Appendix J: Aquatic Resources Report

Aquatic Resource Report for the Guernsey Power Station

Volume 1 Guernsey Power Station

Prepared for: Guernsey Power Station, LLC.

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LIST OF ACRONYMS AND ABBREVIATIONS

Acronym	Meaning
1987 Manual	United States Army Corps of Engineers Wetland Delineation Manual
AWS	Agricultural Water Supply
cm	centimeters
FAC	Facultative
FACU	Facultative Upland
FACW	Facultative Wetland
GIS	Geographic Information Systems
GPS	Global Positioning System
Guernsey Power	Guernsey Power Station, LLC
HGM	Hydrogeomorphic
HHEI	Headwater Habitat Evaluation Index
HMFEI	Headwater Macroinvertebrate Field Evaluation Index
IWS	Industrial Water Supply
LOD	Limit of disturbance
NHD	National Hydrography Dataset
NRCS	Natural Resources Conservation Service
NWI	National Wetlands Inventory
OBL	Obligate
Ohio EPA	Ohio Environmental Protection Agency
ORAM	Ohio Rapid Assessment Method for Wetlands
OWI	Ohio Wetlands Inventory
PCR	Primary Contact Recreation
PEM	Palustrine Emergent
PHWH	Primary Headwater Habitat
Project	Guernsey Power Station Project
PUB	Palustrine Unconsolidated Bottom
QHEI	Qualitative Habitat Evaluation Index
Regional Supplement	Regional Supplement to the Corps of Engineers Wetland Delineation Manual:
	Eastern Mountains and Piedmont Region, April 2012
Tetra Tech	Tetra Tech Inc.
UNT	Unnamed Tributary
UPL	Upland
USACE	United States Army Corps of Engineers
USFWS	United States Fish and Wildlife Service
USGS	United States Geological Survey
WWH	Warm Water Habitat

1.0 INTRODUCTION

This Aquatic Resource Report for the proposed Guernsey Power Station Project was prepared by Tetra Tech, Inc. (Tetra Tech) on behalf of Guernsey Power Station, LLC. (Guernsey Power). The investigation for the presence of wetlands on site utilized methodologies enumerated in the United States Army Corps of Engineers (USACE) *Wetland Delineation Manual* (Environmental Laboratory, 1987) (1987 Manual), as amended by the *Regional Supplement to the Corps of Engineers Wetland Delineation Manual: Eastern Mountains and Piedmont Region*, April 2012 (Regional Supplement).

The subject of this report is a wetland and stream identification field investigation for activities associated with the construction of the Guernsey Power Station, a new 1,650-megawatt natural gas-fired combined cycle generating facility located in Jackson and Valley Townships, Guernsey County, Ohio. The proposed Project will include combustion turbine generators, heat recovery steam generators, steam turbine generators, transformers, a switchyard and other ancillary equipment. Electrical interconnection equipment will be located on a separate adjacent parcel south of the Guernsey Power Station site, referred to as the Interconnection Property. The results of the wetland delineation and stream identification field investigation for the Interconnection Property are in Volume 2 of the Aquatic Resource Report for the Guernsey Power Station Project.

The study area drains to Wills Creek. Wills Creek is designated as Warm Water Habitat (WWH), Agricultural Water Supply (AWS), Industrial Water Supply (IWS), and Primary Contact Recreation (PCR) under Ohio Administrative Code 3745-1-07.

The content of this report presents the methodology, results, and conclusions of wetland delineation and stream identification activities completed for the approximate 129-acre study area.

2.0 METHODOLOGY

2.1 Wetland Delineation and ORAM Assessment

USACE requires the use of the procedures enumerated in the *1987 Manual* and the *Regional Supplement*; for making jurisdictional determinations. According to the *1987 Manual*, an area is defined as a wetland if, under normal circumstances, it meets all three of the following criteria:

- 1. Predominance of hydrophytic vegetation (plants adapted for life in saturated soil conditions);
- 2. Hydric soils (soils formed under water, or in saturated conditions); and
- 3. Wetland hydrology (presence of inundated or saturated soils at some time during the growing season).

Wetlands identified in the field were classified in accordance with the U.S. Fish and Wildlife Service's (USFWS) *Classification of Wetlands and Deepwater Habitats of the United States* (Cowardin et al., 1979), *A Hydrogeomorphic (HGM) Classification for Wetlands (Brinson, 1993), and USACE Waters Type (USACE, 2007). Cowardin wetland classifications (Cowardin et al., 1979) are as follows:*

- Palustrine emergent (PEM) emergent, herbaceous (non-woody) plants are the tallest life form with at least 30 percent aerial coverage
- Palustrine scrub-shrub (PSS) woody plants less than six meters (20 feet) in height are the tallest life form with at least 30 percent aerial coverage
- Palustrine forested (PFO) woody plants at least six meters (20 feet) in height are the tallest life form with at least 30 percent aerial coverage
- Palustrine unconsolidated bottom (PUB) all wetland and deepwater habitats with at least 25 percent cover of particles smaller than stones, and a vegetative cover of less than 30 percent.

Dominant vegetation was identified and classified according to *The National Wetland Plant List: 2016 wetland ratings* (Lichvar, 2016). Plant classifications are as follows:

Obligate (OBL) - essentially always found in wetlands; estimated probability >99% *Facultative Wetland (FACW)* - usually found in wetlands; estimated probability 67%-99% *Facultative (FAC)* - equally likely to occur in wetlands and non-wetlands; estimated probability 34%-66% *Facultative Upland (FACU)* - usually occurs in non-wetlands; estimated probability 1%-33% *Upland (UPL)* –rarely occurs in wetlands; estimated probability <1%

In addition to the USACE wetland delineation, a wetland assessment was performed to determine ecological quality and level of function of each wetland system as required by the Ohio Environmental Protection Agency (Ohio EPA). The Ohio Rapid Assessment Method for Wetlands (Mack, 2001) (ORAM) was used to perform this evaluation. The ORAM uses metrics relating to wetland size, adjacent upland land use, hydrology, habitat alteration, special habitats, and plant communities to calculate and assign each wetland system to a Category. Wetlands are designated as either Category 1, Category 2, Modified Category 2, or Category 3. The categories correspond to wetlands of low, medium, and high quality, respectively.

2.2 Stream Identification and Evaluation

Streams identified in the field were classified by Flow Regime, USACE Water Type (USACE, 2007), and Cowardin Classification (Cowardin et al., 1979).

Streams with a drainage area greater than one square mile or a maximum pool depth greater than 40 centimeters (cm) were evaluated using the Ohio EPA's Qualitative Habitat Evaluation Index (QHEI) and associated field data sheet. The QHEI is a quantitative evaluation of physical stream characteristics important to supporting fish communities. Six individual metrics are scored then added with the total maximum score being 100. The evaluated metrics include substrate, instream cover, channel morphology, riparian zone, pool quality, and riffle quality. Rating scales vary slightly between headwater streams, which have watersheds less than 20 square miles, and streams with larger watersheds. For headwater streams

QHEI scores greater than or equal to 70 correspond to an excellent rating, 55 - 69 to a good rating, 43 - 54 to a rating of fair, 30 - 42 to a rating of poor, and less than 30 to a rating of very poor. For streams with larger watersheds QHEI scores greater than or equal to 75 correspond to an excellent rating, 60 - 74 to a good rating, 45 - 59 to a rating of fair, 30 - 44 to a rating of poor, and less than 30 to a rating of very poor.

2.3 Field Surveys

The field investigations for the proposed Project were performed on July 20 and 21, 2016. The study area was limited to the approximately 129 acre proposed limit of disturbance (LOD) of the Project. The final study area is illustrated on Figure 1.

Preliminary site reconnaissance of the study area was conducted through a review of available Geographic Information Systems (GIS) resources. Existing information reviewed included the following:

- USGS topographic mapping (Figure 1; USGS, 2009)
- Natural Resources Conservation Service (NRCS) National Cooperative Soil Survey (Figure 2; NRCS, 2014)
- USFWS National Wetland Inventory (NWI) Mapping (Figure 3A; USFWS, 2009) and Ohio Wetlands Inventory (OWI) Mapping (Figure 3B)

Wetland delineation in the field involved the establishment of the wetland/upland margin with flagging hung at intervals that accurately depicted the outline of the boundary. The individual flags were then located using a Global Positioning System (GPS) receiver with sub-meter accuracy and later added to the Project area mapping. Wetland flagging was limited to the bounds of the investigated study area and wetlands are shown as closed or partially closed systems on the detail maps (Figures 4-1 to 4-3).

All wetlands and streams identified were given unique identification names (i.e. Wetland ID, Stream ID). For streams, the National Hydrography Dataset (NHD) mapped stream names (USGS, 2015) are also provided in the results.

Data concerning soils, hydrology, and vegetation were collected and recorded on USACE Wetland Determination Data Forms at wetlands and at upland point locations associated with each wetland. USACE Wetland Determination Forms are provided in Appendix A. ORAM data forms are provided in Appendix B. Photographs depicting wetland topography and vegetation are included in Appendix C. A QHEI data sheet detailing stream characteristics is provided in Appendix D. Appendix E contains photographs of the stream. Resumes of Project field personnel, summarizing professional experience, qualifications, and education, are included in Appendix F.

3.0 **RESULTS**

The field investigations identified 20 resources within the Project study area that met the wetland criteria outlined in the *1987 Manual*, as amended by the *USACE Regional Supplement*. Additionally, one stream was identified within the Project study area.

The detail maps provided as Figures 4-1 to 4-3 illustrate the wetland and watercourse locations in relation to the study area. Tables 1 and 2 summarize wetland and stream information for all wetlands and streams identified within the Project study area.

3.1 Wetland Identification and Delineation

Hydric soils and soils with hydric components are often associated with wetlands. A review of the NRCS Soil Survey and county hydric soil list (Table 3) indicates that there are five soil units mapped within the study area classified as hydric. These are the Glenford silt loam, 0 to 3 percent slopes (GnA); Nolin silt loam, 0 to 3 percent slopes, frequently flooded (No); McGary silt loam, 0 to 3 percent slopes (McA); Sarahsville silty clay loam, frequently flooded (Sa); and Zipp silty clay loam, ponded (Zs). The NRCS soil survey map is included as Figure 2. The NRCS soil survey mapping units are shown on Figure 2. Confirmation of the soil mapping units was not performed during this site evaluation.

A review of the USFWS NWI database indicates that there are five NWI mapped wetlands identified in the Project study area (Figure 3A). The NWI wetlands roughly correspond to delineated Wetland C27, Wetland C28, Wetland C30 PEM, Wetland C30 PFO, Wetland C31 PEM, Wetland C31 PFO, Wetland C33, Wetland C34, Wetland C36, Wetland C37, Wetland C38, Wetland C42, and Wetland C43.

Four OWI (Figure 3B) wetlands are mapped within the study area. The OWI wetlands roughly correspond to delineated Wetland C27, Wetland C28, Wetland C31 PEM, Wetland C31 PFO, Wetland C33, Wetland C34, Wetland C36, Wetland C37, Wetland C38, Wetland C39, Wetland C40, and Wetland C44.

Based on our review of available GIS mapping data, evidence collected during field surveys, and best professional judgment, a total of 20 wetlands were identified and delineated within the Project study area. These areas demonstrated the presence of all three wetland parameters required by the *1987 Manual* and the USACE Regional Supplement:

- 1. Predominance of hydrophytic vegetation (plants adapted for life in saturated soil conditions);
- 2. Hydric soils (soils formed under water, or in saturated conditions); and
- 3. Wetland hydrology (presence of inundated or saturated soils at some time during the growing season).

A summary of each wetland identified and delineated within the Project study area is provided in Table 1. Table 1 shows the location of each wetland, Cowardin classification, HGM classification, Waters Type classification, the identity of any associated (i.e. abutting or adjacent) waterbodies, wetland size within the study area (in acres and square feet), whether the wetland boundary is open or closed (open wetland boundaries indicate that delineated wetlands continue beyond the investigated Project study area), and ORAM score and Category. Wetlands with multiple habitat types (e.g. PEM and PSS) are considered a single wetland system and are counted as one wetland. The wetland size provided in Table 1 represents the size of the wetland delineated within the Project study area. Open boundary wetlands continue beyond the investigated survey area; therefore, the size of open boundary wetlands may be greater than the size provided in Table 1.

USACE wetland determination data forms detailing the existing vegetation, soil characteristics, and hydrology for each wetland and its associated upland point are provided in Appendix A. ORAM data sheets are provided in Appendix B. Photographs of each delineated wetland are provided in Appendix C.

3.2 Stream Identification and Evaluation

Based on our review of available GIS mapping data, evidence collected during field surveys, and best professional judgment, one stream was identified and evaluated within the Project study area. A summary of the data for the identified stream is provided in Table 2. Table 2 shows the stream field identification name (Stream ID), the NHD mapped stream name (NHD Stream Name), stream location, Flow Regime classification, Water Type classification, Cowardin classification, and top of bank width.

A QHEI data form is provided for the stream in Appendix D. Photographs of the identified stream are provided in Appendix E.

4.0 CONCLUSION

During the field investigations of the Project study area, 20 locations were identified and delineated as wetlands in accordance with the *1987 Manual* and the *USACE Regional Supplement*. In addition, one stream was identified and evaluated within the Project study area. A summary of wetland and stream data is provided in Tables 1 and 2 and locations of all identified wetlands and streams are shown on Figures 4-1 to 4-3.

The wetland delineation and stream identification services performed by Tetra Tech were conducted in accordance with the *1987 Manual* and USACE Regional Supplement. Seasonal conditions were taken into account while conducting wetland delineation and stream identification evaluations, as they were completed outside of the vegetative growing season. This aquatic resource report represents our best professional judgment and is based on site conditions at the time of the field investigation. However, final authority over the determinations made during these surveys rests with the USACE.

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Figures

Detail Maps

Figure 1	USGS Project Location Map
Figure 2	NRCS Soil Survey Map
Figure 3A	National Wetland Inventory Map
Figure 3B	Ohio Wetland Inventory Map

Figures 4-1 to 4-3















Tables

Table 1	Identified Wetlands
Table 2	Identified Streams
Table 3	Guernsey County Hydric Soil List

Table 1.	Identified Wetlands
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Figure	4-1	4-1, 4-2	4-2, 4-3	4-3	4-3	4-2, 4-3	4-3	4-3	4-2, 4-3	4-2, 4-3	4-2, 4-3	4-2, 4-3	4-2, 4-3	4-2	4-2	4-2	4-2	4-1	4-1	4-1	4-1	4-1	4-1
ORAM Category ⁶	Modified 2	Modified 2	Modified 2	Modified 2	Modified 2	Modified 2	Modified 2	Modified 2	Category 2	Category 2	Modified 2	Modified 2	Category 1	Category 1	Category 1	Category 1							
ORAM Score ⁶	37	37	37	37	37	37	37	37	27	27	23	42	42	23	23	23	23	37	37	22	26	26	26
Open/Closed Boundary	Closed	Closed	Closed	Closed	Closed	Closed	Closed	Closed	Closed	Closed	Closed	Closed	Closed	Closed	Closed	Closed	Closed	Open	Open	Open	Closed	Closed	Closed
Size (square feet) ⁵	1205	413910	1302	26376	63941	364690	16160	22558	4394	10609	24517	35451	53416	79876	1458	7541	6103	15888	24216	7430	8947	11450	9136
Size (Acres) ⁵	0.03	9.50	0.03	0.61	1.47	8.37	0.37	0.52	0.10	0.24	0.56	0.81	1.23	1.83	0.03	0.17	0.14	0.36	0.56	0.17	0.21	0.26	0.21
Associated Waterbodies	Unidentified stream out of survey corridor to Wills Creek	Unidentified stream out of survey corridor to Wills Creek	Unidentified stream out of survey corridor to Wills Creek	S-C38 (Wills Creek)	Unidentified stream out of survey corridor to Wills Creek	Unidentified stream out of survey corridor to Wills Creek	Unidentified stream out of survey corridor to Wills Creek	Unidentified stream out of survey corridor to Wills Creek	Unidentified stream out of survey corridor to Wills Creek	Unidentified stream out of survey corridor to Wills Creek													
Water Type ⁴	RPWWN	RPWWD	RPWWN	RPWWN	RPWWD	RPWWD	RPWWD	RPWWD	RPWWN	RPWWN	RPWWN	NRPWW	NRPWW	NRPWW									
HGM ³	Slope	Depressional	Depressional	Slope	Riverine	Depressional	Depressional	Depressional	Slope	Slope	Depressional	Depressional	Depressional	Depressional	Depressional	Depressional	Slope	Depressional	Depressional	Depressional	Depressional	Depressional	Depressional
Cowardin Class ²	PEM	PEM	PEM	PEM	PFO	PEM	PFO	PEM	PEM	PEM	PEM	PUB	PUB	PEM	PEM	PEM	PEM	PEM	PEM	PEM	PEM	PEM	PFO
Longitude ¹	-81.535037	-81.533776	-81.532219	-81.532970	-81.533366	-81.538038	-81.538620	-81.537070	-81.533812	-81.534743	-81.538699	-81.538605	-81.537911	-81.538500	-81.538145	-81.538020	-81.537186	-81.535691	-81.535686	-81.538282	-81.536990	-81.537830	-81.537479
Latitude ¹	39.940183	39.938466	39.934932	39.933650	39.933228	39.933860	39.933481	39.933191	39.934222	39.934467	39.935448	39.934719	39.934849	39.936355	39.936149	39.936550	39.938523	39.942745	39.941322	39.942778	39.939922	39.940091	39.940156
County	Guernsey	Guernsey	Guernsey	Guernsey	Guernsey	Guernsey	Guernsey	Guernsey	Guernsey	Guernsey	Guernsey	Guernsey	Guernsey	Guernsey	Guernsey	Guernsey	Guernsey	Guernsey	Guernsey	Guernsey	Guernsey	Guernsey	Guernsey
Wetland Habitat ID	W-C27	W-C28	W-C29	W-C30 PEM	W-C30 PFO	W-C31 PEM	W-C31 PFO	W-C32	W-C33	W-C34	W-C35	W-C36	W-C37	W-C38	W-C39	W-C40	W-C41	W-C42	W-C43	W-C44	W-C45	W-C46 PEM	W-C46 PFO
Wetland ID	W-C27	W-C28	W-C29	W C30	000-14	W. C34	100-44	W-C32	W-C33	W-C34	W-C35	W-C36	W-C37	W-C38	W-C39	W-C40	W-C41	W-C42	W-C43	W-C44	W-C45	M-C46	2M

Notes:	-	2

- In decimal degrees - PEM = Palustrine En

ω4

6 9

FPC = Palustrine Forestid
 EUB = Palustrine Forestid
 EUB = Palustrine Forestid
 EUB = Palustrine Forestid
 END = Mydrogenorphic
 END = Mydrogenorphic
 REWWD = Wetlands directly betraining RPWs that flow directly into Traditional Navigable Waterways (TNWs)
 REWWD = Wetlands directly abutting Relatively Permanent Waters (RPWs) that flow directly into Traditional Navigable Waterways (TNWs)
 REWWD = Wetlands directly abutting Relatively Permanent Waters (RPWs) that flow directly into TWNs
 REWWD = Wetlands directly abutting Relatively Permanent Waters (RPWs) that flow directly into TWNs
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Table 2.	Identified Streams
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NHD Stream Name ¹	County	Latitude ²	Longitude ²	Flow Regime	Water Type ³	Cowardin Class ⁴	QHEI Score ⁵	Top of Bank Width (ft)	Figure
Wills Creek	Guernsey	39.930779	-81.537103	Perennial	RPW	R2UB2	42	60.0	4-3

Notes: 1 1 5 2 2 5

For identified streams without a NHD (National Hydrography Dataset) name, the identified stream was given the name. "Unidentified Tributary (UNT)", of the first named receiving waterbody
 In decimal degrees
 Rebarries (N, Pramanent Waters
 Charler, F.C. Golet, and E.T. LaRoe, 1979. Classification of Wetlands and Despwater Habitats of the United States. United States Government Prinning Office. Washington, D.C. GPO 024 010-005246, 103 pp.
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Table 3. Hydric Soils List Guernsey County, Ohio

Map Unit Symbol	Map Unit Name	Component Name and Phase	Component Percent	Landforms
BaB	Barkcamp gravelly sandy loam, 0 to 8 percent slopes	poorly drained soils	5	Depressions
BcD	Barkcamp very flaggy sandy loam, 8 to 40 percent slopes, very stony	poorly drained soils	5	Closed depressions
BhB	Bethesda channery loam, 0 to 8 percent slopes	poorly drained soils	5	Closed depressions
BhD	Bethesda channery loam, 8 to 25 percent slopes	poorly drained soils	5	Closed depressions
BhF	Bethesda channery loam, 25 to 70 percent slopes	poorly drained soils	5	Closed depressions
BkD	Brookside silty clay loam, 15 to 25 percent slopes	poorly drained soils	10	Depressions
BkE	Brookside silty clay loam, 25 to 40 percent slopes	poorly drained soils	10	Depressions
BsD	Brookside silt loam, 15 to 25 percent slopes	poorly drained soils	10	Closed depressions
BsD2	Brookside silt loam, 15 to 25 percent slopes, eroded	poorly drained soils	10	Hills
BtC	Brookside-Vandalia complex, 8 to 15 percent slopes	poorly drained soils	10	Closed depressions
BtD	Brookside-Vandalia complex, 15 to 25 percent slopes	poorly drained soils	8	Closed depressions
BtD2	Brookside-Vandalia complex, 15 to 25 percent slopes, eroded	poorly drained soils	10	Hills
BtE	Brookside-Vandalia complex, 25 to 40 percent slopes	poorly drained soils	7	Closed depressions
Са	Chagrin loam, occasionally flooded	poorly drained soils	5	Depressions
CbD	Clarksburg silt loam, 15 to 25 percent slopes	poorly drained soils	5	Hills
ckc	Claysville-Guernsey complex, 8 to 15 percent slopes	poorly drained soils	15	Closed depressions
EuA	Euclid silt loam, rarely flooded	poorly drained soils	7	Closed depressions
FtA	Fitchville silt loam, 0 to 3 percent slopes	poorly drained soils	10	Closed depressions
GnA	Glenford silt loam, 0 to 2 percent slopes	poorly drained soils	7	Closed depressions
GnB	Glenford silt loam, 2 to 6 percent slopes	poorly drained soils	5	Closed depressions
GpA	Glenford-Urban land complex, 0 to 2 percent slopes	poorly drained soils	5	Closed depressions

Table 3. Hydric Soils List Guernsey County, Ohio

He	Hartshorn silt loam, occasionally flooded	poorly drained soils	5	Closed depressions
Но	Holton silt loam, occasionally flooded	poorly drained soils	5	Closed depressions
Гd	Lindside silt loam, frequently flooded	poorly drained soils	5	Closed depressions
McA	McGary silt loam, 0 to 3 percent slopes	poorly drained soils	10	Closed depressions
Md	Melvin silt loam, ponded	Melvin	06	Flood plains
MoF	Morristown channery clay loam, 40 to 70 percent slopes	poorly drained soils	10	Closed depressions
MrF	Morristown channery silty clay loam, 25 to 70 percent slopes	poorly drained soils	10	Hills
Nd	Newark silt loam, occasionally flooded	poorly drained soils	5	Depressions
Ne	Newark silt loam, frequently flooded	poorly drained soils	10	Closed depressions
No	Nolin silt loam, frequently flooded	poorly drained soils	5	Closed depressions
OmB	Omulga silt loam, 1 to 6 percent slopes	poorly drained soils	5	Depressions
OmC	Omulga silt loam, 6 to 15 percent slopes	poorly drained soils	5	Depressions
Or	Orrville silt loam, occasionally flooded	poorly drained soils	9	Closed depressions
Sa	Sarahsville silty clay loam, frequently flooded	poorly drained soils	8	Closed depressions
Sb	Sarahsville silty clay, frequently flooded	areas flooded for long duration	10	Abandoned channels
SeB	Sees silty clay loam, 2 to 6 percent slopes	poorly drained soils	7	Closed depressions
Zp	Zipp silty clay loam, frequently flooded	Zipp	06	Flood plains
Zs	Zipp silty clay loam, ponded	Zipp	06	Flood plains
Modified from	Hvdric Soils of the United States (NRCS 2012)			

APPENDIX A USACE Wetland Determination Data Forms

WETLAND DETERMINATION DATA FORM – Eastern Mountains and Piedmont Region

Project/Site: Guernsey Power Station	City/County: Guernsey	Sampling Date: 07/20/2016
Applicant/Owner: Guernsey Power Station	State	. OH Sampling Point: W-C27
Investigator(s): CV, CS	Section, Township, Range: N/A	
Landform (hillslope, terrace, etc.): Hillslope	ocal relief (concave, convex, none): <u>C</u>	oncave Slope (%): 3-8
Subregion (LRR or MLRA): LRRN Lat: 39.940183	Long: -81.5350	37 Datum: NAD 83
Soil Map Unit Name: Mentor silt loam, 8 to 15 percent slopes (Me	eC) N	WI classification: PSS1/EM1C
Are climatic / hydrologic conditions on the site typical for this time of y	ear? Yes 🖌 No (If no, e	explain in Remarks.)
Are Vegetation, Soil, or Hydrology significantly	y disturbed? Are "Normal Circun	nstances" present? Yes 🔽 No
Are Vegetation, Soil, or Hydrology naturally p	oblematic? (If needed, explain	any answers in Remarks.)
SUMMARY OF FINDINGS – Attach site map showing	g sampling point locations, tr	ansects, important features, etc.
Hydrophytic Vegetation Present? Yes V No Hydric Soil Present? Yes V No Wetland Hydrology Present? Yes V No Remarks: Opwordin Opdon PEtro Hoth Oppon Hoth Oppon	Is the Sampled Area within a Wetland?	Yes No
Cowardin Code: PEM HGM: Slop	e Water Type: RPW	WN
	bottom of ditch and disappears	
HTDROLOGT	Sooon	dan (Indicators (minimum of two required)
Primary Indicators (minimum of one is required: check all that apply) ✓ Surface Water (A1) True Aquatic F	Plants (B14) Si ide Odor (C1) Di ospheres on Living Roots (C3) M educed Iron (C4) Di eduction in Tilled Soils (C6) Ci rface (C7) Si in Remarks) Si Gi Si M F/	urface Soil Cracks (B6) parsely Vegetated Concave Surface (B8) rainage Patterns (B10) oss Trim Lines (B16) ry-Season Water Table (C2) rayfish Burrows (C8) aturation Visible on Aerial Imagery (C9) runted or Stressed Plants (D1) eomorphic Position (D2) hallow Aquitard (D3) icrotopographic Relief (D4) AC-Neutral Test (D5)
Field Observations: Surface Water Present? Yes No Depth (inchest Water Table Present? Water Table Present? Yes No Depth (inchest Saturation Present? Saturation Present? Yes No Depth (inchest includes capillary fringe) Describe Recorded Data (stream gauge, monitoring well, aerial photeen to the second seco	s): <0.25 b): b): wetland Hydrold os, previous inspections), if available:	ogy Present? Yes No
Remarks:		

VEGETATION (Four Strata) – Use scientific names of plants.

Sampling Point: W-C27

	Abcoluto	Dominant	Indicator	Dominance Test worksheet:
Tree Stratum (Plot size: 30')	% Cover	Species?	Status	Number of Deminent Chasics
1.				That Are OBL. FACW. or FAC: 2 (A)
2				
2				Total Number of Dominant
3		.		Species Across All Strata: (B)
4				Percent of Dominant Species
5				That Are OBL, FACW, or FAC: <u>66</u> (A/B)
6				
7.				Prevalence Index worksheet:
	0	= Total Co	ver	Total % Cover of: Multiply by:
50% of total cover: 0	20% 0	f total cover	·· 0	OBL species x 1 =
Sapling/Shrub Stratum (Plot size: 15'				FACW species x 2 =
<u>A Rubus allegheniensis</u>	5	~	FACU	FAC species x 3 =
			1 400	
2				
3				UPL species x 5 =
4				Column Totals: (A) (B)
5.				
6				Prevalence Index = B/A =
7		• •		Hydrophytic Vegetation Indicators:
ı				1 - Rapid Test for Hydrophytic Vegetation
8		- <u> </u>		✓ 2 - Dominance Test is >50%
9				3 - Prevalence Index is ≤3.0 ¹
	5	= Total Co	ver	A Morphological Adaptations ¹ (Brovide supporting
50% of total cover: 2.5	20% of	f total cover	: <u>1</u>	
Herb Stratum (Plot size: 5')				data in Remarks or on a separate sheet)
1 Echinochloa crus-galli	30	~	FAC	Problematic Hydrophytic Vegetation ¹ (Explain)
a Leersia orvzoides	20		OBI	
	10	· _ •		¹ Indicators of hydric soil and wetland hydrology must
3. Impatiens caperisis	10		FACW	be present, unless disturbed or problematic.
4. Ambrosia artemisiifolia	10		FACU	Definitions of Four Vegetation Strata:
5. Phleum pratense	10		FACU	Jan San San San San San San San San San S
6.				Tree – Woody plants, excluding vines, 3 in. (7.6 cm) or
7				more in diameter at breast height (DBH), regardless of
0				noight.
8				Sapling/Shrub – Woody plants, excluding vines, less
9				than 3 in. DBH and greater than or equal to 3.28 ft (1
10				m) tall.
11				Herb – All herbaceous (non-woody) plants, regardless
	80	= Total Co	ver	of size, and woody plants less than 3.28 ft tall.
50% of total cover: 40	20% o	f total cover	: <u> 16 </u>	
Woody Vine Stratum (Plot size: 15')				Woody vine – All woody vines greater than 3.28 ft in
1				
2				
۷		.		
3		•		
4				Hydrophytic
5				Vegetation
	0	= Total Co	ver	Present? Yes V No
50% of total cover: 0	20% o	f total cover	: 0	
Remarks: (Include photo numbers here or on a separate s	heet.)			
Some overhanging trees and shrubs not rooted	in wetlar	nd.		

Profile Desc	ription: (Describe t	o the dept	h needed to docum	ent the i	ndicator	or confirm	the absence	e of indicators.)
Depth	Matrix		Redox	Features	s			
(inches)	Color (moist)	%	Color (moist)	%	_Type ¹	Loc ²	Texture	Remarks
0-3	10YR 3/2	95	10YR 4/6	5	С	M/PL	CL	
3-12	<u>10YR 4/1</u>	95	10YR 4/6	5	С	M/PL	CL	
12+								Gravel refusal
						·		
						·		
						·		<u></u> -
						·		
¹ Type: C=Co	oncentration, D=Deple	etion, RM=	Reduced Matrix, MS	=Masked	I Sand Gr	ains.	² Location:	PL=Pore Lining, M=Matrix.
Hydric Soil	Indicators:						Indic	cators for Problematic Hydric Soils ³ :
Histosol	(A1)		Dark Surface	(S7)				2 cm Muck (A10) (MLRA 147)
Histic Ep	pipedon (A2)		Polyvalue Bel	ow Surfa	ce (S8) (N	ILRA 147,	148)	Coast Prairie Redox (A16)
Black Hi	stic (A3)		Thin Dark Sur	face (S9)) (MLRA 1	47, 148)		(MLRA 147, 148)
Hydroge	n Sulfide (A4)		Loamy Gleyed	d Matrix (F2)			Piedmont Floodplain Soils (F19)
Stratified	d Layers (A5)		Depleted Matr	rix (F3)				(MLRA 136, 147)
2 cm Mu	ick (A10) (LRR N)		Redox Dark S	Surface (F	⁻ 6)			Very Shallow Dark Surface (TF12)
Depleted	Below Dark Surface	(A11)	Depleted Dark	< Surface	(F7) €)		_ '	Other (Explain in Remarks)
Thick Da	ark Surface (A12)		Redox Depres	SSIONS (F	8) oo (E12) (
Sandy w	100Ky Wineral (ST) (L	KK N,	Iron-Mangane		es (F12) (LKK N,		
Sandy G	leved Matrix (S4)		Umbric Surfac	י ן ים (F13) (6 122)	³ In	dicators of hydrophytic vegetation and
Sandy B	edox (S5)		Piedmont Floo	odplain S	oils (F19)	(MLRA 14	8) w	etland hydrology must be present.
Stripped	Matrix (S6)		Red Parent M	aterial (F	21) (MLR	A 127, 147	7) u	nless disturbed or problematic.
Restrictive I	Layer (if observed):			,	/ (1	•
Type: Gr	avel refusal							
Depth (in	_{ches):} 12+						Hvdric So	il Present? Yes 🖌 No
Remarks:	/						,	
Adiacent to	o farm road.							
,								

WETLAND DETERMINATION DATA FORM – Eastern Mountains and Piedmont Region

Project/Site: Guernsey Power Station	City/County: Guernsey Sampling Date: 07/20/2016
Applicant/Owner: Guernsey Power Station	State: OH Sampling Point: W-C27 UP
Investigator(s): CV, CS	Section, Township, Range: N/A
Landform (hillslope, terrace, etc.): Hillslope	ocal relief (concave, convex, none): Linear Slope (%): 0-5
Subregion (LRR or MLRA): LRRN Lat: 39.940232	Long: <u>-81.535109</u> Datum: NAD 83
Soil Map Unit Name: Mentor silt loam, 8 to 15 percent slopes (Me	C) NWI classification: None
Are climatic / hydrologic conditions on the site typical for this time of ye	ear? Yes 🗾 No (If no, explain in Remarks.)
Are Vegetation, Soil, or Hydrology significantly	/ disturbed? Are "Normal Circumstances" present? Yes 🖌 No
Are Vegetation, Soil, or Hydrology naturally pr	oblematic? (If needed, explain any answers in Remarks.)
SUMMARY OF FINDINGS – Attach site map showing	g sampling point locations, transects, important features, etc.

Hydrophytic Vegetation Present? Hydric Soil Present? Wetland Hydrology Present?	Yes Yes Yes	No No No	Is the Sampled Area within a Wetland?	Yes	_ No
Remarks: Cowardin Code: UP	LAND				

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)
 Surface Water (A1) High Water Table (A2) Saturation (A3) Water Marks (B1) Sediment Deposits (B2) Drift Deposits (B3) Algal Mat or Crust (B4) Iron Deposits (B5) Inundation Visible on Aerial Imagery (B7) Water-Stained Leaves (B9) Aquatic Fauna (B13) 	 Sparsely Vegetated Concave Surface (B8) 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) Geomorphic Position (D2) 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):	
Saturation Present? Yes No Depth (inches): (includes capillary fringe)	Wetland Hydrology Present? Yes No
Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspec	tions), if available:
Remarks:	
Sampling Point: W-C27 UP

201	Absolute	Dominant	Indicator	Dominance Test worksheet:
Tree Stratum (Plot size:30'') 1	% Cover	Species?	Status	Number of Dominant Species That Are OBL, FACW, or FAC:0 (A)
2 3				Total Number of Dominant Species Across All Strata: 2 (B)
4 5.				Percent of Dominant Species
6.				
7				Prevalence Index worksheet:
	0	= Total Cov	ver	Total % Cover of: Multiply by:
50% of total cover:0	20% of	total cover	0	OBL species x 1 =
Sapling/Shrub Stratum (Plot size: 15')				FACW species x 2 =
1				FAC species x 3 =
2				FACU species x 4 =
3				UPL species x 5 =
4				Column Totals: (A) (B)
5				Prevalence Index = B/A =
6			·	Hydrophytic Vegetation Indicators:
7			·	1 - Rapid Test for Hydrophytic Vegetation
8		·	·	2 - Dominance Test is >50%
9		·	·	3 - Prevalence Index is ≤3.0 ¹
		= Total Cov	ver	4 - Morphological Adaptations ¹ (Provide supporting
50% of total cover: <u>0</u>	20% of	total cover		data in Remarks or on a separate sheet)
Herb Stratum (Plot size:)	20		FACU	Problematic Hydrophytic Vegetation ¹ (Explain)
1. Phieum pratense	15	· · · · ·		
2. Cicitofium mitybus	10	· · · ·	FACU	¹ Indicators of hydric soil and wetland hydrology must
3. Dactylis giomerata	10	·	FACU	be present, unless disturbed or problematic.
4. Iritolium pratense			FACU	Definitions of Four Vegetation Strata:
5. Ambrosia artemisiifolia		·	FACU	Tree Weady plants, avaluding vince 2 in (7.6 cm) or
6. Plantago lanceolata 7	5	·		more in diameter at breast height (DBH), regardless of height.
8				
9				than 3 in, DBH and greater than or equal to 3.28 ft (1
10				m) tall.
11.				Harb All borbassaus (see woody) planta, regardlass
	65	= Total Cov	ver	of size, and woody plants less than 3.28 ft tall.
50% of total cover: <u>32.5</u>	520% of	total cover	13	
Woody Vine Stratum (Plot size: 15')				Woody vine – All woody vines greater than 3.28 ft in height.
1				
2		·		
3				
4				Hydrophytic
5				Vegetation
50% of total cover: 0	0	= Total Cov	ver · 0	Present? Yes No _
Remarke: (Include photo numbers here or on a concepte a	20 /0 01		. <u> </u>	
Remarks. (Include photo numbers here of on a separate s	neel.)			

Depth	Matrix		Redo	x Features				-
(inches)	Color (moist)	<u></u>	Color (moist)	%	Type ¹	Loc ²	Texture	Remarks
0-6	10 YR 4/4	100					Gr CL	
6+								Compacted soil
¹ Type: C=Co	oncentration, D=Depl	etion, RM=F	Reduced Matrix, M	S=Masked	Sand Gra	ains.	² Location: P	L=Pore Lining, M=Matrix.
Hydric Soil	ndicators:						Indica	ators for Problematic Hydric Soils ³ :
Histosol	(A1)		Dark Surface	e (S7)			2	cm Muck (A10) (MLRA 147)
Histic Ep	oipedon (A2)		Polyvalue Be	elow Surfac	ce (S8) (M	ILRA 147,	148) C	coast Prairie Redox (A16)
Black Hi	stic (A3)		Thin Dark Su	urface (S9)	(MLRA 1	47, 148)	_	(MLRA 147, 148)
Hydroge	n Sulfide (A4)		Loamy Gleye	ed Matrix (F	=2)		P	riedmont Floodplain Soils (F19)
Stratified	Layers (A5)		Depleted Ma	ttrix (F3)	C)		N.	(MLRA 136, 147)
	ICK (ATU) (LKK N) I Below Dark Surface	Δ11)	Redux Dark	sunace (Fi	0) (F7)		— <u>`</u>	ery Shallow Dark Surface (TFTZ)
Depicted	ark Surface (A12)	,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,	Bedox Depre	essions (F8	(17)		_ 0	
Sandy M	lucky Mineral (S1) (L	.RR N,	Iron-Mangar	ese Masse	., es (F12) (I	_RR N,		
MLRA	A 147, 148)		MLRA 13	6)	. ,.			
Sandy G	ileyed Matrix (S4)		Umbric Surfa	ace (F13) (I	MLRA 13	6, 122)	³ Ind	icators of hydrophytic vegetation and
Sandy R	edox (S5)		Piedmont Flor	oodplain So	oils (F19)	(MLRA 14	8) we	tland hydrology must be present,
Stripped	Matrix (S6)		Red Parent I	Material (F2	21) (MLR	A 127, 147	') un	less disturbed or problematic.
Restrictive I	_ayer (if observed):							
Type: CC								
Depth (ind	ches): <u>b</u>						Hydric Soil	Present? Yes No
Remarks:								
Adjacent to	o farm access roa	ad.						

Project/Site: Guernsey Power Station	City/County: Guernsey	Sampling Date: 07/20/2016					
Applicant/Owner: Guernsey Power Station		State: OH Sampling Point: W-C28					
Investigator(s): CV, CS Section. Township. Range: N/A							
Landform (hillslope, terrace, etc.): Depression Local relief (concave, convex, none): Concave Slope (%): 0-8							
Subregion (LRR or MLRA): LRRN	Lat: 39.938466 Long: -81	.533776 Datum: NAD 83					
Soil Map Unit Name: McGary silt loam, 0 to 3 pe	ercent slopes (McA)	NWI classification: PSS1/EM1C					
Are climatic / hydrologic conditions on the site typic	al for this time of year? Yes 🖌 No	 (If no, explain in Remarks.)					
Are Vegetation, Soil, or Hydrology	significantly disturbed? Are "Normal	Circumstances" present? Yes No					
Are Vegetation, Soil, or Hydrology	naturally problematic? (If needed, et al. 1997)	explain any answers in Remarks.)					
SUMMARY OF FINDINGS – Attach site	e map showing sampling point location	ons, transects, important features, etc.					
Hydrophytic Vegetation Present? Yes	No Is the Sampled Area	_					
Hydric Soil Present? Yes	No within a Wetland?	Yes No					
Remarks:							
Between highway berm and hill slope. Mapped as part of large NWI PSS syste	Nonanse Cowardin Code: PEM HGM: Depressional Water Type: RPWWD Between highway berm and hill slope. Mapped as part of large NWI PSS system: however, PEM within study area.						
HYDROLOGY							
Wetland Hydrology Indicators:		Secondary Indicators (minimum of two required)					
Primary Indicators (minimum of one is required; c	heck all that apply)	Surface Soil Cracks (B6)					
✓ Surface Water (A1)	True Aquatic Plants (B14)	Sparsely Vegetated Concave Surface (B8)					
 High Water Table (A2) 	Hydrogen Sulfide Odor (C1)	✓ Drainage Patterns (B10)					
Saturation (A3)	✓ Oxidized Rhizospheres on Living Roots (C3)	Moss Trim Lines (B16)					
Water Marks (B1)	Presence of Reduced Iron (C4)	Dry-Season Water Table (C2)					
Sediment Deposits (B2)	Recent Iron Reduction in Tilled Soils (C6)	Crayfish Burrows (C8)					
Drift Deposits (B3)	Thin Muck Surface (C7)	Saturation Visible on Aerial Imagery (C9)					
Algal Mat or Crust (B4)	Other (Explain in Remarks)	Stunted or Stressed Plants (D1)					
Iron Deposits (B5)		Geomorphic Position (D2)					
Inundation Visible on Aerial Imagery (B7)		Shallow Aquitard (D3)					
Water-Stained Leaves (B9)		Microtopographic Relief (D4)					
Aquatic Fauna (B13)		FAC-Neutral Test (D5)					
Field Observations:	$D_{\rm ext}(t_{\rm ext}, t_{\rm ext}) = 0.25$						
Surface water Present? Yes No	Depth (inches):						
Water Table Present? Yes No	Depth (inches):						
Saturation Present? Yes <u>Ves</u> No <u>(includes capillary fringe)</u>	Depth (inches):4 Wetland H	lydrology Present? Yes _ ✔ No					
Describe Recorded Data (stream gauge, monitori	ng well, aerial photos, previous inspections), if ava	ilable:					
Remarks:	t in location of toot plat						
Sunace water present in wetland, but no	a mocation of test plot.						

Sampling Point: W-C28

,	Abcoluto	Dominant	Indicator	Dominance Test worksheet:
Tree Stratum (Plot size: 30')	% Cover	Species?	Status	Number of Dominant Species
1.				That Are OBL, FACW, or FAC: 3 (A)
2				
2		·		Total Number of Dominant
		·		Species Across All Strata: (B)
4		·		Percent of Dominant Species
5				That Are OBL, FACW, or FAC: 100 (A/B)
6				
7				Prevalence Index worksheet:
	0	= Total Co	/er	Total % Cover of: Multiply by:
50% of total cover: 0	20% of	total cover	<u> 0 </u>	OBL species x 1 =
Sapling/Shrub Stratum (Plot size: 15')				FACW species x 2 =
1				FAC species x 3 =
2				FACU species x 4 =
2		·		UPL species $x 5 =$
3		·		$\begin{array}{c} Column Totolo: \\ Column Totolo: \\ \end{array} $
4				
5				Prevalence Index = B/A =
6				Hydrophytic Vegetation Indicators:
7				A Denid Test for Unders built Venetation
8				1 - Rapid Test for Hydrophytic Vegetation
0				2 - Dominance Test is >50%
- 5	0		·	3 - Prevalence Index is ≤3.0 ¹
			/er	4 - Morphological Adaptations ¹ (Provide supporting
50% of total cover: 0	20% 0	total cover		data in Remarks or on a separate sheet)
Herb Stratum (Plot size:)	00	,		Problematic Hydrophytic Vegetation ¹ (Explain)
1. Echinochioa crus-galli	30	<u> </u>		
2. Juncus effusus	15	<u> </u>	FACW	Indiantes of budy's soil and watered budyets we set
3. Agrostis gigantea	15	<u> </u>	FACW	be present unless disturbed or problematic
4. Eupatorium perfoliatum	10		FACW	Definitions of Four Venetation Official
5 Carex vulpinoidea	5	·	0BI	Definitions of Four Vegetation Strata:
c Cyperus esculentus	5		FACW	Tree – Woody plants, excluding vines, 3 in. (7.6 cm) or
		·		more in diameter at breast height (DBH), regardless of
7		·		height.
8		·		Sapling/Shrub – Woody plants, excluding vines, less
9				than 3 in. DBH and greater than or equal to 3.28 ft (1
10				m) tall.
11.				Harb All borbaccous (non woody) plants, regardless
	80	= Total Co	/er	of size, and woody plants less than 3.28 ft tall.
50% of total cover: 40	20% of	total cover	16	
Woody Vine Stratum (Plot size: 15')			·	Woody vine – All woody vines greater than 3.28 ft in
				neight.
- ·		·		
2		•		
3				
4				Hydrophytic
5				Vegetation
	0	= Total Co	/er	Present? Yes 🖌 No
50% of total cover: 0	20% of	total cover	: 0	
Remarks: (Include photo numbers here or on a separate s	heet.)			

