

NPDES PUBLIC NOTICE

Application for National Pollutant Discharge Elimination
System (NPDES) Permit to Discharge to State Waters

Southwest Regional Office: Regional Clean Water Program Manager, 400 Waterfront Drive, Pittsburgh, PA 15222-4745, Telephone: 412.442.4000.

PA0002208, Amendment No. 1, Industrial, SIC Codes 2821 & 2869, Shell Chemical Appalachia LLC, 300 Frankfort Road, Monaca, PA 15601. Facility Name: Shell Chemical Appalachia Petrochemicals Complex. This existing facility is located in Potter Township, Beaver County.

Description of Existing Activity: The application is for a NPDES permit for existing discharges of groundwater and storm water and new discharges of non-contact cooling water, untreated storm water, and treated industrial waste and storm water.

The receiving streams, Rag Run, Poorhouse Run, and the Ohio River, are located in State Water Plan watershed 20-G and 20-B and are classified for Warm Water Fishes, aquatic life, water supply and recreation. The discharges are not expected to affect public water supplies.

The proposed effluent limits for Outfall 001 are based on a design flow of 3.75 MGD.

Parameters	Mass Units (lbs/day)		Concentrations (mg/L)			
	Average Monthly	Daily Maximum	Minimum	Average Monthly	Daily Maximum	Instant. Maximum
Flow (MGD)	Report	Report	XXX	XXX	XXX	XXX
pH (S.U.)	XXX	XXX	6.0	XXX	9.0	XXX
Total Residual Chlorine (TRC)	XXX	XXX	XXX	0.5	1.0	1.25
Temperature (deg F) (°F)	XXX	XXX	XXX	XXX	XXX	110
Total Dissolved Solids	XXX	XXX	XXX	Report	Report	XXX
Oil and Grease	XXX	XXX	XXX	15.0	XXX	30.0
Aluminum, Total	XXX	XXX	XXX	Report	Report	XXX
Chromium, Hexavalent	XXX	XXX	XXX	Report	Report	XXX
Sulfate, Total	XXX	XXX	XXX	Report	Report	XXX
Benzene	XXX	XXX	XXX	Report	Report	XXX
Chloride	XXX	XXX	XXX	Report	Report	XXX
Bromide	XXX	XXX	XXX	Report	Report	XXX

The proposed effluent limits for Internal Monitoring Point 101 are based on a design flow of 1.28 MGD.

Parameters	Mass Units (lbs/day)		Concentrations (mg/L)			
	Average Monthly	Daily Maximum	Minimum	Average Monthly	Daily Maximum	Instant. Maximum
Flow (MGD)	Report	Report	XXX	XXX	XXX	XXX
pH (S.U.)	XXX	XXX	6.0	XXX	9.0	XXX
Biochemical Oxygen Demand (BOD5)	287	766	XXX	27.0	72.0	90.0
Total Suspended Solids	458	1487	XXX	43.0	139.0	174
Oil and Grease	XXX	XXX	XXX	Report	Report	XXX
2-Chlorophenol	0.331	1.05	XXX	0.031	0.098	0.122
2,4-Dichlorophenol	0.416	1.20	XXX	0.039	0.112	0.140
2,4-Dimethylphenol	0.192	0.384	XXX	0.018	0.036	0.045
Fluorene	0.235	0.630	XXX	0.022	0.059	0.073
2,4-Dinitrophenol	0.758	1.31	XXX	0.071	0.123	0.153
2,4-Dinitrotoluene	1.21	3.04	XXX	0.113	0.285	0.356
2,6-Dinitrotoluene	2.72	6.85	XXX	0.255	0.641	0.801
4,6-dinitro-o-cresol	0.833	2.96	XXX	0.078	0.277	0.346
2-Nitrophenol	0.437	0.737	XXX	0.041	0.069	0.086
4-Nitrophenol	0.769	1.32	XXX	0.072	0.124	0.155
Phenol	0.160	0.277	XXX	0.015	0.026	0.032
Acenaphthene	0.235	0.630	XXX	0.022	0.059	0.073
Acenaphthylene	0.235	0.630	XXX	0.022	0.059	0.073
Acrylonitrile	1.03	2.59	XXX	0.096	0.242	0.302
Anthracene	0.235	0.630	XXX	0.022	0.059	0.073
Chlorobenzene	0.160	0.299	XXX	0.015	0.028	0.035
1,2-Dichlorobenzene	0.822	1.74	XXX	0.077	0.163	0.203

