AUTHORIZATION TO DISCHARGE UNDER THE RHODE ISLAND POLLUTANT DISCHARGE ELIMINATION SYSTEM

In compliance with the provisions of Chapter 46-12 of the Rhode Island General Laws, as amended,

Home Depot U.S.A., Inc. 2455 Paces Ferry Road, N.W. Atlanta, GA 30339

is authorized to discharge from a facility located at the

Home Depot 387 Charles Street Providence, Rhode Island 02903

to receiving waters named

West River (Waterbody ID: RI0003008R-03C)

in accordance with effluent limitations, monitoring requirements and other conditions set forth herein.

This permit shall become effective on October 1, 2019.

This permit and the authorization to discharge expire at midnight, five (5) years from the effective date.

This permit supersedes the permit issued on March 23, 2012.

This permit consists of 7 pages in Part I including effluent limitations, monitoring requirements, etc. and 10 pages in Part II including General Conditions.

dav of 2019. Signed this

Angelo S. Liberti, P.E., Administrator of Surface Water Protection Office of Water Resources Rhode Island Department of Environmental Management Providence, Rhode Island

PARTI

A. EFFLUENT LIMITATIONS AND MONITORING REQUIREMENTS voluntarily

1.e During the period beginning on the effective date and lasting through permit expiration, the permittee is authorized to discharge from outfall serial numbere 001A. Such discharges shall be limited and monitored by the permittee as specified below:e

| Effluent | Discharge Limitations Quantity - Ibs./day Concentration - specify units | | unita | Monitoring Requirement | | | |
|------------------------------|--|------------------|--|---|--|-----------------------------------|-----------------------|
| <u>Characteristic</u> | Average <u>Monthly</u> | Maximum Daily | Average <u>Monthly</u> *(<u>Minimum</u>) | Average Veekly_ *(<u>Average</u>) | Maximum <u>Dailγ</u> *(<u>Maximum</u>) | Measurement _ <u>Frequency</u> | Sample <u>Type</u> |
| Flow | GPM | 60 GPM | | | | Continuous ¹ | Recorder |
| Total Suspended Solids (TSS) | | | µg/L | | 30,000 μg/ L | 1/Month | Grab |
| Vinyl Chloride | | | 1.92 µg/L | | 2 µg/L | 1/Month | Grab |
| 1,1-Dichloroethylene | | | 3.2 μg/L | | 3.2 μg/L | 1/Month | Grab |
| 1,1-Dichloroethane | | | 5.0 μg /L | | 5.0 μg/L | 1/Month | Grab |
| Cis-1,2-Dichloroethylene | | | 10.0 μg/L | | 10.0 µg/L | 1/Month | Grab |
| Trans-1,2-Dichloroethylene | | | 5.0 μg/L | | 5.0 µg/L | 1/Month | Grab |
| Trichloroethylene | | | 5.0 μg /L | | 5.0 µg/L | 1/Month | Grab |
| Arsenic | | | 76.0 μg/ L | | 4,208.0 µg/L | 1/Month | Grab |
| Iron | | | 12,376.0 µg/L | | µg/L | 1/Month | Grab |

¹ Monitor flow and submit a flow log with the discharge monitoring reports (DMRs) required under part I.C. The flow log shall include the rate and duration of flow including the time(s) of day when flow commences and ceases. At a minimum, the flow must be determined each time a sample is collected.

--- Signifies a parameter which must be monitored and data must be reported; no limit has been established at this time.

Samples taken in compliance with the monitoring requirements specified above shall be taken at the following location: Outfal 001A – The Final Discharge from the Treatment System.

Final Home Depot U.S.A., Inc. Permit

- 2.a a.a The pH of the effluent shall not be less than 6.5 standard units nor greater than 9.0 standard units at any time unless these values are exceeded due to natural causes or as a result of the approved treatment processes.
 - b.a The discharge shall not cause visible discoloration of the receiving waters.a
 - c.a The effluent shall contain neither a visible oil sheen, foam, nor floating solids ata any time.a
 - d.a The permittee shall analyze its influent and effluent once during the permit's finala year (last 4 quarters before permit expiration) for the EPA Priority Pollutants as a listed in 40 CFR 122, Appendix D, Tables II and III. The effluent sample shall be a collected during the same twenty-four (24) hour period as the influent sample. Thea results of these analyses shall be submitted to the Rhode Island Department of a Environmental Management (DEM) along with the reapplication documents. Alla sampling and analysis shall be done in accordance with EPA Regulations, a including 40 CFR 136; grab and composite samples shall be taken as appropriate.a
- 3.a Discharge shall cease and the DEM shall be notified immediately if any of the contaminantsa are found in the effluent (outfall 001A) above the limits listed in Part I.A.1. At a minimum, a the notification shall include a summary of total flow, operation and maintenance activities, a and any laboratory results. Written documentation of the immediate notification requireda above shall be submitted to the DEM within five (5) days. The discharge may recommencea once steps have been taken to ensure that the limits will not be exceeded again, anda following approval by DEM.a
- 4.a All existing manufacturing, commercial, mining, and silvicultural dischargers must notify thea Director as soon as they know or have reason to believe:a
 - a.a That any activity has occurred or will occur which would result in the discharge, ona a routine or frequent basis, of any toxic pollutant which is not limited in the permit, a if that discharge will exceed the highest of the following "notification levels":a

(1)aOne hundred micrograms per liter (100 µg/L);a

- (2)a Two hundred micrograms per liter (200 μg/L) for acrolein and acrylonitrile;a five hundred micrograms per liter (500 μg/L) for 2,4-dinitrophenol and fora 2-methyl-4,6-dinitro-phenol; and one milligram per liter (1 mg/L) fora antimony;a
- (3)a Five (5) times the maximum concentration value reported for that pollutanta in the permit application in accordance with 40 CFR 122.21(g)(7); ora
- (4)a Any other notification level established by the Director in accordance witha 40 CFR 122.44(f) and Rhode Island Regulations.a
- b.a That any activity has occurred or will occur which would result in the discharge, ona a non-routine or infrequent basis, of any toxic pollutant which is not limited in thea permit, if that discharge will exceed the highest of the following "notification levels":a

(1)aFive hundred micrograms per liter (500 µg/L);a

(2)aOne milligram per liter (1 mg/L) for antimony;a

- (3)a Ten (10) times the maximum concentration value reported for thata pollutant in the permit application in accordance with 40 CFR 122.21(g)(7);a ora
- (4)a other notification level established by the Director in accordance with 40a CFR 122.44(f) and Rhode Island Regulations.a

- c.e That they have begun or expect to begin to use or manufacture as an intermediatee or final product or by-product any toxic pollutant, which was not reported in thee permit application.e
- 5.e The permittee shall clean the trays of the air stripper treatment system at a minimume frequency of quarterly and shall provide any other appropriate maintenance to keep thee treatment system in proper working order.e
- 6.e This permit serves as the State's Water Quality Certificate for the discharges describede herein.e

B. DETECTION LIMITS

All analyses of parameters under this permit must comply with the *National Pollutant Discharge Elimination System (NPDES): Use of Sufficiently Sensitive Test Methods for Permit Applications and Reporting* rule. Only sufficiently sensitive test methods may be used for analyses of parameters under this permit. The permittee shall assure that all testing required by this permit, is performed in conformance with methods listed in 40 CFR 136. In accordance with 40 CFR 136, EPA approved analysis techniques, quality assurance procedures and quality control procedures shall be followed for all reports required to be submitted under the Rhode Island Pollutant Discharge Elimination System (RIPDES) program. These procedures are described in "Methods for the Determination of Metals in Environmental Samples" (EPA/600/4-91/010) and "Methods for Chemical Analysis of Water and Wastes" (EPA/600/4-79/020).

If after conducting the complete Method of Standard Additions analysis, the laboratory is unable to determine a valid result, the laboratory shall report "could not be analyzed". Documentation supporting this claim shall be submitted along with the monitoring report. If valid analytical results are repeatedly unobtainable, DEM may require that the permittee determine a method detection limit (MDL) for their effluent or sludge as outlined in 40 CFR 136, Appendix B.

When calculating sample averages for reporting on discharge monitoring reports (DMRs):

- 1.e "could not be analyzed" data shall be excluded, and shall not be considered as failure toe comply with the permit sampling requirements;e
- 2.e results reported as less than the MDL shall be included as zeros in accordance with thee DEM's DMR Instructions, provided that all appropriate EPA approved methods weree followed.e

Therefore, all sample results shall be reported as: an actual value, "could not be analyzed", or zero. The effluent or sludge specific MDL must be calculated using the methods outlined in 40 CFR 136, Appendix B. Samples which have been diluted to ensure that the sample concentration will be within the linear dynamic range shall not be diluted to the extent that the analyte is not detected. If this should occur the analysis shall be repeated using a lower degree of dilution.

LIST OF TOXIC POLLUTANTS

The following list of toxic pollutants has been designated pursuant to Section 307(a)(1) of the Clean Water Act. The Method Detection Limits (MDLs) represent the required Rhode Island MDLs.

