

Approved:



William Lindenbaum,
Deputy Director
Division of Construction Management

Standard Procedure: 510-009(SP)
Effective Date: January 06, 2004
Responsible Division: Construction
Management
Supersedes Standard Procedure 510-009(SP)
Dated April 22, 2003

ACCEPTANCE OF NONSPECIFICATION MATERIAL ON CONSTRUCTION PROJECTS

PURPOSE:

The purpose of this standard procedure is to establish a consistent process for accepting nonspecification material with a pay deduction according to paragraph 2 of 105.03.

This standard procedure provides guidelines to determine the value of nonspecification material that was incorporated into the work.

It further establishes an appeal process of a DCE determination for the Contractor.

REFERENCES:

Appendix A: CALCULATIONS FOR COMMON MATERIAL DEFICIENCIES

DEFINITIONS

C&MS: "Construction and Material Specifications"

Contractor: Defined in C&MS 1997 edition Section 101.14 and C&MS 2002 edition Section 101.03.

DCE: District Construction Engineer

Reasonably
Close

Conformity: Defined in C&MS 1997 edition Section 101.351 and
C&MS 2002 edition Section 101.03.

PROCEDURE STATEMENT

- I. The materials incorporated into a construction project are required to meet all requirements of the applicable material specification before being incorporated into the work. The basis for approval shall be either:
 - A. Sampling as listed in the applicable specification; or
 - B. Where field sampling is not feasible, the method of approval shall be as determined by the Administrator, Office of Materials Management.

- II. Options available when material is not in reasonably close conformity after incorporation into a construction project:
 - A. If material that has been used is later found not to be in reasonably close conformity with the plans and specifications and will not provide a satisfactory product, the DCE will order its removal and replacement with approved material at the Contractor's expense according to C&MS 1997 and 2002 editions, Section 105.03. If the Contractor does not comply with the DCE order, the DCE under authority of C&MS 1997 edition, Section 105.12 or C&MS 2002 edition, Section 105.11, will remove and replace the material with Department forces or the forces of another Contractor and deduct the expense incurred from the contract pay estimates.
 - B. If the District finds material not in reasonably close conformity with the plans and specifications, but provides a satisfactory product, in the judgment of the DCE, the material may be allowed to remain in place with a documented appropriate adjustment in the contract price for that material in accordance with C&MS Section 105.03.

- III. Report on Disposition, Value, and Appeal of Nonspecification Materials Used on a Construction Project:
 - A. The District shall prepare a report for all materials which fail to meet the applicable requirements of the plans, specifications, or proposal. The District may consult with the Office of Materials Management in determining whether extra testing is needed for verifying the contents of the report. The reports reflecting materials that fail to meet the applicable requirements of the plans, specifications, or proposal shall be submitted to the DCE for the purposes of determining whether the material shall be removed and replaced or whether it may remain in place with an adjustment in the contract price.

1. The DCE may consult with Central Office in determining if the material should be removed and replaced.
2. If it is determined that the material may remain in place, the DCE will determine the price adjustment in accordance with the following guidelines:
 - a. For common material deficiencies, use the appropriate calculation from Appendix A or the minimum administrative fee stated in Section III.A.2.c of this procedure, whichever is greater.
 - b. For material deficiencies that are less common and not covered in Appendix A, establish a fair market value (appropriate deduction) for the materials based on facts of usage in the construction project, or apply the minimum administrative fee stated in Section III.A.2.c of this policy, whichever is greater.
 - c. A minimum administrative fee of \$300 shall be applied to all deficient materials test reports, unless a higher appropriate deduction is established.
 - (1) The DCE may combine deficient material test reports into the same change order having one \$300 administrative fee provided the material was similar, produced on the same day, and installed on the same project.
 - (2) If the total bid price for the quantity is less than \$300, then the minimum administrative fee shall be the total bid price.
 - d. If the DCE is unable to determine an appropriate adjustment to the contract price for the nonspecification material, the District report shall be forwarded to the Central Office Review Committee in accordance with Section IV of this policy.
 - e. The cost of any additional testing that was required to determine the acceptability of the in-place material shall be included in the deduction in addition to the fair market or administrative fee deduction fair market or administrative fee.

