm the absence of indicators.)										
Depth	Matrix			r Feature							
(inches)	Color (moist)	%	Color (moist)	%	Type ¹	Loc ²	Texture		Remarks		
0-8	10YR 3/3	100					Loamy/Clayey	m	nixed with gra	vel	
8-20	10YR 4/2	60	10YR 4/6 40 C M				Loamy/Clayey				
1											
	=Concentration, D=Dep	oletion, RN	M=Reduced Matrix, C	S=Cover	red or Coa	ated San			ore Lining, M		
_	oil Indicators:		Daharaha Balau	Curfoso	(CO) /I D	D D			ic Hydric Soi		
	sol (A1) : Epipedon (A2)		Polyvalue Below MLRA 149B)	Surrace	(S8) (LR	KK,			R K, L, MLR <i>A</i> A16) (LRR K,)
	Histic (A3)		Thin Dark Surface	ا) (99) م	IRRR M	II RA 140			Peat (S3) (LRF		B)
	ogen Sulfide (A4)	,	High Chroma Sa					-	ace (S8) (LRF		K)
	fied Layers (A5)		Loamy Mucky M			-		k Surface (S9		· i · · · · · ·	
	eted Below Dark Surfac	e (A11)	Loamy Gleyed M			ν, Ε)			ses (F12) (LR	R K. L.	R)
	Dark Surface (A12)) (/ (· · ·)	Depleted Matrix		-,			-	Soils (F19) (M		
	y Mucky Mineral (S1)	•	Redox Dark Surf)						
	y Gleyed Matrix (S4)		Depleted Dark S				Mesic Spodic (TA6) (MLRA 144A, 145, 149B) Red Parent Material (F21)				
	y Redox (S5)	•	Redox Depression				Very Shallow Dark Surface (TF12)				
	ped Matrix (S6)	•	Marl (F10) (LRR	K, L)			Other (E	xplain in Rem	narks)		
Dark	Surface (S7)	•									
	s of hydrophytic vegeta		vetland hydrology mu	st be pre	esent, unle	ess distur	bed or problematic				
	e Layer (if observed)	:									
Type:											
Depth (inches):						Hydric Soil Pre	esent?	Yes	No_	X
Remarks:											

Project/Site: Avon Lake Gas Addition Project	City/County: Lorain	Sampling Date: 5/13/14
Applicant/Owner: NRG Ohio Pipeline Company LLC		State: OH Sampling Point: WET_18
Investigator(s): Travis Kessler, Lauren Zielke, Aaron Gord	lon Section, Township, Range:	
Landform (hillside, terrace, etc.): depressions	Local relief (concave, convex,	
· · · · · · · · · · · · · · · · · · ·	<u> </u>	82.0684204053 Datum: WGS 84
	F130070629 Long	
Soil Map Unit Name: Miner silty clay loam		NWI classification: Not available
Are climatic / hydrologic conditions on the site typical for thi		(If no, explain in Remarks.)
Are Vegetation, Soil, or Hydrology		l Circumstances" present? Yes x No
Are Vegetation, Soil, or Hydrology	_naturally problematic? (If needed, e	explain any answers in Remarks.)
SUMMARY OF FINDINGS – Attach site map s	showing sampling point locati	ons, transects, important features, etc.
Lludraphytic Vacctation Present?	lo the Complet Area	
	No Is the Sampled Area within a Wetland?	Yes X No
	No If yes, optional Wetland	
Remarks: (Explain alternative procedures here or in a sep		
PFO wetland feature	and reporting	
LIVEROLOGY		_
HYDROLOGY		
Wetland Hydrology Indicators:	the extremely a	Secondary Indicators (minimum of two required)
Primary Indicators (minimum of one is required; check all the Surface Water (A1) x War		Surface Soil Cracks (B6)
	ter-Stained Leaves (B9) uatic Fauna (B13)	Drainage Patterns (B10) Moss Trim Lines (B16)
 -	rl Deposits (B15)	Dry-Season Water Table (C2)
	drogen Sulfide Odor (C1)	Crayfish Burrows (C8)
	dized Rhizospheres on Living Roots (C3	
<u> </u>	sence of Reduced Iron (C4)	Stunted or Stressed Plants (D1)
Algal Mat or Crust (B4) Rec	cent Iron Reduction in Tilled Soils (C6)	Geomorphic Position (D2)
Iron Deposits (B5) Thin	n Muck Surface (C7)	Shallow Aquitard (D3)
Inundation Visible on Aerial Imagery (B7) Oth	er (Explain in Remarks)	Microtopographic Relief (D4)
Sparsely Vegetated Concave Surface (B8)		x FAC-Neutral Test (D5)
Field Observations:		
Surface Water Present? Yes No _X De		
Water Table Present? Yes X No De		
	epth (inches): 6 Wetland	Hydrology Present? Yes X No
(includes capillary fringe) Describe Recorded Data (stream gauge, monitoring well,		
Describe Recorded Data (stream gauge, monitoring well, a	aeriai priotos, previous irispectioris), ii a	valiable.
Remarks:		
Site was seasonably wet due to recent heavy spring rains		

VEGETATION – Use scientific names of plants. Sampling Point: WET 18 Absolute Dominant Indicator Tree Stratum (Plot size: 30' radius) **Dominance Test worksheet:** % Cover Species? Status 70 FAC Acer rubrum Yes **Number of Dominant Species** That Are OBL, FACW, or FAC: Ulmus americana **FACW** (A) 3. **Total Number of Dominant** 4. Species Across All Strata: 6 (B) 5. Percent of Dominant Species 6. That Are OBL, FACW, or FAC: 100.0% (A/B) Prevalence Index worksheet: 100 =Total Cover Total % Cover of: Sapling/Shrub Stratum (Plot size: 15' radius) OBL species x 1 = Acer rubrum 80 Yes FAC FACW species 50 x 2 = 100 x 3 = Ulmus americana 20 Yes **FACW** FAC species 200 3. **FACU** species 0 x 4 = 4. **UPL** species 0 x 5 = 5. Column Totals: 250 700 (A) (B) 6. Prevalence Index = B/A = 2.80 **Hydrophytic Vegetation Indicators:** 1 - Rapid Test for Hydrophytic Vegetation 100 =Total Cover X 2 - Dominance Test is >50% Herb Stratum (Plot size: 5' radius) Arisaema triphyllum 30 X 3 - Prevalence Index is ≤3.0¹ Yes 2. 4 - Morphological Adaptations¹ (Provide supporting data in Remarks or on a separate sheet) Problematic Hydrophytic Vegetation¹ (Explain) 5. ¹Indicators of hydric soil and wetland hydrology must 6. be present, unless disturbed or problematic. **Definitions of Vegetation Strata:** 8. Tree - Woody plants 3 in. (7.6 cm) or more in 9. diameter at breast height (DBH), regardless of height. Sapling/shrub - Woody plants less than 3 in. DBH and greater than or equal to 3.28 ft (1 m) tall. Herb - All herbaceous (non-woody) plants, regardless 30 =Total Cover of size, and woody plants less than 3.28 ft tall. (Plot size: 15' radius) Woody Vine Stratum Woody vines - All woody vines greater than 3.28 ft in Toxicodendron radicans Yes height.

Remarks: (Include photo numbers here or on a separate sheet.) Very heavy leaf litter limited herbaceous stratum growth. .

20

=Total Cover

3.

Yes X_ No ____

Hydrophytic

Vegetation Present?

SOIL Sampling Point: WET_18

Profile Description: (Describe to the depth needed to document the indicator or confirm the absence of indicators.)											
Depth Matrix		Redox Features									
(inches)	Color (moist)	%	Color (moist)	%	Type ¹	Loc ²	Texture	Remarks			
0-8	10YR 3/2	100					Mucky Loam/Clay		-		
8-20	10YR 4/1	90	10YR 5/8	10	C	M	Mucky Loam/Clay	Prominent redox concentr	rations		
<u> </u>	_										
 -											
 -	_										
 -											
 -											
	_							-			
1Type: C=C	Concentration D=Den	letion Pl	M=Reduced Matrix, C	S=Cove	ed or Co		d Grains ² Lo	cation: PL=Pore Lining, M=Ma	atriv		
	Indicators:	netion, ixi	vi-iteduced iviatilix, O	3-00761	eu oi coa	aleu San		-			
-			Dolynyalua Palau	Surface	(CO) (I D	D D	Indicators for Problematic Hydric Soils ³ :				
Histoso			Polyvalue Below	Suriace	(30) (LK	κκ,	2 cm Muck (A10) (LRR K, L, MLRA 149B)				
	Epipedon (A2)		MLRA 149B)	(00) (Coast Prairie Redox (A16) (LRR K, L, R) 5 cm Mucky Peat or Peat (S3) (LRR K, L, R) Polyvalue Below Surface (S8) (LRR K, L) Thin Dark Surface (S9) (LRR K, L)				
	Histic (A3)		Thin Dark Surface								
	en Sulfide (A4)		High Chroma Sa			-					
Stratifie	ed Layers (A5)		Loamy Mucky M	ineral (F	1) (LRR k	(, L)					
X Deplete	ed Below Dark Surfac	e (A11)	Loamy Gleyed M	latrix (F2	2)		Iron-Manganese Masses (F12) (LRR K, L, R)				
	Oark Surface (A12)		Depleted Matrix				Piedmont Floodplain Soils (F19) (MLRA 149B)				
			X Redox Dark Surface (F6)				Mesic Spodic (TA6) (MLRA 144A, 145, 149B)				
Sandy Mucky Mineral (S1)							Red Parent Material (F21)				
Sandy Gleyed Matrix (S4)			Depleted Dark Surface (F7)								
Sandy Redox (S5)			Redox Depressions (F8)				Very Shallow Dark Surface (TF12)				
	d Matrix (S6)		Marl (F10) (LRR K, L)				Other (Explain in Remarks)				
Dark Si	urface (S7)										
³ Indicators of	of hydrophytic vegeta	tion and v	vetland hydrology mu	st be pre	sent, unle	ess distur	rbed or problemation).			
Restrictive	Layer (if observed)										
Type:											
Depth (in	ches):						Hydric Soil Pr	esent? Yes X No	°		
Remarks:											

Project/Site: Avon Lake Gas Addition Project City/County: Lorain Applicant/Owner: NRG Ohio Pipeline Company LLC Investigator(s): Travis Kessler, Lauren Zielke, Aaron Gordon Section, Township, Range: Landform (hillside, terrace, etc.): depressions Local relief (concave, convex, n	State: OH Sampling Point: WET_19 Not available								
Investigator(s): Travis Kessler, Lauren Zielke, Aaron Gordon Section, Township, Range:									
	1 tot a valiable								
	32.0683894488 Datum: WGS 84								
Soil Map Unit Name: Miner silty clay loam	NWI classification: Not available								
	 								
 _	(If no, explain in Remarks.) Circumstances" present? Yes x No								
	xplain any answers in Remarks.)								
SUMMARY OF FINDINGS – Attach site map showing sampling point location									
Hydrophytic Vegetation Present? Yes X No Is the Sampled Area									
Hydric Soil Present? Yes X No within a Wetland?	Yes X No								
Wetland Hydrology Present? Yes X No If yes, optional Wetland S	Site ID: WET_19								
Remarks: (Explain alternative procedures here or in a separate report.) PFO wetland feature									
HYDROLOGY									
Wetland Hydrology Indicators:	Secondary Indicators (minimum of two required)								
Primary Indicators (minimum of one is required; check all that apply)	Surface Soil Cracks (B6)								
x Surface Water (A1) x Water-Stained Leaves (B9)									
X High Water Table (A2) Aquatic Fauna (B13) April Deposits (B45)									
X Saturation (A3) — Marl Deposits (B15) Water Marks (B1) — Hydrogen Sulfide Oder (C1)									
Water Marks (B1) — Hydrogen Sulfide Odor (C1) Sediment Denosits (B2) Ovidized Phizospheres on Living Poots (C3)									
Sediment Deposits (B2) Drift Deposits (B3) Oxidized Rhizospheres on Living Roots (C3) Presence of Reduced Iron (C4)									
Algal Mat or Crust (B4) Recent Iron Reduction in Tilled Soils (C6)									
Iron Deposits (B5) Recent from Reduction in Timed Soils (C6) Thin Muck Surface (C7)	Shallow Aquitard (D3)								
Inundation Visible on Aerial Imagery (B7) Other (Explain in Remarks)	Microtopographic Relief (D4)								
Sparsely Vegetated Concave Surface (B8)	x FAC-Neutral Test (D5)								
Field Observations:	A PAG-Neutral Test (BS)								
Surface Water Present? Yes x No Depth (inches): 0.1									
Water Table Present? Yes X No Depth (inches): 10									
	lydrology Present? Yes X No								
(includes capillary fringe)	ydrology 1 1000111. 100 110								
Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if ava	ailable:								
,, , , , , , , , , , , , , , , , , , ,									
Remarks: Site was seasonably wet due to recent heavy spring rains									

VEGETATION – Use scientific names of plants. Sampling Point: **WET 19** Absolute Dominant Indicator Tree Stratum (Plot size: 30' radius) **Dominance Test worksheet:** % Cover Species? Status 70 FAC Acer rubrum Yes **Number of Dominant Species** That Are OBL, FACW, or FAC: Ulmus americana **FACW** (A) 3. **Total Number of Dominant** 4. Species Across All Strata: 6 (B) 5. Percent of Dominant Species 6. That Are OBL, FACW, or FAC: 100.0% (A/B) Prevalence Index worksheet: 100 =Total Cover Total % Cover of: Sapling/Shrub Stratum (Plot size: 15' radius) OBL species x 1 = 30 Acer rubrum 80 FAC FACW species x 2 = x 3 = 2. FAC species 190 **FACU** species 0 x 4 = UPL species 0 x 5 = Column Totals: 220 630 (A) (B) 6. Prevalence Index = B/A = 2.86 **Hydrophytic Vegetation Indicators:** 80 =Total Cover 1 - Rapid Test for Hydrophytic Vegetation Herb Stratum (Plot size: 5' radius) X 2 - Dominance Test is >50% Carex blanda 20 Yes FAC X 3 - Prevalence Index is ≤3.0¹ 2. Juncus tenuis 10 Yes FAC 4 - Morphological Adaptations¹ (Provide supporting data in Remarks or on a separate sheet) 3. Toxicodendron radicans 10 Yes FAC Problematic Hydrophytic Vegetation¹ (Explain) 4. 5. ¹Indicators of hydric soil and wetland hydrology must 6. be present, unless disturbed or problematic. **Definitions of Vegetation Strata:** 8. Tree - Woody plants 3 in. (7.6 cm) or more in 9. diameter at breast height (DBH), regardless of height. Sapling/shrub - Woody plants less than 3 in. DBH and greater than or equal to 3.28 ft (1 m) tall. Herb - All herbaceous (non-woody) plants, regardless 40 =Total Cover of size, and woody plants less than 3.28 ft tall. Woody Vine Stratum (Plot size: 15' radius) Woody vines - All woody vines greater than 3.28 ft in 1. height. Hydrophytic Vegetation Present? Yes X_ No ____ =Total Cover

Remarks: (Include photo numbers here or on a separate sheet.) Very heavy leaf litter limited herbaceous stratum growth.