Profile Description:	(Describe t	o the dept	h needed to docum	nent the i	ndicator	or confirm	the absence	of indicators.)
Depth	Matrix		Redox	Features	3			
(inches) Colo	or (moist)		Color (moist)	%	Type ¹	Loc ²	Texture	Remarks
0-16 2.	5Y 4/1	90	7.5YR 4/6	10	С	M/PL	SICL	
						·		
						·		
·			. <u></u>			·		
						·		
						·		
							21	
Type: C=Concentra	tion, D=Deple	etion, RM=	Reduced Matrix, MS	=Masked	Sand Gra	ains.	Location: P	L=Pore Lining, M=Matrix.
Hydric Soli Indicato	rs:			(- -)			Indica	ators for Problematic Hydric Solls :
Histosol (A1)	(.)		Dark Surface	(S7)	(²	cm Muck (A10) (MLRA 147)
Histic Epipedon	(A2)		Polyvalue Bel	ow Surfac	ce (S8) (N	ILRA 147,	148) C	coast Prairie Redox (A16)
Black Histic (A3)	<i></i>		Thin Dark Su	face (S9)	(MLRA 1	47, 148)	_	(MLRA 147, 148)
Hydrogen Sulfide	∋ (A4)		Loamy Gleye	d Matrix (I	F2)		P	riedmont Floodplain Soils (F19)
Stratified Layers	(A5)		Depleted Mat	rix (F3)				(MLRA 136, 147)
2 cm Muck (A10)) (LRR N)		Redox Dark S	Surface (F	6)		V	ery Shallow Dark Surface (TF12)
Depleted Below	Dark Surface	(A11)	Depleted Dar	k Surface	(F7)		c	other (Explain in Remarks)
Thick Dark Surfa	ice (A12)		Redox Depres	ssions (F8	3)			
Sandy Mucky Mi	neral (S1) (L	RR N,	Iron-Mangane	ese Masse	es (F12) (LRR N,		
MLRA 147, 14	48)		MLRA 136	5)			<u>_</u>	
Sandy Gleyed M	atrix (S4)		Umbric Surface	ce (F13) (MLRA 13	6, 122)	³Ind	icators of hydrophytic vegetation and
Sandy Redox (S	5)		Piedmont Flo	odplain So	oils (F19)	(MLRA 14	8) we	atland hydrology must be present,
Stripped Matrix (S6)		Red Parent N	laterial (F	21) (MLR	A 127, 147) un	less disturbed or problematic.
Restrictive Layer (if	observed):							
Туре:								
Depth (inches):							Hydric Soil	Present? Yes 🖌 No
Remarks:							•	

Project/Site: Guernsey Power Station	City/County: Guernsey	\$	Sampling Date: 07/20/2016		
Applicant/Owner: Guernsey Power Station		State: OH	Sampling Point: W-C29		
Investigator(s): CV, CS	Section, Township, Range: N/	/A			
andform (hillslope, terrace, etc.): Toe of Slope Local relief (concave, convex, none): Concave Slope (%): 0-3					
Subregion (LRR or MLRA): LRRN Lat: 39.934	932 _{Long:} 81	.532219	Datum: NAD 83		
Soil Map Unit Name: Glenford silt loam, 0 to 3 percent slopes	s (GnA)	NWI classification	tion: None		
Are climatic / hydrologic conditions on the site typical for this time	e of vear? Yes 🖌 No	(If no, explain in Rei	marks.)		
Are Vegetation , Soil, or Hydrology signifi	cantly disturbed? Are "Normal	Circumstances" pre	esent? Yes No		
Are Vegetation . Soil, or Hydrology natura	Ilv problematic? (If needed, e	explain any answers	in Remarks.)		
SUMMARY OF FINDINGS – Attach site map sho	wing sampling point location	ons, transects,	important features, etc.		
Hydrophytic Vegetation Present? Yes V Hydric Soil Present? Yes V Wetland Hydrology Present? Yes V	Is the Sampled Area within a Wetland?	Yes 🖌	_ No		
Remarks: Cowardin Code: PEM HGM: [Depressional Water Type:	RPWWN			
Small depression in field.					
HYDROLOGY					
Wetland Hydrology Indicators:		Secondary Indicato	ors (minimum of two required)		
Primary Indicators (minimum of one is required; check all that a	pply)	Surface Soil C	racks (B6)		
Surface Water (A1) I rue Aqu	atic Plants (B14)	Sparsely Vege	etated Concave Surface (B8)		
High Water Lable (A2) Flyologel Saturation (A3) Oxidized	Bhizospheres on Living Roots (C3)				
Water Marks (B1)	of Reduced Iron (C4)	Drv-Season W	/ater Table (C2)		
Sediment Deposits (B2)	on Reduction in Tilled Soils (C6)	Cravfish Burro	ws (C8)		
Drift Deposits (B3)	k Surface (C7)	Saturation Visi	ible on Aerial Imagery (C9)		
Algal Mat or Crust (B4)	plain in Remarks)	Stunted or Stre	essed Plants (D1)		
Iron Deposits (B5)		✓ Geomorphic P	osition (D2)		
Inundation Visible on Aerial Imagery (B7)		Shallow Aquita	ard (D3)		
Water-Stained Leaves (B9)	Microtopograp	hic Relief (D4)			
Aquatic Fauna (B13)		FAC-Neutral T	est (D5)		
Field Observations:					
Surface Water Present? Yes No Depth (ir	nches):				
Water Table Present? Yes No Depth (ir	nches):				
Saturation Present? Yes No Depth (ir (includes capillary fringe)	hches): Wetland H	lydrology Present	? Yes 🥢 No		
Describe Recorded Data (stream gauge, monitoring well, aerial	photos, previous inspections), if ava	ilable:			
Remarks:					

Sampling Point: W-C29

,	Absoluto	Dominant	Indicator	Dominance Test worksheet:
Tree Stratum (Plot size: <u>30'</u>)	<u>% Cover</u>	Species?	Status	Number of Deminent Species
1				That Are OBL, FACW, or FAC: 2 (A)
2				
2				Total Number of Dominant
3		·		Species Across All Strata: (B)
4		·		Percent of Dominant Species
5		·		That Are OBL, FACW, or FAC:(A/B)
6				Describer of the description of the
7				Prevalence Index worksheet:
	0	= Total Cov	ər	Total % Cover of:Multiply by:
50% of total cover: 0	20% of	total cover:	0	OBL species x 1 =
Sapling/Shrub Stratum (Plot size: 15')				FACW species x 2 =
1 -				FAC species x 3 =
1		·		FACU species x 4 =
2		·		$ P \text{ species} \qquad x 5 =$
3		·		
4		·		Column Totals: (A) (B)
5				Prevalence Index $= B/A =$
6				
7.				
8				1 - Rapid Test for Hydrophytic Vegetation
0		·		2 - Dominance Test is >50%
9				3 - Prevalence Index is ≤3.0 ¹
		= I otal Cov	er O	4 - Morphological Adaptations ¹ (Provide supporting
50% of total cover: 0	20% 01	total cover:	0	data in Remarks or on a separate sheet)
Herb Stratum (Plot size: <u>5</u>)	40			Problematic Hydrophytic Vegetation ¹ (Explain)
1. Echinochloa crus-galli	40		FAC	
2. Carex frankii	20	<u> </u>	OBL	
3. Ambrosia artemisiifolia	15		FACU	Indicators of hydric soil and wetland hydrology must
4 Scirpus atrovirens	15		OBL	
5 Coltsfoot	10		FACU	Definitions of Four Vegetation Strata:
c Trifolium pratense	10	·	FACU	Tree – Woody plants, excluding vines, 3 in. (7.6 cm) or
- Pumov origous	5	·	EAC	more in diameter at breast height (DBH), regardless of
7. Humex clispus		·	FAC	height.
8		·		Sapling/Shrub – Woody plants, excluding vines, less
9				than 3 in. DBH and greater than or equal to 3.28 ft (1
10				m) tall.
11.				Harb All borbaccous (non woody) plants, regardlass
	115	= Total Cov	er.	of size, and woody plants less than 3.28 ft tall.
50% of total cover: 57.5	20% of	total cover:	23	· · · · · · · · · · · · · · · · · · ·
Woody Vine Stratum (Plot size: 15'				Woody vine – All woody vines greater than 3.28 ft in
4 -				neight.
I		·		
2		·		
3		·		
4				Hydrophytic
5				Vegetation
	0	= Total Cov	ər	Present? Yes V No
50% of total cover: 0	20% of	total cover:	0	
Remarks: (Include photo numbers here or on a separate s	heet.)			

Depth Matrix Redox Fastures Inches) Coolr (motist) % Tork Loc Tork Loc Remarks 0-8 10YR 4/2 95 10YR 4/6 5 C M CL Compacted solls 8+	Profile Description: (Describe to the dept	h needed to docur	ment the i	ndicator	or confirm	the absenc	e of indicators.)
(inches) Color (moist) % Color Texture Remarks 0-8 10YR 4/2 95 10YR 4/6 5 C M CL 8+	Depth <u>Matrix</u>	Redo	x Features	S			
0-8 10YR 4/2 95 10YH 4/6 5 C M CL 8+	(inches) Color (moist) %	Color (moist)		Type'	Loc ²	<u>Texture</u>	Remarks
B+ Compacted soils B+ Compacted soils Compacted soils Compacted soils Bit Compacted soils Type: Caconcentration, D=Depleton, RM=Reduced Matrix, MS=Masked Sand Grains. *Location: PL=Pore Lining, M=Matrix. Hydric Soil Indicators: Indicators for Problematic Hydric Soils ¹ : Hitstic Epleption (A2) Polyvalue Below Surface (S9) (MLRA 147, 148) 2 cm Muck (A10) (MLRA 147, 148) Hydrig Soil Indicators: Dark Surface (S7) 2 coast Prairs Redox (A16) Hydrig Soil Bide (A4) Learny Gleyed Matrix (F2) 2 coast Prairs Redox (A16) Stratified Layers (A5) V Depleted Matrix (F3) 2 coast Prairs Redox (A16) Stratified Layers (A5) V Depleted Matrix (F3) Very Shallow Dark Surface (F12) Depleted Below Dark Surface (F13) Redox Dark Surface (F12) Other (Explain in Remarks) Stardiff Cuky Mineral (S1) (LRR N, MLRA 147, 148) Inorthanganeese Masses (F12) (LRR N, MLRA 147, 148) Inorthanganeese Masses (F12) (LRR N, MuRA 147, 148) Indicators of hydrophytic vegetation and wetand hydrology must be present, unless disturbed or problematic. Stratiped Matrix (S6) Red Parent Material (F21) (MLRA 127, 147) Indicators of hydrophytic vegetation and wetand hydrology must be present, unless disturbed or problematic. Trype:	<u> </u>	10YR 4/6	5	С	M	CL	
Type: C=Concentration, D=Depletion, RM=Reduced Matrix, MS=Masked Sand Grains. *Location: PL=Pore Lining, M=Matrix. Hydric Soil Indicators: Indicators for Problematic Hydric Soils ² : Histos (A) Dark Surface (S7) Cocast Praine Redox (A16) Black Histic (A3) Thin Dark Surface (S9) (MLRA 147, 148) Cocast Praine Redox (A16) Hydrice Soil Indicators: MLRA 147, 148) Pledmont Floodplain Soils (F19) Statuted Layers (A5) ✓ Depleted Matrix (F3) (MLRA 147, 148) 2 cm Muck (A10) (LRR N) Redox Dark Surface (F7) — Very Shallow Cank Surface (F12) 2 mMuck (A10) (LRR N) Redox Dark Surface (F12) — Other (Explain in Remarks) Thick Dark Surface (A11) Depleted Dark Surface (F12) (LRR N, MLRA 136, 122) Standy Gloeved Matrix (S4) Umbric Surface (F13) (MLRA 148) * Indicators of hydrophytic vegetation and wetland hydrology must be present, Stripped Matrix (S4) Umbric Surface (F13) (MLRA 148) * Indicators of hydrophytic vegetation and wetland hydrology must be present, Stripped Matrix (S4) Umbric Surface (F13) (MLRA 147, 148) * Indicators of hydrophytic vegetation and wetland hydrology must be present, Stripped Matrix (S6) Red Parent Material (F21) (MLRA 142, 148) * Indicators of hydrophytic vegetation and wetland hydrology must be present,<	8+						Compacted soils
Image: Concentration Dobeptetion RM-Reduced Matrix, MS-Masked Sand Grains. PLocation: PL-Pore Lining, M=Matrix. Hydric Soil Indicators: Indicators for Problematic Hydric Soils": Histic Epideon (A2) Polyvalue Below Surface (S9) (MLRA 147, 149) 2 cm Mukk (A10) (MLRA 147, 149) Black Histic (A3) Thin Dark Surface (S9) (MLRA 147, 149) 2 cm Mukk (A10) (MLRA 147, 149) Hydriges Sulfide (A4) Learny Gleger Matrix (F3) (MLRA 147, 149) Stand Huxyers (A5) Y Depleted Matrix (F3) Pledmont Floodplain Soils (F19) 2 cm Muck (A10) (LRR N, M) Redox Dark Surface (F7) Very Stank Surface (TF12) Sandy Mucky Mineral (S1) (LRR N, MLRA 136, 122) Indicators of hydrophytic vegetation and wetland hydrology must be present, unless disturbed or problemate. Sandy Redox (S5) Pledmont Floodplain Soils (F19) (MLRA 127, 147) Indicators of hydrophytic vegetation and wetland hydrology must be present, unless disturbed or problemate. Stripped Matrix (S6) Red Parent Material (F21) (MLRA 127, 147) Indicators of hydrophytic vegetation and wetland hydrology must be present. Type: Compacted soils Hydric Soil Present? Yes V No							
Image: Second							
Image: Section in the section is the section in the section in the section in the section is the section in the section in the section in the section in the section is the section in th					·		
Image: State of the state	·						
"Type: C-Concentration, D=Depletion, RM=Reduced Matrix, MS=Masked Sand Grains. "Location: PL=Pore Lining, M=Matrix, Hydric Soil Indicators: Indicators for Problematic Hydric Soils": Indicators for Problematic Hydric Soils": Histos (A1) Dark Surface (S7) Indicators for Problematic Hydric Soils": Histos (A2) Polyvalue Below Surface (S8) (MLRA 147, 148) Coast Praine Redox (A16) Black Histic (A3) Thin Dark Surface (S9) (MLRA 147, 148) (MLRA 147, 148) Hydrogen Sufface (A4) Leamy (Sleyed Matrix (F3) Piederom Floodplain Soils (F19) 2 cm Muck (A10) (LRR N) Redox Depressions (F6) (MLRA 136, 147) 3 Sandy Muck (Minerai (S1) (LRR N) Nerance (F17) Other (Explain in Remarks) Sandy Muck (Minerai (S1) (LRR N) MuRA 136, 122) "Indicators of hydrophytic vegetation and wetland hydrology must be present, unless disturbed or problematic. Sandy Medox (S5) Piedmont Floodplain Soils (F19) (MLRA 127, 147) unless disturbed or problematic. Restrictive Layer (f dobserved): Type: Compacted soils Piedmont Floodplain Soils (F19) (MLRA 127, 147) Type: Compacted soils Belpt (inches): B+ Hydric Soil Present? Yes Yes No Bendrift (Soil Present? Yes No							
¹ Type: C=Concentration, D=Depletion, RM=Reduced Matrix, MS=Masked Sand Grains. ¹ Location: PL=Pore Lining, M=Matrix. Hydric Soll Indicators: Indicators for Problematic Hydric Solls ¹ : Histosol (A1) Dark Surface (S7) 2 cm Muck (A10) (MLRA 147, 148) Black Histo (A2) Polyalue Below Surface (S8) (MLRA 147, 148) Coast Praine Redox (A16) Hydrogen Sulfide (A4) Loamy Gleyed Matrix (F2) Peledmont Floodplain Solis (F19) Stratified Layers (A5) Depleted Matrix (F2) Peletion T Floodplain Solis (F19) Other (Explain in Remarks) Redox Dark Surface (F7) Other (Explain in Remarks) Trik Dark Surface (A11) Depleted Matrix (F2) Other (Explain in Remarks) Stratified Layers (A5) Fedemont Floodplain Solis (F12) (LRR N, MLRA 136, 147 Sandy Mucky Mineral (S1) (LRR N, Infor-Manganese Masses (F12) (MLRA 136, 122) ³ Indicators of hydrophytic vegetation and wetland hydrology must be present, Stripted Matrix (S4) Umbric Surface (F13) (MLRA 127, 147) unless disturbed or problematic. Restrictive Layer (if Observed): Trype: Compacted Soils Pedemont Floodplain Soils (F19) (MLRA 127, 147) unless disturbed or problematic. Remarks: Recently developed wetland Merand Matrial (F21) (MLRA 147, 148) Unless disturbed or problematic. <td>·</td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td>	·						
Type: C=Concentration, D=Depletion, RM=Reduced Matrix, MS=Masked Sand Grains. ² Location: PL=Pore Lining, M=Matrix. Indicators for Problematic Hydric Soils ¹ : Histosol (A1) Dark Surface (S7) 2 cm Muck (A10) (MLRA 147, 148) Histosol (A1) Dark Surface (S9) (MLRA 147, 148) Coast Praine Redox (A16) Black Histic (A3) Thin Dark Surface (S9) (MLRA 147, 148) Coast Praine Redox (A16) Yeathied Layers (A6) Z bepleted Matrix (F2) Piedmont Floodplain Soils (F19) 2 cm Muck (A10) (LRR N) Redox Depressions (F6) Very Shallow Dark Surface (TF12) Depleted Below Dark Surface (A11) Depleted Dark Surface (F7) Other (Explain in Remarks) Thick Dark Surface (F3) Iron-Manganese Masses (F12) (LRR N, MLRA 147, 148) Other (Explain in Remarks) Sandy Redox (S5) Umbric Surface (F13) (MLRA 136, 122) ³ Indicators of hydrophytic vegetation and wetland hydrology must be present, unless disturbed or problematic. Stripped Matrix (S4) Umbric Surface (F13) (MLRA 147, 147) ⁴ Indicators of hydrophytic vegetation and wetland hydrology must be present, unless disturbed or problematic. Stripped Matrix (S6) Red Parent Material (F21) (MLRA 147, 147) ⁴ Indicators of hydrophytic vegetation and wetland hydrology must be present, unless disturbed or problematic. Restrictive Layer (If observed): Type: Compacted soi							
¹ Type: C-Concentration, D=Depletion, RM-Reduced Matrix, MS=Masked Sand Grains. ² Location: PL=Pore Lining, M=Matrix. Hydric Soll Indicators: Indicators for Problematic Hydric Soils ¹ : Histic Epledon (A2) Polyvalue Below Surface (S9) (MLRA 147, 148) Coast Prairie Redox (A10) (MLRA 147, 149) Hydrogen Sulfide (A4) Loamy Gleved Matrix (F2) Piedmont Floodplain Soils (F19) (MLRA 147, 148) Stratified Layers (A5) Depleted Matrix (F2) WLRA 147, 148) Depleted Below Dark Surface (A1) Depleted Dark Surface (F6) Very Shallow Dark Surface (F12) Depleted Below Dark Surface (A12) Redox Dark Surface (F7) Other (Explain in Remarks) Thick Dark Surface (A12) Redox Dark Surface (F12) (LRR N, MLRA 147, 148) Sandy Mucky Mineral (S1) (LRR N, Umbric Surface (F13) (MLRA 136, 122) ³ Indicators of hydrophytic vegetation and wetland hydrology must be present, unless disturbed or problematic. Sandy Redox (S5) Piedmont Floodplain Soils (F19) (MLRA 147, 147) unless disturbed or problematic. Restrictive Layer (if observed): Trype: Compacted Soils Palematic Haterial (F21) (MLRA 127, 147) Deplet (inches): 8+ Hydric Soil Present? Yes No No Remarks: Recently developed wetland No							
¹ Type: C=Concentration, D=Depletion, RM=Reduced Matrix, MS=Masked Sand Grains. ² Location: PL=Pore Lining, M=Matrix. Hydric Soil Indicators: Indicators for Problematic Hydric Soils ³ : Histic Epiedon (A2) Polyvalue Below Surface (S3) (MLRA 147, 148) Coast Pravine Redox (A16) (MLRA 147, 148) Black Histic (A3) Thin Dark Surface (S3) (MLRA 147, 148) Coast Pravine Redox (A16) Stratified Layers (A5) Depleted Matrix (F2) Piedmont Floodplain Soils (F19) 2 cm Muck (A10) (LRR N) Redox Dark Surface (F6) Very Shallow Dark Surface (TF12) Depleted Below Dark Surface (A11) Depleted Dark Surface (F2) (MLRA 136, 147) Other (Explain in Remarks) 3 Sandy Redox (S5) Itorn-Manganese Masses (F12) (LRR N, MLRA 136, 147) Umbric Surface (F13) (MLRA 136, 122) Sandy Redox (S5) Redox Depressions (F8) Stratified Layer (Matrix (S4) Umbric Surface (F12) (MLRA 136, 122) Stratyped Matrix (S4) Umbric Surface (F13) (MLRA 136, 122) ³ Indicators of hydrophytic vegetation and wetland hydrology must be present, unless disturbed or problematic. Restrictive Layer (if observed): Type: Compacted soils Hydric Soil Present? Yes Yes No Depth (inches): <u>8+</u> Hydric Soil Present? Yes <u>Y</u> No No Remarks: Recently developed wetland <t< td=""><td></td><td></td><td></td><td></td><td>·</td><td></td><td></td></t<>					·		
"Type: C=Concentration, D=Depletion, RM=Reduced Matrix, MS=Masked Sand Grains. "Lecation: PL=Pore Lining, M=Matrix. Hydric Soil Indicators: Indicators for Problematic Hydric Soils": Indicators for Problematic Hydric Soils": Histosol (A1) Dark Surface (S7) 2 cm Muck (A10) (MLRA 147, 148) Coast Praine Redox (A16) Black Histic CA3 Thin Dark Surface (S9) (MLRA 147, 148) Coast Praine Redox (A16) Polyvalue Below Surface (S9) (MLRA 147, 148) Coast Praine Redox (A16) 2 cm Muck (A10) (MLRA 147) Laamy Gleyed Matrix (F2) Piedmont Floodplain Soils (F19) Fraine Redox (A16) 3 traitified Layers (A10) Redox Dark Surface (F7) Other (Explain in Remarks) Very Shallow Dark Surface (TF12) 3 Sandy McVey Mineral (S1) (LRR N, MLRA 136 Sandy McVey Mineral (S1) (LRR N, MLRA 136, 122) 3 Sandy Gleyed Matrix (S6) Piedmont Floodplain Soils (F19) (MLRA 147, 148) wetland hydrology must be present, 3 Sandy Redox (S5) Piedemont Floodplain Soils (F12) (MLRA 147, 148) "Indicators of hydrophytic vegetation and Sandy Redox (S5) Red Parent Material (F21) (MLRA 127, 147) wetland hydrology must be present, Stripped Matrix (S6) Red Parent Material (F21) (MLRA 127, 147) wetland hydrology must be present,	· _ · · ·						
Hydric Soil Indicators i Indicators for Problematic Hydric Soils*: Histic Spipedon (A2) Dark Surface (S7) 2 cm Muck (A10) (MLRA 147, 148) Histic Epipedon (A2) Polyvalue Below Surface (S8) (MLRA 147, 148) Coast Praitie Redox (A16) Hydrogen Suffide Layers (A5) Depleted Matrix (F2) Peldwarth [F03] 2 cm Muck (A10) (LRR N) Redox Dark Surface (F7) Very Shallow Dark Surface (TF12) Depleted Below Dark Surface (A12) Redox Depressions (F8) Very Shallow Dark Surface (TF12) Sandy Gleyed Matrix (S4) Umbric Surface (F13) (MLRA 136, 122) °Indicators of hydrophytic vegetation and wetland hydrology must be present, unless disturbed or problematic. Sandy Redox (S5) Peledmont Floodplain Soils (F19) (MLRA 147, 148) "Indicators of hydrophytic vegetation and wetland hydrology must be present, unless disturbed or problematic. Stripped Matrix (S6) Red Parent Material (F21) (MLRA 127, 147) "Indicators of hydrophytic vegetation and wetland hydrology must be present, unless disturbed or problematic. Type: Compacted soils Peletmont Floodplain Soils (F19) (MLRA 127, 147) *Indicators of hydrophytic vegetation and wetland hydrology must be present, unless disturbed or problematic. Remarks: Recontly developed wetland No No	¹ Type: C=Concentration, D=Depletion, RM=	Reduced Matrix, M	S=Masked	Sand Gr	ains.	² Location:	PL=Pore Lining, M=Matrix.
	Hydric Soil Indicators:					Indi	cators for Problematic Hydric Soils':
Histic Eppedon (A2) Polyvalue Below Surface (SB) (MLRA 147, 148) Coast Praine Redox (A16) Black Histic (A3) Thin Dark Surface (SB) (MLRA 147, 148) (MLRA 147, 148) Hydrogen Sulfide (A4) Loamy Gleyed Matrix (F2) Piedmont Floodplain Soils (F19) Stratified Layers (A5) ✓ Depleted Matrix (F3) (MLRA 147, 148) 2 cm Muck (A10) (LRR N) Redox Dark Surface (F6) Very Shallow Dark Surface (TF12) Depleted Below Dark Surface (A11) Depleted Dark Surface (F7) Other (Explain in Remarks) Sandy Mucky Mineral (S1) (LRR N, Iron-Manganese Masses (F12) (LRR N, MLRA 147, 148) Sandy Gleyed Matrix (S4) Umbric Surface (F13) (MLRA 136, 122) ^a Indicators of hydrophytic vegetation and wetland hydrology must be present, unless disturbed or problematic. Restrictive Layer (if observed): Type: Compacted soils Red Parent Material (F21) (MLRA 127, 147) unless disturbed or problematic. Remarks: Recently developed wetland No No No	Histosol (A1)	Dark Surface	e (S7)	(—	2 cm Muck (A10) (MLRA 147)
Black Histic (A3)	Histic Epipedon (A2)	Polyvalue Be	elow Surfa	ce (S8) (I	MLRA 147,	148)	Coast Prairie Redox (A16)
	Black Histic (A3)	Thin Dark St	urface (S9)		147, 148)		(MLRA 147, 148) Diadmont Floodplain Spile (F10)
□ Stated Uash (A10) □ Depreted Math (F)	Hydrogen Suilide (A4) Stratified Lavers (A5)	Loarny Greye Depleted Ma	triv (E3)	FZ)		_	
□ Depleted Below Dark Surface (A11) □ Depleted Dark Surface (F7) □ Other (Explain in Remarks) □ Thick Dark Surface (A12) □ Redox Depressions (F8) □ Sandy Mucky Mineral (S1) (LRR N, □ Iron-Manganese Masses (F12) (LRR N, MLRA 147, 148) MLRA 136) □ Sandy Gleyed Matrix (S4) □ Umbric Surface (F13) (MLRA 136, 122) □ Sandy Redox (S5) □ Piedmont Floodplain Soils (F19) (MLRA 148) □ Stripped Matrix (S6) □ Red Parent Material (F21) (MLRA 127, 147) Image: Compacted Soils □ Piedmont Floodplain Soils (F19) (MLRA 127, 147) □ Piedmont Floodplain Soils (F19) (MLRA 127, 147) □ Inless disturbed or problematic. Restrictive Layer (if observed): □ Remarks: Recently developed wetland Bet	2 cm Muck (A10) (I BR N)	Depleted Ma	Surface (F	6)			Very Shallow Dark Surface (TE12)
	Depleted Below Dark Surface (A11)	Depleted Da	rk Surface	(F7)		_	Other (Explain in Remarks)
	Thick Dark Surface (A12)	Redox Depre	essions (F8	B)			
MLRA 147, 148) MLRA 136) Sandy Gleyed Matrix (S4) Umbric Surface (F13) (MLRA 136, 122) ³ Indicators of hydrophytic vegetation and wetland hydrology must be present, unless disturbed or problematic. Stripped Matrix (S6) Red Parent Material (F21) (MLRA 127, 147) unless disturbed or problematic. Restrictive Layer (if observed): Type: Compacted soils unless disturbed or problematic. Depth (inches): 8+ Hydric Soil Present? Yes No No Recently developed wetland Recently developed wetland No No	Sandy Mucky Mineral (S1) (LRR N,	Iron-Mangan	ese Masse	es (F12) (LRR N,		
	MLRA 147, 148)	MLRA 13	6)				
Sandy Redox (S5)Piedmont Floodplain Soils (F19) (MLRA 148) wetland hydrology must be present, unless disturbed or problematic. Restrictive Layer (if observed): Type: Compacted soils Depth (inches): 8+	Sandy Gleyed Matrix (S4)	Umbric Surfa	ace (F13) (MLRA 13	6, 122)	³ lr	ndicators of hydrophytic vegetation and
Stripped Matrix (S6) Red Parent Material (F21) (MLRA 127, 147) unless disturbed or problematic. Restrictive Layer (if observed):	Sandy Redox (S5)	Piedmont Flo	podplain S	oils (F19)	(MLRA 14	8) v	vetland hydrology must be present,
Type: Compacted soils Depth (inches): 8+ Remarks: Recently developed wetland	Stripped Matrix (S6)	Red Parent I	Material (F	21) (MLR	A 127, 147	7) u	inless disturbed or problematic.
Type: Outpacted solis Depth (inches): 8+ Remarks: Recently developed wetland	Restrictive Layer (il observed):						
Depth (inches): 0+ Hydric Soil Present? Yes v No Remarks: Recently developed wetland							
Remarks: Recently developed wetland	Depth (inches): 0+					Hydric So	il Present? Yes <u>Y</u> No
Recently developed wetland	Remarks:						
	Recently developed wetland						

Project/Site: Guernsey Power Plant	_ City/County: Guernsey Sampling Date: 07/20/	2016
Applicant/Owner: Guernsey Power Plant	State: OH Sampling Point: W-C	28, C29 UF
Investigator(s): CV, CS	_ Section, Township, Range: <u>N/A</u>	
Landform (hillslope, terrace, etc.): Depression	_ocal relief (concave, convex, none): Linear Slope (%):	0-5
Subregion (LRR or MLRA): LRRN Lat: 39.93503	1 _{Long:} -81.532225 _{Datum:} NAD) 83
Soil Map Unit Name: Glenford silt loam, 0 to 3 percent slopes (C	GnA) NWI classification: None	
Are climatic / hydrologic conditions on the site typical for this time of	year? Yes 🛃 No (If no, explain in Remarks.)	
Are Vegetation, Soil, or Hydrology significan	tly disturbed? Are "Normal Circumstances" present? Yes 🔽 No	o
Are Vegetation, Soil, or Hydrology naturally	problematic? (If needed, explain any answers in Remarks.)	
SUMMARY OF FINDINGS – Attach site map showin	ng sampling point locations, transects, important feature	s, etc.

Hydrophytic Vegetation Present? Hydric Soil Present? Wetland Hydrology Present?	Yes Yes Yes	No No No	Is the Sampled Area within a Wetland?	Yes	No
Remarks: Cowardin Code: UP	'LAND				

Wetland Hydrology Indicators:	Secondary Indicators (minimum of two required)
Primary Indicators (minimum of one is required; check all that apply)	Surface Soil Cracks (B6)
Surface Water (A1) True Aquatic Plants (B14)	Sparsely Vegetated Concave Surface (B8)
High Water Table (A2) Hydrogen Sulfide Odor (C1)	Drainage Patterns (B10)
Saturation (A3) Oxidized Rhizospheres on Living	Roots (C3) Moss Trim Lines (B16)
Water Marks (B1) Presence of Reduced Iron (C4)	Dry-Season Water Table (C2)
Sediment Deposits (B2) Recent Iron Reduction in Tilled So	ils (C6) Crayfish Burrows (C8)
Drift Deposits (B3) Thin Muck Surface (C7)	Saturation Visible on Aerial Imagery (C9)
Algal Mat or Crust (B4) Other (Explain in Remarks)	Stunted or Stressed Plants (D1)
Iron Deposits (B5)	Geomorphic Position (D2)
Inundation Visible on Aerial Imagery (B7)	Shallow Aquitard (D3)
Water-Stained Leaves (B9)	Microtopographic Relief (D4)
Aquatic Fauna (B13)	FAC-Neutral Test (D5)
Field Observations:	
Surface Water Present? Yes No 🖌 Depth (inches):	
Water Table Present? Yes No 🖌 Depth (inches):	
Saturation Present? Yes No 🖌 Depth (inches):	Wetland Hydrology Present? Yes No_
(includes capillary fringe)	
Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspec	tions), if available:
Pomorko:	

Sampling Point: W-C28, C29 UP

201	Absolute	Dominant	Indicator	Dominance Test worksheet:
Tree Stratum (Plot size: 30°) 1	% Cover	Species?	Status	Number of Dominant Species That Are OBL, FACW, or FAC:0 (A)
23				Total Number of Dominant Species Across All Strata: 2 (B)
4				Percent of Dominant Species
6.				That Are OBL, FACW, or FAC: (A/B)
7.				Prevalence Index worksheet:
	0	= Total Cov	/er	Total % Cover of:Multiply by:
50% of total cover:0	20% of	total cover	: 0	OBL species x 1 =
Sapling/Shrub Stratum (Plot size: 15')				FACW species x 2 =
1				FAC species x 3 =
2				FACU species x 4 =
3				UPL species x 5 =
4				Column Totals: (A) (B)
5				Prevalence Index = B/A =
6				Hydrophytic Vegetation Indicators:
7				1 - Rapid Test for Hydrophytic Vegetation
8				2 - Dominance Test is >50%
9				3 - Prevalence Index is ≤3.0 ¹
	0	= Total Cov	/er	4 - Morphological Adaptations ¹ (Provide supporting
50% of total cover: <u>0</u>	20% of	total cover	:	data in Remarks or on a separate sheet)
Herb Stratum (Plot size:)	30		FACU	Problematic Hydrophytic Vegetation ¹ (Explain)
1. Infoldin platense	15	<u> </u>		
	10			¹ Indicators of hydric soil and wetland hydrology must
	10			be present, unless disturbed or problematic.
- Frideron annuus	5			Definitions of Four Vegetation Strata:
			FACU	Tree – Woody plants, excluding vines, 3 in, (7.6 cm) or
6 7			·	more in diameter at breast height (DBH), regardless of height.
8				Sanling/Shrub - Woody plants, excluding vines, less
9				than 3 in. DBH and greater than or equal to 3.28 ft (1
10				m) tall.
11				Herb – All herbaceous (non-woody) plants, regardless
	70	= Total Cov	/er	of size, and woody plants less than 3.28 ft tall.
50% of total cover: <u>35</u> <u>Woody Vine Stratum</u> (Plot size: <u>15'</u>)	20% of	total cover	: <u>14</u>	Woody vine – All woody vines greater than 3.28 ft in height.
1				
2			·	
3				
4				Hydrophytic
5			·	Vegetation Present? Yes No 🖌
50% of total cover:0	20% of	total Cov	/er : <u>0</u>	
Remarks: (Include photo numbers here or on a separate s	heet.)			

Profile Desc	ription: (Describe t	o the depth	needed to docum	ent the ir	ndicator o	or confirm	the absence	of indicato	rs.)		
Depth	Matrix		Redox	Features	5						
(inches)	Color (moist)		Color (moist)	%	_Type ¹	Loc ²	Texture		Remarks		
0-6	10 YR 4/4	100					Gr CL				
									0	.1	
6+									Compacte		
¹ Type: C=Co	oncentration, D=Depl	etion, RM=Re	educed Matrix, MS	=Masked	Sand Gra	iins.	² Location: F	L=Pore Linir	ng, M=Matrix.		
Hydric Soil	ndicators:						Indic	ators for Pr	oblematic H	dric Soils	s ³ :
Histosol	(A1)		Dark Surface	(S7)			2	2 cm Muck (A	(MLRA 1	47)	
Histic Er	vipedon (A2)		Polvvalue Bel	ow Surfac	e (S8) (M	LRA 147.	148) (Coast Prairie	Redox (A16)	,	
Black Hi	stic (A3)		Thin Dark Su	face (S9)	(MI RA 1	47, 148)		(MI RA 14	7, 148)		
Hydroge	n Sulfide (A4)		Loamy Glever	d Matrix (F	=2)	,,	F	Piedmont Flo	odolain Soils	(F19)	
Stratified			Depleted Mat	rix (F3)	_)			(MI RA 13)	6 147)	(1.10)	
2 cm Mu	r Edyclo (710) ick (A10) (I RR N)		Bedox Dark S	Surface (Fi	6)		``	/erv Shallow	Dark Surface	(TF12)	
Depleter	Below Dark Surface	(A11)	Depleted Darl	k Surface	(F7)			Other (Explai	n in Remarks) (11 1 <u>2</u>)	
Depicted	ark Surface (A12)		Beday Depres	ecione (E8	(1 <i>7)</i> 2)		_ `		in in remarks)	
Thick Da	lucky Mineral (S1) (Redux Depres	SSIULIS (FC	9) be (E12) (I						
	147 149	ixix i x ,		30 Masse	5 (1 12) (-ixix i x ,					
Sandy G	(147, 140)		Umbric Surfa	リ ~~ (E12) (6 122)	³ Inc	dicators of hy	drophytic vo	notation or	h.d.
Sandy B			Oniblic Surfac	.e (F13) (1 adalaia Sc		0, 122) (MI DA 14)	D)	atland bydrol		jelalion an	iu
Sanuy R	Motrix (SC)		Fleumont Flo	ouplain Sc Interial (EC	DIIS (F19)	(WILKA 140	b) vve			present,	
Surpped				iateriai (F2		A 127, 147) ur			auc.	
Restrictive	ayer (if observed):										
Type: CC			_								
Depth (ind	hes): <u>6</u>		_				Hydric Soi	I Present?	Yes	No	<u></u>
Remarks:											

Project/Site: Guernsey Power Plant	_ City/County: Guernsey	S	ampling Date: 07/20/2016
Applicant/Owner: Guernsey Power Plant	s	_{itate:} OH	Sampling Point: W-C30 PEM
Investigator(s): CV, CS	_ Section, Township, Range: <u>N/A</u>		
Landform (hillslope, terrace, etc.): Hillslope	_ocal relief (concave, convex, none):	Convex	Slope (%): <u>3-5</u>
Subregion (LRR or MLRA): LRRN Lat: 39.933365	5 _{Long:} -81.53	297	Datum: NAD 83
Soil Map Unit Name: Glenford silt loam, 0 to 3 percent slopes (G	GnA)	NWI classificati	on: PFO1/SS1C
Are climatic / hydrologic conditions on the site typical for this time of	year? Yes 🖌 No (If n	o, explain in Rem	narks.)
Are Vegetation, Soil, or Hydrology significant	tly disturbed? Are "Normal Cir	cumstances" pre	sent? Yes 🖌 No
Are Vegetation, Soil, or Hydrology naturally	problematic? (If needed, expl	ain any answers	in Remarks.)
SUMMARY OF FINDINGS – Attach site map showir	ng sampling point locations	, transects, i	mportant features, etc.
Hydrophytic Vegetation Present? Yes No Hydric Soil Present? Yes Vo Wetland Hydrology Present? Yes No	 Is the Sampled Area within a Wetland? 	Yes 🖌	No
Remarks: Cowardin Code: PEM HGM: Slo	pe Water Type: RP	WWN	
HYDROLOGY			
Wetland Hydrology Indicators:	Se	condary Indicator	s (minimum of two required)
Primary Indicators (minimum of one is required; check all that apply	<u>/)</u>	Surface Soil Cr	acks (B6)
		• • • • •	

I minary mulcators (minimum	or one is required,		
Surface Water (A1)		True Aquatic Plants (B14)	Sparsely Vegetated Concave Surface (B8)
High Water Table (A2)		Hydrogen Sulfide Odor (C1)	Drainage Patterns (B10)
Saturation (A3)		Oxidized Rhizospheres on Living	g Roots (C3) Moss Trim Lines (B16)
Water Marks (B1)		Presence of Reduced Iron (C4)	Dry-Season Water Table (C2)
Sediment Deposits (B2)		Recent Iron Reduction in Tilled S	Soils (C6) Crayfish Burrows (C8)
Drift Deposits (B3)		Thin Muck Surface (C7)	Saturation Visible on Aerial Imagery (C9)
Algal Mat or Crust (B4)		Other (Explain in Remarks)	Stunted or Stressed Plants (D1)
Iron Deposits (B5)			 Geomorphic Position (D2)
Inundation Visible on Ae	rial Imagery (B7)		Shallow Aquitard (D3)
Water-Stained Leaves (39)		Microtopographic Relief (D4)
Aquatic Fauna (B13)	,		FAC-Neutral Test (D5)
Field Observations:			
Surface Water Present?	Yes No	✓ Depth (inches):	
Water Table Present?	Yes No	✓ Depth (inches):	
Saturation Present? (includes capillary fringe)	Yes No _	✓ Depth (inches):	Wetland Hydrology Present? Yes <u></u> No
Describe Recorded Data (str	eam gauge, monito	pring well, aerial photos, previous inspec	ections), if available:
Remarks:			
Saturation present, but	no water table i	dentified.	

