

# EMISSION RATES FOR TAP/HAP & OTHER POLLUTANTS

AI ID: 2093 - Bradken Inc  
 Activity Number: PER20110004  
 Permit Number: 2840-00032-V5  
 Air - Title V Regular Permit Renewal

Emission Pt.	Pollutant	Avg lb/hr	Max lb/hr	Tons/Year
ARE 0001 EG-01	Arsenic (and compounds)	<0.001	0.001	<0.001
	Barium (and compounds)	<0.001	0.001	<0.001
	Cadmium (and compounds)	<0.001	0.001	<0.001
	Chromium VI (and compounds)	0.002	0.024	0.007
	Copper (and compounds)	0.002	0.003	0.003
	Manganese (and compounds)	0.04	0.62	0.18
	Mercury (and compounds)	<0.001	<0.001	<0.001
	Nickel (and compounds)	0.001	0.003	0.001
	Selenium (and compounds)	<0.001	<0.001	<0.001
	Zinc (and compounds)	0.01	0.01	0.02
ARE 0002 EG-03	Formaldehyde	0.06	0.37	0.18
	Methylene diphenyl diisocyanate	0.05	0.35	0.17
	Naphthalene	1.10	7.21	3.44
	Phenol	0.23	1.53	0.73
ARE 0003 EG-04	Acetaldehyde	0.003	0.03	0.06
	Acrolein	0.001	0.009	0.019
	Antimony (and compounds)	<0.001	<0.001	<0.001
	Arsenic (and compounds)	<0.001	<0.001	<0.001
	Barium (and compounds)	0.003	0.005	0.005
	Benzene	0.03	0.24	0.47
	Beryllium (Table 51.1)	<0.001	<0.001	<0.001
	Cadmium (and compounds)	<0.001	0.001	<0.001
	Chromium VI (and compounds)	0.001	0.003	0.003
	Cobalt compounds	<0.01	<0.01	<0.01
	Copper (and compounds)	0.001	0.003	0.003
	Cresol	0.06	0.56	1.09
	Formaldehyde	0.01	0.07	0.14
	Manganese (and compounds)	<0.01	0.01	0.01
	Mercury (and compounds)	<0.001	0.001	<0.001
	Methyl ethyl ketone	<0.01	0.01	<0.01
	Naphthalene	0.005	0.04	0.09
	Nickel (and compounds)	<0.001	<0.001	0.001
Phenol	0.004	0.03	0.07	

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ARE 0003 EG-04	Selenium (and compounds)	<0.001	<0.001	<0.001
	Styrene	<0.01	0.01	0.01
	Toluene	0.02	0.14	0.27
	Xylene (mixed isomers)	0.01	0.05	0.09
	Zinc (and compounds)	0.01	0.01	0.01
ARE 0004 EG-05	Chromium VI (and compounds)	0.002	0.012	0.006
	Manganese (and compounds)	0.01	0.04	0.02
	Nickel (and compounds)	0.002	0.009	0.004
ARE 0005 EU-02	Dibutyl phthalate	0.002	0.70	0.01
	Ethyl benzene	0.004	2.33	0.02
	Glycol ethers (Table 51.1)	0.002	0.70	0.01
	Naphthalene	0.002	0.17	0.01
	Toluene	0.03	5.59	0.11
	Xylene (mixed isomers)	0.03	6.37	0.13
	n-butyl alcohol	0.01	4.73	0.03
EQT 0002 EG-06	Arsenic (and compounds)	<0.001	<0.001	<0.001
	Barium (and compounds)	<0.001	0.001	<0.001
	Benzene	<0.01	<0.01	<0.01
	Beryllium (Table 51.1)	<0.001	<0.001	<0.001
	Cadmium (and compounds)	<0.001	<0.001	<0.001
	Chromium VI (and compounds)	<0.001	<0.001	<0.001
	Cobalt compounds	<0.01	<0.01	<0.01
	Copper (and compounds)	<0.001	<0.001	<0.001
	Formaldehyde	<0.003	0.004	0.01
	Manganese (and compounds)	<0.01	<0.01	<0.01
	Mercury (and compounds)	<0.001	<0.001	<0.001
	Naphthalene	<0.01	<0.01	<0.01
	Nickel (and compounds)	<0.001	<0.001	<0.001
	Selenium (and compounds)	<0.001	<0.001	<0.001
	Toluene	<0.01	0.01	<0.01
	Zinc (and compounds)	<0.01	<0.01	<0.01
n-Hexane	0.07	0.09	0.30	
EQT 0004 EU-01	Acetaldehyde	0.03	0.17	0.08

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EQT 0004 EU-01	Acrolein	0.056	0.325	0.159
	Antimony (and compounds)	0.001	0.007	0.003
	Arsenic (and compounds)	<0.001	<0.001	<0.001
	Benzene	0.23	1.34	0.65
	Beryllium (Table 51.1)	<0.001	<0.001	<0.001
	Cadmium (and compounds)	<0.001	<0.001	<0.001
	Chromium VI (and compounds)	<0.001	<0.001	<0.001
	Cobalt compounds	<0.01	0.01	<0.01
	Cresol	0.03	0.15	0.07
	Formaldehyde	0.01	0.04	0.02
	Manganese (and compounds)	0.01	0.08	0.04
	Mercury (and compounds)	0.001	0.005	0.002
	Methyl ethyl ketone	0.002	0.01	0.01
	Naphthalene	0.20	1.13	0.55
	Nickel (and compounds)	0.001	0.005	0.002
	Phenol	0.39	2.22	1.08
	Selenium (and compounds)	<0.001	<0.001	<0.001
	Styrene	<0.01	0.02	0.01
	Toluene	0.06	0.33	0.16
Xylene (mixed isomers)	0.02	0.11	0.05	
UNF 0001 Entire Facility	Acetaldehyde			0.14
	Acrolein			0.18
	Antimony (and compounds)			0.003
	Arsenic (and compounds)			<0.001
	Barium (and compounds)			0.005
	Benzene			1.12
	Beryllium (Table 51.1)			<0.001
	Cadmium (and compounds)			0.001
	Chromium VI (and compounds)			0.016
	Cobalt compounds			<0.001
	Copper (and compounds)			0.006
	Cresol			1.17
	Dibutyl phthalate			0.01

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UNF 0001 Entire Facility	Ethyl benzene			0.05
	Formaldehyde			0.34
	Glycol ethers (Table 51.1)			0.01
	Manganese (and compounds)			0.25
	Mercury (and compounds)			0.002
	Methyl ethyl ketone			0.01
	Methylene diphenyl diisocyanate			0.17
	Naphthalene			4.09
	Nickel (and compounds)			0.008
	Phenol			1.88
	Selenium (and compounds)			<0.001
	Styrene			0.02
	Toluene			0.54
	Xylene (mixed isomers)			0.27
	Zinc (and compounds)			0.03
	n-Hexane			0.30
n-butyl alcohol			0.03	

Note: Emission rates in bold are from alternate scenarios and are not included in permitted totals unless otherwise noted in a footnote. Emission rates attributed to the UNF reflect the sum of the TAP/HAP limits of the individual emission points (or caps) under this permit, but do not constitute an emission cap.