

# UNIFORM KENTUCKY WELL CONSTRUCTION RECORD

Use this form to report installation of monitoring or water wells.  
 Original copy must be submitted to Division of Water within 30 days of completion.  
 See instructions on reverse of form. Do not write in shaded areas.  
 Record must be typed or neatly printed or it will be returned to the driller as unacceptable.  
 One copy to Division of Water, one copy to owner, one copy to driller's files.

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4. Owner name <b>United States Department of Energy</b>				1. Kentucky Well ID (AKGWA) Number <b>8 0 0 5 - 6 3 8 6</b>																																							
5. Owner address <b>5600 Hobbs Road</b>				2. Owner Well ID # <b>MW-422 Shallow</b>																																							
6. City <b>West Paducah</b>		7. State <b>KY</b>		8. Zip <b>42053</b>		3. Attachments Required																																					
If site name and address differ from owner name and address: 9. Site name <b>Paducah Gaseous Diffusion Plant C-400 Building</b> 10. Site address <b>5600 Hobbs Road</b> 11. City <b>West Paducah</b> 12. State <b>KY</b> 13. Zip <b>42053</b>																																											
14. Agency Interest (AI) Number <b>3059</b>		15. Facility type & ID Number <input checked="" type="checkbox"/> CERCLA <input type="checkbox"/> Solid Waste <input type="checkbox"/> Drinking Water <input checked="" type="checkbox"/> RCRA <input type="checkbox"/> UST		31. Work start date <b>Jun 05 2009</b>		32. Work end date <b>Jun 05 2009</b>																																					
16. Owner phone		17. Site phone		Please report depths in feet below surface, not as relative elevations																																							
18. USGS topo map <b>Heath</b>		19. County <b>Mccracken</b>		20. Surface elevation (ft) <b>381.00</b>		21. Elevation determined by <input checked="" type="checkbox"/> GPS <input checked="" type="checkbox"/> Map <input type="checkbox"/> Prior report <input type="checkbox"/> Survey <input type="checkbox"/> Prior well log																																					
22. Physiographic Region <input type="checkbox"/> Bluegrass <input type="checkbox"/> Ohio River Alluvium <input type="checkbox"/> E. Coal Field <input type="checkbox"/> W. Coal Field <input type="checkbox"/> Miss. Plateau <input checked="" type="checkbox"/> Jackson Purchase		23. Well Use <input type="checkbox"/> Agriculture <input type="checkbox"/> Commercial <input type="checkbox"/> Domestic <input type="checkbox"/> Industrial <input checked="" type="checkbox"/> Monitoring / Remed <input type="checkbox"/> Public <input type="checkbox"/> Geothermal <input type="checkbox"/> Heat pump <input type="checkbox"/> HVAC <input type="checkbox"/> Injection <input type="checkbox"/> Mining <input type="checkbox"/> Unused		24. Drilling method <input checked="" type="checkbox"/> Auger - HS <input type="checkbox"/> Auger - SS <input type="checkbox"/> Auger - bucket <input type="checkbox"/> Auger - hand <input type="checkbox"/> Cable tool <input type="checkbox"/> Core <input type="checkbox"/> Driven casing <input type="checkbox"/> Excavation <input type="checkbox"/> Combined - HS auger & air rotary <input type="checkbox"/> Jet wash <input type="checkbox"/> Push/probe <input type="checkbox"/> Rotary - air <input type="checkbox"/> Rotary - mud <input type="checkbox"/> Rotary - reverse <input type="checkbox"/> Sand point <input type="checkbox"/> Sonic <input type="checkbox"/> Unknown		25. Well status <input checked="" type="checkbox"/> Active <input type="checkbox"/> Inactive <input type="checkbox"/> Unsuitable for intended use		26. Wellhead <input type="checkbox"/> Flush <input type="checkbox"/> Locking <input checked="" type="checkbox"/> Well cap <input type="checkbox"/> Sanitary seal																																			
27. Well completion: Casing and screens				28. Annulus fill and seal																																							
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49. Comments <b>One of 3 nested wells completed in a common 8-inch borehole as MW-422. 4'X4'X12" concrete pad, 8-inch Sch 40 steel locking cover, 4 steel bollards.</b>				33. Total depth (ft) <b>75.33</b> 34. Depth to bedrock (ft) _____ 35. Static water level (ft) <b>50.00</b> 36. Casing height above surface (in) <b>33.00</b>																																							
50. Affirmation: The work described above was done under my supervision, and this report is true and correct to the best of my knowledge. Note: the driller is not responsible for natural groundwater quality or quantity encountered while drilling or completing this well.				37. Estimated well yield _____ <input type="checkbox"/> gpm <input type="checkbox"/> gph <input type="checkbox"/> gpd 38. Well service _____ # of people served 39. Disinfectant amount _____ 40. Type _____ <input type="checkbox"/> oz <input type="checkbox"/> qts <input type="checkbox"/> cups <input type="checkbox"/> Hypo-chlorite <input type="checkbox"/> lbs <input type="checkbox"/> gal 41. Pitless adapter installed <input type="checkbox"/> Yes <input type="checkbox"/> No 42. Pump installed: <input type="checkbox"/> Submersible <input type="checkbox"/> Jet <input type="checkbox"/> Turbine <input type="checkbox"/> Bailor or bucket <input type="checkbox"/> Hand <input type="checkbox"/> No pump 43. Depth to intake (ft) _____ 44. Apparent quality and odor: APPEARANCE <input type="checkbox"/> Clear <input type="checkbox"/> Cloudy <input type="checkbox"/> Muddy <input type="checkbox"/> Turbid ODOR <input type="checkbox"/> none <input type="checkbox"/> slight <input type="checkbox"/> mod <input type="checkbox"/> high <input type="checkbox"/> Iron <input type="checkbox"/> Sulfur <input type="checkbox"/> Salt COLIFORM TEST 45. Coliform test type <input type="checkbox"/> fecal <input type="checkbox"/> fecal and total 46. Coliform test results <input type="checkbox"/> 0 or <1.0 <input type="checkbox"/> TNTC <input type="checkbox"/> Confluent or _____ # colonies per 100 ml 47. Date Sampled _____ Day _____ Year _____ 48. Date Analyzed _____ Month _____ Day _____ Year _____																																							
Signature of certified driller <i>[Signature]</i>				Date signed <b>Jun 30 2009</b>																																							
Certification number <b>0344-0454-00</b>				Drilling company <b>Chase Environmental Group, Inc.</b>																																							
Date Received <b>JUL 13 2009</b>				Initials of reviewer																																							