Volatiles - EPA Method 624.1 MDL µg/l (ppb)

| 1V | acrolein | 10.0 | | | |
|------------|---|----------------|------------|------------------------------------|----------------|
| 2V | acrylonitrile | 5.0 | Pesticid | les - EPA Method 608.3 | MDL µg/L (ppb) |
| 3V | benzene | 1.0 | 18P | PCB-1242 | 0.289 |
| 5V | bromoform | 1.0 | 19P | PCB-1254 | 0.298 |
| 6V | carbon tetrachloride | 1.0 | 20P | PCB-1221 | 0.723 |
| 7∀ | chlorobenzene | 1.0 | 21P | PCB-1232 | 0.387 |
| 8V | chlorodibromomethane | 1.0 | 22P | PCB-1248 | 0.283 |
| 9V | chloroethane | 1.0 | 23P | PCB-1260 | 0.222 |
| 10V | 2-chloroethylvinyl etherh | 5.0 | 24P | PCB-1016 | 0.494 |
| 10V 11V | chloroform | 1.0 | 25P | toxaphene | 1.670 |
| 12V | dichlorobromomethane | 1.0 | 201 | toxaphene | 1.070 |
| 14V | 1,1-dichloroethaneh | 1.0 | Baco/Ma | eutrals - EPA Method 625.1 | MDL µg/L (ppb) |
| 14V 15V | • • • • • | 1.0 | 1B | | 1.0 |
| 16V | 1,2-dichloroethane 1,1-dichloroethyleneh | 1.0 | 2B | acenaphthene * acenaphthylene * | 1.0 |
| | | | 2B 3B | | |
| 17V | 1,2-dichloropropaneh | 1.0 | | anthracene * | 1.0 |
| 18V | 1,3-dichloropropyleneh | 1.0 | 4B | benzidine | 4.0 |
| 19V | ethylbenzeneh | 1.0 | 5B | benzo(a)anthracene * | 2.0 |
| 20V | methyl bromide | 1.0 | 6B | benzo(a)pyrene * | 2.0 |
| 21V | methyl chloride | 1.0 | 7B | 3,4-benzofluoranthene * | 1.0 |
| 22V | methylene chloride | 1.0 | 8B | benzo(ghi)perylene * | 2.0 |
| 23V | 1,1,2,2-tetrachloroethane | 1.0 | 9B | benzo(k)fluoranthene * | 2.0 |
| 24∀ | tetrachloroethylene | 1.0 | 10B | bis(2-chloroethoxy)methane | 2.0 |
| 25V | toluene | 1.0 | 11B | bis(2-chloroethyl)ether | 1.0 |
| 26V | 1,2-trans-dichloroethylene | 1.0 | 12B | bis(2-chloroisopropyl)ether | 1.0 |
| 27V | 1,1,1-trichloroethane | 1.0 | 13B | bis(2-ethylhexyl)phthalate | 1.0 |
| 28V | 1,1,2-trichloroethane | 1.0 | 14B | 4-bromophenyl phenyl ether | 1.0 |
| 29V | trichloroethylene | 1.0 | 15B | butylbenzyl phthalate0 | 1.0 |
| 31V | vinyl chloride | 1.0 | 16B | 2-chloronaphthaleneh | 1.0 |
| | | | 17B | 4-chlorophenyl phenyl etherh | 1.0 |
| Acids - | EPA Method 625.1 | MDL µg/L (ppb) | 18B | chrysene * | 1.0 |
| 1A | 2-chlorophenolh | 1.0 | 19B | dibenzo (a,h)anthracene * | 2.0 |
| 2A | 2,4-dichlorophenol | 1.0 | 20B | 1,2-dichlorobenzene | 1.0 |
| 3A | 2,4-dimethylphenol | 1.0 | 21B | 1,3-dichlorobenzene | 1.0 |
| 4A | 4,6-dinitro-o-cresol | 1.0 | 22B | 1,4-dichlorobenzene | 1.0 |
| 5A | 2,4-dinitrophenol | 2.0 | 23B | 3,3'-dichlorobenzidine | 2.0 |
| 6A | 2-nitrophenol | 1.0 | 24B | diethyl phthalate | 1.0 |
| 7A | 4-nitrophenol | 1.0 | 25B | dimethyl phthalate | 1.0 |
| 8A | p-chloro-m-cresolh | 2.0 | 26B | di-n-butyl phthalate0 | 1.0 |
| 9A | pentachlorophenol | 1.0 | 27B | 2,4-dinitrotoluene | 2.0 |
| 10A | phenol | 1.0 | 28B | 2,6-dinitrotoluene | 2.0 |
| 11A | 2,4,6-trichlorophenol | 1.0 | 29B | di-n-octyl phthalate0 | 1.0 |
| | | | 30B | 1,2-diphenylhydrazine0 | 1.0 |
| Pesticid | les - EPA Method 608.3 | MDL µg/L (ppb) | | (as azobenzene) | |
| 1P | aldrin | 0.059 | 31B | fluoranthene * | 1.0 |
| 2P | alpha-BHC | 0.058 | 32B | fluorene * | 1.0 |
| 3P | beta-BHC | 0.043 | 33B | hexachlorobenzene | 1.0 |
| 4P | gamma-BHC | 0.048 | 34B | hexachlorobutadiene | 1.0 |
| 5P | delta-BHC | 0.034 | 35B | hexachlorocyclopentadiene | 2.0 |
| 6P | chlordane | 0.211 | 36B | hexachloroethane | 1.0 |
| 7P | 4,4'-DDT | 0.251 | 37B | indeno(1,2,3-cd)pyrene * | 2.0 |
| 48 | 4,4'-DDE | 0.049 | 38B | isophorone | 1.0 |
| 9P | 4,4'-DDD | 0.139 | 39B | naphthalene * | 1.0 |
| 3F 10P | dieldrin | 0.082 | 40B | nitrobenzene | 1.0 |
| 10P 11P | alpha-endosulfan | 0.031 | 40B 41B | N-nitrosodimethylamineh | 1.0 |
| 12P | beta-endosulfan | 0.031 | 41B 42B | N-nitrosodi-n-propylamineh | 1.0 |
| 12P 13P | endosulfan sulfate | 0.109 | 42B 43B | N-nitrosodiphenylamineh | 1.0 |
| 13P 14P | | 0.050 | 43D 44B | phenanthrene *h | 1.0 |
| | endrin ondrin oldobydo | 0.062 | 44B 45B | pyrene * | 1.0 |
| 15P | endrin aldehyde | 0.082 | 45B 46B | 1,2,4-trichlorobenzeneh | |
| 16P | heptachlor heptachlor epoxide | | 400 | 1,2,4~uichioiobeli2ellell | 1.0 |
| 17P | neptachior epoxide | 0.040 | | | |

OTHER TOXIC POLLUTANTS

| | MDL µg/L (ppb) |
|--------------------------------|----------------|
| TSS | 2,000.0 |
| Antimony, Total | 0.5 |
| Arsenic, Total | 0.1 |
| Aluminum, Total | 20.0 |
| Beryllium, Total | 0.2 |
| Cadmium, Total | 0.2 |
| Chromium, Total | 1.0 |
| Chromium, Hexavalent | 1.0 |
| Copper, Total | 0.2 |
| Iron, Total | 20.0 |
| Lead, Total | 0.2 |
| Mercury, Total | 0.2 |
| Nickel, Total | 0.2 |
| Selenium, Total | 1.0 |
| Silver, Total | 0.2 |
| Thallium, Total | 5.0 |
| Zinc, Total | 2.0 |
| Asbestos | ** |
| Cyanide, Total | 5.0 |
| Phenois, Total | 2.0 |
| TCDD | ** |
| Phosphorous, Total | 0.1 |
| MTBE (Methyl Tert Butyl Ether) | 0.5 |

* Polynuclear Aromatic Hydrocarbonse

** No Rhode Island Department of Environmental Management MDL

NOTE:

The MDL for a given analyte may vary with the type of sample. MDLs which are determined in reagent water may be lower than those determined in wastewater due to fewer matrix interferences. Wastewater is variable in composition and may therefore contain substances (interferents) that could affect MDLs for some analytes of interest. Variability in instrument performance can also lead to inconsistencies in determinations of MDLs.

C. MONITORING AND REPORTING

1.e Monitoringe

All monitoring required by this permit shall be done in accordance with sampling ande analytical testing procedures specified in Federal Regulations 40 CFR 136.e

2.e Submittal of DMRs Using NetDMRe

Monitoring results obtained during the previous three (3) months shall be summarized ande reported to DEM in discharge monitoring reports (DMRs) submitted electronically using thee NetDMR reporting tool (<u>https://netdmr.epa.gov</u>). When the permittee submits DMRs usinge NetDMR, it is not required to submit hard copies of DMRs to DEM.e

The first report is due for the calendar quarter during which the facility obtained coverage under this permit. Testing shall be reported as follows:

| Quarter Testing | Report Due | Results Submitted |
|-------------------------|---------------|-------------------|
| to be Performed | No Later Than | with DMR for |
| January 1 – March 31 | April 15 | March |
| April 1 – June 30 | July 15 | June |
| July 1 – September 30 | October 15 | September |
| October 1 - December 31 | January 15 | December |

3.e Submittal of Reports as NetDMR Attachmentse

Unless otherwise specified in this permit, the permittee must submit electronic copies ofe documents in NetDMR that are directly related to the DMR. These include the following:e

- •e DMR Cover Letterse
- •e Below Detection Limit summary tablese

All other reports should be submitted to DEM as a hard copy via regular US mail (see Part I.C.4 below).

