Reporting of Emission to Surface Water for the period from 1st January to 30th June 2022.

Operator : RWE Generation UK plc **Form:** Water1

Location: Aberthaw Quarry Ash Disposal Site

Permit/Variation Number: BP3339BH

Emission point	Substance/ Parameter	Emission Limit Value	Result [1]	Test Method [2]	Sample Date and Times [3]	Accreditation/ Certification [4]	Uncertainty [5]
SW12	Aluminium, Dissolved		<35 µg/l		23/02/2022	Sampling Amec/Testing ALS	
	Antimony, Dissolved		<13 µg/l				
	Arsenic Dissolved		<2.0 µg/l				
	Boron, Dissolved		1220 µg/l				
	Cadmium, Dissolved		0.22 µg/l				
	Calcium, Dissolved		270 mg/l				
	Chromium, Dissolved		5.5 µg/l				
	Copper, Dissolved		<40 µg/l				
	Iron, Dissolved		<200 µg/l				
	Magnesium, Dissolved		39 mg/l				
	Manganese, Dissolved		49.0 µg/l				
	Molybdenum, Dissolved		1700 µg/l				
	Nickel, Dissolved		<10.0 µg/l				
	Selenium Dissolved		n/s µg/l				
	Vanadium, Dissolved		2.5 µg/l				
	Mercury, Dissolved		<0.01 µg/l				
	Total Alkalinity as CaCO3		154 mg/l				
	Electrical Conductivity at 20C		2670 mS/cm				
	Potassium, Dissolved		42 mg/l				
	Sodium, Dissolved		330 mg/l				
	Sulphate, Dissolved		542 mg/l				
	Total Oxidised Nitrogen		13 mg/l				
	Chloride		508 mg/l				
	Fluoride		0.3 mg/l				
	Ammoniacal Nitrogen		<0.06 mg/l				
	Total Organic Carbon		2.5 mg/l				
	Nitrate		13.3 mg/l				
	pH		8.1 pH Units				

Emission point	Substance/ Parameter	Emission Limit Value	Result [1]	Test Method [2]	Sample Date and Times [3]	Accreditation/ Certification [4]	Uncertainty [5]
SW12	Aluminium, Dissolved		<3.5 µg/l		27/04/2022	Sampling Amec/Testing ALS	
	Antimony, Dissolved		<1.3 µg/l				
	Arsenic Dissolved		1.1 µg/l				
	Boron, Dissolved		934 µg/l				
	Cadmium, Dissolved		<0.20 µg/l				
	Calcium, Dissolved		270 mg/l				
	Chromium, Dissolved		6.5 µg/l				
	Copper, Dissolved		<4.0 µg/l				
	Iron, Dissolved		<20 µg/l				
	Magnesium, Dissolved		38 mg/l				
	Manganese, Dissolved		0.5 µg/l				
	Molybdenum, Dissolved		1920 µg/l				
	Nickel, Dissolved		4.9 µg/l				
	Selenium Dissolved		n/s µg/l				
	Vanadium, Dissolved		2.2 µg/l				
	Mercury, Dissolved		<0.01 µg/l				
	Total Alkalinity as CaCO3		115.00 mg/l				
	Electrical Conductivity at 20C		2750 mS/cm				
	Potassium, Dissolved		45 mg/l				
	Sodium, Dissolved		330 mg/l				
	Sulphate, Dissolved		570 mg/l				
	Total Oxidised Nitrogen		15 mg/l				
	Chloride		562 mg/l				
	Fluoride		0.3 mg/l				
	Ammoniacal Nitrogen		0.09 mg/l				
	Total Organic Carbon		3.0 mg/l				
	Nitrate		14.6 mg/l				
	pH		8.0 pH Units				