SOIL Sampling Point: WET_19

Profile Description: (Describe to the depth needed to document the indicator or confirm the absence of indicators.)										
Depth Matrix			x Feature		. 2	- .				
(inches) Color (moist)	%	Color (moist)	<u>%</u>	Type ¹	Loc ²	Texture		Remarks		
0-12 10YR 3/2	90	10YR 3/6	10	С	M	Mucky Loam/Clay				
12-18 10YR 5/2		10YR 4/6	30	<u>C</u>	<u>M</u>	Mucky Loam/Clay	Prominent	redox con	centrations	
<u> </u>										
							-			
1										
¹ Type: C=Concentration, D	=Depletion, R	M=Reduced Matrix, C	S=Cover	red or Co	ated San		ocation: PL=Por		_	
Hydric Soil Indicators: Histosol (A1)		Polyvalue Below	, Surface	(S8) (I R	R R	Indicators for Problematic Hydric Soils ³ : 2 cm Muck (A10) (LRR K, L, MLRA 149B)				
Histic Epipedon (A2)		MLRA 149B)	Juliace	(30) (LI	ix ix,	Coast Prairie Redox (A16) (LRR K, L, R)				
Black Histic (A3)		Thin Dark Surfa	ce (S9) (I	LRR R. M	ILRA 149					
Hydrogen Sulfide (A4)		High Chroma Sa					Polyvalue Below Surface (S8) (LRR K, L)			
Stratified Layers (A5)		Loamy Mucky M			-		Thin Dark Surface (S9) (LRR K, L)			
X Depleted Below Dark S	urface (A11)	Loamy Gleyed N			,	Iron-Manganese Masses (F12) (LRR K, L, R)				
Thick Dark Surface (A1	2)	Depleted Matrix (F3)				Piedmont Floodplain Soils (F19) (MLRA 149B)				
Sandy Mucky Mineral (S1) X Redox Dark Surface (F6))		Mesic Spodic (TA6) (MLRA 144A, 145, 149B)					
Sandy Gleyed Matrix (S4) Depleted Dark Surface (F			- 7)		Red Parent Material (F21)					
Sandy Redox (S5)		Redox Depressions (F8)				Very Shallow Dark Surface (TF12)				
Stripped Matrix (S6)	Marl (F10) (LRR K, L)				Other (Explain in Remarks)					
Dark Surface (S7)										
³ Indicators of hydrophytic ve	egetation and	wetland hydrology mu	ist he nre	esent unle	ess distu	rhed or problemation	•			
Restrictive Layer (if obser		wedana nyarology ma	ot bo pro	ocht, and	Joo diotal	The dispression and	J.			
Type:	,									
Depth (inches):						Hydric Soil Pr	esent? Y	es X	No	
Remarks:						1				

Project/Site: Avon Lake Gas	s Addition Project	C	ty/County: Lorain		Sampling Date:	: 5/13/14		
Applicant/Owner: NRG Ohio	Pipeline Company LLC			State:	OH Sampling	g Point: UP_20		
Investigator(s): Travis Kessler, Lauren Zielke, Aaron Gordon Section, Township, Range: Not available								
Landform (hillside, terrace, et			al relief (concave, convex,		91	lope (%): 0 to 2		
,	′ 		•	, <u> </u>				
Subregion (LRR or MLRA): L		41.4111552	Long. <u>-</u>	82.06879122		um: <u>WGS 84</u>		
Soil Map Unit Name: Miner si	•				ification: Not avail	lable		
Are climatic / hydrologic cond	itions on the site typical for	or this time of year	? Yes x No	(If no, explai	n in Remarks.)			
Are Vegetation, Soil	, or Hydrology	significantly o	listurbed? Are "Norma	l Circumstances" p	resent? Yes	x No		
Are Vegetation, Soil	, or Hydrology	naturally prob	elematic? (If needed,	explain any answe	rs in Remarks.)			
SUMMARY OF FINDIN	GS – Attach site ma	ap showing sa	mpling point locati	ons, transects	, important fe	atures, etc.		
Hydrophytic Vegetation Pres	sent? Yes	No X	Is the Sampled Area		,	,		
Hydric Soil Present?	Yes		within a Wetland?	Yes	No X			
Wetland Hydrology Present?	? Yes	No X	If yes, optional Wetland	d Site ID:				
Remarks: (Explain alternativ Upland adjacent to PFO/PSS		a separate report.)						
HYDROLOGY								
Wetland Hydrology Indicat				-	Secondary Indicators (minimum of two required)			
Primary Indicators (minimum	of one is required; check		(50)	Surface Soil Cracks (B6)				
Surface Water (A1)		Water-Stained Le		Drainage Patterns (B10)				
High Water Table (A2)		Aquatic Fauna (B		Moss Trim Lines (B16)				
Saturation (A3)		Marl Deposits (B1		Dry-Season Water Table (C2) Crayfish Burrows (C8)				
Water Marks (B1) Sediment Deposits (B2)		Hydrogen Sulfide	heres on Living Roots (C					
Drift Deposits (B3)		Presence of Redu	=	· —				
Algal Mat or Crust (B4)			ction in Tilled Soils (C6)	Stunted or Stressed Plants (D1) Geomorphic Position (D2)				
Iron Deposits (B5)		Thin Muck Surfac	` '	Shallow Aquitard (D3)				
Inundation Visible on Ae	erial Imagery (B7)	Other (Explain in			Microtopographic Relief (D4)			
Sparsely Vegetated Cor		,		ral Test (D5)				
Field Observations:					· · · ·			
Surface Water Present?	Yes No X	Depth (inches):						
Water Table Present?	Yes No X Yes No X	Depth (inches):						
Saturation Present?	Yes No X			Hydrology Preser	nt? Yes	No X		
(includes capillary fringe)								
Describe Recorded Data (str	ream gauge, monitoring w	vell, aerial photos,	previous inspections), if a	vailable:				
Remarks:								
Site was seasonably wet due	e to recent heavy spring r	ains						

VEGETATION – Use scientific names of plants. UP 20 Sampling Point: Absolute Dominant Indicator Tree Stratum (Plot size: 30' radius) % Cover **Dominance Test worksheet:** Species? Status 60 **FACU** Acer saccharum Yes **Number of Dominant Species** That Are OBL, FACW, or FAC: 2. Acer rubrum Yes FAC (A) Quercus macrocarpa 10 No **FACU Total Number of Dominant** 4. Species Across All Strata: 5 (B) 5. Percent of Dominant Species (A/B) 6. That Are OBL, FACW, or FAC: 40.0% Prevalence Index worksheet: 100 =Total Cover Total % Cover of: Sapling/Shrub Stratum (Plot size: 15' radius) OBL species x 1 = 0 Prunus serotina 40 Yes **FACU** FACW species x 2 = x 3 = 2. Rubus allegheniensis Yes FACU FAC species 90 270 3. **FACU** species 160 x 4 = 4. **UPL** species 0 x 5 = 0 5. Column Totals: 250 910 (A) (B) 6. Prevalence Index = B/A = 3.64 **Hydrophytic Vegetation Indicators:** 80 =Total Cover 1 - Rapid Test for Hydrophytic Vegetation Herb Stratum (Plot size: 5' radius) 2 - Dominance Test is >50% Festuca rubra 50 Yes FAC 3 - Prevalence Index is ≤3.01 2. Taraxacum officinale 10 No **FACU** 4 - Morphological Adaptations¹ (Provide supporting data in Remarks or on a separate sheet) 3. Toxicodendron radicans 10 FAC No Problematic Hydrophytic Vegetation¹ (Explain) 4. 5. ¹Indicators of hydric soil and wetland hydrology must 6. be present, unless disturbed or problematic. **Definitions of Vegetation Strata:** 8. Tree - Woody plants 3 in. (7.6 cm) or more in 9. diameter at breast height (DBH), regardless of height. Sapling/shrub - Woody plants less than 3 in. DBH and greater than or equal to 3.28 ft (1 m) tall. Herb - All herbaceous (non-woody) plants, regardless 70 =Total Cover of size, and woody plants less than 3.28 ft tall. Woody Vine Stratum (Plot size: 15' radius) Woody vines - All woody vines greater than 3.28 ft in 1. height. Hydrophytic Vegetation Present? Yes ____ No _X =Total Cover Remarks: (Include photo numbers here or on a separate sheet.) Very heavy leaf litter limited herbaceous stratum growth. .

SOIL Sampling Point: UP_20

Profile Description: (Describe to the depth needed to document the indicator or confirm the absence of indicators.)												
Depth	Matrix		Redox	Featur	es							
(inches)	Color (moist)	%	Color (moist)	%	Type ¹	Loc ²	Texture		Remarks			
0-16	10YR 3/2	100	10YR 3/6	0			Loamy/Clayey					
16-20	10YR 5/2	98	10YR 5/8	2	С	M	Loamy/Clayey	faint	t redox concer	ntrations		
								-				
	=Concentration, D=Dep	oletion, RI	M=Reduced Matrix, CS	S=Cove	red or Coa	ated San			Pore Lining, N			
Hydric So	oil Indicators:						Indicators for	or Problema	atic Hydric Sc	oils³:		
Histo	sol (A1)		Polyvalue Below	Surface	(S8) (LR	RR,	2 cm Mu	ıck (A10) (L l	RR K, L, MLR	A 149B)		
Histic	Epipedon (A2)		MLRA 149B)				Coast P	rairie Redox	(A16) (LRR K	, L, R)		
Black Histic (A3) Thin Dark Surface (S9) (LRR R, MLRA)B)5 cm Μι	icky Peat or	Peat (S3) (LR	R K, L, F	₹)	
Hydro	ogen Sulfide (A4)		High Chroma Sa	nds (S1	1) (LRR K	(, L)	Polyvalu	ie Below Sui	rface (S8) (LR	RK, L)		
Strati	fied Layers (A5)		Loamy Mucky Mi	ineral (F	1) (LRR k	(, L)	Thin Da	rk Surface (S	89) (LRR K, L)		
Deple	eted Below Dark Surfac	e (A11)	Loamy Gleyed M	latrix (F2	2)		Iron-Mai	nganese Ma	sses (F12) (Ll	R K, L, !	R)	
Thick	Dark Surface (A12)		Depleted Matrix	(F3)			Piedmont Floodplain Soils (F19) (MLRA 149B)					
Sand	y Mucky Mineral (S1)		Redox Dark Surf	ace (F6)		Mesic S	Mesic Spodic (TA6) (MLRA 144A, 145, 149B)				
	y Gleyed Matrix (S4)		Depleted Dark S				Red Parent Material (F21)					
	y Redox (S5)		Redox Depression						Surface (TF12))		
	ped Matrix (S6)		Marl (F10) (LRR	, ,			Other (Explain in Remarks)					
	Surface (S7)			, ,				•	,			
	s of hydrophytic vegeta		wetland hydrology mus	st be pre	esent, unle	ess distur	bed or problemation	D				
	ve Layer (if observed)	:										
Type:												
Depth (inches):						Hydric Soil Pr	esent?	Yes	No	<u> </u>	
Remarks:												

ddition Project	City/County: Lorain		Sampling Date: 5/13/14			
peline Company LLC	<u> </u>	State:	OH Sampling Point: WET_20			
•	Section, Township, F	Range: Not available				
			Slope (%): 0 to 2			
- '		· -	Datum: WGS 84			
	-		ification: Not available			
•	o of year? Vee v					
••	<u> </u>					
		·				
		•	•			
? Yes X No	Is the Sampled	Area				
			No			
Yes X No	If yes, optional \	Wetland Site ID: WET_20)			
rocedures here or in a separate	ereport.)					
: 		· · · · · · · · · · · · · · · · · · ·	icators (minimum of two required)			
•			oil Cracks (B6)			
			Patterns (B10)			
			on Water Table (C2)			
			Visible on Aerial Imagery (C9)			
			Stressed Plants (D1)			
			Shallow Aquitard (D3) Microtopographic Relief (D4)			
	xpiain in Remarks)		AC-Neutral Test (D5)			
Pe Surface (DO)		A I AO-NOGO				
Van v Na Denth	(inches): 0.1					
	` ′					
		atland Hydrology Preser	nt? Yes X No			
165 <u>A</u> 140 Dopui,	,11101163).	tilaliu riyurology i 1000.	III: 163 A 110			
n gauge monitoring well, aeria	I nhotos previous inspection	ns) if available:				
gaage,eege,e.	priotos, promete maps	10), a.a.a.a.				
recent heavy spring rains						
	celine Company LLC Lauren Zielke, Aaron Gordon depressions R, MLRA 139	Lauren Zielke, Aaron Gordon depressions	celine Company LLC Lauren Zielke, Aaron Gordon Section, Township, Range: Not available depressions Local relief (concave, convex, none): concave R, MLRA 139 Lat: 41.4111708 Long: -82.06869412 Long: -82.06869412 Long: -82.06869412 NWI classis on the site typical for this time of year? YesxNo (If no, explain any answer or Hydrology naturally problematic? (If needed, explain any answer or Hydrology naturally problematic? (If needed, explain any answer or Hydrology naturally problematic? (If needed, explain any answer or Hydrology naturally problematic? (If needed, explain any answer or Hydrology naturally problematic? (If needed, explain any answer or Hydrology naturally problematic? (If needed, explain any answer or Hydrology and Hydrology (If peeded, explain any answer or Hydrology and Hydrology			

VEGETATION – Use scientific names of plants. Sampling Point: WET 20 Absolute Dominant Indicator Tree Stratum (Plot size: 30' radius) % Cover **Dominance Test worksheet:** Species? Status 60 FAC Acer rubrum Yes **Number of Dominant Species** That Are OBL, FACW, or FAC: Ulmus americana **FACW** (A) 3. **Total Number of Dominant** 4. Species Across All Strata: 6 (B) 5. Percent of Dominant Species 6. That Are OBL, FACW, or FAC: 100.0% (A/B) Prevalence Index worksheet: 100 =Total Cover Total % Cover of: Sapling/Shrub Stratum (Plot size: 15' radius) OBL species x 1 = 40 Acer rubrum 80 FAC FACW species x 2 = x 3 = 2. FAC species 180 **FACU** species 0 x 4 = UPL species 0 x 5 = Column Totals: 220 620 (A) (B) 6. Prevalence Index = B/A = 2.82 **Hydrophytic Vegetation Indicators:** 80 =Total Cover 1 - Rapid Test for Hydrophytic Vegetation Herb Stratum (Plot size: 5' radius) X 2 - Dominance Test is >50% Carex blanda 20 Yes FAC X 3 - Prevalence Index is ≤3.0¹ 2. Juncus tenuis 10 Yes FAC 4 - Morphological Adaptations¹ (Provide supporting data in Remarks or on a separate sheet) 3. Toxicodendron radicans 10 Yes FAC Problematic Hydrophytic Vegetation¹ (Explain) 4. 5. ¹Indicators of hydric soil and wetland hydrology must 6. be present, unless disturbed or problematic. **Definitions of Vegetation Strata:** 8. Tree - Woody plants 3 in. (7.6 cm) or more in 9. diameter at breast height (DBH), regardless of height. Sapling/shrub - Woody plants less than 3 in. DBH and greater than or equal to 3.28 ft (1 m) tall. Herb - All herbaceous (non-woody) plants, regardless 40 =Total Cover of size, and woody plants less than 3.28 ft tall. Woody Vine Stratum (Plot size: 15' radius) Woody vines - All woody vines greater than 3.28 ft in 1. height. Hydrophytic Vegetation Present? Yes X No No =Total Cover Remarks: (Include photo numbers here or on a separate sheet.) Very heavy leaf litter limited herbaceous stratum growth. .