Parameters	Mass Units (lbs/day)		Concentrations (mg/L)			
	Average Monthly	Daily Maximum	Minimum	Average Monthly	Daily Maximum	Instant. Maximum
1,3-Dichlorobenzene	0.331	0.470	XXX	0.031	0.044	0.055
1,4-Dichlorobenzene	0.160	0.299	XXX	0.015	0.028	0.035
1,3-Dichloropropylene	0.309	0.470	XXX	0.029	0.044	0.055
1,2,4-Trichlorobenzene	11.9	29.6	XXX	0.068	0.140	0.175
Ethylbenzene	0.341	1.15	XXX	0.032	0.108	0.135
Hexachlorobenzene	0.106	0.213	XXX	0.010	0.020	0.025
Nitrobenzene	0.288	0.726	XXX	0.027	0.068	0.085
Benzene	0.395	1.45	XXX	0.037	0.136	0.170
Benzo(a)Anthracene	0.235	0.630	XXX	0.022	0.059	0.073
Benzo(a)Pyrene	0.245	0.651	XXX	0.023	0.061	0.076
Benzo(k)Fluoranthene	0.235	0.630	XXX	0.022	0.059	0.073
3,4-Benzofluoranthene	0.245	0.651	XXX	0.023	0.061	0.076
Carbon Tetrachloride	0.192	0.405	XXX	0.018	0.038	0.047
Chloroethane	1.11	2.86	XXX	0.104	0.268	0.335
1,1,1-Trichloroethane	15.5	36.1	XXX	0.021	0.054	0.067
1,1,2-Trichloroethane	4.49	12.8	XXX	0.021	0.054	0.067
1,1-Dichloroethane	0.235	0.630	XXX	0.022	0.059	0.073
1,2-Dichloroethane	0.726	2.25	XXX	0.068	0.211	0.263
1,2-Dichloropropane	1.63	2.46	XXX	0.153	0.230	0.287
Bis(2-Ethylhexyl)Phthalate	1.10	2.98	XXX	0.103	0.279	0.348
Chloroform	0.224	0.491	XXX	0.021	0.046	0.057
Chrysene	0.235	0.630	XXX	0.022	0.059	0.073
Diethyl Phthalate	0.865	2.17	XXX	0.081	0.203	0.253
Dimethyl Phthalate	0.202	0.502	XXX	0.019	0.047	0.058
Di-n-Butyl Phthalate	0.288	0.608	XXX	0.027	0.057	0.071
Fluoranthene	0.267	0.726	XXX	0.025	0.068	0.085
Hexachlorobutadiene	0.213	0.523	XXX	0.020	0.049	0.061
Hexachloroethane	0.224	0.576	XXX	0.021	0.054	0.067
Methyl Chloride	0.918	2.03	XXX	0.086	0.190	0.237
Methylene Chloride	0.427	0.950	XXX	0.040	0.089	0.111
Naphthalene	0.235	0.630	XXX	0.022	0.059	0.073
Phenanthrene	0.235	0.630	XXX	0.022	0.059	0.073
Pyrene	0.267	0.715	XXX	0.025	0.067	0.083
1,1-Dichloroethylene	0.170	0.267	XXX	0.016	0.025	0.031
trans-1,2-Dichloroethylene	0.224	0.576	XXX	0.021	0.054	0.067
Tetrachloroethylene	0.235	0.598	XXX	0.022	0.056	0.070
Toluene	0.277	0.854	XXX	0.026	0.080	0.100
Trichloroethylene	3.42	7.37	XXX	0.021	0.054	0.067
Vinyl Chloride	18.1	42.5	XXX	0.104	0.268	0.335

The proposed effluent limits for Internal Monitoring Point 201 are based on a design flow of 2.47 MGD.

Parameters	Mass Units (lbs/day)		Concentrations (mg/L)			
	Average Monthly	Daily Maximum	Minimum	Average Monthly	Daily Maximum	Instant. Maximum
Flow (MGD)	Report	Report	XXX	XXX	XXX	XXX
pH (S.U.)	XXX	XXX	6.0	XXX	9.0	XXX
Free Available Chlorine	XXX	XXX	XXX	0.2	0.5	XXX

The proposed effluent limits for Outfalls 002, 003, 006, 012, and 014 and Outfalls 007, 008, 009, 010, and 013 (Final Limits) are for variable discharges of storm water.

