BERMUDA

WATER RESOURCES (POLLUTION DISCHARGE REPORTING, ABATEMENT AND REMEDIATION) REGULATIONS 2025

BR 115 / 2025

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The Minister responsible for the Environment, in exercise of the power conferred by section 39, as read with Part VIII, of the Water Resources Act 1975, makes the following Regulations:

Citation

1 These Regulations may be cited as the Water Resources (Pollution Discharge Reporting, Abatement and Remediation) Regulations 2025.

Interpretation

2 In these Regulations, unless the context otherwise requires—

"Act" means the Water Resources Act 1975;

"controlled plant" has the meaning given in section 2 of the Clean Air Act 1991;

"Department" means the Department of Environment and Natural Resources;

"Director" means the Director of the Department;

"discharge" means any release however caused and includes any escape, disposal, spilling, leaking, pumping, emitting or emptying, and cognate expressions are to be construed accordingly;

"environmental monitoring company" means an environmental monitoring company approved by the Director under regulation 10;

"excavation company" means an excavation company approved by the Director under regulation 10;

"ground" means any soil, rock or fill through which seepage of any substance into public water or sea water may occur;

"plant" includes a controlled plant;

"premises" includes any building, plant, facility, commercial enterprise, structure or thing situated on land;

"public water" means—

(a) groundwater;

(b) water in a pond where the removal of water from the pond will occasion the seepage of groundwater into the pond;

(c) water in a pond where the addition of water to the pond will occasion the seepage of water from the pond into groundwater,

and includes all such water made available by means of works, but does not include any such water which has been lawfully appropriated for use;

"RBCA Guidelines" means the Risk-Based Corrective Action Guidelines for the Investigation and Remediation of Soil and Groundwater Contamination in Bermuda (as amended from time to time) published pursuant to regulation 4;

"RBCA Limits: Tier I Risk-Based Screening Levels" or "RBSL" means the Risk-Based Corrective Action Limits Tier I Risk-Based Screening Levels, as set out in Schedules 1 and 2, for specifying the concentration thresholds of contaminants resulting in pollution;

"soil-to-groundwater" means any ground where the soil is less than four feet elevation above the water table;

"unsealed ground" means ground other than ground situated over concrete;

"zoned" means—

(a) zoned pursuant to a development plan prepared in accordance with the Development and Planning Act 1974; or

(b) otherwise classified under these Regulations as being soil-to-groundwater.

Risk-Based Corrective Action (RBCA) Guidelines; application

3 (1) Subject to these Regulations, the RBCA Guidelines shall apply for the purposes of prescribing—

(a) the segregation, storage and disposal practices to prevent or reduce the spill risk for fuel, oil, waste and other chemicals that may pollute public water or ground;

(b) the notification, reporting, assessment and monitoring requirements in the event of a fuel, oil, waste or hazardous chemical spill or other pollution event;

(c) the clean up requirements in the event of any pollution, fouling or other contamination of public water or ground.

(2) Subject to these Regulations, the RBCA Guidelines shall apply to any person who has responsibility under the Act to prevent, determine, assess, abate or remediate the pollution or fouling of any public water or ground.

(3) In the event of any conflict between any provision of the RBCA Guidelines and the Regulations, the Regulations shall prevail.

Publication of RBCA Guidelines

4 The Director shall publish the RBCA Guidelines and such obligation to publish shall be fulfilled by—

(a) depositing a copy of the RBCA Guidelines in the office of the Department, or at some other convenient location, for inspection by members of the public during regular office hours, without charge;

(b) publishing on the Department's website the full text or links to the RBCA Guidelines; and

(c) in the case of an amendment to the RBCA Guidelines, publishing a notice in the Gazette of the amendment and the date such amendment is to take effect.

Discharge reporting

5 The discharge of any fuel, oil, waste or hazardous chemicals directly or indirectly into any public water, sea water or ground shall, in accordance with any applicable notification requirements under the RBCA Guidelines, be reported by email or telephone to the Department's Pollution Control Section.

Special reporting requirements for fuel storage tanks and large spills

6 (1) This regulation applies in respect of any land or premises on which there exists an underground or above-ground fuel storage tank.

(2) In the event of a discharge as described in paragraph (3), the owner or person entitled to the possession of such land or the owner or occupier of such premises shall—

(a) report the discharge, in accordance with regulation 5, within a period of 24 hours from the occurrence of the discharge or by the next day of business; and

(b) include in the report any immediate steps taken to abate such discharge.

