

Appendix G

114-MW44A Monitoring Well Documentation



New Jersey Department of Environmental Protection
Site Remediation Program

MONITORING WELL CERTIFICATION FORM A - AS-BUILT CERTIFICATION

Date Stamp
(For Department use only)

SECTION A. SITE NAME AND LOCATION

Site Name: PPG Site 114

List all AKAs: Garfield Avenue Group Chrome Sites (PPG)

Street Address: Garfield Avenue and Carteret Avenue

Municipality: City of Jersey City (Township, Borough or City)

County: Hudson Zip Code: 07305

Program Interest (PI) Number(s): G000008738 Case Tracking Number(s): _____

SECTION B. WELL OWNER AND LOCATION

1. Name of Well Owner PPG Industries

2. Well Location (Street Address) 98 Forrest Street, Jersey City, NJ

3. Well Location (Municipal Block and Lot) Block# 21501 Lot # 14

SECTION C. WELL LOCATION SPECIFICS

1. Well Permit Number (This number must be permanently affixed to the well casing):.. E201712282

2. Site Well Number as shown on application or plans): 114-MW44A

3. Well Completion Date: 10/30/2017

4. Distance from Top of Casing (cap off) to ground surface (nearest 0.01'): 0.46

5. Total Depth of Well to the nearest 1/2 foot: 12.0

6. Depth to Top of Screen (or top of open hole) from top of casing (nearest 0.01'):..... 7.0

7. Screen Length (or length of open hole) in feet: 5.0

8. Screen or Slot Size: 0.010 inches

9. Screen or Slot Material: Machine Slot

10. Casing Material (PVC, steel, or other – specify): Sch 40 PVC (Inner)

11. Casing Diameter (inches): 2.0

12. Static Water Level from top of casing at the time of installation (nearest 0.01'): Not Available

13. Yield (gallons per minute): 0.92

14. Development Technique (specify): Pump/Surge Block

15. Length of Time well is developed/pumped or bailed (hours and minutes): 1 hour



New Jersey Department of Environmental Protection
Site Remediation Program

Monitoring Well Certification Form B - Location Certification

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1. Name of Well Owner PPG Industries
 2. Well Location (Street Address) Site 114, Garfield Avenue and Carteret Avenue, Jersey City, NJ
 3. Well Location (Municipal Block and Lot) Block # _____ Lot # _____

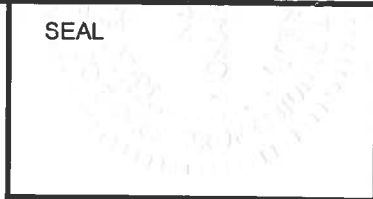
SECTION C. WELL LOCATION SPECIFICS

1. Well Permit Number (This number must be permanently affixed to the well casing): _____
 2. Site Well Number (As shown on application or plans): 114-MW44A
 3. Geographic Coordinate NAD 83 to nearest 1/100 of a second:
 Latitude: North 40°42'33.95" Longitude: West 74°04'06.28"
 4. New Jersey State Plane Coordinates NAD 83 datum, US survey feet units, to nearest foot:
 North 683634.4 East 611768.2
 5. Elevation of Top of Inner Casing (cap off) at reference mark (nearest 0.01'): 9.14
 Elevation of Top of Outer Casing: 9.55 Elevation of Ground: 9.6
 Check one: NAVD 88 NGVD29 On Site Datum Other
 6. Source of elevation datum (benchmark, number/description and elevation/datum). If an on-site datum is used, identify here, assume datum of 100', and give approximated actual elevation (referencing NAVD 88).
 The vertical datum is the North American Vertical Datum of 1988 (NAVD88) GEOID09 verified by differential GPS observations from the NGS CORS network on May 10, 2012. Benchmark reference stations: NJI2, NJNT, NYBP, NYBR and NYVH.
 7. Significant observations and notes:
 On site control points used: Spike and Tag in the top of curb at the intersection of east side of Carteret Avenue and south side of Halladay Street, Elev= 10.76' and Spike and Tag in the face of the retaining wall for the railroad at the north end of Site 114, Elev= 18.02'

