

NGER LIQUID FUELS FACT SHEET 2011



CIVIL CONTRACTORS
FEDERATION

BACKGROUND

The *National Greenhouse and Energy Reporting Act 2007* (the NGER Act) became law in September 2007. The NGER Act introduces a legal requirement for the reporting and distribution of information about greenhouse gas (GHG) emissions, GHG projects and energy use and production of corporations.

In July 2011 the CCF produced the 'NGER Framework Guidelines', a detailed guide outlining the liabilities placed on large, medium and small civil contractors under the NGER Act¹. This Fact Sheet is an additional tool to help contractors meet one of the key NGER requirements – the measurement of liquid fuels consumed by combustion in equipment while carrying out contractor activities.

Increasingly civil contractors are triggering the NGER thresholds in their own right, or being required to provide fuel consumption to head contractors at sites when acting as a subcontractor. Contractors need to know the quantities and type of fuel for each individual site (facility). Civil penalties can apply where a liable company does not provide the required data².

Registered NGER corporations require fuel quantities to work out their organisation's GHG emissions and energy consumption from the year's operational activities.

At a minimum, contractors need to know and be able to report with rigor:

1. how much liquid fuel was consumed;
2. what type of fuel was consumed;
3. what equipment type it was consumed in;
4. how they measured or estimated the fuel use;
5. was it used in a road registered vehicle or non-road registered; and
6. the name and address of the site it was consumed at.

The main types of liquid fuels that will need to be measured are:

FUEL TYPE		ADDITIONAL INFORMATION
Diesel	LNG	Road registered (transport) or non-road registered (stationary) ³
Unleaded Petrol	Diesel in explosives (ANFO mixes)	
Biodiesel (B5, B20)	Engine Oil (often estimated ⁴)	
Ethanol Blended Petrol (E10)	AVTUR	
LPG	Any other petroleum based fuels ⁵	

Historically it has not been common practice for contractors to measure and report how much and what type of fuel is used at each site. That being said, liquid fuels are usually a large component of operating costs and fuel tax credit rebates rely on businesses being able to verify the quantities of fuel used per year.

NGERs adds a new layer, where the amount of fuel used needs to be reported to site level, or 'facility' as the legislation describes it.

The method used to measure a fuel quantity determines the 'measurement criteria' that applies. Measurement criteria falls into the following categories – A, AA, AAA (for commercial transactions) and BBB for non-commercial transactions. A subcontractor burning their own (pre-purchased) fuel on the head contractor's site would be considered a non-commercial transaction with regards to fuel consumption. The measurement criteria affects the perceived level of 'uncertainty' of the accuracy of the reported data, with A, AAA, AAA having a lower uncertainty level than BBB. High uncertainty levels may lead to a higher carbon liability going forward.

Ideally contractors will be able to produce fuel receipts or delivery dockets for quantities used at each site (criteria A) or metering records (criteria AA). This can be difficult as equipment is often fuelled from bulk storage (sometimes un-metered) at depots and used at multiple sites. On other occasions retailer fuel providers will fuel equipment and/or mobile storage tanks on-site yet not provide the contractor itemised (by site) invoices.

Contractors may also wish to consider what records they are currently collecting for the purposes of claiming fuel tax credits as this may also assist in providing the base line information required⁶.

The following table demonstrates some methods that contractors can implement to measure liquid fuel consumption at each site from earthmoving and other equipment use. The methods towards the top of the table should be considered best practice and where possible, contractors should eventually implement these or equivalent systems going forward.