4.e Submittal of Requests and Reports to DEMe

The following requests, reports, and information described in this permit shall be submittede as hard copy to the DEM.e

A.e Transfer of Permit noticee B.e Request for changes in sampling locatione C.e Request for reduction in testing frequencye D.e Written notifications required under Part IIe E.e Notice of unauthorized dischargese F.e Priority Pollutants Scan results per Part I.A.2.de

These reports, information, and requests shall be submitted to DEM by hard copy mail to the following address:

Rhode Island Department of Environmental Management RIPDES Program 235 Promenade Street Providence, RI 02908

5.e Verbal Reports and Verbal Notificationse

Any verbal reports or verbal notifications, if required in Parts I and/or II of this permit, shalle be made to the DEM. This includes verbal reports and notifications required under Parte II.(I)(5) General Requirements. Verbal reports and verbal notifications shall be made toe DEM at (401) 222-4700 or (401) 222-3070 at night.e

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RHODE ISLAND DEPARTMENT OF ENVIRONMENTAL MANAGEMENT OFFICE OF WATER RESOURCES 235 PROMENADE STREET PROVIDENCE, RHODE ISLAND 02908-5767

STATEMENT OF BASIS

RHODE ISLAND POLLUTANT DISCHARGE ELIMINATION SYSTEM (RIPDES) PERMIT TO DISCHARGE TO WATERS OF THE STATE

RIPDES PERMIT NO. RI0023574

NAME AND ADDRESS OF APPLICANT:

Home Depot U.S.A., Inc.

2455 Paces Ferry Road, N.W. Atlanta, GA 30339

NAME AND ADDRESS OF FACILITY WHERE DISCHARGE OCCURS:

Home Depot

387 Charles Street Providence, Rhode Island 02903

RECEIVING WATER: West River (Waterbody ID: RI0003008R-03C)

2

CLASSIFICATION: B{a}

Le Proposed Action, Type of Facility, and Discharge Location

The above named applicant has applied to the Rhode Island Department of Environmentale Management for the reissuance of a RIPDES permit to discharge into the designated receiving water, e The discharge is from a groundwater pump and treat remediation system that was installed toe remediate groundwater that was contaminated by various chlorinated volatile organic compoundse (VOCs) used in commercial and industrial operations at the former Silver Spring Center dating backe to the late 1800's.e

The Facility

The groundwater extraction and treatment system is located at 387 Charles Street in Providence, RI 02903. Home Depot U.S.A., Inc. Owns the system and Groundwater Environmental Services Inc. (GES) operates the system. The Home Depot site was used in the late 1800's as a former mill complex that had manufacturing, commercial, and industrial operations. The former mill buildings have been razed and the site has been redeveloped into a retail site. The discharge is from groundwater remediation activities at the site.

The previous permit was issued on March 23, 21012 and included new limits for Total Iron and Total Arsenic. The permittee was not able to immediately comply with the new final effluent limits for Total Iron and Total Arsenic. DEM entered into a consent agreement (No. RIA-421) with Home Depot U.S.A., Inc. on September 13, 2012. As part of the consent agreement Home Depot upgraded the groundwater extraction and treatment system. Operation of the upgraded system commenced on November 25, 2013.

The groundwater extraction and treatment system consists of two groundwater recovery wells (RW-1R and RW-2), which extract impacted groundwater from the aquifer along the down-gradient portion

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of the site via the electric submersible sumps. Recovery well RW-1 was reportedly installed to a depth of approximately 60 feet below ground surface (bgs) and recovery well RW-2 was installed to a depth of approximately 45 feet bgs. The groundwater is treated on-site using an oxygenator (nozzle) air stripper to remove VOCs, Iron, and Arsenic. Treated groundwater is then pumped through Birm media for further metals treatment. The groundwater is then directed to a series of five (5) shallow tray low profile air stripping units for secondary treatment to further reduce VOCs concentrations. The treated groundwater is then gravity-discharged to the West River (Waterbody ID: RI0003008R-03C). The design flow rate for recovery well RW-1R is 50 gallons per minute (gpm) and the design flow rate for recovery well RW-2 is 10 gpm with a total design flow rate for the groundwater treatment system of 60 gpm.

Discharge Location & Receiving Waterbody Description

Outfall 001A discharges to West River. The segment of West River where the discharges occur is defined as water body identification number RI0003008R-03C according to the RI Water Quality Regulations. This particular segment begins from the first CSO discharge point located south of the Branch Avenue crossing, off of Vandewater Street to the confluence with the Moshassuck River in Providence. This segment is a Class B{a} waterbody and is designated as a warm water fishery according to the RI Water Quality Regulations. Water use classification "B" designates these waters for fish and wildlife habitat and primary and secondary contact recreational activities. The symbol {a}ondicates a partial use designation due to impacts from CSOs. Class B waters shall be suitableo for compatible industrial processes and cooling, hydropower, aquacultural uses, navigation, ando irrigation and other agricultural uses. These waters shall have good aesthetic value. According too the 2016 303(d) List of Impaired Waters, this waterbody is impaired for Benthic-Macroinvertebrateo Bioassessments and Enterococcus.o

II. Limitations and Conditions

The effluent limitations, monitoring requirements, and any implementation schedule (if required) may be found in the draft permit. Historical average effluent concentrations may be found in **Attachment A-1**.

III. Permit Basis and Explanation of Effluent Limitation Derivation

Permit Development

The requirements set forth in this permit are from the State's Water Quality Regulations (250-RICR-150-05-1) and the State's regulations for the Rhode Island Pollutant Discharge Elimination Systemo (250-RICR-150-10-1), both filed pursuant to RIGL Chapter 46-12, as amended. DEM's primaryo authority over the permit comes from EPA's delegation of the program in September 1984 undero the Federal Clean Water Act (CWA).o

Development of RIPDES permit limitations is a multi-step process consisting of the following steps: calculating allowable water quality based discharge levels based on instream criteria, background data and available dilution; identifying any technology-based limits that apply to the facility; establishing appropriate Best Professional Judgment (BPJ) limits in accordance with Section 402 of the CWA; setting the most stringent of these limits as the final allowable discharge levels; comparing existing discharge concentrations to the new allowable discharge levels; and evaluating the ability of the facility to meet the final permit effluent limits.

Water quality criteria are comprised of numeric and narrative criteria. Numeric criteria are scientifically derived ambient concentrations developed by EPA or States for various pollutants of concern to protect human health and aquatic life. Narrative criteria are statements that describe the desired water quality goal. A technology-based limit is a numeric limit, which is determined by examining the capability of a treatment process to reduce or eliminate pollutants.

Streamflow Determination

The RI Water Quality Regulations 250-RICR-150-10-1.26 describes the flows used to determine compliance with the aquatic life and human health criteria. It specifies that the acute and chronic aquatic life criteria for freshwaters shall not be exceeded at or above the lowest average 7 consecutive day low flow with an average recurrence frequency of once in 10 years (7Q10). It also specifies that the stream design flow to be used to implement both carcinogen and noncarcinogen human health criteria is the Harmonic Mean flow.

Streamflow values for the West River were estimated by multiplying the streamflow values for the Moshassuck River (USGS Gaging Station No. 01114000) by the ratio between the estimated drainage area of the West River within the Moshassuck drainage area to the estimated drainage area of the Moshassuck River. using the following equation:

$$Q_W = Q_M \times \frac{DA_W}{DA_M}$$

Where:

Qw= Streamflow values for the West River at Home DepotQM= Streamflow value at USGS Moshassuck River (Station No. 01114000)DAw= Drainage area of West River at Home Depot (10.9 mi²)DAM= Drainage area of Moshassuck River (23.1 mi²)

The 7Q10 flow for Moshassuck River (USGS Station No. 01114000) was 4.1 cubic feet per second (cfs) while the Harmonic Mean flow was 19 cfs. Based on the above drainage areas, the 7Q10 and the Harmonic Mean flow at Home Depot were calculated to be 1.94 cfs and 8.97 cfs respectively.

Dilution Factor (DF)

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Using the specific West River 7Q10 and Harmonic Mean flow calculated at the Home Depot site, a dilution factor was then determined, using the following equation:

$$DF = \frac{Q_W + Q_{HD}}{Q_{HD}}$$

Where:

e: DF = Dilution Factor Q_W = Streamflow values for the West River at Home Depot Q_{HD} = Home Depot treatment system design flowrate

The dilution factor for the acute and chronic aquatic life criteria for freshwaters was determined to be 15.471. The dilution factor for the carcinogen and noncarcinogen human health criteria Harmonic Mean flow was determined to be 68.061.

The previous issuance of the permit determined water quality-based permit limits for organic pollutants by using the water quality criteria provided in § 1.26(J) of the RI Water Quality Regulations and a conservative dilution factor of 10. Since the permittee was able to meet all water quality-based limits for organic pollutants in the previous permit, a dilution factor of 10 was also used to develop water quality-based limits for organic pollutants in this permit.

