

Addendum to the Load Calculation Protocol (2009)

Amendment of Table 34 to incorporate coal seam gas assessment and production operations and the assessable pollutant 'salt'

7.24 Petroleum and fuel production: Natural gas/methane production and coal seam gas assessment and production

Table 34: Petroleum and fuel production: Natural gas/methane production and coal seam gas assessment and production — Acceptable load calculation methods and emission factors, where applicable

(kg per tonne of final product refined or manufactured, as applicable)

AIR

Component or activity	Assessable pollutants—AIR						
	Benzene	Benzo(a) pyrene (equiv.)	Fine particulates	H ₂ S	NO _x & NO _x (summer)	SO _x	VOCs & VOCs (summer)
1. Separation processes (excluding combustion)	SM—PM, CEMS EF—G, SS	—	—	SM—PM, CEMS EF—G, SS	—	—	SM—PM, CEMS EF—G, SS,
2. Conversion processes (excluding combustion)	SM—PM, CEMS EF—G, SS	—	—	SM—PM, CEMS EF—G, SS	—	—	SM—PM, CEMS EF—G, SS,
3. Treating process (excluding combustion)	SM—PM, CEMS EF—G, SS	—	—	SM—PM, CEMS EF—G, SS	—	—	SM—PM, CEMS EF—G, SS,
4. Auxiliary activities							
4(a) Emissions from gas leaks	SM—PM, CEMS EF—G, SS	—	—	SM—PM, CEMS EF—G, SS	—	—	SM—PM, CEMS EF—G, SS
4(b) Emissions from gas venting	SM—PM, CEMS EF—G, SS	—	—	SM—PM, CEMS EF—G, SS	—	—	SM—PM, CEMS EF—G, SS
4(c) Other auxiliary activities (excluding combustion)	—	—	—	SM—PM, CEMS EF—G, SS	—	—	SM—PM, CEMS EF—G, SS
5. Combustion							
5(a) Engines and turbines	SM—PM, CEMS EF—G, SS, PEMS	SM—PM, CEMS EF—G, SS, PEMS	SM—PM, CEMS EF—G, SS, PEMS	—	SM—PM, CEMS EF—G, SS, PEMS	SM—PM, CEMS EF—G, SS, PEMS	SM—PM, CEMS EF—G, SS, PEMS
5(b) Flares	SM—PM, CEMS	SM—PM, CEMS	SM—PM, CEMS	—	SM—PM, CEMS	SM—PM, CEMS	SM—PM, CEMS

Addendum to the Load Calculation Protocol (June 2014)

	<i>Assessable pollutants—AIR</i>						
<i>Component or activity</i>	<i>Benzene</i>	<i>Benzo(a) pyrene (equiv.)</i>	<i>Fine particulates</i>	<i>H₂S</i>	<i>NO_x & NO_x (summer)</i>	<i>SO_x</i>	<i>VOCs & VOCs (summer)</i>
5(b) Flares (cont.)	EF—G, SS, PEMS	EF—G, SS, PEMS	EF—G, SS, PEMS		EF—G, SS, PEMS	EF—G, SS, PEMS	EF—G, SS, PEMS
5(c) Other combustion	SM—PM, CEMS EF—G, SS, PEMS	SM—PM, CEMS EF—G, SS, PEMS	SM—PM, CEMS EF—G, SS, PEMS	–	SM—PM, CEMS SS EF—G, SS, PEMS	SM—PM, CEMS SS EF—G, SS, PEMS	SM—PM, CEMS EF—G, SS, PEMS
6. Transfer of bulk organic liquids	SM—PM, CEMS EF—G, SS	–	–	–	–	–	SM—PM, CEMS EF—G, SS
7. Storage of bulk organic liquids	SM—PM, CEMS EF—G, SS	–	–	–	–	–	SM—PM, CEMS EF—G, SS
8. Air emissions from wastewater treatment	–	–	–	–	–	–	SM—PM, CEMS EF—G, SS
9. Vapour disposal or recovery systems (excluding combustion)	–	–	–	–	–	–	SM—PM, CEMS EF—G, SS
TOTAL actual load (kg)							

SM—source monitoring (PM—periodic monitoring; CEMS—continuous emission monitoring system); EF—emission factor (G—generic; SS—site specific; PEMS—predictive emission monitoring system)

Note: Where EF—G is shown without a numerical value, no adequate data is available for Australian conditions at this time and an EF—PEMS or EF—SS may be developed by the licensee.

Table 34: Petroleum and fuel production: Natural gas/methane production and coal seam gas assessment and production

WATER

	<i>Assessable pollutants—WATER</i>					
<i>Component or activity</i>	<i>BOD</i>	<i>Oil & grease</i>	<i>TSS</i>	<i>Total PAHs</i>	<i>Total phenolics</i>	<i>Salt</i>
10. Wastewater	SM—PM, CEMS EF—SS	SM—PM, CEMS EF—SS	SM—PM, CEMS EF—SS	SM—PM, CEMS EF—SS	SM—PM, CEMS EF—SS	SM—PM, CEMS EF—SS
TOTAL actual load (kg)						

SM—source monitoring (PM—periodic monitoring; CEMS—continuous emission monitoring system); EF—emission factor (SS—site specific)

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