(3) Paragraph (2) applies to the discharge of fuel, oil, waste, hazardous chemicals, or other organic chemicals of a quantity exceeding one US gallon (whether such discharge is a single spill event or discharged over a prolonged period of time) into unsealed ground.

(4) Without prejudice to the foregoing, any person entitled to possess, own or occupy any land or premises referred to in paragraph (1) shall notify the Department, in such form as the Department may require, of the existence and location of every fuel storage tank with a capacity exceeding 500 US gallons.

(5) A person who fails to comply with or who knowingly provides false information for the purposes of this regulation, commits an offence and is liable on summary conviction to a fine of $20,000 or imprisonment for a period of three months.

Determining pollution; RBCA Limits: Tier I Risk-Based Screening Levels (RBSL)

7 (1) Schedule 1 has effect for the purposes of determining at what concentration level a compound or substance set out therein is deemed to pollute—

(a) the soil of any ground, whether in respect of land used or zoned for residential or commercial/industrial purposes;

(b) any ground, where the depth of the ground is comparable to water table height (also referred to as soil-to-groundwater).

(2) Schedule 2 has effect for the purposes of determining at what concentration level a compound or substance set out therein is deemed to pollute any groundwater.

(3) The Minister may by order amend Schedules 1 and 2 and the Statutory Instruments Act 1977 shall not apply to such order.

Abatement and remediation standards

8 (1) Where a person is required by notice under the Act to abate or remediate any pollution or fouling of public water or ground, such pollution or fouling shall be deemed abated or remediated by the Minister in writing, if—

(a) any action directed under the notice to be taken is so taken; and

(b) the concentration levels of all contaminants no longer exceeds the RBSL relevant to such public water or ground; or

(c) subject to regulation 11, the Minister is satisfied, after conferring with the Director, that such pollution or fouling has otherwise been sufficiently abated or remediated.

(2) In any other case, any pollution or fouling of public water or ground shall be deemed remediated or abated by an authorized officer in writing if—

(a) subject to these Regulations, any applicable clean up and monitoring actions set out in the RBCA Guidelines are so taken; and

(b) the concentration levels of all contaminants no longer exceeds the RBSL relevant to such public water or ground; or

(c) subject to regulation 11, the authorized officer is satisfied, after conferring with the Director, that such pollution or fouling has otherwise been sufficiently abated or remediated.

Abatement and remediation for large ground spills

9 (1) Paragraph (2) applies in the event of a discharge into unsealed ground of any fuel, oil, waste, hazardous chemicals, or other organic chemicals of a quantity exceeding one US gallon (whether from a single spill event or discharged over a prolonged period of time).

(2) The abatement or remediation of any pollution occurring under paragraph (1) may require the transporting of any impacted ground material to a facility that can bioremediate the soil of such ground until it meets the RBSL for the relevant zone of land on which the discharge occurred.

(3) Paragraph (4) applies in the event of a discharge into unsealed ground of any fuel, oil, waste, hazardous chemicals, or other organic chemicals of a quantity exceeding 20 US gallons (whether from a single spill event or discharged over a prolonged period of time).

(4) The abatement or remediation of any pollution occurring under paragraph (3) may require the contracting of an environmental monitoring company (or excavation company working under the direction of an environmental monitoring company), to assist in such abatement, remediation and monitoring efforts including actions set out in paragraphs (2) and (5).

(5) Where the remediation of any impacted ground material transported under this regulation is completed such that the ground material satisfies the RBSL for areas zoned commercial/industrial, that ground material may, with the approval of the Department, be transported for use at a site zoned as commercial/industrial.

Approval of companies for environmental monitoring and excavation

10 (1) An environmental monitoring company or an excavation company may be approved, for the purposes of regulation 9, if, on an application for approval, the Director is satisfied that the requirements set out in paragraph (2) are met.

(2) The requirements for approval under paragraph (1) are as follows—

(a) in the case of an environmental monitoring company, the company agrees in writing—

(i) to be instructed by the Department with respect to overseeing the monitoring, abatement or remediation of any pollution, and any subsequent monitoring;

(ii) to instruct, where necessary, an excavation company with respect to the excavating and transporting of impacted ground material for remediation or disposal;

(iii) to report progress, outcomes or other findings to the Director; and

(iv) to comply with any applicable RBCA Guidelines;

(b) in the case of an excavation company, the company agrees in writing—

(i) to be instructed by the Department or an environmental monitoring company with respect to the excavating and transporting of impacted ground material for remediation or disposal; and

(ii) to comply with any applicable RBCA Guidelines.

(3) An environmental monitoring company or excavation company approved under this regulation shall be listed on the Department's website where the name and contact information for such company shall be provided.