Emission point	Substance/ Parameter	Emission Limit Value	Result [1]	Test Method [2]	Sample Date and Times [3]	Accreditation/ Certification [4]	Uncertainty [5]
Settlement Ponds	Aluminium, Dissolved		13.0 µg/l		01/02/2022	Sampling Station / Testing ALS	
	Antimony, Dissolved		<1.3 µg/l				
	Arsenic Dissolved	50	2.4 µg/l				
	Boron, Dissolved	2000	1100 µg/l				
	Cadmium, Dissolved	5	<0.02 µg/l				
	Calcium, Dissolved		314 mg/l				
	Chromium, Dissolved	50	15 µg/l				
	Copper, Dissolved		<4 µg/l				
	Iron, Dissolved		<20 µg/l				
	Magnesium, Dissolved		37 mg/l				
	Manganese, Dissolved		28.0 µg/l				
	Molybdenum, Dissolved		2400 µg/l				
	Nickel, Dissolved		8.2 µg/l				
	Selenium Dissolved		33 µg/l				
	Vanadium, Dissolved	60	7.0 µg/l				
	Mercury, Dissolved		<0.01 µg/l				
	Total Alkalinity as CaCO3		<2.3 mg/l				
	Electrical Conductivity at 20C		3260 mS/cm				
	Potassium, Dissolved		49 mg/l				
	Sodium, Dissolved		410 mg/l				
	Sulphate, Dissolved	400	604 mg/l				
	Total Oxidised Nitrogen		28 mg/l				
	Chloride		702 mg/l				
	Fluoride		0.2 mg/l				
	Ammoniacal Nitrogen	0.6	3.03 mg/l				
	Total Organic Carbon		1.8 mg/l				
	Nitrate		1.5 mg/l				
	pH	<9	8.1 pH Units				

Emission point	Substance/ Parameter	Emission Limit Value	Result [1]	Test Method [2]	Sample Date and Times [3]	Accreditation/ Certification [4]	Uncertainty [5]
Settlement Ponds	Aluminium, Dissolved		8.3 µg/l		01/03/2022	Sampling Station / Testing ALS	
	Antimony, Dissolved		<1.3 µg/l				
	Arsenic Dissolved	50	2.1 µg/l				
	Boron, Dissolved	2000	1000 µg/l				
	Cadmium, Dissolved	5	<0.02 µg/l				
	Calcium, Dissolved		306 mg/l				
	Chromium, Dissolved	50	13 µg/l				
	Copper, Dissolved		<4 µg/l				
	Iron, Dissolved		<20 µg/l				
	Magnesium, Dissolved		35 mg/l				
	Manganese, Dissolved		12.0 µg/l				
	Molybdenum, Dissolved		3000 µg/l				
	Nickel, Dissolved		7.7 µg/l				
	Selenium Dissolved		31 µg/l				
	Vanadium, Dissolved	60	5.9 µg/l				
	Mercury, Dissolved		<0.01 µg/l				
	Total Alkalinity as CaCO3		170.00 mg/l				
	Electrical Conductivity at 20C		3250 mS/cm				
	Potassium, Dissolved		47 mg/l				
	Sodium, Dissolved		390 mg/l				
	Sulphate, Dissolved	400	565 mg/l				
	Total Oxidised Nitrogen		27 mg/l				
	Chloride		700 mg/l				
	Fluoride		0.2 mg/l				
	Ammoniacal Nitrogen	0.6	0.99 mg/l				
	Total Organic Carbon		2.5 mg/l				
	Nitrate		1.2 mg/l				
	pH	<9	8.1 pH Units				

Emission point	Substance/ Parameter	Emission Limit Value	Result [1]	Test Method [2]	Sample Date and Times [3]	Accreditation/ Certification [4]	Uncertainty [5]
Settlement Ponds	Aluminium, Dissolved		11 µg/l		30/03/2022	Sampling Station / Testing ALS	
	Antimony, Dissolved		<1.3 µg/l				
	Arsenic Dissolved	50	2.8 µg/l				
	Boron, Dissolved	2000	1200 µg/l				
	Cadmium, Dissolved	5	0.07 µg/l				
	Calcium, Dissolved		354 mg/l				
	Chromium, Dissolved	50	17 µg/l				
	Copper, Dissolved		<4 µg/l				
	Iron, Dissolved		<20 µg/l				
	Magnesium, Dissolved		40 mg/l				
	Manganese, Dissolved		8.6 µg/l				
	Molybdenum, Dissolved		2700 µg/l				
	Nickel, Dissolved		7.5 µg/l				
	Selenium Dissolved		36 µg/l				
	Vanadium, Dissolved	60	6.9 µg/l				
	Mercury, Dissolved		<0.01 µg/l				
	Total Alkalinity as CaCO3		170.00 mg/l				
	Electrical Conductivity at 20C		3600 mS/cm				
	Potassium, Dissolved		54 mg/l				
	Sodium, Dissolved		450 mg/l				
	Sulphate, Dissolved	400	651 mg/l				
	Total Oxidised Nitrogen		30 mg/l				
	Chloride		786 mg/l				
	Fluoride		0.2 mg/l				
	Ammoniacal Nitrogen	0.6	2.00 mg/l				
	Total Organic Carbon		2.3 mg/l				
	Nitrate		1.3 mg/l				
	pH	<9	7.9 pH Units				

