

EA Regulation 61 Annex	Analyte
n/a	Total Organofluorine (TOF)
ANNEX I	Perfluoro-1-butanesulfonic acid (PFBS)
ANNEX I	Perfluoro-1-pentanesulfonic acid (PFPeS)
ANNEX I	Perfluoro-1-hexanesulfonic acid (PFHxS)
ANNEX I	Perfluoro-1-heptanesulfonic acid (PFHpS)
ANNEX I	Perfluoro-1-octanesulfonic acid (PFOS)
ANNEX I	Perfluoro-1-nonanesulfonic acid (PFNS)
ANNEX I	Perfluoro-1-decanesulfonic acid (PFDS)
ANNEX I	1H, 1H, 2H, 2H-perfluorohexane sulfonic acid (4:2 FTS)
ANNEX I	1H, 1H, 2H, 2H-perfluorooctane sulfonic acid (6:2 FTS)
ANNEX I	1H, 1H, 2H, 2H-perfluorodecane sulfonic acid (8:2 FTS)
ANNEX I	Perfluorobutanoic acid (PFBA)
ANNEX I	Perfluoropentanoic acid (PFPeA)
ANNEX I	Perfluorohexanoic acid (PFHxA)
ANNEX I	Perfluoroheptanoic acid (PFHpA)
ANNEX I	Perfluorooctanoic acid (PFOA)
ANNEX I	Perfluorononanoic acid (PFNA)
ANNEX I	Perfluorodecanoic acid (PFDA)
ANNEX I	Perfluoroundecanoic acid (PFUnDA)
ANNEX I	Perfluorododecanoic acid (PFDoDA)
ANNEX I	Perfluorotridecanoic acid (PFTrDA)
ANNEX I	Perfluorotetradecanoic acid (PFTeDA)
ANNEX I	EtFOSAA)
ANNEX I	MeFOSAA)
ANNEX I	Perfluoro-1-octanesulfonamide (PFOSA)
ANNEX II	salt [EEA-NH ₄] (SAA-1000)
ANNEX II	(PPVE)
ANNEX II	perfluorobutylethylene (PFBE)
ANNEX II	as 1H-perfluorohexane (1H-PFHx) [AC-2000] (C6H)
-	<i>list)</i>

CAS RN	fluoropolymer manufacture	fabrics, carpets).
	-	
375-73-5	N	Unknown
2706-91-4	N	Unknown
355-46-4	N	Unknown
375-92-8	N	Unknown
1763-23-1	N	Y
68259-12-1	N	Unknown
335-77-3	N	Unknown
757124-72-4	N	Unknown
27619-97-2	N	Possible
39108-34-4	N	Possible
375-22-4	Y	Unknown
2706-90-3	Y	Unknown
307-24-4	Y	Y (fabrics / textiles
375-85-9	Y	Unknown
335-67-1	Y	Y
375-95-1	Y	Unknown
335-76-2	Y	Unknown
2058-94-8	Y	Unknown
307-55-1	Y	Unknown
72629-94-8	Y	Unknown
376-06-7	Y	Unknown
2991-50-6	N	Unknown
2355-31-9	N	Unknown
754-91-6	N	Unknown
908020-52-0	Y	N
1623-05-8	Y	Unknown
19430-93-4	Y	Unknown
355-37-3	Y	N
	Y	Unknown

Comments on use/generation at AGCCE Hillhouse

n/a

Not in use and not possible to generate at AGCCE

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Potential to generate from PFBE.

PFBE is a related substance to PFBA.

Not in use but potential to generate from PTFE micropowder manufacture during thermal degradation and irradiation. The degraded micropowder is then heat treated and off gasses abated by the ARK plant.

Potential to generate from AC-2000.

AC-2000 is a related substance to PFHxA (in theory but not likely).

Not in use but potential to generate from PTFE micropowder manufacture during thermal degradation and irradiation. The degraded micropowder is then heat treated and off gasses abated by the ARK plant.

Not a credible mechanism to generate PFOA from PTFE manufacture unless present as a contaminant in the raw materials (source - chemically bound into polymer)

AC-2000 or PFBE)

Not in use but potential to generate from PTFE micropowder manufacture during thermal degradation and irradiation. The degraded micropowder is then heat treated and off gasses abated by the ARK plant.