(4) An application under paragraph (1) shall be in such form as the Director may determine.

Director may agree to less stringent levels for ground remediation

11 (1) Following a discharge, the Director may agree to less stringent site specific target levels for remediation than the RBSL for the relevant zone of land on which the discharge occurred if—

(a) the owner or person entitled to possession of any land on which a discharge has occurred makes such request to the Director in writing;

(b) all applicable risk or other assessments as may be prescribed, in the circumstances, under the RBCA Guidelines have been conducted; and

(c) having considered those assessments and the RBCA Guidelines, the Director is of the opinion that it is not technically or economically feasible to restore such land to the RBSL for the relevant zone of land on which the discharge occurred.

(2) For the purposes of paragraph (1), the Director may work with the land owner or person entitled to its possession, or with an environmental monitoring company assisting in any monitoring, abatement or remediation efforts to determine, in the particular case, whether less stringent target levels for remediation can be agreed.

(3) In any case to which paragraph (1) applies, the Director shall set out in writing the less stringent site specific target levels arrived at and the reasons for determining those levels.

Application in relation to controlled plants

12 Without prejudice to the foregoing, if in the case of a controlled plant, a conflict arises between any provision of the RBCA Guidelines, these Regulations and the Clean Air Act 1991, the Clean Air Act 1991 shall prevail.

SCHEDULE 1

(regulation 7(1))

RBCA LIMITS: TIER I RISK-BASED SCREENING LEVELS (RBSL) FOR SOIL IN LAND AREAS USED OR ZONED FOR "RESIDENTIAL" AND "COMMERCIAL/INDUSTRIAL" PURPOSES AND ALSO SOIL AT "SOIL-TO-GROUNDWATER" LEVELS

1 A substance or compound specified in column 1 (and as may be assigned a chemical abstraction service number specified in column 2), if found in the amounts at or exceeding the levels provided in the remaining columns (as it relates to land used or zoned for residential or commercial/industrial purposes, or in the soil to any ground where the soil depth is less than four feet elevation above the water table), shall be deemed to have polluted the ground in which it is found.

COLUMN 1	COLUMN 2	COLUMN 3		COLUMN 4		COLUMN 5	
Compound	CAS#	Residential (mg/kg)		Commercial / Industrial (mg/kg)		Soil-to-groundwater (mg/kg)	
Alkanes (Aliphatic Hydrocarbons)							
C5-C8		939	N	24528	N	72	N
C9-C12		9386	N	245280	N	3255	N
C9-C18		9386	N	245280	N	424799	N
C19-C36		93860	N		N	Immobile	N
Aromatic Hydrocarbons							
C9-C10		469	N	12264	N	34	N
C11-C22		469	N	12264	N	206	N
Organic Compounds							
Acenaphthene	83-32-9	13000	P	170000	P	2700	P
Acenapnthylene	208-96-8	13000	P	170000	P	38	R
Acetone	67-64-1	10000	P	10000	P	2.4	R
Acrlyamide (propenamide)	79-06-1	3.2	R	13	R	0.00052	R
Anthracene	120-12-7	66000	P	190000	P	230	P
Benzene	71-43-2	19	R	33	R	0.0093	R
Benzo(a)anthracene	56-55-3	6	R	12	R	80	P
Benzo(a)pyrene	50-32-8	0.6	R	11	P	46	P
Benzo(b)fluoranthene	205-99-2	6	R	12	R	120	P
Benzo(g,h,i)perylene	191-24-2	13000	P	170000	P	180	P
Benzo(k)fluoranthene	207-08-9	250	P	1100	P	600	P