Emission point	Substance/ Parameter	Emission Limit Value	Result [1]	Test Method [2]	Sample Date and Times [3]	Accreditation/ Certification [4]	Uncertainty [5]
Settlement Ponds	Aluminium, Dissolved		4.8 µg/l		02/05/2022	Sampling Station / Testing ALS	
	Antimony, Dissolved		<1.3 µg/l				
	Arsenic Dissolved	50	2.9 µg/l				
	Boron, Dissolved	2000	1700 µg/l				
	Cadmium, Dissolved	5	<0.2 µg/l				
	Calcium, Dissolved		486 mg/l				
	Chromium, Dissolved	50	23 µg/l				
	Copper, Dissolved		<4 µg/l				
	Iron, Dissolved		<20 µg/l				
	Magnesium, Dissolved		56 mg/l				
	Manganese, Dissolved		0.8 µg/l				
	Molybdenum, Dissolved		4200 µg/l				
	Nickel, Dissolved		12.0 µg/l				
	Selenium Dissolved		56 µg/l				
	Vanadium, Dissolved	60	6.9 µg/l				
	Mercury, Dissolved		<0.01 µg/l				
	Total Alkalinity as CaCO3		167.00 mg/l				
	Electrical Conductivity at 20C		5120 mS/cm				
	Potassium, Dissolved		76 mg/l				
	Sodium, Dissolved		620 mg/l				
	Sulphate, Dissolved	400	959 mg/l				
	Total Oxidised Nitrogen		42 mg/l				
	Chloride		1180 mg/l				
	Fluoride		0.2 mg/l				
	Ammoniacal Nitrogen	0.6	3.65 mg/l				
	Total Organic Carbon		3.2 mg/l				
	Nitrate		2.4 mg/l				
	pH	<9	8.0 pH Units				

Emission point	Substance/ Parameter	Emission Limit Value	Result [1]	Test Method [2]	Sample Date and Times [3]	Accreditation/ Certification [4]	Uncertainty [5]
Settlement Ponds	Aluminium, Dissolved		15 µg/l		31/05/2022	Sampling Station / Testing ALS	
	Antimony, Dissolved		<1.3 µg/l				
	Arsenic Dissolved	50	2.9 µg/l				
	Boron, Dissolved	2000	1800 µg/l				
	Cadmium, Dissolved	5	<0.02 µg/l				
	Calcium, Dissolved		592 mg/l				
	Chromium, Dissolved	50	20 µg/l				
	Copper, Dissolved		<4 µg/l				
	Iron, Dissolved		<20 µg/l				
	Magnesium, Dissolved		58 mg/l				
	Manganese, Dissolved		18.0 µg/l				
	Molybdenum, Dissolved		4400 µg/l				
	Nickel, Dissolved		12.0 µg/l				
	Selenium Dissolved		53 µg/l				
	Vanadium, Dissolved	60	8.9 µg/l				
	Mercury, Dissolved		<0.01 µg/l				
	Total Alkalinity as CaCO3		135.00 mg/l				
	Electrical Conductivity at 20C		5620 mS/cm				
	Potassium, Dissolved		82 mg/l				
	Sodium, Dissolved		760 mg/l				
	Sulphate, Dissolved	400	1050 mg/l				
	Total Oxidised Nitrogen		43 mg/l				
	Chloride		1390 mg/l				
	Fluoride		0.2 mg/l				
	Ammoniacal Nitrogen	0.6	3.43 mg/l				
	Total Organic Carbon		4.3 mg/l				
	Nitrate		2.1 mg/l				
	pH	<9	7.9 pH Units				