Water Quality Based Limits

Aquatic life criteria have been established to ensure the protection and propagation of aquatic life while human health criteria represent the pollutant levels that would not result in a significant risk to public health from ingestion of aquatic organisms. The more stringent of the two criteria was then used in establishing allowable effluent limitations. The allowable effluent limitations were established based on the non-class A freshwater acute and chronic aquatic life criteria and human health criteria specified in § 1.26(J) of the RI Water Quality Regulations, as amended, using 80%

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allocation when no background data was available and 90% allocation when background data is available. Since there is no background data available, the allowable water quality-based discharge levels are set equal to 80% of the water quality criteria for Class B{a} waters as listed in § 1.26(J) of the RI Water Quality Regulations. Water quality-based limitations were calculated as follows:

Background concentration unknown

$Limit = (DF)^* (Criteria)^*(80\%)$

The DEM examined the permit application data and DMR data reported for the monitoring period covering March 2011 to January 2019 to determine if any pollutants have reasonable potential to exceed the applicable permit limits using the dilution factor of 10 for VOCs and 15.471 for Non-VOCs. These limits were then compared to the technology-based limits listed in the RIPDES 2019 Remediation General Permit. A summary of applicable water quality-based permit limits calculated using water quality criteria and dilution can be found in **Attachment A-2**.

In accordance with Section 402(a)(1) of the Clean Water Act, the DEM is authorized to use Best Professional Judgment (BPJ) to establish permit limits.

| elow. Effluent limits which are new or revise | ed from the previous permit are Bolded . |
|---|---|
| | Effluent Limitation |

The effluent limitations and/or monitor-only requirements proposed in this permit are listed in Table 1

| Parameter | Effluent Limitation | | | |
|------------------------------|---------------------|------------------------------|--|--|
| | Monthly Average | Daily Maximum 30,000 µg/L | | |
| Total Suspended Solids (TSS) | μg/L | | | |
| Vinyl Chloride | 1.92 µg/L | 2 µg/L | | |
| 1,1-Dichloroethylene | 3.2 µg/L | 3.2 µg/L | | |
| 1,1-Dichloroethane | 5.0 µg/L. | 5.0 µg/L | | |
| Cis-1,2-Dichloroethylene | 10.0 µg/L | 10.0 µg/L | | |
| Trans-1,2-Dichloroethylene | 5.0 µg/L | 5.0 µg/L | | |
| Tetrachloroethylene | Removed Limit | Removed Limit | | |
| Trichloroethylene | 5.0 µg/L | 5.0 µg/L | | |
| 1,1,1-Trichloroethane | Removed Limit | Removed Limit | | |
| рН | Narrative Limit | Narrative Limit | | |
| Arsenic | 91.7 μg/L | 5,154.9 μg/L | | |
| Iron | 15,162 µg/L | μg/L | | |

Table 1

pН

The effluent limitations for pH have been established in accordance with the § 1.10(D) of the RI Water Quality Regulations for Class B{a} freshwaters. Narrative conditions in Part I.A.2.a of this permit require pH of the effluent not be less than 6.5 standard units nor greater than 9.0 SU at any time unless these values are exceeded due to natural causes or as a result of the approved treatment processes. However, the monitoring and reporting requirement was removed from this issuance of the permit.

Total Suspended Solids (TSS)

This BPJ limit was added to be consistent with the RIPDES 2019 RGP. The effluent limitations for TSS in this permit is a Daily Maximum of 30 mg/L and a Monthly Average of monitor only using BPJ as authorized by 402(a)(1) of the CWA.

1,1,1-Trichloroethane (TCA)

1,1,1-Trichloroethane was not detected in the groundwater influent samples since November 2013. Permit limits are only required for pollutants with reasonable potential to causes or contribute to an excursion above the State's criterion. Since 1,1,1-Trichloroethane does not have reasonable potential, the effluent monitoring requirements for this pollutant were removed from this permit.

Tetrachloroethylene (PCE)

Tetrachloroethylene was not detected in the groundwater influent samples since April 2015. Permit limits are only required for pollutants with reasonable potential to causes or contribute to an excursion above the State's criterion. Since Tetrachloroethylene does not have reasonable potential, the effluent monitoring requirements for this pollutant were removed from this permit.

Arsenic

Water Quality-based Arsenic limits were developed from the RI Water Quality Human Health Criteria for Consumption of Aquatic Organisms Only using a Harmonic Mean flow DF of 68.061. As a result, the Arsenic limits were changed from Monthly Average and Daily Maximum of 91.7 μ g/L and 5,154.9 μ g/L to 76 μ g/L and 4,208 μ g/L respectively.

Iron

Water Quality-based Iron limits were developed from the RI Water Quality Aquatic Life Criteria for Freshwater using a 7Q10 flow DF of 15.471. As a result, the Iron limits were changed from Monthly Average of 15,162 µg/L to 12,376 µg/L. Since the RI Water Quality Aquatic Life Criteria for Freshwater does not have acute criteria for Iron, no Daily Maximum limit was assigned. The Daily Maximum limit of "monitor only" for Iron was retained from the previous issuance permit.

Technology Based Limits

The limits for the following pollutants were retained from the previous issuance permit and are consistent with the 2019 RIPDES RGP:

- •o Vinyl Chlorideo
- •o 1,1-Dichloroethyleneo
- •o 1.1-Dichloroethaneo

- •o Cis-1,2-Dichloroethyleneo
- •o Trans-1,2-Dichloroethyleneo
- •o Trichloroethyleneo

A comparison between Water Quality-based limits for these pollutants, limits from the previous issuance of this permit, and the RIPDES 2019 RGP Category E - Sites Containing Volatile Organic Compounds and Other Contaminants Discharging to Non-Class AA receiving waters can be found in **Attachment A-3**.

Whole Effluent Toxicity (WET) Testing

WET testing is the aggregate toxic effect of an effluent measured directly by an aquatic toxicity test. Under §§ 402(a)(2) and 308(a) of the CWA, States are authorized to require toxicity testing. The RI Water Quality regulations § 1.10(D)(1) under Chemical Constituents have narrative requirements that prohibits the discharge of pollutants in concentration or combinations that could be harmful to humans or fish and wildlife for the most sensitive and governing water class use.

40 CFR 122.44(d)(1)(ii) requires states to use procedures which account for existing controls on point and nonpoint sources of pollution, the variability of the pollutant or pollutant parameter in the

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effluent, the sensitivity of the species to toxicity testing, and where appropriate, the dilution of the effluent in the receiving water when conducting reasonable potential analysis. Permits are required to contain WET limitations when a discharge causes or has a reasonable potential to cause or contribute to an excursion above the State's narrative criterion for toxicity under 40 CFR 122.44(d)(1)(v).

After review of treatment system and compliance history records, it was determined that chemicalspecific limits should be sufficient to attain and maintain the applicable Rhode Island Water Quality Standards. Therefore, WET limits were not included in this permit.

Priority Pollutants Scan (PPS)

The requirement to conduct a Priority Pollutants scan on the effluent and influent in the final year of the permit and submit the results to the DEM with the reapplication was added to the permit requirements to ensure discharge meets the State's Water Quality Standards for a wide variety of pollutants not monitored on a regular basis using BPJ as authorized by § 402(a)(1) of the CWA.

Antibacksliding/Antidegradation

The Antibacksliding Provision of the Clean Water Act (found at Section 402(o) and repeated at 40 CFR 122.44(I)) prohibits reissuing a permit containing less stringent effluent limits than the comparable limits from the previous permit. Section 303(d)(4) of the Clean Water Act addresses water quality based antibacksliding in terms of water quality-based limits. Since none of the permit limits are less stringent than in the previous permit, antibacksliding regulations are being met. Additionally, the draft permit is being relssued with limitations as stringent or more stringent than those in the existing permit with no change to the outfall location or increase in flow. Therefore, as there will be no increase in loadings or flow to the receiving waterbody, no additional antidegradation review is necessary.

The requirements set forth in this permit are from the State's Water Quality Regulations and the State's Regulations for the Rhode Island Pollutant Discharge Elimination System, both filed pursuant to RIGL Chapter 46-12, as amended. DEM's primary authority over the permit comes from EPA's delegation of the program in September 1984 under the Federal Clean Water Act (CWA).

The effluent monitoring requirements have been specified in accordance with RIPDES regulations as well as 40 CFR 122.41(j), 122.44(i), and 122.48 to yield data representative of the discharge.

The remaining general and specific conditions of the permit are based on the RIPDES regulations as well as 40 CFR 122 through 125 and consist primarily of management requirements common to all permits.

IV. Comment Period, Hearing Requests, and Procedures for Final Decisions

All persons, including applicants, who believe any condition of the draft permit is inappropriate must raise all issues and submit all available arguments and all supporting material for their arguments in full by the close of the public comment period, to the Rhode Island Department of Environmental Management, Office of Water Resources, 235 Promenade Street, Providence, Rhode Island, 02908-5767. Any person, prior to such date, may submit a request in writing for a public hearing to consider the draft permit to the Rhode Island Department of Environmental Management. Such requests shall state the nature of the issues proposed to be raised in the hearing. A public hearing may be held after at least thirty (30) days public notice whenever the Director finds that response to this notice indicates significant public interest. In reaching a final decision on the draft permit the Director will respond to all significant comments and make these responses available to the public at DEM's Providence Office.