JB

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# UNIFORM KENTUCKY WELL CONSTRUCTION RECORD

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 See instructions on reverse of form. Do not write in shaded areas.  
 Record must be typed or neatly printed or it will be returned to the driller as unacceptable.  
 One copy to Division of Water, one copy to owner, one copy to driller's files.

Attach Well Identification Number  
 Label Here (if applicable)  
 Water wells: yellow labels

23

8002-3019

4. Owner name **United States Department of Energy**

5. Owner address **5600 Hobbs Road** 2. Owner Well ID # **MW-422 Intermed**

6. City **West Paducah** 7. State **KY** 8. Zip **42053**

If site name and address differ from owner name and address:  
 9. Site name **Paducah Gaseous Diffusion Plant C-400 Building**

10. Site address **5600 Hobbs Road**

11. City **West Paducah** 12. State **KY** 13. Zip **42053**

14. Agency Interest (AI) Number **3059** 15. Facility type & ID Number  
 CERCLA  Solid Waste  Drinking Water  
 RCRA  UST

16. Owner phone 17. Site phone

18. USGS topo map **Heath** 22. Physiographic Region  
 Bluegrass  Ohio River Alluvium  
 E. Coal Field  W. Coal Field  
 Miss. Plateau  Jackson Purchase

19. County **Mccracken** 20. Surface elevation (ft) **381.00**  
 21. Elevation determined by  
 GPS  Map  Prior report  
 Survey  Prior well log

23. Well Use  
 Agriculture  Geothermal  
 Commercial  Heat pump  
 Domestic  HVAC  
 Industrial  Injection  
 Monitoring / Remed  Mining  
 Public  Unused