Sampling Point: W-C30 PEM

0.01	Absolute	Dominant	Indicator	Dominance Test worksheet:
Tree Stratum (Plot size: <u>30'</u>)	% Cover	Species?	Status	Number of Dominant Species
2				
3		·		Total Number of Dominant Species Across All Strata: 1 (B)
4		·		Percent of Dominant Species
5		·	·	That Are OBL, FACW, or FAC:(A/B)
6		·	·	Prevalence Index worksheet:
7		·	·	Total % Cover of: Multiply by:
	0	= Total Cov	rer	$\frac{1}{OBI} \text{ species} \qquad x 1 =$
Soling/Shrub Stratum (Plot size: 15')	20% 0			FACW species x 2 =
				FAC species x 3 =
2		·		FACU species x 4 =
2		·	·	UPL species x 5 =
а		·	·	Column Totals: (A) (B)
4		·	·	
5		·	· <u> </u>	Prevalence Index = B/A =
0 7		·	· <u> </u>	Hydrophytic Vegetation Indicators:
7			·	1 - Rapid Test for Hydrophytic Vegetation
0			·	✓ 2 - Dominance Test is >50%
9			·	$_$ 3 - Prevalence Index is $\leq 3.0^1$
50% of total covor: 0	0	= I otal Cov	er 0	4 - Morphological Adaptations ¹ (Provide supporting
Horb Strotum (Plot size: 5')	20% 0			data in Remarks or on a separate sheet)
A Rudbeckia laciniata	60	~	FACW	Problematic Hydrophytic Vegetation ¹ (Explain)
2 Microstegium vimineum	15		FAC	
2. Echinochloa crus-galli	5	·	FAC	¹ Indicators of hydric soil and wetland hydrology must
A Phleum pratense	5	·	FACU	be present, unless disturbed or problematic.
		·	17100	Definitions of Four Vegetation Strata:
] 5		·	·	Tree – Woody plants, excluding vines, 3 in. (7.6 cm) or
0			·	more in diameter at breast height (DBH), regardless of
/·			·	neight.
8			·	Sapling/Shrub – Woody plants, excluding vines, less
9			·	than 3 in. DBH and greater than or equal to 3.28 ft (1
10			·	
	85	= Total Cov	/er	Herb – All herbaceous (non-woody) plants, regardless of size, and woody plants less than 3.28 ft tall.
50% of total cover: 42.5	5 20% of	total cover	17	Woody vine All woody vines greater than 2.28 ft in
Woody Vine Stratum (Plot size: 15')				height.
1				
2				
3				
4				Hydrophytic
5				Vegetation
	0	= Total Cov	rer	Present? Yes V No
50% of total cover:0	20% of	total cover	0	
Remarks: (Include photo numbers here or on a separate s	heet.)			

opui	Matrix		Redo	x Feature	s					
(inches)	Color (moist)	%	Color (moist)	<u>%</u>	Type ¹	Loc ²	Texture		Remarks	
0-8	10YR 3/2	90	10YR 4/1	2	D	М	С			
			7.5YR 4/6	8	С		C			
8-14	7.5YR 4/4	100								
		<u> </u>				·				
						·				
						·				
¹ Type: C=C	oncentration, D=Depl	etion, RM=	Reduced Matrix, MS	S=Masked	d Sand Gi	ains.	² Location: P	L=Pore Lini	ng, M=Matrix.	
Hydric Soil	Indicators:						Indic	ators for Pr	oblematic H	ydric Soils ³ :
Histosol	(A1)		Dark Surface	e (S7)			2	cm Muck (A	A10) (MLRA 1	147)
Histic Er	pipedon (A2)		Polyvalue Be	low Surfa	ce (S8) (I	/LRA 147	, 148) (Coast Prairie	Redox (A16)	
Black Hi	istic (A3)		Thin Dark Su	Irface (S9) (MLRA	147, 148)	-	MLRA 14 (MLRA 14	7, 148) Andria Caila	(E10)
Hydroge Stratified	d Lavers (A5)		Loarny Greye	trix (E3)	(FZ)		F	(MI RA 13	6. 147)	(F19)
2 cm Mi	uck (A10) (LRR N)		Redox Dark	Surface (F	-6)		\	/ery Shallow	Dark Surface	e (TF12)
Depleter	d Below Dark Surface	e (A11)	Depleted Dar	rk Surface	e (F7)			Other (Explai	in in Remarks	6)
Thick Da	ark Surface (A12)		Redox Depre	essions (F	8)					
Sandy M	/lucky Mineral (S1) (L	.RR N,	Iron-Mangan	ese Mass	es (F12)	LRR N,				
	A 147, 148)		MLRA 13	6)			2			
Sandy G	Played Matrix (S4)		Limbric Surfa	CO (E13)		26 1221	^o lno	licators of h	drophytic ver	natation and
Sandy C	Gleyed Matrix (S4) Redox (S5)		Umbric Surfa	ice (F13) odplain S	(MLRA 1: ioils (F19)	36, 122) (MLRA 14	୍ଧାnc 48) we	licators of hy etland hydro	ydrophytic veg loav must be	petation and present.
Sandy G	Gleyed Matrix (S4) Redox (S5) I Matrix (S6)		Umbric Surfa Piedmont Flo Red Parent N	ice (F13) oodplain S /laterial (F	(MLRA 1; ioils (F19) i21) (MLF	36, 122) (MLRA 14 A 127, 14	ି Inc 18) we 7) un	licators of hy etland hydro Iless disturb	ydrophytic veg logy must be ed or problem	getation and present, natic.
Sandy G Sandy F Sandy F Stripped	Gleyed Matrix (S4) Redox (S5) I Matrix (S6) Layer (if observed):		Umbric Surfa Piedmont Flo Red Parent N	ice (F13) oodplain S /laterial (F	(MLRA 1; ioils (F19) i21) (MLF	36, 122) (MLRA 14 A 127, 14	°Inc 48) we 7) un	licators of hy etland hydro less disturb	ydrophytic veg logy must be ed or problem	getation and present, natic.
Sandy G Sandy G Sandy F Stripped Restrictive I	Gleyed Matrix (S4) Redox (S5) I Matrix (S6) Layer (if observed):		Umbric Surfa Piedmont Flo Red Parent N	ice (F13) oodplain S Material (F	(MLRA 1: coils (F19) (MLF)	36, 122) (MLRA 14 A 127, 14	³ Inc 48) we 7) un	licators of hy etland hydro less disturb	ydrophytic veg logy must be ed or problem	getation and present, natic.
Sandy C Sandy F Stripped Restrictive I Type: Depth (inc	Gleyed Matrix (S4) Redox (S5) I Matrix (S6) Layer (if observed): ches):		Umbric Surfa Piedmont Flc Red Parent N	ace (F13) bodplain S Aaterial (F	(MLRA 13 ioils (F19) i21) (MLF	36, 122) (MLRA 14 A 127, 14	³ Inc 18) we 7) un Hydric Soil	licators of hy etland hydro less disturb Present?	ydrophytic veg logy must be ed or problem Yes	present, hatic.
Sandy C Sandy C Sandy F Stripped Restrictive Type: Depth (inc Remarks:	Gleyed Matrix (S4) Redox (S5) I Matrix (S6) Layer (if observed): ches):		Umbric Surfa Piedmont Flo Red Parent N	ice (F13) bodplain S Aaterial (F	(MLRA 1; ioils (F19) i21) (MLF	36, 122) (MLRA 14 A 127, 14	*Inc 48) we 7) un Hydric Soil	licators of hy etland hydro less disturb Present?	ydrophytic veg logy must be ed or problem Yes	present, natic.
Sandy C Sandy F Stripped Restrictive I Type: Depth (inc Remarks: Soils distur	Gleyed Matrix (S4) Redox (S5) I Matrix (S6) Layer (if observed): ches):		Umbric Surfa Piedmont Flo Red Parent N	ice (F13) podplain S Aaterial (F	(MLRA 1; coils (F19) c21) (MLF	36, 122) (MLRA 14 A 127, 14	*Inc 48) we 7) un Hydric Soil	licators of hy etland hydro less disturb Present?	ydrophytic veg logy must be ed or problem Yes	getation and present, hatic.
Sandy C Sandy F Stripped Restrictive I Type: Depth (ind Remarks: Soils distur	Gleyed Matrix (S4) Redox (S5) I Matrix (S6) Layer (if observed): ches):		Umbric Surfa Piedmont Flo Red Parent M	ice (F13) (podplain S //aterial (F	(MLRA 1; coils (F19) (MLF	36, 122) (MLRA 14 A 127, 14	*Inc 48) we 7) un Hydric Soil	licators of hy etland hydro less disturb	ydrophytic veg logy must be ed or problem Yes	present, hatic.
Sandy C Sandy F Stripped Restrictive I Type: Depth (inc Remarks: Soils distur	Gleyed Matrix (S4) Redox (S5) I Matrix (S6) Layer (if observed): ches):		Umbric Surfa Piedmont Flo Red Parent N	ice (F13) podplain S Aaterial (F	(MLRA 1: coils (F19) 221) (MLF	36, 122) (MLRA 14 A 127, 14	*Inc 18) we 7) un Hydric Soil	licators of hy etland hydro less disturb	ydrophytic veg logy must be ed or problem Yes	present, hatic.
Sandy C Sandy F Stripped Restrictive Type: Depth (in Remarks: Soils distur	Gleyed Matrix (S4) Redox (S5) I Matrix (S6) Layer (if observed): ches):		Umbric Surfa Piedmont Flo Red Parent M	ice (F13) (bodplain S <i>I</i> aterial (F	(MLRA 1: soils (F19) 21) (MLF	36, 122) (MLRA 14 A 127, 14	*8) we 7) un Hydric Soil	licators of hy etland hydro less disturb	ydrophytic veg logy must be ed or problem Yes	getation and present, hatic.
Sandy C Sandy F Stripped Restrictive I Type: Depth (in: Remarks: Soils distur	Gleyed Matrix (S4) Redox (S5) I Matrix (S6) Layer (if observed): ches): rbed		Umbric Surfa Piedmont Flo Red Parent M 	ice (F13) (podplain S <i>M</i> aterial (F	(MLRA 1: coils (F19) (MLF	36, 122) (MLRA 14 A 127, 14	*Inc 48) we 7) un Hydric Soil	licators of hy etland hydro less disturb	ydrophytic veg logy must be ed or problem Yes	_ No
MLR/ Sandy C Sandy F Stripped Restrictive I Type: Depth (in: Remarks: Soils distur	Gleyed Matrix (S4) Redox (S5) I Matrix (S6) Layer (if observed): ches): rbed		Umbric Surfa Piedmont Flc Red Parent M	ice (F13) podplain S Aaterial (F	(MLRA 1: coils (F19) (MLF	36, 122) (MLRA 14 A 127, 14	*Inc 48) we 7) un Hydric Soil	licators of hy etland hydro less disturb	ydrophytic veg logy must be ed or problem Yes	_ No
MLR/ Sandy C Sandy F Stripped Restrictive Type: Depth (in- Remarks: Soils distur	Gleyed Matrix (S4) Redox (S5) I Matrix (S6) Layer (if observed): ches):		Umbric Surfa Piedmont Flo Red Parent M	ice (F13) podplain S Aaterial (F	(MLRA 1: coils (F19) (MLF	36, 122) (MLRA 14 A 127, 14	*Inc 18) we 7) un Hydric Soil	licators of hy etland hydro less disturb	ydrophytic veg logy must be ed or problem Yes	_ No
MLR/ Sandy C Sandy F Strippec Restrictive I Type: Depth (in/ Remarks: Soils distur	Gleyed Matrix (S4) Redox (S5) I Matrix (S6) Layer (if observed): ches): rbed		Umbric Surfa Piedmont Flo Red Parent M 	ice (F13) (bodplain S <i>N</i> aterial (F	(MLRA 1: soils (F19) 221) (MLF	36, 122) (MLRA 14 A 127, 14	*Inc 48) we 7) un Hydric Soil	licators of hy etland hydro less disturb	ydrophytic veg logy must be ed or problem Yes	_ No
Sandy C Sandy F Strippec Restrictive I Type: Depth (in/ Remarks: Soils distur	Gleyed Matrix (S4) Redox (S5) I Matrix (S6) Layer (if observed): ches): rbed		Umbric Surfa Piedmont Flo Red Parent M 	ice (F13) (podplain S <i>I</i> aterial (F	(MLRA 1: coils (F19) c21) (MLF	36, 122) (MLRA 14 A 127, 14	*Inc 18) we 7) un Hydric Soil	licators of hy etland hydro less disturb	ydrophytic veg logy must be ed or problem Yes	_ No
MLR/ Sandy (Sandy F Strippec Restrictive I Type: Depth (in- Remarks: Soils distur	Gleyed Matrix (S4) Redox (S5) I Matrix (S6) Layer (if observed): ches): rbed		Umbric Surfa Piedmont Flo Red Parent M 	ice (F13) podplain S Aaterial (F	(MLRA 1: coils (F19) c21) (MLF	36, 122) (MLRA 14 A 127, 14	*Inc 18) we 7) un Hydric Soil	licators of hy etland hydro less disturb	ydrophytic veg logy must be ed or problem Yes	_ No
MLR/ Sandy (Sandy F Strippec Restrictive I Type: Depth (in/ Remarks: Soils distur	Gleyed Matrix (S4) Redox (S5) I Matrix (S6) Layer (if observed): ches):		Umbric Surfa Piedmont Flc Red Parent M 	ice (F13) (bodplain S Aaterial (F	(MLRA 1: coils (F19) (MLF	36, 122) (MLRA 14 A 127, 14	*Inc 18) we 7) un Hydric Soil	licators of hy etland hydro less disturb	ydrophytic veg logy must be ed or problem Yes	_ No
MLR/ Sandy (Sandy F Strippec Restrictive I Type: Depth (in/ Remarks: Soils distur	Gleyed Matrix (S4) Redox (S5) I Matrix (S6) Layer (if observed): ches): rbed		Umbric Surfa Piedmont Flo Red Parent M 	ice (F13) (bodplain S <i>M</i> aterial (F	(MLRA 1: soils (F19) 221) (MLF	36, 122) (MLRA 14 A 127, 14	*Inc 18) we 7) un Hydric Soil	licators of hy etland hydro less disturb	ydrophytic veg logy must be ed or problem Yes	_ No
MLR/ Sandy (Sandy F Strippec Restrictive I Type: Depth (in- Remarks: Soils distur	Bleyed Matrix (S4) Redox (S5) I Matrix (S6) Layer (if observed): ches): rbed		Umbric Surfa Piedmont Flo Red Parent M	ice (F13) (podplain S <i>M</i> aterial (F	(MLRA 1: coils (F19) c21) (MLF	36, 122) (MLRA 14 A 127, 14	*Inc 18) we 7) un Hydric Soil	licators of hy etland hydro less disturb	ydrophytic vea logy must be ed or problem Yes	_ No
MLR/ Sandy (Sandy F Strippec Restrictive Type: Depth (in- Remarks: Soils distur	Gleyed Matrix (S4) Redox (S5) I Matrix (S6) Layer (if observed): ches): rbed		Umbric Surfa Piedmont Flo Red Parent M 	ice (F13) podplain S Aaterial (F	(MLRA 1: coils (F19) (MLF	36, 122) (MLRA 14 A 127, 14	*Inc 18) we 7) un Hydric Soil	licators of hy etland hydro less disturb	ydrophytic veg logy must be ed or problem Yes	_ No
MLR/ Sandy (Sandy F Strippec Restrictive 	Gleyed Matrix (S4) Redox (S5) I Matrix (S6) Layer (if observed): ches): rbed		Umbric Surfa Piedmont Flo Red Parent M 	ice (F13) (bodplain S Лaterial (F	(MLRA 1: coils (F19) (MLF	36, 122) (MLRA 14 A 127, 14	*Inc 18) we 7) un Hydric Soil	licators of hy etland hydro less disturb	ydrophytic veg logy must be ed or problem Yes	_ No
MLR/ Sandy (Sandy F Strippec Restrictive Type: Depth (in/ Remarks: Soils distur	Bleyed Matrix (S4) Redox (S5) I Matrix (S6) Layer (if observed): ches): rbed		Umbric Surfa Piedmont Flo Red Parent M 	ice (F13) (podplain S <i>I</i> aterial (F	(MLRA 1: soils (F19) 221) (MLF	36, 122) (MLRA 14 A 127, 14	³ Inc 18) we 7) un Hydric Soil	licators of hy etland hydro less disturb	ydrophytic veg logy must be ed or problem Yes <u>Y</u>	_ No

Project/Site: Guernsey Power Plant	City/County: Guernsey		Sampling Date: 07/20/2016
Applicant/Owner: Guernsey Power Plant		State: OH	_ Sampling Point: W-C30 PFC
Investigator(s): CV, CS	Section, Township, Range:	N/A	
Landform (hillslope, terrace, etc.): Floodplain	Local relief (concave, convex, n	one): Concave	Slope (%): 0-3
Subregion (LRR or MLRA): LRRN Lat: 39.933	3228 Long: <u>-8</u>	1.533366	Datum: NAD 83
Soil Map Unit Name: Nolin silt loam, 0 to 3 percent slopes, f	requently flooded (No)	NWI classifica	tion: PFO1/SS1C
Are climatic / hydrologic conditions on the site typical for this tim	e of year? Yes 🖌 No	(If no, explain in Re	marks.)
Are Vegetation, Soil, or Hydrology signit	ficantly disturbed? Are "Norm	al Circumstances" pr	esent? Yes 🔽 No
Are Vegetation, Soil, or Hydrology natur	ally problematic? (If needed	, explain any answers	s in Remarks.)
SUMMARY OF FINDINGS – Attach site map sho	owing sampling point locat	ions, transects,	important features, etc.

Hydrophytic Vegetation Present? Hydric Soil Present? Wetland Hydrology Present?	Yes Yes Yes	レ レ レ	No No _ No	Is the Sampled Area within a Wetland?	Yes 💆	<u> </u>	No
Remarks: Cowardin Code: PFC)		HGM: Riverine	Water Type: RPW	/WD		

Wetland Hydrology Indicators:	Secondary Indicators (minimum of two required)
Primary Indicators (minimum of one is required; check all that apply)	Surface Soil Cracks (B6)
Surface Water (A1) True Aquatic Plants (B14)	Sparsely Vegetated Concave Surface (B8)
High Water Table (A2) Hydrogen Sulfide Odor (C1)	Drainage Patterns (B10)
Saturation (A3) Oxidized Rhizospheres on Living	Roots (C3) Moss Trim Lines (B16)
Water Marks (B1) Presence of Reduced Iron (C4)	Dry-Season Water Table (C2)
Sediment Deposits (B2) Recent Iron Reduction in Tilled So	oils (C6) Crayfish Burrows (C8)
✓ Drift Deposits (B3) ✓ Thin Muck Surface (C7)	Saturation Visible on Aerial Imagery (C9)
Algal Mat or Crust (B4) Other (Explain in Remarks)	Stunted or Stressed Plants (D1)
Iron Deposits (B5)	Geomorphic Position (D2)
Inundation Visible on Aerial Imagery (B7)	Shallow Aquitard (D3)
Water-Stained Leaves (B9)	Microtopographic Relief (D4)
Aquatic Fauna (B13)	FAC-Neutral Test (D5)
Field Observations:	
Surface Water Present? Yes No Depth (inches):	
Water Table Present? Yes No 🔽 Depth (inches):	
Saturation Present? Yes No <u>✓</u> Depth (inches): (includes capillary fringe)	Wetland Hydrology Present? Yes <u>V</u> No
Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspec	tions), if available:
Remarks:	

Sampling Point: W-C30 PFO

	Absolute	- Dominant	Indicator	Dominance Test worksheet:
Tree Stratum (Plot size: 30')	% Cover	Species?	Status	Number of Demisert Oregins
Acer saccharinum	20	V	FACW	Number of Dominant Species
- Maclura pomifera	15	~		
				Total Number of Dominant
3				Species Across All Strata:6 (B)
4				
5				Percent of Dominant Species
0			·	That Are OBL, FACVV, or FAC: (A/D)
b				Prevalence Index worksheet:
7				
	35	= Total Cov	/er	
50% of total cover: <u>17.8</u>	<u>5</u> 20% of	total cover	:7	OBL species x 1 =
Sapling/Shrub Stratum (Plot size: 15')				FACW species x 2 =
A Acer negundo	10	~	FAC	FAC species x 3 =
2				
3				UPL species x 5 =
4				Column Totals: (A) (B)
5				
			•	Prevalence Index = B/A =
6				Hydrophytic Vegetation Indicators:
7				1 - Rapid Test for Hydrophytic Vegetation
8				Deminance Testics E00/
9				2 - Dominance Test is >50%
	10	Total Ca	- <u> </u>	3 - Prevalence Index is ≤3.0 ⁺
50% of total assess			/er	4 - Morphological Adaptations ¹ (Provide supporting
50% of total cover: <u>5</u>	20% of	total cover	: <u> </u>	data in Remarks or on a separate sheet)
Herb Stratum (Plot size:)				Problematic Hydrophytic Vegetation ¹ (Evaluation)
1. Microstegium vimineum	25	<u> </u>		
_{2.} Pilea pumila	20	~	FACW	
3 Impatiens capensis	15		FACW	¹ Indicators of hydric soil and wetland hydrology must
A Rudbeckia laciniata	10		FACW	be present, unless disturbed or problematic.
4. Nathesing alternifelia	10			Definitions of Four Vegetation Strata:
5. Verbesina alternitolia			FAC	Tree Mercharte evolution vince 2 in (7.0 em) en
6				I ree – woody plants, excluding vines, 3 in. (7.6 cm) or
7.				height.
8				
0				Sapling/Shrub – Woody plants, excluding vines, less
9				than 3 in. DBH and greater than or equal to 3.28 ft (1
10				m) tall.
11				Herb – All berbaceous (non-woody) plants regardless
	80	= Total Cov	/er	of size, and woody plants less than 3.28 ft tall.
50% of total cover: 40	20% of	total cover	: 16	
Woody Vino Stratum (Plot size: 15'				Woody vine – All woody vines greater than 3.28 ft in
Tovicodondron radicons	15	1	EAC	height.
			FAC	
2				
3				
4				
				Hydrophytic
⁵	15		•	Present? Ves V No
	10	= Total Cov	/er	
50% of total cover:	20% of	total cover	:3	
Remarks: (Include photo numbers here or on a separate s	heet.)			•

I

	Matrix		Redo	<u>x Feature</u>	s	<u> </u>		
inches)	Color (moist)	%	Color (moist)	%	Type ¹	Loc ²	Texture	Remarks
0-8	10YR 4/2	95	7.5YR 4/4	5	<u>C</u>	M	SIC	
8-16	10YR 4/1	90	7.5YR 4/4	5	С	Μ	C	
					·			
					·			
			Doducod Matrix M	- Meele				Lining M Motrie
iype: C=CC	Indicators:	euon, KM=	Reduced Matrix, Ma	S=IVIASKee	a Sana Gr	ains.	Location: PL=Pore	e Lining, M=Matrix.
yune sonn			Davida Oracía a	(07)				
HISTOSOI	(A1)		Dark Surface	(57) Ianu Curta	(00) (2 cm IVIL	JCK (A10) (MLRA 147)
_ HISTIC Ep	npedon (AZ)		Polyvalue Be	IOW SUITS	ace (58) (I	VILRA 147,	148) Coast P	
	SIIC (A3) $(A4)$			Matrix		147, 140)		A 147, 140) at Electrolain Soils (E10)
_ Hyuruge Stratifior	11 Suillue (A4)			riv (E2)	(Г2)			A 126 147)
2 cm Mu	r Layers (A3) ick (A10) (I RR N)		Depleted Ma	unx (13) Surface (1	F6)		Very Sh	allow Dark Surface (TE12)
_ 2 cm wa	1 Below Dark Surface	(A11)	Depleted Dark	k Surface	e (F7)		Other (F	Explain in Remarks)
Thick Da	ark Surface (A12)	()	Redox Depre	essions (F				
Sandv N	luckv Mineral (S1) (L	RR N.	Iron-Mangan	ese Mass	es (F12) (LRR N.		
	A 147, 148)	,	MLRA 13	6)		,		
Sandy G	leyed Matrix (S4)		Umbric Surfa	, ce (F13)	(MLRA 1	36, 122)	³ Indicators	of hydrophytic vegetation and
Sandy R	edox (S5)		Piedmont Flo	odplain S	Soils (F19)	(MLRA 14	8) wetland h	lydrology must be present,
_ Stripped	Matrix (S6)		Red Parent N	Aaterial (F		À 127, 147	7) unless dis	sturbed or problematic.
estrictive I	_ayer (if observed):							
Type:								
Depth (inc	ches).						Hydric Soil Prese	nt? Yes 🖌 No
emarks:								

Project/Site: Guernsey Power Plant	City/County: Guernsey	Sampling Date: <u>07/20/2016</u>
Applicant/Owner: Guernsey Power Plant	Sta	te: OH Sampling Point: W-C30 UP
Investigator(s): CV, CS	Section, Township, Range: N/A	
Landform (hillslope, terrace, etc.): Floodplain	cal relief (concave, convex, none): _	_inear Slope (%):_0
Subregion (LRR or MLRA): LRRN Lat: 39.933513	Long: -81.532	342 Datum: NAD 83
Soil Map Unit Name: Sarahsville silty clay loam, frequently floode	d (Sa)	NWI classification: None
Are climatic / hydrologic conditions on the site typical for this time of ye	ear? Yes 🖌 No (If no	explain in Remarks.)
Are Vegetation, Soil, or Hydrology significantly	disturbed? Are "Normal Circ	ımstances" present? Yes 🗾 No
Are Vegetation, Soil, or Hydrology naturally pr	oblematic? (If needed, explai	n any answers in Remarks.)
SUMMARY OF FINDINGS – Attach site map showing	sampling point locations,	transects, important features, etc.

Hydrophytic Vegetation Present? Hydric Soil Present? Wetland Hydrology Present?	Yes Yes Yes	No No No	Is the Sampled Area within a Wetland?	Yes	No	<u>~</u>
Remarks: Cowardin Code: UP	LAND					

Wetland Hydrology Indicators:	Secondary Indicators (minimum of two required)
Primary Indicators (minimum of one is required; check all that apply)	Surface Soil Cracks (B6)
 Surface Water (A1) High Water Table (A2) Saturation (A3) Water Marks (B1) Sediment Deposits (B2) Drift Deposits (B3) Algal Mat or Crust (B4) Iron Deposits (B5) Inundation Visible on Aerial Imagery (B7) Water Fauna (B13) 	 Sparsely Vegetated Concave Surface (B8) 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) Geomorphic Position (D2) 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):	
Saturation Present? Yes No <u>✓</u> Depth (inches): (includes capillary fringe)	Wetland Hydrology Present? Yes No
Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspec	tions), if available:
Remarks:	

Sampling Point: W-C30 UP

001	Absolute	Dominant	Indicator	Dominance Test worksheet:
Tree Stratum (Plot size: 30)	% Cover	Species?	Status	Number of Dominant Species
1				That Are OBL, FACW, or FAC:0 (A)
2				Total Number of Dominant
3				Species Across All Strata: 3 (B)
4.				
5				Percent of Dominant Species
6		·		That Are OBL, FACW, or FAC: (A/B)
0		·		Prevalence Index worksheet:
/				Total % Cover of: Multiply by:
		= Total Cov	er	OBL species x1-
50% of total cover: 0	20% of	total cover:		
Sapling/Shrub Stratum (Plot size: 15)				FACW species x z =
1				FAC species X 3 =
2				FACU species x 4 =
3				UPL species x 5 =
4.				Column Totals: (A) (B)
5				
6				Prevalence Index = B/A =
7		·		Hydrophytic Vegetation Indicators:
		·		1 - Rapid Test for Hydrophytic Vegetation
8				2 - Dominance Test is >50%
9		·		3 - Prevalence Index is $≤3.0^{1}$
	0	= Total Cov	er	4 - Morphological Adaptations ¹ (Provide supporting
50% of total cover: 0	20% of	total cover:	0	data in Remarks or on a separate sheet)
Herb Stratum (Plot size: 5')				Dark la se stie Unders ha tie) (a se fai ale sheet)
1. Trifolium pratense	30	<u> </u>	FACU	Problematic Hydrophytic Vegetation (Explain)
2. Dactylis glomerata	15	~	FACU	
3. Vernonia angustifolia	15	~	FACU	¹ Indicators of hydric soil and wetland hydrology must
₄ Cichorium intybus	10		FACU	be present, unless disturbed or problematic.
F. Rubus allegheniensis	5		FACU	Definitions of Four Vegetation Strata:
		•	1 700	Tree – Woody plants, excluding vines, 3 in, (7.6 cm) or
6		·		more in diameter at breast height (DBH), regardless of
7				height.
8		. <u> </u>		Sapling/Shrub – Woody plants, excluding vines, less
9				than 3 in. DBH and greater than or equal to 3.28 ft (1
10				m) tall.
11				Herb - All herbaceous (non-woody) plants, regardless
	75	= Total Cov	er	of size, and woody plants less than 3.28 ft tall.
50% of total cover: 37.5	5 20% of	total cover:	15	
Woody Vine Stratum (Plot size: 15')				Woody vine – All woody vines greater than 3.28 ft in
1				
·				
<u></u>				
3				
4				Hydrophytic
5		·		Vegetation
	0	= Total Cov	er	Present? Yes No V
50% of total cover: 0	20% of	total cover:	0	
Remarks: (Include photo numbers here or on a separate s	heet.)			

Profile Desc	ription: (Describe to	o the depth	n needed to docum	nent the in	dicator o	or confirm	the absenc	e of indicato	rs.)	
Depth	Matrix		Redo	x Features	1		_			
(inches)	Color (moist)		Color (moist)		Type'	Loc	Texture		Remarks	
0-12	10 YR 4/4	100					SICL			
								_		
<u> </u>										
		•								
1							21	- <u> </u>		
	ncentration, D=Deple	etion, RM=H	Reduced Matrix, MS	S=Masked	Sand Gra	uns.	Location:	PL=Pore Linir	ng, M=Matrix.	dria Saila ³ .
Hydric Soli I			David Overface	(07)			mar			
HIStOSOI	(A1) inadan (A2)		Dark Surface	(S7) Iour Surfoor			4.49)	2 CM IVIUCK (A	(10) (IVILRA 1)	47)
Histic Ep	A_{2}		Polyvalue Be	rfooo (SO)	e (58) (IVI (MI DA 1	LRA 147, ' 47 440)	148)		Redox (A16)	
	$\operatorname{Sulfido}(\Lambda 4)$			d Matrix (E		47, 140)		Diodmont Elo	n, 140) Adalain Saila	(E10)
Tryuroge			Loanny Oleye	riv (F3)	2)			(MI RA 13)	6 147)	(113)
2 cm Mu	ck (A10) (I RR N)		Bedox Dark S	Surface (F6	;)			Very Shallow	Dark Surface	(TF12)
2 on tria	Below Dark Surface	(A11)	Depleted Dar	k Surface (" F7)			Other (Explai	n in Remarks)	(11 12)
Thick Da	rk Surface (A12)	()	Redox Depre	ssions (F8))				,	
Sandy M	ucky Mineral (S1) (LI	RR N,	Iron-Mangan	ese Masses	, s (F12) (l	.RR N,				
MLRA	147, 148)		MLRA 13	6)	· / ·	·				
Sandy G	leyed Matrix (S4)		Umbric Surfa	ce (F13) (N	ILRA 13	6, 122)	³ In	dicators of hy	drophytic veg	etation and
Sandy R	edox (S5)		Piedmont Flo	odplain So	ils (F19)	(MLRA 148	8) v	etland hydrol	ogy must be p	oresent,
Stripped	Matrix (S6)		Red Parent M	laterial (F2	1) (MLR/	A 127, 147)) u	nless disturbe	ed or problema	atic.
Restrictive L	ayer (if observed):									
Туре:										
Depth (inc	hes):						Hydric So	il Present?	Yes	No 🖌
Remarks:	,									
. to mainter										

Project/Site: Guernsey Power Plant	City/County: Gu	ernsey	Sampling Date: 07/20/2016
Applicant/Owner: Guernsey Power Plant		State: OH	Sampling Point: W-C31 PEM
Investigator(s): CV, CS	Section, Townsh	ip, Range: N/A	0
Landform (hillslope terrace etc.). Floodplai	n Local relief (concave	a convex none). Concave	Slope (%): 0-2
Subrogion (LDD or MLDA): LBRN	Lat. 39 933860	long: -81 538038	Otope (78) Datum: NAD 83
Subregion (LRR of MLRA):	Lat:flooded (Sa)		
Soil Map Unit Name: <u>Salarisville Sity Clay loa</u>		NWI classifi	cation:
Are climatic / hydrologic conditions on the site t	vpical for this time of year? Yes	No (If no, explain in F	Remarks.)
Are Vegetation, Soil, or Hydrold	gy significantly disturbed?	Are "Normal Circumstances"	present? Yes 🔽 No
Are Vegetation, Soil, or Hydrold	gy naturally problematic?	(If needed, explain any answe	ers in Remarks.)
SUMMARY OF FINDINGS – Attach	site map showing sampling po	int locations, transect	s, important features, etc.
Hydrophytic Vegetation Present?YesHydric Soil Present?YesWetland Hydrology Present?Yes	✓ No Is the Sam ✓ No within a W	npled Area Vetland? Yes	No
Remarks: Cowardin Code: PEM	HGM: Depressional W	ater Type: RPWWD	
Mosaic wetland system.			
HYDROLOGY			
Wetland Hydrology Indicators:		Secondary Indic	ators (minimum of two required)
Primary Indicators (minimum of one is require	d; check all that apply)	Surface Soi	l Cracks (B6)
Surface Water (A1)	True Aquatic Plants (B14)	Sparsely Ve	egetated Concave Surface (B8)
High Water Table (A2)	Hydrogen Sulfide Odor (C1)	Drainage Pa	atterns (B10)
Saturation (A3)	Oxidized Rhizospheres on Living		Lines (B16)
Sodimont Doposite (B2)	Presence of Reduced Iron (C4)	Crowfish Bu	$\frac{1}{1000} \frac{1}{1000} \frac{1}{1000$
Drift Deposits (B3)	Thin Muck Surface (C7)	Saturation \	(isible on Aerial Imagery (CQ)
Algal Mat or Crust (B4)	Other (Explain in Remarks)	Saturation V	Stressed Plants (D1)
Iron Deposits (B5)			c Position (D2)
Inundation Visible on Aerial Imagery (B7)		Shallow Ag	uitard (D3)
Water-Stained Leaves (B9)		Microtopogr	aphic Relief (D4)
Aquatic Fauna (B13)		FAC-Neutra	l Test (D5)
Field Observations:			
Surface Water Present? Yes No	Depth (inches):		
Water Table Present? Yes No	Depth (inches):		
Saturation Present? Yes No (includes capillary fringe)	Depth (inches):	Wetland Hydrology Prese	nt? Yes 🖌 No
Describe Recorded Data (stream gauge, mon	itoring well, aerial photos, previous inspe	ctions), if available:	
Remarks:			

Sampling Point: W-C31 PEM

	Absolute	Dominant	Indicator	Dominance Test worksheet:
Tree Stratum (Plot size: <u>30</u> ')	% Cover	Species?	Status	Number of Dominant Species
1				That Are OBL, FACW, or FAC: (A)
2.				
3				Total Number of Dominant Species Across All Strate: 1 (P)
4				
4			·	Percent of Dominant Species
5			·	That Are OBL, FACW, or FAC: (A/B)
6				Prevalence Index worksheet
7				Total % Cover of:
	0	= Total Cov	ver	
50% of total cover: <u>0</u>	20% of	total cover	0	OBL species x 1 =
Sapling/Shrub Stratum (Plot size: 15')				FACW species x 2 =
1				FAC species x 3 =
2.				FACU species x 4 =
3.				UPL species x 5 =
4				Column Totals: (A) (B)
4			·	
5			·	Prevalence Index = B/A =
6				Hydrophytic Vegetation Indicators:
7				 1 - Rapid Test for Hydrophytic Vegetation
8				✓ 2 - Dominance Test is >50%
9				
	0	= Total Cov	/er	3 - Prevalence index is ≤ 3.0
50% of total cover: 0	20% of	total cover	0	4 - Morphological Adaptations' (Provide supporting
Herb Stratum (Plot size: 5')				data in Remarks or on a separate sheet)
1 Juncus effusus	60	~	FACW	Problematic Hydrophytic Vegetation ¹ (Explain)
Phleum pratense	20		FACIL	
	- 20		1 700	¹ Indicators of hydric soil and wetland hydrology must
3. Juncus tenuis	10		FAC	be present, unless disturbed or problematic.
4. Carex frankii	10		OBL	Definitions of Four Vegetation Strata:
5				
6.				Tree – Woody plants, excluding vines, 3 in. (7.6 cm) or
7.				height
8				
0			·	Sapling/Shrub – Woody plants, excluding vines, less
9			·	than 3 in. DBH and greater than or equal to 3.28 ft (1
10			·	
11	405		·	Herb - All herbaceous (non-woody) plants, regardless
		= Total Cov	ver	of size, and woody plants less than 3.28 ft tall.
50% of total cover: <u>52.</u>	20% of	total cover	21	Woody vine – All woody vines greater than 3.28 ft in
Woody Vine Stratum (Plot size: 15)				height.
1				
2				
3				
4				
т. <u></u>			·	Hydrophytic
⁵			·	Vegetation Present? Ves V No
		= Total Cov	ver	
	20% 0	total cover		
Remarks: (Include photo numbers here or on a separate s	sheet.)			

Profile Desc	ription: (Describe to	the denth	needed to docum	ent the i	ndicator	or confirm	the absence	e of indicators)
Donth	Motrix		Deday		iaioatoi			
(inches)	Color (moist)	<u>%</u>	Color (moist)	<u>« Features</u> %	Type ¹	loc^2	Texture	Remarks
0-10	10YR 4/2	<u> </u>	7.5YR 4/4	15	C	M/PL	SIC	
10+								Compacted soil
								- <u> </u>
		tion DM D		Maakad	Cond Cr		² l contion.	
	ndicators:			eiviaskeu	Sanu Gr	airis.	Location. r	cators for Problematic Hydric Soils ³
Listood	(44)		Dorle Curfons	(07)			indic	
Histosol	(AI) inodon (A2)		Dark Surface	(SI)	00 (SQ) /N		149)	2 CITI MUCK (ATU) (MERA 147)
Histic Ep	ripedon (AZ)		Folyvalue Bel	dw Sullat		1LKA 147,	140)	
	n Sulfide (ΔA)			d Matrix (I		47, 140)		(MERA 147, 140) Diedmont Floodplain Soils (F10)
Tryuroge				u Matrix (1 riv (E3)	2)		'	(MI PA 136 147)
3tratilieu	ck (A10) (I RR N)		Depleted Mat	Surface (F	6)		,	Very Shallow Dark Surface (TE12)
2 cm Ma	Below Dark Surface	(A11)	Repleted Dark	k Surface	(F7)			Other (Explain in Remarks)
Thick Da	rk Surface (A12)	(,,,,)	Bedox Depres	ssions (F8	() R)			
Sandy M	ucky Mineral (S1) (LI	RR N.	Iron-Mangane	ese Masse	es (F12) (LRR N.		
MLRA	147. 148)	,	MLRA 136	5) 5)	/o (<u>_</u> / (,		
Sandy G	leved Matrix (S4)		Umbric Surfac	, ce (F13) (MLRA 13	6, 122)	³ In	dicators of hydrophytic vegetation and
Sandy R	edox (S5)		Piedmont Flo	odplain So	oils (F19)	(MLRA 14	. 8) w	etland hydrology must be present.
Stripped	Matrix (S6)		Red Parent M	laterial (F:	21) (MLR	A 127, 147	') u	nless disturbed or problematic.
Restrictive L	ayer (if observed):							
Type: Co	mpacted soil							
Depth (inc	hes): <u>10+</u>						Hydric So	il Present? Yes 🖌 No
Remarks:								

Project/Site: Guernsey Power Plant	City/County: Guernsey	Sampling Date: 07/22/2016				
Applicant/Owner: Guernsey Power Plant		Sampling Point: W-C31 PFO				
Investigator(s): CV, CS Section, Township, Range: N/A						
Landform (hillslope, terrace, etc.): Depression	Local relief (concave, convex, none): Concave	Slope (%): 0				
Subregion (LRR or MLRA): LRRN Lat: 39.93348	1 <u>I ong</u> : -81.53862	Datum: NAD 83				
Soil Man Unit Name. Nolin silt loam, 0 to 3 percent slopes, frequencies	uently flooded (No)	eation: PEM1A				
Are climatic / bydrologic conditions on the site typical for this time of	vear? Yes V No (If no explain in R	emarks)				
Are Vegetetion Soil or Hydrology significant	the disturbed?	vrogant2 Van V Na				
Are Vegetation, Soli, or Hydrology significat	Are Normal Circumstances p	resin Demontre)				
Are vegetation, Soil, or Hydrology naturally	problematic? (If needed, explain any answe					
SUMMARY OF FINDINGS – Attach site map showi	ng sampling point locations, transects	, Important features, etc.				
Hydrophytic Vegetation Present? Yes 🖌 No	- Is the Sampled Area					
Hydric Soil Present? Yes Ves No	— within a Wetland? Yes	No				
Wetland Hydrology Present? Yes <u>V</u> No						
Remarks: Cowardin Code: PFO HGM: De	pressional Water Type: RPWWD					
Located in depression below old rail road bed/current	farm road.					
Mapped as part of PEM system; however wetland is F	FO in location of this plot.					
HYDROLOGY						
Wetland Hydrology Indicators:	Secondary Indica	tors (minimum of two required)				
Primary Indicators (minimum of one is required; check all that appl	y) Surface Soil	Cracks (B6)				
✓ Surface Water (A1) ✓ True Aquation	Plants (B14) Sparsely Veg	getated Concave Surface (B8)				
High Water Table (A2) Hydrogen Si	ulfide Odor (C1) <pre> ✓ Drainage Pat </pre>	tterns (B10)				
Saturation (A3) Oxidized Rh	zospheres on Living Roots (C3) Moss Trim Li	ines (B16)				
Water Marks (B1) Presence of	Reduced Iron (C4) Dry-Season	Water Table (C2)				
Sediment Deposits (B2) Recent Iron	Reduction in Tilled Soils (C6) Crayfish Burr	rows (C8)				
Drift Deposits (B3) Thin Muck S	urface (C7) Saturation Vi	sible on Aerial Imagery (C9)				
Algal Mat or Crust (B4) Other (Expla	in in Remarks) Stunted or Si	tressed Plants (D1)				
Iron Deposits (B5)		Position (D2)				
Inundation Visible on Aerial Imagery (B7)		Itard (D3)				
Aquatic Found (B13)		Tost (D5)				
Field Observations:						
Surface Water Present? Yes V No Depth (inch	_{es)} . 2-12					
Water Table Present? Yes V No Depth (inch	es): 0					
Saturation Present? Yes <u>V</u> No Depth (inch	es):0 Wetland Hydrology Presen	nt? Yes 🖌 No				
(includes capillary fringe)	otos previous inspections), if available:					
Describe Recorded Data (sitean gauge, monitoring weil, aenai pri	olos, previous inspections), il available.					
Remarks:						

Sampling Point: W-C31 PFO

	Absolute	Dominant	Indicator	Dominance Test worksheet
Tree Stratum (Plot size: 30')	% Cover	Species?	Status	Number of Deminent Chasics
Acer saccharinum	20	~	FACW	That Are OBL EACW or EAC 6 (A)
	10	~		
2. <u>Salix Higra</u>	10			Total Number of Dominant
3				Species Across All Strata:6 (B)
4.				
5				Percent of Dominant Species
<u> </u>			·	That Are OBL, FACW, or FAC: (A/B)
6			·	Brovalance Index workshoot:
7				
	30	= Total Cov	/er	Total % Cover of: Multiply by:
50% of total cover: 15	20% of	total cover	6	OBL species x 1 =
Sapling/Shrub Stratum (Plot size: 15'				FACW species x 2 =
Saping/Sindo Stratum (Flot size)	20			
	20			
2				FACU species x 4 =
3.				UPL species x 5 =
1				Column Totals: (A) (B)
4			·	
5				Prevalence Index = B/A =
6				Hydrophytic Vegetation Indicators:
7.			_	
				1 - Rapid Test for Hydrophytic Vegetation
o			·	✓ 2 - Dominance Test is >50%
9				3 - Prevalence Index is $\leq 3.0^{1}$
	20	= Total Cov	/er	A Morphological Adaptations ¹ (Dravide supporting
50% of total cover: 10	20% of	total cover	4	4 - Morphological Adaptations (Provide supporting
Herb Stratum (Plot size: 5')	_			data in Remarks or on a separate sheet)
	20		OBI	Problematic Hydrophytic Vegetation ¹ (Explain)
1. Acorus calalitus				
2. Nuphar advena	20	<u> </u>	OBL	
3. Leersia oryzoides	15	~	OBL	he present unless disturbed or problematic
A Persicaria hydropiper	10		OBL	be present, unless disturbed of problematic.
- Verbesina alternifolia	5		- <u></u>	Definitions of Four Vegetation Strata:
			FAC	Tree Mondy planta avaluding vince 2 in (7.6 cm) or
6				more in diameter at breast height (DBH), regardless of
7.				height.
°				
0			·	Sapling/Shrub – Woody plants, excluding vines, less
9				than 3 in. DBH and greater than or equal to 3.28 ft (1
10				m) tall.
11.				Harb All borbassaus (non woody) planta, regardlaga
	70	- Total Cov		of size, and woody plants less than 3.28 ft tall
50% of total cover: 35	20% of		. 14	
50% of total cover	20 % 01			Woody vine - All woody vines greater than 3.28 ft in
Woody Vine Stratum (Plot size: 10)				height.
1				
2.				
3				
			·	
4			·	Hydrophytic
5				Vegetation
	0	= Total Cov	ver	Present? Yes V No
50% of total cover: 0	20% of	total cover	. 0	
Pomarks: (Include photo numbers here or on a separate s	hoot)			
remarks. (include photo numbers here of on a separate s	neet.)			

Profile Desc	ription: (Describe t	o the dept	h needed to docum	ent the i	ndicator	or confirm	the absence of	of indicators	s.)	
Depth	Matrix		Redox	Feature	S					
(inches)	Color (moist)		Color (moist)	%	_Type ¹	Loc ²	<u>Texture</u>		Remarks	
0-4	10YR 3/1	100					MK			
4-12	10YR 3/2	90	10YR 4/6	10	C	M	SIC			
	1011(0/2				<u> </u>					
$\frac{1}{1}$	ncentration D-Denl	otion RM-	Reduced Matrix MS	-Maskod	I Sand Gr	aine	² Location: PL	-Pore Lining	a M-Matrix	
Hydric Soil L	ndicators:			-IVIASKEL		air 15.	Indicat	ors for Pro	g, M=Maink.	ric Soils ³ .
	(4.4)		Darily Curford	(07)			indicat			
Histosol	(A1) in a dam (AQ)		Dark Surface	(57) aux Curta	aa (CO) (<u> </u>	m Wuck (Al	10) (IVILRA 147 Dedau (A4C))
HISTIC EP	ipedon (AZ)		Polyvalue Bel	ow Suna taaa (CO)	Ce (58) (N	ILRA 147,	148) Co			
Black His	STIC (A3)			Tace (59)) (IVILKA 1	47, 148)			, 148) Idalain Caila (F	40)
Hydrogel			Loany Gleyed		FZ)					19)
				lix (F3) Surface (E	(C)			WILKA 130	, 141) Dark Surfaga (*	
Z CIT Mu	CK (ATU) (LKK N) I Bolow Dork Surfood	(111)	Redux Dark S	Surface (F	·0) (E7)			ry Snallow L	Dark Surface (1 F 12)
	I BEIOW DAIK SUITACE	(ATT)	Depleted Dark		(<i>Г1</i>)		Ou	ier (Explain	i in Remarks)	
Thick Da	ucky Minoral (S1)		Redux Depres		0) 00 (E12) (
	147 149)	KK N,			es (F12) (LKK N,				
IVILKA Sondy C	141, 140)		WILKA 130)) 00 (E12) (6 122)	³ India	otoro of hur	drophytic vocat	ation and
Sandy B	odox (SE)		Onblic Surac			0, 122) (MI DA 14)	8) woth	and bydrolo	and physic veget	alion and
Sanuy K	Motrix (S6)		Piedinoni Floo	Jupiain S Intorial (E	015 (F19) 21) (MI D	(IVILICA 140		anu nyuruu	d or problomati	o o
Supped	aver (if observed):			iateriai (i		A 127, 147) une			0.
T	ayer (il observeu).									
Type:										
Depth (inc	:hes):						Hydric Soil F	'resent?	Yes 🔽	No
Remarks:							•			
Due to wate	er depth soil prob	be taken	at wetland edge.							

Project/Site: Guernsey Power Plant	City/County: Guernsey	S	ampling Date: <u>07/20/2016</u>			
Applicant/Owner: Guernsey Power Plant		_ _{State:} OH	Sampling Point: W-C32			
Investigator(s): CV, CS	Section, Township, Range: <u>N/</u>	A				
Landform (hillslope, terrace, etc.): Floodplain	ocal relief (concave, convex, nor	ne): Concave	Slope (%): <u>0-2</u>			
Subregion (LRR or MLRA): LRRN Lat: 39.933191	Long: <u>-81</u> .	.53707	Datum: NAD 83			
Soil Map Unit Name: Sarahsville silty clay loam, frequently floode	ed (Sa)	NWI classificati	_{on:} None			
Are climatic / hydrologic conditions on the site typical for this time of y	rear? Yes 🖌 No (If no, explain in Rem	narks.)			
Are Vegetation, Soil, or Hydrology significantly	y disturbed? Are "Normal	Circumstances" pres	sent? Yes 🖌 No			
Are Vegetation, Soil, or Hydrology naturally pl	roblematic? (If needed, e	xplain any answers i	in Remarks.)			
SUMMARY OF FINDINGS – Attach site map showing sampling point locations, transects, important features, etc.						
Hydrophytic Vegetation Present? Yes Vo						

Hydrophytic Hydric Soil F Wetland Hyc	Vegetation Present? resent? rology Present?	Yes _ Yes _ Yes _	v v v	No No No	Is the Sampled Area within a Wetland?	Yes _	~	No
Remarks:	Cowardin Code: PEN	1		HGM: Depressio	nal Water Type: RP	WWD		

Wetland Hydrology Indicators:	Secondary Indicators (minimum of two required)
Primary Indicators (minimum of one is required; check all that apply)	Surface Soil Cracks (B6)
	 Sparsely Vegetated Concave Surface (B8) Drainage Patterns (B10) Moss Trim Lines (B16) Dry-Season Water Table (C2) ils (C6) Crayfish Burrows (C8)
 Drift Deposits (B3) Algal Mat or Crust (B4) Iron Deposits (B5) Inundation Visible on Aerial Imagery (B7) Water-Stained Leaves (B9) Aquatic Fauna (B13) 	 Saturation Visible on Aerial Imagery (C9) Stunted or Stressed Plants (D1) Geomorphic Position (D2) 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): Saturation Present? Yes No Depth (inches): (includes capillary fringe) Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspect	Wetland Hydrology Present? Yes <u>V</u> No ions), if available:
Remarks:	

Sampling Point: W-C32

	Absolute	• Dominant	Indicator	Dominance Test worksheet:
Tree Stratum (Plot size: 30')	% Cover	Species?	Status	Number of Deminant Species
1				That Are OBL_EACW_or EAC· 1 (A)
··	-	•		
2		·		Total Number of Dominant
3				Species Across All Strata: 1 (B)
4				
5.				That Aro OBL EACW or EAC: 100 (A/B)
6				
				Prevalence Index worksheet:
7				Total % Covor of: Multiply by:
	0	= Total Cov	er	
50% of total cover: <u>0</u>	20% o	f total cover	0	OBL species x 1 =
Sapling/Shrub Stratum (Plot size: 15')				FACW species x 2 =
1				FAC species x 3 =
··		·		FACU species x 4 =
2				
3		. <u> </u>		UPL species X 5 =
4				Column Totals: (A) (B)
5.				
6.				Prevalence Index = B/A =
		·		Hydrophytic Vegetation Indicators:
7				1 - Rapid Test for Hydrophytic Vegetation
8				\mathbf{V} 2 Dominance Test is $\geq 50\%$
9				2 - Dominance Test is >50%
	0	- Total Ca		3 - Prevalence Index is ≤3.0'
				4 - Morphological Adaptations ¹ (Provide supporting
50% of total cover:	20% 0	r total cover		data in Remarks or on a separate sheet)
Herb Stratum (Plot size:)				Problematic Hydrophytic Vegetation ¹ (Evaluin)
1. Juncus effusus	60	<u> </u>	FACW	
2 Phleum pratense	20		FACU	
2 Juncus tenuis	15	• •	FAC	¹ Indicators of hydric soil and wetland hydrology must
<u>Corox frankii</u>	10	·		be present, unless disturbed or problematic.
	10			Definitions of Four Vegetation Strata:
5				
6.				Tree – Woody plants, excluding vines, 3 in. (7.6 cm) or
7				more in diameter at breast height (DBH), regardless of
/:				neight.
8				Sapling/Shrub – Woody plants, excluding vines, less
9				than 3 in. DBH and greater than or equal to 3.28 ft (1
10				m) tall.
11.				
	105	Total Car		nerb – All nerbaceous (non-woody) plants, regardless
E0% of total anyon 52	5 200/ 0		21	
50% Of total cover. <u>32.</u>	20%0	l lotal cover	21	Woody vine – All woody vines greater than 3.28 ft in
Woody Vine Stratum (Plot size: 13				height.
1				
2				
3				
0				
4				Hydrophytic
5				Vegetation
	0	= Total Cov	er	Present? Yes V No
50% of total cover:0	20% o	f total cover	0	
Remarks: (Include photo numbers here or on a separate s	heet)			
	1000.)			