STATEMENT OF BASIS Permit No. RI0023574 Page 7 of 7

Following the close of the comment period, and after a public hearing, if such hearing is held, the Director will issue a final permit decision and forward a copy of the final decision to the applicant and each person who has submitted written comments or requested notice. Within thirty (30) days following the notice of the final permit decision any interested person may submit a request for a formal hearing to reconsider or contest the final decision. Requests for formal hearings must satisfy the requirements of Rule 49 of the Regulations for the Rhode Island Pollutant Discharge Elimination System.

V. DEM Contact

Additional information concerning the permit may be obtained between the hours of 8:30 a.m. ande 4:00 p.m., Monday through Friday, excluding holidays, from:e

Abdulrahman Ragab Sanitary Engineer RIPDES Program Office of Water Resources Department of Environmental Management 235 Promenade Street Providence, Rhode Island 02908 Telephone: (401) 222-4700, Extension: 7201

Joseph B. Haberek, P.E. Supervising Sanitary Engineer eOffice of Water Resourcese Department of Environmental Managemente

ATTACHMENT A-1

DESCRIPTION OF DISCHARGE: treated groundwater **DISCHARGE:** 001A - The Final Discharge from the Air Stripper Treatment System

AVERAGE EFFLUENT CHARACTERISTICS AT POINT OF DISCHARGE OF SELECTED POLLUTANTS:

| PARAMETER | AVERAGE ¹ | MAXIMUM ² |
|----------------------------|----------------------|----------------------|
| Flow | 53.16 gpm | 55.88 gpm |
| Vinyl Chloride | 0.49 µg/L | 1.43 µg/L |
| 1,1-Dichloroethylene | 0.00 µg/L | 0.00 µg/L |
| 1,1-Dichloroethane | 0.00 μg/L | 0.00 µg/L |
| Cis-1,2-Dichloroethylene | 3.67 μg/L | 11.91 µg/L |
| Trans-1,2-Dichloroethylene | 0.00 µg/L | 0.00 µg/L |
| Tetrachloroethylene | 0.00 μg/ L | 0.00 µg/L |
| Trichloroethylene | 0.08 μg/L | 0.21 µg/L |
| 1,1,1-Trichloroethane | 0.00 μg/L | 0.00 μg/L |
| pН | 7.07 S.U. (Minimum) | 7.41 S.U. (Maximum) |
| Arsenic | 2.17 μg/L | 3.89 µg/L |
| Iron | 2,944.50 µg/L | 5,688.64 µg/L |

¹Data represents the mean of the monthly average data from March 2012 – December 2018 ²Data represents the mean of the daily maximum data from March 2012 – December 2018

CALCULATION OF WATER QUALITY BASED NON-CLASS AA FRESHWATER DISCHARGE LIMITS FACILITY SPECIFIC DATA INPUT SHEET NOTE: LIMITS BASED ON RI WATER QUALITY CRITERIA DATED JULY 2006

FACILITY NAME: Home Depot USA Inc. RIPDES PERMIT #: RI0023574

| | DISSOLVED BACKGROUND | ACUTE METAL | CHRONIC METAL |
|----------------|-------------------------|----------------|---|
| | DATA (ug/L) | TRANSLATOR | TRANSLATOR |
| ALUMINUM | NA | NA | NA |
| ARSENIC | NA | 1 | and the second se |
| CADMIUM | NA | 1.002000673 | 0.967000673 |
| CHROMIUM III | NA | (N) (D) | 0.86 |
| CHROMIUM VI | NA | 0.982 | 0.962 |
| COPPER | NA | 0,96 | 0.96 |
| LEAD | NA | 0.993001166 | 0.993001166 |
| MERCURY | NA | 0.85 | 0.85 |
| NICKEL | MA | 0.998 | 0.997 |
| SELENIUM | NA | NA | NA |
| SILVER | NA | 0.85 | NA |
| ZINC | MA | 0.978 | 0,986 |
| AMMONIA (as N) | NA | | |

USE NA WHEN NO DATA IS AVAILABLE NOTE 1: METAL TRANSLATORS FROM RI WATER QUALITY REGS.

| pH = | 7.5 S.U. |
|------------|----------------------|
| HARDNESS = | 25.0 (mg/L as CaCO3) |

| FLO | N DAT | 4 | |
|-----------------|----------|-------|-----|
| DESIGN FLOW | = | 0.086 | MGD |
| | = | 0.134 | CFS |
| 7Q10 FLOW | Z | 1.935 | CFS |
| 7Q10 (JUNE-OCT) | = | 1.935 | CFS |
| 7Q10 (NOV-MAY) | = | 1.935 | CFS |
| 30Q5 FLOW | | 8.965 | CFS |
| HARMONIC FLOW | | 8.965 | CFS |

| DILUTION FA | CTORS | Contex |
|-----------------|--------|------------------|
| ACUTE = | 15.471 | |
| CHRONIC = | 15.471 | |
| (MAY-OCT) = | 15.471 | - 1943 - 1773 |
| (NOV-APR) = | 15.471 | 200 |
| 30Q5 FLOW = | 68.061 | |
| HARMONIC FLOW = | 68.061 | |
| VOCs = | 10.000 | |

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Attachment A-2 Water Quality Based Effluent Limits - Freshwater CALCULATION OF WATER QUALITY BASED NON-CLASS AA FRESHWATER DISCHARGE LIMITS FACILITY NAME: Home Depot USA Inc. RIPDES PERMIT #: RI0023574

CHEMICAL NAME

TETRACHLOROETHYLENE

| CHEMICAL NAME | CAS# | DAILY MAX LIMIT (ug/L) | MONTHLY AVE LIMIT (ug/L) |
|---------------------------------|----------|------------------------------|--------------------------------|
| PRIORITY POLLUTANTS: | | | |
| TOXIC METALS AND CYANIDE | | | |
| ANTIMONY | 7440360 | 5569,58 | 123.77 |
| ARSENIC, TOTAL | 7440382 | 4208.12 | 76.23 |
| ASBESTOS | 1332214 | No Criteria | 0.00000 |
| BERYLLIUM | 7440417 | 92.83 | 2.10 |
| CADMIUM, TOTAL | 7440439 | 6.45 | |
| CHROMIUM III, TOTAL | 16065831 | 7170.18 | |
| CHROMIUM VI, TOTAL | 18540299 | 201.66 | 141.52 |
| COPPER, TOTAL | 7440508 | 46.93 | 35.32 |
| CYANIDE | 57125 | 272.29 | |
| LEAD, TOTAL | 7439921 | 173.03 | 6.74 |
| MERCURY, TOTAL | 7439976 | 20.39 | 9.61 |
| NICKEL, TOTAL | 7440020 | 1797.22 | 199.82 |
| SELENIUM, TOTAL | 7782492 | 247.54 | 61.88 |
| SILVER, TOTAL | 7440224 | 4.63 | No Criteria |
| THALLIUM | 7440280 | 569.33 | 12.38 |
| ZINC, TOTAL | 7440666 | 458.14 | 458,14 |
| VOLATILE ORGANIC COMPOUNDS | | | |
| ACROLEIN | 107028 | 23.20 | 0.48000 |
| ACRYLONITRILE | 107131 | 3024.00 | 20.00 |
| BENZENE | 71432 | 2120.00 | 47.20 |
| BROMOFORM | 75252 | 11720.00 | 264.00 |
| CARBON TETRACHLORIDE | 56235 | 10920.00 | 128.00 |
| CHLOROBENZENE | 108907 | 6360.00 | 144.00 |
| CHLORODIBROMOMETHANE | 124481 | No Criteria | 1040.00 |
| CHLOROFORM | 67663 | 11560.00 | 256.00 |
| DICHLOROBROMOMETHANE | 75274 | No Criteria | 1360.00 |
| 1,2DICHLOROETHANE | 107062 | 47200.00 | 1048.00 |
| 1,1DICHLOROETHYLENE | 75354 | 4640.00 | 104.00 |
| 1,2DICHLOROPROPANE | 78875 | 21000.00 | 464.00 |
| 1,3DICHLOROPROPYLENE | 542756 | No Criteria | 168.00 |
| ETHYLBENZENE | 100414 | 12800.00 | 288.00 |
| BROMOMETHANE (methyl bromide) | 74839 | No Criteria | 12000.00 |
| CHLOROMETHANE (methyl chloride) | 74873 | No Criteria | 0.00000 |
| METHYLENE CHLORIDE | 75092 | 77200.00 | 1712.00 |
| 1,1,2,2TETRACHLOROETHANE | 79345 | 3728.00 | 80.00 |
| FLUORENE | 86737 | No Criteria | 288578.44 |
| HEXACHLOROBENZENE | 118741 | No Criteria | 0.15790 |

