GC 8.0 **Measurement and Payment**

GC 8.02 **Payment**

GC 8.02.04.02 **Payment Adjustment for Changes in the Fuel Price Index**

Clause GC 8.02.04.02 of OPSS 100 is deleted in its entirety and replaced with the following:

.01 The Owner ~~shall~~ will adjust the payment to the Contractor based on changes to the Owner's fuel price index. The fuel price index shall be calculated by the Ontario Ministry of Energy and shall be based on the rack price, including taxes, of diesel fuel. The fuel price index shall be published monthly in the Owner's Contract Bulletin for each calendar month and shall reflect the previous month's prices. The Contractor shall use this index when calculating flow through to truckers, Subcontractors, and shippers and suppliers.

.02 A payment adjustment, excluding any payments for Changes in the Work and Additional Work, shall be calculated monthly and applied to the monthly progress payment.

.03 It is agreed by the parties to the Contract that it is impracticable and difficult to ascertain actual fuel consumed on the Contract, and the parties hereto agree that for the purpose of calculating the total fuel price adjustments, the amount of fuel consumed shall be determined using the rates in Table 8.02.04.02-1. The payment provided for the items listed in Table 8.02.04.02-1 shall be deemed to be for all Work.

.04 Payments provided under clause GC 8.02.04.02, Payment Adjustment for Changes in the Fuel Price Index, shall be used to compensate all trucks, Subcontractors, and shippers and suppliers performing any Contract Work or delivering material for the Contract including items not listed in Table 8.02.04.02-1.

.05 The compensation provided through this provision shall also be used for the purpose of providing fuel price adjustment compensation to suppliers and shippers. Should the Contractor be required by a supplier to negotiate and provide fuel price adjustment compensation to any party providing Materials to the Contract, the Owner ~~shall~~ will not provide any compensation for this purpose in addition to that provided through these MTO General Conditions of Contract.

.06 Fuel Price Adjustment Calculation

a) The Contractor's payment adjustment for each month shall be calculated using the following formula:

$$Cfpa = (Ctem) \times \frac{(I - Bc)}{100}$$

Where:
Cfpa = fuel price adjustment paid to Contractor or Owner, in dollars
Ctem = total estimated monthly fuel consumption
I = progress payment month fuel price index (for the month that the work was completed in)
Bc = fuel price index in the month prior to tender opening~~that the Contract that the Contract was advertised for tender~~.

b) The progress payment month fuel index shall be published the first Friday of every month in the Owner's Contract Bulletin.

c) The total estimated monthly fuel consumption shall be calculated by multiplying the consumption rates in Table 8.02.04.02-1 by the work accomplished in the current month for each applicable item and totalling the volume in litres.

d) Only tender item quantities or work done at the tender item price shall be included in the calculation.

.07 Payment Certificate Documentation

a) When (I-Bc) (progress payment month fuel price index – ~~advertising~~ month prior to tender opening fuel price index) is positive, the Contractor shall receive a payment.

b) When (I-Bc) (progress payment month fuel price index – ~~advertising~~ month prior to tender opening fuel price index) is negative the Owner shall receive a credit.

c) The Contractor shall show the fuel price adjustment as a line item on each progress payment certificate and the final payment certificate. The item shall be called fuel price adjustment.

.08 Fuel Price Adjustment Flow Through

a) The Contractor agrees to adjust the payment to each trucker hired directly by the Contractor for execution of part of the Work according to the following formula:

$$Tfpa = (Tmpp) \times \frac{(I - Bt)}{Bt} \times 0.17$$

Where:
Tfpa = fuel price adjustment paid to trucker, in dollars
Tmpp = monthly payment to trucker, in dollars
Bt = fuel price index in the month that the Contract with the trucker was entered into either verbally or in writing
I = progress payment month fuel price index (for the month that the work was completed in)
The fuel price adjustment paid to each trucker (Tfpa) shall be calculated for each Calendar Month and may be positive or negative.

b) The Contractor agrees to adjust the payment to each Subcontractor according to the following formula:

$$Sfpa = (Smpp) \times \frac{(I - Bs)}{Bs} \times \frac{Fn}{100}$$

Where:

Sfpa = fuel price adjustment paid to the Subcontractor, in dollars

Smpp = monthly progress payment to the Subcontractor, in dollars

Bs = fuel price index in the month that the Contract with the Subcontractor was entered into either verbally or in writing

I = progress payment month fuel price index (for the month that the work was completed in)

Fn = fuel consumption factor as negotiated between the Contractor and the Subcontractor as a percentage of the value of the subcontract

c) The Contractor shall report the negotiated fuel consumption factor (Fn) on MTO form PH-CC-744, Fuel Consumption Listing Subcontractor, listing all subcontracts, and the corresponding negotiated fuel consumption factor. The form shall be updated monthly or as changes and additions arise.

d) The Contractor also agrees that each subcontract shall contain a requirement that the Subcontractor shall make a fuel price adjustment to each trucker hired directly by the Subcontractor for execution of part of the work according to the same formula and conditions used by the Contractor to make fuel price adjustments to truckers, and provide such confirmation on MTO form PH-CC-745, Fuel Consumption Tracking Subcontractor, for each trucker.