Emission point	Substance/ Parameter	Emission Limit Value	Result [1]	Test Method [2]	Sample Date and Times [3]	Accreditation/ Certification [4]	Uncertainty [5]
Settlement Ponds	Aluminium, Dissolved		19 µg/l		05/07/2022	Sampling Station / Testing ALS	
	Antimony, Dissolved		<1.3 µg/l				
	Arsenic Dissolved	50	2.9 µg/l				
	Boron, Dissolved	2000	2100 µg/l				
	Cadmium, Dissolved	5	<0.02 µg/l				
	Calcium, Dissolved		628 mg/l				
	Chromium, Dissolved	50	17 µg/l				
	Copper, Dissolved		<4 µg/l				
	Iron, Dissolved		<20 µg/l				
	Magnesium, Dissolved		67 mg/l				
	Manganese, Dissolved		9.9 µg/l				
	Molybdenum, Dissolved		4900 µg/l				
	Nickel, Dissolved		12.0 µg/l				
	Selenium Dissolved		61 µg/l				
	Vanadium, Dissolved	60	8.8 µg/l				
	Mercury, Dissolved		<0.01 µg/l				
	Total Alkalinity as CaCO3		135.00 mg/l				
	Electrical Conductivity at 20C		6650 mS/cm				
	Potassium, Dissolved		100 mg/l				
	Sodium, Dissolved		990 mg/l				
	Sulphate, Dissolved	400	1160 mg/l				
	Total Oxidised Nitrogen		43 mg/l				
	Chloride		1660 mg/l				
	Fluoride		0.2 mg/l				
	Ammoniacal Nitrogen	0.6	5.70 mg/l				
	Total Organic Carbon		4.1 mg/l				
	Nitrate		3.7 mg/l				
	pH	<9	7.9 pH Units				

Emission point	Substance/ Parameter	Emission Limit Value	Result [1]	Test Method [2]	Sample Date and Times [3]	Accreditation/ Certification [4]	Uncertainty [5]
DP2	Aluminium, Dissolved		36 µg/l		01/02/2022	Sampling Station / Testing ALS	
	Antimony, Dissolved		<1.3 µg/l				
	Arsenic Dissolved		3.8 µg/l				
	Boron, Dissolved		1400 µg/l				
	Cadmium, Dissolved		<0.02 µg/l				
	Calcium, Dissolved		383 mg/l				
	Chromium, Dissolved		25 µg/l				
	Copper, Dissolved		<4 µg/l				
	Iron, Dissolved		<20 µg/l				
	Magnesium, Dissolved		46 mg/l				
	Manganese, Dissolved		42.0 µg/l				
	Molybdenum, Dissolved		3000 µg/l				
	Nickel, Dissolved		10.0 µg/l				
	Selenium Dissolved		49 µg/l				
	Vanadium, Dissolved		11.0 µg/l				
	Mercury, Dissolved		0.01 µg/l				
	Total Alkalinity as CaCO3		<2.3 mg/l				
	Electrical Conductivity at 20C		3710 mS/cm				
	Potassium, Dissolved		55 mg/l				
	Sodium, Dissolved		470 mg/l				
	Sulphate, Dissolved		777 mg/l				
	Total Oxidised Nitrogen		37 mg/l				
	Chloride		841 mg/l				
	Fluoride		0.2 mg/l				
	Ammoniacal Nitrogen		7.89 mg/l				
	Total Organic Carbon		1.6 mg/l				
	Nitrate		1.7 mg/l				
	pH		7.5 pH Units				

Emission point	Substance/ Parameter	Emission Limit Value	Result [1]	Test Method [2]	Sample Date and Times [3]	Accreditation/ Certification [4]	Uncertainty [5]
DP2	Aluminium, Dissolved		11 µg/l		01/03/2022	Sampling Station / Testing ALS	
	Antimony, Dissolved		<1.3 µg/l				
	Arsenic Dissolved		1.8 µg/l				
	Boron, Dissolved		860 µg/l				
	Cadmium, Dissolved		0.05 µg/l				
	Calcium, Dissolved		284 mg/l				
	Chromium, Dissolved		10 µg/l				
	Copper, Dissolved		<4 µg/l				
	Iron, Dissolved		<20 µg/l				
	Magnesium, Dissolved		32 mg/l				
	Manganese, Dissolved		21.0 µg/l				
	Molybdenum, Dissolved		1900 µg/l				
	Nickel, Dissolved		6.5 µg/l				
	Selenium Dissolved		27 µg/l				
	Vanadium, Dissolved		4.7 µg/l				
	Mercury, Dissolved		<0.01 µg/l				
	Total Alkalinity as CaCO3		234.00 mg/l				
	Electrical Conductivity at 20C		2950 mS/cm				
	Potassium, Dissolved		39 mg/l				
	Sodium, Dissolved		340 mg/l				
	Sulphate, Dissolved		464 mg/l				
	Total Oxidised Nitrogen		24 mg/l				
	Chloride		591 mg/l				
	Fluoride		0.2 mg/l				
	Ammoniacal Nitrogen		2.23 mg/l				
	Total Organic Carbon		1.4 mg/l				
	Nitrate		1.3 mg/l				
	pH		7.5 pH Units				