Profile Desc	ription: (Describe t	o the dent	h needed to docum	ent the ir	ndicator	or confirm	the absence	e of indicato	rs.)	
Donth	Motrix	e ine dopi	Rodov		laioatoi				,	
(inches)	Color (moist)	%	Color (moist)	<u>«reatures</u> %	Type ¹	loc^2	Texture		Remarks	
0-10	10YR 4/2	85	7.5YR 4/4	15	C	M/PL	SIC		rtemante	
10+						·			Compacte	d soil
						·			Compacie	
						·				
						·				
						·		· · · · · · · · · · · · · · · · · · ·		
				-Mackad	Sand Gr		² Location:		a M-Matrix	
Hydric Soil I	ndicators		Reduced Matrix, Mo	eiviaskeu	Sanu Gr	all 15.		ators for Pr	oblematic H	vdric Soils ³
Histosol	(A1)		Dark Surface	(97)				2 cm Muck (A		(47)
Histic En	(A1) Jinedon (A2)		Polyvalue Bel	ow Surfac	e (S8) (N	AI RA 147	148)	Coast Prairie		(<i>41</i>)
Black His	stic (A3)		Thin Dark Su	face (S9)	(MLRA 1	47. 148)	(140) <u> </u>	(MLRA 147	7. 148)	
Hydroge	n Sulfide (A4)		Loamy Gleve	d Matrix (F	=2)	,,	1	Piedmont Flo	odplain Soils	(F19)
Stratified	Layers (A5)		Depleted Mat	rix (F3)	,			(MLRA 136	6, 147)	` ,
2 cm Mu	ck (A10) (LRR N)		Redox Dark S	Surface (F	6)		`	Very Shallow	Dark Surface	e (TF12)
Depleted	Below Dark Surface	e (A11)	Depleted Darl	k Surface	(F7)		(Other (Explai	n in Remarks	5)
Thick Da	rk Surface (A12)		Redox Depres	ssions (F8	3)					
Sandy M	lucky Mineral (S1) (L	RR N,	Iron-Mangane	ese Masse	es (F12) (LRR N,				
	147, 148)		MLRA 136	5) (F40) (1			3.			
Sandy G	leyed Matrix (S4)		Umbric Surfac	ce (F13) (I adalaia Sc		(MIDA 44)	-In •	dicators of hy	drophytic ve	getation and
Sanuy R	Matrix (S6)		Pleamont Floo	ouplain Sc Intorial (EC	DIIS (F19)	(IVILKA 140	o) w	eliano nyoror aloss disturbo	ogy must be	present,
Bestrictive I	aver (if observed):					A 127, 147) ui I			
	mpacted soil									
Dopth (inc	$\frac{10+}{10+}$						Liveria Cai	I Dresent?	Vac V	No
Depth (inc	nes): 101						Hydric Sol	Il Present?	res_	NO
Remarks:										

Project/Site: Guernsey Power Plant	City/County: Guernsey	Sampling Date: 07/20/2016
Applicant/Owner: Guernsey Power Plant	Si	tate: OH Sampling Point: W-C32 UP
Investigator(s): CV, CS	Section, Township, Range: N/A	
Landform (hillslope, terrace, etc.): Floodplain	cal relief (concave, convex, none):	Linear Slope (%): 0
Subregion (LRR or MLRA): LRRN Lat: 39.933318	Long: -81.53	7897 Datum: NAD 83
Soil Map Unit Name: Sarahsville silty clay loam, frequently floode	d (Sa)	NWI classification: None
Are climatic / hydrologic conditions on the site typical for this time of ye	ear? Yes 🔽 No (If no	o, explain in Remarks.)
Are Vegetation, Soil, or Hydrology significantly	disturbed? Are "Normal Cire	cumstances" present? Yes 🗾 No
Are Vegetation, Soil, or Hydrology naturally pr	oblematic? (If needed, expla	ain any answers in Remarks.)
SUMMARY OF FINDINGS – Attach site map showing	sampling point locations	, transects, important features, etc.

Hydrophytic Vegetation Present? Hydric Soil Present? Wetland Hydrology Present?	Yes Yes Yes	No No No	Is the Sampled Area within a Wetland?	Yes	No	<u>~</u>
Remarks: Cowardin Code: UP	LAND					

Wetland Hydrology Indicators:	Secondary Indicators (minimum of two required)
Primary Indicators (minimum of one is required; check all that apply)	Surface Soil Cracks (B6)
 Surface Water (A1) High Water Table (A2) Saturation (A3) Water Marks (B1) Sediment Deposits (B2) Drift Deposits (B3) Algal Mat or Crust (B4) Iron Deposits (B5) Inundation Visible on Aerial Imagery (B7) Water Fauna (B13) 	 Sparsely Vegetated Concave Surface (B8) 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) Geomorphic Position (D2) 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):	
Saturation Present? Yes No <u>✓</u> Depth (inches): (includes capillary fringe)	Wetland Hydrology Present? Yes No
Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspec	tions), if available:
Remarks:	

Sampling Point: W-C32 UP

001	Absolute	Dominant	Indicator	Dominance Test worksheet:
Tree Stratum (Plot size: 30)	% Cover	Species?	Status	Number of Dominant Species
1				That Are OBL, FACW, or FAC:0 (A)
2				Total Number of Dominant
3				Species Across All Strata: 3 (B)
4.				
5				Percent of Dominant Species
6		·		That Are OBL, FACW, or FAC: (A/B)
0		·		Prevalence Index worksheet:
/				Total % Cover of: Multiply by:
		= Total Cov	er	OBL species x1-
50% of total cover: 0	20% of	total cover:		
Sapling/Shrub Stratum (Plot size: 15)				FACW species x z =
1				FAC species X 3 =
2				FACU species x 4 =
3				UPL species x 5 =
4.				Column Totals: (A) (B)
5				
6				Prevalence Index = B/A =
7		·		Hydrophytic Vegetation Indicators:
		·		1 - Rapid Test for Hydrophytic Vegetation
8				2 - Dominance Test is >50%
9		·		3 - Prevalence Index is $≤3.0^{1}$
	0	= Total Cov	er	4 - Morphological Adaptations ¹ (Provide supporting
50% of total cover: 0	20% of	total cover:	0	data in Remarks or on a separate sheet)
Herb Stratum (Plot size: 5')				Dark la se stie Unders ha tie) (a se fai ale sheet)
1. Trifolium pratense	30	<u> </u>	FACU	Problematic Hydrophytic Vegetation (Explain)
2. Dactylis glomerata	15	~	FACU	
3. Vernonia angustifolia	15	~	FACU	¹ Indicators of hydric soil and wetland hydrology must
₄ Cichorium intybus	10		FACU	be present, unless disturbed or problematic.
F. Rubus allegheniensis	5		FACU	Definitions of Four Vegetation Strata:
		•	1 700	Tree – Woody plants, excluding vines, 3 in, (7.6 cm) or
6		·		more in diameter at breast height (DBH), regardless of
7				height.
8		. <u> </u>		Sapling/Shrub – Woody plants, excluding vines, less
9				than 3 in. DBH and greater than or equal to 3.28 ft (1
10				m) tall.
11				Herb - All herbaceous (non-woody) plants, regardless
	75	= Total Cov	er	of size, and woody plants less than 3.28 ft tall.
50% of total cover: 37.5	5 20% of	total cover:	15	
Woody Vine Stratum (Plot size: 15')				Woody vine – All woody vines greater than 3.28 ft in
1				
·				
<u></u>				
3				
4				Hydrophytic
5		·		Vegetation
	0	= Total Cov	er	Present? Yes No V
50% of total cover: 0	20% of	total cover:	0	
Remarks: (Include photo numbers here or on a separate s	heet.)			

Profile Description	: (Describe to	o the depth	n needed to docun	nent the ir	dicator o	or confirm	n the absence of indicators.)
Depth	Matrix		Redo	K Features	1		
(inches) Col	or (moist)		Color (moist)		Type'	Loc	Texture Remarks
0-12 10) YR 4/4						SICL
·							
·							
	ation D Donk		Deduced Metrix MC	Maakad	Cond Cro		² Lagation, DL Data Lining M Matrix
Hydric Soil Indicate	alion, D=Depie	elion, rivi=r		s=iviaskeu	Sand Gra	uns.	Indicators for Problematic Hydric Soils ³ :
	515.			(07)			
Histosol (A1)	(4.0)		Dark Surface	(\$7)	. (00) (1)		2 cm Muck (A10) (MLRA 147)
Histic Epipedon	(A2)		Polyvalue Be	low Surfac	e (58) (IV	LRA 147,	, 148) Coast Prairie Redox (A16)
Black Histic (A3) - (A A)			nace (S9)		47, 148)	(MLRA 147, 148)
Hydrogen Sulfid	le (A4)		Loamy Gleye	d Matrix (F	-2)		Piedmont Floodplain Soils (F19)
Stratified Layers	s (A5)		Depleted Mat	rix (F3)	-		(MLRA 136, 147)
2 cm Muck (A10)) (LRR N)	()	Redox Dark S	Surface (F) (F7)		Very Shallow Dark Surface (TF12)
	Dark Surface	(A11)	Depleted Dar	k Sunace	(F7)		Other (Explain in Remarks)
Thick Dark Suff	ace (A12)		Redox Depre	SSIONS (F8) - (E40) (
	ineral (51) (LI	KKN,		ese masse	S (F12) (I	_RR N,	
WILRA 147, 1	48)		WILRA 13) 		C 400)	3 adiantana af hudean hutia un actation and
Sandy Gleyed N	hatrix (54)		Umbric Surra	ce (F13) (I administration Ca		$(\mathbf{M} \ \mathbf{D} \ \mathbf{A} \ \mathbf{A})$	Indicators of hydrophytic vegetation and
Sandy Redox (S	(CC)		Pleamont Flo	oopiain Sc		(IVILRA 14	48) wetland hydrology must be present,
Stripped Matrix	(56)		Red Parent N	laterial (F2		4 127, 147	() unless disturbed or problematic.
Restrictive Layer (I	r observed):						
Туре:			_				
Depth (inches):							Hydric Soil Present? Yes No _
Remarks:							

Project/Site: Guernsey Power Plant	City/County: Guernsey	Sampling Date: 07/21/2016			
Applicant/Owner: Guernsey Power Plant	State: OH	Sampling Point: W-C33			
Investigator(s): CV, CS	_ Section, Township, Range: <u></u>				
Landform (hillslope, terrace, etc.): Hillslope	ocal relief (concave, convex, none): <u>Concave</u>	Slope (%): <u>0-4</u>			
Subregion (LRR or MLRA): LRRN Lat: 39.934222	Long: -81.533812	Datum: NAD 83			
Soil Map Unit Name: Mentor silt loam, 2 to 8 percent slopes (Me	B) NWI classifie	cation: PEM1A			
Are climatic / hydrologic conditions on the site typical for this time of y	/ear? Yes 🔽 No (If no, explain in F	Remarks.)			
Are Vegetation, Soil, or Hydrology significantly	y disturbed? Are "Normal Circumstances"	present? Yes 🖌 No			
Are Vegetation, Soil, or Hydrology naturally pr	roblematic? (If needed, explain any answers in Remarks.)				
SUMMARY OF FINDINGS – Attach site map showing	g sampling point locations, transects	s, important features, etc.			
Hydrophytic Vegetation Present? Yes <u>Ves</u> No	- Is the Sampled Area				

Hydrophytic V Hydric Soil P Wetland Hyd	/egetation Present? resent? rology Present?	Yes _ Yes _ Yes _	<i>v</i> <i>v</i> <i>v</i>	No No No	Is the Sampled Area within a Wetland?	Yes _	<u>~</u>	No
Remarks:	Cowardin Code: PEM			HGM: Slope	Water Type: RPV	VWN		

Primary Indicators (minimum of one is required; check all that apply)
High Water Table (A2) Hydrogen Sulfide Odor (C1) Drainage Patterns (B10) Saturation (A3) ✓ Oxidized Rhizospheres on Living Roots (C3) Moss Trim Lines (B16) Water Marks (B1) Presence of Reduced Iron (C4) Dry-Season Water Table (C2) Sediment Deposits (B2) Recent Iron Reduction in Tilled Soils (C6) Crayfish Burrows (C8) Drift Deposits (B3) Thin Muck Surface (C7) Saturation Visible on Aerial Imagery (C9)
Water Marks (B1) Presence of Reduced Iron (C4) Dry-Season Water Table (C2) Sediment Deposits (B2) Recent Iron Reduction in Tilled Soils (C6) Crayfish Burrows (C8) Drift Deposits (B3) Thin Muck Surface (C7) Saturation Visible on Aerial Imagery (C9) Algal Mat or Crust (B4) Other (Explain in Remarks) Stunted or Stresson Plants (D1)
Sediment Deposits (B2) Recent Iron Reduction in Tilled Soils (C6) Crayfish Burrows (C8) Drift Deposits (B3) Thin Muck Surface (C7) Saturation Visible on Aerial Imagery (C9) Algal Mat or Crust (B4) Other (Explain in Remarks) Stunted or Stressed Plants (D1)
Drift Deposits (B3) Thin Muck Surface (C7) Saturation Visible on Aerial Imagery (C9)
Algal Mat or Cruet (P4) Other (Explain in Permarke) Stunted or Stressed Plante (D1)
Iron Deposits (B5) Geomorphic Position (D2)
Inundation Visible on Aerial Imagery (B7) Shallow Aquitard (D3)
Water-Stained Leaves (B9) Microtopographic Relief (D4)
Aquatic Fauna (B13) FAC-Neutral Test (D5)
Field Observations:
Surface Water Present? Yes No Depth (inches):
Water Table Present? Yes No Depth (inches):
Saturation Present? Yes No Ves Depth (inches): Wetland Hydrology Present? Yes No No
Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available:
Remarks:

Sampling Point: W-C33

, ,	Absolute	• Dominant	Indicator	Dominance Test worksheet:
Tree Stratum (Plot size: 30')	% Cover	Species?	Status	Number of Dominant Species
1				That Are OBL_EACW_or EAC: 2 (A)
·		·	•	
2		·	·	Total Number of Dominant
3				Species Across All Strata: (B)
4				
5.				That Aro OBL EACIAL or EAC: 100 (A/B)
6		·	·	
			·	Prevalence Index worksheet:
/			·	Total % Cover of Multiply by:
		= Total Co	/er	
50% of total cover: 0	20% of	f total cover	:	OBL species X 1 =
Sapling/Shrub Stratum (Plot size: 15')				FACW species x 2 =
1.				FAC species x 3 =
3				FACU species x 4 =
2		·	·	LIPL species x 5 =
3		·	·	
4			·	Column Totals: (A) (B)
5				Drevelence Index D/A
6.				
7			·	Hydrophytic Vegetation Indicators:
/·		·	·	1 - Rapid Test for Hydrophytic Vegetation
8			·	✓ 2 - Dominance Test is >50%
9				3 - Prevalence Index is < 3.01
	0	= Total Co	/er	5 - Hevalence index is ±0.0
50% of total cover: 0	20% of	f total cover	: 0	4 - Morphological Adaptations' (Provide supporting
Herb Stratum (Plot size: 5')				data in Remarks or on a separate sheet)
Echipochloa crus-galli	40	~	FAC	Problematic Hydrophytic Vegetation ¹ (Explain)
		·		
2. Leersia oryzoides	20	<u> </u>	OBL	¹ Indiantara of hydria cail and watland hydrology must
3. Carex frankii	15		OBL	he present unless disturbed or problematic
4 Juncus effusus	15		FACW	
Carex vulpinoidea	10			Definitions of Four Vegetation Strata:
Deroicerio hydroninor	10	·		Tree – Woody plants, excluding vines 3 in (7.6 cm) or
6. Persicana nyuropiper	10	·	·	more in diameter at breast height (DBH), regardless of
7				height.
8.				
9				Sapling/Shrub – Woody plants, excluding vines, less
40		·	·	m) tall
10		·		
11		·	·	Herb – All herbaceous (non-woody) plants, regardless
	110	= Total Co	/er	of size, and woody plants less than 3.28 ft tall.
50% of total cover: 55	20% of	f total cover	<u>: 22</u>	
Woody Vine Stratum (Plot size: 15')				woody vine – All woody vines greater than 3.28 ft in
, 1				
··		•	•	
۷		·	·	
3				
4				Hydrophytic
5.				Vegetation
	0	- Total Co		Present? Yes V No
50% of total cover: 0	20% of	f total cover	. 0	
50% 01 total cover	20 /8 0			
I Remarke: (Include photo numbers here or on a separate s	1 1			
	sheet.)			
	sheet.)			
	heet.)			

Profile Desc	ription: (Describe to	o the deptl	h needed to docun	nent the i	ndicator	or confirm	the absence	of indicato	rs.)	
Depth	Matrix		Redox	K Features	5					
(inches)	Color (moist)		Color (moist)			Loc ²	Texture		Remarks	
0-16	2.5Y 4/1	85	7.5 YR 4/4	15	С	M/PL	CL			
		·				·				
		·				·				
						·				
		·				·				
		·				·				
						·				
1							2			
Type: C=Co	oncentration, D=Deple	etion, RM=I	Reduced Matrix, MS	s=Masked	Sand Gr	ains.	Location: P	L=Pore Linir	ng, M=Matrix.	Collo ³
	nuicators:			(0-)			indica			; 50115 :
Histosol	(A1)		Dark Surface	(S7) Iaur Curta			$-\frac{2}{2}$	CM MUCK (A	(MLRA 147)	
HISTIC Ep	olpedon (A2)		Polyvalue Be	IOW SUITA	Ce (58) (N	/ILRA 147,	148)		Redox (A16)	
	STIC (A3)			nace (59) d Motrix (147, 148)	П	(IVILKA 14)	1, 148) Indelain Saila (510	n)
Hyuroge				u Matrix (riv (E2)	⊢∠)		r		147))
	r Layers (AS) ock (A10) (I RR N)		Depleted Mat	lik (F3) Surface (F	6)		V		Dark Surface (TF	(12)
Depleter	Below Dark Surface	(A11)	Depleted Dark	k Surface	(F7)		— ů	ther (Explai	n in Remarks)	12)
Thick Da	ark Surface (A12)	() (1)	Redox Depre	ssions (F	() B)		_ •		in in Romano)	
Sandy M	luckv Mineral (S1) (Ll	RR N.	Iron-Mangane	ese Masse	es (F12) (LRR N.				
MLRA	147, 148)	,		5)		,				
Sandy G	leyed Matrix (S4)		Umbric Surfa	, ce (F13) (MLRA 13	86, 122)	³ Ind	icators of hy	drophytic vegetat	ion and
Sandy R	edox (S5)		Piedmont Flo	odplain S	oils (F19)	(MLRA 14	8) we	tland hydrol	ogy must be pres	ent,
Stripped	Matrix (S6)		Red Parent M	laterial (F	21) (MLR	A 127, 147) un	less disturbe	ed or problematic.	
Restrictive L	ayer (if observed):									
Туре:										
Depth (inc	ches):						Hydric Soil	Present?	Yes 🖌 N	o
Remarks:							1			

Project/Site: Guernsey Power Plant	City/County: Guernsey	Sampling Date: 07	7/21/2016			
Applicant/Owner: Guernsey Power Plant	Sta	ate: OH Sampling Point:	W-C34			
Investigator(s): CV, CS	Section, Township, Range: N/A					
Landform (hillslope, terrace, etc.): Hillslope	ocal relief (concave, convex, none):	Concave Slope	(%): 0-4			
Subregion (LRR or MLRA): LRRN Lat: 39.934467	_{Long:} -81.534	743 Datum:	NAD 83			
Soil Map Unit Name: Mentor silt loam, 2 to 8 percent slopes (MeE	3)	NWI classification: PEM1A				
Are climatic / hydrologic conditions on the site typical for this time of year? Yes No (If no, explain in Remarks.)						
Are Vegetation, Soil, or Hydrology significantly	/ disturbed? Are "Normal Circ	umstances" present? Yes 🗹	No			
Are Vegetation, Soil, or Hydrology naturally pr	oblematic? (If needed, explain	n any answers in Remarks.)				
SUMMARY OF FINDINGS – Attach site map showing sampling point locations, transects, important features, etc.						
Hydrophytic Vegetation Present? Yes No	La the Complete Area					

Hydrophytic Hydric Soil F Wetland Hyd	Vegetation Present? resent? rology Present?	Yes Yes Yes	レ レ レ	_ No _ No _ No	Is the Sampled Area within a Wetland?	Yes _	~	No
Remarks:	Cowardin Code: PEN	1		HGM: Slope	Water Type: RPV	VWN		

Wetland Hydrology Indicators:	Secondary Indicators (minimum of two required)					
Primary Indicators (minimum of one is required; check all that apply)	Surface Soil Cracks (B6)					
✓ Surface Water (A1) True Aquatic Plants (B14)	Sparsely Vegetated Concave Surface (B8)					
✓ High Water Table (A2) Hydrogen Sulfide Odor (C1)	Drainage Patterns (B10)					
✓ Saturation (A3) ✓ Oxidized Rhizospheres on Living Ro	ots (C3) Moss Trim Lines (B16)					
Water Marks (B1) Presence of Reduced Iron (C4)	Dry-Season Water Table (C2)					
Sediment Deposits (B2) Recent Iron Reduction in Tilled Soils	(C6) Crayfish Burrows (C8)					
Drift Deposits (B3) Thin Muck Surface (C7)	Saturation Visible on Aerial Imagery (C9)					
Algal Mat or Crust (B4) Other (Explain in Remarks)	Stunted or Stressed Plants (D1)					
Iron Deposits (B5)	Geomorphic Position (D2)					
Inundation Visible on Aerial Imagery (B7)	Shallow Aquitard (D3)					
Water-Stained Leaves (B9)	Microtopographic Relief (D4)					
Aquatic Fauna (B13) FAC-Neutral Test (D5)						
Field Observations:						
Surface Water Present? Yes 🖌 No Depth (inches):4						
Water Table Present? Yes <u>V</u> No Depth (inches): 0						
Saturation Present? Yes <u>V</u> No Depth (inches): 0	Vetland Hydrology Present? Yes <u>V</u> No					
Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available:						
Remarks:						
,	Abaoluto	Dominont	Indiaator	Dominance Test worksheet:		
---	----------	---------------	-------------	--		
Tree Stratum (Plot size: 30')	% Cover	Species?	Status	Dominance Test worksneet.		
1	/0 0010.			Number of Dominant Species		
' <u></u> -			·			
2				Total Number of Dominant		
3				Species Across All Strata: <u>2</u> (B)		
4						
5				Percent of Dominant Species		
<u>.</u>				That Are OBL, FACW, of FAC:(A/B)		
0		·	• ——	Prevalence Index worksheet:		
7				Total % Covor of: Multiply by:		
	0	= Total Co	/er			
50% of total cover: <u>0</u>	20% of	f total cover	:0	OBL species x 1 =		
Sapling/Shrub Stratum (Plot size: 15')				FACW species x 2 =		
1				FAC species x 3 =		
··		·		FACU species x 4 =		
Z						
3		·				
4				Column Totals: (A) (B)		
5				Drevelance in dayD/A		
6				Prevalence Index = B/A =		
7		• •		Hydrophytic Vegetation Indicators:		
/ ·		·		✓ 1 - Rapid Test for Hydrophytic Vegetation		
8				✓ 2 - Dominance Test is >50%		
9		<u> </u>		$\frac{1}{2} = \frac{1}{2} = \frac{1}$		
	0	= Total Co	/er	3 - Prevalence index is ≤3.0		
50% of total cover: 0	20% of	f total cover	. 0	4 - Morphological Adaptations' (Provide supporting		
Herb Stratum (Plot cize: 5'				data in Remarks or on a separate sheet)		
Herb Stratum (Piot size)	40		FACW	Problematic Hydrophytic Vegetation ¹ (Explain)		
	40	· <u>· ·</u>				
2. Persicaria hydropiper	20	<u> </u>	OBL			
3. Carex vulpinoidea	15		OBL	he present unless disturbed or problematic		
A Echinochloa crus-galli	15		FAC	be present, unless disturbed of problematic.		
- Nuphar advena	10	·		Definitions of Four Vegetation Strata:		
5. Tupital datona	10	·		Tree – Woody plants, excluding vines 3 in (7.6 cm) or		
6. Eupatonum perioriatum		·		more in diameter at breast height (DBH), regardless of		
7. Acorus calamus	5		OBL	height.		
8						
9				Sapling/Shrub – Woody plants, excluding vines, less		
		·		m) tall		
10		·				
11				Herb – All herbaceous (non-woody) plants, regardless		
		= Total Co	/er	of size, and woody plants less than 3.28 ft tall.		
50% of total cover: <u>57.5</u>	5 20% of	f total cover	: <u>23</u>	We should a Allow should be made to the solution		
Woody Vine Stratum (Plot size: 15')				woody vine – All woody vines greater than 3.28 it in		
1						
1		·				
۲		·				
3						
4				Hydronbytic		
5.				Vegetation		
	0	- Total Co		Present? Yes V No		
50% of total cover:	20% of	f total cover	. 0			
	20 78 01					
Remarks: (Include photo numbers here or on a separate s	heet.)					

Profile Desc	ription: (Describe to	o the dept	h needed to docum	nent the in	ndicator	or confirm	the absence	of indicato	rs.)	
Depth	Matrix		Redox	Features	6					
(inches)	Color (moist)		Color (moist)		_Type ¹	Loc ²	Texture		Remarks	
0-16	2.5Y 4/1	85	7.5 YR 4/4	15	С	M/PL	CL			
						·				
						·				
						·				
						·				
						·				
¹ Type: C=Co	oncentration, D=Deple	etion, RM=	Reduced Matrix, MS	=Masked	Sand Gr	ains.	² Location: Pl	L=Pore Linin	g, M=Matrix.	
Hydric Soil	Indicators:						Indica	ators for Pro	blematic Hyd	ric Soils ³ :
Histosol	(A1)		Dark Surface	(S7)			2	cm Muck (A	10) (MLRA 14	7)
Histic Ep	pipedon (A2)		Polyvalue Bel	ow Surfac	ce (S8) (N	ILRA 147,	148) — C	oast Prairie	Redox (A16)	
Black Hi	stic (A3)		Thin Dark Su	rface (S9)	(MLRA	47, 148)		(MLRA 147	7, 148)	
Hydroge	n Sulfide (A4)		Loamy Gleye	d Matrix (I	F2)		P	iedmont Flo	odplain Soils (F	19)
Stratified	Layers (A5)		Depleted Mat	rix (F3)				(MLRA 136	6, 147)	
2 cm Mu	ick (A10) (LRR N)		Redox Dark S	Surface (F	6)		V	ery Shallow	Dark Surface (TF12)
Depleted	d Below Dark Surface	(A11)	Depleted Dar	k Surface	(F7)		0	ther (Explain	n in Remarks)	
Thick Da	ark Surface (A12)		Redox Depre	ssions (F8	3)					
Sandy M	lucky Mineral (S1) (L	RR N,	Iron-Mangane	ese Masse	es (F12) (LRR N,				
MLRA	A 147, 148)			5)						
Sandy G	leyed Matrix (S4)		Umbric Surfac	ce (F13) (MLRA 13	6, 122)	³ Ind	icators of hy	drophytic vege	tation and
Sandy R	edox (S5)		Piedmont Flo	odplain So	oils (F19)	(MLRA 14	8) we	tland hydrol	ogy must be pr	esent,
Stripped	Matrix (S6)		Red Parent M	laterial (F2	21) (MLR	A 127, 147) unl	less disturbe	d or problemat	ic.
Restrictive I	_ayer (if observed):									
Туре:										
Depth (in	ches):						Hydric Soil	Present?	Yes 🖌	No
Remarks:							7			

Project/Site: Guernsey Power Plant	City/County: Guernsey	_ Sampling Date: 07/21/2016
Applicant/Owner: Guernsey Power Plant	State: OH	Sampling Point: W-C31, C33, C34 UP
Investigator(s): CV, CS	Section, Township, Range: <u>N/A</u>	
Landform (hillslope, terrace, etc.): Terrace	Local relief (concave, convex, none): Linear	Slope (%): <u>0</u>
Subregion (LRR or MLRA): LRRN Lat: 39.9344	03 Long: -81.534896	Datum: NAD 83
Soil Map Unit Name: Sarahsville silty clay loam, frequently flo	oded (Sa) NWI classif	fication: None
Are climatic / hydrologic conditions on the site typical for this time	of year? Yes No (If no, explain in	Remarks.)
Are Vegetation, Soil, or Hydrology signific	antly disturbed? Are "Normal Circumstances"	' present? Yes 🖌 No
Are Vegetation, Soil, or Hydrology natural	y problematic? (If needed, explain any answ	vers in Remarks.)
SUMMARY OF FINDINGS – Attach site map show	ing sampling point locations, transect	s, important features, etc.
Hydrophytic Vegetation Present? Yes No_ Hydric Soil Present? Yes No_ Wetland Hydrology Present? Yes No_	, Is the Sampled Area , within a Wetland? Yes	No
Remarks: Cowardin Code: UPLAND		

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)
Surface Water (A1) True Aquatic Plants (B14)	Sparsely Vegetated Concave Surface (B8)
High Water Table (A2) Hydrogen Sulfide Odor (C1)	Drainage Patterns (B10)
Saturation (A3) Oxidized Rhizospheres on Living	Roots (C3) Moss Trim Lines (B16)
Water Marks (B1) Presence of Reduced Iron (C4)	Dry-Season Water Table (C2)
Sediment Deposits (B2) Recent Iron Reduction in Tilled Sc	oils (C6) Crayfish Burrows (C8)
Drift Deposits (B3) Thin Muck Surface (C7)	Saturation Visible on Aerial Imagery (C9)
Algal Mat or Crust (B4) Other (Explain in Remarks)	Stunted or Stressed Plants (D1)
Iron Deposits (B5)	Geomorphic Position (D2)
Inundation Visible on Aerial Imagery (B7)	Shallow Aquitard (D3)
Water-Stained Leaves (B9)	Microtopographic Relief (D4)
Aquatic Fauna (B13)	FAC-Neutral Test (D5)
Field Observations:	
Surface Water Present? Yes No 🖌 Depth (inches):	
Water Table Present? Yes No 🖌 Depth (inches):	
Saturation Present? Yes No 🖌 Depth (inches):	Wetland Hydrology Present? Yes No_
(includes capillary fringe)	
Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspec	lions), if available:
Remarke:	
Tomano.	

Sampling Point: W-C31, C33, C34 UP

	Absolute	Dominant	Indicator	Dominance Test worksheet:
Tree Stratum (Plot size: 30')	% Cover	Species?	Status	Number of Deminent Creation
1				That Are OBL EACW or EAC: 0 (A)
·				
2				Total Number of Dominant
3				Species Across All Strata: 2 (B)
4				
5				Percent of Dominant Species
· · · · · · · · · · · · · · · · · · ·	-			That Are OBL, FACW, of FAC: (A/B)
0				Prevalence Index worksheet:
7				Total % Cover of: Multiply by:
	0	= Total Cov	er	
50% of total cover: <u>0</u>	20% of	total cover:	0	OBL species x 1 =
Sapling/Shrub Stratum (Plot size: 15')				FACW species x 2 =
1				FAC species x 3 =
·				FACIL species x 4 =
2		· · · · · · · · · · · · · · · · · · ·		
3				UPL species
4				Column Totals: (A) (B)
5				
o				Prevalence Index = B/A =
б				Hydrophytic Vegetation Indicators:
7				1 - Rapid Test for Hydrophytic Vegetation
8				2. Deminence Test is 2 50%
9				2 - Dominance Test is >50%
···	0	Total Cau		3 - Prevalence Index is ≤3.0 ⁺
500 (a (to take to source = 0)				4 - Morphological Adaptations ¹ (Provide supporting
50% of total cover:	20% of	total cover:		data in Remarks or on a separate sheet)
Herb Stratum (Plot size: 5)				Droblematic Hydrophytic Vagatation ¹ (Evaluin)
1. Dactylis glomerata	30	 ✓ 	FACU	
2 Trifolium pratense	20	~	FACU	
2 Juncus tenuis	15		FAC	¹ Indicators of hydric soil and wetland hydrology must
	10			be present, unless disturbed or problematic.
4. Cichonum intybus	10		FACU	Definitions of Four Vegetation Strata:
5. Ambrosia artemisiifolia	10		FACU	
6. Daucus carota	5		UPL	Tree – Woody plants, excluding vines, 3 in. (7.6 cm) or
- Frigeron annuus	5		FACU	more in diameter at breast height (DBH), regardless of
				neight.
8				Sapling/Shrub – Woody plants, excluding vines, less
9				than 3 in. DBH and greater than or equal to 3.28 ft (1
10.				m) tall.
11				
	95			Herb – All herbaceous (non-woody) plants, regardless
500(()) J7 E		= I otal Cov	er 10	of size, and woody plants less than 5.20 it tall.
50% of total cover: <u>47.3</u>	20% of	total cover:	19	Woody vine – All woody vines greater than 3.28 ft in
Woody Vine Stratum (Plot size: 15)				height.
1				
2				
2				
		· · · · · · · · · · · · · · · · · · ·		
4				Hydrophytic
5				Vegetation
	0	= Total Cov	er	Present? Yes No V
50% of total cover: 0	20% of	total cover	0	
Remarks: (Include photo numbers here or on a senarate s	heet)			
	1001.)			

I

Profile Desc	ription: (Describe te	o the depth	needed to docun	nent the i	ndicator of	or confirm	the absence	of indicato	ors.)	
Depth	Matrix		Redox	K Features	S					
(inches)	Color (moist)		Color (moist)	%	_Type ¹	Loc ²	Texture		Remarks	
0-6	10YR 5/4	100					CL			
6+								(Compacter	
									oompacted	1 30113
		tion PM-E	Advord Matrix MS	-Maakad		ine			og M_Motrix	
	ndicators:		teduced Matrix, Mc	s=iviaskeu	i Sanu Gra	uns.	Location: P	tere for Pr	ng, M=Mainx.	udric Soils ³
				(07)			indic			
Histosol	(A1)		Dark Surface	(S7)	(0.0) (1)		2	cm Muck (A	A10) (MLRA 1	47)
Histic Ep	pipedon (A2)		Polyvalue Be	low Surfa	ce (S8) (N	LRA 147,	148)	Coast Prairie	Redox (A16)	
Black Hi	stic (A3)		Thin Dark Su	rface (S9)	(MLRA 1	47, 148)	_	(MLRA 14	7, 148)	(-)
Hydroge	n Sulfide (A4)		Loamy Gleye	d Matrix (F2)		^I	redmont Flo	odplain Soils	(F19)
Stratified	Layers (A5)		Depleted Mat	rix (F3)	•			(MLRA 13	6, 147)	(7540)
2 cm Mu	ICK (A10) (LRR N)	()	Redox Dark S	Surface (F	·6)		_ \	ery Shallow	Dark Surface) (IF12)
	Below Dark Surface	(A11)	Depleted Dar	K Surface	(F7)		_ (other (Explai	in in Remarks	·)
Thick Da	ark Surface (A12)		Redox Depre	ssions (F8	8)					
Sandy N	lucky Mineral (S1) (L	RR N,	Iron-Mangane	ese Masse	es (F12) (I	_RR N,				
MLRA	A 147, 148)		MLRA 130	5) (= (a) (3.			
Sandy G	ileyed Matrix (S4)		Umbric Surfa	ce (⊦13) (MLRA 13	6, 122)	°Inc	licators of hy	/drophytic veg	jetation and
Sandy R	edox (S5)		Piedmont Flo	odplain S	oils (F19)	(MLRA 14	•8) we	etland hydrol	logy must be	present,
Stripped	Matrix (S6)		Red Parent M	laterial (F	21) (MLR	A 127, 147	') ur	less disturbe	ed or problem	atic.
Restrictive	_ayer (if observed):									
Type: Co	ompacted soil									
Depth (in	ches): <u>6</u>		_				Hydric Soi	Present?	Yes	No 🖌
Remarks:							-			
Farm road	hed									
i ann iouu	500									

Project/Site: Guernsey Power Plant	City/County: Guernsey		Sampling Date: 07/21/2016
Applicant/Owner: Guernsey Power Plant		State: OH	Sampling Point: W-C35
Investigator(s): CV, CS	Section, Township, Range; N/	/A	
Landform (hillslope, terrace, etc.): Depression	Local relief (concave, convex, nor	ne): Concave	Slope (%):_0
Subregion (LRR or MLRA): LRRN Lat: 39.93	35448 Long: -81	.538699	Datum: NAD 83
Soil Map Unit Name: Glenford silt loam, 0 to 3 percent slop	es (GnA)	NWI classifica	ation: None
Are climatic / hydrologic conditions on the site typical for this tir	ne of year? Yes 🖌 No	(If no, explain in Re	emarks.)
Are Vegetation, Soil, or Hydrology sign	ificantly disturbed? Are "Normal	Circumstances" pr	resent? Yes 🖌 No
Are Vegetation, Soil, or Hydrology natu	rally problematic? (If needed, e	explain any answer	s in Remarks.)
SUMMARY OF FINDINGS – Attach site map sh	owing sampling point locatio	ons, transects,	important features, etc.
Hydrophytic Vegetation Present? Yes ✓ No_ Hydric Soil Present? Yes ✓ No_ Wetland Hydrology Present? Yes ✓ No_	Is the Sampled Area within a Wetland?	Yes_	No
Remarks: Cowardin Code: PEM HGM:	Depressional Water Type:	RPWWN	
Narrow depression located between current rail ro	ad bed and old rail road bed/fa	arm road.	
HYDROLOGY			
Wetland Hydrology Indicators:		Secondary Indicat	ors (minimum of two required)
Primary Indicators (minimum of one is required; check all that	apply)	Surface Soil C	Cracks (B6)
Surface Water (A1)	uatic Plants (B14)	Sparsely Veg	etated Concave Surface (B8)
High Water Table (A2) Hydrog	en Sulfide Odor (C1)	Drainage Patt	erns (B10)
Saturation (A3)Oxidize	d Rhizospheres on Living Roots (C3)	Moss Trim Lir	nes (B16)
Water Marks (B1) Present	e of Reduced Iron (C4)	Dry-Season V	Vater Table (C2)
Sediment Deposits (B2) Recent	Iron Reduction in Tilled Soils (C6)	Crayfish Burro	bws (C8)
Drift Deposits (B3) Thin Mit	ICK SUFFACE (C7)	Saturation Vis	sple on Aerial Imagery (C9)
Iron Deposits (B5)			Position (D2)
Inundation Visible on Aerial Imagery (B7)		Shallow Aquit	ard (D3)
Water-Stained Leaves (B9)		Microtopogram	phic Relief (D4)
Aquatic Fauna (B13)		FAC-Neutral	Test (D5)
Field Observations:			
Surface Water Present? Yes No Depth	(inches):<0.25		
Water Table Present? Yes Ves No Depth	(inches): 6		
Saturation Present? Yes Ves No Depth	(inches): 0 Wetland H	lydrology Present	? Yes 🖌 No
(includes capillary fringe)	al photos, provious inspections) if ave	ilabla	
Describe Recorded Data (Stream gauge, monitoring weil, aen	ai priotos, previous inspections), il ava	liable.	
Remarks:			

,	Abcoluto	Dominant	Indicator	Dominance Test worksheet:
Tree Stratum (Plot size: 30')	% Cover	Species?	Status	Dominance Test worksneet.
1	/0 0010.		010100	Number of Dominant Species
l		·	·	$\begin{array}{c} \text{That Are OBL, FACW, OF FAC.} \\ \end{array} $
2		·	·	Total Number of Dominant
3				Species Across All Strata:3 (B)
4.				
5				Percent of Dominant Species
			·	That Are OBL, FACW, or FAC: (A/B)
6		• •	•	Prevalence Index worksheet:
7				
	0	= Total Cov	/er	I otal % Cover of: Multiply by:
50% of total cover: 0	20% of	total cover	0	OBL species x 1 =
Sapling/Shrub Stratum (Plot size: 15'				FACW species x 2 =
A Salix nigra	10	~	OBI	FAC species x 3 =
		·		
2				FACO species x 4 =
3				UPL species x 5 =
4				Column Totals: (A) (B)
5			·	
		•	·	Prevalence Index = B/A =
6				Hydrophytic Vegetation Indicators:
7				1 - Rapid Test for Hydrophytic Vegetation
8				
0				2 - Dominance Test is >50%
9	10		·	3 - Prevalence Index is ≤3.0 ¹
5	10	= Total Cov	ver o	4 - Morphological Adaptations ¹ (Provide supporting
50% of total cover: 5	20% of	total cover		data in Remarks or on a separate sheet)
Herb Stratum (Plot size: 5')				
1. Juncus effusus	40	~	FACW	Problematic Hydrophytic Vegetation (Explain)
2 Leersia orvzoides	30	<hr/>	OBL	
	10	•		¹ Indicators of hydric soil and wetland hydrology must
		·		be present, unless disturbed or problematic.
4. Carex Iurida	<u> </u>		OBL	Definitions of Four Vegetation Strata:
5				
6.				Tree – Woody plants, excluding vines, 3 in. (7.6 cm) or
7				more in diameter at breast height (DBH), regardless of
/·		·	·	neight.
8		·	·	Sapling/Shrub – Woody plants, excluding vines, less
9				than 3 in. DBH and greater than or equal to 3.28 ft (1
10.				m) tall.
11				
•••	85			Herb – All herbaceous (non-woody) plants, regardless
500/ of total accord 42 F			/er 17	
50% of total cover: <u>42.</u>	<u> </u>	total cover		Woody vine – All woody vines greater than 3.28 ft in
Woody Vine Stratum (Plot size: 15)				height.
1				
2.				
3				
			·	
4		·	·	Hydrophytic
5				Vegetation
	0	= Total Cov	/er	Present? Yes V No
50% of total cover: 0	20% of	total cover	0	
Remarks: (Include photo numbers here or on a separate s	heet)			
remand. (morado proto nambolo nero or or a separate s				

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	
0-16 10YR 3/2 90 7.5YR 4/4 10 C M Gr C Gravel, coal fr	agments
¹ Type: C-Concentration D-Depletion RM-Reduced Matrix MS-Masked Sand Grains ² Location: PL-Pore Lining M-Matrix	
Hydric Soil Indicators: Indicators:	dric Soils ³ :
Histosol (A1) Dark Surface (S7) 2 cm Muck (A10) (MLRA 1	47)
Histic Epipedon (A2) Polyvalue Below Surface (S8) (MLRA 147, 148) Coast Prairie Redox (A16)	,
Black Histic (A3) Thin Dark Surface (S9) (MLRA 147, 148) (MLRA 147, 148)	
Hydrogen Sulfide (A4) Loamy Gleyed Matrix (F2) Piedmont Floodplain Soils	(F19)
Stratified Layers (A5) Depleted Matrix (F3) (MLRA 136, 147)	
2 cm Muck (A10) (LRR N) Kedox Dark Surface (F6) Very Shallow Dark Surface	(TF12)
Depleted Below Dark Surface (A11) Depleted Dark Surface (F7) Other (Explain in Remarks	
Thick Dark Surface (A12) Redox Depressions (F8)	
Sandy Mucky Mineral (S1) (LRR N, Iron-Manganese Masses (F12) (LRR N,	
MLRA 14/, 148) MLRA 130) Sendy Clayed Matrix (24) Umbria Surface (E42) (MLDA 426 422) ³ Indicators of hydrophytic ys.	atation and
Sandy Gleyed Matrix (54) Umbric Surface (F13) (MLRA 136, 122) Indicators of hydrophytic veg	etation and
Stripped Matrix (S6) Red Parent Material (F21) (MI RA 127, 147) unless disturbed or problem	atic
Restrictive Laver (if observed):	
Depth (inches):	No
Remarks.	