Not in use and not possible to generate at AGCCE

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Surfactant used at AGCCE - polymerisation aid in PTFE manufacture

source - chemically bound into polymer)

manufacture)

Solvent - used at AGCCE as a polymerisation medium in ETFE manufacture

Exclude any HFP that is generated as part of pyrolysis.

analysis suite (suggested screening suite where there is a known or reasonably expected route to AGCCE effluent)	analysis suite (suggested screening suite where there is a known or reasonably expected route to AGCCE effluent)
1. total suspended solids (TSS) (mg/L) 2. total dissolved solids (TDS) (mg/L) 3. total organic carbon (TOC) (mg/L) 4. total nitrogen (TN) (mg/L) 5. total phosphorus (TP) (mg/L) 6. ammonia nitrogen (NH₄-N) (mg/L) 7. nitrite nitrogen (NO₂-N) (mg/L) 8. nitrate nitrogen (NO₃-N) (mg/L) 9. chemical oxygen demand (COD) (mg/L) 10. biochemical oxygen demand (BOD₅) (mg/L) 11. fluoride (F⁻) (mg/L) 12. chloride (Cl⁻) (mg/L) 13. sulfate (SO₄²⁻) (mg/L) 14. calcium (Ca²⁺) (mg/L) 15. magnesium (Mg²⁺) (mg/L) 16. zinc (Zn²⁺) (mg/L) 17. copper (Cu²⁺) (mg/L) 18. lead (Pb²⁺) (mg/L) 19. nickel (Ni²⁺) (mg/L) 20. chromium (Cr⁶⁺) (mg/L) 21. barium (Ba²⁺) (mg/L) 22. strontium (Sr²⁺) (mg/L) 23. potassium (K⁺) (mg/L) 24. sodium (Na⁺) (mg/L) 25. iron (Fe²⁺) (mg/L) 26. aluminum (Al³⁺) (mg/L) 27. silica (SiO₂) (mg/L) 28. boron (B³⁺) (mg/L) 29. fluoride (F⁻) (mg/L) 30. chloride (Cl⁻) (mg/L) 31. sulfate (SO₄²⁻) (mg/L) 32. calcium (Ca²⁺) (mg/L) 33. magnesium (Mg²⁺) (mg/L) 34. zinc (Zn²⁺) (mg/L) 35. copper (Cu²⁺) (mg/L) 36. lead (Pb²⁺) (mg/L) 37. nickel (Ni²⁺) (mg/L) 38. chromium (Cr⁶⁺) (mg/L) 39. barium (Ba²⁺) (mg/L) 40. strontium (Sr²⁺) (mg/L) 41. potassium (K⁺) (mg/L) 42. sodium (Na⁺) (mg/L) 43. iron (Fe²⁺) (mg/L) 44. aluminum (Al³⁺) (mg/L) 45. silica (SiO₂) (mg/L) 46. boron (B³⁺) (mg/L) 47. fluoride (F⁻) (mg/L) 48. chloride (Cl⁻) (mg/L) 49. sulfate (SO₄²⁻) (mg/L) 50. calcium (Ca²⁺) (mg/L) 51. magnesium (Mg²⁺) (mg/L) 52. zinc (Zn²⁺) (mg/L) 53. copper (Cu²⁺) (mg/L) 54. lead (Pb²⁺) (mg/L) 55. nickel (Ni²⁺) (mg/L) 56. chromium (Cr⁶⁺) (mg/L) 57. barium (Ba²⁺) (mg/L) 58. strontium (Sr²⁺) (mg/L) 59. potassium (K⁺) (mg/L) 60. sodium (Na⁺) (mg/L) 61. iron (Fe²⁺) (mg/L) 62. aluminum (Al³⁺) (mg/L) 63. silica (SiO₂) (mg/L) 64. boron (B³⁺) (mg/L) 65. fluoride (F⁻) (mg/L) 