

Section 2120. Fuel Adjustment

2120.01 DESCRIPTION.

Factor applied to payments and partial payments for quantities of certain items of excavation work. Fuel Adjustment (FA) is an adjustment to monthly progress payments for cost changes in diesel fuel used on specific items of work identified.

2120.02 PRICE INDEX DEFINITION.

- A. A Current Price Index (CPI) in dollars per gallon (liter) will be established by the Department of Transportation for each month. The CPI will be the price of No. 2 High Sulfur Diesel, as reported by the Oil Price Information Service, using the first weekday of the month and the average of all prices reported for Des Moines. This information will be printed in the Weekly Letting Report published by the Department.
- B. The Base Price Index (BPI) for each contract will be the CPI in effect during the month previous to the month of letting of that contract.

~~2120.02~~ 2120.03 APPLICATION.

- A. Applied as the work is done, according to this specification when indicated in the contract documents.
- B. Fuel adjustment will be applied to all Class 10, 12, and 13 Excavation, Embankment In Place (non-dredge material), Selected Backfill Material, and Topsoil which is work of the contract. A FUF of 0.20 gallon per cubic yard (1.0 L/m^3) will be used for all excavation items of work covered by this specification. A FUF of 0.27 gallon per cubic yard (1.3 L/m^3) will be used for Embankment in Place (non-dredge material). Fuel adjustment using a fuel adjustment factor (FUF) of 0.20 gallon per cubic yard (1.0 L/m^3) will be applied to:
 1. Selected Backfill (including Stockpile)
 2. Class 10 (Roadway & Borrow, Unsuitable, Waste, Stockpile, and Channel)
 3. Class 12 (Roadway & Borrow, Channel, and Waste)
 4. Class 13 (Roadway & Borrow, Channel, and Waste)
 5. Topsoil, Furnish and Spread
 6. Topsoil, Spread
 7. Topsoil, Strip, Salvage, and Spread
 8. Topsoil, Strip and Stockpile
- C. Fuel adjustment using a FUF factor of 0.27 gallon per cubic yard (1.3 L/m^3) will be applied to Embankment-in-Place (non-dredge material)
- C. D. Fuel adjustment will also be applied to Embankment-In-Place (dredge material). The fuel usage will be based on billed gallons (liters) of fuel used.

~~2120.03~~ PRICE INDEX.

- A. A Current Price Index (CPI) in dollars per gallon (liter) will be established by the Department for each month. The CPI will be the price of No. 2 High Sulfur Diesel, as reported by the Oil Price Information Service, using the first weekday of the month and the average of all prices reported for Des Moines. This information will be printed in the Weekly Letting Report published by the Department.
- B. The Base Price Index (BPI) for each contract will be the CPI in effect during the month previous to the month of letting of that contract.

2120.04 METHOD OF MEASUREMENT.

- A. Provide the Engineer with a monthly spreadsheet (the Engineer will provide the format) with quantities, and the fuel adjustment for the month (even if there will be no adjustment).
- B. If the contract quantity for an item is in tons (megagrams), convert the quantity to cubic yards (cubic meters) using an appropriate conversion factor the Engineer approves. The total quantity of cubic yards (cubic meters) for each month (Y) is the sum of these quantities.
- C. If the work is not completed within the contract period or authorized extensions thereof, the CPI to be used for work done after the contract period is to be the CPI that applied during the last working day within the contract period, including authorized extensions.
- D. A fuel adjustment factor that accounts for the estimated amount of fuel used per cubic yard (cubic meter) of work covered by this specification will be applied to items of work covered in [Article 2120.03, B](#) or [2120.03, C](#).
- E. A fuel adjustment will be made for items of work covered in this specification when the CPI for the month the work is performed is more than \$0.15 per gallon (\$0.04 per liter) different than the BPI established at the beginning of the project.

1. For items of work covered in [Article 2120.03, B](#) or [2120.03, C](#):

- a. If the CPI is greater than the BPI plus \$0.15, then the fuel adjustment will be positive which warrants additional payment to the Contractor. The following formula will be used to calculate the additional payment:

$$\begin{array}{ll} \text{(English)} & \text{FA} = \text{FUF}(\text{CPI} - (\text{BPI} + 0.15))\text{Y} \\ \text{(Metric)} & \text{FA} = \text{FUF}(\text{CPI} - (\text{BPI} + 0.04))\text{Y} \end{array}$$

- b. If the CPI is less than the BPI minus \$0.15, then the fuel adjustment will be negative and a credit will be due to the contracting authority. The following formula will be used to calculate the credit:

$$\begin{array}{ll} \text{(English)} & \text{FA} = \text{FUF}(\text{CPI} - (\text{BPI} - 0.15))\text{Y} \\ \text{(Metric)} & \text{FA} = \text{FUF}(\text{CPI} - (\text{BPI} - 0.04))\text{Y} \end{array}$$