SECTION D. LAND SURVEYOR'S CERTIFICATION

I certify under penalty of law that I have personally examined and am familiar with the information submitted in this document and all attachments and that, based on my inquiry of those individuals immediately responsible for obtaining the information, I believe the submitted information is true, accurate and complete. I am aware that there are significant penalties for submitting false information including the possibility of fine and imprisonment.

Professional Land Surveyor's Signature: [Signature] Date: 11/30/2017
 Surveyor's Name: John D. Beattie License Number: 24GS04331900
 Firm Name: Borbas Surveying & Mapping, LLC Certificate of Authorization #: 24GA28056200
 Mailing Address: 402 Main Street
 City/Town: Boonton State: New Jersey Zip Code: 07005
 Phone Number: 973-316-8743 Ext: _____ Fax: 973-402-6627



WELL PERMIT

New Well

The New Jersey Department of Environmental Protection grants this permit in accordance with your application, attachments accompanying same application, and applicable laws and regulations. This permit is also subject to further conditions and stipulations enumerated in the supporting documents which are agreed to by the permittee upon acceptance of the permit

Certifying Driller: NICHOLAS A FALLUCCA, MASTER LICENSE # 749523

Permit Issued to: SGS NORTH AMERICA INC.

Company Address: PO BOX 423 WEST CREEK, NJ 08092

PROPERTY OWNER

Name: AMRITA BASU

Organization: Forrest Associates, LLC

Address: 28 Bromleigh Road

City: Stewart Manor State: New York Zip Code: 11530

PROPOSED WELL LOCATION

Facility Name: Forrest Street Properties

Address: 98 Forrest St / 114-MW44A conformed by client / 6136

County: Hudson Municipality: Jersey City Lot: 14 Block: 21501

Easting (X): 611780 Northing (Y): 683640
Coordinate System: NJ State Plane (NAD83) - USFEET

Local ID: 114-MW44A

SITE CHARACTERISTICS

PROPOSED CONSTRUCTION

WELL USE: MONITORING

Other Use(s): _____

Diameter (in.): 2

Regulatory Program

Requiring Wells/Borings: Owner Investigation

Depth (ft.): 20

Case ID Number: _____

Pump Capacity (gpm): 0

Deviation Requested: N

Drilling Method: Hollow Stem Augers

Attachments: _____

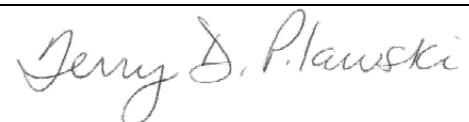
SPECIFIC CONDITIONS/REQUIREMENTS

Approval Date: October 26, 2017

Expiration Date: October 26, 2018

Approved by the authority of:

Bob Martin
Commissioner



Terry Pilawski, Chief
Bureau of Water Allocation and Well Permitting

WELL PERMIT
 New Well

DEVIATION INFORMATION	
Purpose:	
Unusual Conditions:	
Reason for Deviation:	
Proposed Well Construction	

