

WEST VIRGINIA DEPARTMENT OF TRANSPORTATION  
DIVISION OF HIGHWAYS  
MATERIALS CONTROL, SOILS AND TESTING DIVISION

MATERIALS PROCEDURE

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PROCEDURE FOR DETERMINING AN ADJUSTED PAY QUANTITY  
RESULTING FROM EXCESS MOISTURE IN AGGREGATES

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- 1.0 PURPOSE
- 1.1 To provide a method to determine adjusted pay quantity to be used in those cases where excess moisture in aggregate has been confirmed. In this method, the pay quantity will be considered to be the net weight of the aggregate determined in Megagrams delivered.
- 2.0 SCOPE
- 2.1 This procedure is applicable to aggregate furnished under Maintenance Purchasing Requisitions.
- 3.0 DEFINITION OF TERMS
- 3.1 Normal Moisture Content - the moisture content (on the basis of ASTM Method C-566) of stocked aggregate as it would generally exist under field conditions over an extended period of time.
- 4.0 PROCEDURE
- 4.1 In the event it has been determined by ASTM Method C-566 that an aggregate type has a moisture content in excess of that which is listed and designated as "Normal Moisture Content" for that type in Table 1, the pay quantity represented shall be adjusted in accordance with 4.2.

TABLE 1  
 NORMAL MOISTURE CONTENT  
 MOISTURE PERCENTAGE

TYPE	CLASS 1 & 2	GRADED**	FINE
Limestone	5.0	1.0	5.0
Gravel	3.5	1.0	
Sand			5.0
Sandstone	5.0	1.0	5.0
Slag*	6.0	2.1	7.0
Cinders			10.0
Boiler Slag			10.0
Steel Stag	4.0	1.0	5.0

\*Blast Burnace Slag

\*\*AASHTO Sizes No. 1 through No. 9, Class 7 Gabions and Shot Rock

- 4.2 The adjusted pay quantity shall be calculated by comparing the normal moisture content with the actual moisture content.

The adjusted pay quantity calculation would be:

$$APQ = \text{Megagrams} \frac{(1 + M_N)}{(1 + M_a)}$$

Where : APQ = Adjusted pay quantity

Megagrams = Net weight delivered

$$M_a = \frac{\text{Actual Moisture Content}}{100}$$

$$M_N = \frac{\text{Normal Moisture Content}}{100}$$

4.3 Example

Net weight of graded limestone delivered = 13.6 Megagrams

Actual moisture content = 3 percent

Normal moisture content = 1 percent

$$\text{APQ} = 13.6 \frac{(1 + .01)}{(1 + .03)}$$

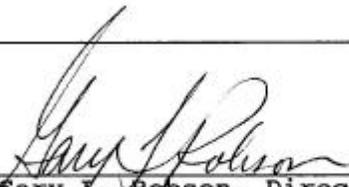
$$\text{APQ} = \frac{13.6 (1.01)}{1.03}$$

$$\text{APQ} = \frac{13.736}{1.03}$$

$$\text{APQ} = 13.3 \text{ Mg}$$

In this case the adjusted pay quantity would be 13.3 Megagrams instead of the 13.6 Megagrams.

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Gary L. Robson, Director  
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