24. Drilling method  
 Auger - HS  Jet wash  
 Auger - SS  Push/probe  
 Auger - bucket  Rotary - air  
 Auger - hand  Rotary - mud  
 Cable tool  Rotary - reverse  
 Core  Sand point  
 Driven casing  Sonic  
 Excavation  Unknown  
 Combined - HS auger & air rotary

25. Well status  
 Active  
 Inactive  
 Unsuitable for intended use

26. Wellhead  
 Flush  Locking  
 Well cap  Sanitary seal

27. Well completion: Casing and screens

From depth, ft.	To depth, ft.	Borehole diameter	Casing diameter	Casing type	Screen slot size
0.0	79.0	8	2	PVC	
79.0	81.0	8	2	PVC screen	0.010
81.0	83.33	8	2	PVC	

28. Annulus fill and seal

From depth, ft.	To depth, ft.	Material
1.0	55.67	Bentonite
55.67	58.50	Bentonite pellets
58.50	87.50	Sand

29. Lithologic log (if more space is needed, continue on separate page)

From depth, ft.	To depth, ft.	Description (include any show of water and indicate apparent quality)
0.0	17.8	Silt
17.8	26.0	Sandy Gravel
26.0	28.2	Gravelly Clay
28.2	31.3	Silt to Fine Sand
31.3	38.7	Sandy Gravel
38.7	43.9	Silt to Very Fine Sand
43.9	53.7	Silt
53.7	59.0	Fine Sand
59.0	85.5	Sandy Gravel
85.5	87.5	Silt

30. Sketch map

Show well location and distances from permanent structures, septic drain fields, major roads (include name or number) and intersections. INDICATE NORTH WITH AN ARROW.

31. Work start date **Jun 05 2009**

32. Work end date **Jun 05 2009**

33. Total depth (ft) **83.33**

34. Depth to bedrock (ft) \_\_\_\_\_

35. Static water level (ft) **50.00**

36. Casing height above surface (in) **33.00**

37. Estimated well yield \_\_\_\_\_  
 gpm  gph  gpd

38. Well service \_\_\_\_\_ # of people served

39. Disinfectant amount \_\_\_\_\_ 40. Type  
 oz  qts  cups  Bleach  
 lbs  gal  Hypo-chlorite

41. Pitless adapter installed  Yes  No

42. Pump installed:  
 Submersible  Jet  Turbine  
 Bailor or bucket  Hand  No pump

43. Depth to intake (ft) \_\_\_\_\_

44. Apparent quality and odor:  
 APPEARANCE  Clear  Cloudy  Muddy  Turbid  
 ODOR  none  slight  mod  high  
 Iron  Sulfur  Salt

45. Coliform test type  
 fecal  fecal and total

46. Coliform test results  
 0 or <1.0  TNTC  Confluent  
 or \_\_\_\_\_ # colonies per 100 ml

47. Date Sampled \_\_\_\_\_ Day \_\_\_\_\_ Year \_\_\_\_\_

48. Date Analyzed \_\_\_\_\_ Month \_\_\_\_\_ Day \_\_\_\_\_ Year \_\_\_\_\_

49. Comments  
**One of 3 nested wells completed in a common 8-inch borehole as MW-422. 4'X4'X12" concrete pad, 8-inch Sch 40 steel locking cover, 4 steel bollards.**

50. Affirmation: The work described above was done under my supervision, and this report is true and correct to the best of my knowledge. Note: the driller is not responsible for natural groundwater quality or quantity encountered while drilling or completing this well.

Signature of certified driller *[Signature]* Date signed **Jun 30 2009**

Certification number **0344-0454-00** Drilling company **Chase Environmental Group, Inc.**

Date Received **JUL 13 2009**

Initials of reviewer \_\_\_\_\_

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Attach Well Identification Number  
 Label Here (if applicable)