Project/Site: Guernsey Power Plant	City/County: Guernsey		Sampling Date: 07/21/2016
Applicant/Owner: Guernsey Power Plant		State: OH	Sampling Point: W-C36
Investigator(s): CV, CS	Section, Township, Range: N	/A	
Landform (hillslope, terrace, etc.): Depression	Local relief (concave, convex, no	ne): Concave	Slope (%): <u>0</u>
Subregion (LRR or MLRA): LRRN Lat	: <u>39.934719</u> Long: <u>-81</u>	.538605	Datum: NAD 83
Soil Map Unit Name: Sarahsville silty clay loam, fre	quently flooded (Sa)	NWI classifica	ation: PEM1F
Are climatic / hydrologic conditions on the site typical f	or this time of year? Yes No	(If no, explain in Re	emarks.)
Are Vegetation, Soil, or Hydrology	significantly disturbed? Are "Norma	Il Circumstances" p	resent? Yes 🖌 No
Are Vegetation, Soil, or Hydrology	naturally problematic? (If needed,	explain any answer	rs in Remarks.)
SUMMARY OF FINDINGS – Attach site n	nap showing sampling point location	ons, transects	, important features, etc.
Hydrophytic Vegetation Present?YesHydric Soil Present?YesWetland Hydrology Present?Yes	No Is the Sampled Area within a Wetland?	Yes 🖌	No
Remarks: Cowardin Code: PLIB	HGM: Depressional Water Type:	RPWWN	
	beas/berms.		
HYDROLOGY			
Wetland Hydrology Indicators:		Secondary Indica	tors (minimum of two required)
Primary Indicators (minimum of one is required; chec	k all that apply)	Surface Soil (Cracks (B6)
Surface Water (A1)	I rue Aquatic Plants (B14)	Sparsely Veg	terms (P10)
\checkmark Saturation (A3)	Oxidized Rhizospheres on Living Roots (C3)	Drainage Fat	nes (B16)
Water Marks (B1)	Presence of Reduced Iron (C4)	Drv-Season \	Nater Table (C2)
Sediment Deposits (B2)	Recent Iron Reduction in Tilled Soils (C6)	Cravfish Burr	ows (C8)
Drift Deposits (B3)	Thin Muck Surface (C7)	Saturation Vi	sible on Aerial Imagery (C9)
Algal Mat or Crust (B4)	Other (Explain in Remarks)	Stunted or St	ressed Plants (D1)
Iron Deposits (B5)		Geomorphic	Position (D2)
Inundation Visible on Aerial Imagery (B7)		Shallow Aqui	tard (D3)
Water-Stained Leaves (B9)		Microtopogra	phic Relief (D4)
Aquatic Fauna (B13)		FAC-Neutral	Test (D5)
Field Observations:	1 2		
Surface Water Present? Yes <u>No</u> No	Depth (inches):		
Vater Table Present? Yes No	Depth (inches): 0		
(includes capillary fringe)	_ Depth (inches) Wetland	nydrology Presen	
Describe Recorded Data (stream gauge, monitoring	well, aerial photos, previous inspections), if ava	ailable:	
Remarks:			
1			

001	Absolute	Dominant	Indicator	Dominance Test worksheet:
Tree Stratum (Plot size: 30)	% Cover	Species?	Status	Number of Dominant Species
1				That Are OBL, FACW, or FAC: (A)
2				Total Number of Dominant
3.				Species Across All Strata: 2 (B)
4			· <u> </u>	
5			·	Percent of Dominant Species
		·		That Are OBL, FACW, or FAC:(A/B)
б				Prevalence Index worksheet:
7			·	Total % Cover of: Multiply by:
		= Total Cov	rer	
50% of total cover: 0	20% of	total cover		
Sapling/Shrub Stratum (Plot size: 15)				FACW species x 2 =
1				FAC species x 3 =
2.				FACU species x 4 =
3				UPL species x 5 =
4				Column Totals: (A) (B)
			·	
5		·	·	Prevalence Index = B/A =
6				Hydrophytic Vegetation Indicators:
7				 1 - Rapid Test for Hydrophytic Vegetation
8				V 2- Dominance Test is >50%
9				2 - Dominance Test is >00%
	0	= Total Cov	/er	3 - Prevalence Index Is ≤3.0
50% of total cover: 0	20% of	total cover	0	4 - Morphological Adaptations' (Provide supporting
Herb Stratum (Plot size: 5')				data in Remarks or on a separate sheet)
A Nuphar advena	50	~	OBL	Problematic Hydrophytic Vegetation ¹ (Explain)
- Spargapium amoricapum	15	·		
	10	v		¹ Indicators of hydric soil and wetland hydrology must
3. Juncus emusus	10		FACW	be present, unless disturbed or problematic.
4				Definitions of Four Vegetation Strata:
5				
6.				Tree – Woody plants, excluding vines, 3 in. (7.6 cm) or
7				more in diameter at breast height (DBH), regardless of
0				noight.
8				Sapling/Shrub – Woody plants, excluding vines, less
9				than 3 in. DBH and greater than or equal to 3.28 ft (1
10				m) tall.
11				Herb – All herbaceous (non-woody) plants, regardless
		= Total Cov	rer	of size, and woody plants less than 3.28 ft tall.
50% of total cover: 37.	5 20% of	total cover	15	We achieve Allowed the interview of the theory of the
Woody Vine Stratum (Plot size: 15')				beight
1.				
2				
2			·	
3		·	·	
4		·	·	Hydrophytic
5			·	Vegetation
	0	= Total Cov	rer	Present? Yes Ves No
50% of total cover:0	20% of	total cover	0	
Remarks: (Include photo numbers here or on a separate s	heet.)			

	Color (moist)	%	Color (moist)	%	Tvpe ¹	Loc ²	Texture		Remarks	
0-2	10YR 3/2	100					MK		rtomanto	
<u> </u>	10VP 4/1	<u> </u>			~	- <u> </u>	<u></u>	Gro	wol oool fro	amonto
2-0		. <u>00</u> .	<u>/.51n 4/4</u>	_20_				Gra	ivel, coal lia	agments
8-16	10YR 5/4	100					<u> </u>			
		· ·								
ype: C=C	oncentration, D=Depl	letion, RM=	Reduced Matrix, M	S=Masked	Sand G	ains.	² Location: Pl	_=Pore Linii	ng, M=Matrix.	
dric Soil	Indicators:						Indica	tors for Pr	oblematic Hy	dric Soils ³
_ Histosol	(A1)		Dark Surface	e (S7)			2	cm Muck (A	A10) (MLRA 1 4	47)
_ Histic Ep	pipedon (A2)		Polyvalue Be	elow Surfac	ce (S8) (MLRA 147,	, 148) C	oast Prairie	Redox (A16)	
Black Hi	stic (A3)		Thin Dark Su	urface (S9)	(MLRA	147, 148)		(MLRA 14	7, 148)	
_ Hydroge	en Sulfide (A4)		Loamy Gleye	ed Matrix (I	F2)		P	iedmont Flo	odplain Soils	(F19)
_ Stratified	d Layers (A5)		Depleted Ma	trix (F3) Curr€a a a (⊏	C)		V	(MLRA 13	6, 147) Darle Curfaga	
	d Below Dark Surface	۵ (Δ11)	Redux Dark	Sunace (F	0) (F7)			ther (Evolai	in in Remarks)	(1612)
_ Depicted Thick D:	ark Surface (A12)		Bedox Depre	essions (F8	(i <i>'i')</i> 3)		_ 0			
Sandy N	lucky Mineral (S1) (L	.RR N,	Iron-Mangan	ese Masse	es (F12)	(LRR N,				
 MLR/	A 147, 148)		MLRA 13	6)	· · ·	, , , , , , , , , , , , , , , , , , ,				
_ Sandy G	Bleyed Matrix (S4)		Umbric Surfa	ace (F13) (MLRA 1	36, 122)	³ Indi	icators of hy	/drophytic veg	etation and
_ Sandy F	Redox (S5)		Piedmont Flo	odplain So	oils (F19	(MLRA 14	18) we	tland hydro	logy must be p	oresent,
_ Stripped	Matrix (S6)		Red Parent N	Material (F2	21) (MLF	RA 127, 147	7) unl	ess disturb	ed or problema	atic.
estrictive	Layer (if observed):									
Туре:							Hydric Soil	Present?	Yes 🔽	No
Type: Depth (in	ches):									
Type: Depth (in emarks:	ches):									
Type: Depth (in emarks: oils distur	ches):									
Type: Depth (in- emarks: bils distu	ches): r bed.									
Type: Depth (in- emarks: bils distur ue to por	ches): rbed. nded water probe	e taken on	wetland edge.							
Type: Depth (in emarks: bils distu ue to por	ches): rbed. nded water probe	taken on	wetland edge.							
Type: Depth (in emarks: bils distu t ue to por	ches): rbed. nded water probe	taken on	wetland edge.							
Type: Depth (in emarks: bils distu t	ches): rbed. nded water probe	taken on	wetland edge.							
Type: Depth (in emarks: bils distu ue to por	ches): rbed. nded water probe	taken on	wetland edge.							
Type: Depth (in emarks: bils distur ue to por	ches): rbed. nded water probe	taken on	wetland edge.							
Type: Depth (in emarks: bils distu ue to por	ches): rbed. nded water probe	taken on	wetland edge.							
Type: Depth (in emarks: bils distu ue to por	ches): rbed. nded water probe	taken on	wetland edge.							
Type: Depth (in emarks: bils distu t	ches): rbed. ided water probe	taken on	wetland edge.							
Type: Depth (in emarks: bils distu ue to por	ches): rbed. nded water probe	taken on	wetland edge.							
Type: Depth (in emarks: bils distu ue to por	ches):	taken on	wetland edge.							
Type: Depth (in emarks: bils distu ue to por	ches): rbed. nded water probe	taken on	wetland edge.							
Type: Depth (in emarks: bils distu ue to por	ches): rbed. nded water probe	taken on	wetland edge.							
Type: Depth (in emarks: bils distu ue to por	ches): rbed. nded water probe	taken on	wetland edge.							
Type: Depth (in emarks: oils distur ue to por	ches): rbed. nded water probe	taken on	wetland edge.							
Type: Depth (in emarks: oils distur ue to por	rbed. Ided water probe	taken on	wetland edge.							
Type: Depth (in emarks: bils distu ue to por	rbed. nded water probe	taken on	wetland edge.							
Type: Depth (in emarks: bils distu ue to por	ches):	taken on	wetland edge.							
Type: Depth (in emarks: bils distur ue to por	ches):	taken on	wetland edge.							
Type: Depth (in emarks: bils distur	ches): rbed. nded water probe	taken on	wetland edge.							

Project/Site: Guernsey Power Plant	City/County: Guernsey		Sampling Date: 07/21/2016
Applicant/Owner: Guernsey Power Plant		_{State:} OH	Sampling Point: W-C37
Investigator(s): CV, CS	Section. Township. Range: N	/A	_
Landform (hillslope, terrace, etc.): Depression	Local relief (concave, convex, no	ne): Concave	Slope (%): 0
Subregion (LRR or MLRA): LRRN Lat:	 39.934849	.537911	Datum: NAD 83
Soil Map Unit Name: Sarahsville silty clay loam, freq	uently flooded (Sa)	NWI classific	ation: PEM1F
Are climatic / hydrologic conditions on the site typical for	this time of year? Yes No	(If no, explain in R	emarks.)
Are Vegetation, Soil, or Hydrology	significantly disturbed? Are "Norma	I Circumstances" p	resent? Yes 🔽 No
Are Vegetation, Soil, or Hydrology	naturally problematic? (If needed,	explain any answe	rs in Remarks.)
SUMMARY OF FINDINGS – Attach site ma	ap showing sampling point location	ons, transects	, important features, etc.
Hydrophytic Vegetation Present? Yes ✓ Hydric Soil Present? Yes ✓ Wetland Hydrology Present? Yes ✓	No Is the Sampled Area No within a Wetland?	Yes 🗸	No
Remarks: Converdin Code: DUD			
Large artificial depression between old rail b	eds/berms.		
HYDROLOGY			
Wetland Hydrology Indicators:		Secondary Indica	tors (minimum of two required)
Primary Indicators (minimum of one is required; check	all that apply)	Surface Soil	Cracks (B6)
$\underbrace{\mathbf{V}}_{\mathbf{V}}$ Surface Water (A1) $\underbrace{\mathbf{V}}_{\mathbf{V}}$	True Aquatic Plants (B14)	Sparsely Veg	getated Concave Surface (B8)
High Water Table (A2)	Hydrogen Sulfide Odor (C1)	Drainage Pat	tterns (B10)
Water Marke (B1)	Presence of Reduced Iron (C4)		Netor Table (C2)
Sediment Deposits (B2)	Recent Iron Reduction in Tilled Soils (C6)	Cravfish Bur	rows (C8)
Drift Deposits (B3)	Thin Muck Surface (C7)	Saturation Vi	sible on Aerial Imagery (C9)
Algal Mat or Crust (B4)	Other (Explain in Remarks)	Stunted or St	tressed Plants (D1)
Iron Deposits (B5)		Geomorphic	Position (D2)
Inundation Visible on Aerial Imagery (B7)		Shallow Aqui	tard (D3)
Water-Stained Leaves (B9)		Microtopogra	phic Relief (D4)
Aquatic Fauna (B13)		 FAC-Neutral 	Test (D5)
Field Observations:			
Surface Water Present? Yes Ves No	Depth (inches): 12		
Water Table Present? Yes Ves No	Depth (inches):		
Saturation Present? Yes <u>Ves</u> No	Depth (inches): 0 Wetland H	Hydrology Presen	t? Yes 🔽 No
Describe Recorded Data (stream gauge, monitoring w	ell, aerial photos, previous inspections), if ava	ailable:	
Remarks:			

	Absoluto	• Dominant	Indicator	Dominance Test worksheet:
Tree Stratum (Plot size: 30')	% Cover	Species?	Status	Dominance Test worksheet.
1				That Aro OBL EACW or EAC: 2 (A)
				$\begin{array}{c} \text{That Ale OBL, FACW, OFFAC.} \\ \underline{} \\ \underline{} \\ \underline{} \\ (A) \end{array}$
2				Total Number of Dominant
3				Species Across All Strata: (B)
4				
5				Percent of Dominant Species
o				That Are OBL, FACW, of FAC: (A/B)
0				Prevalence Index worksheet:
7				Total % Cover of: Multiply by:
		= Total Co	/er	
50% of total cover: 0	20% of	total cover	:0	OBL species X 1 =
Sapling/Shrub Stratum (Plot size: 15')				FACW species x 2 =
1.				FAC species x 3 =
2				FACU species x 4 =
2				UPL species $x 5 =$
3				
4				
5				Prevalence Index $= R/A =$
6				
7				Hydrophytic Vegetation Indicators:
o				1 - Rapid Test for Hydrophytic Vegetation
o				2 - Dominance Test is >50%
9				3 - Prevalence Index is ≤3.0 ¹
		= Total Co	/er	4 - Morphological Adaptations ¹ (Provide supporting
50% of total cover: 0	20% of	total cover	:0	
Herb Stratum (Plot size: 5')				data in Remarks or on a separate sheet)
1 Nuphar advena	50	V	OBL	Problematic Hydrophytic Vegetation ¹ (Explain)
o Sparganium americanum	15	~		
	10			¹ Indicators of hydric soil and wetland hydrology must
3. Juncus emusus			FACW	be present, unless disturbed or problematic.
4				Definitions of Four Vegetation Strata
5.				
6				Tree – Woody plants, excluding vines, 3 in. (7.6 cm) or
~				more in diameter at breast height (DBH), regardless of
7			·	neight.
8				Sapling/Shrub – Woody plants, excluding vines, less
9				than 3 in. DBH and greater than or equal to 3.28 ft (1
10				m) tall.
11				
	75	Total Ca		Herb – All herbaceous (non-woody) plants, regardless
50% of total anyon 37	<u> </u>		/er 15	or size, and woody plants less than 5.20 it tall.
50% Of total cover. <u>57.</u>	20% 0	total cover		Woody vine – All woody vines greater than 3.28 ft in
Woody Vine Stratum (Plot size: 13				height.
1				
2				
3.				
4				
¬:				Hydrophytic
o				Vegetation
	<u> </u>	= Total Co	/er	
50% of total cover: 0	20% of	total cover	:	
Remarks: (Include photo numbers here or on a separate s	heet.)			

Later unsess 20 Later unsess 20 Later unsess 20 MK 2-8 10YR 3/2 100 MK Gravel, coal fragments 3-16 10YR 5/4 100 C MK Gravel, coal fragments 3-16 10YR 5/4 100 C C C	Depth (inches)	Matrix		Redox	Features	<u>3</u> Turna ¹	1002	Touture	Domostico
0.1 100 TH 4/1 80 7.5YR 4/4 20 M SIC Gravel, coal fragments 8-16 10YR 5/4 100 C C C C C 9 0 C C C C C C C 9 0 C <t< th=""><th></th><th>10YB 3/2</th><th><u></u> _</th><th></th><th></th><th><u> </u></th><th></th><th>MK</th><th> Remarks</th></t<>		10YB 3/2	<u></u> _			<u> </u>		MK	Remarks
2-26 U111-471 00		10\\D 4/1					- <u>-</u>		
d-16 IUTH 5/4 IUU	2-8	<u>101R 4/1</u>	<u> </u>	<u>/.51H 4/4</u>		<u> </u>	<u></u>		Gravel, coal fragments
Type: C=Concentration, D=Depletion, RM-Reduced Mairk, MS=Masked Sand Grains. ¹ Location: PL=Pore Lining, M=Matrix. Type: C=Concentration, D=Depletion, RM-Reduced Mairk, MS=Masked Sand Grains. ¹ Location: PL=Pore Lining, M=Matrix. Hydric Soil Indicators: Indicators (S7) 2 cm Muck (A10) (MLRA 147, 148) Histosol (A1) Dark Surface (S7) Coast Praine Redox (A16) Stratified Layers (A5) V Depleted Matrix (F2) (MLRA 147, 148) Hydrogen Sulfake (K4) Loamy Gleyed Matrix (F2) (MLRA 147, 148) Stratified Layers (A5) V Depleted Matrix (C3) (MLRA 147, 148) Stratified Layers (A5) Redox Dark Surface (F1) Other (Explain in Remarks) Sandy Macky (Merail (S1) (LRR N) Redox Dark Surface (F13) (MLRA 145, 122) ¹ Indicators of hydrophytic vegetation an wetland theorematic (F13) (MLRA 145, 122) Sandy Redox (S5) Pedemont Floodplain Soils (F19) (MLRA 145, 122) ¹ Indicators of hydrophytic vegetation an wetland theorematic (F21) (MLRA 145, 122) Statifice Layer (If observed): Pedemont Floodplain Soils (F19) (MLRA 147, 148) unless disturbed or problematic. Statifice Layer (If observed): Red Parent Material (F21) (MLRA 1427, 147) unless disturbed or problematic. Statifice Layer (If observed): Red Parent Material (F21) (MLRA 1427, 147)	8-16	101R 5/4	100						
"Type: C=Concentration, D=Depletion, RM=Reduced Matrix, MS=Masked Sand Grains. ¹ Location: PL=Pore Lining, M=Matrix. "Histo: Epipedon (A2) Dark Surface (S7)			·	,					
"Type: C=Concentration, D=Depletion, RM=Reduced Matrix, MS=Masked Sand Grains. *Location: PL=Pore Lining, M=Matrix, Indicators for Problematic Hydric Soli Mydric Soli Indicators: "Histo: Epipedon (A2) Polyvalue Below Surface (S3) (MLRA 147, 148)			· ·						
Type: C=Concentration, D=Depletion, RM=Reduced Matrix, MS=Masked Sand Grains. ² Location: PL=Pore Lining, M=Matrix. Histos (14)									
Type: C-Concentration. D=Depletion, RM=Reduced Matrix, MS=Masked Sand Grains. ¹ Location: PL=Pore Lining, M=Matrix. Hydric Soil Indicators: Dark Surface (S7) Dark Surface (S9) Derlyvalue Belook Surface (S9) (MLRA 147, 148) Cast Prain Reduce (A16) Gast Prain Reduce (A16) Ulack A17) Cast Prain Reduce (A16) Ulack A17, 148) Depleted Dark Surface (F8) Depleted Dark Surface (F8) Depleted Dark Surface (F8) Under Variace (A17) Depleted Dark Surface (F8) Under Variace (A17) Depleted Dark Surface (F8) Under Variace (F17) Other (Explain in Remarks) Sandy Mucky (Minerai (S1) (LRR N, MLRA 136, 122) Sandy Matrix (S4) Umbrio Surface (F13) (MLRA 136, 122) Sandy Matrix (S4) Umbrio Surface (F13) (MLRA 136, 122) Sandy Matrix (S4) Depleted Dark Surface (F13) (MLRA 136, 122) Sandy Matrix (S4) Umbrio Surface (F13) (MLRA 136, 122) Indicators of hydrophytic vegetation an settintive Larger (f1 observed): Type: Depleted Matrix (S4) Red Parent Material (F21) (MLRA 127, 147) Unless disturbed or problematic. Remarke:: Soill's Gisturbed. Nue to ponded water probe taken on wetland edge. Via to ponded water probe taken on wetland edge.									
Type: C=Concentration, D=Depletion, RM=Reduced Matrix, MS=Masked Sand Grains. ² Location: PL=Pore Lining, M=Matrix. Hydric Soil Indicators: Indicators for Problematic Hydric Soils Histic Epipedon (A2) Polyvalue Below Surface (S3) (MLRA 147, 148) Coast Praine Redox (A16) Black Histic (A3) Thin Dark Surface (S3) (MLRA 147, 148) Coast Praine Redox (A16) Stratified Layers (A5) Depleted Matrix (F2) Pietomot Floodplain Soils (F19) 2 cm Muck (A10) (LRR N) Redox Dark Surface (F7) Other (Explain in Remarks) Stratified Layers (A5) Depleted Matrix (F3) Very Shallow Dark Surface (TF12) Depleted Matrix (S4) Learny Gleyed Matrix (F3) Other (Explain in Remarks) Sandy Redox Oxfs MLRA 147, 149 MLRA 147, 149 Sandy Redox (S5) Piedmon Floodplain Soils (F19) (MLRA 148, 122) ³ Indicators of hydrophytic vegetation an vetland hydrology must be present, unless disturbed or problematic. Stripped Matrix (S4) Umbric Suiface (F13) (MLRA 147, 149) velation floodplain Soils (F19) (MLRA 147, 147) Sandy Redox (S5) Piedmon Floodplain Soils (F19) (MLRA 147, 148) velation hydrology must be present, unless disturbed or problematic. Type:							_		
Type: C-Concentration. D=Depletion. RM=Reduced Matrix, MS=Masked Sand Grains. ² Location: PL=Pore Lining, M=Matrix. Histos OI Indicators: Indicators for Problematic Hydric Solis Indicators for Problematic Hydric Solis Histos (A1) Dark Surface (S7) Case Praine Redox (A16) Black Histic (A3) Thin Dark Surface (S9) (MLRA 147, 148) Case Praine Redox (A16) Stratified Layers (A5) ✓ Depleted Matrix (F3) (MLRA 137, 149) 2 cm Muck (A10) (LRR N) Peleted Matrix (F3) (MLRA 137, 149) 2 cm Muck Nurface (A11) Depleted Dark Surface (F7) Very Shallow Dark Surface (F12) 2 hydroge Matrix (S4) Unbric Surface (F13) (MLRA 136, 122) ³ Indicators of hydrophytic vegetation an wetland hydrology must be present, strictive Layer (if observed): Type:							-	·	
Type: C-Concentration, D=Depletion, RM=Reduced Matrix, MS=Masked Sand Grains. ² Location: Public Coll Indicators: Indicators for Problematic Hydric Soils Histosol (A1)								·	
Type: Cacconcentration, D=Depletion, HM=Reduced Matrix, MS=Masked Sand Grains. Tocators for Problematic Hydric Solis Histicsol (A1) Dark Surface (S7) 2 cm Muck (A10) (MLRA 147, 148) Histic Epipedion (A2) Polyvalue Below Surface (S9) (MLRA 147, 148) (MLRA 147, 148) Hydrig Soli Histic (A3) Thin Dark Surface (S9) (MLRA 147, 148) (MLRA 147, 148) Hydrig Soli Histic (A3) Thin Dark Surface (S9) (MLRA 147, 148) (MLRA 147, 148) Stratified Layers (A5) Depleted Matrix (F2) Pelodmont Floodplain Solis (F19) Stratified Layers (A5) Depleted Matrix (F2) (MLRA 147, 148) Depleted Matrix (F3) Redox Dark Surface (F7) Other (Explain in Remarks) Sandy Mucky Mineral (S1) (LRR N, Sandy Mucky Mineral (S1) (LRR N, Sandy Redox (S5) WLRA 136, 122) ¹ Indicators of hydrophylic vegetation an wetland hydrology must be present, wetland hydrology must be present, stripped Matrix (S6) Image Present (F2) (LRR N, MLRA 147, 148) Image Present (F2) (MLRA 138, 122) ¹ Indicators of hydrophylic vegetation an wetland hydrology must be present, unless disturbed or problematic. Stripped Matrix (S6) Red Parent Material (F21) (MLRA 127, 147) Image Present, unless disturbed or problematic. Deplit (Inches): Depleted Matrix (S6) Hydro Solis (F19) (MLRA 127, 147) Image Present, unless disturbed or problematic. <td>1</td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td>2</td> <td></td>	1							2	
Histosol (A1)	Type: C=C	oncentration, D=Depl	letion, RM=I	Reduced Matrix, MS	=Masked	Sand G	rains.	Location: PL	_=Pore Lining, M=Matrix.
Histic Epipedon (A2) Delviaue Below Surface (S8) (MLRA 147, 148) Coast Prairie Redox (A16) Black Histic (A3) Thin Dark Surface (S9) (MLRA 147, 148) Coast Prairie Redox (A16) Stratfied Layers (A5) Depleted Matrix (F3) (MLRA 147, 148) 2 cm Muck (A10) (LRR N) Redox Dark Surface (F6) Very Shallow Dark Surface (T71) Depleted Bolw Dark Surface (A11) Depleted Dark Surface (F7) Other (Explain in Remarks) Sandy Gleved Matrix (S4) Umork Marganese Masses (F12) (LRR N, MLRA 136, 122) Sandy Gleved Matrix (S4) Umbric Surface (F13) (MLRA 148, 122) ³ Indicators of hydrophytic vegetation an wetland bydrolegy must be present, statistic Layer (if observed): Stripped Matrix (S6) Red Parent Material (F21) (MLRA 148, 122) ³ Indicators of hydrophytic vegetation an wetland bydrolegy must be present, unless disturbed or problematic. Restrictive Layer (if observed): Type:	Histosol	(A1)		Dark Surface	(\$7)			2	cm Muck (A10) (MI RA 147)
Black Histic (A3)	Histic Er	oipedon (A2)		Polvvalue Bel	ow Surfa	ce (S8) (MLRA 147	7. 148) Co	oast Prairie Redox (A16)
Hydrogen Sullide (A4) Laramy Gleyed Matrix (F2) Piedmont Floodplain Solis (F19) Stratified Layers (A5) Depleted Matrix (F3) Piedmont Floodplain Solis (F19) 2 cm Muck (A10) (LRR N) Redox Dark Surface (F7) Other (Explain in Remarks)	Black Hi	istic (A3)		Thin Dark Su	rface (S9)	(MLRA	147, 148)	· · · <u> </u>	(MLRA 147, 148)
Statified Layers (A6) ✓ Depleted Matrix (F3) (MLRA 136, 147) 2 cm Muck (A10) (LRR N) Redox Dark Surface (F6) ✓ Very Shallow Dark Surface (T12) Depleted Below Dark Surface (A11) Depleted Dark Surface (F7) Other (Explain in Remarks) Trick Dark Surface (A12) Redox Depressions (F9) Other (Explain in Remarks) Sandy Muck V Mineral (S1) (LRR N, InformAnganese Masses (F12) (LRR N, MLRA 136) Sandy Redox (S5) Umbric Surface (F13) (MLRA 136, 122) ^a Indicators of hydrophytic vegetation an wetland hydrology must be present, Stripped Matrix (S6) Red Parent Material (F21) (MLRA 127, 147) unless disturbed or problematic. Restrictive Layer (if observed): Type:	Hydroge	en Sulfide (A4)		Loamy Gleye	d Matrix (F2)		Pi	edmont Floodplain Soils (F19)
Com Muck (A10) (LRK N) Redox Dark Sufface (F6) Very Shallow Dark Sufface (1F12) Depleted Bolw Dark Sufface (A11) Depleted Dark Sufface (F7) Other (Explain in Remarks) Trick Dark Sufface (A12) Redox Depressions (F8) Redox Depressions (F8) Redox Depressions (F8) MURA 147, 148) MURA 147, 148) MURA 147, 148) Umbric Sufface (F13) (MLRA 136, 122) ³ Indicators of hydrophytic vegetation an Safdy Redox (S5) Piedmont Floodplain Solis (F19) (MLRA 148) wetland hydrology must be present, Umbric Sufface (F21) (MLRA 147) unless disturbed or problematic. Restrictive Layer (if observed): Type: Depth (inches): Remarks:	Stratified	d Layers (A5)		Depleted Mat	rix (F3)				(MLRA 136, 147)
Depleted Dark Surface (ATT) Depleted Dark Surface (IT) Thick Dark Surface (IT) Sandy (Beyed Matrix (S4) MLRA 136) Sandy (Beyed Matrix (S4) Durbits Surface (F13) (MLRA 136, 122) "Indicators of hydrophytic vegetation an Sandy Redox (S5) Piedmont Floodplain Solis (F19) (MLRA 148) wetland hydrology must be present, unless disturbed or problematic. Restrictive Layer (if observed): Type: Depth (inches): Depth (inches): Red Parent Material (F21) (MLRA 127, 147) Hydric Soil Present? Yes <u>V</u> No No	2 cm Mu Doplator	uck (A10) (LRR N) d Bolow Dark Surface	► (Λ11)	Redox Dark S	Surface (F	6) (E7)			ery Shallow Dark Surface (TF12)
Sandy Mucky Mineral (S1) (LRR N, Incn-Manganese Masses (F12) (LRR N, MLRA 136) Sandy Gleyed Matrix (S4) Umbric Surface (F13) (MLRA 136, 122) ³ Indicators of hydrophytic vegetation an Sandy Redx (S5) Piedmont Floodplatin Solis (F19) (MLRA 148) wetland hydrology must be present, Stripped Matrix (S6) Red Parent Material (F21) (MLRA 127, 147) unless disturbed or problematic. Restrictive Layer (if observed): Type:	Depleter	ark Surface (A12)	= (ATT)	Depleted Dall	ssions (F	(177) B)		0	
MLRA 147, 148) MLRA 136) Sandy Gleyed Matrix (S4) Umbric Surface (F13) (MLRA 136, 122) ³ Indicators of hydrophytic vegetation an Sandy Redox (S5) Stripped Matrix (S6) Red Parent Material (F21) (MLRA 127, 147) wetland hydrology must be present, unless disturbed or problematic. Restrictive Layer (If observed): Type:	Sandy N	/lucky Mineral (S1) (L	.RR N,	Iron-Mangane	ese Masse	es (F12)	(LRR N,		
Sandy Gleyed Matrix (S4) Umbric Surface (F13) (MLRA 136, 122) ³ Indicators of hydrophytic vegetation an Stripped Matrix (S6) Red Parent Material (F21) (MLRA 148) wetland hydrology must be present, unless disturbed or problematic. Restrictive Layer (if observed):	MLR	A 147, 148)		MLRA 136	5)				
Sandy Redox (S5) Piedmont Floodplain Soils (F19) (MLRA 148) wetland hydrology must be present, Stripped Matrix (S6) Red Parent Material (F21) (MLRA 127, 147) unless disturbed or problematic. Restrictive Layer (If observed): Depth (inches): Hydric Soil Present? Yes _ Mo Remarks: Soils disturbed. Due to ponded water probe taken on wetland edge.	Sandy G	Eleyed Matrix (S4)		Umbric Surfac	ce (F13) (MLRA 1	36, 122)	³ Indi	cators of hydrophytic vegetation and
	Sandy F	Redox (S5)		Piedmont Flo	odplain So	oils (F19) (MLRA 1	48) wei	tland hydrology must be present,
Type:	Surpped	aver (if observed):			iateriai (F.	21) (IVIL	KA 127, 14		ess disturbed of problematic.
Depth (inches): No No Remarks: Soils disturbed. Due to ponded water probe taken on wetland edge.	Type:								
Remarks: Soils disturbed. Due to ponded water probe taken on wetland edge.	Depth (in	ches):						Hydric Soil	Present? Yes 🖌 No
Solls disturbed. Due to ponded water probe taken on wetland edge.	Remarks:							,	
Due to ponded water probe taken on wetland edge.	Soils distu	rbed.							
Due to ponded water probe taken on wetland edge.									
	Due to por	nded water probe	taken on	wetland edge.					

Project/Site: Guernsey Power Plant	City/County: C	Sauernsey Sa	mpling Date: 07/21/2016
Applicant/Owner: Guernsey Power Plant		State: OH	Sampling Point: W-C35, C36, C37 UF
Investigator(s): CV, CS	Section, Towns	ship, Range: <u>N/A</u>	
Landform (hillslope, terrace, etc.): Terrace	Local relief (conca	ave, convex, none): Linear	Slope (%): 0
Subregion (LRR or MLRA): LRRN Lat: 39.9	035346	Long: -81.538303	Datum: NAD 83
Soil Map Unit Name: Glenford silt loam, 0 to 3 percent slo	opes (GnA)	NWI classification	_{n:} None
Are climatic / hydrologic conditions on the site typical for this	time of year? Yes	No (If no, explain in Rema	arks.)
Are Vegetation, Soil, or Hydrology sig	nificantly disturbed?	Are "Normal Circumstances" pres	ent? Yes 🔽 No
Are Vegetation, Soil, or Hydrology na	turally problematic?	(If needed, explain any answers in	n Remarks.)
SUMMARY OF FINDINGS – Attach site map s	howing sampling p	point locations, transects, ir	nportant features, etc.

Hydrophytic Vegetation Present? Hydric Soil Present? Wetland Hydrology Present?	Yes Yes Yes	No No No	Is the Sampled Area within a Wetland?	Yes	No
Remarks: Cowardin Code: UF	'LAND				

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)
Surface Water (A1) True Aquatic Plants (B14)	Sparsely Vegetated Concave Surface (B8)
High Water Table (A2) Hydrogen Sulfide Odor (C1)	Drainage Patterns (B10)
Saturation (A3) Oxidized Rhizospheres on Living	Roots (C3) Moss Trim Lines (B16)
Water Marks (B1) Presence of Reduced Iron (C4)	Dry-Season Water Table (C2)
Sediment Deposits (B2) Recent Iron Reduction in Tilled Sc	ils (C6) Crayfish Burrows (C8)
Drift Deposits (B3) Thin Muck Surface (C7)	Saturation Visible on Aerial Imagery (C9)
Algal Mat or Crust (B4) Other (Explain in Remarks)	Stunted or Stressed Plants (D1)
Iron Deposits (B5)	Geomorphic Position (D2)
Inundation Visible on Aerial Imagery (B7)	Shallow Aquitard (D3)
Water-Stained Leaves (B9)	Microtopographic Relief (D4)
Aquatic Fauna (B13)	FAC-Neutral Test (D5)
Field Observations:	
Surface Water Present? Yes No Depth (inches):	
Water Table Present? Yes No Depth (inches):	
Saturation Present? Yes No <u>✓</u> Depth (inches): (includes capillary fringe)	Wetland Hydrology Present? Yes No
Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspec	tions), if available:
Remarks:	

Sampling Point: W-C35, C36, C37 UP

30'	Absolute	Dominant	Indicator	Dominance Test worksheet:
Tree Stratum (Plot size:)	<u>% Cover</u>	Species?	Status	Number of Dominant Species
1				That Are OBL, FACW, or FAC: (A)
2				Total Number of Dominant
3				Species Across All Strata: (B)
4				
5.				Percent of Dominant Species $0 (A/B)$
6				
7				Prevalence Index worksheet:
··	0	- Total Co		Total % Cover of: Multiply by:
50% of total cover: 0	20% of	total cover	. 0	OBL species x 1 =
Sapling/Shruh Stratum (Plat aiza: 15'	2070.01			FACW species x 2 =
				FAC species x 3 =
1				
2				
3				
4				Column lotals: (A) (B)
5				Prevalence Index = B/A =
6				Hydronhytic Vegetation Indicators:
7				1 - Ranid Tast for Hydronbytic Vegetation
8				
9.				2 - Dominance Test is >50%
	0	= Total Co	/er	3 - Prevalence Index is ≤3.0°
50% of total cover: 0	20% of	total cover	: 0	4 - Morphological Adaptations' (Provide supporting
Herb Stratum (Plot size: 5')				data in Remarks or on a separate sheet)
1 Phleum pratense	40	~	FACU	Problematic Hydrophytic Vegetation ¹ (Explain)
Dactvlis glomerata	30	~	FACU	
2. Trifolium repens	15		FACU	¹ Indicators of hydric soil and wetland hydrology must
	10			be present, unless disturbed or problematic.
4. <u>Cichorium intuluu</u>				Definitions of Four Vegetation Strata:
5. Cicitorian Intybas	<u> </u>			Tree – Woody plants, excluding vines 3 in (7.6 cm) or
6. Juncus tenuis	<u> </u>			more in diameter at breast height (DBH), regardless of
7				height.
8				Sanling/Shrub – Woody plants, excluding vines, less
9				than 3 in. DBH and greater than or equal to 3.28 ft (1
10				m) tall.
11				Herb - All herbaceous (non-woody) plants, regardless
	105	= Total Co	/er	of size, and woody plants less than 3.28 ft tall.
50% of total cover: 52.5	20% of	total cover	: <u>21</u>	
Woody Vine Stratum (Plot size: 15')				beight
1.				noight
2.				
3				
4				
5				Hydrophytic
J	0	Total Ca	- <u> </u>	Present? Yes No
50% of total cover: 0	20% of	total cover	·· 0	
Bemarka: (Include photo numbers here or on a concrete a	20 /0 01			
Nemarks. (Include proto numbers here or on a separate s	neet.)			

Depth	Matrix		Redo	x Features						
(inches)	Color (moist)		Color (moist)		Type ¹	Loc ²	Texture	·	Remark	S
0-6	<u>10YR 4/4</u>	100					SL			
6+								Gravel,	compac	ted soil refusal
		·						·		
		<u> </u>						·		
								·		
		<u> </u>								
¹ Type: C=C	oncentration, D=Depl	etion, RM=	Reduced Matrix, M	S=Masked	Sand Gra	ains.	² Location: F	PL=Pore Lini	ng, M=Matr	ix.
Hydric Soil	Indicators:						Indic	ators for Pr	oblematic	Hydric Soils":
Histoso	(A1)		Dark Surface	e (S7)			2	2 cm Muck (/	A10) (MLRA	147)
Histic E	pipedon (A2)		Polyvalue Be	low Surfac	e (S8) (N	ILRA 147,	, 148) (Coast Prairie	Redox (A1	6)
Black H	istic (A3)		Thin Dark Su	Irface (S9)	(MLRA 1	47, 148)		(MLRA 14	7, 148)	
Hydroge	en Sulfide (A4)		Loamy Gleye	ed Matrix (F	-2)		I	Piedmont Flo	odplain So	ils (F19)
Stratifie	d Layers (A5)		Depleted Ma	trix (F3)				(MLRA 13	6, 147)	
2 cm M	uck (A10) (LRR N)		Redox Dark	Surface (F6	5)		`	Very Shallow	Dark Surfa	ace (TF12)
Deplete	d Below Dark Surface	e (A11)	Depleted Da	rk Surface	(F7)		0	Other (Expla	in in Remar	'ks)
Thick D	ark Surface (A12)		Redox Depression	essions (F8)					
Sandy M	/lucky Mineral (S1) (L	RR N,	Iron-Mangan	ese Masse	s (F12) (I	LRR N,				
MLR	A 147, 148)		MLRA 13	6)						
Sandy C	Gleyed Matrix (S4)		Umbric Surfa	nce (F13) (N	ILRA 13	6, 122)	³ Inc	dicators of h	ydrophytic v	egetation and
Sandy F	Redox (S5)		Piedmont Flo	odplain So	ils (F19)	(MLRA 14	18) w	etland hydro	logy must b	e present,
Stripped	l Matrix (S6)		Red Parent N	Material (F2	21) (MLR	A 127, 147	7) ur	nless disturb	ed or proble	ematic.
Restrictive	Layer (if observed):									
Type G	ravel, compacted	soil								
Denth (in								Due e e ut O	Vaa	
Depth (in	ches): 0						Hydric Sol	I Present?	Yes	No
Remarks:										

Project/Site: Guernsey Power Plant	City/County: Guernsey		Sampling Date: 07/21/2016
Applicant/Owner: Guernsey Power Plant		_ _{State:} OH	Sampling Point: W-C38
Investigator(s): CV, CS	_ Section, Township, Range: N/	/A	
Landform (hillslope, terrace, etc.): Depression	ocal relief (concave, convex, no	ne): Concave	Slope (%): 0
Subregion (LRR or MLRA): LRRN Lat: 39.936355	5 Long: <u>-81</u>	.5385	Datum: NAD 83
Soil Map Unit Name: Glenford silt loam, 0 to 3 percent slopes (G	nA)	NWI classific	cation: PEM1C
Are climatic / hydrologic conditions on the site typical for this time of y	/ear? Yes 🖌 No	(If no, explain in R	emarks.)
Are Vegetation, Soil, or Hydrology significant	ly disturbed? Are "Normal	l Circumstances" p	oresent? Yes 🔽 No
Are Vegetation, Soil, or Hydrology naturally p	oroblematic? (If needed, e	explain any answe	rs in Remarks.)
SUMMARY OF FINDINGS – Attach site map showin	g sampling point location	ons, transects	, important features, etc.
Hydrophytic Vegetation Present? Yes No Hydric Soil Present? Yes No Wetland Hydrology Present? Yes No	 Is the Sampled Area within a Wetland? 	Yes 🖌	No
Remarks: Cowardin Code: PEM HGM: Dep	ressional Water Type:	RPWWN	
HYDROLOGY			
Wetland Hydrology Indicators:		Secondary Indica	ators (minimum of two required)
Primary Indicators (minimum of one is required: check all that apply)	Surface Soil	Cracks (B6)
	Dianta (D4.4)	Onenally Mr.	

 Surface Water (A1) High Water Table (A2) Saturation (A3) Water Marks (B1) Sediment Deposits (B2) Drift Deposits (B3) Algal Mat or Crust (B4) Iron Deposits (B5) Inundation Visible on Aerial Imagery (B7) Water-Stained Leaves (B9) Aquatic Fauna (B13) 	 True Aquatic Plants (B14) Hydrogen Sulfide Odor (C1) Oxidized Rhizospheres on Living Presence of Reduced Iron (C4) Recent Iron Reduction in Tilled So Thin Muck Surface (C7) Other (Explain in Remarks) 	
Field Observations: Surface Water Present? Yes No _ Water Table Present? Yes No _ Saturation Present? Yes No _ (includes capillary fringe) Describe Recorded Data (stream gauge, monitod) Remarks:	Depth (inches): Depth (inches): Depth (inches): Depth (inches): Depth (inches): pring well, aerial photos, previous inspec	Wetland Hydrology Present? Yes <u>Yes</u> No tions), if available:

20/	Absolute	Dominant	Indicator	Dominance Test worksheet:
Tree Stratum (Plot size: 30)	% Cover	Species?	Status	Number of Dominant Species
1				That Are OBL, FACW, or FAC: (A)
2				Total Number of Deminent
3				Species Across All Strata: 2 (B)
4				
5				Percent of Dominant Species
0				That Are OBL, FACW, or FAC: (A/B)
6				Prevalence Index worksheet:
7				Total % Cover of: Multiply by:
_	0	= Total Co	ver	
50% of total cover:0	20% of	total cover	:0	OBL species X 1 =
Sapling/Shrub Stratum (Plot size: 15')				FACW species x 2 =
1				FAC species x 3 =
2.				FACU species x 4 =
3				UPL species x 5 =
3				Column Totals: (A) (B)
4				
5				Prevalence Index = B/A =
6	. <u> </u>			Hydrophytic Vegetation Indicators:
7				✓ 1 - Rapid Test for Hydrophytic Vegetation
8				Company Test in 1901/0011101
9.				
•	0	- Total Co		3 - Prevalence Index is ≤3.0'
50% of total cover: 0	20% of		0	4 - Morphological Adaptations ¹ (Provide supporting
Ulark Stratum (Distaine) 5'	20 /8 01			data in Remarks or on a separate sheet)
Herb Stratum (Plot size:)	40		FACW	Problematic Hydrophytic Vegetation ¹ (Explain)
	40			
2. Carex vulpinoidea	20	<u> </u>	OBL	¹ Indicators of hydric soil and wetland hydrology must
3. Ambrosia artemisiifolia	15		FACU	be present, unless disturbed or problematic.
4. Mentha spicata	10		FACW	Definitions of Four Vogetation Strata
5. Carex frankii	5		OBL	Deminions of Four Vegetation Strata.
6				Tree – Woody plants, excluding vines, 3 in. (7.6 cm) or
-				more in diameter at breast height (DBH), regardless of
7				neight.
8				Sapling/Shrub – Woody plants, excluding vines, less
9				than 3 in. DBH and greater than or equal to 3.28 ft (1
10				m) tall.
11				Herb - All berbaceous (non-woody) plants, regardless
	90	= Total Co	ver	of size, and woody plants less than 3.28 ft tall.
50% of total cover: 45	20% of	total cover	18	
Woody Vine Stratum (Plot size: 15'			·	Woody vine – All woody vines greater than 3.28 ft in
				neight.
1				
2				
3				
4		·		Hydrophytic
5				Vegetation
	0	= Total Co	ver	Present? Yes V No
50% of total cover: 0	20% of	total cover	··· 0	
Pomarka: (Include photo numbers here or on a sonarate s	hoot)		· · · · · ·	
Remarks. (include photo numbers here of on a separate s	sneet.)			