| TETHAUREUNUETHTLENE | 12/104 | 1920.00 | 42.40 |
|----------------------------|--------|-------------|----------|
| TOLUENE | 108883 | 5080.00 | 112.00 |
| 1,2TRANSDICHLOROETHYLENE | 156605 | No Criteria | 80000.00 |
| 1,1,1TRICHLOROETHANE | 71556 | No Criteria | 0.00000 |
| 1,1,2TRICHLOROETHANE | 79005 | 7200.00 | 160.00 |
| TRICHLOROETHYLENE | 79016 | 15600.00 | 344.00 |
| VINYL CHLORIDE | 75014 | No Criteria | 19.20 |
| ACID ORGANIC COMPOUNDS | | | |
| 2CHLOROPHENOL | 95578 | 1596.61 | 35.89 |
| 2,4DICHLOROPHENOL | 120832 | 1250.06 | 27.23 |
| 2,4DIMETHYLPHENOL | 105679 | | 29.70 |
| 4,6DINITRO2METHYL PHENOL | 534521 | No Criteria | 15245.65 |
| 2,4DINITROPHENOL | 51285 | 383.68 | 8.54 |
| 4NITROPHENOL | 88755 | No Criteria | 0.00000 |
| PENTACHLOROPHENOL | 87865 | 0.72 | 0.55256 |
| PHENOL | 108952 | 3106.59 | 69.31029 |
| 2,4.6TRICHLOROPHENOL | 108953 | VOCs | 4.46 |
| BASE NEUTRAL COMPUNDS | | | |
| ACENAPHTHENE | 83329 | | 23.52 |
| ANTHRACENE | 120127 | | |
| BENZIDINE | 92875 | | |
| PAHs | | No Criteria | |
| BIS(2CHLOROETHYL)ETHER | 111444 | | |
| BIS(2CHLOROISOPROPYL)ETHER | 108601 | | |
| BIS(2ETHYLHEXYL)PHTHALATE | 117817 | 6869.15 | |
| BUTYL BENZYL PHTHALATE | 85687 | 1052.03 | |
| 2CHLORONAPHTHALENE | 91587 | No Criteria | |
| 1,2DICHLOROBENZENE | 95501 | 977.77 | 22.28 |
| 1,3DICHLOROBENZENE | 541731 | 4826.97 | 107.68 |
| 1,4DICHLOROBENZENE | 106467 | 693.10 | |
| 3,3DICHLOROBENZIDENE | 91941 | | |
| DIETHYL PHTHALATE | 84662 | 32241.66 | |
| DIMETHYL PHTHALATE | 131113 | | |
| DI-n-BUTYL PHTHALATE | 84742 | | |
| 2,4DINITROTOLUENE | 121142 | | |
| 1,2DIPHENYLHYDRAZINE | 122667 | | |
| FLUORANTHENE | 206440 | 2462.99 | 54.46 |

CAS#

127184

DAILY MAX MONTHLY AVE

1920.00

LIMIT

(ug/L)

42.40

LIMIT

(ug/L)

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NON PRIORITY POLLUTANTS: OTHER SUBSTANCES

Attachment A-2 Water Quality Based Effluent Limits - Freshwater

CALCULATION OF WATER QUALITY BASED NON-CLASS AA FRESHWATER DISCHARGE LIMITS FACILITY NAME: <u>Home Depot USA Inc.</u> RIPDES PERMIT #: <u>RI0023574</u>

| CHEMICAL NAME | CAS# | DAILY MAX LIMIT (ug/L) | MONTHLY AVE LIMIT (ug/L) |
|-----------------------------|----------------|---|--|
| | 07000 | the second se | the second s |
| | 87683 77474 | No Criteria | |
| | 67721 | 4.33 | |
| HEXACHLOROETHANE | | 606.47 | 13.61 |
| ISOPHORONE | 78591 | 72404.50 | |
| | 91203 | 1423.34 | 32.18 |
| | 98953 | 16708.73 | |
| | 62759 | | |
| N-NITROSODI-N-PROPYLAMINEO | 621647 | No Criteria | |
| N-NITROSODIPHENYLAMINEO | 86306 | 3626.41 | 80.45 |
| PYRENEO | 129000 | | |
| 1.2.4trichlorobenzene O | 120821 | 928.26 | 21.04 |
| PESTICIDES/PCBsO | | | |
| ALDRINO | 309002 | 37.13 | |
| Alpha BHCO | 319846 | | |
| Beta BHCO | 319857 | No Criteria | |
| Gamma BHC (Lindane)O | 58899 | | |
| CHLORDANEO | 57749 | | |
| 4,4DDTO | 50293 | | 0.01238 |
| 4,4DDEO | 72559 | | |
| 4,4DDDO | 72548 | | |
| DIELDRINO | 60571 | 2.97 | |
| ENDOSULFAN (alpha)O | 959988 | | |
| ENDOSULFAN (beta)O | 33213659 | | |
| ENDOSULFAN (sulfate)O | 1031078 | | |
| ENDRINO | 72208 | | |
| ENDRIN ALDEHYDEO | 7421934 | | |
| HEPTACHLORO | 76448 | | |
| HEPTACHLOR EPOXIDEO | 1024573 | | |
| POLYCHLORINATED BIPHENYLS30 | | | |
| 2,3,7,8TCDD (Dioxin)O | 1746016 | | |
| TOXAPHENEO | 8001352 | | 1 |
| TRIBUTYLTINO | | 5.69 | 0.89 |

| | | DAILY MAX | MONTHLY AVE |
|--------------------------------|----------|-------------|-------------|
| CHEMICAL NAME | CAS# | LIMIT | LIMIT |
| | | (ug/L) | {ug/L} |
| ALUMINUM, TOTAL | 7429905 | 9282.63 | 1076.78 |
| AMMONIA (as N), WINTER (NOV-AP | 7664417 | 125006.06 | 18070.18 |
| AMMONIA (as N), SUMMER (MAY-O | 7664417 | 125006.06 | 18070.18 |
| 4BROMOPHENYL PHENYL ETHER | | 222.78 | 4.95 |
| CHLORIDE | 16887006 | ######### | 2846672.76 |
| CHLORINE | 7782505 | 293.95 | 170.18 |
| 4CHLORO2METHYLPHENOL | | 185.65 | 3.96 |
| 1CHLORONAPHTHALENE | | 990.15 | 22.28 |
| 4CHLOROPHENOL | 106489 | 2376.35 | 53.22 |
| 2,4DICHLORO6METHYLPHENOL | | 272.29 | 5.94 |
| 1,1DICHLOROPROPANE | | 14233.36 | 321.80 |
| 1,3DICHLOROPROPANE | 142289 | 3750.18 | 82.92 |
| 2,3DINITROTOLUENE | | 210.41 | 4.58 |
| 2,4DINITRO6METHYL PHENOL | | 148.52 | |
| IRON | 7439896 | No Criteria | 12376.84 |
| pentachlorobenzene | 608935 | 160.90 | 3.47 |
| PENTACHLOROETHANE | | 4480.42 | 99.01 |
| 1,2,3,5tetrachlorobenzene | | 3972.97 | 87.88 |
| 1,1,1,2TETRACHLOROETHANE | 630206 | 12129.30 | 272.29 |
| 2,3,4,6TETRACHLOROPHENOL | 58902 | 86.64 | 1.98 |
| 2,3,5,6TETRACHLOROPHENOL | | 105.20 | 2.35 |
| 2,4,5TRICHLOROPHENOL | 95954 | 284.67 | 6.31 |
| 2,4,6TRINITROPHENOL | 88062 | 52415.91 | 1163.42 |
| XYLENE | 1330207 | 1646.12 | 37.13 |

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ATTACHMENT A-3

Home Depot limits Comparison

Comparison between RI Water Quality limits, limits from the previous issuance of this permit, and the RIPDES 2019 RGP Category E - Sites Containing Volatile Organic Compounds and Other Contaminants Discharging to Non-Class AA receiving waters

| | Mo. Ave. 2011 permit ug/L | Mo. Ave. 2019 RGP ug/L | Mo. Ave. WQ crit ug/L | Daily Max. 2011 permit ug/L | Daily Max. 2019 RGP ug/L | Daily Max. WQ crit ug/L |
|----------------------------|---------------------------------|------------------------------|-----------------------------|-----------------------------------|--------------------------------|-------------------------------|
| Vinyl Chloride | 1.92 | 1.92 | 19.2 | mon. only | 2 | no criteria |
| 1,1-Dichloroethylene | 3.2 | 3.2 | 104.00 | 5.0 | 3.2 | 4640.00 |
| 1,1-Dichloroethane | 5.0 | mon only | not listed | 5.0 | 70 | not listed |
| Cis-1,2-Dichloroethylene | 10.0 | mon only | not listed | 10.0 | 70 | not listed |
| Trans-1,2-Dichloroethylene | 5.0 | not listed | 80000.00 | 5.0 | not listed | no criteria |
| Trichloroethylene | 5.0 | 5 | 344.00 | 5.0 | 5 | 15600.00 |

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DEFINITIONS

GENERAL REQUIREMENTS

(a)a <u>Duty to Comply</u>a

The permittee must comply with all conditions of this permit. Any permit noncompliancea constitutes a violation of Chapter 46-12 of the Rhode Island General Laws and the Clean Watera Act (CWA) and is grounds for enforcement action; for permit termination, revocation and a reissuance, or modification; or for denial of a permit renewal application.a

- (1)a The permittee shall comply with effluent standards or prohibitions established undera Section 307(a) of the CWA for toxic pollutants within the time provided in the regulationsa that establish these standards or prohibitions, even if the permit has not yet been modified a to incorporate the requirement.a
- (2)a The CWA provides that any person who violates a permit condition implementinga Sections 301, 302, 306, 307, 308, 318, or 405 of the CWA is subject to a civil penalty nota to exceed \$10,000 per day of such violation. Any person who willfully or negligentlya violates permit conditions implementing Sections 301, 302, 306, 307 or 308 of the Act isa subject to a fine of not less than \$2,500 nor more than \$25,000 per day of violation, or bya imprisonment of not more than 1 year, or both.a
- (3)a Chapter 46-12 of the Rhode Island General Laws provides that any person who violates aa permit condition is subject to a civil penalty of not more than \$5,000 per day of sucha violation. Any person who willfully or negligently violates a permit condition is subject to a criminal penalty of not more than \$10,000 per day of such violation anda imprisonment for not more than 30 days, or both. Any person who knowingly makes anya false statement in connection with the permit is subject to a criminal penalty of not more a than \$5,000 for each instance of violation or by imprisonment for not more than 30 days, or both.

