

**Administration and Inspection Activities for
Additional Test Results and Samples for Recovered Asphalt Cement (RAC)**

(As Specified in ~~NSSP-BITU0027~~111S15)

1101.01 SCOPE

This CAIS covers the construction administration and inspection requirements for recovered asphalt cement as specified in ~~NSSP-BITU0027~~111S15.

1101.02 REFERENCES

This CAIS refers to the following standards, specifications, or publications:

Ontario Provincial Standard Specifications, Material:

OPSS 1101 Performance Graded Asphalt Cement (PGAC)

Construction Administration and Inspection Specifications (CAIS):

CAIS 313-04 Additional Requirements for Acceptance of Recovered Asphalt Cement (RAC)
CAIS 100 MTO Contract Administration General Conditions (CAGC)

MTO Standard Special Provisions:

~~SSP 111S15 Amendment to OPSS 1101, November 2020 – Additional Testing and Acceptance Requirements for Performance Graded Asphalt Cement (PGAC) and Recovered Asphalt Cement (RAC)~~

~~SSP 103S58 Amendment to OPSS 313, April 2021 – Additional Hot Mix Asphalt Sampling and Testing Requirements for Acceptance of Recovered Asphalt Cement (RAC)~~

SSP 199S66 Quality Conformance Requirements

~~MTO Non-Standard Special Provisions:~~

~~NSSP-BITU0027 Amendment to OPSS 1101, November 2020 – Additional Test Results and Samples for Performance Graded Asphalt Cement (PGAC) and Recovered Asphalt Cement (RAC)~~

~~NSSP-BITU0028 Amendment to OPSS 313, April 2021 – Additional Requirements for Acceptance of Recovered Asphalt Cement (RAC)~~

MTO Forms:

PH-CC-249 Recovered Asphalt Cement (RAC) Test Reporting Sheet
PH-CC-824 Limiting Grade Report for Extended BBR Test
PH-CC-835 DENT Test Reporting Sheet - Load in lbf
PH-CC-836 DENT Test Reporting Sheet - Load in N

1101.03 DEFINITIONS

For the purpose of this CAIS, the definitions shall be as specified in ~~NSSP-BITU0027111S15~~.

1101.08 QUALITY ASSURANCE

1101.08.01 Sampling

Inspection Activities:

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|----------|----------|--|-------------|
| 1 | - | Witness the sampling of HMA loose mix for Recovered Asphalt Cement (RAC). -Refer to CAIS 313-04 for additional administrative and inspection tasks for sampling. | 100% |
| <u>2</u> | <u>-</u> | <u>Maintain continuous possession of the samples until they are sealed and arrange the delivery to MTO's designated laboratory.</u> | <u>100%</u> |

1101.08.02 Lot Size

Administrative Activities:

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|---|---|---|---|
| 1 | M | Prior to HMA production and after discussion with the Contractor, Determine the size and location of RAC lots and for each grade of PGAC for QA testing according to OPSS 1101 and the Field Guide for Acceptance of Hot Mix Asphalt and Bridge Deck Waterproofing. -RAC lots shall be the same as PGAC lots. | - |
| 2 | - | Terminate the current RAC lot: <ul style="list-style-type: none"> • If the source of PGAC is changed, or • When HMA production for the Contract ceases for a period of 20 Days or more and termination is deemed appropriate. | - |

1101.08.03 Acceptance Testing

Administrative Activities:

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|---|---|--|---|
| 1 | M | Receive and Review all test results for RAC on Owner standard forms <u>PH-CC-249, PH-CC-824, and PH-CC-835/836.</u> | - |
| 2 | M | Complete Owner standard form PH-CC-249 based on the RAC requirements specified in NSSP BITU0027111S15 . -Provide the Contractor with the test results for each lot as they become available. -Submit a completed PH-CC-249, in excel <u>and PDF</u> formats. For non-WBCMS Contracts, submit PH-CC-249, in excel format to the Regional Quality Assurance Section and <u>bituminous@ontario.ca.</u> | - |

