



Southern Ohio Diversification Initiative



Photo: US Department of Energy (DOE)

PORTS SITE ASSETS INFRASTRUCTURE OVERVIEW

LAND / GEOLOGY

Land

- Total area: 3777 acres, with ~1200 acres of existing industrial footprint (within Perimeter Road)
- Well-characterized site with existing data based on previous regulatory activities

Geology

- No major fault and no historical earthquakes, maximum earthquake likely to occur would produce ground motion equal to .15 gravity, and a recurrence of 1,000 years
- Bedrock is composed of sedimentary rock, primarily shale and sandstone, located 35 feet below the surface. The Ohio shale is 300 to 400 feet thick at the site
- Land Transfer to SODI: 80 acres expected in 2018, with an additional 185 acres to be available for transfer in Summer 2019



TRANSPORTATION

Roads

- Site is at intersection of two major four-lane divided highways
 - » U.S. 23 is national north-south highway
 - » Ohio 32 is substantial east-west corridor from Cincinnati, OH to Parkersburg, WV



Rail

- ~17 miles of track on-site with ~1/3 currently in service
- Connects to Norfolk Southern Heartland Corridor main line
- CSX Transportation's mainline and Norfolk Southern Heartland meet just north of Zhan's Corner Industrial Park (~6 miles)

Barge

- Close proximity to Ohio River with barge-to-rail transfer facility is ~26 miles to the south

Air

Major Commercial Passenger:

- John Glenn International Airport (CMH) in Columbus, OH, is ~72 miles to the north
 - » 141 direct flights to 34 destinations
- Cincinnati and Northern Kentucky International Airport (CVG) is ~102 miles to the west
 - » 165+ peak-day flights to 56 nonstop airport destinations
 - » Eighth largest cargo airport in North America and 34th in the world based on FAA statistics

Cargo and Intermodal Services:

- Rickenbacker International Airport (LCK) in Columbus, OH, is ~ 55 miles to the north
 - » Rickenbacker Inland Port includes Air Freight, Rail Intermodal, Trucking & Logistics, and Warehousing & Distribution

General Aviation with Fuel and Flight Services:

- Pike County Airport (4899' runway) with Avgas 100LL and Jet A is ~13 miles to the north
- Greater Portsmouth Regional Airport (5001' runway) with Avgas 100LL is ~ 15 miles to the south
- Ashland Regional Airport (5602' runway) with Avgas 100LL and Jet A is ~55 miles to the south
- Huntington Tri-State Airport (HTS) with Avgas 100LL and Jet A is ~66 miles to the south
 - » American Airlines service to Charlotte, NC and Allegiant Air service to FL and SC

UTILITIES

Electrical Power

- Connection to national grid via AEP Don Marquis Substation 8,000 MVA, 765 kV/345kV/138kV located in northwest portion of site

Natural Gas

- 8-inch line connected to main transmission line to Pike Natural Gas
- Estimated 15,000 scfm at 100 psig available at site boundary
- Estimated that there is currently a minimum surplus capacity of 350,000 scf/hr

Steam

- 2 natural gas fired steam boilers (fuel oil back up), each boiler capable of producing 40,000 pounds of steam per hour at 125 psi
- Current use is ~25% of capacity

Compressed Air

- Four electric driven compressors are capable of producing ~15 million standard cubic feet (scf) of clean dry air (@110 psig and dried to 60oF) per day in a looped system



Water

- Raw water system from two well fields and Scioto River intakes (air-gapped) designed for ~40 million gallons per day with current site usage less than <2 million gallons per day
- On-site potable domestic water system designed to produce 23 million gallons per day
 - » Softened to approximately 100 ppm CaCO₃ hardness
 - » 250,000 gallon elevated storage tank 200 feet in height
 - » Current site usage is 2 million gallons per day

Waste Water Treatment

- Design capacity 1.2 million gallons per day
- National Pollutant Discharge Elimination System (NPDES)-permitted discharge to Scioto River
- Current usage 250,000 gallons per day