SOIL Sampling Point: WET_20

	escription: (Describe	to the de	-	or or cor	nfirm the absence	of indicators	s.)					
Depth	Matrix			x Feature		. 2	- .					
(inches)	Color (moist)	<u>%</u>	Color (moist)	<u>%</u>	Type ¹	Loc ²	Texture	1	Remarks			
0-10	10YR 3/2	90	10YR 3/6	10	<u>C</u>	<u>M</u>	Mucky Loam/Clay					
10-20	10YR 4/1	60	10YR 4/6	40	<u>C</u>	<u>M</u>	Mucky Loam/Clay	Promine	ent redox con	centrations		
 												
	=Concentration, D=Dep	oletion, RI	√I=Reduced Matrix, C	S=Cover	red or Coa	ated San		ocation: PL=P				
-	oil Indicators:		Determine Delem	O::wfa.a.	(00) /LE			or Problemat	-			
	sol (A1)		Polyvalue Below		; (S8) (LK	RR,		uck (A10) (LR		•		
	Epipedon (A2)		MLRA 149B)			DA 440		rairie Redox (
	(Histic (A3)		Thin Dark Surface					ucky Peat or F				
	ogen Sulfide (A4)		High Chroma Sa			-		ue Below Surf				
	ified Layers (A5)		Loamy Mucky M			(, L)		rk Surface (S				
	eted Below Dark Surfac	e (A11)	Loamy Gleyed M		2)			nganese Mas				
	Dark Surface (A12)		Depleted Matrix					nt Floodplain				
	ly Mucky Mineral (S1)		X Redox Dark Surf	face (F6))		Mesic S	Mesic Spodic (TA6) (MLRA 144A, 145, 149B)				
Sand	ly Gleyed Matrix (S4)		Depleted Dark S	Surface (F	F 7)		Red Parent Material (F21)					
Sand	ly Redox (S5)		Redox Depression	ons (F8)			Very Shallow Dark Surface (TF12)					
Stripp	oed Matrix (S6)		Marl (F10) (LRR	K, L)			Other (Explain in Remarks)					
Dark	Surface (S7)						<u>-</u>					
3Indicators	s of hydrophytic vegeta	tion and v	wetland hydrology mu	ist he pre	esent unle	ese distu	rhed or problematic	^				
	ve Layer (if observed)		veliana nyarology ma	St De pro	Scrit, um	333 GIGGG	The of problematic	<u>. </u>				
Type:												
Depth (i	inches):						Hydric Soil Pr	resent?	Yes X	No		
Remarks:												

Applicant/Owner: NRG Gas Pipeline Company LLC Investigator(s): Travis Kessler, Lauren Zielke, Aaron Gordon Section, Township, Range: Not available Landform (hillside, terrace, etc.): depressions Local relief (concave, convex, none): concave Slope (%): 0 - 2 Subregion (LRR or MLRA): LRR R, MLRA 139 Lat: 41.4095025921 Long: -82.0683496339 Datum: WGS 84 Soil Map Unit Name: Miner silty clay loam Are climatic / hydrologic conditions on the site typical for this time of year? Yes x No (If no, explain in Remarks.) Are Vegetation Soil or Hydrology significantly disturbed? Are "Normal Circumstances" present? Yes x No Are Vegetation or Hydrology naturally problematic? (If needed, explain any answers in Remarks.) SUMMARY OF FINDINGS – Attach site map showing sampling point locations, transects, important features, etc. Hydrophytic Vegetation Present? Yes No X Is the Sampled Area within a Wetland? Yes No X Wetland Hydrology Present? Yes No X Wetland Hydrology Present? Yes No X If yes, optional Wetland Site ID: Remarks: (Explain alternative procedures here or in a separate report.)	Project/Site: Avon Lake	Gas Addition Project	C	city/County: Lorain County	,	Sampling Date: 5/13	3/14		
Investigator(s): Travis Kessler, Lauren Zielke, Aaron Gordon Section, Township, Range: Not available Landform (hillside, terrace, etc.): depressions Local relief (concave, convex, none): concave Slope (%): 0 - 2 Subregion (LRR or MLRA): LRR R. MLRA 139	Applicant/Owner: NRG	Gas Pipeline Company				OH Sampling Poin	t: UPL 21		
Landform (hillside, terrace, etc.): depressions				ection Townshin Range:					
Subregion (LRR or MLRA): LRR R, MLRA 139				-		Slone (¢	%)· 0 - 2		
Are climatic / hydrologic conditions on the site typical for this time of year? Yes x No (If no, explain in Remarks.) Are Vegetation Soil or Hydrology significantly disturbed? Are 'Normal Circumstances' present? Yes x No (If no, explain in Remarks.) Are Vegetation Soil or Hydrology significantly disturbed? Are 'Normal Circumstances' present? Yes x No (If no, explain in Remarks.) SUMMARY OF FINDINGS – Attach site map showing sampling point locations, transects, important features, etc. Hydrophytic Vegetation Present? Yes X No X Is the Sampled Area within a Wetland? Yes No X Wetland Hydrology Present? Yes No X If yes, optional Wetland Site ID: **Present Strain St	•	· · ·		•	·		-		
Are climatic / hydrologic conditions on the site typical for this time of year? Yes x No (If no, explain in Remarks.) Are Vegetation Soil or Hydrology significantly disturbed? Are 'Normal Circumstances' present? Yes x No (If needed, explain any answers in Remarks.) SUMMARY OF FINDINGS — Attach site map showing sampling point locations, transects, important features, etc. Hydrophytic Vegetation Present? Yes No X within a Wetland? Yes No X Wetland Hydrology Present? Yes No X If yes, optional Wetland Site ID: Remarks: (Explain alternative procedures here or in a separate report.) HYDROLOGY Wetland Hydrology Indicators: Primary Indicators (minimum of one is required; check all that apply) Surface Water (A1) Water-Stained Leaves (B9) Drainage Patterns (B10) High Water Table (A2) Aquatic Fauna (B13) Mos STimules (B16) Sufface Water (A3) Man Deposits (B15) Dry-Season Water Table (C2) Water Marks (B1) Hydrogen Sulfide Odor (C1) Craylish Burrows (C8) Sediment Oeposits (B2) Oxidized Rhizospheres on Living Roots (C3) Saturation Visible on Aerial Imagery (C9) Drift Deposits (B3) Presence of Reduced Iron (C4) Stunted or Stressed Plants (D1) Algal Mat or Crust (B4) Recent Iron Reduction in Tilled Solis (C6) Geomorphic Position (D2) Iron Deposits (B5) Thin Muck Surface (C7) Shallow Aquitard (D3) Inundation Visible on Aerial Imagery (B7) Other (Explain in Remarks) Microtopographic Relief (D4) Sparsely Vegetated Concave Surface (B8) Field Observations: Surface Water Present? Yes No X Depth (inches): Wetland Hydrology Present? Yes No X Depth (inches):			Lat: 41.4095025921	Long: -			7GS 84		
Are Vegetation, Soil, or Hydrology significantly disturbed?	Soil Map Unit Name: Mir	er silty clay loam							
Are Vegetation, Soil, or Hydrology	Are climatic / hydrologic	onditions on the site ty	pical for this time of year	? Yes <u>x</u> No_	(If no, explain	n in Remarks.)			
SUMMARY OF FINDINGS – Attach site map showing sampling point locations, transects, important features, etc. Hydrophytic Vegetation Present? Yes No Within a Wetland? Yes No X Wetland Hydrology Present? Yes No Within a Wetland? Yes No X Wetland Hydrology Present? Yes No Within a Wetland? Yes No X Wetland Hydrology Indicators: Remarks: (Explain alternative procedures here or in a separate report.) Wetland Hydrology Indicators: Secondary Indicators (minimum of two required) Surface Soil Cracks (B6) Surface Water (A1) Water-Stained Leaves (B9) Drainage Patterns (B10) High Water Table (A2) Aquatic Fauna (B13) Moss Trin Lines (B16) Saturation (A3) Marl Deposits (B15) Dry-Season Water Table (C2) Sediment Deposits (B2) Oxidized Rhizospheres on Living Roots (C3) Saturation Visible on Aerial Imagery (C9) Drift Deposits (B3) Presence of Reduced Iron (C4) Stunted or Stressed Plants (D1) Algal Mat or Crust (B4) Recent Iron Reduction in Tilled Soils (C6) Geomorphic Position (D2) Inundation Visible on Aerial Imagery (B7) Other (Explain in Remarks) Microtopographic Relief (D4) Sparsely Vegetated Concave Surface (B8) Field Observations: Surface Water Present? Yes No X Depth (inches): Water Table Present? Yes No X Depth (inches): Wetland Hydrology Present? Yes No X Depth (inches):	Are Vegetation,	Soil, or Hydrolo	ogysignificantly	disturbed? Are "Norma	l Circumstances" p	resent? Yes x	No		
Hydrophytic Vegetation Present? Yes X No Within a Wetland? Wetland Hydrology Present? Wetland Hydrology Present? Wetland Hydrology Present? Wetland Hydrology Present? Wetland Hydrology Present? Wetland Hydrology Indicators: Famarks: (Explain alternative procedures here or in a separate report.) Wetland Hydrology Indicators:	Are Vegetation,	Soil, or Hydrolo	ogynaturally pro	blematic? (If needed,	explain any answei	s in Remarks.)			
HYDROLOGY Wetland Hydrology Present? Yes No X Wetland Hydrology Present? Yes No X Wetland Hydrology Present? Yes No X Wetland Hydrology Indicators: Remarks: (Explain alternative procedures here or in a separate report.) ### Wetland Hydrology Indicators: Wetland Hydrology Indicators: Wetland Hydrology Indicators: Secondary Indicators (minimum of two required) Primary Indicators (minimum of one is required; check all that apply) Surface Water (A1) High Water Table (A2) Aquatic Fauna (B13) Marl Deposits (B15) Saturation (A3) Marl Deposits (B15) Sediment Deposits (B2) Oxidized Rhizospheres on Living Roots (C3) Sediment Deposits (B3) Presence of Reduced Iron (C4) Aquatic Fauna (B1) Agal Mat or Crust (B4) Recent Iron Reduction in Tilled Solis (C6) Iron Deposits (B5) Iron Deposits (B7) Sparsely Vegetated Concave Surface (B8) Thin Muck Surface (C7) Sparsely Vegetated Concave Surface (B8) Surface Water Present? Yes No X Depth (inches): Surface Water Present? Yes No X Depth (inches): Wetland Hydrology Present? Yes No X Depth (inches): Wetland Hydrology Present? Yes No X Depth (inches): Wetland Hydrology Present? Yes No X Depth (inches): Becomarks:	SUMMARY OF FIN	DINGS – Attach si	ite map showing sa	ampling point locati	ons, transects	, important feature	s, etc.		
HYDROLOGY Wetland Hydrology Present? Yes No X	Hydrophytic Vegetation	Present? Yes	No X	Is the Sampled Area					
HYDROLOGY Wetland Hydrology Indicators: Primary Indicators (minimum of one is required; check all that apply) Surface Water (A1) High Water Table (A2) Saturation (A3) Mand Deposits (B15) Sediment Deposits (B2) Drift Deposits (B2) Drift Deposits (B3) Algal Mat or Crust (B4) Algal Mat or Crust (B5) Algal Mat or Crust (B6) Algal Mat or Crust (B6) Algal Mat or Crust (B7) Algal Mat or Crust (B8) Algal Mat or Crust (B1) Algal Mat o	Hydric Soil Present?	Yes		within a Wetland?	Yes	No X			
HYDROLOGY Wetland Hydrology Indicators: Primary Indicators (minimum of one is required; check all that apply) Surface Water (A1) High Water Table (A2) Aquatic Fauna (B13) Saturation (A3) Marf Deposits (B15) Water Marks (B1) Dry-Season Water Table (C2) Water Marks (B1) Dry-Season Water Table (C2) Sediment Deposits (B2) Oxidized Rhizospheres on Living Roots (C3) Algal Mat or Crust (B4) Iron Deposits (B5) Iron Deposits (B5) Iron Deposits (B5) Iron Deposits (B5) Thin Muck Surface (C7) Sparsely Vegetated Concave Surface (B8) Field Observations: Surface Water Present? Yes No No Depth (inches): Wetland Hydrology Present? Yes No X Depth (inches): (includes capillary fringe) Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available:	Wetland Hydrology Pres	ent? Yes	No X	If yes, optional Wetland	d Site ID:				
Wetland Hydrology Indicators:	Remarks: (Explain alter	native procedures here	e or in a separate report.)	•					
Wetland Hydrology Indicators:									
Primary Indicators (minimum of one is required; check all that apply) Surface Water (A1) Water-Stained Leaves (B9) Drainage Patterns (B10) High Water Table (A2) Aquatic Fauna (B13) Moss Trim Lines (B16) Saturation (A3) Water Marks (B1) Sediment Deposits (B1) Drift Deposits (B3) Presence of Reduced Iron (C4) Iron Deposits (B5) Inundation Visible on Aerial Imagery (B7) Sparsely Vegetated Concave Surface (B8) Field Observations: Surface Soil Cracks (B6) Drainage Patterns (B10) Moss Trim Lines (B16) Dry-Season Water Table (C2) Crayfish Burrows (C8) Saturation Visible on Aerial Imagery (C9) Stunted or Stressed Plants (D1) Stunted or Stressed Plants (D1) Geomorphic Position (D2) Iron Deposits (B5) Thin Muck Surface (C7) Shallow Aquitard (D3) Microtopographic Relief (D4) FAC-Neutral Test (D5) Field Observations: Surface Water Present? Yes No Depth (inches): Water Table Present? Yes No Depth (inches): Wetland Hydrology Present? Yes No X Remarks: Remarks:	HYDROLOGY								
Surface Water (A1)	Wetland Hydrology Inc	licators:			Secondary Indi	cators (minimum of two	required)		
High Water Table (A2) Saturation (A3) Aquatic Fauna (B13) Marl Deposits (B15) Dry-Season Water Table (C2) Water Marks (B1) Hydrogen Sulfide Odor (C1) Sediment Deposits (B2) Drift Deposits (B3) Presence of Reduced Iron (C4) Algal Mat or Crust (B4) Iron Deposits (B5) Inundation Visible on Aerial Imagery (B7) Sparsely Vegetated Concave Surface (B8) Field Observations: Surface Water Present? Water Table Present? Yes No X Depth (inches): Saturation Visible on Aerial Imagery (Ps) No X Depth (inches): Wetland Hydrology Present? Yes No X Depth (inches): Saturation Visible on Aerial Imagery (B7) Wetland Hydrology Present? Yes No X Depth (inches): Saturation Present? Remarks: Remarks:	Primary Indicators (mini	num of one is required	; check all that apply)		Surface So	oil Cracks (B6)			
Saturation (A3) Water Marks (B1) Hydrogen Sulfide Odor (C1) Crayfish Burrows (C8) Sediment Deposits (B2) Oxidized Rhizospheres on Living Roots (C3) Saturation Visible on Aerial Imagery (C9) Drift Deposits (B3) Presence of Reduced Iron (C4) Stunted or Stressed Plants (D1) Algal Mat or Crust (B4) Recent Iron Reduction in Tilled Soils (C6) Geomorphic Position (D2) Iron Deposits (B5) Inundation Visible on Aerial Imagery (B7) Sparsely Vegetated Concave Surface (B8) Field Observations: Surface Water Present? Yes No x Depth (inches): Water Table Present? Yes No x Depth (inches): Saturation Present? Yes No x Depth (inches): Wetland Hydrology Present? Yes No x Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available: Remarks:	Surface Water (A1)		Water-Stained Le	eaves (B9)	Drainage I	atterns (B10)			
Water Marks (B1)	High Water Table (A	(2)	Aquatic Fauna (E	313)		` '			
Sediment Deposits (B2) Drift Deposits (B3) Algal Mat or Crust (B4) Iron Deposits (B5) Inundation Visible on Aerial Imagery (B7) Sparsely Vegetated Concave Surface (B8) Field Observations: Surface Water Present? Water Table Present? Yes No X Depth (inches): Saturation Visible on Aerial Imagery (B7) Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available: Oxidized Rhizospheres on Living Roots (C3) Saturation Visible on Aerial Imagery (C9) Stunted or Stressed Plants (D1) Stunted or Stressed Plants (D2) Shallow Aquitard (D3) Microtopographic Peiston (D2) Shallow Aquitard (D3) Microtopographic Peiston (D2) Shallow Aquitard (D3) Microtopographic Plants (D3) Microtopographic Plants (D4) Microtopographic Plants (D4) Stunted Name (D4) Stunted Nam									
Drift Deposits (B3)									
Algal Mat or Crust (B4)	· ·	(B2)		= -		=	y (C9)		
Iron Deposits (B5)		D.4)							
Inundation Visible on Aerial Imagery (B7) Other (Explain in Remarks) Microtopographic Relief (D4) Sparsely Vegetated Concave Surface (B8) FAC-Neutral Test (D5) Field Observations: Surface Water Present? Yes No x Depth (inches): Water Table Present? Yes No x Depth (inches): Saturation Present? Yes No x Depth (inches): Wetland Hydrology Present? Yes No X (includes capillary fringe) Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available:	I 	34)		· / — · · · · · · · · · · · · · · · · ·					
Sparsely Vegetated Concave Surface (B8) FAC-Neutral Test (D5) Field Observations: Surface Water Present? Yes No x Depth (inches): Water Table Present? Yes No x Depth (inches): Saturation Present? Yes No x Depth (inches): Wetland Hydrology Present? Yes No X (includes capillary fringe) Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available:		n Aprial Imagen (D7)							
Field Observations: Surface Water Present? Yes No x Depth (inches): Water Table Present? Yes No x Depth (inches): Saturation Present? Yes No x Depth (inches): (includes capillary fringe) Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available: Remarks:	l 			Remarks)					
Surface Water Present? Yes No x Depth (inches): Water Table Present? Yes No x Depth (inches): Saturation Present? Yes No x Depth (inches): (includes capillary fringe) Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available: Remarks:		Concave Surface (Bo)			I AO-Neuti	ai rest (DS)			
Water Table Present? Yes No x Depth (inches): Saturation Present? Yes No x Depth (inches): (includes capillary fringe) Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available: Remarks:		Voc. No.	y Donth (inches):						
Saturation Present? Yes No x Depth (inches): Wetland Hydrology Present? Yes No X (includes capillary fringe) Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available: Remarks:									
(includes capillary fringe) Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available: Remarks:					Hydrology Preser	nt? Yes I	No X		
Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available: Remarks:			Z Bopai (monoc).		, a. o.og, 1 .ooo.		<u> </u>		
			oring well, aerial photos,	previous inspections), if a	ıvailable:				