	Bromoform (tribromomethane)	75-25-2	71	R	120	R	0.54	R
	Carbon disulfide	75-15-0	10000	p	10000	P	14	R
	Carbon tetrachloride	56-23-5	4.3	R	7.5	R	0.07	R
	Chlorobenzene	108-90-7	4400	P	10000	P	0.83	R
	Chloroethane	75-00-3	10000	P	10000	P	54	R
	Chloroform (trichloromethane)	67-66-3	73	R	160	R	0.3	R
	Chloromethane	74-87-3	44	R	75	R	0.083	P
	2-Chlorophenol	95-57-8	330	P	920	P	2	R
	Chrysene	218-01-9	2500	P	11000	P	220	P
	Cumene	98-82-8	170	P	480	P	1.9	R
	Dibenz(a,h)anthracene	53-70-3	0.6	R	11	P	41	P
	1,2-Dichlorobenzene (-o)	95-50-1	3800	P	10000	P	33	R
	1,4-Dichlorobenzene (-p)	75-34-3	750	P	3300	P	4.2	R
	1,1 Dichloroethane	75-34-3	200	P	1000	P	28	R
	1,2 Dichloroethane	107-06-2	6.1	R	11	R	0.011	R
	1,2-Dichloroethene (cis)	156-59-2	670	P	1900	P	0.18	R
	1,2-Dichloroethene (trans)	156-60-5	1300	P	3700	P	0.16	R
	2,4-Dimethylphenol (m-xylenol)	105-67-9	4400	P	10000	P	31	P
	Ethylbenzene	100-41-4	10000	P	10000	P	2.4	R
	Ethylene glycol	107-21-1	48000	R	48000	R	130	R
	bis-2-Ethylhexyl phthalate	117-81-7	1300	P	5700	P	25	R
	Fluoranthene	206-44-0	8800	P	110000	P	3300	P
	Fluorene	86-73-7	8800	P	100000	P	380	P
	n-Hexane	110-54-3	3800	P	10000	P	510	P
	Indeno(1,2,3-cd)pyrene	193-39-5	6	R	12	R	3400	R
	Methylene chloride	75-09-2	75	R	130	R	0.0061	R
	Methyl ethyl ketone (MEK, 2-butanone)	78-93-3	10000	P	10000	P	43	R
	3-Methylphenol (m-cresol)	108-39-4	1100	P	14000	P	15	R
	4-Methylphenol (p-cresol)	106-44-5	1100	P	14000	P	1.4	R
	Methyl t-butyl ether (MTBE)	1634-04-4	120	R	170	R	0.51	R
	Naphthalene	91-20-3	8800	P	110000	P	14	R

	n-Nitrosodimethylamine	62-75-9	0.26	R	0.69	R	0.000037	R
	PCBs	1336-36-3	4.4	P	44	P	2.1	R
	Phenanthrene	85-01-8	66000	P	190000	P	11000	P
	Phenol	108-95-2	130000	P	190000	P	84	R
	Pyrene	129-00-0	6600	P	84000	P	220	P
	1,1,2,2-Tetrachloroethane	79-34-5	2.8	R	4.9	R	0.011	R
	Tetrachloroethylene (PCE)	127-18-4	11	R	19	R	0.043	R
	Toluene	108-88-3	7600	P	10000	P	4.4	R
	1,2,4-Trichlororbenzene	120-82-1	240	R	350	R	15	R
	1,1,1-Trichloroethane	71-55-6	10000	P	10000	P	1.7	R
	1,1,2-Trichloroethane	79-00-5	9.8	R	17	R	0.0036	R
	Trichloroethylene (TCE)	79-01-6	51	R	88	R	0.0077	R
	Vinyl chloride	75-01-4	0.3	R	0.51	R	0.0084	R
	Xylene (mixed isomers)	1330-20-7	10000	P	10000	P	72	R
Inorganic Compounds								
	Arsenic	7440-38-2	9.7	R	33	R	76	
	Barium	7440-39-3						
	Cadmium	7440-43-9					16	
	Chromium	16065-83-1	5.40E+05		1.20E+06		4.60E+01	
	Copper	7440-50-8	2.70E+04		7.60E+04		5.00E+03	
	Cyanide	57-12-5						
	Lead	7439-92-1						
	Mercury	7439-97-6						
	Nickel	7440-02-0					86	
	Selenium	7782-49-2					6.2	
	Silver	7440-22-4						
	Zinc	7440-66-6					10000	

Notes

2 In the table above—

"N" = Value is based on the North Carolina Guidelines for the Investigation and Remediation of Soil and Groundwater

"P" = Value is based on the Pennsylvania Act 2 Land Recycling Program

"R" = Value is based on ASTM RBCA Tier I Model for generic sites in Bermuda

SCHEDULE 2

(regulation 7(2))

RBCA LIMITS: TIER I RISK-BASED SCREENING LEVELS (RBSL) FOR GROUNDWATER

1 A substance or compound specified in column 1 (and as may be assigned a chemical abstraction service number specified in column 2) shall, if found in the amounts at or exceeding the levels provided in column 3 in any groundwater, be deemed to have polluted the groundwater in which it is found.