1101.08.04 Basis of Acceptance

Administrative Activities:

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|---|---|---|---|
| 1 | M | Using the requirements in NSSP BITU0027-111S15 and the test results, determine whether the RAC lot should be categorized as acceptable, minor borderline, major borderline, or rejectable. -Discuss categorization of the RAC lot with the Regional Quality Assurance Section. | - |
| 2 | - | If asphalt cement anti-stripping treatment is used and the Contractor submitted a request when production began, contact the Regional Quality Assurance Section to determine if an allowance will be made to the acceptance of the RAC test results based on the impact of the anti-stripping treatment. | - |
| 3 | M | Notify the Contractor of the category for each RAC lot. | - |

1101.08.05 Referee Testing

Administrative Activities:

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|---|---|---|---|
| 1 | M | If referee testing of RAC is requested by the Contractor, check that it is within the time constraint and the performance grading test result category meets the requirements specified in NSSP BITU0027111S15 . -Using Owner standard form PH-CC-883, coordinate the referee testing according to the Field Guide for Acceptance of Hot Mix Asphalt and Bridge Deck Waterproofing. | - |
| 2 | M | Receive and Review all referee laboratory test results for RAC on Owner standard forms PH-CC-249, PH-CC-824, and PH-CC-835/836. | - |
| 3 | M | Complete Owner standard form PH-CC-249 based on the RAC requirements specified in NSSP BITU0027111S15 . -Provide the Contractor with the referee test results for each lot as they become available. -Submit a completed PH-CC-249, in excel <u>and PDF</u> formats. For non-WBCMS Contracts, submit the completed PH-CC-249, in excel format, to the Regional Quality Assurance Section and bituminous@ontario.ca. | - |
| 4 | - | Using the requirements in NSSP BITU0027-111S15 and the referee test results, determine whether the RAC lot should be categorized as acceptable, minor borderline, major borderline or rejectable. -Discuss categorization of the RAC lot with the Regional Quality Assurance Section. | - |
| 5 | - | If referee testing did not confirm total conformance of the RAC to the Contract Documents, the Contractor shall be charged the cost of the referee testing specified in the Contract Documents. | - |

1101.08.06

Disposition of HMA Produced with Borderline and Rejectable Lots

Administrative Activities:

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|---|---|---|---|
| 1 | M | Receive and Review non-conformance reports from the Contractor for RAC samples that do not conform to the requirements of NSSP BITU0027111S15 . | - |
| | M | If the Contractor has not issued a non-conformance report, initiate the non-conformance report as specified in SSP 199S66 and in CAIS 100, MTO Contract Administration General Conditions (CAGC) under Quality Process Management. | - |
| 2 | M | Using the category for the lot and the requirements in NSSP BITU0027111S15 , Determine-determine whether the disposition of the HMA in the RAC lot will be accepted at full payment, accepted with a payment reduction, or rejected. | - |
| 3 | - | If the lot is subject to a payment reduction, calculate the payment reduction according to NSSP BITU0027111S15 . -If the PGAC in the lot is also subject to a payment reduction, only apply the higher payment reduction to the HMA in the lot according to NSSP BITU0027111S15 . | - |
| 4 | M | Notify the Contractor of the disposition of the HMA within the RAC lot and any payment reduction that applies. | - |
| 5 | - | For lots with rejectable RAC, determine whether the work will be repaired or subject to a payment reduction acceptable to the Owner. -Notify the Contractor of the requirement to repair the work or that the work will be accepted with a payment reduction. | - |

WARRANT: Always with ~~NSSP BITU0027111S15~~, Amendment to OPSS 1101 - Additional ~~Testing and Acceptance Requirements for Results and Samples for~~ Performance Graded Asphalt Cement (PGAC) and Recovered Asphalt Cement (RAC).