VEGETATION – Use scientific names of plants. Sampling Point: UPL 21 Absolute Dominant Indicator Tree Stratum (Plot size: 30' radius) **Dominance Test worksheet:** % Cover Species? Status 50 **FACU** Acer saccharum Yes **Number of Dominant Species** That Are OBL, FACW, or FAC: 2. Acer rubrum FAC (A) 3. **Total Number of Dominant** 4. Species Across All Strata: 6 (B) 5. Percent of Dominant Species 6. That Are OBL, FACW, or FAC: 16.7% (A/B) Prevalence Index worksheet: 100 =Total Cover Total % Cover of: Sapling/Shrub Stratum (Plot size: 15' radius) OBL species x 1 = 0 Rubus allegheniensis 30 Yes **FACU FACW** species x 2 = x 3 = 2. Prunus serotina 30 Yes FACU FAC species 50 150 3. **FACU** species 190 x 4 = 4. **UPL** species 20 x 5 = 100 5. Column Totals: 260 1010 (A) (B) 6. Prevalence Index = B/A = 3.88 **Hydrophytic Vegetation Indicators:** 60 =Total Cover 1 - Rapid Test for Hydrophytic Vegetation Herb Stratum (Plot size: 5' radius) 2 - Dominance Test is >50% Dactylis glomerata 40 Yes **FACU** 3 - Prevalence Index is ≤3.01 2. Poa pratensis 30 Yes **FACU** 4 - Morphological Adaptations¹ (Provide supporting data in Remarks or on a separate sheet) 3. Cirsium discolor 10 No UPL 10 FACU Problematic Hydrophytic Vegetation¹ (Explain) Taraxacum officinale No 4. 10 UPL 5. Trifolium arvense No ¹Indicators of hydric soil and wetland hydrology must 6. be present, unless disturbed or problematic. **Definitions of Vegetation Strata:** 8. Tree - Woody plants 3 in. (7.6 cm) or more in 9. diameter at breast height (DBH), regardless of height. Sapling/shrub - Woody plants less than 3 in. DBH and greater than or equal to 3.28 ft (1 m) tall. Herb - All herbaceous (non-woody) plants, regardless 100 =Total Cover of size, and woody plants less than 3.28 ft tall. Woody Vine Stratum (Plot size: 15' radius) Woody vines - All woody vines greater than 3.28 ft in 1. height. Hydrophytic Vegetation Present? Yes ____ No _X =Total Cover Remarks: (Include photo numbers here or on a separate sheet.) very heavy leaf litter did not allow abundant herbaceous stratum growth

SOIL Sampling Point: UPL_21

Type: C=Concentration, D=Depletion, RM=Reduced Matrix, CS=Covered or Coated Sand Grains. Location: PL=Pore Lining, M=Matrix.	Depth	Matrix	. to the ut	-	x Featur		J. J. COI	nfirm the absence of ind	10a(013.)
Type: C=Concentration, D=Depletion, RM=Reduced Matrix, CS=Covered or Coated Sand Grains. Ptydric Soil Indicators: Histosol (A1) Polyvalue Below Surface (S8) (LRR R, Indicators for Problematic Hydric Soils³: 2 cm Muck (A10) (LRR K, L MLRA 149B) Black Histic Epipedon (A2) Histic Epipedon (A2) High Chroma Sands (S11) (LRR K, L) Polyvalue Below Surface (S9) (LRR R, MLRA 149B) 5 cm Mucky Pate or Peat (S3) (LRR K, L) Polyvalue Below Surface (S8) (LRR K, L) Thin Dark Surface (S9) (LRR K, L) Thin Dark Surface (S9) (LRR K, L) Thin Dark Surface (S9) (LRR K, L) Thick Dark Surface (A11) Loamy Mucky Mineral (F1) (LRR K, L) Thick Dark Surface (A12) Depleted Matrix (F2) Thick Dark Surface (A12) Sandy Mucky Mineral (S1) X Redox Dark Surface (F6) Mesic Spodic (TA6) (MLRA 149B) Sandy Redox (S5) Redox Dark Surface (F7) Red Parent Matrial (F21) Sarly Redox (S5) Redox Depressions (F8) Dark Surface (S7) Other (Explain in Remarks) Type: Type: Depth (inches): Hydric Soil Present? Yes X No	(inches)	Color (moist)	%	Color (moist)	%	Type ¹	Loc ²	Texture	Remarks
Type: C=Concentration, D=Depletion, RM=Reduced Matrix, CS=Covered or Coated Sand Grains. Ptydric Soil Indicators: Histosol (A1)	0-18	10YR 3/1	98	10YR 5/8	2	С	М	Loamy/Clayey	
Histosol (A1) Polyvalue Below Surface (S8) (LRR R, 2 cm Muck (A10) (LRR K, L, MLRA 149B) Histic Epipedon (A2) MLRA 149B) Coast Prairie Redox (A16) (LRR K, L, R) Black Histic (A3) Thin Dark Surface (S9) (LRR R, MLRA 149B) 5 cm Mucky Peat or Peat (S3) (LRR K, L, R) Hydrogen Sulfide (A4) High Chroma Sands (S11) (LRR K, L) Polyvalue Below Surface (S8) (LRR K, L) Stratified Layers (A5) Loamy Mucky Mineral (F1) (LRR K, L) Thin Dark Surface (S9) (LRR K, L) Depleted Below Dark Surface (A11) Loamy Gleyed Matrix (F2) Iron-Manganese Masses (F12) (LRR K, L, R) Sandy Mucky Mineral (S1) X Redox Dark Surface (F6) Mesic Spodic (TA6) (MLRA 144A, 145, 149B) Sandy Gleyed Matrix (S4) Depleted Dark Surface (F7) Red Parent Material (F21) Sandy Redox (S5) Redox Depressions (F8) Very Shallow Dark Surface (TF12) Stripped Matrix (S6) Marl (F10) (LRR K, L) Other (Explain in Remarks) Indicators of hydrophytic vegetation and wetland hydrology must be present, unless disturbed or problematic. Restrictive Layer (if observed): Type: Depth (inches): Hydric Soil Present? Yes X No									
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Histosol (A1)	Type: C=	Concentration, D=Dep	pletion, RI	M=Reduced Matrix, C	S=Cove	red or Co	ated San	d Grains. ² Location:	PL=Pore Lining, M=Matrix.
Histic Epipedon (A2) MIRA 149B) Coast Prairie Redox (A16) (LRR K, L, R) Black Histic (A3) Thin Dark Surface (S9) (LRR R, MLRA 149B) 5 cm Mucky Peat or Peat (S3) (LRR K, L, R) Hydrogen Sulfide (A4) High Chroma Sands (S11) (LRR K, L) Stratified Layers (A5) Loamy Mucky Mineral (F1) (LRR K, L) Thin Dark Surface (S9) (LRR K, L) Depleted Below Dark Surface (A11) Loamy Gleyed Matrix (F2) Iron-Manganese Masses (F12) (LRR K, L, R) Thick Dark Surface (A12) Depleted Matrix (F3) Sandy Mucky Mineral (S1) Sandy Gleyed Matrix (S4) Depleted Dark Surface (F6) Mesic Spodic (TA6) (MLRA 144A, 145, 149B) Sandy Redox (S5) Redox Depressions (F8) Very Shallow Dark Surface (TF12) Stripped Matrix (S6) Dark Surface (S7) Pindicators of hydrophytic vegetation and wetland hydrology must be present, unless disturbed or problematic. Restrictive Layer (if observed): Type: Depth (inches): Hydric Soil Present? Yes X No	Hydric So	il Indicators:						Indicators for Prol	olematic Hydric Soils ³ :
Black Histic (A3)	Histos	ol (A1)		Polyvalue Below	/ Surface	e (S8) (LR	RR,	2 cm Muck (A1	0) (LRR K, L, MLRA 149B)
Hydrogen Sulfide (A4) High Chroma Sands (S11) (LRR K, L) Polyvalue Below Surface (S8) (LRR K, L) Stratified Layers (A5) Loamy Mucky Mineral (F1) (LRR K, L) Thin Dark Surface (S9) (LRR K, L) Depleted Below Dark Surface (A11) Loamy Gleyed Matrix (F2) Iron-Manganese Masses (F12) (LRR K, L, R) Thick Dark Surface (A12) Depleted Matrix (F3) Piedmont Floodplain Soils (F19) (MLRA 149B) Sandy Mucky Mineral (S1) X Redox Dark Surface (F6) Mesic Spodic (TA6) (MLRA 144A, 145, 149B) Sandy Gleyed Matrix (S4) Depleted Dark Surface (F7) Red Parent Material (F21) Sandy Redox (S5) Redox Depressions (F8) Very Shallow Dark Surface (TF12) Stripped Matrix (S6) Marl (F10) (LRR K, L) Other (Explain in Remarks) Pindicators of hydrophytic vegetation and wetland hydrology must be present, unless disturbed or problematic. Restrictive Layer (if observed): Type: Depth (inches):				,					
Stratified Layers (A5) Loamy Mucky Mineral (F1) (LRR K, L) Depleted Below Dark Surface (A11) Loamy Gleyed Matrix (F2) Thick Dark Surface (A12) Depleted Matrix (F3) Sandy Mucky Mineral (S1) Sandy Mucky Mineral (S1) Sandy Gleyed Matrix (S4) Depleted Dark Surface (F7) Sandy Redox (S5) Redox Depressions (F8) Dark Surface (S7) Marl (F10) (LRR K, L) Other (Explain in Remarks) Pindicators of hydrophytic vegetation and wetland hydrology must be present, unless disturbed or problematic. Restrictive Layer (if observed): Type: Depth (inches): Hydric Soil Present? Yes X No									
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Thick Dark Surface (A12) Depleted Matrix (F3) Sandy Mucky Mineral (S1) Sandy Mucky Mineral (S1) Sandy Gleyed Matrix (S4) Depleted Dark Surface (F7) Red Parent Material (F21) Sandy Redox (S5) Redox Depressions (F8) Very Shallow Dark Surface (TF12) Stripped Matrix (S6) Dark Surface (S7) Piedmont Floodplain Soils (F19) (MLRA 149B) Mesic Spodic (TA6) (MLRA 144A, 145, 149B) Red Parent Material (F21) Very Shallow Dark Surface (TF12) Other (Explain in Remarks) Piedmont Floodplain Soils (F19) (MLRA 149B) Mesic Spodic (TA6) (MLRA 149B) Red Parent Material (F21) Very Shallow Dark Surface (TF12) Other (Explain in Remarks) Piedmont Floodplain Soils (F19) (MLRA 149B) Mesic Spodic (TA6) (MLRA 144A, 145, 149B) Mesic Spodic (TA6) (MLRA 144A, 145, 149B) Mesic Spodic (TA6) (MLRA 149B) Mesic Spodic (TA6) (MLRA 144A, 145, 149B) Mesic Spodic (TA6) (MLRA 149B) Mesic Spodic (TA6) (MLRA 144A, 145, 149B) Mesic Spodic (TA6) (MLRA 149B) Mesi			(8.4.4)				(, L)		
Sandy Mucky Mineral (S1) X Redox Dark Surface (F6) Mesic Spodic (TA6) (MLRA 144A, 145, 149B) Sandy Gleyed Matrix (S4) Depleted Dark Surface (F7) Red Parent Material (F21) Sandy Redox (S5) Redox Depressions (F8) Very Shallow Dark Surface (TF12) Stripped Matrix (S6) Marl (F10) (LRR K, L) Other (Explain in Remarks) Dark Surface (S7) Clindicators of hydrophytic vegetation and wetland hydrology must be present, unless disturbed or problematic. Restrictive Layer (if observed): Type: Depth (inches): Hydric Soil Present? Yes X No			ce (A11)			2)			
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Sandy Redox (S5) Redox Depressions (F8) Very Shallow Dark Surface (TF12) Stripped Matrix (S6) Marl (F10) (LRR K, L) Other (Explain in Remarks) Dark Surface (S7) Sindicators of hydrophytic vegetation and wetland hydrology must be present, unless disturbed or problematic. Restrictive Layer (if observed): Type: Depth (inches): Hydric Soil Present? Yes X No									
Stripped Matrix (S6)									
Dark Surface (S7) Bindicators of hydrophytic vegetation and wetland hydrology must be present, unless disturbed or problematic. Restrictive Layer (if observed): Type: Depth (inches): Hydric Soil Present? Yes X No		` ,							
Pindicators of hydrophytic vegetation and wetland hydrology must be present, unless disturbed or problematic. Restrictive Layer (if observed): Type: Depth (inches): Hydric Soil Present? Yes X No					, ,			` '	,
Restrictive Layer (if observed): Type:		, ,							
Type:	Indicators	of hydrophytic vegeta	ation and v	vetland hydrology mu	ist be pre	esent, unle	ess distu	rbed or problematic.	
Depth (inches): Hydric Soil Present? Yes X No	Restrictive	e Layer (if observed)):						
	Type:								
Remarks:	Depth (ir	nches):						Hydric Soil Present?	Yes X No
	Remarks:								

dition Project	City/County: Lora	ain	Sampling Date: 5/13/14			
eline Company LLC		State:	OH Sampling Point: WET_21			
-	Section, Townshi	p, Range: Not available				
			Slope (%): 0 to 2			
-		· ·	Datum: WGS 84			
	112001		ification: Not available			
•	- of year? Vec					
	-					
		•				
		•	•			
Yes X No	Is the Samp	led Area				
			No			
Yes X No	If yes, option	al Wetland Site ID: WET_21				
ocedures here or in a separate	e report.)					
			icators (minimum of two required)			
•			oil Cracks (B6)			
			Patterns (B10)			
			on Water Table (C2)			
	-	` ' 	Visible on Aerial Imagery (C9)			
	• •		Stressed Plants (D1)			
		· · · · —				
	xplain in Kemarks)					
3 Surface (DO)			al lest (DO)			
as v No Donth	(inches): 0.1					
	` ′					
		Motland Hydrology Preser	nt? Yes X No			
28 <u>v</u> 140 <u> </u>	(Inches)	Welland Flydrology i 16361	nt? Yes X No			
	I photos previous inspec	rtions) if available:				
recent heavy spring rains						
	eline Company LLC auren Zielke, Aaron Gordon depressions R, MLRA 139	eline Company LLC auren Zielke, Aaron Gordon Section, Townshi depressions Local relief (concav R, MLRA 139 Lat: 41.4094412861 ay loam s on the site typical for this time of year? Yes, or Hydrology significantly disturbed? Al, or Hydrology naturally problematic? (If Attach site map showing sampling poir Yes X No ls the Samp within a Wet Yes X No within a Wet If yes, option occedures here or in a separate report.) Marl Deposits (B15)	eline Company LLC auren Zielke, Aaron Gordon Section, Township, Range: Not available depressions Local relief (concave, convex, none): concave R, MLRA 139 Lat: 41.4094412861 Long: -82.068845592 ay loam NWI classi son the site typical for this time of year? Yes x No (If no, explair , or Hydrology significantly disturbed? Are "Normal Circumstances" property of the site typical for this time of year? - Attach site map showing sampling point locations, transects Yes X No Strim a Wetland? Yes X No Strim a Wetland? Yes X No Strim a Wetland Site ID: WET_21 cocedures here or in a separate report.) Secondary Indi me is required; check all that apply) Marl Deposits (B15) Hydrogen Sulfide Odor (C1) Oxidized Rhizospheres on Living Roots (C3) Arustion Presence of Reduced Iron (C4) Recent Iron Reduction in Tilled Soils (C6) Recent Iron Reduction in Tilled Soils (C6) Thin Muck Surface (C7) shallow Ac magery (B7) Other (Explain in Remarks) Microtopog as X No Depth (inches): 0.1 pes X No Depth (inches): 0.1 gauge, monitoring well, aerial photos, previous inspections), if available:			