- B. A copy of the test report along with the price adjustment shall be sent by the DCE to the Contractor.
- C. Written notice must be given to the Contractor, who may appeal the price adjustment within 10 days of receipt of the test report and price adjustment.
 - 1. If the Contractor appeals the price adjustment, the appeal shall be sent by the Contractor to the DCE.
 - 2. The DCE will forward the appeal to the Central Office Review Committee according to Section IV of this procedure.
 - 3. Failure to file an appeal within the allotted time waives the Contractor's right to appeal the DCE determination.
- D. After the Contractor's appeal time has elapsed and no appeal has been submitted, the District shall process a change order that accepts material that has failed to meet the plans and specifications, but results in a reasonably acceptable product. The change order shall include the appropriate adjustment in the contract price.

IV. Central Office Review Committee

- A. If the Contractor appeals the price adjustment or the DCE is unable to arrive at an appropriate price adjustment for the nonspecification material, the District shall immediately forward a report to the Secretary of the Central Office Review Committee. The District report shall contain all data and analysis compiled and performed by the District and any report submitted by the Contractor.
- B. The Central Office Review Committee consists of the:
 - 1. Deputy Director, Division of Construction Management, Chair.
 - 2. Administrator, Office of Construction Administration.
 - 3. Administrator, Office of Materials Management
 - 4. The Committee Secretary is appointed by the Chair of the Committee.

- C. In its review and resolution the Committee may, at its discretion, rely on internal or external expertise. The Committee will meet on an as needed basis as determined by the Chair.
- D. The Central Office Review Committee Chair will notify the DCE of its decision for appropriate final action.

TRAINING:

This procedure does not require any training of the DCEs. The Office of Construction Administration will advise the various DCEs on any policy or procedure question.

FISCAL ANALYSIS:

This procedure will not have any fiscal impact to the Department.

Appendix A CALCULATIONS FOR COMMON MATERIAL DEFICIENCIES

I. Deficient Strength

If a material has deficient strength, then the following deduction shall apply:

$$\text{Deduction (percent)} = 100 \times [1 - \{\text{actual strength} / \text{required strength}\}]$$

Apply the calculated percentage to the actual cost of the bid item the material was provided under. Do not use this calculation for determination of deductions for concrete whose sample cylinders broke at a low strength.

II. Deficient Coating Thickness

If a material has deficient coating thickness, then the following deduction shall apply:

$$\text{Deduction (percent)} = 100 \times [1 - \{\text{actual thickness} / \text{required thickness}\}]$$

Apply the calculated percentage to the actual cost of the bid item of the material that was to be protected by the coating.

III. Gradation (304)

When material is inadvertently incorporated into the work the following scale deduction shall be used for each failed sample and on each sieve:

Percent Out of Gradation	Percent Deduction of bid item Cost (all sieves except No. 200)	Percent Deduction of bid item Cost (No. 200 sieve)
0.1 - 1.0	(1)	(1)
1.1 - 2.0	5	10
2.1 - 3.0	10	20
3.1 - 4.0	15	30
4.1 - 5.0	25	50
5.1 or greater	(2)	(2)

- Notes: (1) Minimum administrative fee shall apply
 (2) Material removed and replaced at no cost to the Department.

The deduction is not cumulative, when the aggregate fails to meet the specified gradation on more than one sieve, the largest deduction shall apply. This deduction shall apply to all material represented by the sample.

IV. Gradation (306, 307, 1998 & 2002 Spec Books & 308 2002 Spec Book)

When random samples fail to meet specification gradation requirements at discharge from the mixer or pugmill or after the spreading operation, the following scale deduction shall be used for each failed sample and on each sieve:

Percent Out of Gradation	Percent Deduction of bid item Cost (all sieves except No. 200)	Percent Deduction of bid item Cost (No. 200 sieve)
0.1 - 1.0	(1)	(1)
1.1 - 2.0	10	50
2.1 - 3.0	20	50
3.1 - 4.0	30	50
4.1 - 5.0	50	50
5.1 or greater	(2)	(2)

- Notes: (1) Minimum administrative fee shall apply.
 (2) Material shall be removed and replaced at no additional cost to the Department.

The deduction is not cumulative, when the aggregate fails to meet the specified gradation on more than one sieve, the largest deduction shall apply. If a pugmill and spreader sample represents the same lot or tonnage, the largest deduction shall apply. This deduction shall apply to all material represented by the sample.

V. Excess Water (Moisture) in Liquid Materials

If a liquid material has excess water (moisture) the following formula applies:

$$\text{Price Adjustment} = \{ W_A - W_M \} \times P \times 0.01$$

- Where: W_A = actual water (moisture) content (%)
 W_M = maximum allowed water (moisture) content (%)
 P = Bid item price the excess water is incorporated in (\$)

VI. Air Voids and F/A Ratio

Any instance of a material having a **F/A Ratio** (C&MS 441.09 B.) of 1.5 or greater will be evaluated for removal. If allowed to remain in place the pay adjustment of the bid price will be 20% for a surface course or 10% for other courses .