GENERAL CONDITIONS/REQUIREMENTS
A copy of this permit shall be kept at the worksite / on the property and shall be exhibited upon request. [N.J.A.C. 7:9D-1]
A well record must be submitted by the well driller to the Bureau of Water Systems and Well Permitting. Unless prior written approval is obtained from the Bureau of Water Systems and Well Permitting the well record shall be submitted electronically through the New Jersey Department of Environmental Protection's Regulatory Services Portal Submit Well Record: within ninety (90) days after the well is completed.[N.J.A.C. 7:9D-1]
All well drilling/pump installation activities shall comply with N.J.A.C. 7:9D-1 et seq. [N.J.A.C. 7:9D-1]
For this permit to remain valid, the well approved in this permit shall be constructed within one year of the effective date of the permit. [N.J.A.C. 7:9D-1]
If the pump capacity applied for is less than 70 gpm, no subsequent increase to 70 gpm or more shall be made without prior approval of the Bureau of Water Systems and Well Permitting. [N.J.A.C. 7:9D-1]
If the use of the well is to be changed a well permit for the proposed use of the well shall be submitted for review and approval. [N.J.A.C. 7:9D-1]
If you or a future property owner intend to redesignate this well as a Category 1 well (domestic, non-public, community water supply or public non-community water supply wells), the well must be constructed as a Category 1 well per the Well Construction and Abandonment Regulations at N.J.A.C. 7:0D-1.1 et seq. In addition, if the current or future property owner intends to have this well redesignated as a community water supply well, the well must be constructed by a Master well driller, which would include having a Master well driller on-site at all times during construction of the well, as specified in the Well Construction and Abandonment Regulations. Otherwise, the New Jersey Department of Environmental Protection will not allow the well to be redesignated, and a new well would have to be installed. [N.J.A.C. 7:9D-1.7((a))1i]
In accepting this permit the Property Owner and Driller agree to abide by the following terms and conditions [N.J.A.C. 7:9D-1]
In the event that this well is not constructed the well driller shall notify the Bureau of Water Systems and Well Permitting of the permit cancellation. Unless prior written approval is obtained from the Bureau of Water Systems and Well Permitting the Cancellation notification shall be submitted electronically through the New Jersey Department of Environmental Protection's Regulatory Services Portal Submit Well Permit Cancellation : by the expiration date of this permit.[N.J.A.C. 7:9D-1]
In the event this well is abandoned, the Owner or Well driller shall assume full responsibility for having the well decommissioned in a manner satisfactory to the New Jersey Department of Environmental Protection in accordance with the provisions of N.J.A.C. 7:9D-1 et seq. [N.J.A.C. 7:9D-1]
The granting of this permit shall not be construed in any way to affect the title or ownership of property, and shall not make the New Jersey Department of Environmental Protection or the State a party in any suit or question of ownership of property. [N.J.A.C. 7:9D-1]
The issuance of this permit shall not be deemed to affect in any way action by the New Jersey Department of Environmental Protection on any future application. [N.J.A.C. 7:9D-1]
This permit conveys no rights, either expressed, or implied to divert water. [N.J.A.C. 7:9D-1]
This permit does not waive the obtaining of Federal or other State or local Government consent when necessary. This permit is not valid and no work shall be undertaken until such time as all other required approvals and permits have been obtained. [N.J.A.C. 7:9D-1]
This permit is NONTRANSFERABLE [N.J.A.C. 7:9D]
This well shall not be used for the supply of potable / drinking water. [N.J.A.C. 7:9D-1]

MONITORING WELL RECORD

PROPERTY OWNER: AMRITA BASU

Company/Organization: Forrest Associates, LLC

Address: 28 Bromleigh Road Stewart Manor, New York 11530

WELL LOCATION: Forrest Street Properties

Address: 98 Forrest St / 114-MW44A confirmed by client / 6136

County: Hudson Municipality: Jersey City Lot: 14 Block: 21501

Easting (X): <u>611780</u> Northing (Y): <u>683640</u> Coordinate System: <u>NJ State Plane (NAD83) - USFEET</u>

DATE WELL STARTED: October 30, 2017
DATE WELL COMPLETED: October 30, 2017

WELL USE: MONITORING

Other Use(s): _____ **Local ID:** 114-MW44A

WELL CONSTRUCTION

Total Depth Drilled (ft.): 12 Finished Well Depth (ft.): 12 Well Surface: Flush Mount

	Depth to Top (ft.)	Depth to Bottom (ft.)	Diameter (inches)	Material	Wgt/Rating/Screen # Used (lbs/ch no.)
Borehole	0	12	8		
Casing	0	7	2	PVC	Sch 40
Screen	7	12	2	Pvc	.010