/EGETATION – Use scientific names of pla	ınts.			Sampling Point:	WET_21		
Tree Stratum (Plot size: 30' radius)	Absolute % Cover	Dominant Species?	Indicator Status	Dominance Test worksheet:			
1. Acer rubrum	70	Yes	FAC	Number of Dominant Species			
2. Quercus bicolor	20	Yes	FACW	That Are OBL, FACW, or FAC:	7 (A)		
3. Ulmus americana	10	No	FACW	Total Number of Dominant			
4.				Species Across All Strata:	7 (B)		
5.				Percent of Dominant Species			
6.				•	100.0% (A/B)		
7.				Prevalence Index worksheet:	<u></u>		
	100	=Total Cover		Total % Cover of: Mu	ultiply by:		
Sapling/Shrub Stratum (Plot size: 15' radius)		_		OBL species 0 x 1 =	0		
1. Fraxinus pennsylvanica	70	Yes	FACW	FACW species 100 x 2 =	200		
2. Acer rubrum	30	Yes	FAC	FAC species 140 x 3 =	420		
3.				FACU species 0 x 4 =	0		
4.				UPL species 0 x 5 =	0		
5.				Column Totals: 240 (A)	620 (B)		
6.				Prevalence Index = B/A =	2.58		
7.				Hydrophytic Vegetation Indicators:			
	100	=Total Cover		1 - Rapid Test for Hydrophytic Ve			
Herb Stratum (Plot size: 5' radius)		-		X 2 - Dominance Test is >50%			
1. Juncus tenuis	20	Yes	FAC	X 3 - Prevalence Index is ≤3.0 ¹			
2. Trillium cernuum	10	Yes	FAC	4 - Morphological Adaptations ¹ (F	Provide supporting		
3. Carex blanda	10	Yes	FAC	data in Remarks or on a separate sheet)			
4.				Problematic Hydrophytic Vegetat	ion ¹ (Explain)		
5.				 			
6.				 Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic. 			
7.				Definitions of Vegetation Strata:			
8.				Trace Weeds pleate 2 in (7.0 cm) on	:		
9.				Tree – Woody plants 3 in. (7.6 cm) or diameter at breast height (DBH), rega			
10.							
11.				Sapling/shrub – Woody plants less that and greater than or equal to 3.28 ft (1			
12.		-			,		
	40	=Total Cover		Herb – All herbaceous (non-woody) p of size, and woody plants less than 3.	-		
Woody Vine Stratum (Plot size: 15' radius)		-					
1.				Woody vines – All woody vines great height.	ter than 3.28 ft in		
2				g			
3.				Hydrophytic			
4.				Vegetation Present? Yes X N	lo		
···		=Total Cover		100 A	·- <u></u>		
Remarks: (Include photo numbers here or on a separ	rate sheet \			1			
the state of the s	2.10 0.1001.)						

Very heavy leaf litter limited herbaceous stratum growth. Sphagnum spp. moss exhibited growing on forest floor.

SOIL Sampling Point: WET_21

Profile De	escription: (Describe	to the de	pth needed to docur	ment th	e indicate	or or con	firm the absence	of indicators.)			
Depth	Matrix			(Feature							
(inches)	Color (moist)	%	Color (moist)	%	Type ¹	Loc ²	Texture	Remarks			
0-20	10YR 4/1	60	10YR 5/6	40			Mucky Loam/Clay	gravel mixed within matrix			
		— .									
¹ Type: C=	Concentration, D=Dep	oletion PN	M=Peduced Matrix C	S=Cove	red or Co		d Grains 21 o	ocation: PL=Pore Lining, M=Matrix.			
	oil Indicators:	Jelon, Kiv	n-Reduced Matrix, Co	3-C0VE	ieu oi co	aleu Sanc		or Problematic Hydric Soils ³ :			
-	sol (A1)		Polyvalue Below	Surface	(S8) (I R	R R		uck (A10) (LRR K, L, MLRA 149B)			
	Epipedon (A2)	-	MLRA 149B)	Juliace	; (30) (LI	ix ix,		rairie Redox (A16) (LRR K, L, R)			
			Thin Dark Surfac	no (SO) (IDDD M	II DA 140					
	Histic (A3)							ucky Peat or Peat (S3) (LRR K, L, R)			
	ogen Sulfide (A4)		High Chroma Sa			-		ue Below Surface (S8) (LRR K, L)			
	fied Layers (A5)		Loamy Mucky Mi			(, L)		rk Surface (S9) (LRR K, L)			
	ted Below Dark Surfac	e (A11)	Loamy Gleyed M		2)			nganese Masses (F12) (LRR K, L, R)			
	Dark Surface (A12)		Depleted Matrix				Piedmor	nt Floodplain Soils (F19) (MLRA 149B)			
Sandy	y Mucky Mineral (S1)		X Redox Dark Surf	ace (F6)		Mesic S	podic (TA6) (MLRA 144A, 145, 149B)			
Sandy	y Gleyed Matrix (S4)		Depleted Dark S	urface (l	F7)		Red Par	rent Material (F21)			
Sandy	y Redox (S5)		Redox Depression	ons (F8)			Very Shallow Dark Surface (TF12)				
Stripp	ed Matrix (S6)	•	Marl (F10) (LRR	K, L)			Other (Explain in Remarks)				
Dark :	Surface (S7)	-									
3											
	of hydrophytic vegeta		vetland hydrology mus	st be pre	esent, unle	ess distur	bed or problematio	C			
	e Layer (if observed)	:									
Type: _											
	nches):						Hydric Soil Pr	resent? Yes X No No			
Remarks:											

Project/Site: Avon Lake Ga	s Addition Project	Ci	ity/County: Lorain Cour		Sampling Date: 5/13	3/14		
Applicant/Owner: NRG Gas	Pipeline Company LLC			State:				
Investigator(s): Travis Kessl		Gordon Se	ection, Township, Rang	e: Not available				
Landform (hillside, terrace, et			al relief (concave, conve		Slope (%	6): 0 - 2		
Subregion (LRR or MLRA): L	·	_		-82.0666634222	· · · Datum: W			
Soil Map Unit Name: Miner si					ification: none	<u> </u>		
Are climatic / hydrologic cond	•	for this time of year	? Yes x No		n in Remarks.)			
		-		nal Circumstances" p		No		
Are Vegetation, Soil Are Vegetation, Soil				·		NO		
SUMMARY OF FINDIN				l, explain any answe tions, transects		s, etc.		
Hydrophytic Vegetation Pres	sent? Yes	No X	Is the Sampled Area	1				
Hydric Soil Present?	Yes		within a Wetland?	Yes	NoX			
Wetland Hydrology Present?	? Yes	No X	If yes, optional Wetla	nd Site ID:	<u> </u>			
Remarks: (Explain alternative Disturbed upland area that p	•	a separate report.)						
HYDROLOGY Western Hydrology Indicase				Cacandany Ind	to the desirence of two	irad)		
Wetland Hydrology Indicat Primary Indicators (minimum		all that apply)			icators (minimum of two r	<u>equirea)</u>		
Surface Water (A1)	1 01 One is required, ones	Water-Stained Le	aves (R0)		oil Cracks (B6) Patterns (B10)			
High Water Table (A2)		Aquatic Fauna (B			Lines (B16)			
Saturation (A3)	_	Marl Deposits (B1			on Water Table (C2)			
Water Marks (B1)	_	Hydrogen Sulfide			urrows (C8)			
Sediment Deposits (B2)			heres on Living Roots (Visible on Aerial Imager	y (C9)		
Drift Deposits (B3)		Presence of Redu	= -		Stressed Plants (D1)	, ,		
Algal Mat or Crust (B4)			ction in Tilled Soils (C6		Geomorphic Position (D2)			
Iron Deposits (B5)		Thin Muck Surfac			Shallow Aquitard (D3)			
Inundation Visible on Ae	erial Imagery (B7)	Other (Explain in			Microtopographic Relief (D4)			
Sparsely Vegetated Cor	ncave Surface (B8)	_	•		ral Test (D5)			
Field Observations:						-		
Surface Water Present?	Yes No x	_ ' ' '						
Water Table Present?	Yes No x	Depth (inches):						
Saturation Present?	Yes No x	Depth (inches):	Wetlan	d Hydrology Presei	nt? Yes N	lo X		
(includes capillary fringe)								
Describe Recorded Data (str	ream gauge, monitoring	well, aerial photos,	previous inspections), it	available:				
Remarks: N/A								

VEGETATION – Use scientific names of plants. Sampling Point: UPL 22 Absolute Dominant Indicator Tree Stratum (Plot size: 30' radius) % Cover **Dominance Test worksheet:** Species? Status FACU **Number of Dominant Species** That Are OBL, FACW, or FAC: 2. (A) **Total Number of Dominant** Species Across All Strata: 2 (B) Percent of Dominant Species 6. That Are OBL, FACW, or FAC: 0.0% (A/B) Prevalence Index worksheet: =Total Cover Total % Cover of: Sapling/Shrub Stratum (Plot size: 15' radius) OBL species x 1 = 0 1. FACW species x 2 = x 3 = 2. FAC species 10 **FACU** species 85 x 4 = 5 UPL species x 5 = Column Totals: 100 395 (A) (B) 6. Prevalence Index = B/A = 3.95 **Hydrophytic Vegetation Indicators:** 1 - Rapid Test for Hydrophytic Vegetation =Total Cover Herb Stratum (Plot size: 5' radius) 2 - Dominance Test is >50% Poa pratensis 40 Yes **FACU** 3 - Prevalence Index is ≤3.01 2. Dactylis glomerata 40 Yes **FACU** 4 - Morphological Adaptations¹ (Provide supporting data in Remarks or on a separate sheet) 10 3. Toxicodendron radicans No FAC 5 UPL Problematic Hydrophytic Vegetation¹ (Explain) No Daucus carota 5 No FACU 5. Trifolium pratense ¹Indicators of hydric soil and wetland hydrology must 6. be present, unless disturbed or problematic. **Definitions of Vegetation Strata:** 8. Tree - Woody plants 3 in. (7.6 cm) or more in 9. diameter at breast height (DBH), regardless of height. Sapling/shrub - Woody plants less than 3 in. DBH and greater than or equal to 3.28 ft (1 m) tall. Herb - All herbaceous (non-woody) plants, regardless 100 =Total Cover of size, and woody plants less than 3.28 ft tall. Woody Vine Stratum (Plot size: 15' radius) Woody vines - All woody vines greater than 3.28 ft in height. Hydrophytic Vegetation Present? Yes No X =Total Cover Remarks: (Include photo numbers here or on a separate sheet.) roadside shoulder vegetative features

SOIL Sampling Point: UPL_22

		to the de	-			or or cor	firm the absence of indi	cators.)		
Depth	Matrix Color (moint)	%		x Featur		Loc ²	Toyturo	Domarka		
(inches)	Color (moist)		Color (moist)	<u>%</u>	Type ¹	LOC	Texture	Remarks		_
0-10	10YR 4/3	100					Loamy/Clayey			_
10-20	2.5Y 6/2	70	2.5Y 6/8	30	С	M	Loamy/Clayey			
										—
										—
										—
1	Organization D. D.		A. Danker and Marketine O	0.0		-410	21 +	DI Dana Lining M		_
	Concentration, D=De	pietion, Ri	VI=Reduced Matrix, C	S=Cove	red or Coa	ated San		PL=Pore Lining, M		
-	oil Indicators: sol (A1)		Polyvalue Below	, Surface	(S8) (I D	D D	Indicators for Prob	0) (LRR K, L, MLR		
	Epipedon (A2)		MLRA 149B)	Suriace	(30) (LK	κκ,		edox (A16) (LRR K		
	Histic (A3)		Thin Dark Surface	ce (S9) (I RR R. M	I RA 149		at or Peat (S3) (LR		
	ogen Sulfide (A4)		High Chroma Sa					w Surface (S8) (LRI		
	fied Layers (A5)		Loamy Mucky M			-		ace (S9) (LRR K, L)		
	eted Below Dark Surfa	ce (A11)	Loamy Gleyed N			-, -,		e Masses (F12) (LR		
	Dark Surface (A12)	,	Depleted Matrix		,			Iplain Soils (F19) (N)
	y Mucky Mineral (S1)		Redox Dark Sur)			ΓA6) (MLRA 144A ,		
	y Gleyed Matrix (S4)		Depleted Dark S				Red Parent Ma			
Sand	y Redox (S5)		Redox Depressi	ons (F8)			Very Shallow D	ark Surface (TF12)		
Stripp	ed Matrix (S6)		Marl (F10) (LRR	K , L)			Other (Explain	in Remarks)		
Dark	Surface (S7)									
	of hydrophytic vegeta		wetland hydrology mu	st be pre	esent, unle	ess distu	rbed or problematic.			
	e Layer (if observed):								
Type:										
Depth (i	nches):						Hydric Soil Present?	Yes	No X	_
Remarks:										

Project/Site: Avon Lake Gas Addition P	roject C	ity/County: Lorain		Sampling Date	: 5/13/14
Applicant/Owner: NRG Ohio Pipeline Co		<u></u>	State:		g Point: WET_22
Investigator(s): Travis Kessler, Lauren Z		ection, Township, Range:	Not available		
Landform (hillside, terrace, etc.): depres		al relief (concave, convex,		S	lope (%): 0 to 2
Subregion (LRR or MLRA): LRR R, MLRA			82.0666271415		um: WGS 84
Soil Map Unit Name: Miner silty clay loam				ification: Not avai	
		2 Yes v No			llanie
Are climatic / hydrologic conditions on the Are Vegetation, Soil, or I	•		Circumstances" p	n in Remarks.) resent? Yes	x No
Are Vegetation , Soil , or I	<u></u>		explain any answei		
SUMMARY OF FINDINGS – Atta	<u> </u>				eatures, etc.
Hydrophytic Vegetation Present?	Yes X No	Is the Sampled Area			
Hydric Soil Present?	Yes X No	within a Wetland?	Yes X	No	
Wetland Hydrology Present?	Yes X No	If yes, optional Wetland	Site ID: WET_22	2	
Remarks: (Explain alternative procedure large wetland with primarily PFO charact					
HYDROLOGY					
Wetland Hydrology Indicators:			-	icators (minimum	of two required)
Primary Indicators (minimum of one is re				oil Cracks (B6)	
Surface Water (A1)	X Water-Stained Le			Patterns (B10)	
High Water Table (A2)	Aquatic Fauna (B			Lines (B16)	
X Saturation (A3)	Marl Deposits (B1			on Water Table (C	2)
Water Marks (B1)	Hydrogen Sulfide			Surrows (C8)	(00)
Sediment Deposits (B2)		oheres on Living Roots (C3	· —	Visible on Aerial	
Drift Deposits (B3)	Presence of Redu	, ,		Stressed Plants ((D1)
Algal Mat or Crust (B4)		uction in Tilled Soils (C6)		nic Position (D2)	
Iron Deposits (B5)	Thin Muck Surfac			quitard (D3)	`
Inundation Visible on Aerial Imagery		Remarks)		graphic Relief (D4)
Sparsely Vegetated Concave Surface	ce (B8)		x FAC-Neut	ral Test (D5)	
Field Observations:					
Surface Water Present? Yes					
	No Depth (inches):			V V	
	No Depth (inches):	6 Wetland H	Hydrology Preser	nt? Yes X	No
(includes capillary fringe)		====:i==== increatione) if a	رجاطما		
Describe Recorded Data (stream gauge,	, monitoring well, aerial priolos,	previous inspections), ii av	/allable:		
Remarks: Site was seasonably wet due to recent h	neavy spring rains				