66. chloride (Cl⁻) (mg/L) 67. sulfate (SO₄²⁻) (mg/L) 68. calcium (Ca²⁺) (mg/L) 69. magnesium (Mg²⁺) (mg/L) 70. zinc (Zn²⁺) (mg/L) 71. copper (Cu²⁺) (mg/L) 72. lead (Pb²⁺) (mg/L) 73. nickel (Ni²⁺) (mg/L) 74. chromium (Cr⁶⁺) (mg/L) 75. barium (Ba²⁺) (mg/L) 76. strontium (Sr²⁺) (mg/L) 77. potassium (K⁺) (mg/L) 78. sodium (Na⁺) (mg/L) 79. iron (Fe²⁺) (mg/L) 80. aluminum (Al³⁺) (mg/L) 81. silica (SiO₂) (mg/L) 82. boron (B³⁺) (mg/L) 83. fluoride (F⁻) (mg/L) 84. chloride (Cl⁻) (mg/L) 85. sulfate (SO₄²⁻) (mg/L) 86. calcium (Ca²⁺) (mg/L) 87. magnesium (Mg²⁺) (mg/L) 88. zinc (Zn²⁺) (mg/L) 89. copper (Cu²⁺) (mg/L) 90. lead (Pb²⁺) (mg/L) 91. nickel (Ni²⁺) (mg/L) 92. chromium (Cr⁶⁺) (mg/L) 93. barium (Ba²⁺) (mg/L) 94. strontium (Sr²⁺) (mg/L) 95. potassium (K⁺) (mg/L) 96. sodium (Na⁺) (mg/L) 97. iron (Fe²⁺) (mg/L) 98. aluminum (Al³⁺) (mg/L) 99. silica (SiO₂) (mg/L) 100. boron (B³⁺) (mg/L)	1. total suspended solids (TSS) (mg/L) 2. total dissolved solids (TDS) (mg/L) 3. total organic carbon (TOC) (mg/L) 4. total nitrogen (TN) (mg/L) 5. total phosphorus (TP) (mg/L) 6. ammonia nitrogen (NH₄-N) (mg/L) 7. nitrite nitrogen (NO₂-N) (mg/L) 8. nitrate nitrogen (NO₃-N) (mg/L) 9. chemical oxygen demand (COD) (mg/L) 10. biochemical oxygen demand (BOD₅) (mg/L) 11. fluoride (F⁻) (mg/L) 12. chloride (Cl⁻) (mg/L) 13. sulfate (SO₄²⁻) (mg/L) 14. calcium (Ca²⁺) (mg/L) 15. magnesium (Mg²⁺) (mg/L) 16. zinc (Zn²⁺) (mg/L) 17. copper (Cu²⁺) (mg/L) 18. lead (Pb²⁺) (mg/L) 19. nickel (Ni²⁺) (mg/L) 20. chromium (Cr⁶⁺) (mg/L) 21. barium (Ba²⁺) (mg/L) 22. strontium (Sr²⁺) (mg/L) 23. potassium (K⁺) (mg/L) 24. sodium (Na⁺) (mg/L) 25. iron (Fe²⁺) (mg/L) 26. aluminum (Al³⁺) (mg/L) 27. silica (SiO₂) (mg/L) 28. boron (B³⁺) (mg/L) 29. fluoride (F⁻) (mg/L) 30. chloride (Cl⁻) (mg/L) 31. sulfate (SO₄²⁻) (mg/L) 32. calcium (Ca²⁺) (mg/L) 33. magnesium (Mg²⁺) (mg/L) 34. zinc (Zn²⁺) (mg/L) 35. copper (Cu²⁺) (mg/L) 36. lead (Pb²⁺) (mg/L) 37. nickel (Ni²⁺) (mg/L) 38. chromium (Cr⁶⁺) (mg/L) 39. bar

[illegible]

where there is a known or reasonably expected route to air)

N
N
N
N
N
N
N
N
N
N
N
N - Not expected, will investigate screening
N - Not expected, will investigate screening
N
Y (PTFE emission points only)
N
N
N
N
N
N
N
N
N
Y (PTFE emission points only)
n/a incorporated into polymer
Y (ETFE emission points only)
Y (ETFE emission points only)
site incineration