COLUMN 1		COLUMN 2	COLUMN 3	
	Compound	CAS#	Groundwater RBCA (mg/l)	
	Alkanes (Aliphatic Hydrocarbons)			
	C5-C8		0.42	N
	C9-C12		4.2	N
	C9-C18		4.2	N
	C19-C36		42	N
Aromatic Hydrocarbons				
	C9-C10		0.21	N
	C11-C22		0.21	N
Organic Compounds				
	Acenaphthene	83-32-9	2.2	R
	Acenapnthylene	208-96-8	0.15	R
	Acetone	67-64-1	3.7	R
	Acrlyamide (propenamide)	79-06-1	1.90E-04	R
	Anthracene	120-12-7	0.043	P
	Benzene	71-43-2	0.005	M
	Benzo(a)anthracene	56-55-3	0.0012	R
	Benzo(a)pyrene	50-32-8	1.20E-04	R
	Benzo(b)fluoranthene	205-99-2	0.0012	R
	Benzo(g,h,i)perylene	191-24-2	2.60E-04	P
	Benzo(k)fluoranthene	207-08-9	5.50E-04	P
	Bromoform (tribromomethane)	75-25-2	0.11	R
	Carbon disulfide	75-15-0	0.46	R
	Carbon tetrachloride	56-23-5	0.005	M
	Chlorobenzene	108-90-7	0.1	M
	Chloroethane	75-00-3	15	R
	Chloroform (trichloromethane)	67-66-3	0.1	M

	Chloromethane	74-87-3	0.0026	N
	2-Chlorophenol	95-57-8	0.18	R
	Chrysene	218-01-9	2.00E-04	M
	Cumene	98-82-8	0.73	R
	Dibenz(a,h)anthracene	53-70-3	1.20E-04	
	1,2-Dichlorobenzene (-o)	95-50-1	0.6	M
	1,4-Dichlorobenzene (-p)	106-46-7	0.035	R
	1,1 Dichloroethane	75-34-3	3.7	R
	1,2 Dichloroethane	107-06-2	0.005	M
	1,2-Dichloroethene (cis)	156-59-2	0.07	M
	1,2-Dichloroethene (trans)	156-60-5	0.1	M
	2,4-Dimethylphenol (m-xylenol)	105-67-9	0.14	N
	Ethylbenzene	100-41-4	0.7	M
	Ethylene glycol	107-21-1	73	R
	bis-2-Ethylhexyl phthalate	117-81-7	0.006	M
	Fluoranthene	206-44-0	0.27	P
	Fluorene	86-73-7	1.5	R
	n-Hexane	110-54-3	0.74	R
	Indeno(1,2,3-cd)pyrene	193-39-5	0.0012	R
	Methylene chloride	75-09-2	0.005	M
	Methyl ethyl ketone (MEK, 2-butanone)	78-93-3	22	R
	3-Methylphenol (m-cresol)	108-39-4	1.8	R
	4-Methylphenol (p-cresol)	106-44-5	0.18	R
	Methyl t-butyl ether (MTBE)	1634-04-4	0.18	R
	Naphthalene	91-20-3	0.15	R
	n-Nitrosodimethylamine	62-75-9	1.70E-05	R
	PCBs	1336-36-3	1.10E-04	R
	Phenanthrene	85-01-8	0.15	R
	Phenol	108-95-2	22	R
	Pyrene	129-00-0	0.013	P
	1,1,2,2-Tetrachloroethane	79-34-5	0.0043	R
	Tetrachloroethylene (PCE)	127-18-4	0.005	M
	Toluene	108-88-3	1	M
	1,2,4-Trichlororbenzene	120-82-1	0.07	M
	1,1,1-Trichloroethane	71-55-6	0.2	M
	1,1,2-Trichloroethane	79-00-5	0.005	M
	Trichloroethylene (TCE)	79-01-6	0.005	M
	Vinyl chloride	75-01-4	4.50E-04	R

	Xylene (mixed isomers)	1330-20-7	10	M
Inorganic Compounds				
	Arsenic	7440-38-2	4.90E-04	R
	Barium	7440-39-3	2	M
	Cadmium	7440-43-9	0.005	M
	Chromium	16065-83-1	0.1	M
	Copper	7440-50-8	1.4	R
	Cyanide	57-12-5	0.154	N
	Lead	7439-92-1	0.005	M
	Mercury	7439-97-6	0.002	M
	Nickel	7440-02-0	0.1	M
	Selenium	7782-49-2	0.05	M
	Silver	7440-22-4	0.18	R
	Zinc	7440-66-6	11	R

Notes

2 In the table above—

"M" = Value is based on the USEPA Maximum Contaminant Level (MCL)

"N" = Value is based on the North Carolina Guidelines for the Investigation and Remediation of Soil and Groundwater

"P" = Value is based on the Pennsylvania Act 2 Land Recycling Program

"R" = Value is based on ASTM RBCA Tier I Model for generic sites in Bermuda

Made this 9th day of December 2025

Minister of Public Works & Environment

[Operative Date: 09 December 2025]