VEGETATION – U	Ise scientific names	of plants
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EGETATION – Use scientific names of pla	Absolute	Dominant	Indicator	Sampling Point:	WET_22		
ree Stratum (Plot size: 30' radius)	% Cover	Species?	Status	Dominance Test worksheet:			
. Ulmus americana	40	Yes	FACW	Number of Dominant Species			
. Acer saccharinum	30	Yes	FACW	That Are OBL, FACW, or FAC:	9 (A)		
. Acer rubrum	30	Yes	FAC	Total Number of Dominant			
·				Species Across All Strata:	9 (B)		
i				Percent of Dominant Species			
j				·	100.0% (A/		
				Prevalence Index worksheet:			
	100	=Total Cover		Total % Cover of: Mi	ultiply by:		
Sapling/Shrub Stratum (Plot size: 15' radius)				OBL species 30 x 1 =	30		
. Acer saccharinum	30	Yes	FACW	FACW species 165 x 2 =	330		
. Ulmus americana	30	Yes	FACW	FAC species 95 x 3 =	285		
3. Acer rubrum	30	Yes	FAC	FACU species 0 x 4 =	0		
k				UPL species 0 x 5 =	0		
i				Column Totals: 290 (A)	645 (
				Prevalence Index = B/A =	2.22		
				Hydrophytic Vegetation Indicators:	<u> </u>		
	90	=Total Cover		1 - Rapid Test for Hydrophytic Ve	egetation		
Herb Stratum (Plot size: 5' radius)		-		X 2 - Dominance Test is >50%			
. Carex lacustris	30	Yes	OBL	X 3 - Prevalence Index is ≤3.0 ¹			
2. Carex blanda	30	Yes	FAC	4 - Morphological Adaptations ¹ (Provide supporting			
3. Anemone canadensis	20	Yes	FACW	data in Remarks or on a separate sheet)			
Phalaris arundinacea	10	No	FACW	Problematic Hydrophytic Vegetat	ion ¹ (Explain)		
5. Ranunculus hispidus	5	No	FAC	1 Indicators of hydric call and watland	budrala au muai		
S. Persicaria pensylvanica	5	No	FACW	¹ Indicators of hydric soil and wetland be present, unless disturbed or proble			
· · · · · · · · · · · · · · · · · · ·				Definitions of Vegetation Strata:			
3.				Trace Wasdernlants 2 in (7.0 cm) on	!		
).				Tree – Woody plants 3 in. (7.6 cm) or diameter at breast height (DBH), rega			
0.				Continuo hanne Mandy planta laga t	han 2 in DDU		
1.				Sapling/shrub – Woody plants less to and greater than or equal to 3.28 ft (1			
2.				Harle All harbanania (nan unaah) m			
	100	=Total Cover		Herb – All herbaceous (non-woody) p of size, and woody plants less than 3.	-		
Voody Vine Stratum (Plot size: 15' radius)		-					
				Woody vines – All woody vines great height.	ter than 3.28 ft		
		· ——		<u> </u>			
3.				Hydrophytic			
· I.			-	Vegetation Present? Yes X N	lo		
··		=Total Cover		100	·		
Remarks: (Include photo numbers here or on a separ		TOTAL COVE		1			

SOIL Sampling Point: WET_22

Profile De	escription: (Describe t	to the de	pth needed to docu	ment th	e indicato	or or cor	nfirm the absence	of indicator	rs.)	
Depth	Matrix		Redox	k Featur	es					
(inches)	Color (moist)	%	Color (moist)	%	Type ¹	Loc ²	Texture		Remarks	
0-8	10YR 4/2	100					Mucky Loam/Clay			
8-20	2.5Y 6/2	40	10YR 5/8	60	С	М	Mucky Loam/Clay	Promin	ent redox conc	entrations
		,								
										_
			_							
¹ Type: C=	=Concentration, D=Depl	etion RI	M=Reduced Matrix C	S=Cove	red or Coa	ated San	d Grains ² Lo	cation: PI =	Pore Lining, M	=Matrix
	oil Indicators:	0,							atic Hydric Soi	
-	sol (A1)		Polyvalue Below	Surface	e (S8) (LR	RR,			RR K, L, MLRA	
	Epipedon (A2)		MLRA 149B)		()(,			(A16) (LRR K,	-
	Histic (A3)		Thin Dark Surfac	e (S9) (LRR R, M	LRA 149			Peat (S3) (LRI	-
	ogen Sulfide (A4)		High Chroma Sa					Polyvalue Below Surface (S8) (LRR K, L)		
	fied Layers (A5)		Loamy Mucky M			-	Thin Dark Surface (S9) (LRR K, L)			
	eted Below Dark Surface	e (A11)	Loamy Gleyed M			,	Iron-Manganese Masses (F12) (LRR K, L, R)			
	Dark Surface (A12)	,	X Depleted Matrix		,		Piedmont Floodplain Soils (F19) (MLRA 149B)			
	y Mucky Mineral (S1)		Redox Dark Sur)		Mesic Spodic (TA6) (MLRA 144A, 145, 149B)			
	y Gleyed Matrix (S4)		Depleted Dark S					ent Material		-, -,
	y Redox (S5)		Redox Depression						Surface (TF12)	
	ped Matrix (S6)		Marl (F10) (LRR					xplain in Re	, ,	
	Surface (S7)			, -,					,	
	curiaco (cr)									
³ Indicators	s of hydrophytic vegetat	ion and v	vetland hydrology mu	st be pre	esent, unle	ess distu	rbed or problemation) .		
	ve Layer (if observed):									
Type:										
Depth (i	inches):						Hydric Soil Pr	esent?	Yes X	No
Remarks:										

Project/Site: Avon Lake Gas	s Addition Project	Ci	ty/County: Lorain County		Sampling Date: 5/	14/14	
Applicant/Owner: NRG Gas	Pipeline Company LLC			State:			
Investigator(s): Travis Kessle			ection, Township, Range:	Not available			
Landform (hillside, terrace, etc			al relief (concave, convex	•	Slope	(%): 0 - 2	
Subregion (LRR or MLRA): L	RR R, MLRA 139 La			-82.0657081361	 Datum:		
Soil Map Unit Name: Miner si	<u> </u>				ification: none		
Are climatic / hydrologic condi	•	for this time of year'	? Yes x No		n in Remarks.)		
Are Vegetation, Soil		•		Il Circumstances" p		No	
Are Vegetation, Soil				explain any answer		_ ''`	
SUMMARY OF FINDING	·					es, etc.	
Hydrophytic Vegetation Pres	ent? Yes	No X	Is the Sampled Area				
Hydric Soil Present?	Yes		within a Wetland?	Yes	NoX		
Wetland Hydrology Present?	Yes	No X	If yes, optional Wetlan	d Site ID:			
Remarks: (Explain alternativ	e procedures here or in	a separate report.)					
HYDROLOGY							
Wetland Hydrology Indicat	ors:			Secondary Indi	icators (minimum of two	required)	
Primary Indicators (minimum		ck all that apply)		-	oil Cracks (B6)	<u> </u>	
Surface Water (A1)	01 0110 10 10 10 1	Water-Stained Le	aves (B9)		Patterns (B10)		
High Water Table (A2)	_	Aquatic Fauna (B			Lines (B16)		
Saturation (A3)		Marl Deposits (B1			on Water Table (C2)		
Water Marks (B1)		Hydrogen Sulfide			urrows (C8)		
Sediment Deposits (B2)	_		heres on Living Roots (C		Visible on Aerial Image	ery (C9)	
Drift Deposits (B3)	_	Presence of Redu	=	· 	Stressed Plants (D1)	• • •	
Algal Mat or Crust (B4)	_		ction in Tilled Soils (C6)	Geomorphic Position (D2)			
Iron Deposits (B5)	_	Thin Muck Surfac	, ,	Shallow Aquitard (D3)			
Inundation Visible on Ae	erial Imagery (B7)	Other (Explain in			Microtopographic Relief (D4)		
Sparsely Vegetated Cor		_ ` ` `	•		ral Test (D5)		
Field Observations:	_						
Surface Water Present?	Yes No x	_ ' ' '					
Water Table Present?	Yes No x	Depth (inches):					
Saturation Present?	Yes No x	Depth (inches):	Wetland	Hydrology Preser	nt? Yes	No X	
(includes capillary fringe)							
Describe Recorded Data (str	eam gauge, monitoring	well, aerial photos,	previous inspections), if a	available:			
Remarks: N/A							

VEGETATION – Use scientific names of plants. UPL 22.1 Sampling Point: Absolute Dominant Indicator Tree Stratum (Plot size: 30' radius) % Cover **Dominance Test worksheet:** Species? Status Quercus macrocarpa 60 FACU Yes **Number of Dominant Species** That Are OBL, FACW, or FAC: 2. (A) **Total Number of Dominant** 4. Species Across All Strata: 5 (B) 5. Percent of Dominant Species 6. That Are OBL, FACW, or FAC: 0.0% (A/B) Prevalence Index worksheet: 60 =Total Cover Total % Cover of: Sapling/Shrub Stratum (Plot size: 15' radius) OBL species x 1 = 0 Acer saccharum 70 Yes **FACU** FACW species x 2 = x 3 = 2. Quercus macrocarpa 20 Yes FACU FAC species 0 3. **FACU** species 200 x 4 = 0 4. **UPL** species x 5 = 5. Column Totals: 200 800 (A) (B) 6. Prevalence Index = B/A = 4.00 **Hydrophytic Vegetation Indicators:** 90 =Total Cover 1 - Rapid Test for Hydrophytic Vegetation Herb Stratum (Plot size: 5' radius) 2 - Dominance Test is >50% Carex pensylvanica 40 Yes **FACU** 3 - Prevalence Index is ≤3.01 Podophyllum peltatum **FACU** 4 - Morphological Adaptations¹ (Provide supporting data in Remarks or on a separate sheet) 3. Problematic Hydrophytic Vegetation¹ (Explain) 4. 5. ¹Indicators of hydric soil and wetland hydrology must 6. be present, unless disturbed or problematic. **Definitions of Vegetation Strata:** 8. Tree - Woody plants 3 in. (7.6 cm) or more in 9. diameter at breast height (DBH), regardless of height. Sapling/shrub - Woody plants less than 3 in. DBH and greater than or equal to 3.28 ft (1 m) tall. Herb - All herbaceous (non-woody) plants, regardless 50 =Total Cover of size, and woody plants less than 3.28 ft tall. Woody Vine Stratum (Plot size: 15' radius) Woody vines - All woody vines greater than 3.28 ft in 1. height. Hydrophytic Vegetation Present? Yes No X =Total Cover Remarks: (Include photo numbers here or on a separate sheet.) very heavy leaf litter did not allow abundant herbaceous stratum growth

SOIL Sampling Point: UPL_22.1

Profile De	escription: (Describe	to the de	epth needed to docu	ment th	e indicate	or or con	firm the absence of indic	ators.)		
Depth	Matrix		Redo	x Featur	es					
(inches)	Color (moist)	%	Color (moist)	%	Type ¹	Loc ²	Texture	Remarks		
0-5	2.5Y 4/4	100					Loamy/Clayey			
5-17	2.5Y 5/6	100					Loamy/Clayey			
								_		
1 _{Typo: C:}	=Concentration, D=Dep	alotion Pl	A-Poducod Matrix C		rod or Co		d Grains ² L coation: 1	PL=Pore Lining, M=Matrix.		
	oil Indicators:	Dietion, Kr	vi=Reduced Matrix, C	S=Cove	red or Coa	ated Sand		ematic Hydric Soils ³ :		
-	sol (A1)		Polyvalue Below	, Surface	- (S8) (I R	RR		(LRR K, L, MLRA 149B)		
	Epipedon (A2)		MLRA 149B)	Carrace	3 (00) (Li t	,		dox (A16) (LRR K, L, R)		
	Histic (A3)		Thin Dark Surface	ce (S9) (LRR R. M	ILRA 149		t or Peat (S3) (LRR K, L, R)		
	ogen Sulfide (A4)		High Chroma Sa					Surface (S8) (LRR K, L)		
	fied Layers (A5)		Loamy Mucky M			-		e (S9) (LRR K, L)		
	eted Below Dark Surfac	ce (A11)	Loamy Gleyed N			. , - /	Iron-Manganese Masses (F12) (LRR K, L, R)			
	Dark Surface (A12)	JC (7111)	Depleted Matrix		-)		Piedmont Floodplain Soils (F19) (MLRA 149B)			
	y Mucky Mineral (S1)		Redox Dark Sur)			A6) (MLRA 144A, 145, 149B)		
	y Gleyed Matrix (S4)		Depleted Dark S				Red Parent Mate			
	y Redox (S5)		Redox Depressi					rk Surface (TF12)		
	ped Matrix (S6)		Marl (F10) (LRR				Other (Explain in			
	Surface (S7)		Wan (1 10) (LKK	ι Ι (, L)			Other (Explain in	itemarks)		
Bank	ouriace (or)									
³ Indicators	s of hydrophytic vegeta	ition and v	vetland hydrology mu	st be pre	esent, unle	ess distur	bed or problematic.			
	e Layer (if observed)		, ,				·			
Type:										
Depth (inches):						Hydric Soil Present?	Yes No X		
Remarks:	<u> </u>		<u> </u>							

Project/Site: Avon Lake Ga	s Addition Project	City/Cou	nty: Lorain		Sampling Date:	5/14/14
Applicant/Owner: NRG Ohio	Pipeline Company LLC			State:	OH Sampling	Point: WET_22.1
Investigator(s): Travis Kessl		Gordon Section	Township, Range:			
Landform (hillside, terrace, et			(concave, convex,		Slo	ope (%): 0 to 2
,	′ _ '		,	·		
Subregion (LRR or MLRA): L		: 41.3818331808	Long	82.0680170978		ım: <u>WGS 84</u>
Soil Map Unit Name: Miner si					fication: Not availa	able
Are climatic / hydrologic cond		-	Yes x No		n in Remarks.)	
Are Vegetation, Soil	, or Hydrology	significantly disturbe	ed? Are "Normal	Circumstances" pr	resent? Yes_	x No
Are Vegetation, Soil	, or Hydrology	naturally problemati	c? (If needed, e	explain any answer	s in Remarks.)	
SUMMARY OF FINDIN	GS – Attach site m	ap showing samplii	ng point location	ons, transects	, important fea	atures, etc.
Hydrophytic Vegetation Pres	sent? Yes X	No is th	e Sampled Area			
Hydric Soil Present?	Yes X		in a Wetland?	Yes X	No	
Wetland Hydrology Present?			s, optional Wetland			
Remarks: (Explain alternativ	ve procedures here or in					
PFO/ PSS/ PEM wetland cha	•		of wetland.			
HYDROLOGY						
Wetland Hydrology Indicat	tore:			Secondary Indi	cators (minimum o	of two required)
Primary Indicators (minimum		k all that annly)			oil Cracks (B6)	i two required)
x Surface Water (A1)	Tor one is required, ones	Water-Stained Leaves (F	39)		Patterns (B10)	
x High Water Table (A2)		Aquatic Fauna (B13)			Lines (B16)	
X Saturation (A3)		Marl Deposits (B15)			n Water Table (C2	3)
Water Marks (B1)		Hydrogen Sulfide Odor (C1)	x Crayfish B		,
Sediment Deposits (B2)		Oxidized Rhizospheres			Visible on Aerial Ir	nagery (C9)
Drift Deposits (B3)		Presence of Reduced Iro	= -		Stressed Plants (D	01)
Algal Mat or Crust (B4)		Recent Iron Reduction in	n Tilled Soils (C6)	Geomorph	ic Position (D2)	
Iron Deposits (B5)	_	Thin Muck Surface (C7)		Shallow Ad	quitard (D3)	
Inundation Visible on Ae	erial Imagery (B7)	Other (Explain in Remar	ks)	Microtopog	graphic Relief (D4)	
Sparsely Vegetated Cor	ncave Surface (B8)	_		x FAC-Neutr	al Test (D5)	
Field Observations:						
Surface Water Present?	Yes x No					
Water Table Present?	Yes x No					
Saturation Present?	Yes x No	Depth (inches): 0	Wetland I	Hydrology Presen	nt? Yes X	No
(includes capillary fringe)				2.11		
Describe Recorded Data (str	ream gauge, monitoring v	well, aerial photos, previol	is inspections), if a	vallable:		
Remarks:						
Site was seasonably wet due	e to recent heavy spring	rains				