	Depth to Top (ft.)	Depth to Bottom (ft.)	Outer Diameter (in.)	Inner Diameter (in.)	Material		
					Bentonite (lbs.)	Neat Cement (lbs.)	Water (gal.)
Grout	0	5	8	2	5	94	8
Gravel Pack	5	12	8	2	#1		

Grouting Method: Pressure method (Tremie Pipe) Drilling Method: Hollow Stem Augers

ADDITIONAL INFORMATION

Protective Casing: <u>Yes</u>	Pump Capacity: <u>_</u> gpm
Static Water Level: <u>4</u> ft. below land surface	Total Design Head: <u>_</u> ft.
Water Level Measure Tool: <u>M-scope</u>	Drilling Fluid:
Well Development Period: <u>1</u> hrs.	Drill Rig: <u>7822</u>
Method of Development: <u>Pump & surge</u>	Health and Safety Plan Submitted? <u>Yes</u>
Pump Type:	

ATTACHMENTS:

GEOLOGIC LOG
0 - .5: White/gray OT - Other Concrete
.5 - 6: Dark brown GP - Poorly graded gravels and gravel-sand mixtures, little or no fines
6 - 12: Dark redish brown GP - Poorly graded gravels and gravel-sand mixtures, little or no fines

ADDITIONAL INFORMATION:

Driller of Record: Peter Hanley, MONITORING LICENSE # 572679 Company: SGS NORTH AMERICA INC.

Project Name: PPG Garfield Avenue	Drilling Company: SGS North America	NJDEP Well Permit Number:
Project Number: 60240739	Driller:	Coordinates (NJSPNAD83) x: 611768.23
Drilling Date: 10/30/2017 8:30:00 AM	Drilling Method: Auger	Coordinates (NJSPNAD83) y: 683634.36
Completion Date: 10/30/2017 3:30:00 PM	Elevation: 9.6	Total Well Depth: 12 ft
Geologist: Kyle Willis	Project Manager: Scott Mikaelian	Depth to Water: 6.0 ft
Physical Location: Jersey City, NJ		Date Gauged:

(Note bgs = below ground surface)

DEPTH (ft bgs)	WATER LEVEL (ft)	SAMPLE NUMBER	RECOVERY (FT)	BLOW COUNTS	PID READING (PPM)	GA Class	USCS	LITHOLOGY	WELL DIAGRAM
0								Surface Cover and Thickness:	
1					0.0	1	CONC	Concrete floor slab	<p>Top Cap (J-Plug) protective casing (steel)</p> <p>Cement (Cement Grout Seal) Riser (PVC)</p> <p>Annular seal (#00 Sand Pack)</p> <p>Filter Pack (#1 Sand Filter Pack) Screen (PVC schedule 40)</p> <p>End Cap (PVC)</p>
2						3	FILL	ASH, some cinders, little fill debris, (5YR 2.5/1) black, loose, moist no odor, no staining	
3		1	5						
4									
5						3	FILL	SILT, little fine sand, trace fill debris, (5YR 4/1) dark gray, firm, moist to wet, no odor, no staining, water at 6.0 feet	
6	▼				0.0				
7									
8		2	5						
9						9	ML	SILT, trace fine sand, (5Y 7/1) light gray, firm, wet no odor no staining. Soils consistent with UNDno.	
10					0.0				
11		3	2						
12									

PPG MONITORING WELL - 2012-09 RA PPG_LOGS_A_GDT - 1/5/18 14:31 - C:\USERS\ISLAMT1\DESKTOP\PROJECTS\PPG GARFIELD AVE GROUP\GINT FILES\SITE 114\114-MW44A.GPJ

Comments: 1) No CCPW (COPR/GGM) observed in any interval of this boring 2) MM/UND confirmed to be 1 ft thick