Calor (moist) % Color (moist) % Type Loc ² Texture Remarks 0-16 10YR 4/2 60 7.5YR 5/6 10 C M SIL 7.5YR 4/4 30	Dopui	Matrix		Redo	x Features	;					
0-16 10 YR 4/2 60 7.5YR 5/6 10 C M SIL 7.5YR 4/4 30	(inches)	Color (moist)		Color (moist)	%	_Type ¹	Loc ²	Texture	·	Remarks	
7.5YR 4/4 30	0-16	10YR 4/2	60	7.5YR 5/6	10	С	М	SIL			
Image: Solution of the second seco		7 5YR 4/4	30								
'Type: C=Concentration, D=Depletion, RM=Reduced Matrix, MS=Masked Sand Grains. ?Location: PL=Pore Lining, M=Matrix. 'Hydric Soil Indicators: Indicators for Problematic Hydric Soils': Indicators for Problematic Hydric Soils': Histosol (A1) Dark Surface (S7) 2 cm Muck (A10) (MLRA 147) Histosol (A2) Polyvalue Below Surface (S8) (MLRA 147, 148) Coast Praite Redox (A16) Black Histic (A3) Thin Dark Surface (S9) (MLRA 147, 148) Coast Praite Redox (A16) Hydrogen Suffide (A4) Loamy Gleyed Matrix (F2) Pledmont Floodplain Soils (F19) Stratified Layers (A5) Mepteted Matrix (F3) (MLRA 147, 148) 2 cm Muck (A10) (LRR N) Redox Dark Surface (F6) Very Shallow Dark Surface (F12) 2 cm Muck (A10) (LRR N) Redox Dark Surface (F7) Other (Explain in Remarks) 2 Thick Dark Surface (A11) Depleted Dark Surface (F7) Other (Explain in Remarks) 3 Endry Gleyed Matrix (S4) Umbric Surface (F13) (MLRA 136, 122) Pledmont Floodplain Soils (F19) (MLRA 147, 148) Sandy Redox (S5) Pledmont Floodplain Soils (F19) (MLRA 147, 147) Pledmont Floodplain Soils (F19) (MLRA 147, 147) Sandy Gleyed Matrix (S4) Umbric Surface (F13) (MLRA 147, 147) Pledmont Floodplain Soils (F19) (MLRA 147, 148) Sandy Gl		<u></u>		,			·				
Type: C-Concentration, D=Depletion, RM=Reduced Matrix, MS=Masked Sand Grains. ² Location: PL=Pore Lining, M=Matrix. Hydric Soil Indicators: Indicators for Problematic Hydric Soils*: Indicators for Problematic Hydric Soils*: Histosol (A1) Dark Surface (S7) 2 cm Muck (A10) (MLRA 147) Histo: Epipedon (A2) Polyvalue Below Surface (S8) (MLRA 147, 148) Coast Prairie Redox (A16) Black Histisc (A3) Thin Dark Surface (S9) (MLRA 147, 148) Coast Prairie Redox (A16) Statified Layers (A5) Depleted Matrix (F2) Pledmont Floodplain Soils (F19) 2 cm Muck (A10) (LRR N) Redox Depressions (F6) Uery Shallow Dark Surface (TF12) 2 sandy Mucky Mineral (S1) (LRR N, MuRA 136, 122) ³ Indicators of hydrophytic vegetation and Sandy Redox (S5) Sandy Redox (S5) Pledmont Floodplain Soils (F19) (MLRA 127, 147) ³ Indicators of hydrophytic vegetation and Sandy Redox (S5) Stripped Matrix (S4) Umbric Surface (F13) (MLRA 127, 147) ³ Indicators of hydrophytic vegetation and methan hydrology must be present, unless disturbed or problematic. Restrictive Layer (if observed): Type:											
"Type: C=Concentration, D=Depletion, RM=Reduced Matrix, MS=Masked Sand Grains. *Location: PL=Pore Lining, M=Matrix. Hydric Soil Indicators: Indicators for Problematic Hydric Soils*: Histosol (A1)											
"Type: C=Concentration, D=Depletion, RM=Reduced Matrix, MS=Masked Sand Grains. *Location: PL=Pore Lining, M=Matrix. Hydric Soil Indicators: Indicators for Problematic Hydric Soils*: Histosol (A1)											
'Type: C=Concentration, D=Depletion, RM=Reduced Matrix, MS=Masked Sand Grains. ² Location: PL=Pore Lining, M=Matrix. Hydric Soli Indicators: Indicators for Problematic Hydric Solis ² : Histos (A1) Dark Surface (S7) 2 cm Muck (A10) (MLRA 147, 148) Hydric Soli Indicators:											
'Type: C=Concentration, D=Depletion, RM=Reduced Matrix, MS=Masked Sand Grains. ² Location: PL=Pore Lining, M=Matrix. Hydric Soil Indicators: Indicators for Problematic Hydric Soils*: Histosol (A1) Dark Surface (S7) 2 cm Muck (A10) (MLRA 147) Histosol (A2) Polyvalue Below Surface (S8) (MLRA 147, 148) Coast Prairie Redox (A16) Black Histo (A3) Thin Dark Surface (S9) (MLRA 147, 148) Coast Prairie Redox (A16) Hydrogen Suffide (A4) Loamy Gleyed Matrix (F2) Piedmont Floodplain Soils (F19) Stratified Layers (A5) Depleted Dark Surface (F6) Very Shallow Dark Surface (TF12) 2 cm Muck (A10) (LRR N) Redox Dark Surface (F7) Other (Explain in Remarks) Thick Dark Surface (A11) Depleted Dark Surface (F7) Other (Explain in Remarks) Thick Dark Surface (A12) Redox Depressions (F8) Very Shallow Dark Surface (TF12) Sandy Mucky Mineral (S1) (LRR N, MLRA 136, 100 wetland hydrology must be present, unless disturbed or problematic. Sandy Mucky Miseral (S6) Piedmont Floodplain Soils (F19) (MLRA 126, 122) ² Indicators of hydrophytic vegetation and wetland hydrology must be present, unless disturbed or problematic. Stripped Matrix (S6) Red Parent Material (F21) (MLRA 127, 147) unless disturbed or problematic.			<u> </u>				·				
¹ Type: C=Concentration, D=Depletion, RM=Reduced Matrix, MS=Masked Sand Grains. ² Location: PL=Pore Lining, M=Matrix. Hydric Soil Indicators: Indicators for Problematic Hydric Soils ³ : Histosol (A1) Dark Surface (S7) Histosol (A2) Polyvalue Below Surface (S8) (MLRA 147, 148) Coast Prairie Redox (A16) Black Histic (A3) Hydrogen Sulfide (A4) Loamy Gleyed Matrix (F2) Stratified Layers (A5) Depleted Matrix (F3) 2 cm Muck (A10) (LRR N) Redox Dark Surface (F6) 2 cm Muck (A10) (LRR N) Redox Dark Surface (F7) Depleted Below Dark Surface (A12) Redox Dark Surface (F7) Sandy Mucky Mineral (S1) (LRR N, Iron-Manganese Masses (F12) (LRR N, MLRA 147, 148) Umbric Surface (F13) (MLRA 136, 122) Stripped Matrix (S4) Umbric Surface (F13) (MLRA 136, 122) Stripped Matrix (S6) Red Parent Material (F21) (MLRA 127, 147) unless disturbed or problematic. Remarks: Soils high in iron content.									·		
¹ Type: C=Concentration, D=Depletion, RM=Reduced Matrix, MS=Masked Sand Grains. ² Location: PL=Pore Lining, M=Matrix. Hydric Soil Indicators: Indicators for Problematic Hydric Soils ³ : Histic Epipedon (A2) Polyvalue Below Surface (S9) (MLRA 147, 148) Coast Prairie Redox (A10) (MLRA 147, 148) Histic CA3 Thin Dark Surface (S9) (MLRA 147, 148) Coast Prairie Redox (A16) Hydrogen Suffice (A4) Loamy Gleyed Matrix (F2) Piedmont Floodplain Soils (F19) Stratified Layers (A5) V Depleted Matrix (F3) (MLRA 136, 147) 2 cm Muck (A10) (LRR N) Redox Dark Surface (F6) Very Shallow Dark Surface (TF12) Depleted Below Dark Surface (A11) Depleted Dark Surface (F7) Other (Explain in Remarks) Thick Dark Surface (A12) Redox Depressions (F8) Very Shallow Dark Surface (TF12) Sandy Redox (S5) Piedmont Floodplain Soils (F19) (MLRA 148) wetland hydrology must be present, unless disturbed or problematic. Type:											
¹ Type: C=Concentration, D=Depletion, RM=Reduced Matrix, MS=Masked Sand Grains. ² Location: PL=Pore Lining, M=Matrix. Hydric Soil Indicators: Indicators for Problematic Hydric Soils ³ : Histosol (A1) Dark Surface (S7) 2 cm Muck (A10) (MLRA 147, 148) Black Histic CA3 Thin Dark Surface (S9) (MLRA 147, 148) Coast Praine Redox (A16) Hydrogen Sulfide (A4) Loamy Gleyed Matrix (F3) (MLRA 147, 148) 2 cm Muck (A10) (LRR N) Redox Dark Surface (F6) Very Shallow Dark Surface (TF12) Depleted Dark Surface (A11) Depleted Dark Surface (F7) Other (Explain in Remarks) Thick Dark Surface (A12) Redox Depressions (F8) Sandy Gleyed Matrix (S4) Umbric Surface (F13) (MLRA 136, 122) Sandy Gleyed Matrix (S6) Piedmont Floodplain Soils (F19) (MLRA 136, 122) ³ Indicators of hydrophytic vegetation and wetland hydrology must be present, unless disturbed or problematic. Restrictive Layer (if observed): Type:											
¹ Type: C=Concentration, D=Depletion, RM=Reduced Matrix, MS=Masked Sand Grains. ² Location: PL=Pore Lining, M=Matrix. Hydric Soil Indicators: Indicators for Problematic Hydric Soils [*] : Histosol (A1) Dark Surface (S7) 2 cm Muck (A10) (MLRA 147) Histosol (A2) Polyvalue Below Surface (S8) (MLRA 147, 148) Coast Prairie Redox (A16) Black Histic (A3) Thin Dark Surface (S9) (MLRA 147, 148) Coast Prairie Redox (A16) Hydrogen Sulfide (A4) Loamy Gleyed Matrix (F2) Piedmont Floodplain Soils (F19) 2 cm Muck (A10) (LRR N) Redox Dark Surface (F6) Very Shallow Dark Surface (TF12) Depleted Below Dark Surface (A11) Depleted Dark Surface (F12) Other (Explain in Remarks) Thir Dark (S11) Redox Depressions (F8) Other (Explain in Remarks) Sandy Gleyed Matrix (S4) Umbric Surface (F13) (MLRA 136, 122) ³ Indicators of hydrophytic vegetation and wetland hydrology must be present, unless disturbed or problematic. Stripped Matrix (S6) Red Parent Material (F21) (MLRA 127, 147) unless disturbed or problematic. Restrictive Layer (if observed): Type: Piedmont Floodplain Soils (F19) (MLRA 127, 147) No Soils high in iron content. No No No No							·		·		
¹ Type: C=Concentration, D=Depletion, RM=Reduced Matrix, MS=Masked Sand Grains. ² Location: PL=Pore Lining, M=Matrix. Hydric Soil Indicators: Indicators for Problematic Hydric Soils ³ : Histic Epipedon (A2) Dark Surface (S7) 2 cm Muck (A10) (MLRA 147) Histic Epipedon (A2) Polyvalue Below Surface (S9) (MLRA 147, 148) Coast Prairie Redox (A16) Hydrogen Suffide (A4) Loamy Gleyed Matrix (F2) Piedmont Floodplain Soils (F19) Stratified Layers (A5) ✓ Depleted Matrix (F3) (MLRA 146, 147) 2 cm Muck (A10) (LRR N) Redox Dark Surface (F6) Very Shallow Dark Surface (TF12) Depleted Below Dark Surface (A11) Depleted Dark Surface (F7) Other (Explain in Remarks) Sandy Mucky Mineral (S1) (LRR N, Iron-Manganese Masses (F12) (LRR N, Indicators of hydrophytic vegetation and wetland hydrology must be present, Sandy Gleyed Matrix (S6) Red Parent Material (F21) (MLRA 127, 147) Inless disturbed or problematic. Restrictive Layer (if observed): Type: Piedmont Floodplain Soils (F19) (MLRA 127, 147) Indicators of hydrophytic vegetation and wetland hydrology must be present, Soils high in irron content. Matrix (S6) Red Parent Material (F21) (MLRA 127, 147) Indicators of hydrophytic vegetation and											
Hydric Soil Indicators: Indicators for Problematic Hydric Soils ³ : Histosol (A1) Dark Surface (S7) 2 cm Muck (A10) (MLRA 147, 148) Histic Epipedon (A2) Polyvalue Below Surface (S8) (MLRA 147, 148) Coast Prairie Redox (A16) Black Histic (A3) Thin Dark Surface (S9) (MLRA 147, 148) (MLRA 147, 148) Hydrogen Sulfide (A4) Loamy Gleyed Matrix (F2) Piedmont Floodplain Soils (F19) Stratified Layers (A5) V Depleted Matrix (F3) Very Shallow Dark Surface (TF12) Depleted Below Dark Surface (A11) Depleted Dark Surface (F6) Very Shallow Dark Surface (TF12) Thick Dark Surface (A12) Redox Depressions (F8) Other (Explain in Remarks) Sandy Mucky Mineral (S1) (LRR N, Iron-Manganese Masses (F12) (LRR N, MLRA 147, 148) Sandy Redox (S5) Piedmont Floodplain Soils (F19) (MLRA 148, 148) wetland hydrology must be present, unless disturbed or problematic. Restrictive Layer (if observed): Type: Piedmont Floodplain Soils (F21) (MLRA 127, 147) Indicators of hydrophytic vegetation and wetland hydrology must be present, unless disturbed or problematic. Remarks: Soils high in iron content. Hydric Soil Present? Yes No No	¹ Type: C=C	oncentration, D=Deple	etion, RM=F	Reduced Matrix, MS	S=Masked	Sand Gr	ains.	² Location: I	PL=Pore Lini	ng, M=Matrix.	
Histosol (A1) Dark Surface (S7) 2 cm Muck (A10) (MLRA 147) Histic Epipedon (A2) Polyvalue Below Surface (S8) (MLRA 147, 148) Coast Prairie Redox (A16) Black Histic (A3) Thin Dark Surface (S9) (MLRA 147, 148) (MLRA 147, 148) Hydrogen Sulfide (A4) Loamy Gleyed Matrix (F2) Piedmont Floodplain Soils (F19) Stratified Layers (A5) Depleted Matrix (F3) (MLRA 136, 147) 2 cm Muck (A10) (LRR N) Redox Dark Surface (F6) Very Shallow Dark Surface (TF12) Depleted Below Dark Surface (A11) Depleted Dark Surface (F7) Other (Explain in Remarks) Thick Dark Surface (A12) Redox Dark Surface (F13) (MLRA 136, 122) °Indicators of hydrophytic vegetation and wetland hydrology must be present, unless disturbed or problematic. Sandy Gleyed Matrix (S6) Red Parent Material (F21) (MLRA 147, 147) unless disturbed or problematic. Restrictive Layer (if observed): Type:	Hydric Soil	Indicators:						Indie	ators for P	oblematic Hy	dric Soils ³ :
Histic Epipedon (A2) Polyvalue Below Surface (S8) (MLRA 147, 148) Coast Prairie Redox (A16) Black Histic (A3) Thin Dark Surface (S9) (MLRA 147, 148) (MLRA 147, 148) Hydrogen Sulfide (A4) Loamy Gleyed Matrix (F2) Piedmont Floodplain Soils (F19) Stratified Layers (A5) V Depleted Matrix (F3) (MLRA 136, 147) 2 cm Muck (A10) (LRR N) Redox Dark Surface (F6) Very Shallow Dark Surface (TF12) Depleted Below Dark Surface (A11) Depleted Dark Surface (F7) Other (Explain in Remarks) Thick Dark Surface (A12) Redox Depressions (F8) Other (Explain in Remarks) Sandy Mucky Mineral (S1) (LRR N, Iron-Manganese Masses (F12) (LRR N, MLRA 136, 147) Sandy Gleyed Matrix (S4) Umbric Surface (F13) (MLRA 136, 122) ³ Indicators of hydrophytic vegetation and wetland hydrology must be present, unless disturbed or problematic. Restrictive Layer (if observed): Type:	Histosol	(A1)		Dark Surface	e (S7)				2 cm Muck (A10) (MLRA 1 4	47)
Black Histic (A3) Thin Dark Surface (S9) (MLRA 147, 148) (MLRA 147, 148) Hydrogen Sulfide (A4) Loamy Gleyed Matrix (F2) Piedmont Floodplain Soils (F19)	Histic Ep	pipedon (A2)		Polyvalue Be	olow Surface	e (S8) (N	ILRA 147,	, 148)	Coast Prairie	e Redox (A16)	
Hydrogen Sulfide (A4) Loamy Gleyed Matrix (F2) Piedmont Floodplain Soils (F19) Stratified Layers (A5) Depleted Matrix (F3) (MLRA 136, 147) 2 cm Muck (A10) (LRR N) Redox Dark Surface (F6) Very Shallow Dark Surface (TF12) Depleted Below Dark Surface (A11) Depleted Dark Surface (F7) Other (Explain in Remarks) Thick Dark Surface (A12) Redox Depressions (F8) Other (Explain in Remarks) Sandy Mucky Mineral (S1) (LRR N, Iron-Manganese Masses (F12) (LRR N, MLRA 136, 122) ³ Indicators of hydrophytic vegetation and wetland hydrology must be present, Sandy Redox (S5) Piedmont Floodplain Soils (F19) (MLRA 148) wetland hydrology must be present, Stripped Matrix (S6) Red Parent Material (F21) (MLRA 127, 147) unless disturbed or problematic. Restrictive Layer (if observed): Type:	Black Hi	stic (A3)		Thin Dark Su	urface (S9)	(MLRA 1	47, 148)		(MLRA 14	7, 148)	
	Hydroge	n Sulfide (A4)		Loamy Gleye	ed Matrix (=2)			Piedmont Flo	oodplain Soils ((F19)
2 cm Muck (A10) (LRR N)	Stratified	d Layers (A5)		Depleted Ma	trix (F3)				(MLRA 13	6, 147)	
Depleted Below Dark Surface (A11) Depleted Dark Surface (F7) Other (Explain in Remarks) Redox Depressions (F8) Redox Depressions (F8) Iron-Manganese Masses (F12) (LRR N, MLRA 136) MLRA 136) MLRA 136 Umbric Surface (F13) (MLRA 136, 122) ³ Indicators of hydrophytic vegetation and wetland hydrology must be present, Umbric Surface (F12) (MLRA 148) wetland hydrology must be present, unless disturbed or problematic. Restrictive Layer (if observed):	2 cm Mu	uck (A10) (LRR N)		Redox Dark	Surface (F	6)			Very Shallow	/ Dark Surface	(TF12)
	Deplete	d Below Dark Surface	e (A11)	Depleted Date	rk Surface	(F7)			Other (Expla	in in Remarks)	
	Thick Da	ark Surface (A12)		Redox Depre	essions (F8	3)					
MLRA 147, 148) MLRA 136)	Sandy N	/lucky Mineral (S1) (L	RR N,	Iron-Mangan	ese Masse	es (F12) (LRR N,				
	MLR	A 147, 148)		MLRA 13	6)			з.			
	Sandy G	Bleyed Matrix (S4)		Umbric Surfa	ace (F13) (MLRA 13	6, 122)	°In	dicators of h	ydrophytic veg	etation and
	Sandy F	(S5)		Piedmont Flo	odplain S	oils (F19)	(MLRA 14	18) w	etland hydro	logy must be p	oresent,
Restrictive Layer (if observed): Type:	Stripped	Matrix (S6)		Red Parent N	Material (F	21) (MLR	A 127, 14	7) u	nless disturb	ed or problema	atic.
Type: Depth (inches): No Remarks: Soils high in iron content.	Restrictive	Layer (if observed):									
Depth (inches): No No Remarks: Soils high in iron content.	Туре:										
Remarks: Soils high in iron content.	Depth (in	ches):						Hydric So	I Present?	Yes 🔽	No
Soils high in iron content.	Remarks:							-			
	Soils high i	in iron content.									

Project/Site: Guernsey Power Plant	_ City/County: Guernsey	Sampling Date: 07/21/2016					
Applicant/Owner: Guernsey Power Plant	State: OH	Sampling Point: W-C39					
Investigator(s): CV, CS	_ Section, Township, Range: <u>N/A</u>						
Landform (hillslope, terrace, etc.): Depression	ocal relief (concave, convex, none): <u>Concave</u>	Slope (%): 0					
Subregion (LRR or MLRA): LRRN Lat: 39.936149	9 Long: -81.538145	Datum: NAD 83					
Soil Map Unit Name: Glenford silt loam, 0 to 3 percent slopes (G	inA) NWI classific	cation: None					
Are climatic / hydrologic conditions on the site typical for this time of year? Yes <u>V</u> No (If no, explain in Remarks.)							
Are Vegetation, Soil, or Hydrology significant	ly disturbed? Are "Normal Circumstances" p	present? Yes 🔽 No					
Are Vegetation, Soil, or Hydrology naturally problematic? (If needed, explain any answers in Remarks.)							
SUMMARY OF FINDINGS – Attach site map showin	ng sampling point locations, transects	s, important features, etc.					
Hydrophytic Vegetation Present? Yes V Hydric Soil Present? Yes V Wetland Hydrology Present? Yes V	 Is the Sampled Area within a Wetland? Yes 	No					
Remarks: Cowardin Code: PEM HGM: Dep	vressional Water Type: RPWWN						
HYDROLOGY							
Wetland Hydrology Indicators:	Secondary Indica	ators (minimum of two required)					

, , , , , , , , , , , , , , , , , , , ,				
Primary Indicators (minimum	of one is required	; check all that apply)		Surface Soil Cracks (B6)
Surface Water (A1)			Sparsely Vegetated Concave Surface (B8)	
High Water Table (A2)			Drainage Patterns (B10)	
Saturation (A3)		Oxidized Rhizospheres on Living	Roots (C3)	Moss Trim Lines (B16)
Water Marks (B1)		Presence of Reduced Iron (C4)		Dry-Season Water Table (C2)
Sediment Deposits (B2)		Recent Iron Reduction in Tilled S	Soils (C6)	Crayfish Burrows (C8)
Drift Deposits (B3)		Thin Muck Surface (C7)		Saturation Visible on Aerial Imagery (C9)
Algal Mat or Crust (B4)		Other (Explain in Remarks)		Stunted or Stressed Plants (D1)
Iron Deposits (B5)				Geomorphic Position (D2)
Inundation Visible on Ae	rial Imagery (B7)			Shallow Aquitard (D3)
Water-Stained Leaves (I	39)			Microtopographic Relief (D4)
Aquatic Fauna (B13)				 FAC-Neutral Test (D5)
Field Observations:				
Surface Water Present?	Yes No	Depth (inches):		
Water Table Present?	Yes No	Depth (inches):		
Saturation Present? (includes capillary fringe)	Yes No	Depth (inches):	Wetland I	Hydrology Present? Yes 🖌 No
Describe Recorded Data (str	eam gauge, monite	oring well, aerial photos, previous inspe	ctions), if ava	ailable:
Remarks:				

201	Absolute	Dominant	ndicator	Dominance Test worksheet:
Tree Stratum (Plot size: 30)	% Cover	Species?	Status	Number of Dominant Species
1				That Are OBL, FACW, or FAC:3 (A)
2				Total Number of Dominant
3				Species Across All Strata: 3 (B)
4				
5				Percent of Dominant Species
				That Are OBL, FACW, or FAC:(A/B)
б				Prevalence Index worksheet:
7				Total % Cover of Multiply by:
	0	= Total Cove	er	
50% of total cover: 0	20% of	total cover:	0	
Sapling/Shrub Stratum (Plot size: 15)				FACW species x 2 =
1				FAC species x 3 =
2				FACU species x 4 =
3.				UPL species x 5 =
4				Column Totals: (A) (B)
5				
0				Prevalence Index = B/A =
٥				Hydrophytic Vegetation Indicators:
7				1 - Rapid Test for Hydrophytic Vegetation
8				✓ 2 - Dominance Test is >50%
9				$\frac{2}{3} = \frac{2}{2} = \frac{1}{2} $
	0	= Total Cove	er	5 - Flevalence index is ≤5.0
50% of total cover:0	20% of	total cover:_	0	4 - Morphological Adaptations (Provide supporting
Herb Stratum (Plot size: 5')		_		data in Remarks or on a separate sheet)
1 Juncus effusus	40	~	FACW	Problematic Hydrophytic Vegetation ¹ (Explain)
	20	~	OBI	
2. Carox frankii	15	<u> </u>		¹ Indicators of hydric soil and wetland hydrology must
	15		OBL	be present, unless disturbed or problematic.
4				Definitions of Four Vegetation Strata:
5				
6				Tree – Woody plants, excluding vines, 3 in. (7.6 cm) or
7.				height.
8				
0				Sapling/Shrub – Woody plants, excluding vines, less
				than 3 ln. DBH and greater than or equal to 3.28 ft (1
10				11) tail.
¹¹				Herb – All herbaceous (non-woody) plants, regardless
		= Total Cove	er	of size, and woody plants less than 3.28 ft tall.
50% of total cover: 37.	b 20% of	total cover:	15	Woody vine – All woody vines greater than 3.28 ft in
Woody Vine Stratum (Plot size: 15)				height.
1				
2				
3.				
4				
				Hydrophytic
0				Vegetation Present? Yes V No
50% (4.4.4		= I otal Cove	er O	
	20% 0	total cover:	0	
Remarks: (Include photo numbers here or on a separate s	sheet.)			

Profile Desc	Profile Description: (Describe to the depth needed to document the indicator or confirm the absence of indicators.)							
Depth	Matrix		Redox	Features	<u> </u>	. 2	_	
(inches)	Color (moist)	<u> % </u>	Color (moist)		Type'		Texture	Remarks
0-16	10YR 4/2		7.5YR 5/6	10	<u>C</u>	<u>M</u>	SIL	
		·						
		·						
¹ Type: C=Co			Reduced Matrix MS	 =Masked	Sand Gr	ains	² Location: P	
Hydric Soil	indicators:	50011, 1011–1		_maonoa	Cana On		Indica	ators for Problematic Hydric Soils ³ :
Histosol	(A1)		Dark Surface	(S7)			2	cm Muck (A10) (MLRA 147)
Histic Er	pipedon (A2)		Polyvalue Bel	ow Surfa	ce (S8) (N	ILRA 147.	148) C	coast Prairie Redox (A16)
Black Hi	stic (A3)		Thin Dark Su	rface (S9)	(MLRA 1	47, 148)	,	(MLRA 147, 148)
Hydroge	n Sulfide (A4)		Loamy Gleye	d Matrix (F2)		P	iedmont Floodplain Soils (F19)
Stratified	l Layers (A5)		Depleted Mat	rix (F3)				(MLRA 136, 147)
2 cm Mu	ick (A10) (LRR N)		Redox Dark S	Surface (F	6)		V	ery Shallow Dark Surface (TF12)
Depleted	d Below Dark Surface	(A11)	Depleted Dar	k Surface	(F7)		_ 0	other (Explain in Remarks)
Thick Da	ark Surface (A12)		Redox Depres	ssions (F8	3)			
Sandy M	lucky Mineral (S1) (L l	RR N,	Iron-Mangane	ese Masse	es (F12) (LRR N,		
MLRA	A 147, 148)		MLRA 136	5)				
Sandy G	ileyed Matrix (S4)		Umbric Surface	ce (F13) (MLRA 13	6, 122)	³ Ind	icators of hydrophytic vegetation and
Sandy R	edox (S5)		Piedmont Flo	odplain S	oils (F19)	(MLRA 14	18) we	tland hydrology must be present,
Stripped	Matrix (S6)		Red Parent N	laterial (F	21) (MLR	A 127, 147	7) un	less disturbed or problematic.
Restrictive I	_ayer (if observed):							
Туре:								_
Depth (ind	ches):						Hydric Soil	Present? Yes <u>V</u> No
Remarks:							•	

Project/Site: Guernsey Power Plant	City/County: Guernsey	Sampling Date: 07/21/2016
Applicant/Owner: Guernsey Power Plant	State: OH	Sampling Point: W-C40
Investigator(s): CV, CS	_ Section, Township, Range: <u>N/A</u>	
Landform (hillslope, terrace, etc.): Depression	ocal relief (concave, convex, none): <u>Concave</u>	Slope (%): 0
Subregion (LRR or MLRA): LRRN Lat: 39.93655	Long: -81.53802	Datum: NAD 83
Soil Map Unit Name: Glenford silt loam, 0 to 3 percent slopes (Gr	nA) NWI classifio	cation: None
Are climatic / hydrologic conditions on the site typical for this time of y	vear? Yes 🖌 No (If no, explain in F	Remarks.)
Are Vegetation, Soil, or Hydrology significantly	y disturbed? Are "Normal Circumstances"	present? Yes 🖌 No
Are Vegetation, Soil, or Hydrology naturally pl	roblematic? (If needed, explain any answe	ers in Remarks.)
SUMMARY OF FINDINGS – Attach site map showing	g sampling point locations, transects	s, important features, etc.
Hydrophytic Vegetation Present? Yes V Hydric Soil Present? Yes V Wetland Hydrology Present? Yes No	- Is the Sampled Area - within a Wetland? Yes✔	No
Remarks: Cowardin Code: PEM HGM: Dep	ressional Water Type: RPWWN	
HYDROLOGY		

Primary Indicators (minimum of one is required; check all that apply)	Surface Soil Cracks (B6)							
Surface Water (A1) True Aquatic Plants (B14)	Sparsely Vegetated Concave Surface (B8)							
High Water Table (A2) Hydrogen Sulfide Odor (C1)	Drainage Patterns (B10)							
Saturation (A3) Oxidized Rhizospheres on Living	Roots (C3) Moss Trim Lines (B16)							
Water Marks (B1) Presence of Reduced Iron (C4)	Dry-Season Water Table (C2)							
Sediment Deposits (B2) Recent Iron Reduction in Tilled Sc	bils (C6) Crayfish Burrows (C8)							
Drift Deposits (B3) Thin Muck Surface (C7)	Saturation Visible on Aerial Imagery (C9)							
Algal Mat or Crust (B4) Other (Explain in Remarks)	Stunted or Stressed Plants (D1)							
Iron Deposits (B5)	Geomorphic Position (D2)							
Inundation Visible on Aerial Imagery (B7)	Shallow Aquitard (D3)							
Water-Stained Leaves (B9)	Microtopographic Relief (D4)							
Aquatic Fauna (B13)	FAC-Neutral Test (D5)							
Field Observations:								
Surface Water Present? Yes No 🔽 Depth (inches):								
Water Table Present? Yes No 🖌 Depth (inches):								
Saturation Present? Yes No 🖌 Depth (inches):	Wetland Hydrology Present? Yes <u>V</u> No							
L (includes capillary tringe)	(includes capillary tringe)							
(includes capillary tringe) Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspec	tions), if available:							
(includes capillary tringe) Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspec	tions), if available:							
(includes capillary tringe) Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspec Remarks:	tions), if available:							
(includes capillary tringe) Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspec Remarks:	tions), if available:							
(includes capillary tringe) Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspec Remarks:	tions), if available:							
(Includes capillary tringe) Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspec Remarks:	tions), if available:							
(Includes capillary tringe) Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspec Remarks:	tions), if available:							
(Includes capillary tringe) Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspec Remarks:	tions), if available:							
(Includes capillary tringe) Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspec Remarks:	tions), if available:							
(Includes capillary tringe) Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspec Remarks:	tions), if available:							
(Includes capillary tringe) Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspec Remarks:	tions), if available:							

20/	Absolute	Dominant	Indicator	Dominance Test worksheet:
Tree Stratum (Plot size:)	<u>% Cover</u>	Species?	<u>Status</u>	Number of Dominant Species
1				That Are OBL, FACW, or FAC:3 (A)
2				Total Number of Dominant
3				Species Across All Strata: <u>3</u> (B)
4				Demonst of Deminerat Creation
5				That Are OBL, FACW, or FAC: 0 (A/B)
6.				
7				Prevalence Index worksheet:
··	0	- Total Cove		Total % Cover of: Multiply by:
50% of total cover: 0	20% of	total cover:	0	OBL species x 1 =
Sapling/Shrub Stratum (Plot size: 15')				FACW species x 2 =
				FAC species x 3 =
I				FACIL species x 4 =
2				
3				
4				Column Totals: (A) (B)
5				Prevalence Index = B/A =
6				Hydrophytic Vegetation Indicators:
7				1 - Rapid Test for Hydrophytic Vegetation
8				✓ 2 - Dominance Test is >50%
9				$\frac{1}{2} = 2 \text{ Dominiative rest is } 200\%$
	0	= Total Cove	er	3 - Prevalence index is ≤3.0
50% of total cover:0	20% of	total cover:_	0	4 - Morphological Adaptations (Provide supporting
Herb Stratum (Plot size: 5')				data in Remarks or on a separate sheet)
1 Juncus effusus	40	~	FACW	Problematic Hydrophytic Vegetation ¹ (Explain)
2 Carex vulpinodea	20	<u> </u>	OBL	
2. Catex frankij	15	<u> </u>		¹ Indicators of hydric soil and wetland hydrology must
				be present, unless disturbed or problematic.
4				Definitions of Four Vegetation Strata:
5				Tree – Woody plants, excluding vines 3 in (7.6 cm) or
6				more in diameter at breast height (DBH), regardless of
7				height.
8				Sanling/Shrub Woody plants evoluting vines loss
9				than 3 in. DBH and greater than or equal to 3.28 ft (1
10.				m) tall.
11.				
	75	- Total Cove		of size, and woody plants less than 3.28 ft tall
50% of total cover: 37 .	5 20% of	total cover:	່ 15	
Woody Vine Stratum (Plot size: 15')				Woody vine – All woody vines greater than 3.28 ft in
				height.
<u> </u>	·			
3				
4				Hydrophytic
5				Vegetation
		= Total Cove	er	Present? Yes V. No
50% of total cover: 0	20% of	total cover:	0	
Remarks: (Include photo numbers here or on a separate s	sheet.)			

Profile Desc	ription: (Describe te	o the depth	n needed to docum	nent the i	ndicator	or confirm	the absence	e of indicators.)
Depth	Matrix		Redox	Features	6			
(inches)	Color (moist)		Color (moist)	%	_Type ¹	Loc ²	Texture	Remarks
0-16	10YR 4/2	90	7.5YR 5/6	10	С	Μ	SIL	
						·	-	-
						·		
								-
						• ——		
						·		-
						·		
			Poducod Matrix MS	-Mackad	Sand Gr		² Location:	PL-Poro Lipipa M-Matrix
Hydric Soil I	ndicators:			-iviaskeu	Sanu Gi	airi5.	Location. r	rators for Problematic Hydric Soils ³
Histopol	(A 1)		Dark Surface	(67)			interio	2 om Muck (A10) (MI BA 117)
Listic Er	(AT) Vinadan (A2)			(SI)			149)	Const Proirie Rodov (A16)
	(A2)		Polyvalue Bel	ow Sunac	(MIDA)	/ILKA 147, 147 440)	140)	
	$\operatorname{Sub}(A3)$			d Motrix (147, 140)		(MLRA 147, 140) Diadmont Floodalain Soila (F10)
Hyuroge				u Maliix (1	r <i>z)</i>		!	
			Bodov Dork S	lix (F3) Surface (E	(C)		,	(MERA 130, 147)
2 cm wu	CK (ATU) (LKK N) Bolow Dark Surface	(11)	Redux Dark 3	k Surface	(E7)		—	Other (Explain in Remarks)
Depleted	r Below Dark Surface	(ATT)	Depieted Dali	n Sunace	(F7) 5)			
Thick Da	lik Sullace (A12)		Redux Depres	SSIULIS (FO)););			
	147 149)	nn N,		30 1112330	55 (112)	LNN N,		
Sandy G	leved Matrix (S4)		Limbric Surfa	リ への (F13) (6 122)	³ In	dicators of hydrophytic vegetation and
Sandy C	edox (S5)		Oniblic Sullat	odnlain S		/MI PA 1/	I 8) w	vetland hydrology must be present
Sandy R	Matrix (S6)		Red Parent M	latorial (F	21) (MI R	Δ 127 147	7)	nless disturbed or problematic
Restrictive I	aver (if observed):							
Turner	ayer (il observeu).							
Type:								
Depth (inc	ches):						Hydric So	il Present? Yes <u>Yes</u> No
Remarks:								

Project/Site: Guernsey Power Plant	City/County: Gue	ernsey s	Campling Date: 07/21/2016
Applicant/Owner: Guernsey Power Plant		State: OH	Sampling Point: W-C38, C39, C40 UF
Investigator(s): CV, CS	Section, Township	o, Range: <u>N/A</u>	
Landform (hillslope, terrace, etc.): Terrace	Local relief (concave,	convex, none): Linear	Slope (%): 0
Subregion (LRR or MLRA): LRRN Lat: 39.93	64	Long: -81.538199	Datum: NAD 83
Soil Map Unit Name: Glenford silt loam, 0 to 3 percent slop	es (GnA)	NWI classificat	ion: None
Are climatic / hydrologic conditions on the site typical for this tir	ne of year? Yes	No (If no, explain in Rer	narks.)
Are Vegetation, Soil, or Hydrology sign	ificantly disturbed?	Are "Normal Circumstances" pre	esent? Yes 🖌 No
Are Vegetation, Soil, or Hydrology natu	rally problematic?	(If needed, explain any answers	in Remarks.)
SUMMARY OF FINDINGS – Attach site map sh	owing sampling poi	nt locations, transects,	important features, etc.

Hydrophytic Vegetation Present? Hydric Soil Present?	Yes Yes	No No	<u> </u>	Is the Sampled Area within a Wetland?	Yes	No	v
Wetland Hydrology Present?	Yes	No	<u> </u>				
Remarks: Cowardin Code: UPL	AND						

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)				
Surface Water (A1) True Aquatic Plants (B14)	Sparsely Vegetated Concave Surface (B8)				
High Water Table (A2) Hydrogen Sulfide Odor (C1)	Drainage Patterns (B10)				
Saturation (A3) Oxidized Rhizospheres on Living	Roots (C3) Moss Trim Lines (B16)				
Water Marks (B1) Presence of Reduced Iron (C4)	Ls (C6) Crayfish Burrows (C8)				
Sediment Deposits (B2) Recent Iron Reduction in Tilled Sc					
Drift Deposits (B3) Thin Muck Surface (C7)	Saturation Visible on Aerial Imagery (C9)				
Algal Mat or Crust (B4) Other (Explain in Remarks)	Stunted or Stressed Plants (D1)				
Iron Deposits (B5)	Geomorphic Position (D2)				
Inundation Visible on Aerial Imagery (B7)	Shallow Aquitard (D3)				
Water-Stained Leaves (B9)	Microtopographic Relief (D4)				
Aquatic Fauna (B13)	FAC-Neutral Test (D5)				
Field Observations:					
Surface Water Present? Yes No Depth (inches):					
Water Table Present? Yes No Depth (inches):					
Saturation Present? Yes No <u>✓</u> Depth (inches): (includes capillary fringe)	Wetland Hydrology Present? Yes No				
Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspec	tions), if available:				
Remarks:					

Sampling Point: W-C38, C39, C40 UP

	Absolute	Dominant	Indicator	Dominance Test worksheet:
<u>Tree Stratum</u> (Plot size: <u>30</u>)	% Cover	Species?	Status	Number of Dominant Species
1				That Are OBL, FACW, or FAC: (A)
2.				
3				Total Number of Dominant
			·	Species Across All Strata. (B)
4			·	Percent of Dominant Species
5				That Are OBL, FACW, or FAC: (A/B)
6			·	Prevalence Index worksheet:
7				
	0	= Total Cov	/er	<u> </u>
50% of total cover: 0	20% of	total cover	:0	OBL species x 1 =
Sapling/Shrub Stratum (Plot size: 15')				FACW species x 2 =
1				FAC species x 3 =
2.				FACU species x 4 =
3				UPL species x 5 =
4				Column Totals: (A) (B)
4				
0			·	Prevalence Index = B/A =
ΰ			·	Hydrophytic Vegetation Indicators:
7				1 - Rapid Test for Hydrophytic Vegetation
8				2 - Dominance Test is >50%
9				$\frac{2}{2} \text{ Browelence Index is } <2.0^{1}$
	0	= Total Cov	/er	$\frac{1}{2} = \frac{1}{2} = \frac{1}$
50% of total cover: 0	20% of	total cover	<u> 0 </u>	4 - Morphological Adaptations (Provide supporting
Herb Stratum (Plot size: 5')				data in Remarks or on a separate sheet)
1 Phleum pratense	40	V	FACU	Problematic Hydrophytic Vegetation ¹ (Explain)
Dactvlis glomerata	30	~	FACU	
2. Trifolium repens	15		EACU	¹ Indicators of hydric soil and wetland hydrology must
J. Trifolium protonoo	10			be present, unless disturbed or problematic.
4. Thiolium pratense			FACU	Definitions of Four Vegetation Strata:
5. Cichorium intybus	5		FACU	The Merchanks with the side of the (7.0 cm) of
6. Juncus tenuis	5		FAC	Iree – woody plants, excluding vines, 3 in. (7.6 cm) or more in diameter at breast height (DBH) regardless of
7				height.
8.				
9				Sapling/Shrub – Woody plants, excluding vines, less
10				m) tall.
			·	,
· · · · · · · · · · · · · · · · · · ·	105		·	Herb – All herbaceous (non-woody) plants, regardless
500% of total accord 52 F	105	= I otal Cov	/er	or size, and woody plants less than 3.28 ft tall.
50% of total cover: <u>52.c</u>	20% of	total cover		Woody vine – All woody vines greater than 3.28 ft in
Woody Vine Stratum (Plot size: 19)				height.
1				
2				
3				
4				I hudron hudio
5.				Hydrophytic Vegetation
	0	- Total Cov	/er	Present? Yes No V
50% of total cover: 0	20% of	total cover	: 0	
Remarks: (Include photo numbers bere or on a separate s	hoot)		·	
	1001.7			

I

Profile Desc	ription: (Describe t	o the depth	needed to docun	nent the i	ndicator	or confirm	the absence	of indicato	rs.)	
Depth	Matrix		Redo	x Features	<u>s</u> 1	. 2	_			
(inches)		<u> </u>	Color (moist)		Type	Loc	Texture		Remarks	
0-0										
6+								Gravel,	compacted	d soil refusal
$\frac{1}{1}$				-Maakad			² Legation: D		a M-Motrix	
Hvdric Soil	ndicators:			S=IVIASKeu	I Sand Gra	ans.	Location: P	ators for Pro	blematic H	dric Soils ³ :
Histosol	(A1)		Dark Surface	(S7)			2	cm Muck (A	.10) (MLRA 1	47)
Histic Ep	pipedon (A2)		Polyvalue Be	low Surfa	ce (S8) (M	ILRA 147,	148) (Coast Prairie	Redox (A16)	,
Black Hi	stic (A3)		Thin Dark Su	rface (S9)	(MLRA 1	47, 148)		(MLRA 147	7, 148)	
Hydroge	n Sulfide (A4)		Loamy Gleye	d Matrix (F2)		F	Piedmont Flo	odplain Soils	(F19)
Stratified	Layers (A5)		Depleted Mat	(F3) Surface (F	6)		N.	(IVILRA 130) Arv Shallow	o, 147) Dark Surface	(TF12)
2 cm wid Depleted	Below Dark Surface	e (A11)	Depleted Dar	k Surface	(F7)		`	Other (Explain	n in Remarks)
Thick Da	ark Surface (A12)	· · /	Redox Depre	ssions (F8	B)					,
Sandy M	lucky Mineral (S1) (L	RR N,	Iron-Mangane	ese Masse	es (F12) (I	_RR N,				
MLRA	A 147, 148)		MLRA 136	6)			3.			
Sandy G	ileyed Matrix (S4)		Umbric Surfa	ce (F13) (odplain S	MLRA 13	6,122) (MI D \ 14)	°inc •	licators of hy	drophytic veg	jetation and
Sanuy R	Matrix (S6)		Red Parent N	Aaterial (F	21) (MLR	(IVILKA 14) A 127, 147	o) we) un	less disturbe	ed or problem	atic.
Restrictive L	_ayer (if observed):					,	/ u			
_{Type:} Gr	avel, compacted	soil								
Depth (ind	_{ches):} 6						Hydric Soil	Present?	Yes	No 🖌
Remarks:										

Project/Site: Guernsey Power Plant	City/County: Guernsey	Sampling Date: 07/21/2016						
Applicant/Owner: Guernsey Power Plant	State: OH	Sampling Point: W-C41						
Investigator(s): <u>CV, CS</u>	_ Section, Township, Range: <u>N/A</u>							
Landform (hillslope, terrace, etc.): Hillslope	ocal relief (concave, convex, none): Concav	e Slope (%): 3-8						
Subregion (LRR or MLRA): LRRN Lat: 39.938523	Long: -81.537186	Datum: NAD 83						
Soil Map Unit Name: Mentor silt loam, 2 to 8 percent slopes (Mel	NWI classification: None							
Are climatic / hydrologic conditions on the site typical for this time of year? Yes No (If no, explain in Remarks.)								
Are Vegetation, Soil, or Hydrology significantly disturbed? Are "Normal Circumstances" present? Yes No								
Are Vegetation, Soil, or Hydrology naturally p	roblematic? (If needed, explain any ans	wers in Remarks.)						
SUMMARY OF FINDINGS – Attach site map showing sampling point locations, transects, important features, etc.								
Hydrophytic Vegetation Present? Yes No Hydric Soil Present? Yes No Wetland Hydrology Present? Yes No	 Is the Sampled Area within a Wetland? Yes 	✔No						
Remarks: Cowardin Code: PEM HGM: Slop	Water Type: RPWWN							

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)
 Surface Water (A1) High Water Table (A2) Saturation (A3) Water Marks (B1) Sediment Deposits (B2) Drift Deposits (B3) Algal Mat or Crust (B4) Iron Deposits (B5) Inundation Visible on Aerial Imagery (B7) Water-Stained Leaves (B9) Aquatic Fauna (B13) 	 Sparsely Vegetated Concave Surface (B8) 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) Geomorphic Position (D2) 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): Saturation Present? Yes No _ Depth (inches): (includes capillary fringe) Depth (inches): Depth (inches): Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspect	Wetland Hydrology Present? Yes <u>V</u> No tions), if available:
Remarks:	

US Army Corps of Engineers

, ,	Absolute	• Dominant	Indicator	Dominance Test worksheet:
Tree Stratum (Plot size: <u>30'</u>)	<u>% Cover</u>	Species?	Status	Number of Dominant Species
1.				That Are OBL_EACW_or EAC· 1 (A)
··				
2		·		Total Number of Dominant
3		·		Species Across All Strata: [] (B)
4				Percent of Dominant Species
5				That Are OBL, FACW, or FAC: 100 (A/B)
6				
7				Prevalence Index worksheet:
	0	- Total Cov		Total % Cover of: Multiply by:
50% of total cover: 0	20% of	total cover:	0	OBL species x 1 =
	20 % 0			FACW species x 2 =
Sapling/Shrub Stratum (Plot size:)				
1				FAC species x 3 =
2				FACU species x 4 =
3				UPL species x 5 =
4				Column Totals: (A) (B)
5				
0		·		Prevalence Index = B/A =
٥		·		Hydrophytic Vegetation Indicators:
7				 1 - Rapid Test for Hydrophytic Vegetation
8				\checkmark 2 - Dominance Test is >50%
9				$\frac{1}{2} = 2 \text{Dominianov restriction} = 200\%$
	0	= Total Cov	er	3 - Prevalence index is ≤ 3.0
50% of total cover: 0	20% of	total cover:	0	4 - Morphological Adaptations' (Provide supporting
Horb Stratum (Plot size: 5'				data in Remarks or on a separate sheet)
A Phalaris arundinacea	80	1	FACW	Problematic Hydrophytic Vegetation ¹ (Explain)
	- 15			
2. Agrostis gigantea	15	·	FACW	¹ Indicators of hydric soil and wetland hydrology must
3				be present, unless disturbed or problematic.
4				Definitions of Four Vagetation Strate
5.				Deminions of Four Vegetation Strata.
6		·		Tree – Woody plants, excluding vines, 3 in. (7.6 cm) or
		·		more in diameter at breast height (DBH), regardless of
/		·		height.
8		•		Sapling/Shrub – Woody plants, excluding vines, less
9				than 3 in. DBH and greater than or equal to 3.28 ft (1
10				m) tall.
11.				
	95	- Total Cov		of size, and woody plants less than 3.28 ft tall
50% of total cover: 47	5 20% of	total cover:	- 19	
15'	2078 01			Woody vine - All woody vines greater than 3.28 ft in
<u>woody vine Stratum</u> (Plot size:)				height.
1				
2				
3				
4.				
5				Hydrophytic
	0			Present? Yes V No
		= I otal Cov	er	
50% of total cover: 0	20% 01	total cover:	0	
Remarks: (Include photo numbers here or on a separate s	sheet.)			