VEGETATION – Use scientific names of plants. Sampling Point: WET 22.1 Absolute Dominant Indicator Tree Stratum (Plot size: 30' radius) % Cover **Dominance Test worksheet:** Species? Status **Number of Dominant Species** That Are OBL, FACW, or FAC: 2. (A) **Total Number of Dominant** Species Across All Strata: 2 (B) 5. Percent of Dominant Species 6. That Are OBL, FACW, or FAC: 100.0% (A/B) Prevalence Index worksheet: =Total Cover Total % Cover of: Sapling/Shrub Stratum (Plot size: 15' radius) OBL species x 1 = 30 x 2 = 1. FACW species 60 2. FAC species 0 x 3 = **FACU** species 0 x 4 = 0 UPL species x 5 = Column Totals: 100 130 (A) (B) 6. Prevalence Index = B/A = 1.30 **Hydrophytic Vegetation Indicators:** 1 - Rapid Test for Hydrophytic Vegetation =Total Cover Herb Stratum (Plot size: 5' radius) X 2 - Dominance Test is >50% Carex stricta 60 Yes OBL X 3 - Prevalence Index is ≤3.0¹ 2. Onoclea sensibilis 20 Yes **FACW** 4 - Morphological Adaptations¹ (Provide supporting data in Remarks or on a separate sheet) 10 Juncus effusus No OBL 10 Phalaris arundinacea **FACW** Problematic Hydrophytic Vegetation¹ (Explain) No 5. ¹Indicators of hydric soil and wetland hydrology must 6. be present, unless disturbed or problematic. **Definitions of Vegetation Strata:** 8. Tree - Woody plants 3 in. (7.6 cm) or more in 9. diameter at breast height (DBH), regardless of height. Sapling/shrub - Woody plants less than 3 in. DBH and greater than or equal to 3.28 ft (1 m) tall. Herb - All herbaceous (non-woody) plants, regardless 100 =Total Cover of size, and woody plants less than 3.28 ft tall. Woody Vine Stratum (Plot size: 15' radius) Woody vines - All woody vines greater than 3.28 ft in 1. height. Hydrophytic Vegetation Present? Yes X No No =Total Cover Remarks: (Include photo numbers here or on a separate sheet.)

SOIL Sampling Point: WET_22.1

Profile De	scription: (Describe	to the de	pth needed to docu	ment the	e indicate	or or con	firm the absence	of indicators.)		
Depth	Matrix			k Feature						
(inches)	Color (moist)	%	Color (moist)	%	Type ¹	Loc ²	Texture	Remarks		
0-20	10YR 4/1	90	10YR 4/6	10	С	M	Mucky Loam/Clay			
			_							
	_		_							
	_		_							
¹ Type: C=	Concentration, D=Dep	letion RM	M=Reduced Matrix C	S=Cove	red or Co	ated San	d Grains ² L or	cation: PL=Pore Lining, M=Matrix.		
	il Indicators:	71011011, 111	T TOUGOOG Matin, O	0010	04 01 00	atou cum		or Problematic Hydric Soils ³ :		
-	ol (A1)		Polyvalue Below	Surface	(S8) (LR	RR,		ck (A10) (LRR K, L, MLRA 149B)		
	Epipedon (A2)		MLRA 149B)		`			rairie Redox (A16) (LRR K, L, R)		
	Histic (A3)		Thin Dark Surface	e (S9) (LRR R, N	ILRA 149		cky Peat or Peat (S3) (LRR K, L, R)		
Hydro	gen Sulfide (A4)		High Chroma Sa	nds (S1	1) (LRR k	(, L)	Polyvalu	e Below Surface (S8) (LRR K, L)		
Stratifi	ed Layers (A5)		Loamy Mucky M	ineral (F	1) (LRR I	(, L)	Thin Dar	k Surface (S9) (LRR K, L)		
Deplet	ed Below Dark Surfac	e (A11)	Loamy Gleyed M	1atrix (F2	2)		Iron-Manganese Masses (F12) (LRR K, L, R)			
Thick I	Dark Surface (A12)		Depleted Matrix	(F3)			Piedmont Floodplain Soils (F19) (MLRA 149B)			
Sandy	Mucky Mineral (S1)		X Redox Dark Surf	face (F6))		Mesic Sp	oodic (TA6) (MLRA 144A, 145, 149B)		
	Gleyed Matrix (S4)		Depleted Dark S					ent Material (F21)		
	Redox (S5)		Redox Depression	, ,				Very Shallow Dark Surface (TF12)		
	ed Matrix (S6)		Marl (F10) (LRR	K , L)			Other (Explain in Remarks)			
Dark S	Surface (S7)									
3Indicators	of hydrophytic yogota	tion and v	votland hydrology mu	et ha pro	scont unl	nee dietur	thad or problematic			
	of hydrophytic vegeta Layer (if observed)		veliand hydrology mu	st be pre	sent, unit	ess distui		•		
Type:	, ,									
	nches):						Hydric Soil Pre	esent? Yes X No		
							Tryunc 3011 Te			
Remarks:										

Project/Site: Avon Lake Gas Addition Project	City/County: Lo	orain County	Sampling Date: 5/14/14
Applicant/Owner: NRG Gas Pipeline Company LLC		State:	OH Sampling Point: UPL_22.2
Investigator(s): Travis Kessler, Lauren Zielke, Aaron	Gordon Section, Towns	ship, Range: Not available	
Landform (hillside, terrace, etc.): depressions		ave, convex, none): concave	Slope (%): 0 - 2
Subregion (LRR or MLRA): LRR R, MLRA 139 Lat.	: 41.4033977464	Long: -82.0672054461	Datum: WGS 84
Soil Map Unit Name: Miner silty clay loam			ification: none
Are climatic / hydrologic conditions on the site typical for	or this time of vear? Yes		n in Remarks.)
Are Vegetation, Soil, or Hydrology	-	Are "Normal Circumstances" pr	•
Are Vegetation, Soil, or Hydrology _	naturally problematic?	(If needed, explain any answer	s in Remarks.)
SUMMARY OF FINDINGS – Attach site ma	ap showing sampling po	oint locations, transects	, important features, etc.
Hydrophytic Vegetation Present? Yes	No X Is the San	npled Area	
Hydric Soil Present? Yes			No X
Wetland Hydrology Present? Yes	No X If yes, option	onal Wetland Site ID:	
HYDROLOGY			
Wetland Hydrology Indicators:		·	icators (minimum of two required)
Primary Indicators (minimum of one is required; check			oil Cracks (B6)
Surface Water (A1)	Water-Stained Leaves (B9)		Patterns (B10)
High Water Table (A2)	Aquatic Fauna (B13)		Lines (B16)
Saturation (A3)	Marl Deposits (B15)		on Water Table (C2)
Water Marks (B1)	Hydrogen Sulfide Odor (C1)		urrows (C8)
Sediment Deposits (B2)	Oxidized Rhizospheres on Livin	· · · —	Visible on Aerial Imagery (C9)
Drift Deposits (B3)	Presence of Reduced Iron (C4	<i></i>	Stressed Plants (D1)
Algal Mat or Crust (B4)	Recent Iron Reduction in Tilled	· · · —	ic Position (D2)
Iron Deposits (B5)	Thin Muck Surface (C7)		quitard (D3)
Inundation Visible on Aerial Imagery (B7)	Other (Explain in Remarks)		graphic Relief (D4)
Sparsely Vegetated Concave Surface (B8)			ral Test (D5)
Field Observations:			
Surface Water Present? Yes Nox	Depth (inches):		
Water Table Present? Yes No x	Depth (inches):		
	Depth (inches):	Wetland Hydrology Presen	nt? Yes No X
(includes capillary fringe)			
Describe Recorded Data (stream gauge, monitoring v	well, aerial photos, previous insp	ections), if available:	
B 1			
Remarks: N/A			
IN/A			

VEGETATION – Use scientific names of plants. UPL 22.2 Sampling Point: Absolute Dominant Indicator Tree Stratum (Plot size: 30' radius) **Dominance Test worksheet:** % Cover Species? Status 60 **FACU** Acer saccharum Yes **Number of Dominant Species** That Are OBL, FACW, or FAC: 2. Quercus macrocarpa **FACU** (A) 3. **Total Number of Dominant** (B) 4. Species Across All Strata: 6 5. Percent of Dominant Species 6. That Are OBL, FACW, or FAC: 16.7% (A/B) Prevalence Index worksheet: 100 =Total Cover Total % Cover of: Sapling/Shrub Stratum (Plot size: 15' radius) OBL species x 1 = 0 Acer saccharum 60 Yes **FACU** FACW species x 2 = x 3 = 2. Ulmus rubra 20 Yes FAC FAC species 20 3. Quercus macrocarpa 20 Yes **FACU FACU** species 240 x 4 = 4. **UPL** species 0 x 5 = 0 5. Column Totals: 260 1020 (A) (B) 6. Prevalence Index = B/A = 3.92 **Hydrophytic Vegetation Indicators:** 100 =Total Cover 1 - Rapid Test for Hydrophytic Vegetation Herb Stratum (Plot size: 5' radius) 2 - Dominance Test is >50% Carex pensylvanica 60 **FACU** 3 - Prevalence Index is ≤3.01 Yes 2. 4 - Morphological Adaptations¹ (Provide supporting data in Remarks or on a separate sheet) Problematic Hydrophytic Vegetation¹ (Explain) 5. ¹Indicators of hydric soil and wetland hydrology must 6. be present, unless disturbed or problematic. **Definitions of Vegetation Strata:** 8. Tree - Woody plants 3 in. (7.6 cm) or more in 9. diameter at breast height (DBH), regardless of height. Sapling/shrub - Woody plants less than 3 in. DBH and greater than or equal to 3.28 ft (1 m) tall. Herb - All herbaceous (non-woody) plants, regardless 60 =Total Cover of size, and woody plants less than 3.28 ft tall. Woody Vine Stratum (Plot size: 15' radius) Woody vines - All woody vines greater than 3.28 ft in 1. height. Hydrophytic Vegetation Present? Yes No X =Total Cover Remarks: (Include photo numbers here or on a separate sheet.) very heavy leaf litter did not allow abundant herbaceous stratum growth

SOIL Sampling Point: UPL_22.2

Profile De	escription: (Describe	to the de	epth needed to docu	ment th	e indicate	or or con	firm the absence of indic	eators.)		
Depth	Matrix	_	Redo	k Featur	es					
(inches)	Color (moist)	%	Color (moist)	%	Type ¹	Loc ²	Texture	Remarks		
0-6	2.5Y 5/4	100					Loamy/Clayey			
6-18	2.5Y 6/6	100					Loamy/Clayey			
			_							
								_		
			_							
							2			
	=Concentration, D=Dep	oletion, RI	M=Reduced Matrix, C	S=Cove	red or Co	ated San		PL=Pore Lining, M=Matrix.		
-	oil Indicators:		Daharaha Dalam	O f	(00) /I B	. .		ematic Hydric Soils ³ :		
	sol (A1)		Polyvalue Below	Surface	(S8) (LR	кк,) (LRR K, L, MLRA 149B)		
	Epipedon (A2)		MLRA 149B)	(00) (edox (A16) (LRR K, L, R)		
	Histic (A3)		Thin Dark Surface					at or Peat (S3) (LRR K, L, R)		
	ogen Sulfide (A4)		High Chroma Sa			-		Surface (S8) (LRR K, L)		
Strati	fied Layers (A5)		Loamy Mucky M	ineral (F	1) (LRR I	(, L)	Thin Dark Surface	ce (S9) (LRR K, L)		
Deple	eted Below Dark Surfac	ce (A11)	Loamy Gleyed N	1atrix (F2	2)		Iron-Manganese Masses (F12) (LRR K, L, R)			
Thick	Dark Surface (A12)		Depleted Matrix	(F3)			Piedmont Flood	olain Soils (F19) (MLRA 149B)		
Sand	y Mucky Mineral (S1)		Redox Dark Sur	face (F6)		Mesic Spodic (T.	A6) (MLRA 144A, 145, 149B)		
Sand	y Gleyed Matrix (S4)		Depleted Dark S	urface (F7)		Red Parent Mate	erial (F21)		
	y Redox (S5)		Redox Depressi					ark Surface (TF12)		
	ped Matrix (S6)		Marl (F10) (LRR				Other (Explain in			
	Surface (S7)			, ,				- · · · · · · · · · · · · · · · · · · ·		
	()									
³ Indicators	s of hydrophytic vegeta	ition and v	vetland hydrology mu	st be pre	esent, unle	ess distur	bed or problematic.			
Restrictiv	e Layer (if observed)	:								
Type:										
Depth (inches):						Hydric Soil Present?	Yes NoX		
Remarks:										

Project/Site: Avon Lake Gas Add	dition Project	City/County: Lorain		Sampling Date: 5/14/14
Applicant/Owner: NRG Ohio Pipe	eline Company LLC		State:	OH Sampling Point: WET_22
Investigator(s): Travis Kessler, La		Section, Township, Range:		
Landform (hillside, terrace, etc.):		ocal relief (concave, convex,		Slope (%): 0 to 2
,		·	· -	· · · · · · · · · · · · · · · · · · ·
Subregion (LRR or MLRA): LRR F	-	Long	82.0662569409	Datum: WGS 84
Soil Map Unit Name: Miner silty cla	•			fication: Not available
	s on the site typical for this time of ye			in Remarks.)
Are Vegetation, Soil	, or Hydrologysignificantl	y disturbed? Are "Normal	Circumstances" pr	resent? Yes x No
Are Vegetation, Soil	, or Hydrologynaturally p	roblematic? (If needed, e	explain any answers	s in Remarks.)
SUMMARY OF FINDINGS	 Attach site map showing 	sampling point location	ons, transects,	important features, etc.
Hydrophytic Vegetation Present?	Yes X No	Is the Sampled Area		_
Hydric Soil Present?	Yes X No	within a Wetland?	Yes X	No
Wetland Hydrology Present?	Yes X No	If yes, optional Wetland		
Remarks: (Explain alternative pro	ocedures here or in a separate repor	t.)		
PFO wetland feature				
HYDROLOGY				
Wetland Hydrology Indicators:				cators (minimum of two required)
•	one is required; check all that apply)			il Cracks (B6)
x Surface Water (A1)	Water-Stained			Patterns (B10)
High Water Table (A2)	Aquatic Fauna			Lines (B16)
Saturation (A3)	Marl Deposits (n Water Table (C2)
Water Marks (B1)	Hydrogen Sulfic			urrows (C8)
Sediment Deposits (B2)		spheres on Living Roots (C3	· 	Visible on Aerial Imagery (C9)
Drift Deposits (B3) Algal Mat or Crust (B4)		educed Iron (C4) eduction in Tilled Soils (C6)		Stressed Plants (D1) ic Position (D2)
Iron Deposits (B5)	Thin Muck Surf		Shallow Aq	
Inundation Visible on Aerial I		` '		raphic Relief (D4)
Sparsely Vegetated Concave		in redinancy	x FAC-Neutra	
Field Observations:				
	es x No Depth (inches	s)· 1		
	es No x Depth (inches			
Saturation Present? Yes	es No x Depth (inches	s): Wetland I	Hydrology Presen	t? Yes X No
(includes capillary fringe)				
Describe Recorded Data (stream	gauge, monitoring well, aerial photo	s, previous inspections), if av	vailable:	
Remarks:	recent heavy enring rains			
Site was seasonably wet due to r	ecent neavy spring rains			

VEGETATION – Use scientific names of plants.