(b)a Duty to Reapplya

If the permittee wishes to continue an activity regulated by this permit after the expiration datea of this permit, the permittee must apply for and obtain a new permit. The permittee shall submita a new application at least 180 days before the expiration date of the existing permit, unlessa permission for a later date has been granted by the Director. (The Director shall not granta permission for applications to be submitted later than the expiration date of the existing permit.)a

(c)a Need to Halt or Reduce Not a Defensea

It shall not be a defense for a permittee in an enforcement action that it would have been a necessary to halt or reduce the permitted activity in order to maintain compliance with the a conditions of this permit.a

(d)a <u>Duty to Mitigate</u>a

The permittee shall take all reasonable steps to minimize or prevent any discharge in violation of a this permit which has a reasonable likelihood of adversely affecting human health or thea environment.a

(e)e <u>Proper Operation and Maintenance</u>e

The permittee shall at all times properly operate and maintain all facilities and systems ofe treatment and control (and related appurtenances) which are installed or used by the permittee toe achieve compliance with the conditions of this permit. Proper operation and maintenance alsoe includes adequate laboratory controls and appropriate quality assurance procedures, and, wheree applicable, compliance with DEM "Rules and Regulations Pertaining to the Operation ande Maintenance of Wastewater Treatment Facilities" and "Rules and Regulations Pertaining to thee Disposal and Utilization of Wastewater Treatment Facility Sludge." This provision requires thee operation of back-up or auxiliary facilities or similar systems only when the operation ise necessary to achieve compliance with the conditions of the permit.

(f) <u>Permit Actions</u>e

This permit may be modified, revoked and reissued, or terminated for cause, including but note limited to: (1) Violation of any terms or conditions of this permit; (2) Obtaining this permit by misrepresentation or failure to disclose all relevant facts; or (3) A change in any conditions thate requires either a temporary or permanent reduction or elimination of the authorized discharge. The filing of a request by the permittee for a permit modification, revocation and reissuance, ore termination or a notification of planned changes or anticipated noncompliance, does not stay anye permit condition.

(g)e Property Rightse

This permit does not convey any property rights of any sort, or any exclusive privilege.e

(h)e <u>Duty to Provide Information</u>e

The permittee shall furnish to the Director, within a reasonable time, any information which thee Director may request to determine whether cause exists for modifying, revoking and reissuing, e or terminating this permit, or to determine compliance with this permit. The permittee shall also furnish to the Director, upon request, copies of records required to be kept by this permit.

(i) Inspection and Entrye

The permittee shall allow the Director, or an authorized representative, upon the presentation of e credentials and other documents as may be required by law, to:e

- (1)e Enter upon the permittee's premises where a regulated facility or activity is located ore conducted, or where records must be kept under the conditions of this permit;e
- (2)e Have access to and copy, at reasonable times any records that must be kept under thee conditions of this permit;e
- (3)e Inspect at reasonable times any facilities, equipment (including monitoring and controle equipment), practices or operations regulated or required under this permit; ande

- (4)a Sample or monitor any substances or parameters at any location, at reasonable times. fora the purposes of assuring permit compliance or as otherwise authorized by the CWA ora Rhode Island law.a
- (j)a Monitoring and Recordsa
 - (1)a Samples and measurements taken for the purpose of monitoring shall be representative of a the volume and nature of the discharge over the sampling and reporting period.a
 - (2)a The permittee shall retain records of all monitoring information, including all calibrationa and maintenance records and all original strip chart recordings from continuousa monitoring instrumentation, copies of all reports required by this permit, and records of a all data used to complete the application for this permit, for a period of at least 5 yearsa from the date of the sample, measurement, report or application. This period may bea extended by request of the Director at any time.a
 - (3)a Records of monitoring information shall include:a
 - (i)a The date, exact place, and time of sampling or measurements;a
 - (ii)a The individual(s) who performed the sampling or measurements;a
 - (iii)a The date(s) analyses were performed;a
 - (iv)a The individual(s) who performed the analyses;a
 - (v)a The analytical techniques or methods used; anda
 - (vi)a The results of such analyses.a
 - (4)_a Monitoring must be conducted according to test procedures approved under 40 CFR Parta 136 and applicable Rhode Island regulations, unless other test procedures have been a specified in this permit.a
 - (5)a The CWA provides that any person who falsifies, tampers with, or knowingly rendersa inaccurate, any monitoring device or method required to be maintained under this permita shall upon conviction, be punished by a fine of not more than \$10,000 per violation or bya imprisonment for not more than 6 months per violation or by both. Chapter 46-12 of thea Rhode Island General Laws also provides that such acts are subject to a fine of not morea than \$5,000 per violation, or by imprisonment for not more than 30 days per violation. ora by both.
 - (6)a Monitoring results must be reported on a Discharge Monitoring Report (DMR).a
 - (7)_a If the permittee monitors any pollutant more frequently than required by the permit, usinga test procedures approved under 40 CFR Part 136, applicable State regulations, or asa specified in the permit, the results of this monitoring shall be included in the calculationa and reporting of the data submitted in the DMR.a

(k)e Signatory Requiremente

All applications, reports, or information submitted to the Director shall be signed and certified ine accordance with Rule 12 of the Rhode Island Pollutant Discharge Elimination System (RIPDES)e Regulations. Rhode Island General Laws, Chapter 46-12 provides that any person whoe knowingly makes any false statement, representation, or certification in any record or othere document submitted or required to be maintained under this permit, including monitoring reportse or reports of compliance or noncompliance shall, upon conviction, be punished by a fine of note more than \$5,000 per violation, or by imprisonment for not more than 30 days per violation, ore by both.e

(I)e <u>Reporting Requirements</u>e

- (1)e <u>Planned changes</u>. The permittee shall give notice to the Director as soon as possible of e any planned physical alterations or additions to the permitted facility.e
- (2)e <u>Anticipated noncompliance</u>. The permittee shall give advance notice to the Director of e any planned changes in the permitted facility or activity which may result ine noncompliance with the permit requirements.e
- (3) <u>Transfers.</u> This permit is not transferable to any person except after written notice to thee Director. The Director may require modification or revocation and reissuance of thee permit to change the name of the permittee and incorporate such other requirements ase may be necessary under State and Federal law.e
- (4)_e <u>Monitoring reports</u>. Monitoring results shall be reported at the intervals specifiede elsewhere in this permit.e
- (5) <u>Twenty-four hour reporting</u>. The permittee shall immediately report any noncompliancee which may endanger health or the environment by calling DEM at (401) 222-4700 ore (401) 222-3070 at night.e

A written submission shall also be provided within five (5) days of the time the permitteee becomes aware of the circumstances. The written submission shall contain a descriptione of the noncompliance and its cause; the period of noncompliance, including exact datese and times, and if the noncompliance has not been corrected, the anticipated time it ise expected to continue; and steps taken or planned to reduce, eliminate, and prevente reoccurrence of the noncompliance.

The following information must be reported immediately:e

- (i)e Any unanticipated bypass which causes a violation of any effluent limitation in thee permit; ore
- (ii)e Any upset which causes a violation of any effluent limitation in the permit; ore
- (iii)e Any violation of a maximum daily discharge limitation for any of the pollutantse specifically listed by the Director in the permit.

The Director may waive the written report on a case-by-case basis if the oral report has been received within 24 hours.