23

8002-3018

4. Owner name: United States Department of Energy

5. Owner address: 5600 Hobbs Road

6. City: West Paducah 7. State: KY 8. Zip: 42053

9. Site name: Paducah Gaseous Diffusion Plant C-400 Building

10. Site address: 5600 Hobbs Road

11. City: West Paducah 12. State: KY 13. Zip: 42053

14. Agency Interest (AI) Number: 3059

15. Facility type: CERCLA, RCRA, Solid Waste, UST, Drinking Water

16. Owner phone: \_\_\_\_\_ 17. Site phone: \_\_\_\_\_

18. USGS topo map: Heath 19. County: Mccracken

20. Surface elevation (ft): 381.00 21. Elevation determined by: GPS, Map, Survey, Prior report, Prior well log

22. Physiographic Region: Bluegrass, Ohio River Alluvium, E. Coal Field, W. Coal Field, Miss. Plateau, Jackson Purchase

23. Well Use: Agriculture, Commercial, Domestic, Industrial, Monitoring / Ambient Monitor, Public, Geothermal, Heat pump, HVAC, Injection, Mining, Unused

24. Drilling method: Auger - HS, Auger - SS, Auger - bucket, Auger - hand, Cable tool, Core, Driven casing, Excavation, Combined - HS auger & air rotary, Jet wash, Push/probe, Rotary - air, Rotary - mud, Rotary - reverse, Sand point, Sonic, Unknown

25. Well status: Active, Inactive, Unsuited for intended use

26. Wellhead: Flush, Locking, Well cap, Sanitary seal

27. Well completion: Casing and screens

From depth, ft.	To depth, ft.	Borehole diameter	Casing diameter	Casing type	Screen slot size
0.0	83.0	8	2	PVC	
83.0	85.0	8	2	PVC screen	0.010
85.0	87.33	8	2	PVC	

28. Annulus fill and seal

From depth, ft.	To depth, ft.	Material
1.0	55.67	Bentonite
55.67	58.50	Bentonite pellets
58.50	87.50	Sand

29. Lithologic log (if more space is needed, continue on separate page)

From depth, ft.	To depth, ft.	Description (include any show of water and indicate apparent quality)
0.0	17.8	Silt
17.8	26.0	Sandy Gravel
26.0	28.2	Gravelly Clay
28.2	31.3	Silt to Fine Sand
31.3	38.7	Sandy Gravel
38.7	43.9	Silt to Very Fine Sand
43.9	53.7	Silt
53.7	59.0	Fine Sand
59.0	85.5	Sandy Gravel
85.5	87.5	Silt

30. Sketch map

31. Work start date: Jun 05 2009 32. Work end date: Jun 05 2009

33. Total depth (ft): 87.33 34. Depth to bedrock (ft): \_\_\_\_\_ 35. Static water level (ft): 50.00 36. Casing height above surface (in): 33.00

37. Estimated well yield: \_\_\_\_\_ gpm, gph, gpd 38. Well service: \_\_\_\_\_ # of people served

39. Disinfectant amount: \_\_\_\_\_ 40. Type: Bleach, Hypochlorite

41. Pitless adapter installed: Yes No 42. Pump installed: Submersible, Jet, Turbine, Bailer or bucket, Hand, No pump

43. Depth to intake (ft): \_\_\_\_\_ 44. Apparent quality and odor: Clear, Cloudy, Muddy, Turbid, none, slight, mod, high, Iron, Sulfur, Salt

45. Coliform test type: fecal, fecal and total 46. Coliform test results: 0 or <1.0, TNTC, Confluent or \_\_\_\_\_ # colonies per 100 ml

47. Date Sampled: \_\_\_\_\_ Day Year 48. Date Analyzed: \_\_\_\_\_ Month Day Year

49. Comments: One of 3 nested wells completed in a common 8-inch borehole as MW-422. 4'X4'X12" concrete pad, 8-inch Sch 40 steel locking cover, 4 steel bollards.

50. Affirmation: The work described above was done under my supervision, and this report is true and correct to the best of my knowledge. Note: the driller is not responsible for natural groundwater quality or quantity encountered while drilling or completing this well.

Signature of certified driller: \_\_\_\_\_ Date signed: Jun 30 2009

Certification number: 0344-0454-00 Drilling company: Chase Environmental Group, Inc.