Number of Dominant Species That Are OBL, FACW, or FAC: 7 (A) Total Number of Dominant Species Across All Strata: 7 (B) Percent of Dominant Species That Are OBL, FACW, or FAC: 100.0% (A/B) Prevalence Index worksheet: Total % Cover of: Multiply by: DBL species 0 x 1 = 0 FACW species 180 x 2 = 360 FAC species 110 x 3 = 330 FAC species 10 x 4 = 40 JPL species 0 x 5 = 0 Column Totals: 300 (A) 730 (B)
That Are OBL, FACW, or FAC: 7 (A) Total Number of Dominant Species Across All Strata: 7 (B) Percent of Dominant Species That Are OBL, FACW, or FAC: 100.0% (A/B) Prevalence Index worksheet:
Species Across All Strata: 7 (B) Percent of Dominant Species 100.0% (A/B) Prevalence Index worksheet: 100.0% (A/B) Total % Cover of: Multiply by: 0 DBL species 0 x 1 = 0 FACW species 180 x 2 = 360 FAC species 110 x 3 = 330 FACU species 10 x 4 = 40 JPL species 0 x 5 = 0 Column Totals: 300 (A) 730 (B)
That Are OBL, FACW, or FAC: 100.0% (A/B) Prevalence Index worksheet: Total % Cover of: Multiply by: DBL species 0 x 1 = 0 FACW species 180 x 2 = 360 FAC species 110 x 3 = 330 FACU species 10 x 4 = 40 JPL species 0 x 5 = 0 Column Totals: 300 (A) 730 (B)
Prevalence Index worksheet: Total % Cover of: Multiply by: DBL species 0 x 1 = 0 FACW species 180 x 2 = 360 FAC species 110 x 3 = 330 FACU species 10 x 4 = 40 JPL species 0 x 5 = 0 Column Totals: 300 (A) 730 (B)
OBL species 0 x 1 = 0 FACW species 180 x 2 = 360 FAC species 110 x 3 = 330 FACU species 10 x 4 = 40 JPL species 0 x 5 = 0 Column Totals: 300 (A) 730 (B)
OBL species 0 x 1 = 0 FACW species 180 x 2 = 360 FAC species 110 x 3 = 330 FACU species 10 x 4 = 40 JPL species 0 x 5 = 0 Column Totals: 300 (A) 730 (B)
FACW species 180 x 2 = 360 FAC species 110 x 3 = 330 FACU species 10 x 4 = 40 JPL species 0 x 5 = 0 Column Totals: 300 (A) 730 (B)
FACU species 10 x 4 = 40 UPL species 0 x 5 = 0 Column Totals: 300 (A) 730 (B)
JPL species 0 x 5 = 0 Column Totals: 300 (A) 730 (B)
Column Totals: 300 (A) 730 (B)
``/
Prevalence Index = B/A = 2.43
Hydrophytic Vegetation Indicators:
1 - Rapid Test for Hydrophytic Vegetation
X 2 - Dominance Test is >50%
X 3 - Prevalence Index is ≤3.0 ¹
4 - Morphological Adaptations ¹ (Provide supporting
data in Remarks or on a separate sheet)
Problematic Hydrophytic Vegetation ¹ (Explain)
Indicators of hydric soil and wetland hydrology must
pe present, unless disturbed or problematic.
Definitions of Vegetation Strata:
Free – Woody plants 3 in. (7.6 cm) or more in
diameter at breast height (DBH), regardless of height.
Sapling/shrub – Woody plants less than 3 in. DBH
and greater than or equal to 3.28 ft (1 m) tall.
Herb – All herbaceous (non-woody) plants, regardless of size, and woody plants less than 3.28 ft tall.
of size, and woody plants less than 5.25 it tall.
Noody vines – All woody vines greater than 3.28 ft in neight.
<u> </u>
Hydrophytic
Vegetation Present? Yes X No
100 <u>X</u> 100
H

Sampling Point: WET_22.2

SOIL Sampling Point: WET_22.2

Profile D	escription: (Describe	to the de	epth needed to docu	ment the	e indicato	or or con	firm the absence	of indicators.)		
Depth	Matrix		Redox	c Feature	es					
(inches)	Color (moist)	%	Color (moist)	%	Type ¹	Loc ²	Texture	Remarks		
0-10	10YR 3/2	100					Loamy/Clayey			
10-20	10YR 4/1	15	10YR 5/8	85	С	<u>M</u>	Loamy/Clayey	Prominent redox concentrations		
			_							
			_				-			
			_							
			_							
¹ Type: C:	=Concentration, D=Dep	oletion, RI	M=Reduced Matrix, C	S=Cover	red or Coa	ated San	d Grains. ² Lo	cation: PL=Pore Lining, M=Matrix.		
Hydric So	oil Indicators:						Indicators for	or Problematic Hydric Soils ³ :		
Histo	sol (A1)		Polyvalue Below	Surface	(S8) (LR	RR,	2 cm Mu	uck (A10) (LRR K, L, MLRA 149B)		
Histic	Epipedon (A2)		MLRA 149B)				Coast Prairie Redox (A16) (LRR K, L, R)			
Black	(Histic (A3)		Thin Dark Surface	e (S9) (l	LRR R, M	LRA 149	Β) 5 cm Μι	B) 5 cm Mucky Peat or Peat (S3) (LRR K, L, R)		
	ogen Sulfide (A4)		High Chroma Sa					ie Below Surface (S8) (LRR K, L)		
	ified Layers (A5)		Loamy Mucky M			-		Thin Dark Surface (S9) (LRR K, L)		
	eted Below Dark Surfac	۰e (Δ11)	Loamy Gleyed M			-, -,	Iron-Manganese Masses (F12) (LRR K, L, R)			
	Dark Surface (A12)	C (ATT)	Depleted Matrix		-)					
							Piedmont Floodplain Soils (F19) (MLRA 149B)			
	ly Mucky Mineral (S1)		X Redox Dark Surf				Mesic Spodic (TA6) (MLRA 144A, 145, 149B)			
	ly Gleyed Matrix (S4)		Depleted Dark S	•	•		Red Parent Material (F21)			
	y Redox (S5)		Redox Depression	, ,			Very Shallow Dark Surface (TF12)			
	ped Matrix (S6)		Marl (F10) (LRR	K , L)			Other (Explain in Remarks)			
Dark	Surface (S7)									
³ Indicator	s of hydrophytic vegeta	tion and v	vetland hydrology mu	st be pre	esent, unle	ess distur	bed or problemation	2.		
	ve Layer (if observed)		, 0,		· · · · · · · · · · · · · · · · · · ·		'			
Type:										
Depth (inches):						Hydric Soil Pr	esent? Yes X No No		
Remarks:							•			

Project/Site:Avon Lake Gas Addition ProjectCity/County: Lorain CountySampling Date:5/13/14Applicant/Owner:NRG Gas Pipeline Company LLCState:OHSampling Date:5/13/14Investigator(s):Travis Kessler, Lauren Zielke, Aaron GordonSection, Township, Range:Not availableLandform (hillside, terrace, etc.):depressionsLocal relief (concave, convex, none):concaveSlope (%):0 - 2											
Investigator(s): Travis Kessler, Lauren Zielke, Aaron Gordon Section, Township, Range: Not available											
· · · · · · · · · · · · · · · · · · ·											
· · · · · · · · · · · · · · · · · · ·											
Subregion (LRR or MLRA): LRR R, MLRA 139 Lat: 41.3794289286 Long: -82.0658609821 Datum: WGS 84											
Soil Map Unit Name: Miner silty clay loam NWI classification: none											
Are climatic / hydrologic conditions on the site typical for this time of year? Yes x No (If no, explain in Remarks.)											
Are Vegetation, Soil, or Hydrologysignificantly disturbed? Are "Normal Circumstances" present? Yesx No											
Are Vegetation, Soil, or Hydrology naturally problematic? (If needed, explain any answers in Remarks.)											
SUMMARY OF FINDINGS – Attach site map showing sampling point locations, transects, important features, etc.											
Hydrophytic Vegetation Present? Yes No X Is the Sampled Area											
Hydric Soil Present? Yes No x within a Wetland? Yes No X											
Wetland Hydrology Present? Yes No X If yes, optional Wetland Site ID:											
Remarks: (Explain alternative procedures here or in a separate report.) Disturbed upland area that parallels Ohio Turnpike											
HYDROLOGY Consider the displace of the required											
Wetland Hydrology Indicators: Secondary Indicators (minimum of two required) Surface Sail Creaks (ISS)											
Primary Indicators (minimum of one is required; check all that apply) Surface Water (A1) Water Stained Leaves (B9) Drainage Patterns (B10)											
Surface Water (A1) — Water-Stained Leaves (B9) — Drainage Patterns (B10) High Water Table (A2) — Moss Trim Lines (B16)											
High Water Table (A2) Saturation (A3) Aquatic Fauna (B13) Marl Deposits (B15) Moss Trim Lines (B16) Dry-Season Water Table (C2)											
Water Marks (B1) Water Marks (B1) Hydrogen Sulfide Odor (C1) Crayfish Burrows (C8)											
Sediment Deposits (B2) Oxidized Rhizospheres on Living Roots (C3) Saturation Visible on Aerial Imagery (C9)											
Drift Deposits (B3) Presence of Reduced Iron (C4) Stunted or Stressed Plants (D1)											
Algal Mat or Crust (B4) Recent Iron Reduction in Tilled Soils (C6) Geomorphic Position (D2)											
Iron Deposits (B5) Thin Muck Surface (C7) Shallow Aquitard (D3)											
Inundation Visible on Aerial Imagery (B7) Other (Explain in Remarks) Microtopographic Relief (D4)											
Sparsely Vegetated Concave Surface (B8) FAC-Neutral Test (D5)											
Field Observations:											
Surface Water Present? Yes No x Depth (inches):											
Water Table Present? Yes No x Depth (inches):											
Saturation Present? Yes No x Depth (inches): Wetland Hydrology Present? Yes No X											
(includes capillary fringe)											
Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available:											
Remarks:											
N/A											

VEGETATION – Use scientific names of plants. Sampling Point: UPL 23 Absolute Dominant Indicator Tree Stratum (Plot size: 30' radius) % Cover **Dominance Test worksheet:** Species? Status FACU **Number of Dominant Species** That Are OBL, FACW, or FAC: 2. (A) **Total Number of Dominant** Species Across All Strata: 2 (B) 5. Percent of Dominant Species 6. That Are OBL, FACW, or FAC: 50.0% (A/B) Prevalence Index worksheet: =Total Cover Total % Cover of: Sapling/Shrub Stratum (Plot size: 15' radius) OBL species x 1 = 0 1. FACW species x 2 = x 3 = 2. FAC species 30 **FACU** species 60 x 4 = UPL species 10 x 5 = Column Totals: 100 380 (A) (B) 6. Prevalence Index = B/A = 3.80 **Hydrophytic Vegetation Indicators:** 1 - Rapid Test for Hydrophytic Vegetation =Total Cover Herb Stratum (Plot size: 5' radius) 2 - Dominance Test is >50% Poa pratensis 60 Yes **FACU** 3 - Prevalence Index is ≤3.01 2. Plantago rugelii 20 Yes FAC 4 - Morphological Adaptations¹ (Provide supporting data in Remarks or on a separate sheet) 10 3. Toxicodendron radicans No FAC 10 UPL Problematic Hydrophytic Vegetation¹ (Explain) No Daucus carota 5. ¹Indicators of hydric soil and wetland hydrology must 6. be present, unless disturbed or problematic. **Definitions of Vegetation Strata:** 8. Tree - Woody plants 3 in. (7.6 cm) or more in 9. diameter at breast height (DBH), regardless of height. Sapling/shrub - Woody plants less than 3 in. DBH and greater than or equal to 3.28 ft (1 m) tall. Herb - All herbaceous (non-woody) plants, regardless 100 =Total Cover of size, and woody plants less than 3.28 ft tall. Woody Vine Stratum (Plot size: 15' radius) Woody vines - All woody vines greater than 3.28 ft in 1. height. Hydrophytic Vegetation Present? Yes No X =Total Cover Remarks: (Include photo numbers here or on a separate sheet.) roadside shoulder vegetative features

SOIL Sampling Point: UPL_23

	Profile Description: (Describe to the depth needed to document the indicator or confirm the absence of indicators.)										
Depth			Redox Features Color (moist) % Type ¹ Loc ²			Toytura	Remarks				
(inches)	Color (moist)	<u>%</u>	Color (moist)	<u>%</u>	Type ¹	LOC	Texture	Ren	iarks		
0-20	10YR 5/2	90	10YR 4/6	10	С	M	Loamy/Clayey				
			_								
1 _{Type:} C=	Concentration D=Day	olotion DI	A=Poducod Matrix C	S=Covo	rod or Co	atod Son	d Crains ² L coati	on: DI =Doro Lin	ina M-Matri	<u> </u>	
¹ Type: C=Concentration, D=Depletion, RM=Reduced Matrix, CS=Covered or Coated Sand Grains. ² Location: PL=Pore Lining, M=Matrix. Hydric Soil Indicators: Indicators for Problematic Hydric Soils ³ :											
Histosol (A1) Polyvalue Below Surface (S8) (LRR R,						R R	2 cm Muck (A10) (LRR K, L, MLRA 149B)				
Histic Epipedon (A2)			MLRA 149B)				Coast Prairie Redox (A16) (LRR K, L, R)				
	Histic (A3)	Thin Dark Surface (S9) (LRR R, MLRA 149)					Peat or Peat (S		. R)		
	gen Sulfide (A4)	High Chroma Sands (S11) (LRR K, L)					elow Surface (S8		-		
	ed Layers (A5)		Loamy Mucky M			-		urface (S9) (LRR			
	ted Below Dark Surfac		amy Gleyed Matrix (F2) Iron-Manganese Masses (F12) (LRR K, L, R)								
	Dark Surface (A12)	Depleted Matrix (F3)				Piedmont Floodplain Soils (F19) (MLRA 149B)					
Sandy	Mucky Mineral (S1)	Redox Dark Surface (F6)				Mesic Spod	ic (TA6) (MLRA	144A, 145, 1	49B)		
Sandy Gleyed Matrix (S4)			Depleted Dark Surface (F7)				Red Parent Material (F21)				
Sandy Redox (S5)			Redox Depressions (F8)				Very Shallow Dark Surface (TF12)				
Stripped Matrix (S6)			Marl (F10) (LRR K, L)				Other (Expla	ain in Remarks)			
Dark Surface (S7)											
	of hydrophytic vegeta		vetland hydrology mu	st be pre	esent, unle	ess distur	bed or problematic.				
	e Layer (if observed)):									
Type:											
Depth (ir	nches):						Hydric Soil Prese	nt? Yes_	No_	X	
Remarks:							•				

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in

Case No(s). 14-1717-GA-BLN

Summary: Application of NRG Ohio Pipeline Company LLC continued - Attachment I (Part 4) electronically filed by Teresa Orahood on behalf of Sally Bloomfield