Emission point	Substance/ Parameter	Emission Limit Value	Result [1]	Test Method [2]	Sample Date and Times [3]	Accreditation/ Certification [4]	Uncertainty [5]
DP2	Aluminium, Dissolved		37 µg/l		30/03/2022	Sampling Station / Testing ALS	
	Antimony, Dissolved		<1.3 µg/l				
	Arsenic Dissolved		4.9 µg/l				
	Boron, Dissolved		1600 µg/l				
	Cadmium, Dissolved		<0.02 µg/l				
	Calcium, Dissolved		471 mg/l				
	Chromium, Dissolved		28 µg/l				
	Copper, Dissolved		<4 µg/l				
	Iron, Dissolved		<20 µg/l				
	Magnesium, Dissolved		56 mg/l				
	Manganese, Dissolved		51.0 µg/l				
	Molybdenum, Dissolved		3900 µg/l				
	Nickel, Dissolved		12.0 µg/l				
	Selenium Dissolved		56 µg/l				
	Vanadium, Dissolved		12.0 µg/l				
	Mercury, Dissolved		<0.01 µg/l				
	Total Alkalinity as CaCO3		208.00 mg/l				
	Electrical Conductivity at 20C		4320 mS/cm				
	Potassium, Dissolved		65 mg/l				
	Sodium, Dissolved		500 mg/l				
	Sulphate, Dissolved		872 mg/l				
	Total Oxidised Nitrogen		43 mg/l				
	Chloride		913 mg/l				
	Fluoride		0.3 mg/l				
	Ammoniacal Nitrogen		8.51 mg/l				
	Total Organic Carbon		1.4 mg/l				
	Nitrate		1.5 mg/l				
	pH		7.2 pH Units				

Emission point	Substance/ Parameter	Emission Limit Value	Result [1]	Test Method [2]	Sample Date and Times [3]	Accreditation/ Certification [4]	Uncertainty [5]
DP2	Aluminium, Dissolved		33 µg/l		02/05/2022	Sampling Station / Testing ALS	
	Antimony, Dissolved		<1.3 µg/l				
	Arsenic Dissolved		3.9 µg/l				
	Boron, Dissolved		2000 µg/l				
	Cadmium, Dissolved		<0.2 µg/l				
	Calcium, Dissolved		563 mg/l				
	Chromium, Dissolved		27.0 µg/l				
	Copper, Dissolved		<4 µg/l				
	Iron, Dissolved		<20 µg/l				
	Magnesium, Dissolved		63 mg/l				
	Manganese, Dissolved		76.0 µg/l				
	Molybdenum, Dissolved		4900 µg/l				
	Nickel, Dissolved		15.0 µg/l				
	Selenium Dissolved		70 µg/l				
	Vanadium, Dissolved		11.0 µg/l				
	Mercury, Dissolved		<0.01 µg/l				
	Total Alkalinity as CaCO3		195.00 mg/l				
	Electrical Conductivity at 20C		5780 mS/cm				
	Potassium, Dissolved		79 mg/l				
	Sodium, Dissolved		670 mg/l				
	Sulphate, Dissolved		1080 mg/l				
	Total Oxidised Nitrogen		46 mg/l				
	Chloride		1340 mg/l				
	Fluoride		0.2 mg/l				
	Ammoniacal Nitrogen		9.80 mg/l				
	Total Organic Carbon		1.3 mg/l				
	Nitrate		1.7 mg/l				
	pH		7.3 pH Units				