- (6)a <u>Other noncompliance</u>. The permittee shall report all instances of noncompliance nota reported under paragraphs (1), (2), and (5), of this section, at the time monitoring reports are submitted. The reports shall contain the information required in paragraph (1)(5) of a the section.a
- (7)a <u>Other information</u>. Where the permittee becomes aware that it failed to submit anya relevant facts in a permit application, or submitted incorrect information in a permita application or in any report to the Director, they shall promptly submit such facts or a information.a
- (m)a <u>Bypass</u>a

"Bypass" means the intentional diversion of waste streams from any portion of a treatmenta facility.a

- (1)a <u>Bypass not exceeding limitations</u>. The permittee may allow any bypass to occur which a does not cause effluent limitations to be exceeded, but only if it also is for essentiala maintenance to assure efficient operation. These bypasses are not subject to thea provisions of paragraphs (2) and (3) of this section.a
- (2)a <u>Notice.</u>a
 - (i)a <u>Anticipated bypass.</u> If the permittee knows in advance of the need for a bypass, ita shall submit prior notice, if possible at least ten (10) days before the date of thea bypass.a
 - (ii)a <u>Unanticipated bypass</u>. The permittee shall submit notice of an unanticipateda bypass as required in Rule 14.18 of the RIPDES Regulations.a
- (3)a Prohibition of bypass.a
 - (i)a Bypass is prohibited, and the Director may take enforcement action against aa permittee for bypass, unless:a
 - (A)a Bypass was unavoidable to prevent loss of life, personal injury, or severea property damage, where "severe property damage" means substantiala physical damage to property, damage to the treatment facilities which causes a them to become inoperable, or substantial and permanent loss of naturala resources which can reasonably be expected to occur in the absence of aa bypass. Severe property damage does not mean economic loss caused bya delays in production;a
 - (B)a There were no feasible alternatives to the bypass, such as the use of auxiliarya treatment facilities, retention of untreated wastes, or maintenance duringa normal periods of equipment downtime. This condition is not satisfied if a adequate backup equipment should have been installed in the exercise of a reasonable engineering judgment to prevent a bypass which occurred duringa normal periods of equipment downtime or preventive maintenance; anda
 - (C)a The permittee submitted notices as required under paragraph (2) of thisa section.a

- (ii)a The Director may approve an anticipated bypass, after considering its adversea effects, if the Director determines that it will meet the three conditions listed abovea in paragraph (3)(i) of this section.a
- (n) <u>Upset</u>a

"Upset" means an exceptional incident in which there is unintentional and temporarya noncompliance with technology-based permit effluent limitations because of factors beyond thea reasonable control of the permittee. An upset does not include noncompliance to the extenta caused by operational error, improperly designed treatment facilities, inadequate treatmenta facilities, lack of preventive maintenance, or careless or improper operation.a

- (1) <u>Effect of an upset</u>. An upset constitutes an affirmative defense to an action brought fora noncompliance with such technology-based permit effluent limitations if the requirementsa of paragraph (2) of this section are met. No determination made during administrativea review of claims that noncompliance was caused by upset, and before an action fora noncompliance, is final administrative action subject to judicial review.a
- (2)a <u>Conditions necessary for a demonstration of upset</u>. A permittee who wishes to establisha the affirmative defense of upset shall demonstrate, through properly signed, a contemporaneous operating logs, or other relevant evidence that:a
 - (a)a An upset occurred and that the permittee can identify the cause(s) of the upset;a
 - (b)a The permitted facility was at the time being properly operated;a
 - (c)a The permittee submitted notice of the upset as required in Rule 14.18 of thea RIPDES Regulations; anda
 - (d)a The permittee complied with any remedial measures required under Rule 14.05 of a the RIPDES Regulations.a
- (3)_a <u>Burden of proof.</u> In any enforcement proceeding the permittee seeking to establish thea occurrence of an upset has the burden of proof.a
- (o)a Change in Dischargea

All discharges authorized herein shall be consistent with the terms and conditions of this permit.a Discharges which cause a violation of water quality standards are prohibited. The discharge of a any pollutant identified in this permit more frequently than or at a level in excess of thata authorized shall constitute a violation of the permit. Any anticipated facility expansions, a production increases, or process modifications which will result in new, different or increaseda discharges of pollutants must be reported by submission of a new NPDES application at leasta 180 days prior to commencement of such discharges, or if such changes will not violate thea effluent limitations specified in this permit, by notice, in writing, to the Director of such changes. Following such notice, the permit may be modified to specify and limit any pollutants not previously limited.a

Until such modification is effective, any new or increased discharge in excess of permit limits or not specifically authorized by the permit constitutes a violation.

(p) <u>Removed Substances</u>

Solids, sludges, filter backwash, or other pollutants removed in the course of treatment or control of wastewaters shall be disposed of in a manner consistent with applicable Federal and State laws and regulations including, but not limited to the CWA and the Federal Resource Conservation and Recovery Act, 42 U.S.C. §§6901 et seq., Rhode Island General Laws, Chapters 46-12, 23-19.1 and regulations promulgated thereunder.

(q)o <u>Power Failures</u>o

In order to maintain compliance with the effluent limitation and prohibitions of this permit, theo permittee shall either:o

In accordance with the Schedule of Compliance contained in Part I, provide an alternative power source sufficient to operate the wastewater control facilities;

or if such alternative power source is not in existence, and no date for its implementation appears in Part I,

Halt reduce or otherwise control production and/or all discharges upon the reduction, loss, or failure of the primary source of power to the wastewater control facilities.

(r)o Availability of Reportso

Except for data determined to be confidential under paragraph (w) below, all reports prepared ino accordance with the terms of this permit shall be available for public inspection at the DEM, 2910 Promenade Street, Providence, Rhode Island. As required by the CWA, effluent data shall noto be considered confidential. Knowingly making any false statement on any such report mayo result in the imposition of criminal penalties as provided for in Section 309 of the CWA ando under Section 46-12-14 of the Rhode Island General Laws.o

(s)o <u>State Laws</u>o

Nothing in this permit shall be construed to preclude the institution of any legal action or relieveo the permittee from any responsibilities, liabilities, or penalties established pursuant to anyo applicable State law.o

(t)o Other Lawso

The issuance of a permit does not authorize any injury to persons or property or invasion of o other private rights, nor does it relieve the permittee of its obligation to comply with any othero applicable Federal, State, and local laws and regulations.o

(u)a <u>Severability</u>a

The provisions of this permit are severable, and if any provision of this permit, or the applicationa of any provision of this permit to any circumstance, is held invalid, the application of such a provision to other circumstances, and the remainder of this permit, shall not be affected thereby.a

(v)a <u>Reopener Clause</u>a

The Director reserves the right to make appropriate revisions to this permit in order toa incorporate any appropriate effluent limitations, schedules of compliance, or other provisionsa which may be authorized under the CWA or State law. In accordance with Rules 15 and 23 of a the RIPDES Regulations, if any effluent standard or prohibition, or water quality standard isa promulgated under the CWA or under State law which is more stringent than any limitation on a the pollutant in the permit, or controls a pollutant not limited in the permit, then the Directora may promptly reopen the permit and modify or revoke and reissue the permit to conform to thea applicable standard.

(w)a Confidentiality of Informationa

- (1)a Any information submitted to DEM pursuant to these regulations may be claimed as a confidential by the submitter. Any such claim must be asserted at the time of submissiona in the manner prescribed on the application form or instructions or, in the case of othera submissions, by stamping the words "confidential business information" on each pagea containing such information. If no claim is made at the time of submission, <u>DEM may</u>a make the information available to the pubic without further notice.a
- (2)a Claims of confidentiality for the following information will be denied:a
 - (i)a The name and address of any permit applicant or permittee;a
 - (ii)a Permit applications, permits and any attachments thereto; anda
 - (iii)a NPDES effluent data.a

(x)a Best Management Practicesa

The permittee shall adopt Best Management Practices (BMP) to control or abate the discharge of a toxic pollutants and hazardous substances associated with or ancillary to the industriala manufacturing or treatment process and the Director may request the submission of a BMP plana where the Director determines that a permittee's practices may contribute significant amounts of a such pollutants to waters of the State.a

(y)a Right of Appeala

Within thirty (30) days of receipt of notice of a final permit decision, the permittee or anya interested person may submit a request to the Director for an adjudicatory hearing to reconsidera or contest that decision. The request for a hearing must conform to the requirements of Rule 49a of the RIPDES Regulations.a

DEFINITIONS

- 1.e For purposes of this permit, those definitions contained in the RIPDES Regulations and thee Rhode Island Pretreatment Regulations shall apply.e
- 2.e The following abbreviations, when used, are defined below.e

| cu. M/day or M ³ /day | cubic meters per day |
|----------------------------------|---|
| mg/l | milligrams per liter |
| ug/l | micrograms per liter |
| lbs/day | pounds per day |
| kg/day | kilograms per day |
| Temp. °C | temperature in degrees Centigrade |
| Temp. °F | temperature in degrees Fahrenheit |
| Turb. | turbidity measured by the Nephelometric Method (NTU) |
| TNFR or TSS | total nonfilterable residue or total suspended solids |
| DO | dissolved oxygen |
| BOD | five-day biochemical oxygen demand unless otherwise specified |
| TKN | total Kjeldahl nitrogen as nitrogen |
| Total N | total nitrogen |
| NH ₃ -N | ammonia nitrogen as nitrogen |
| Total P | total phosphorus |
| COD | chemical oxygen demand |
| TOC | total organic carbon |
| Surfactant | surface-active agent |
| рН | a measure of the hydrogen ion concentration |
| PCB | polychlorinated biphenyl |
| CFS | cubic feet per second |
| MGD | million gallons per day |
| Oil & Grease | Freon extractable material |
| Total Coliform | total coliform bacteria |
| Fecal Coliform | total fecal coliform bacteria |
| ml/l | milliliter(s) per liter |
| NO ₃ -N | nitrate nitrogen as nitrogen |
| NO ₂ -N | nitrite nitrogen as nitrogen |
| NO ₃ -NO ₂ | combined nitrate and nitrite nitrogen as nitrogen |
| Clę | total residual chlorine |
| | |