Date Received: JUL 13 2009

Initials of reviewer: \_\_\_\_\_

JB

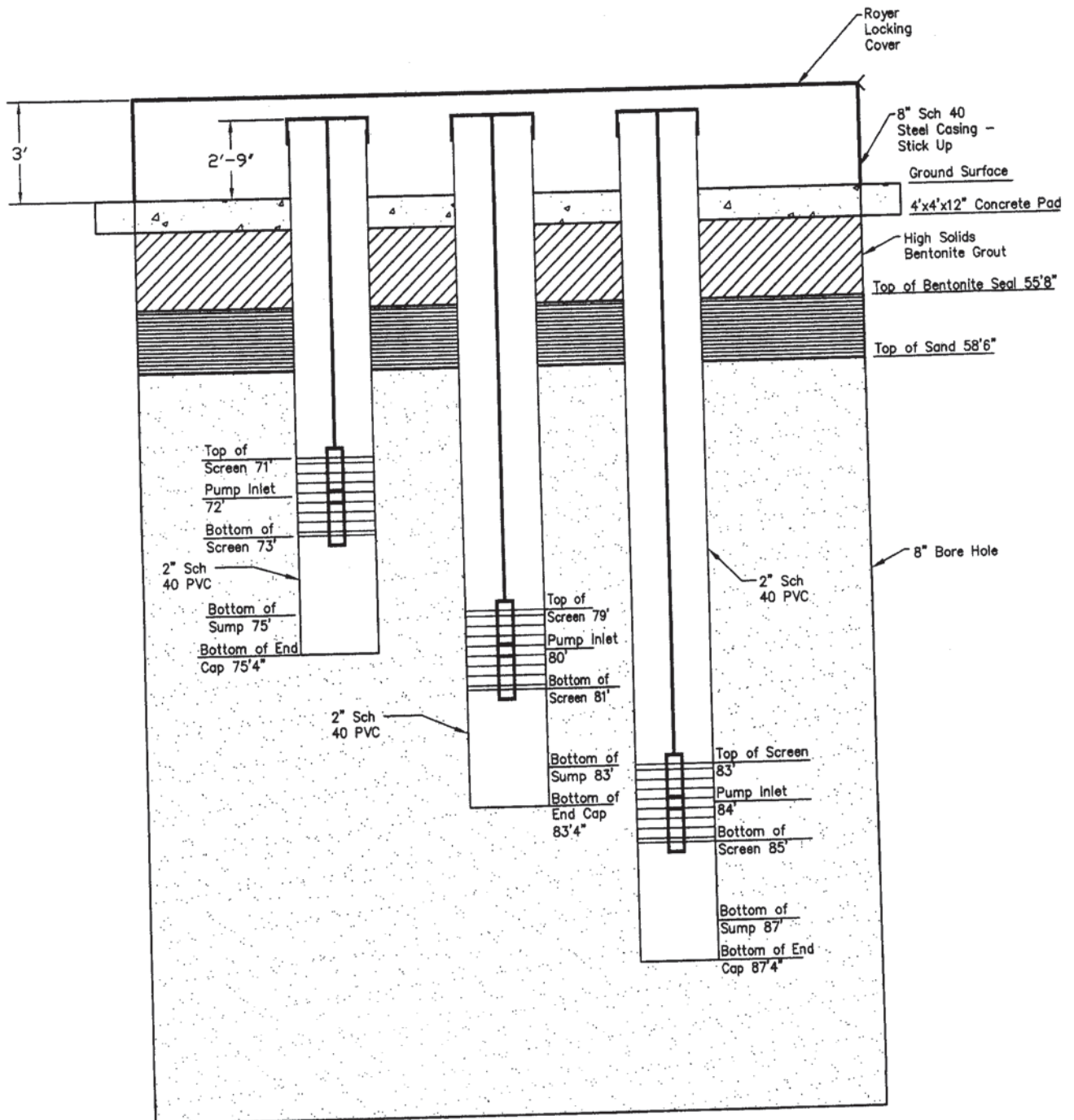
SLC

# MONITORING WELL CONSTRUCTION LOG

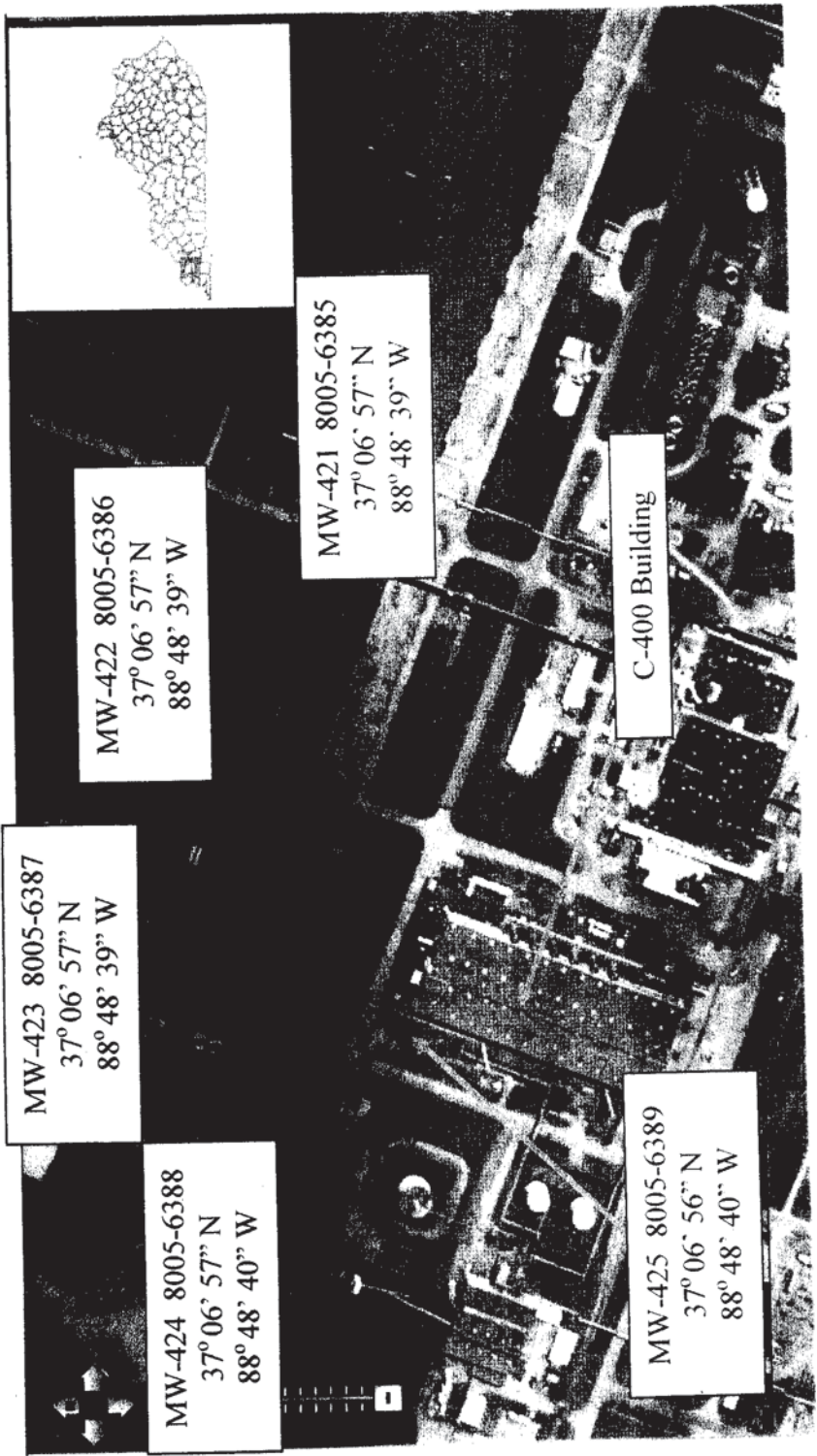
Location Name: Paducah Gaseous Diffusion Plant  
 Address: 5600 Hobbs Road  
 City/State/Zip: West Paducah, KY 42053

State Assigned # 8005-6386

Facility Assigned # MW-422



Comments: Drawing not to scale.