For any non-specification F/A Ratio between 1.2 and 1.5 accept the very first non-specification test of the project JMF without a price deduction or administrative fee, provided the Contractor brought the following test into the specification limits. All subsequent tests between 1.2 and 1.5 will receive a pay adjustment of the bid price of 10%. If the Contractor does not immediately (441.09 paragraph 2) adjust and retest per his QC Plan apply a pay adjustment of the bid price of 10% to all test results between 1.2 and 1.5.

Any instance of a material having an **Air Void** result greater than 6% or less than 2% will be evaluated for removal. Evaluation will include contacting central office for input. If allowed to remain in place the pay adjustment of the bid price will be 20% for a surface course or 10% for other courses.

Accept any non-specification Air Void (C&MS Table 441.10-1) result between the specification limit and 6% or 2% of a project JMF without a price deduction or administrative fee if the number of non-specification tests is less than or equal to 10% (up to 3 maximum) of the total number of QC tests and if the tests are not consecutive in any manner. Otherwise apply the following:

For any non-specification Air Void (C&MS Table 441.10-1) result between the specification limit and 6% or 2% accept the very first non-specification test of the project JMF without a price deduction or administrative fee, provided the Contractor brought the following test into the specification limits. All subsequent tests (consecutive or otherwise) between the specification limit and 6% or 2% will receive a pay adjustment of the bid price of 10%. If the Contractor does not immediately (441.09 paragraph 2) adjust and retest per his QC Plan apply a pay adjustment of the bid price of 10% to all test results between the specification limit and 6% or 2%.

VII. Low Bitumen Content

If a sample of asphalt concrete or asphalt concrete base has a bitumen content below the specification limits, then the following formula applies:

$$A (\$/CY) = [\{B_R - B_A - L\} \times Q_T \times PI] / [Q_V \times 100]$$

$$B (\$/CY) = \{B_R - B_A - L\} \times P \times 0.233$$

$$\text{Price Adjustment } (\$) = \{A + B\} \times Q_V$$

Where: B_R = required bitumen content (%)

B_A = actual bitumen content (%)

L = allowable limits from design (%) = usually 0.5

%

Q_T = effected quantity in tons

Q_V = effected quantity in cubic yards

PI = placing index for month material placed (\$/ton)

P = bid item price (\$/CY)

VIII. High Bitumen Content

The DCE may accept, without a price deduction or administrative fee, asphalt concrete base material produced with a high bitumen content, provided the Contractor immediately brought the subsequent production into the specification limits and continued to control the mix within reasonably close conformity to the specifications.

If the material continues to be produced outside the specification limits or inconsistent control of the material following the above allowance persists, then the DCE shall review the performance of the material to determine if the material can remain in place. If the material is allowed to remain in place, then the pay adjustment shall be 5 percent of the bid item purchase price of the in-place material.

IX. Bitumen Content or 4.75 mm (No. 4) Sieve Outside Range Limitation

If a sample of asphalt concrete or asphalt concrete base is outside the range limitation specified for bitumen content or the 4.75 mm (No. 4) sieve, then the following formula applies:

$$\text{Price Adjustment} = P \times 0.05$$

$$\text{Quantity to Apply Price Adjustment}^* = Q_V \times F$$

Where: F = fraction out on range based on the number of tests outside the range limitation divided by the total tests performed

P = bid item price

Q_V = effected quantity in cubic meters (cubic yards)

* Any remaining quantity shall have no deduction.

X. PG Binder

If a check sample of PG binder from a hot mix facility fails to meet the grade requirements and is proven to fail by at least two sample failures and a refinery sample taken at the same time is proven to pass the following formula applies:

$$\text{Price Adjustment} = P \times A \times Q$$

Where: Q = quantity of PG binder affected

P = bid item price

A = total of applicable adjustment factors from chart

Adjustment factor for PG binder sample failure

m-value failure	0.290 - 0.299	A = 0.05
	0.280 - 0.289	A = 0.10
	0.270 - 0.279	A = 0.20
	0.269 or less	A = 0.30
Original DSR (G*/sin delta)	less than 1.00kPa	A = 0.30
Any other PG properties		A = 0.05