Fire Water

- There are two fire water systems
 - » The potable domestic water system supplies hydrants and fixed suppression sprinklers
 - » Dedicated high pressure (125 psig) system, which includes a 300,000 gallon elevated storage tank 300 feet in height

Data Connection and Transmission (Fiber Optics)

- Two, 48-strand backbone fiber bundles
 - » West bundle, Frontier Communications, 6 of 48 fibers are being utilized
 - » South bundle, Horizon Corporation, 16 of 48 fibers are being utilized

MEDICAL AND EMERGENCY FACILITIES

Medical

- Onsite medical facility, specializing in energy industry emergency treatment
- Nearest medical facility is 8-miles away - Adena Pike Medical Center, Waverly, OH



Emergency

- Onsite Emergency Operation Center available to provide integrated response to emergency situations by personnel that have been trained and certified
- DOE onsite Emergency Medical Services and Pike County Emergency Medical Services
- Onsite fire station (12, 2654 sq. ft) with 8 vehicles, including 2 ambulances
- Mutual aid agreements with area fire departments

BUILDINGS (POTENTIALLY TRANSFERRABLE)

Former American Centrifuge Plant (ACP)

• Consists of 31 buildings with a total 2 million sq ft,

Property ID	Property Name	Gross/Rentable	SqftUsable Sqft
X-1020	Emergency Operations Center	7,180	5,617
X-1107AV	GCEP Administrative Vehicle Portal	5,000	3,301
X-1107BP	GCEP Administrative Pedestrian Portal	1,300	858
X-1107DP	GCEP Administrative Pedestrian Portal	1,300	858
X-1107DV	GCEP Administrative Vehicle Portal	700	700
X-1107EP	GCEP Northwest Pedestrian Portal	1,300	1,300
X-1107EV	GCEP Northwest Vehicle Portal	700	700
X-1107FP	GCEP South Pedestrian Portal	1,300	1,300
X-1107FV	GCEP South Vehicle Portal	700	700
X-112	Data Processing Building	30,000	23,471
X-1200-T-07	GCEP Sngle Wde Restroom, HVAC/H2O Heater	400	
X-1200-T-08	GCEP Double wide Office, HVAC	1,782	
X-1200-T-09	GCEP Single Wide Shower/Restroom	610	
X-3000	GCEP Office Building	12,447	8,219
X-3000-T-01	GCEP IAEA Trailer	650	
X-3001	GCEP Process Building	303,680	179,124
X-3002	GCEP Process Building	303,680	179,124
X-3012	GCEP Process Support Building	56,243	44,003
X-3346	GCEP Feed and Customer Services Building	167,236	98,643
X-5000	GCEP Switch House	7,512	4,431
X-5001A	GCEP Valve House	120	71
X-530G	GCEP Oil Pumping Station	1,250	737
X-6000	GCEP Cooling Tower Water Pumphouse	15,768	9,301
X-6001A	GCEP Valve House	120	71
X-7721	GCEP Maintenance, Stores & Training Bldg	136,188	89,924
X-7725	GCEP Recycle and Assembly Building 837,	900	494,230
X-7725A	GCEP Waste Accountability Facility	29,400	17,341
X-7725B	GCEP Environmental Information Center	2,400	
X-7726	GCEP Centrifuge Training & Test Facility	49,480	29,185
X-7727H	GCEP Interplant Transfer Corridor	69,724	41,126
XT-801	South Office Building	44,286	29,242
	Totals	2,090,356	1,263,577

Contact SODI at sodilaw@outlook.com or 740.289.2576

Our Mission for the Southern Ohio Diversification Initiative (SODI) is to improve the quality of life for Jackson, Pike, Ross, and Scioto Counties through economic diversification, development of underutilized land and facilities on the Department of Energy (DOE) Portsmouth Gaseous Diffusion Plant Site, and continued support of local industry.

References:

Department of Energy Presentation, ASSET AVAILABILITY AT THE PORTSMOUTH GASEOUS DIFFUSION PLANT, No author or date specified, 2017

PORTS Concept Map - GIS Data Needs, Restoration Services, Inc., ETS Contractor for DOE-PORTS, C.F.Harley, 6/2/2016