Title: Site Aerial Photograph  
Paducah Gaseous Diffusion Plant - C-400 Building  
5600 Hobbs Road, West Paducah, KY

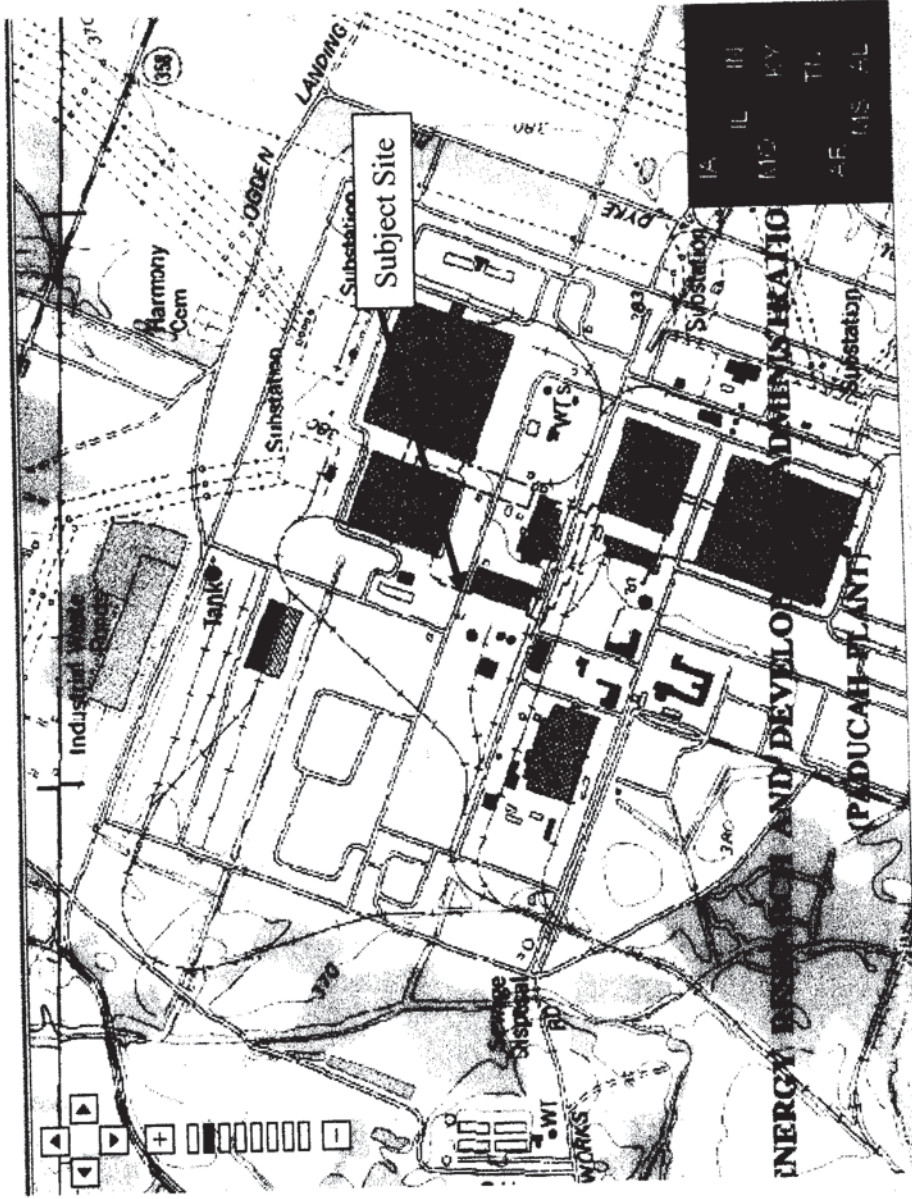
Comments: Approximate Scale: 1" = 150'  
Coordinates taken from Google Earth

**Chase Environmental Group, Inc.**  
environmental engineering, remediation & consulting

Drawn By: Todd W. Mills

Date: June 30, 2009





Display format:

Decimal Degrees

Center: 37.1157°N 88.8113°W  
 Elevation at center: 381 feet (116 meters)

Title: Site Topographic Map  
 Paducah Gaseous Diffusion Plant  
 West Paducah, Kentucky

Comments: Scale: 1:24,000  
 Source: USGS 7.5' Topographic Series Health Quadrangle

**Ceg**  
 CHASE ENVIRONMENTAL GROUP, INC.  
 environmental engineering, remediation & consulting

Drawn By: Todd W. Mills

Date: June 30, 2009

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