Emission point	Substance/ Parameter	Emission Limit Value	Result [1]	Test Method [2]	Sample Date and Times [3]	Accreditation/ Certification [4]	Uncertainty [5]
DP2	Aluminium, Dissolved		30 µg/l		31/05/2022	Sampling Station / Testing ALS	
	Antimony, Dissolved		<1.3 µg/l				
	Arsenic Dissolved		4.1 µg/l				
	Boron, Dissolved		2200 µg/l				
	Cadmium, Dissolved		<0.02 µg/l				
	Calcium, Dissolved		734 mg/l				
	Chromium, Dissolved		27 µg/l				
	Copper, Dissolved		<4 µg/l				
	Iron, Dissolved		<20 µg/l				
	Magnesium, Dissolved		64 mg/l				
	Manganese, Dissolved		100.0 µg/l				
	Molybdenum, Dissolved		5800 µg/l				
	Nickel, Dissolved		15.0 µg/l				
	Selenium Dissolved		70 µg/l				
	Vanadium, Dissolved		13.0 µg/l				
	Mercury, Dissolved		<0.01 µg/l				
	Total Alkalinity as CaCO3		193.00 mg/l				
	Electrical Conductivity at 20C		6230 mS/cm				
	Potassium, Dissolved		92 mg/l				
	Sodium, Dissolved		880 mg/l				
	Sulphate, Dissolved		1170 mg/l				
	Total Oxidised Nitrogen		50 mg/l				
	Chloride		1480 mg/l				
	Fluoride		0.2 mg/l				
	Ammoniacal Nitrogen		12.60 mg/l				
	Total Organic Carbon		1.8 mg/l				
	Nitrate		2.1 mg/l				
	pH		7.2 pH Units				

Emission point	Substance/ Parameter	Emission Limit Value	Result [1]	Test Method [2]	Sample Date and Times [3]	Accreditation/ Certification [4]	Uncertainty [5]
DP2	Aluminium, Dissolved		43 µg/l		05/07/2022	Sampling Station / Testing ALS	
	Antimony, Dissolved		<1.3 µg/l				
	Arsenic Dissolved		4.3 µg/l				
	Boron, Dissolved		2300 µg/l				
	Cadmium, Dissolved		<0.02 µg/l				
	Calcium, Dissolved		608 mg/l				
	Chromium, Dissolved		24 µg/l				
	Copper, Dissolved		<4 µg/l				
	Iron, Dissolved		<20 µg/l				
	Magnesium, Dissolved		66 mg/l				
	Manganese, Dissolved		96.0 µg/l				
	Molybdenum, Dissolved		5400 µg/l				
	Nickel, Dissolved		13.0 µg/l				
	Selenium Dissolved		67 µg/l				
	Vanadium, Dissolved		13.0 µg/l				
	Mercury, Dissolved		<0.01 µg/l				
	Total Alkalinity as CaCO3		190.00 mg/l				
	Electrical Conductivity at 20C		6530 mS/cm				
	Potassium, Dissolved		100 mg/l				
	Sodium, Dissolved		920 mg/l				
	Sulphate, Dissolved		1190 mg/l				
	Total Oxidised Nitrogen		48 mg/l				
	Chloride		1540 mg/l				
	Fluoride		0.3 mg/l				
	Ammoniacal Nitrogen		15.90 mg/l				
	Total Organic Carbon		1.5 mg/l				
	Nitrate		2.1 mg/l				
	pH		7.5 pH Units				

[1] The result given is the maximum value (or the minimum value in the case of a limit that is fdpressed as a minimum) obtained during the reporting period, fdpressed in the same terms as the

[2] Where an internationally recognised standard test method is used the reference number is given. Where another method that has been formally agreed with the Agency is used, then the

[3] For non-continuous measurements the date and time of the sample that produced the result is given. For continuous measurements, or flow/time proportional samples, the percentage of the

[4] The accreditation status of the equipment and/or the monitoring organisation, as appropriate, for the methods used for both sampling and analysis.

[5] The uncertainty associated with the quoted result at the 95% confidence interval, unless otherwise stated.

Emission point	Substance/ Parameter	Emission Limit Value	Result [1]	Test Method [2]	Sample Date and Times [3]	Accreditation/ Certification [4]	Uncertainty [5]

[6] The emission limit values for all substances is fdpressed as a maximum individual value, unless otherwise stated.

Signed ..... Date 07/09/2022

(authorised to sign as representative of the Operator)