CIRCUMSTANCE	PROPOSED MEASUREMENT METHOD	NGER MEASUREMENT CRITERIA
Contractor's equipment and/or mobile fuel tanks fuelled at site by retailer	Request that fuel retailer's invoice includes site name/address and record the amount and fuel types used at each site for each client (if subcontracting) and for each equipment ⁷	A
Contractor's equipment and/or mobile fuel tanks fuelled at depots from bulk storage	Meter ⁸ bulk fuel storage and utilise log books for operators to complete for each piece of equipment ⁹ . When fuelling, operators record: <ul style="list-style-type: none"> • fuel type • quantity (litres) • date • road-registered? • site <ul style="list-style-type: none"> - site address, name and client 	AA ¹⁰
Contractor's equipment and/or mobile fuel tanks fuelled at depots from bulk storage	Use 'dipping' ¹¹ to estimate bulk fuel storage dispersals and log books for operators to complete for each piece of equipment. When fuelling, operators record: <ul style="list-style-type: none"> • fuel type • quantity (litres) • date • road-registered? • site <ul style="list-style-type: none"> - site address, name and client Amounts estimated from dipping will require verification against bulk amounts delivered to depot and must match – adjust for changes in stockpile from one year to the next. For example if log book entries for the year equal 1,000 KL, retailer invoices should equal the same.	AA ¹² (if matched against bulk delivery invoices) BBB (if not matched against bulk delivery records)
Contractor's own mobile fuel tanks used across multiple sites at any one time to fuel equipment by the contractor: Mobile tanks fuelled from bulk vessels at depots or directly by retailer.	Meter and log fuel dispatched to each piece of equipment from the mobile fuelling unit. Record: <ul style="list-style-type: none"> • fuel type • quantity (litres) • date • road-registered? • site <ul style="list-style-type: none"> - site address, name and client Verify against retailer invoices.	AA
Contractor's own mobile fuel tanks used across multiple sites at any one time to fuel equipment by the contractor: Mobile tanks fuelled from bulk vessels at depots or directly by retailer.	Estimate amounts by dipping and log fuel dispatched to each piece of equipment from the mobile fuelling unit. Record: <ul style="list-style-type: none"> • fuel type • quantity (litres) • date • road-registered? • site <ul style="list-style-type: none"> - site address, name and client 	BBB ¹³
Contractors do not have any metering installed on mobile or bulk vessels, and no site level invoices to refer to.	Estimate the fuel consumed in the equipment using the CCF Liquid Fuel Consumption Calculator. Hours worked at particular site x hourly fuel consumption of equipment type. The CCF Liquid Fuel Consumption Calculator can be found in the member login section on the CCF National website (www.civilcontractors.com)	BBB ¹⁴
Engine oil	An example of an estimation technique for oils and greases for an earthmoving contractor might be: (hours on site/hours per year) x (sump capacity x oil change per year) e.g.: (30/1500) x (15 x 5) = 1.5 litres	BBB

Increasingly head contractors are having provisions written into standard subcontracts and/or applying standard site specific proforma requesting fuel use details from contractors. Subcontractors need to be ready to meet the requirements of their clients. The Federal Government has also begun auditing corporations to ensure they are complying with the NGER Act, and in the future penalties may apply where businesses are not applying reasonable resources to measure liquid fuels and the associated greenhouse gas and energy.

¹ Contractors should read the NGER Framework Guidelines to fully understand their potential liabilities.

² See section 8 of the CCF NGER Framework Guidelines for details of civil penalties for non-compliance.

³ NGER (Measurement) Determination r2.20 (2) defines all fuel used in non-road registered vehicles as 'stationary'.

⁴ See Part 7.2 of the CCF NGER Framework Guidelines for how to estimate engine oil use.

⁵ See Attachment A of CCF NGER Framework Guidelines.

⁶ Members may wish to discuss this further with their accounting advisers.

⁷ In most cases this level of invoicing will not be possible/provided for by retailers.

⁸ In this example 'meters' are typical flow meters calibrated and used to calculate fuel amounts.

⁹ Registration or internal codes can be used to identify individual equipment.

¹⁰ This would likely to be considered a 'delivery receipt' fulfilling criteria A requirements for r2.50 of the NGER (Measurement) Determination 2008.

Criteria A only applies to commercial transactions – which is deemed to occur at the point of bulk delivery at depots.

¹¹ Dipping involves using a dipstick that has been marked up to equate a certain 'height' (of fuel) in a tank to equal a certain amount based on volume.

¹² This would likely to be considered to meet criteria AA requirements for r2.50 of the NGER (Measurement) Determination 2008.

¹³ Criteria BBB can only be used where a commercial transaction does not occur. For this scenario the dispatch of fuel from the mobile unit to the equipment piece is considered not to be a commercial transaction.

¹⁴ This technique fills the requirement of BBB as it is an 'accepted industry practice' under NGER (Measurement) Determination 2008 Sub-division 2.4.6.

¹⁵ The NGER Framework Guidelines include a standard contractor form at Appendix B.





For further assistance,
contact your CCF Branch.



**CIVIL CONTRACTORS
FEDERATION**

NATIONAL OFFICE

Level 1, 210 High Street,
Kew
VIC 3101

Phone: (03) 9851 9900

Fax: (07) 3360 7944

Email: ccfnat@civilcontractors.com

Web: www.civilcontractors.com