Profile Description: (Describe to the depth needed to document the indicator or confirm the absence of indicators.)								
Depth	Depth Matrix			K Features	3			
(inches)	Color (moist)		Color (moist)	%	_Type'	_Loc ²	Texture	Remarks
0-12	10YR 4/2		7.5YR 4/6	10	<u>C</u>	M/PL	SIL	
						·		
<u> </u>						·		
						·		·
						·		·
								·
¹ Type: C=C	oncentration. D=Deple	etion. RM=F	Reduced Matrix. MS	=Masked	Sand Gr	ains.	² Location: F	PL=Pore Lining, M=Matrix,
Hydric Soil	Indicators:	,	,				Indic	ators for Problematic Hydric Soils ³ :
Histosol	(A1)		Dark Surface	(S7)				2 cm Muck (A10) (MLRA 147)
Histic Ep	pipedon (A2)		Polyvalue Bel	low Surfac	ce (S8) (N	ILRA 147,	148)	Coast Prairie Redox (A16)
Black Hi	stic (A3)		Thin Dark Sui	rface (S9)	(MLRA 1	47, 148)		(MLRA 147, 148)
Hydroge	en Sulfide (A4)		Loamy Gleye	d Matrix (F2)		I	Piedmont Floodplain Soils (F19)
Stratified	d Layers (A5)		Depleted Mat	rix (F3)				(MLRA 136, 147)
2 cm Mu	ick (A10) (LRR N)	(.)	Redox Dark S	Surface (F	6)		—)	Very Shallow Dark Surface (TF12)
Depleted	d Below Dark Surface	(A11)	Depleted Darl	k Surface	(F7)		_ (Other (Explain in Remarks)
Thick Da	ark Sufface (A12)		Redox Depres	SSIONS (F	5) >> (F12) (
Sandy w	10CKy Wineral (ST) (Li	KK N,			95 (F12) (LKK N,		
Sandy G	Gleved Matrix (S4)		Umbric Surfa	7) ce (F13) (MIRA 13	6 122)	³ In	dicators of hydrophytic vegetation and
Sandy B	edox (S5)		Piedmont Flo	odolain S	oils (F19)	(MI RA 14	8) w	etland hydrology must be present
Stripped	Matrix (S6)		Red Parent M	laterial (F	21) (MLR	A 127. 147	') ur	nless disturbed or problematic.
Restrictive I	Layer (if observed):			,	, (,	<u>,</u>	•
Type:								
Depth (in	ches):						Hydric Soi	l Present? Yes 🗾 No
Remarks:								

Project/Site: Guernsey Power Plant	City/County: Guernsey Sampling Date: 07/21/2016
Applicant/Owner: Guernsey Power Plant	State: OH Sampling Point: W-C41 UP
Investigator(s): CV, CS	Section, Township, Range: N/A
Landform (hillslope, terrace, etc.): Hillslope	cal relief (concave, convex, none): Linear Slope (%): 3-8
Subregion (LRR or MLRA): LRRN Lat: 39.938423	Long: <u>-81.537034</u> Datum: NAD 83
Soil Map Unit Name: Mentor silt loam, 2 to 8 percent slopes (MeE	B) NWI classification: None
Are climatic / hydrologic conditions on the site typical for this time of ye	ear? Yes 🗾 🖌 No (If no, explain in Remarks.)
Are Vegetation, Soil, or Hydrology significantly	v disturbed? Are "Normal Circumstances" present? Yes 🗾 No
Are Vegetation, Soil, or Hydrology naturally pr	oblematic? (If needed, explain any answers in Remarks.)
SUMMARY OF FINDINGS – Attach site map showing	g sampling point locations, transects, important features, etc.

Hydrophytic Vegetation Present? Hydric Soil Present? Wetland Hydrology Present?	Yes Yes Yes	No No No	Is the Sampled Area within a Wetland?	Yes	_ No	<u>v</u>
Remarks: Cowardin Code: UP	LAND					

HYDROLOGY

Primary Indicators (minimum of one is required; check all that apply)
Drift Deposits (B3) Thin Muck Surface (C7) Saturation Visible on Aerial Imagery (C9) Algal Mat or Crust (B4) Other (Explain in Remarks) Stunted or Stressed Plants (D1) Iron Deposits (B5) Other (Explain in Remarks) Stunted or Stressed Plants (D1) Iron Deposits (B5) Other (Explain in Remarks) Stunted or Stressed Plants (D1) Iron Deposits (B5) Geomorphic Position (D2) Shallow Aquitard (D3) Nater-Stained Leaves (B9) Microtopographic Relief (D4) Shallow Aquitard (D5) Regenvalue
Water-Stained Leaves (B9) Microtopographic Relief (D4) Aquatic Fauna (B13) FAC-Neutral Test (D5) Field Observations: Surface Water Present? YesNo _ ✓ Depth (inches): Water Table Present? YesNo _ ✓ Depth (inches): Saturation Present? YesNo _ ✓ Depth (inches): (includes capillary fringe)
Aquatic Fauna (B13) FAC-Neutral Test (D5) Field Observations: Surface Water Present? Yes No Depth (inches): Water Table Present? Yes No Depth (inches): Saturation Present? Yes No Depth (inches): (includes capillary fringe) Wetland Hydrology Present? Yes No Describe Recorded Data (stream gauge monitoring well, aerial photos, previous inspections), if available:
Field Observations: Surface Water Present? Yes No Depth (inches): Water Table Present? Yes No Depth (inches): Saturation Present? Yes No Depth (inches): (includes capillary fringe) Wetland Hydrology Present? Yes No No Describe Recorded Data (stream gauge monitoring well aerial photos previous inspections) if available: Mo V
Surface Water Present? Yes No Depth (inches): Water Table Present? Yes No Depth (inches): Saturation Present? Yes No Depth (inches): (includes capillary fringe) Wetland Hydrology Present? Yes No Describe Recorded Data (stream gauge monitoring well aerial photos previous inspections) if available:
Water Table Present? Yes No ✓ Depth (inches): Wetland Hydrology Present? Yes No ✓ Saturation Present? Yes No ✓ Depth (inches): Wetland Hydrology Present? Yes No ✓ Uncludes capillary fringe) Depth (inches): Ves Ves No ✓ Describe Recorded Data (stream gauge monitoring well aerial photos previous inspections) if available: If available: Ves Ves Ves
Saturation Present? Yes No C Depth (inches): Wetland Hydrology Present? Yes No C Depth (includes capillary fringe) Wetland Hydrology Present? Yes No C
Describe Recorded Data (stream dauge, monitoring well, aerial photos, previous inspections), if available:
Remarks

Sampling Point: W-C41 UP

20'	Absolute	Dominant	Indicator	Dominance Test worksheet:
Tree Stratum (Plot size:30) 1	<u>% Cover</u>	Species?	<u>Status</u>	Number of Dominant Species That Are OBL, FACW, or FAC:0 (A)
2 3				Total Number of Dominant Species Across All Strata:3 (B)
4 5.				Percent of Dominant Species
6.				
7				Prevalence Index worksheet:
	0	= Total Cov	ver	Total % Cover of:Multiply by:
50% of total cover: 0	20% of	total cover	. 0	OBL species x 1 =
Sapling/Shrub Stratum (Plot size: 15')				FACW species x 2 =
1				FAC species x 3 =
2				FACU species x 4 =
3				UPL species x 5 =
4				Column Totals: (A) (B)
5				Prevalence Index = B/A =
7			·	Hydrophytic Vegetation Indicators:
/			·	1 - Rapid Test for Hydrophytic Vegetation
0				2 - Dominance Test is >50%
9		Tatal Car	·	3 - Prevalence Index is $\leq 3.0^1$
50% of total cover: 0		total cover	· 0	4 - Morphological Adaptations ¹ (Provide supporting
Herb Stratum (Plot size: 5')	20 /0 01			data in Remarks or on a separate sheet)
1 Dactylis glomerata	30	~	FACU	Problematic Hydrophytic Vegetation ¹ (Explain)
2 Trifolium pratense	15	~	FACU	
2 Plantago lanceolata	15	<u> </u>	FACU	¹ Indicators of hydric soil and wetland hydrology must
A Phleum pratense	10		FACU	be present, unless disturbed or problematic.
Daucus carota	10			Definitions of Four Vegetation Strata:
				Tree – Woody plants, excluding vines, 3 in. (7.6 cm) or
o 7				more in diameter at breast height (DBH), regardless of height.
8				Sanling/Shrub – Woody plants, excluding vines, less
9				than 3 in. DBH and greater than or equal to 3.28 ft (1
10				m) tall.
11				Herb – All herbaceous (non-woody) plants, regardless
		= Total Cov	ver	of size, and woody plants less than 3.28 ft tall.
50% of total cover: 40 <u>Woody Vine Stratum</u> (Plot size: 15')	20% of	total cover	16	Woody vine – All woody vines greater than 3.28 ft in height.
l				
2			•	
3				
4			·	Hydrophytic
		Tatal Car	·	Present? Yes No
50% of total cover:0	20% of	total cover	er : <u>0</u>	
Remarks: (Include photo numbers here or on a separate s	heet.)			

Profile Desc	ription: (Describe t	o the depth	needed to docun	nent the ir	ndicator	or confirm	the absend	ce of indicators.)		
Depth	Matrix		Redo	x Features						
(inches)	Color (moist)	%	Color (moist)		Type ¹	Loc ²	Texture	Remarks		
0-12	10YR 5/4	100					SIL			
¹ Type: C=Co	oncentration, D=Deple	etion, RM=R	educed Matrix, MS	S=Masked	Sand Gra	ains.	² Location:	PL=Pore Lining, M=Matrix.		
Hydric Soil I	ndicators:						Indi	icators for Problematic Hydric Soils ³ :		
Histosol	(A1)		Dark Surface	(S7)				2 cm Muck (A10) (MLRA 147)		
Histic Ep	ipedon (A2)		Polyvalue Be	low Surfac	e (S8) (N	ILRA 147,	148)	Coast Prairie Redox (A16)		
Black Hi	stic (A3)		Thin Dark Su	rface (S9)	(MLRA 1	47, 148)	,	(MLRA 147, 148)		
Hydroge	n Sulfide (A4)		Loamy Gleye	d Matrix (F	=2)			Piedmont Floodplain Soils (F19)		
Stratified	Lavers (A5)		Depleted Mat	rix (F3)	,			(MLRA 136, 147)		
2 cm Mu	ck (A10) (LRR N)		Redox Dark S	Surface (F	5)		Very Shallow Dark Surface (TF12)			
Depleted	Below Dark Surface	(A11)	Depleted Dark Surface (F7) Other (Explain in Remarks)							
Thick Da	rk Surface (A12)	()	Redox Depre	ssions (F8	s)					
Sandy M	lucky Mineral (S1) (L	RR N.	Iron-Mangane	ese Masse	., s (F12) (I	RR N.				
MLRA	147. 148)	,	MLRA 13	6)	- (· · -/ (,				
Sandy G	leved Matrix (S4)		Umbric Surfa	-, ce (F13) (I	MLRA 13	6, 122)	³ lı	ndicators of hydrophytic vegetation and		
Sandy B	edox (S5)		Piedmont Flo	odolain Sc	nils (F19)	(MIRA 14)	 wetland hydrology must be present. 			
Stripped	Matrix (S6)		Red Parent M	laterial (F2	21) (MI R	A 127, 147	()	inless disturbed or problematic		
Restrictive I	aver (if observed):					A 127, 147				
T	ayer (il observeu).									
Type:			_							
Depth (inc	ches):		_				Hydric So	oil Present? Yes No _		
Remarks:										

Project/Site: Guernsey Power Plant	City/County: Guernsey		Sampling Date: 07/21/2016	
Applicant/Owner: Guernsey Power Plant		_ _{State:} OH	Sampling Point: W-C42	
Investigator(s): CV, CS	Section, Township, Range: <u>N</u>	/A		
Landform (hillslope, terrace, etc.): Depression	Local relief (concave, convex, no	ne): Concave	Slope (%): 0-3	
Subregion (LRR or MLRA): LRRN Lat: 39	.942745 Long: -81	.535691	Datum: NAD 83	
Soil Map Unit Name: Zipp silty clay loam, ponded (Zs)		NWI classific	ation: PSS1/EM1C	
Are climatic / hydrologic conditions on the site typical for the	s time of year? Yes No	(If no, explain in R	emarks.)	
Are Vegetation, Soil, or Hydrology	significantly disturbed? Are "Norma	I Circumstances" p	oresent? Yes 🗾 No	
Are Vegetation, Soil, or Hydrology	naturally problematic? (If needed,	explain any answe	rs in Remarks.)	
SUMMARY OF FINDINGS – Attach site map	showing sampling point location	ons, transects	, important features, etc.	
Hydrophytic Vegetation Present? Yes V Hydric Soil Present? Yes V Wetland Hydrology Present? Yes V Remarks: O I O	Is the Sampled Area within a Wetland?	Yes 🖌	No	
Mapped as part of large NWI PSS system; how	vever, PEM within study area.			
Wetland Hydrology Indicators:		Secondary Indica	tors (minimum of two required)	
Primary Indicators (minimum of one is required; check all	that apply) e Aquatic Plants (B14) Irogen Sulfide Odor (C1) dized Rhizospheres on Living Roots (C3) sence of Reduced Iron (C4) tent Iron Reduction in Tilled Soils (C6) in Muck Surface (C7) er (Explain in Remarks)	Surface Soil ↓ Sparsely Veg Drainage Pat Moss Trim Li Dry-Season ↓ Crayfish Burr Saturation Vi Stunted or St V Geomorphic Shallow Aqui Microtopogra V FAC-Neutral	Cracks (B6) getated Concave Surface (B8) tterns (B10) nes (B16) Water Table (C2) rows (C8) sible on Aerial Imagery (C9) tressed Plants (D1) Position (D2) tard (D3) uphic Relief (D4) Test (D5)	
Field Observations: Surface Water Present? Yes No De Water Table Present? Yes No De Saturation Present? Yes No De (includes capillary fringe) Describe Recorded Data (stream gauge, monitoring well,	pth (inches): pth (inches): pth (inches): aerial photos, previous inspections), if ava	Hydrology Presen ailable:	t? Yes No	
Remarks:				
20'	Absolute	Dominant	Indicator	Dominance Test worksheet:
---	----------------	-------------	-----------	---
Tree Stratum (Plot size:)	<u>% Cover</u>	Species?	Status	Number of Dominant Species
1			·	That Are OBL, FACW, or FAC: (A)
2				Total Number of Dominant
3				Species Across All Strata: (B)
4				Percent of Dominant Species
5				That Are OBL, FACW, or FAC: (A/B)
6				Prevalence Index worksheet:
7				Total % Cover of: Multiply by:
500/ - (/ - / - /	0	= Total Cov	/er	$\frac{1}{\text{OBL species}} = \frac{1}{\text{X1}} = \frac{1}{\text{X1}}$
50% of total cover: <u>0</u>	20% of	total cover	:	FACW species $x^2 =$
Sapling/Shrub Stratum (Plot size:)				FAC species x3 =
1				
2				
3				
4				
5				Prevalence Index = B/A =
6				Hydrophytic Vegetation Indicators:
7				✓ 1 - Rapid Test for Hydrophytic Vegetation
8				✓ 2 - Dominance Test is >50%
9				$3 - Prevalence Index is \leq 3.0^{1}$
		= Total Cov	/er	4 - Morphological Adaptations ¹ (Provide supporting
50% of total cover:0	20% of	total cover	:0	data in Remarks or on a separate sheet)
Herb Stratum (Plot size: 5)				Problematic Hydrophytic Vegetation ¹ (Explain)
1. Phalaris arndinacea	90	<u> </u>	FACW	
2				
3				be present, unless disturbed or problematic.
4				Definitions of Four Vegetation Strata
5				
6				Tree – Woody plants, excluding vines, 3 in. (7.6 cm) or
7				height.
8				
9.				Sapling/Shrub – Woody plants, excluding vines, less than 3 in DBH and greater than or equal to 3.28 ft (1
10.				m) tall.
11.				
	90	= Total Cov	/er	of size, and woody plants less than 3.28 ft tall.
50% of total cover: 45	20% of	total cover	18	
Woody Vine Stratum (Plot size: 15')				Woody vine – All woody vines greater than 3.28 ft in height
1.				incight.
2.				
3.				
4				
5				Hydrophytic Vegetation
	0	- Total Cov		Present? Yes <u>V</u> No
50% of total cover: 0	20% of	total cover	: 0	
Remarks: (Include photo numbers here or on a separate s	heet.)			1

Profile Desc	ription: (Describe to	o the depth	needed to docum	ent the i	ndicator	or confirm	the absence	of indicators.)
Depth	Matrix		Redox	Features	3			
(inches)	Color (moist)	%	Color (moist)	%	Type ¹	Loc ²	Texture	Remarks
0-6	10YR 3/2	85	7.5YR 4/4	15	<u>C</u>	M/PL	SICL	
6-16	2.5Y 4/1	85	7.5YR 4/4	15	С	M/PL	SICL	
					<u> </u>	<u></u>		
·						·		
						·		
		tion PM_P	aduced Matrix MS	-Mackod	Sand Gr		² Location: P	
Hydric Soil I	ndicators:			-iviaskeu	Sanu Gr	airis.		ators for Problematic Hydric Soils ³ :
Histosol	(A1)		Dark Surface	(\$7)			2	cm Muck (A10) (MI RA 147)
Histic Er	pipedon (A2)		Polyvalue Belo	ow Surfac	ce (S8) (N	ILRA 147.	148) C	oast Prairie Redox (A16)
Black Hi	stic (A3)		Thin Dark Sur	face (S9)	(MLRA 1	47, 148)		(MLRA 147, 148)
Hydroge	n Sulfide (A4)		Loamy Gleved	Matrix (I	F 2)	, -,	Р	iedmont Floodplain Soils (F19)
Stratified	Layers (A5)		Depleted Matr	ix (F3)	,			(MLRA 136, 147)
2 cm Mu	ick (A10) (LRR N)		Redox Dark S	urface (F	6)		V	ery Shallow Dark Surface (TF12)
 Depleted 	Below Dark Surface	(A11)	Depleted Dark	Surface	(F7)		0	ther (Explain in Remarks)
Thick Da	ark Surface (A12)		Redox Depres	sions (F8	3)			
Sandy M	lucky Mineral (S1) (Ll	RR N,	Iron-Mangane	se Masse	es (F12) (LRR N,		
MLRA	A 147, 148)		MLRA 136)				
Sandy G	leyed Matrix (S4)		Umbric Surfac	e (F13) (MLRA 13	6, 122)	³ Ind	icators of hydrophytic vegetation and
Sandy R	edox (S5)		Piedmont Floc	odplain So	oils (F19)	(MLRA 148	8) we	tland hydrology must be present,
Stripped	Matrix (S6)		Red Parent Ma	aterial (F2	21) (MLR	A 127, 147) un	less disturbed or problematic.
Restrictive L	_ayer (if observed):							
Туре:			_					,
Depth (inc	ches):		_				Hydric Soil	Present? Yes V No
Remarks:								

Project/Site: Guernsey Power Plant	City/County: Gue	rnsey	Sampling Date: 07/21/2016
Applicant/Owner: Guernsey Power Plant		_{State:} OH	Sampling Point: W-C43
Investigator(s): CV, CS	Section, Township	Range: N/A	
Landform (hillslope, terrace, etc.): Depression	Local relief (concave,	convex, none): Concave	Slope (%): 0-5
Subregion (LRR or MLRA): LRRN Lat:	39.941322	_{Long:} -81.535686	_{Datum:} NAD 83
Soil Map Unit Name: McGary silt loam, 0 to 3 percer	nt slopes (McA)	NWI classific	ation: PSS1/EM1C
Are climatic / hydrologic conditions on the site typical fo	r this time of year? Yes N	lo (If no, explain in R	emarks.)
Are Vegetation, Soil, or Hydrology		Are "Normal Circumstances" p	resent? Yes 🔽 No
Are Vegetation, Soil, or Hydrology	naturally problematic? (If needed, explain any answe	rs in Remarks.)
SUMMARY OF FINDINGS – Attach site m	ap showing sampling poir	nt locations, transects	, important features, etc.
Hydrophytic Vegetation Present?YesHydric Soil Present?YesWetland Hydrology Present?Yes	- No Is the Sam No No within a We	oled Area etland? Yes <u></u>	No
Remarks: Cowardin Code: PEM	HGM: Depressional Wat	er Type: RPWWN	
Mapped as part of large NWI PSS system; h	nowever, PEM within study a	area.	
HYDROLOGY			
Wetland Hydrology Indicators:		Secondary Indica	tors (minimum of two required)
Primary Indicators (minimum of one is required; check	all that apply)	Surface Soil	Cracks (B6)
Surface Water (A1)	True Aquatic Plants (B14)	Sparsely Veg	getated Concave Surface (B8)
High Water Table (A2)	Hydrogen Sulfide Odor (C1)	Drainage Pa	tterns (B10)
Saturation (A3)	Oxidized Rhizospheres on Living F	Roots (C3) Moss Trim Li	nes (B16)
Water Marks (B1)	Presence of Reduced Iron (C4)	Dry-Season	Water Table (C2)
Sediment Deposits (B2)	Recent Iron Reduction in Tilled So	ils (C6) Crayfish Buri	rows (C8)
Drift Deposits (B3)	Thin Muck Surface (C7)	Saturation Vi	sible on Aerial Imagery (C9)
Algal Mat or Crust (B4)	Other (Explain in Remarks)	Stunted or St	tressed Plants (D1)
Iron Deposits (B5)			Position (D2)
Weter Steined Leaves (B0)		Shallow Aqui	tard (D3)
Aquatic Fauna (P13)		Microtopogra	Tost (D5)
Eield Observationer			Test (D3)
Surface Water Present? Yes No	Depth (inches):		
Water Table Present? Ves No	Depth (inches):		
Saturation Procent? Voc No	Depth (inches):	Wotland Hydrology Procon	ta Vas 🖌 Na
(includes capillary fringe)	Deptil (inches).	Wetianu nyurology Fresen	
Describe Recorded Data (stream gauge, monitoring w	vell, aerial photos, previous inspect	ions), if available:	
Remarks:			

20'	Absolute	Dominant I	ndicator	Dominance Test worksheet:
Tree Stratum (Plot size:)	<u>% Cover</u>	Species?	Status	Number of Dominant Species
1	·	·		That Are OBL, FACW, or FAC: (A)
2	·	·		Total Number of Dominant
3				Species Across All Strata: 1 (B)
4				Percent of Dominant Species
5				That Are OBL, FACW, or FAC: 100 (A/B)
6				
7.				Prevalence Index worksheet:
	0	= Total Cove	r	Total % Cover of:Multiply by:
50% of total cover: 0	20% of	total cover:	0	OBL species x 1 =
Sapling/Shrub Stratum (Plot size: 15'		_		FACW species x 2 =
1.				FAC species x 3 =
2		·		FACU species x 4 =
3	·			UPL species x 5 =
3		·		Column Totals: (A) (B)
4	·	·		
5	·	·		Prevalence Index = B/A =
6		·		Hydrophytic Vegetation Indicators:
7				1 - Rapid Test for Hydrophytic Vegetation
8				✓ 2 - Dominance Test is >50%
9				\sim 2 - Dominance results >50%
	0	= Total Cove	r	
50% of total cover:0	20% of	total cover:	0	4 - Morphological Adaptations' (Provide supporting
Herb Stratum (Plot size: 5')				data in Remarks or on a separate sheet)
1 Phalaris arundinacea	90	🖌 - F	FACW	Problematic Hydrophytic Vegetation ¹ (Explain)
2		·		
2				¹ Indicators of hydric soil and wetland hydrology must
3	·	·		be present, unless disturbed or problematic.
4	·	·		Definitions of Four Vegetation Strata:
5		·		Tree Weady plants excluding vines 3 in (7.6 cm) or
6				more in diameter at breast height (DBH), regardless of
7				height.
8				Conting/Chrub Weady planta avaluding visco logo
9				than 3 in DBH and greater than or equal to 3.28 ft (1
10.				m) tall.
11				
	90	- Total Cava		Herb – All herbaceous (non-woody) plants, regardless
50% of total cover: 45	20% of	total cover:	่ 18	
Weader Vira Chatting (Plat size: 15'	20 % 01	iotal cover.	10	Woody vine - All woody vines greater than 3.28 ft in
<u>woody vine Stratum</u> (Plot size:)				height.
1	·	·		
2	·	·		
3	·	·		
4				Hydrophytic
5				Vegetation
	0	= Total Cove	r	Present? Yes V No
50% of total cover:0	20% of	total cover:	0	
Remarks: (Include photo numbers here or on a separate s	sheet.)			
	,			

Profile Desc	ription: (Describe to	o the depth	needed to docum	ent the i	ndicator	or confirm	the absence	of indicators.)
Depth	Matrix		Redox	Features	3			
(inches)	Color (moist)	%	Color (moist)		Type ¹	Loc ²	Texture	Remarks
0-6	10YR 3/2	85	7.5YR 4/4	15	<u>C</u>	M/PL	SICL	
6-16	2.5Y 4/1	85	7.5YR 4/4	15	С	M/PL	SICL	
						·		
						·		
						·		
						·		
						·		
						·		
¹ Type: C=Co	oncentration, D=Deple	etion, RM=R	educed Matrix, MS	=Masked	Sand Gr	ains.	² Location: P	L=Pore Lining, M=Matrix.
Hydric Soil I	ndicators:						Indica	ators for Problematic Hydric Soils ³ :
Histosol	(A1)		Dark Surface	(S7)			2	cm Muck (A10) (MLRA 147)
Histic Ep	pipedon (A2)		Polyvalue Belo	ow Surfac	ce (S8) (N	/ILRA 147,	148) C	oast Prairie Redox (A16)
Black Hi	stic (A3)		Thin Dark Sur	face (S9)	(MLRA [·]	147, 148)		(MLRA 147, 148)
Hydroge	n Sulfide (A4)		Loamy Gleyed	d Matrix (I	F2)		P	iedmont Floodplain Soils (F19)
Stratified	l Layers (A5)		Depleted Matr	ix (F3)				(MLRA 136, 147)
2 cm Mu	ick (A10) (LRR N)		Redox Dark S	urface (F	6)		V	ery Shallow Dark Surface (TF12)
<u> Depletec</u>	Below Dark Surface	(A11)	Depleted Dark	Surface	(F7)		0	ther (Explain in Remarks)
Thick Da	ark Surface (A12)		Redox Depres	sions (F8	3) 			
	iucky Mineral (51) (Lf	KK N,	Iron-Mangane	se masse	es (F12) (LKK N,		
Sandy G	(S4)		INILKA 130) (E13) (6 122)	³ Ind	icators of hydrophytic vegetation and
Sandy C	edox (S5)		Dimblic Surface	dolain S	nils (F19)	(MI RA 14)	8) we	tland hydrology must be present
Stripped	Matrix (S6)		Red Parent M	aterial (F:	21) (MLR	A 127. 147) un	less disturbed or problematic.
Restrictive L	_aver (if observed):						/ un	
Type:								
Depth (inc	ches):		_				Hydric Soil	Present? Yes 🖌 No
Remarks:							<u>I</u>	

Project/Site: Guernsey Power Plant	City/County: Guernsey	Sampling Date: 07/21/2016
Applicant/Owner: Guernsey Power Plant	Sta	te: OH Sampling Point: W-C42, C43 UP
Investigator(s): CV, CS	Section, Township, Range: <u>N/A</u>	
Landform (hillslope, terrace, etc.): Hillslope	Local relief (concave, convex, none): _L	inear Slope (%): 3-8
Subregion (LRR or MLRA): LRRN Lat: 39.94	2150 Long: -81.535	709
Soil Map Unit Name: McGary silt loam, 0 to 3 percent slope	≥s (McA) ١	WI classification: None
Are climatic / hydrologic conditions on the site typical for this tin	ne of year? Yes 🔽 No (If no,	explain in Remarks.)
Are Vegetation, Soil, or Hydrology signi	ificantly disturbed? Are "Normal Circu	mstances" present? Yes 🖌 No
Are Vegetation, Soil, or Hydrology natu	rally problematic? (If needed, explain	any answers in Remarks.)
SUMMARY OF FINDINGS – Attach site map she	owing sampling point locations,	ransects, important features, etc.

Hydrophytic Vegetation Present? Hydric Soil Present? Wetland Hydrology Present?	Yes Yes Yes	No No No	✓ ✓ ✓	Is the Sampled Area within a Wetland?	Yes	No	<u>v</u>
Remarks: Cowardin Code: UP	LAND						

	Secondary Indicators (minimum of two required)			
Primary Indicators (minimum of one is required; check all that apply)	Surface Soil Cracks (B6)			
 Surface Water (A1) High Water Table (A2) Saturation (A3) Water Marks (B1) Sediment Deposits (B2) Drift Deposits (B3) Algal Mat or Crust (B4) Iron Deposits (B5) Inundation Visible on Aerial Imagery (B7) Water Fauna (B13) True Aquatic Plants (B14) Hydrogen Sulfide Odor (C1) Oxidized Rhizospheres on Living Oxidized Rhizospheres on Living Presence of Reduced Iron (C4) Recent Iron Reduction in Tilled Sc Drift Deposits (B3) Thin Muck Surface (C7) Other (Explain in Remarks) 	 Sparsely Vegetated Concave Surface (B8) 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) Geomorphic Position (D2) 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):				
	Watland Hydrology Present? Vas No V			
(includes capillary fringe)				
(includes capillary fringe) Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspec	tions), if available:			

Sampling Point: W-C42, C43 UP

001	Absolute	Dominant	Indicator	Dominance Test worksheet:
Tree Stratum (Plot size:30') 1)	<u>% Cover</u>	Species?	Status	Number of Dominant Species That Are OBL, FACW, or FAC:0 (A)
2 3				Total Number of Dominant Species Across All Strata:3(B)
4 5				Percent of Dominant Species
6				
7				Prevalence Index worksheet:
	0	= Total Cov	er	Total % Cover of: Multiply by:
50% of total cover: <u>0</u>	20% of	total cover:	0	OBL species x 1 =
Sapling/Shrub Stratum (Plot size: 15')				FACW species x 2 =
1				FAC species x 3 =
2				FACU species x 4 =
3				UPL species x 5 =
4				Column Totals: (A) (B)
5				Prevalence Index = B/A =
6				Hydrophytic Vegetation Indicators:
7				1 - Rapid Test for Hydrophytic Vegetation
8				2 - Dominance Test is >50%
9				3 - Prevalence Index is ≤3.0 ¹
		= Total Cov	er	4 - Morphological Adaptations ¹ (Provide supporting
50% of total cover: 0	20% of	total cover:	0	data in Remarks or on a separate sheet)
Herb Stratum (Plot size: 5)				Problematic Hydrophytic Vegetation ¹ (Explain)
1. Dactylis glomerata	30	<u> </u>	FACU	
2. Trifolium pratense	15	<u> </u>	FACU	¹ Indiantara of hydria apil and watland hydrology must
3. Plantago lanceolata	15	<u> </u>	FACU	be present, unless disturbed or problematic.
4. Trifolium repens	10		FACU	Definitions of Four Vegetation Strata:
5. Daucus carota	10		UPL	Deminions of Four Vegetation Orada.
6. Phleum pratense	10		FACU	Tree – Woody plants, excluding vines, 3 in. (7.6 cm) or more in diameter at breast height (DBH), regardless of
0				neight.
0				Sapling/Shrub – Woody plants, excluding vines, less
3				than 3 In. DBH and greater than or equal to 3.28 ft (1 m) tall.
····	90	= Total Cov	er	Herb – All herbaceous (non-woody) plants, regardless of size, and woody plants less than 3.28 ft tall.
<u>Woody Vine Stratum</u> (Plot size: <u>15'</u>)	20% of	total cover:	10	Woody vine – All woody vines greater than 3.28 ft in height.
1				
3				
0				
T				Hydrophytic
- J		Tatal Cau		Present? Yes No
50% of total cover:0	20% of	total cover:	0	
Remarks: (Include photo numbers here or on a separate s	heet.)			
	,			

I

Profile Desc	ription: (Describe t	o the depth	n needed to docun	nent the i	ndicator	or confirm	the absence of i	indicato	rs.)	
Depth	Matrix		Redo	x Features	3					
(inches)	Color (moist)		Color (moist)		Type ¹	Loc ²	Texture		Remarks	
0-12	10YR 5/4	100					SIL			
¹ Type: C=Co	oncentration, D=Depl	etion, RM=F	Reduced Matrix, MS	S=Masked	Sand Gra	ains.	² Location: PL=P	ore Linin	g, M=Matrix	(.
Hydric Soil I	ndicators:						Indicator	s for Pro	blematic H	lydric Soils ³ :
<u> </u>	(A1)		Dark Surface	(S7)			2 cm	Muck (A	10) (MLRA	147)
Histic Ep	ipedon (A2)		Polyvalue Be	low Surfac	ce (S8) (M	ILRA 147,	148) Coas	st Prairie	Redox (A16	5)
Black His	stic (A3)		Thin Dark Su	rface (S9)	(MLRA 1	47, 148)	(M	LRA 147	′, 148)	
Hydroge	n Sulfide (A4)		Loamy Gleye	d Matrix (I	F2)		Piedr	mont Floo	odplain Soil	s (F19)
Stratified	Layers (A5)		Depleted Mat	rix (F3)			(M	LRA 136	6, 147)	
2 cm Mu	ck (A10) (LRR N)	(Redox Dark S	Surface (F	6) (FT)		Very	Shallow	Dark Surfac	xe (TF12)
Depleted	Below Dark Surface	e (A11)	Depleted Dar	k Surface	(F7)		Othe	r (Explair	n in Remark	s)
Thick Da	irk Surface (A12)		Redox Depre	SSIONS (FE	3) 					
	ucky Mineral (51) (L	KK N,			es (F12) (I	LRR N,				
Sandy G	147, 140) Joyod Matrix (S4)		IVILRA 130	0) 00 (E12) ()	MI DA 12	6 122)	³ Indicat	ore of by	drophytic va	actation and
Sandy G	edox (S5)		Onblic Sulla	odolain Su	nile (F10)	0, 122) (MI DA 17)	8) wetlan	of s of fry	anopriyiic ve	
Stripped	Matrix (S6)		Red Parent M	latorial (F	21) (MI R			e disturba	d or probler	natic
Restrictive I	aver (if observed):					~ 127, 147				
Type:										
Type.			_						M	
Depth (Inc	nes):						Hydric Soli Pre	esent?	Yes	NO
Remarks:										

Project/Site: Guernsey Power Plant	City/County: Guer	nsey	Sampling Date: 07/21/2016
Applicant/Owner: Guernsey Power Plant	,	_{State:} OH	Sampling Point: W-C44
Investigator(s); CV, CS	Section, Township,	Range: N/A	
Landform (hillslope, terrace, etc.): Depression	Local relief (concave, c	onvex, none): Concave	Slope (%):_0
Subregion (LRR or MLRA): LRRN Lat: 39.	942778	_{_ong:} 81.538282	Datum: NAD 83
Soil Map Unit Name: McGary silt loam, 0 to 3 percent slo	opes (McA)	NWI classific	cation: None
Are climatic / hydrologic conditions on the site typical for this	s time of year? Yes No	o (If no, explain in R	emarks.)
Are Vegetation, Soil, or Hydrologys	ignificantly disturbed? A	re "Normal Circumstances"	oresent? Yes 🔽 No
Are Vegetation, Soil, or Hydrology n	aturally problematic? (If	f needed, explain any answe	ers in Remarks.)
SUMMARY OF FINDINGS – Attach site map	showing sampling poin	t locations, transects	, important features, etc.
Hydrophytic Vegetation Present? Yes V Hydric Soil Present? Yes V Wetland Hydrology Present? Yes V	⁰ Is the Samp ⁰ within a We	led Area tland? Yes _✔	No
Remarks: Cowardin Code: PEM HG	M: Depressional Wate	er Type: RPWWN	
		ad bed/10ad.	
HYDROLOGY			
Wetland Hydrology Indicators:		Secondary Indica	ators (minimum of two required)
Primary Indicators (minimum of one is required; check all t	hat apply)	Surface Soil	Cracks (B6)
Surface Water (A1) True	Aquatic Plants (B14)	Sparsely Ve	getated Concave Surface (B8)
Saturation (A3)	lized Rhizospheres on Living R	oots (C3) Moss Trim I	ines (B16)
Water Marks (B1)	ence of Reduced Iron (C4)	Drv-Season	Water Table (C2)
Sediment Deposits (B2)	ent Iron Reduction in Tilled Soil	s (C6) Crayfish Bur	rows (C8)
Drift Deposits (B3)	Muck Surface (C7)	Saturation V	isible on Aerial Imagery (C9)
Algal Mat or Crust (B4) Othe	er (Explain in Remarks)	Stunted or S	tressed Plants (D1)
Iron Deposits (B5)		🖌 Geomorphic	Position (D2)
Inundation Visible on Aerial Imagery (B7)		Shallow Aqu	itard (D3)
Water-Stained Leaves (B9)		Microtopogra	aphic Relief (D4)
Aquatic Fauna (B13)		FAC-Neutral	Test (D5)
Field Observations:	th (inches)		
Weter Table Present? Yes No C Dep	oth (inches):		
Saturation Present? Yes No Voc	oth (inches):	Wotland Hydrology Proso	nt? Vas 🖌 Na
(includes capillary fringe)		wetianu nyurology riesei	
Describe Recorded Data (stream gauge, monitoring well, a	aerial photos, previous inspection	ons), if available:	
Remarks:			
1			

	Absolute	Dominant	Indicator	Dominance Test worksheet:
<u>Tree Stratum</u> (Plot size: <u>30</u> ')	% Cover	Species?	Status	Number of Dominant Species
1				That Are OBL, FACW, or FAC: (A)
2.				
3				I otal Number of Dominant Species Across All Strata: 1 (B)
4				Percent of Dominant Species
5				That Are OBL, FACW, or FAC:(A/B)
6				Prevalence Index worksheet
7				
		= Total Cov	er	<u> </u>
50% of total cover: 0	20% of	total cover:	0	OBL species x 1 =
Sapling/Shrub Stratum (Plot size: 15')				FACW species x 2 =
1				FAC species x 3 =
2.				FACU species x 4 =
3				UPL species x 5 =
				Column Totals: (A) (B)
4				
5		·		Prevalence Index = B/A =
6				Hydrophytic Vegetation Indicators:
7				✓ 1 - Ranid Test for Hydrophytic Vegetation
8				
9				2 - Dominance Test Is >50%
	0	- Total Cov		3 - Prevalence Index is $\leq 3.0^{\circ}$
50% of total cover: 0	20% of	total cover	0	4 - Morphological Adaptations ¹ (Provide supporting
Lierh Stratum (Diet eize: 5	2070.01			data in Remarks or on a separate sheet)
(Piol Size)	80		FACW	Problematic Hydrophytic Vegetation ¹ (Explain)
	45			
2. Eupatorium perrollatum	15		FACW	¹ Indicators of hydric soil and wetland hydrology must
3. Apocynum cannabinum	5		FACU	be present, unless disturbed or problematic.
4				Definitions of Four Vegetation Strata
5.				Deminions of Four Vegetation of ata.
6				Tree – Woody plants, excluding vines, 3 in. (7.6 cm) or
7				more in diameter at breast height (DBH), regardless of
/				neight.
8				Sapling/Shrub – Woody plants, excluding vines, less
9				than 3 in. DBH and greater than or equal to 3.28 ft (1
10				m) tall.
11				Herb – All berbaceous (non-woody) plants, regardless
	100	= Total Cov	er	of size, and woody plants less than 3.28 ft tall.
50% of total cover: 50	20% of	total cover:	20	
Woody Vine Stratum (Plot size: 15'				Woody vine – All woody vines greater than 3.28 ft in
1				
·				
2				
3				
4				Hydrophytic
5				Vegetation
	0	= Total Cov	er	Present? Yes V No
50% of total cover: 0	20% of	total cover:	0	
Remarks: (Include photo numbers here or on a separate s	heet.)			I
	/			

Profile Desc	ription: (Describe to	b the deptr	n needed to docum	nent the i	ndicator	or confirm	the absence	e of indicators.)
Depth	Matrix		Redox	x Features	S1	. 2		- .
(inches)	Color (moist)	<u>%</u>	Color (moist)	%	<u>lype</u>	Loc-	<u>l exture</u>	Remarks
0-10	10YR 3/2	95	7.5YR 4/4	5	<u>C</u>	M/PL	Gr SIC	
10+								Refusal - Gravel
			,			·		
								•
						·		·
								•
¹ Type: C=Co	oncentration, D=Deple	etion, RM=F	Reduced Matrix, MS	S=Masked	Sand Gr	ains.	² Location: F	² L=Pore Lining, M=Matrix.
Hydric Soil	ndicators:						Indic	ators for Problematic Hydric Soils ³ :
Histosol	(A1)		Dark Surface	(S7)			2	2 cm Muck (A10) (MLRA 147)
Histic Ep	pipedon (A2)		Polyvalue Bel	low Surfa	ce (S8) (N	/LRA 147,	148) (Coast Prairie Redox (A16)
Black Hi	stic (A3)		Thin Dark Su	rface (S9)	(MLRA	147, 148)		(MLRA 147, 148)
Hydroge	n Sulfide (A4)		Loamy Gleye	d Matrix (F2)		[Piedmont Floodplain Soils (F19)
Stratified	Lavers (A5)		Depleted Mat	rix (F3)	,			(MLRA 136, 147)
2 cm Mu	ck (A10) (LRR N)		Redox Dark S	Surface (F	6)		Ň	Very Shallow Dark Surface (TF12)
Depleter	Below Dark Surface	(A11)	Neoleted Dar	k Surface	(F7)		—	Other (Explain in Remarks)
Depicted	ark Surface (A12)	(/////)	Bedex Depre	ccione (E	(i /) 2)		`	
Thick Da	(IK Sullace (A12)) 			
		KK N,			es (F12) (LKK N,		
	(147, 148)		MLRA 13)			3.	
Sandy G	leyed Matrix (S4)		Umbric Surfa	ce (F13) (MLRA 13	86, 122)	-Inc	dicators of hydrophytic vegetation and
Sandy R	edox (S5)		Piedmont Flo	odplain S	oils (F19)	(MLRA 14	18) w	etland hydrology must be present,
Stripped	Matrix (S6)		Red Parent M	laterial (F	21) (MLR	A 127, 147	7) ur	nless disturbed or problematic.
Restrictive I	ayer (if observed):							
Type: <u>R</u> €	efusal - Gravel							
Depth (ind	_{ches):} 10+						Hvdric Soi	il Present? Yes 🖌 No
Pomorko:							,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,	
Remarks.								

Project/Site: Guernsey Power Plant	City/County: Guernsey Sa	mpling Date: 07/21/2016
Applicant/Owner: Guernsey Power Plant	State: OH State: OH State: OH State: OH State:	Sampling Point: W-C44 UP
Investigator(s): CV, CS	Section, Township, Range: <u>N/A</u>	
Landform (hillslope, terrace, etc.): Hillslope	ocal relief (concave, convex, none): Linear	Slope (%): 3-8
Subregion (LRR or MLRA): LRRN Lat: 39.941869	Long: -81.538197	Datum: NAD 83
Soil Map Unit Name: McGary silt loam, 0 to 3 percent slopes (Mc	A) NWI classification	_{n:} None
Are climatic / hydrologic conditions on the site typical for this time of ye	ear? Yes 🗾 No (If no, explain in Rema	arks.)
Are Vegetation, Soil, or Hydrology significantly	/ disturbed? Are "Normal Circumstances" prese	ent? Yes 🗾 No
Are Vegetation, Soil, or Hydrology naturally pr	oblematic? (If needed, explain any answers in	Remarks.)
SUMMARY OF FINDINGS – Attach site map showing	g sampling point locations, transects, in	nportant features, etc.