2. For the item of work covered in [Article 2120.03, D](#):

- a. If the CPI is greater than the BPI plus \$0.15, then the fuel adjustment will be positive which warrants additional payment to the Contractor. The following formula will be used to calculate the additional payment:

$$\begin{array}{ll} \text{(English)} & \text{FA} = (\text{CPI} - (\text{BPI} + 0.15)) \times (\text{billed gallons of fuel used per month}) \\ \text{(Metric)} & \text{FA} = (\text{CPI} - (\text{BPI} + 0.04)) \times (\text{billed liters of fuel used per month}) \end{array}$$

- b. If the CPI is less than the BPI minus \$0.15, then the fuel adjustment will be negative and a credit will be due to the contracting authority. The following formula will be used to calculate the credit:

$$\begin{array}{ll} \text{(English)} & \text{FA} = (\text{CPI} - (\text{BPI} - 0.15)) \times (\text{billed gallons of fuel used per month}) \\ \text{(Metric)} & \text{FA} = (\text{CPI} - (\text{BPI} - 0.04)) \times (\text{billed liters of fuel used per month}) \end{array}$$

~~D. Items Other Than Embankment In-Place:~~

- ~~1. Compute the Gross Fuel Adjustment (GFA) for each item of work covered in this specification other than Embankment In-Place using the following formula (the GFA may be positive or negative):~~

$$\text{GFA} = \text{FUF}(\text{CPI} - \text{BPI})\text{Y}$$

- ~~2. Compute the first \$0.15 per gallon (\$0.04 per liter) of adjustment (FFA) for each item of work covered by this specification other than Embankment In-Place (dredge material) using the following formula:~~

English $FFA = FUF(\$0.15) \times Y$

Metric $FFA = FUF(\$0.04) \times Y$

E. Embankment In-Place:

1. Compute the Gross Fuel Adjustment for Embankment In-Place (dredge material) (GFA_{Dredge}) using the following formula:

English $GFA_{Dredge} = (CPI - BPI)(\text{Billed gallons of fuel used per month})$

Metric $GFA_{Dredge} = (CPI - BPI)(\text{Billed liters of fuel used per month})$

2. Compute the first \$0.15 per gallon (\$0.04 per liter) of adjustment (FFA) for all items of work covered by this specification other than Embankment In-Place (dredge material) (FFA_{Dredge}) using the following formula:

English $FFA_{Dredge} = \$0.15 \times (\text{Billed gallons of fuel used per month})$

Metric $FFA_{Dredge} = \$0.04 \times (\text{Billed liters of fuel used per month})$

F. For each item of work covered by this specification, if the FFA is equal to or greater than the GFA_{Dredge} , the Net Fuel Adjustment will be zero, and no fuel adjustment payment will be made. The same applies to FFA_{Dredge} and GFA_{Dredge} .

G. For each item of work covered by this specification, if the GFA_{Dredge} is greater than the FFA, the Net Fuel Adjustment will be determined as $GFA_{Dredge} - FFA_{Dredge}$. If the GFA_{Dredge} is less than 0.0, the Net Fuel Adjustment will be determined as $GFA_{Dredge} + FFA_{Dredge}$. The same applies to GFA_{Dredge} and FFA_{Dredge} .

2120.05 BASIS OF PAYMENT.

- A. Payment will be the Net Fuel Adjustment (FA) for each month, subject to the deduction for partial payments described in Article 1109.05. Should the Net Fuel Adjustment (FA) be negative, an equal amount will be deducted on payments made to the Contractor from sums otherwise due. This payment or deduction will be made by change order.
- B. On completion of the work of the contract:
- For all items covered in this specification other than Embankment In-Place (dredge material) Article 2120.03, B or 2120.03, C, the sum of the total quantities (Y) for each monthly period will be adjusted, if necessary, to agree with the final quantities to be paid.
 - For Embankment In-Place (dredge material) the item covered in Article 2120.03, D, the sum of the total quantities for billed gallons (liters) of fuel used for each monthly period will be adjusted, if necessary, to agree with the final quantities to be paid. This adjustment will be made by either:
 - Subtracting the proper quantity from the last adjustment made, or
 - Adding the proper quantity and computing the adjustment on the basis of the CPI in effect on the last working day any of this work was done.
- C. On completion of the work of the contract, the monthly fuel adjustment will be revised by pro-rating any variance from the plan quantity.
- D. Payment or deduction is full compensation for all fluctuations in fuel prices during the time the contract work is being done.