Parameters	Mass Units (lbs/day)		Concentrations (mg/L)			
	Average Monthly	Daily Maximum	Minimum	Average Monthly	Daily Maximum	Instant. Maximum
Flow (MGD)	XXX	Report	XXX	XXX	XXX	XXX
pH (S.U.)	XXX	XXX	XXX	XXX	Report	XXX
Chemical Oxygen Demand (COD)	XXX	XXX	XXX	XXX	Report	XXX

Parameters	Mass Units (lbs/day)		Concentrations (mg/L)			
	Average Monthly	Daily Maximum	Minimum	Average Monthly	Daily Maximum	Instant. Maximum
Total Suspended Solids	XXX	XXX	XXX	XXX	Report	XXX
Nitrate-Nitrite as N	XXX	XXX	XXX	XXX	Report	XXX
Total Phosphorus	XXX	XXX	XXX	XXX	Report	XXX
Aluminum, Total	XXX	XXX	XXX	XXX	Report	XXX
Iron, Total	XXX	XXX	XXX	XXX	Report	XXX
Lead, Total	XXX	XXX	XXX	XXX	Report	XXX
Zinc, Total	XXX	XXX	XXX	XXX	Report	XXX

The proposed effluent limits for Outfall 004 are for variable discharges of untreated storm water. Final limits at Outfall 004 are the same as those proposed for Internal Monitoring Point 101 except for the following change:

Parameters	Mass Units (lbs/day)		Concentrations (mg/L)			
	Average Monthly	Daily Maximum	Minimum	Average Monthly	Daily Maximum	Instant. Maximum
Oil and Grease	XXX	XXX	XXX	15.0	XXX	30.0

The proposed effluent limits for Internal Monitoring Point 108 are for variable flows of hydrostatic test water.

Parameters	Mass Units (lbs/day)		Concentrations (mg/L)			
	Average Monthly	Daily Maximum	Minimum	Average Monthly	Maximum	Instant. Maximum
Flow (MGD)	Report	Report	XXX	XXX	XXX	XXX
pH (S.U.)	XXX	XXX	6.0	XXX	9.0	XXX
Total Residual Chlorine (TRC)	XXX	XXX	XXX	XXX	XXX	0.05
Total Suspended Solids	XXX	XXX	XXX	30.0	XXX	60.0
Oil and Grease	XXX	XXX	XXX	15.0	XXX	30.0
Iron, Dissolved	XXX	XXX	XXX	XXX	XXX	7.0
Benzene	XXX	XXX	XXX	XXX	XXX	0.0025
BTEX, Total	XXX	XXX	XXX	XXX	XXX	0.25

The proposed effluent limits for Outfall 015 are for variable discharges of groundwater.

Parameters	Mass Units (lbs/day)		Concentrations (mg/L)			
	Average Monthly	Daily Maximum	Minimum	Average Monthly	Daily Maximum	Instant. Maximum
Flow (MGD)	Report	Report	XXX	XXX	XXX	XXX
pH (S.U.)	XXX	XXX	6.0	XXX	9.0	XXX
Total Suspended Solids	XXX	XXX	XXX	30.0	100.0	XXX

Effluent limits in effect for Internal Monitoring Point 113 and Outfalls 004, 005, 007 - 011, 013, 017 - 021, 104 - 604, 713, 813, and 114 are not being modified as part of this amendment.

In addition, the permit contains the following major special conditions: requirements applicable to storm water outfalls associated with industrial activities and construction activities, post-construction storm water management, chemical additives, and post-startup effluent analyses. Also, to minimize adverse impacts from impingement and entrainment and comply with Best Technology Available (BTA) requirements for cooling water intake structures under Section 316(b) of the Clean Water Act, the permittee shall: 1) operate a closed cycle recirculating system as defined at 40 CFR §125.92(c); and 2) monitor the actual intake flows at a minimum frequency of daily, including measurements of cooling water withdrawals, make-up water and blow down volume or, alternatively, monitor cycles of concentration at a minimum frequency of daily. The permittee shall submit all monitoring data with the next permit renewal application and shall retain data and other records for any information developed pursuant to Section 316(b) of the Clean Water Act for a minimum of ten years.

You may make an appointment to review the DEP files on this case by calling the File Review Coordinator at 412-442-4000.

The EPA Waiver is not in effect.