Hydrophytic Vegetation Present? Hydric Soil Present? Wetland Hydrology Present?	Yes Yes Yes	No No	Is the Sampled Area within a Wetland?	Yes	No
Remarks: Cowardin Code: UP	LAND				

Wetland Hydrology Indicators:	Secondary Indicators (minimum of two required)
Primary Indicators (minimum of one is required; check all that apply)	Surface Soil Cracks (B6)
Surface Water (A1) True Aquatic Plants (B14)	Sparsely Vegetated Concave Surface (B8)
High Water Table (A2) Hydrogen Sulfide Odor (C1)	Drainage Patterns (B10)
Saturation (A3) Oxidized Rhizospheres on Living Roots (C3) Moss Trim Lines (B16)
Water Marks (B1) Presence of Reduced Iron (C4)	Dry-Season Water Table (C2)
Sediment Deposits (B2) Recent Iron Reduction in Tilled Soils (C6)	Crayfish Burrows (C8)
Drift Deposits (B3) Thin Muck Surface (C7)	Saturation Visible on Aerial Imagery (C9)
Algal Mat or Crust (B4) Other (Explain in Remarks)	Stunted or Stressed Plants (D1)
Iron Deposits (B5)	Geomorphic Position (D2)
Inundation Visible on Aerial Imagery (B7)	Shallow Aquitard (D3)
Water-Stained Leaves (B9)	Microtopographic Relief (D4)
Aquatic Fauna (B13)	FAC-Neutral Test (D5)
Field Observations:	
Surface Water Present? Yes No Depth (inches):	
Water Table Present? Yes No 🖌 Depth (inches):	
Saturation Present? Yes No Ver Depth (inches): Wetland	Hydrology Present? Yes No _
Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if a	vailable:
Remarks:	

Sampling Point: W-C44 UP

0.01	Absolute	Dominant	Indicator	Dominance Test worksheet:
Tree Stratum (Plot size: 30')	<u>% Cover</u>	Species?	Status	Number of Dominant Species That are OBL_EACW or EAC: 0 (a)
2				
3				Total Number of Dominant Species Across All Strata: <u>3</u> (B)
4			- <u> </u>	Percent of Dominant Species
6				That Are OBL, FACW, or FAC: (A/B)
7				Prevalence Index worksheet:
	0	= Total Co	/er	Total % Cover of: Multiply by:
50% of total cover: 0	20% of	total cover	: 0	OBL species x 1 =
Sapling/Shrub Stratum (Plot size: 15')				FACW species x 2 =
1				FAC species x 3 =
2				FACU species x 4 =
3.				UPL species x 5 =
4				Column Totals: (A) (B)
5.				
6.	·			Prevalence Index = B/A =
7.				Hydrophytic Vegetation Indicators:
8				1 - Rapid Test for Hydrophytic Vegetation
0				2 - Dominance Test is >50%
9	0	Tetal Ca		$_$ 3 - Prevalence Index is $\leq 3.0^1$
50% of total cover: 0	0% of		/er · 0	4 - Morphological Adaptations ¹ (Provide supporting
Userb Stratum (Plat size: 5'	20 % 01			data in Remarks or on a separate sheet)
A Dactylis glomerata	30	~	FACU	Problematic Hydrophytic Vegetation ¹ (Explain)
Trifolium pratense	15		FACU	
2. Though platense	15	· · · · ·		¹ Indicators of hydric soil and wetland hydrology must
	10			be present, unless disturbed or problematic.
4. Irifolium repens	10		FACU	Definitions of Four Vegetation Strata:
5. Daucus carota	10			Tree Weady plants, avaluding visca, 2 in (7.6 cm) or
6. Phleum pratense	10		FACU	more in diameter at breast height (DBH), regardless of
7		<u></u>		height.
8				Sanling/Shrub - Woody plants, evoluting vines, less
9				than 3 in. DBH and greater than or equal to 3.28 ft (1
10				m) tall.
11				Herb – All berbaceous (non-woody) plants, regardless
	90	= Total Co	/er	of size, and woody plants less than 3.28 ft tall.
50% of total cover: <u>45</u>	20% of	total cover	<u>: 18</u>	Weedward All weedward entropy to the 2.20 ft in
Woody Vine Stratum (Plot size: 15')				height.
1				
2				
3.				
4.				
5.				Hydrophytic Vegetation
	0	= Total Co	/er	Present? Yes No V
50% of total cover: 0	20% of	total cover	: 0	
Remarks: (Include photo numbers here or on a separate s	sheet.)			1
······································	,			

Profile Desc	ription: (Describe t	o the dept	h needed to document the indicator or confi	rm the abse	ence of indicators.)
Depth (inches)	Matrix		Redox Features	- Taytur	Demorko
(incries)		<u></u> _	Color (moist) % Type Loc		e Remarks
0-12	10YR 5/4	100			· ·
		·			·
		·			
		·			
¹ Type: C=Co	oncentration, D=Depl	etion, RM=I	Reduced Matrix, MS=Masked Sand Grains.	² Locatio	n: PL=Pore Lining, M=Matrix.
Hydric Soil	ndicators:			Ir	ndicators for Problematic Hydric Soils
Histosol	(A1)		Dark Surface (S7)	_	2 cm Muck (A10) (MLRA 147)
Histic Ep	oipedon (A2)		Polyvalue Below Surface (S8) (MLRA 14	.7, 148) _	Coast Prairie Redox (A16)
Black Hi	stic (A3)		Thin Dark Surface (S9) (MLRA 147, 148))	(MLRA 147, 148)
Hydroge	n Sulfide (A4)		Loamy Gleyed Matrix (F2)	_	Piedmont Floodplain Soils (F19)
Stratified	Layers (A5)		Depleted Matrix (F3)		(MLRA 136, 147)
2 cm Mu	ick (A10) (LRR N)		Redox Dark Surface (F6)	_	Very Shallow Dark Surface (TF12)
Depleted	d Below Dark Surface	e (A11)	Depleted Dark Surface (F7)	_	Other (Explain in Remarks)
Thick Date	ark Surface (A12)		Redox Depressions (F8)		
Sandy M	lucky Mineral (S1) (L	RR N,	Iron-Manganese Masses (F12) (LRR N,		
MLRA	A 147, 148)		MLRA 136)		
Sandy G	leyed Matrix (S4)		Umbric Surface (F13) (MLRA 136, 122)		³ Indicators of hydrophytic vegetation an
Sandy R	edox (S5)		Piedmont Floodplain Soils (F19) (MLRA	148)	wetland hydrology must be present,
Stripped	Matrix (S6)		Red Parent Material (F21) (MLRA 127, 1	47)	unless disturbed or problematic.
Restrictive I	_ayer (if observed):				
Туре:					
Depth (ind	ches):			Hydric	Soil Present? Yes No _
Remarks:					

Project/Site: Guernsey Power Plant	_ City/County: Guernsey	Sampling Date: 07/21/2016
Applicant/Owner: Guernsey Power Plant	State: O	H Sampling Point:_W-C45
Investigator(s): CV, CS	_ Section, Township, Range: <u>N/A</u>	
Landform (hillslope, terrace, etc.): Depression	Local relief (concave, convex, none): Conc	ave Slope (%):_0-4
Subregion (LRR or MLRA): LRRN Lat: 39.939922	2 Long: -81.53699	Datum: NAD 83
Soil Map Unit Name: Mentor silt loam, 2 to 8 percent slopes (Me	eB) NWI cl	assification: none
Are climatic / hydrologic conditions on the site typical for this time of	year? Yes No (If no, expla	in in Remarks.)
Are Vegetation, Soil, or Hydrology significant	tly disturbed? Are "Normal Circumstar	nces" present? Yes 🔽 No
Are Vegetation, Soil, or Hydrology naturally	problematic? (If needed, explain any a	answers in Remarks.)
SUMMARY OF FINDINGS – Attach site map showin	ng sampling point locations, trans	sects, important features, etc.
Hydrophytic Vegetation Present? Yes <u>Ves</u> No	- Is the Sampled Area	,

Hydrophytic Vegetation Present? Hydric Soil Present? Wetland Hydrology Present?	Yes _ Yes _ Yes _	<i>v</i> <i>v</i>	No No No	Is the Sampled Area within a Wetland?	Yes_	v	No
Remarks: Cowardin Code: PEN	1		HGM: Depressio	nal Water Type: NR	PWW		

Wetland Hydrology Indicators:	Secondary Indicators (minimum of two required)
Primary Indicators (minimum of one is required; check all that apply)	Surface Soil Cracks (B6)
Primary Indicators (minimum of one is required; check all that apply)	
Aqualle Faulta (B13)	
Surface Water Present? Yes No Depth (inches): Water Table Present? Yes No Depth (inches): Saturation Present? Yes No Depth (inches): (includes capillary fringe) Depth (inches): Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspect	Wetland Hydrology Present? Yes <u>V</u> No tions), if available:
Remarks:	

, , 	Absolute	• Dominant	Indicator	Dominance Test worksheet:
Tree Stratum (Plot size: <u>30'</u>)	<u>% Cover</u>	Species?	<u>Status</u>	Number of Dominant Species
1.				That Are OBL, FACW, or FAC: 2 (A)
2				
2		·		Total Number of Dominant
3		•		Species Across All Strata: <u>2</u> (B)
4		·		Percent of Dominant Species
5				That Are OBL, FACW, or FAC:(A/B)
6				
7.				Prevalence Index worksheet:
	0	- Total Co		Total % Cover of: Multiply by:
50% of total cover: 0	20% of	total cove		OBL species x 1 =
Conling/Shruh Stratum (Dist size) 15'	2070 01		·	FACW species x 2 =
				FAC species x 3 -
1				
2				FACU species x 4 =
3				UPL species x 5 =
4.				Column Totals: (A) (B)
5				
<u>.</u>				Prevalence Index = B/A =
b		·		Hydrophytic Vegetation Indicators:
7				 1 - Rapid Test for Hydrophytic Vegetation
8				\checkmark 2 - Dominance Test is >50%
9				2 Dravidance Index is $< 2.0^{1}$
	0	= Total Co	ver	3 - Prevalence Index is ≤3.0
50% of total cover: 0	20% of	total cove	·: 0	4 - Morphological Adaptations' (Provide supporting
Herb Stratum (Plot size: 5')				data in Remarks or on a separate sheet)
A Phalaris arundinacea	60	~	FACW	Problematic Hydrophytic Vegetation ¹ (Explain)
	- 20			
2. Carex Irankii	30	<u> </u>		¹ Indicators of hydric soil and wetland hydrology must
3				be present, unless disturbed or problematic.
4				Definitions of Four Vogetation Strata:
5.				Deminions of Four Vegetation Strata.
6				Tree – Woody plants, excluding vines, 3 in. (7.6 cm) or
-				more in diameter at breast height (DBH), regardless of
/		·		height.
8				Sapling/Shrub – Woody plants, excluding vines, less
9				than 3 in. DBH and greater than or equal to 3.28 ft (1
10				m) tall.
11.				Hark All borbosous (non woods) planta regardlage
	90	- Total Co	Vor	of size, and woody plants less than 3.28 ft tall
50% of total cover: 45	20% of	total cove	~ 18	
15'	20 /8 01			Woody vine – All woody vines greater than 3.28 ft in
(Plot size:)				height.
1		·		
2				
3				
4.				
5				Hydrophytic
	0	Tatal Ca		Present? Yes V No
	200% of		ver n	
	20% 0			
Remarks: (Include photo numbers here or on a separate s	sheet.)			

Profile Desc	ription: (Describe to	o the dept	h needed to docun	nent the i	ndicator	or confirm	the absence o	f indicators.)	
Depth	Matrix		Redox	k Features	6				
(inches)	Color (moist)	%	Color (moist)	%	_Type ¹	Loc ²	Texture	Remarks	
0-16	10YR 4/2	95	10YR 5/6	5	С	M/PL	SIL		
						·			
						·			
						·			
¹ Type: C=C	oncentration, D=Deple	etion. RM=	Reduced Matrix, MS	S=Masked	Sand Gr	ains	² Location: PL =	=Pore Lining, M=Matrix,	
Hydric Soil	ndicators:		,				Indicat	ors for Problematic Hyd	dric Soils ³ :
Histosol	(A1)		Dark Surface	(S7)			2 c	m Muck (A10) (MI RA 14	17)
Histic Er	(A2)		Daix Ounace	(07) Iow Surfa			148)	ast Prairie Redox (A16)	,
	stic (A2)		Folyvalue De	rfaca (SQ)		1217 147,	(140)	MIDA 147 149	
	n Sulfide (A3)			d Motrix (147, 140)	l Dia	dmont Floodnloin Soile (E10)
Hydroge					FZ)			amont Floodplain Solis (F19)
Stratified			Depleted Mat	FIX (F3)			(WILRA 136, 147)	
	ICK (A10) (LRR N)	()	Redox Dark S	surrace (F	6) (F7)			ry Shallow Dark Surface	(1F12)
	Below Dark Surface	(ATT)	Depleted Dar	k Surrace	(F7)		Otr	ier (Explain in Remarks)	
	ark Surface (A12)		Redox Depre	SSIONS (F	3) (F40) (
Sandy M	lucky Mineral (S1) (L	RR N,	Iron-Mangane	ese Masse	es (F12) (LRR N,			
MLRA	A 147, 148)		MLRA 136	5)			3		
Sandy G	ileyed Matrix (S4)		Umbric Surfa	ce (F13) (MLRA 13	6, 122)	°Indic	ators of hydrophytic vege	etation and
Sandy R	edox (S5)		Piedmont Flo	odplain S	oils (F19)	(MLRA 14	8) wetla	and hydrology must be p	resent,
Stripped	Matrix (S6)		Red Parent M	laterial (F	21) (MLR	A 127, 147	') unle	ss disturbed or problema	tic.
Restrictive I	_ayer (if observed):								
Туре:									
Depth (ind	ches):						Hvdric Soil P	Present? Yes 🖌	No
Pomarke:	,						-		
Remarks.									

Project/Site: Guernsey Pov	ver Plant		City/County: GL	uernsey		_ Sampling Date: 07/21/2016
Applicant/Owner: Guernsey	Power Plant			9	_{state:} OH	Sampling Point: W-C46 PE
Investigator(s): CV, CS			Section, Townsh	nip, Range: N/A		
Landform (hillslope, terrace, et	c.): Depression	Lo	ocal relief (concav	e, convex, none):	Concave	Slope (%): 0-3
Subregion (LRR or MLRA): _L	RRN	Lat: 39.940091		Long: -81.53	783	Datum: NAD 83
Soil Map Unit Name: McGary	silt loam, 0 to 3 pe	ercent slopes (Mc	A)		NWI classifi	_{cation:} None
Are climatic / hydrologic condit	ions on the site typic	cal for this time of y	ear?Yes 🖌	No (lf r	- 10, explain in F	Remarks.)
Are Vegetation . Soil	. or Hydrology	significantly	v disturbed?	Are "Normal Cir	cumstances"	present? Yes 🖌 No
Are Vegetation Soil	or Hydrology	naturally p	oblematic?	(If needed, expl	ain any answe	ers in Remarks.)
	GS Attach sit	a man showing		oint locations	trancocto	important foaturos ato
	95 – Allach Sil	e map snowing	y sampling po		, transects	s, important leatures, etc.
Hydrophytic Vegetation Pres	ent? Yes	✓ No	- Is the Sa	mpled Area		
Hydric Soil Present?	Yes	✓ No	- within a	Wetland?	Yes 🗸	No
Wetland Hydrology Present?	Yes	✓ No	-			
Remarks: Cowordin C	ode: PEM	HGM: Dep	ressional W	ater Type: NR	PWW	
Cowardin C						
HYDROLOGY						
HYDROLOGY Wetland Hydrology Indicate	prs:			Se	condary Indica	ators (minimum of two required)
HYDROLOGY Wetland Hydrology Indicators Primary Indicators (minimum Surface Water (A1)	ors: of one is required; c	theck all that apply	Planta (P14)	<u>Se</u>	condary Indica Surface Soil	ators (minimum of two required) I Cracks (B6)
HYDROLOGY Wetland Hydrology Indicate Primary Indicators (minimum Surface Water (A1) High Water Table (A2)	ors: of one is required; c	heck all that apply	Plants (B14)	<u>Se</u> 	<u>condary Indica</u> Surface Soil Sparsely Ve Drainage Pa	ators (minimum of two required) I Cracks (B6) egetated Concave Surface (B8)
HYDROLOGY Wetland Hydrology Indicator Primary Indicators (minimum Surface Water (A1) High Water Table (A2) Saturation (A3)	ors: of one is required: c	theck all that apply) True Aquatic F Hydrogen Sulf Oxidized Rhiz	Plants (B14) ide Odor (C1) ospheres on Livin	<u>Se</u> 	<u>condary Indica</u> Surface Soil Sparsely Ve Drainage Pa Moss Trim L	ators (minimum of two required) I Cracks (B6) egetated Concave Surface (B8) atterns (B10) Lines (B16)
HYDROLOGY Wetland Hydrology Indicator Primary Indicators (minimum Surface Water (A1) High Water Table (A2) Saturation (A3) Water Marks (B1)	ors: of one is required: c	theck all that apply) True Aquatic F Hydrogen Sulf Cuidized Rhize Presence of R	Plants (B14) ide Odor (C1) ospheres on Living educed Iron (C4)	g Roots (C3)	<u>condary Indica</u> Surface Soil Sparsely Ve Drainage Pa Moss Trim L Dry-Season	ators (minimum of two required) I Cracks (B6) egetated Concave Surface (B8) atterns (B10) Lines (B16) Water Table (C2)
HYDROLOGY Wetland Hydrology Indicate Primary Indicators (minimum Surface Water (A1) High Water Table (A2) Saturation (A3) Water Marks (B1) Sediment Deposits (B2)	ors: of one is required: c	 Check all that apply) True Aquatic F Hydrogen Sulf Oxidized Rhiz Presence of R Recent Iron Reference 	Plants (B14) ide Odor (C1) ospheres on Livin educed Iron (C4) eduction in Tilled s	g Roots (C3) Soils (C6)	condary Indica Surface Soil Sparsely Ve Drainage Pa Moss Trim L Dry-Season Crayfish Bur	ators (minimum of two required) I Cracks (B6) egetated Concave Surface (B8) atterns (B10) Lines (B16) Water Table (C2) rrows (C8)
HYDROLOGY Wetland Hydrology Indicate Primary Indicators (minimum Surface Water (A1) High Water Table (A2) Saturation (A3) Water Marks (B1) Sediment Deposits (B2) Drift Deposits (B3)	ors: of one is required; c	Check all that apply) True Aquatic F Hydrogen Sulf Oxidized Rhiz Presence of R Recent Iron R Thin Muck Sulf	Plants (B14) ide Odor (C1) ospheres on Living educed Iron (C4) eduction in Tilled S face (C7)	g Roots (C3) Soils (C6)	condary Indica Surface Soil Sparsely Ve Drainage Pa Moss Trim L Dry-Season Crayfish Bur Saturation V	ators (minimum of two required) I Cracks (B6) egetated Concave Surface (B8) atterns (B10) Lines (B16) Water Table (C2) rrows (C8) /isible on Aerial Imagery (C9)
HYDROLOGY Wetland Hydrology Indicator Primary Indicators (minimum Surface Water (A1) High Water Table (A2) Saturation (A3) Water Marks (B1) Sediment Deposits (B2) Drift Deposits (B3) Algal Mat or Crust (B4)	ors: of one is required: c	 check all that apply) True Aquatic F Hydrogen Sulf Oxidized Rhize Presence of R Recent Iron Re Thin Muck Sun Other (Explain 	Plants (B14) ide Odor (C1) ospheres on Living educed Iron (C4) eduction in Tilled S face (C7) i in Remarks)	g Roots (C3)	condary Indica Surface Soil Sparsely Ve Drainage Pa Moss Trim L Dry-Season Crayfish Bur Saturation V Stunted or S	ators (minimum of two required) I Cracks (B6) egetated Concave Surface (B8) atterns (B10) Lines (B16) Water Table (C2) rrows (C8) //isible on Aerial Imagery (C9) Stressed Plants (D1)
HYDROLOGY Wetland Hydrology Indicate Primary Indicators (minimum Surface Water (A1) High Water Table (A2) Saturation (A3) Water Marks (B1) Sediment Deposits (B2) Drift Deposits (B3) Algal Mat or Crust (B4) Iron Deposits (B5)	ors: of one is required; o	 check all that apply) True Aquatic F Hydrogen Sulf ✓ Oxidized Rhize Presence of R Recent Iron Recent Iron R	Plants (B14) ide Odor (C1) ospheres on Living educed Iron (C4) eduction in Tilled s face (C7) i in Remarks)	g Roots (C3)	condary Indica Surface Soil Sparsely Ve Drainage Pa Moss Trim L Dry-Season Crayfish Bur Saturation V Stunted or S Geomorphic	ators (minimum of two required) I Cracks (B6) egetated Concave Surface (B8) atterns (B10) Lines (B16) Water Table (C2) rrows (C8) /isible on Aerial Imagery (C9) Stressed Plants (D1) c Position (D2)
HYDROLOGY Wetland Hydrology Indicate Primary Indicators (minimum 	ors: of one is required; c	 check all that apply) True Aquatic F Hydrogen Sulf ✓ Oxidized Rhize Presence of R Recent Iron Recent Iron Recent Iron Ruck Sun Other (Explain 	Plants (B14) ide Odor (C1) ospheres on Living educed Iron (C4) eduction in Tilled S face (C7) i in Remarks)	g Roots (C3)	condary Indica Surface Soil Sparsely Ve Drainage Pa Moss Trim L Dry-Season Crayfish Bur Saturation V Stunted or S Geomorphic Shallow Aqu	ators (minimum of two required) I Cracks (B6) egetated Concave Surface (B8) atterns (B10) Lines (B16) Water Table (C2) rrows (C8) /isible on Aerial Imagery (C9) Stressed Plants (D1) c Position (D2) Litard (D3)
HYDROLOGY Wetland Hydrology Indicate Primary Indicators (minimum 	ors: of one is required: o ial Imagery (B7) 19)	 check all that apply) True Aquatic F Hydrogen Sulf ✓ Oxidized Rhizo Presence of R Recent Iron Ro Thin Muck Suo Other (Explain 	Plants (B14) ide Odor (C1) ospheres on Living educed Iron (C4) eduction in Tilled S rface (C7) i in Remarks)	g Roots (C3)	condary Indica Surface Soil Sparsely Ve Drainage Pa Moss Trim L Dry-Season Crayfish Bur Saturation V Stunted or S Geomorphic Shallow Aqu	ators (minimum of two required) I Cracks (B6) egetated Concave Surface (B8) atterns (B10) Lines (B16) Water Table (C2) rrows (C8) /isible on Aerial Imagery (C9) Stressed Plants (D1) c Position (D2) Litard (D3) aphic Relief (D4)
HYDROLOGY Wetland Hydrology Indicator Primary Indicators (minimum	ors: of one is required; o ial Imagery (B7)	theck all that apply) True Aquatic F Hydrogen Sulf ✓ Oxidized Rhize Presence of R Recent Iron Re Thin Muck Sun Other (Explain	Plants (B14) ide Odor (C1) ospheres on Living educed Iron (C4) eduction in Tilled S face (C7) i in Remarks)	g Roots (C3)	condary Indica Surface Soil Sparsely Ve Drainage Pa Moss Trim L Dry-Season Crayfish Bur Saturation V Stunted or S Geomorphic Shallow Aqu Microtopogra	ators (minimum of two required) I Cracks (B6) egetated Concave Surface (B8) atterns (B10) Lines (B16) Water Table (C2) rrows (C8) /isible on Aerial Imagery (C9) Stressed Plants (D1) c Position (D2) Litard (D3) aphic Relief (D4) I Test (D5)
HYDROLOGY Wetland Hydrology Indicate Primary Indicators (minimum 	ors: of one is required; c rial Imagery (B7) 39)	Check all that apply) True Aquatic F Hydrogen Sulf Oxidized Rhize Presence of R Recent Iron Re Thin Muck Sul Other (Explain Other (Explain)	Plants (B14) ide Odor (C1) ospheres on Living educed Iron (C4) eduction in Tilled S face (C7) i in Remarks)	g Roots (C3)	condary Indica Surface Soil Sparsely Ve Drainage Pa Moss Trim L Dry-Season Crayfish Bur Saturation V Stunted or S Geomorphic Shallow Aqu Microtopogra FAC-Neutra	ators (minimum of two required) I Cracks (B6) egetated Concave Surface (B8) atterns (B10) Lines (B16) Water Table (C2) rrows (C8) /isible on Aerial Imagery (C9) Stressed Plants (D1) c Position (D2) Litard (D3) aphic Relief (D4) I Test (D5)
HYDROLOGY Wetland Hydrology Indicate Primary Indicators (minimum 	rial Imagery (B7) 9) Yes No	check all that apply) True Aquatic F Hydrogen Sulf Oxidized Rhize Presence of R Recent Iron Re Thin Muck Sult Other (Explain) Other (Explain) Depth (inchest) Presence (inchest)	Plants (B14) ide Odor (C1) ospheres on Living educed Iron (C4) eduction in Tilled S face (C7) i in Remarks)	g Roots (C3)	condary Indica Surface Soil Sparsely Ve Drainage Pa Moss Trim L Dry-Season Crayfish Bur Saturation V Stunted or S Geomorphic Shallow Aqu Microtopogra	ators (minimum of two required) I Cracks (B6) egetated Concave Surface (B8) atterns (B10) Lines (B16) Water Table (C2) rrows (C8) Visible on Aerial Imagery (C9) Stressed Plants (D1) c Position (D2) Litard (D3) aphic Relief (D4) I Test (D5)
HYDROLOGY Wetland Hydrology Indicato Primary Indicators (minimum 	ors: of one is required; of of one is required; of one is required; of of one is required; of one is req	check all that apply)	Plants (B14) ide Odor (C1) ospheres on Living educed Iron (C4) eduction in Tilled S face (C7) i in Remarks)	g Roots (C3)	condary Indica Surface Soil Sparsely Ve Drainage Pa Moss Trim L Dry-Season Crayfish Bur Saturation V Stunted or S Geomorphic Shallow Aqu Microtopogra FAC-Neutra	ators (minimum of two required) I Cracks (B6) egetated Concave Surface (B8) atterns (B10) Lines (B16) Water Table (C2) rrows (C8) //isible on Aerial Imagery (C9) Stressed Plants (D1) c Position (D2) Litard (D3) aphic Relief (D4) I Test (D5)

Sampling Point: W-C46 PEM

201	Absolute	Dominant	Indicator	Dominance Test worksheet:
Tree Stratum (Plot size: 30)	% Cover	Species?	Status	Number of Dominant Species
1				That Are OBL, FACW, or FAC: (A)
2				Total Number of Dominant
3				Species Across All Strata:1 (B)
4				
5.				Percent of Dominant Species That Are OBLEACW or EAC: 100 (A/B)
6.				
7				Prevalence Index worksheet:
	0	= Total Cov	er	Total % Cover of: Multiply by:
50% of total cover: 0	20% of	total cover:	0	OBL species x 1 =
Sapling/Shrub Stratum (Plot size: 15')				FACW species x 2 =
1				FAC species x 3 =
2				FACU species x 4 =
2			·	UPL species $x 5 =$
3		·	·	Column Totals: (A) (B)
4		•	·	
5			·	Prevalence Index = B/A =
6				Hydrophytic Vegetation Indicators:
7				 1 - Rapid Test for Hydrophytic Vegetation
8				\checkmark 2 - Dominance Test is >50%
9				$\frac{1}{2} = 2 \cdot \frac{1}{2} = \frac{1}{2} \cdot \frac{1}{2}$
	0	= Total Cov	er	\sim 3 - Frevalence index is \leq 3.0
50% of total cover:0	20% of	total cover	0	4 - Morphological Adaptations" (Provide supporting
Herb Stratum (Plot size: 5')				data in Remarks or on a separate sheet)
1 Phalaris arundinacea	70	~	FACW	Problematic Hydrophytic Vegetation ¹ (Explain)
2 Verbesina alternifolia	10		FAC	
2 Carex lurida	10		OBI	¹ Indicators of hydric soil and wetland hydrology must
A Carex vulpinoidea	5			be present, unless disturbed or problematic.
-		·		Definitions of Four Vegetation Strata:
5			·	Tree – Woody plants, excluding vines 3 in (7.6 cm) or
6			·	more in diameter at breast height (DBH), regardless of
7				height.
8				Sanling/Shrub – Woody plants, excluding vines, less
9				than 3 in. DBH and greater than or equal to 3.28 ft (1
10				m) tall.
11				Harb - All berbaceous (non-woody) plants, regardless
	95	= Total Cov	rer	of size, and woody plants less than 3.28 ft tall.
50% of total cover: 47.	5 20% of	total cover	19	
Woody Vine Stratum (Plot size: 15')				Woody vine – All woody vines greater than 3.28 ft in height
1.				Toight.
2				
		·		
4			·	
4			·	Hydrophytic
5			·	Vegetation Present? Ves V No
		= Total Cov	er	
50% of total cover:0	20% of	total cover		
Remarks: (Include photo numbers here or on a separate s	heet.)			
1				

Profile Desc	ription: (Describe to	o the depth	needed to docun	nent the i	ndicator	or confirm	the absence	of indicators.)
Depth	Matrix		Redo	x Features	3	0		
(inches)	Color (moist)	<u>%</u>	Color (moist)		Type'	Loc ²	Texture	Remarks
0-12	10YR 4/1	95	7.5YR 4/4	5	С	M/PL	SIL	
						·		
						·		
						·		
						·		
						·		
¹ Type: C=Co	ncentration, D=Deple	etion, RM=F	Reduced Matrix, MS	S=Masked	Sand Gr	ains.	² Location: PL	_=Pore Lining, M=Matrix.
Hydric Soil I	ndicators:						Indica	tors for Problematic Hydric Soils ³ :
<u> </u>	(A1)		Dark Surface	(S7)			2 0	cm Muck (A10) (MLRA 147)
Histic Ep	ipedon (A2)		Polyvalue Be	low Surfac	ce (S8) (N	ILRA 147,	148) Co	oast Prairie Redox (A16)
Black His	stic (A3)		Thin Dark Su	rface (S9)	(MLRA 1	147, 148)		(MLRA 147, 148)
Hydroge	n Sulfide (A4)		Loamy Gleye	d Matrix (I	=2)		Pi	edmont Floodplain Soils (F19)
Stratified	Layers (A5)		Depleted Mat	rix (F3)				(MLRA 136, 147)
2 cm Mu	ck (A10) (LRR N)		Redox Dark S	Surface (F	6)		Ve	ery Shallow Dark Surface (TF12)
Depleted	Below Dark Surface	(A11)	Depleted Dar	k Surface	(F7)		Ot	her (Explain in Remarks)
Thick Da	rk Surface (A12)		Redox Depre	ssions (F8	3)			
Sandy M	ucky Mineral (S1) (LI	RR N,	Iron-Mangane	ese Masse	es (F12) (LRR N,		
MLRA	. 147, 148)		MLRA 13	6)			2	
Sandy G	leyed Matrix (S4)		Umbric Surfa	ce (F13) (MLRA 13	6, 122)	°Indie	cators of hydrophytic vegetation and
Sandy R	edox (S5)		Piedmont Flo	odplain So	oils (F19)	(MLRA 14	8) wet	land hydrology must be present,
<u> </u>	Matrix (S6)		Red Parent M	laterial (F2	21) (MLR	A 127, 147	7) unle	ess disturbed or problematic.
Restrictive L	ayer (if observed):							
Туре:								_
Depth (inc	hes):						Hydric Soil	Present? Yes 🔽 No
Remarks:								

	A TORM Lastern mountains and Ficultion Region
Project/Site: Guernsey Power Plant	City/County: Guernsey Sampling Date: 07/21/2016
Applicant/Owner: Guernsey Power Plant	State: OH Sampling Point: W-C46 P
Investigator(s): CV, CS	Section, Township, Range: N/A
Landform (hillslope, terrace, etc.): Depression	Local relief (concave, convex, none): Concave Slope (%): 0
Subregion (LRR or MLRA): LRRN Lat: 39.940)156 Long: -81.537479 Datum NAD 83
Soil Mon Unit Name: McGary silt Joam, 0 to 3 percent slopes	s (McA)
Are dimetia (hudralaria carditiana an tha aita turical far thia tim	
Are climatic / hydrologic conditions on the site typical for this time	e of year? Yes No (Ir no, explain in Remarks.)
Are Vegetation, Soil, or Hydrology signifi	icantly disturbed? Are "Normal Circumstances" present? Yes No
Are Vegetation, Soil, or Hydrology natura	ally problematic? (If needed, explain any answers in Remarks.)
SUMMARY OF FINDINGS – Attach site map sho	wing sampling point locations, transects, important features, etc
Hydrophytic Vegetation Present? Yes V Hydric Soil Present? Yes V Wetland Hydrology Present? Yes V Pemarks: P P	Is the Sampled Area within a Wetland? Yes No
Cowardin Code: PFO HGM:	Depressional Water Type: NRPWW
HYDROLOGY	
Wetland Hydrology Indicators:	Secondary Indicators (minimum of two required)
Primary Indicators (minimum of one is required; check all that a	apply) Surface Soil Cracks (B6)
Surface Water (A1) True Aqu	Jatic Plants (B14) Sparsely Vegetated Concave Surface (B8)
High Water Lable (A2) Hydroger	n Sulfide Odor (C1)
→ Saturation (A3) → Oxidized	a of Reduced Iron (C4)
Sediment Deposits (B2)	ron Reduction in Tilled Soils (C6) Cravitish Burrows (C8)
Drift Deposits (B3)	ck Surface (C7) Saturation Visible on Aerial Imagery (C9)
Algal Mat or Crust (B4) Other (E)	xplain in Remarks) Stunted or Stressed Plants (D1)
Iron Deposits (B5)	Geomorphic Position (D2)
Inundation Visible on Aerial Imagery (B7)	Shallow Aquitard (D3)
Water-Stained Leaves (B9)	Microtopographic Relief (D4)
Aquatic Fauna (B13)	✓ FAC-Neutral Test (D5)
Field Observations:	
Surface Water Present? Yes No 🔽 Depth (i	inches):
Water Table Present? Yes No Depth (i	inches):
Saturation Present? Yes No 🔽 Depth (i	inches): Wetland Hydrology Present? Yes <u>/</u> No
(includes capillary tringe) Describe Recorded Data (stream gauge, monitoring well, aeria	l photos, previous inspections), if available:
Remarks:	

Sampling Point: W-C46 PFO

	Absolute	Dominant	Indicator	Dominance Test worksheet:
Tree Stratum (Plot size: 30)	% Cover	Species?	Status	Number of Dominant Species
1. Acer saccharinum	30	~	FACW	That Are OBL. FACW. or FAC: 4 (A)
2 Fraxinus pennsylvanica	10	~	FACW	
	5			Total Number of Dominant
	·		<u>FACU</u>	Species Across All Strata:4 (B)
4				Percent of Dominant Species
5				That Are OBL_EACW or EAC: 100 (A/B)
6				
7				Prevalence Index worksheet:
1	45			Total % Cover of Multiply by
		= Total Co	ver	
50% of total cover: 22.	5 20% of	total cover	: <u>9</u>	
Sapling/Shrub Stratum (Plot size: 15')				FACW species x 2 =
1. Acer saccharinum	10	~	FACW	FAC species x 3 =
2	·			FACU species x 4 =
Z	·			
3				
4				Column Totals: (A) (B)
5.				
6	·			Prevalence Index = B/A =
	·			Hydrophytic Vegetation Indicators:
/	·			✓ 1 - Rapid Test for Hydrophytic Vegetation
8				✓ 2 - Dominance Test is >50%
9.				
	10	- Total Co		3 - Prevalence Index is ≤3.0°
5.0% of total anyon 5	20% of			4 - Morphological Adaptations ¹ (Provide supporting
50% of total cover. <u>5</u>	20% 0		·	data in Remarks or on a separate sheet)
Herb Stratum (Plot size:)	~~			Problematic Hydrophytic Vegetation ¹ (Explain)
1. Phalaris arundinacea	60	<u> </u>	FACW	
2. Juncus effusus	15		FACW	
3 Eutrochium purpureum	10		FAC	Indicators of hydric soil and wetland hydrology must
Impatiens capensis	5		FACW	be present, unless disturbed or problematic.
4			- 171011	Definitions of Four Vegetation Strata:
5				
6				Iree – woody plants, excluding vines, 3 in. (7.6 cm) or
7.				height
Q				l
o	·			Sapling/Shrub – Woody plants, excluding vines, less
9	·			than 3 in. DBH and greater than or equal to 3.28 ft (1
10				m) tall.
11				Herb – All berbaceous (non-woody) plants, regardless
	90	- Total Co	/er	of size, and woody plants less than 3.28 ft tall.
50% of total cover: 45	20% of	total cover	. 18	
15'	2070 01			Woody vine – All woody vines greater than 3.28 ft in
woody vine Stratum (Plot size:)				height.
1				
2				
3.				
4				
4				Hydrophytic
5				Vegetation
	0	= Total Co	ver	Present? Yes V No
50% of total cover: <u>0</u>	20% of	total cover	: <u>0</u>	
Remarks: (Include photo numbers here or on a separate s	sheet.)			
, ,	,			

Deptn (inchoo)		0/	Color (moint)	<u>ox Feature</u>	<u>S</u> Turno ¹	1.00 ²	Toxturo	Bomorko	
		 		<u>%</u>				Remarks	
0-12	10YR 4/2		<u>10184/4</u>		<u> </u>	<u> </u>			
						·			
Type: C=Co	oncentration, D=Depl	etion, RM=	Reduced Matrix, M	S=Masked	d Sand Gr	ains.	² Location: PL	=Pore Lining, M=Matrix.	
Hydric Soil I	ndicators:						Indicat	tors for Problematic Hy	ydric Soils ³ :
Histosol	(A1)		Dark Surface	e (S7)			2 0	cm Muck (A10) (MLRA 1	47)
Histic Ep	pipedon (A2)		Polyvalue Be	elow Surfa	ice (S8) (I	/LRA 147,	148) Co	bast Prairie Redox (A16)	
Black Hi	stic (A3)		Thin Dark Su	urface (S9) (MLRA '	147, 148)		(MLRA 147, 148)	
Hydroge	n Sulfide (A4)		Loamy Gleye	ed Matrix ((F2)		Pie	edmont Floodplain Soils	(F19)
Stratified	Layers (A5)		 Depleted Ma Bodey Dark 	itrix (F3) Surface (F				(MLRA 136, 147)	(TE40)
2 CITI IVIU Depleter	CK (ATU) (LKK N) Below Dark Surface	(Δ11)	Redux Dark	Sunace (r rk Surface	-0) (E7)		Ve	ber (Evolain in Remarks)
Depieted	ark Surface (A12)	(,,,,)	Depieted Da	assions (F	5 (17) (8)		_ 01)
Sandy M	lucky Mineral (S1) (L	RR N.	Iron-Mangar	ese Mass	es (F12) (LRR N.			
Ound, II	147. 148)	,	MLRA 13	6)		,			
Sandy G	leved Matrix (S4)		Umbric Surfa	ace (F13)	(MLRA 1	36, 122)	³ India	cators of hydrophytic vec	petation and
Sandy R	edox (S5)		Piedmont Flo	odplain S	oils (F19)	(MLRA 14	18) wet	land hydrology must be	present,
Stripped	Matrix (S6)		Red Parent I	Material (F	21) (MLF	À 127, 147	7) unle	ess disturbed or problem	atic.
Restrictive I	ayer (if observed):								
Туре:									
Depth (in	ches):						Hydric Soil I	Present? Yes 🖌	No
Remarks:							,		
Contanto.									

Project/Site: Guernsey Power Plant	City/County: Guerns	еу	Sampling Date: 07/21/2016
Applicant/Owner: Guernsey Power Plant		State: OH	_ Sampling Point: W-C45, 46 UP
Investigator(s): CV, CS	Section, Township, Ra	ange: N/A	
Landform (hillslope, terrace, etc.): Hillslope	Local relief (concave, con	vex, none): Linear	Slope (%): <u>3-8</u>
Subregion (LRR or MLRA): LRRN Lat: 39.93	39885 Lor	ng: <u>-81.537401</u>	Datum: NAD 83
Soil Map Unit Name: McGary silt loam, 0 to 3 percent slope	es (McA)	NWI classifica	tion: None
Are climatic / hydrologic conditions on the site typical for this tir	me of year? Yes 🔽 No _	(If no, explain in Re	marks.)
Are Vegetation, Soil, or Hydrology sign	nificantly disturbed? Are	"Normal Circumstances" pr	esent? Yes 🔽 No
Are Vegetation, Soil, or Hydrology natu	urally problematic? (If ne	eeded, explain any answers	s in Remarks.)
SUMMARY OF FINDINGS – Attach site map sh	owing sampling point I	ocations, transects,	important features, etc.

Hydrophytic Vegetation Present? Hydric Soil Present? Wetland Hydrology Present?	Yes Yes Yes	No V No V No V	Is the Sampled Area within a Wetland?	Yes	_ No
Remarks: Cowardin Code: UP	LAND				

Wetland Hydrology Indicators:	Secondary Indicators (minimum of two required)
Primary Indicators (minimum of one is required; check all that apply)	Surface Soil Cracks (B6)
 Surface Water (A1) High Water Table (A2) Saturation (A3) Water Marks (B1) Sediment Deposits (B2) Drift Deposits (B3) Thin Muck Surface (C7) Algal Mat or Crust (B4) Iron Deposits (B5) Inundation Visible on Aerial Imagery (B7) Aquatic Fauna (B13) 	 Sparsely Vegetated Concave Surface (B8) 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) Geomorphic Position (D2) 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):	
Saturation Present? Yes No _ Depth (inches): Wetla (includes capillary fringe)	and Hydrology Present? Yes No
Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), i	f available:
Remarks:	

Sampling Point: W-C45, 46 UP

20'	Absolute	Dominant	Indicator	Dominance Test worksheet:
Tree Stratum (Plot size: 30)	<u>% Cover</u>	Species?	Status	Number of Dominant Species
1				That Are OBL, FACW, or FAC: (A)
2				Total Number of Dominant
3				Species Across All Strata: <u>2</u> (B)
4				Demonst of Deminent Creation
5				That Are OBL_EACW_or EAC: 0 (A/B)
6.				
7				Prevalence Index worksheet:
	0	- Total Cov		Total % Cover of: Multiply by:
50% of total cover: 0	20% of	total cover	0	OBL species x 1 =
Sapling/Shrub Stratum (Plot size: 15')				FACW species x 2 =
				FAC species x 3 =
				FACU species x 4 =
2				
3				OFL species
4				Column Totals: (A) (B)
5				Prevalence Index $- B/A -$
6				Hydrophytic Vagotation Indicators
7.				
8				1 - Rapid Test for Hydrophytic Vegetation
0			•	2 - Dominance Test is >50%
9			·	3 - Prevalence Index is $\leq 3.0^1$
500/ // / 0		= I otal Cov	/er	4 - Morphological Adaptations ¹ (Provide supporting
50% of total cover:0	20% of	total cover	:	data in Remarks or on a separate sheet)
Herb Stratum (Plot size:)	40		FAOL	Problematic Hydrophytic Vegetation ¹ (Explain)
1. Phleum pratense		<u> </u>	FACU	
2. Dactylis glomerata	30	 ✓ 	FACU	The discrete section of the data and the data and the data are section.
3. Trifolium repens	15		FACU	Indicators of hydric soil and wetland hydrology must
4. Trifolium pratense	10		FACU	Definitions of Four Manatation Of problematic.
5				Definitions of Four Vegetation Strata:
e				Tree – Woody plants, excluding vines, 3 in. (7.6 cm) or
0				more in diameter at breast height (DBH), regardless of
/				height.
8				Sapling/Shrub – Woody plants, excluding vines, less
9				than 3 in. DBH and greater than or equal to 3.28 ft (1
10				m) tall.
11				Herb – All berbaceous (non-woody) plants, regardless
	95	= Total Cov	/er	of size, and woody plants less than 3.28 ft tall.
50% of total cover: 47.5	520% of	total cover	<u>: 19</u>	
Woody Vine Stratum (Plot size: 15')				Woody vine – All woody vines greater than 3.28 ft in
1				neight.
2				
2				
3				
4				Hydrophytic
5				Vegetation
		= Total Cov	/er	Present? Yes No V
50% of total cover: 0	20% of	total cover	: 0	
Remarks: (Include photo numbers here or on a separate s	heet.)			

Profile Desc	ription: (Describe to	o the depth n	eeded to docum	ent the i	ndicator o	or confirm	the absence	of indicato	rs.)	
Depth	Matrix		Redox	Features	3					
(inches)	Color (moist)		Color (moist)		Type ¹	Loc ²	Texture		Remarks	
0-12	10YR 4/4	100					SL			
			ducod Matrix MS	-Mackod	Sand Gra	line	² Location: P	– Poro Linir	og M-Motrix	
	ndicators:		uuceo Matrix, MS	=iviaskeu	Sanu Gra	uns.	Location: Pl	L=Pore Linir	oblematic H	udric Soils ³ .
Hyunc Sonn				(07)			inuica			
Histosol	(A1) in a data (AQ)	-	_ Dark Surface	(57)	(00) (14		$-\frac{2}{2}$	CM IVIUCK (A	(INILRA 1	47)
Histic Ep	ipedon (AZ)	-	Polyvalue Bel	ow Sunac	Ce (58) (IVI	LRA 147,	148)		Redox (A16)	
	STIC (A3)	-	_ Thin Dark Sur	Tace (59)		47, 148)		(IVILKA 14)	7, 148) adalain Caila	(540)
Hydroge	n Sulfide (A4)	-	_ Loamy Gleyed	iviatrix (i	F2)		P		ooplain Solis	(F19)
Stratified		-	_ Depleted Mati	IX (F3)	(C)		V	(IVILKA 13)	6 , 147)	(TE40)
2 cm Mu	CK (ATU) (LKK N) I Rolow Dork Surfood	(411)	_ Redux Dark S		0) (E7)		— ×	ery Shallow Wher (Evoloi	Dark Surface) (IFIZ)
Depieted	rk Surfood (A12)	(ATT) _	_ Depieted Dan		(<i>Г1)</i>		_ 0	nnei (⊏xpiai	II III Remarks)
Thick Da	ucky Minoral (S1) (L		_ Redux Depres))))) (E12) (I					
	147 149)	<u> </u>		:50 Masse	5 (F12) (I	KK N,				
Sandy C	loved Matrix (S4)			7) 20 (E12) (I	MI DA 12	6 122)	³ Ind	icators of by	drophytic vor	notation and
Sandy B	edox (S5)	-	Dinblic Sullat	dolain Se		(MI DA 14)	8) wa	itators of hy	arophytic veg	present
Stripped	Matrix (S6)	-	Red Parent M	atorial (E	21) (MI P	127 147	0) we	loce disturbe	ad or problem	atic
Outpped	aver (if observed):	-				~ 127, 147) un			
Turnet	ayer (il observeu).									
Type:			•							
Depth (inc	:hes):		-				Hydric Soil	Present?	Yes	No <u> </u>
Remarks:										

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in

Case No(s). 16-2443-EL-BGN

Summary: Application of Guernsey Power Station, LLC Part 7 - Appendix J Part 1 electronically filed by Teresa Orahood on behalf of Sally W. Bloomfield