Table 8.02.04.02-1 Fuel Consumption Rates, of OPSS 100 is deleted in its entirety and replaced with the following:

TABLE 8.02.04.02-1
Fuel Consumption Rates

	Item Description	Notes	Diesel Fuel Consumption Rates
1	Clearing including Close Cut Clearing		237 l/ha
2	Grubbing		163 l/ha
3	Earth Excavation and Earth Borrow	1	1.7 l/m³
4	Rock Excavation	2	0.6 l/m³
5	Rock Embankment		1.6 l/m³
6	Rock Face		1.2 l/m²
7	Select Subgrade Material (SSM)		1.0 l/t
8	Granular A, B, O, M, and RSS Backfill	9	1.9 l/t
9	All Asphalt Pavement, except Superpave FC2 Pavement	10	11.5 l/t
10	Superpave FC2 Pavement	10	14.3 l/t
11	Concrete Pavement		4.9 l/m²
12	Structural Concrete	3	5.5 l/m³
13	Tall Wall, any non-precast barrier wall, including asymmetric		3.2 l/m
14	Milling by m² Items	4	0.4 l/m²
15	Milling by tonne Items	5	3.0 l/t
16	Pulverize		0.2 l/m²
17	Cold In Place Recycling		0.4 l/m²
18	Concrete Removal, all complete structural concrete	6	1.0 l/m³
19	Concrete Removal, concrete base and pavements		0.9 l/m²
20	Asphalt Removal	7	0.4 l/m²
21	Piling ~~& Caissons~~		5.0 l/m

22	Sewers & Drainage	8	8.0 l/m
23	Rock Supply		1.4 l/m³
24	Recycled Asphalt Pavement		0.21 l/ m²
25	Hot-In-Place Recycling (HIR)		0.32 l/m²
26	~~Caissons (Earth)~~ Caisson and Continuous Flight Auger (CFA) Piles (Earth)	11	12.2 l/m³
27	~~Caissons (Rock)~~Caisson and Continuous Flight Auger (CFA) Piles (Rock)	11	36.6 l/m³

Notes:

1. Also includes the tender item Earth Excavation for Structures when the quantity is greater than 100 m³.
2. If the Contract has a Rock Excavation item but not the Rock Embankment item, the diesel fuel consumption rate for Rock Excavation shall be 2.2 l/m³.
3. Structural concrete is normally a lump sum item that has no quantity listed in the Contract Documents. The Contract Administrator will calculate the quantity for this item or get concrete ticket summary sheets for this item. This item does not include deck joint assemblies or modifications, concrete patches, or precast units. Includes the following items:

   - concrete in deck
   - concrete in substructure
   - concrete in culverts
   - high performance concrete in deck
   - concrete in footing, structure
   - concrete in substructure and retaining wall
   - high performance concrete in sub structures
   - concrete in structure
   - concrete in approach slab
   - high performance concrete in barrier walls
   - concrete in parapet walls

4. Includes the following items:
   - removal of asphalt pavement from concrete surfaces
   - removal of asphalt pavement, partial depth
   - removal of asphalt pavement from concrete surfaces on structures
   - reclaim asphalt pavement, full depth
   - remove asphalt pavement and salvage; full depth
   - reclaim asphalt pavement, full depth over concrete
5. Includes the following items:
   - reclaim asphalt pavement, partial depth
   - remove asphalt pavement and salvage, partial depth
6. Includes the following items:
   - removal of bridge structures
   - concrete removal, full depth
   - concrete removal, complete deck
7. Includes the following items:
   - removal of asphalt pavement
8. Sewers and drainage is to be applied to sewers that are 300 mm in diameter or larger. Subdrains do not receive compensation. Catchbasins with a single stub outlet receive no compensation nor do flexible pipe culverts.
9. 60% of the Diesel Fuel Consumption Rate shall apply to the production and stockpiling of Granular A, B, O, and RSS Backfill. 40% of the Diesel Fuel Consumption Rate shall apply to Granular A, B, O, and RSS Backfill supplied from existing stockpiles that are the property of the Owner.
10. When measurement for payment of asphalt is by square metre, for the purpose of fuel price index payment adjustment calculation, square metre asphalt quantities shall be converted to tonnage (Tmix)

using the following formula, rounded to one decimal according to LS-100:
Tmix = [BRDs x (TD/1000) x Amix]

Where:

BRDs = 2.50 t/m³

TD = average asphalt thickness from core measurements, mm

Amix = quantity of asphalt placed, m²

11. Fuel consumption rates for Caisson and Continuous Flight Auger (CFA) Piles listed above shall be converted to a l/m rate using the following formula and the diameter of each pile, rounded to one decimal according to LS-100:

$DFCR_{l/m} = DFCR_{l/m^3} \times 0.785 \times D^2$

Where:

$DFCR_{l/m^3}$ = Diesel fuel consumption rate in litres per cubic metre for earth or rock caisson or continuous flight auger pile as specified above

D = diameter of caisson or continuous flight auger pile, m