



Approved Products List (APL) and Build American Buy America (BABA) Sample Life Cycle

June 18, 2024

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Updates

This section summarizes the updates in this document from the last posted version.

Description	Page Number
Added Update Section	3
Additional language regarding current Department status of BABA	4
Deleted language for 1 per product per placement per project	5
Added language for new frequency 1 per product per project	5
Additional language/note for new frequency	10
New Note for materials with multiple Method of Acceptance	11
Highlighted instructions for when the Tester is not CTQP qualified	12
Additional language for test reason "Other" selection in step #7	13
Added report example screenshots	16 - 18
Broke table into two tables – one for materials with no APL tracking sample	19
and one for materials where the APL tracking sample is logged into MAC	
under a different MAC Spec than the APL Spec	
Designated that 985 "E" Geotextile Materials require an APL tracking	19
Sample if left in place permanently.	
Removed table from MM 5.10	22

Introduction

Products from the Approved Products List (APL) were tracked in the State Construction Office (SCO) Pay Item Tracking System (PTS). PTS has been decommissioned and all APL products permanently installed are now tracked in MAC beginning on January 1, 2023 **on both new and active projects**.

Products with a Build America Buy America (BABA) designation will be entered in MAC as they are added to the APL. This requirement applies to contracts let on or after January 1, 2024. Currently some of the product categories are being loaded into PATH but the process is not complete at this time. Once the BABA products are in PATH and MAC, there is no difference in the entry and tracking for APL products and BABA products.

Things to know:

- MAC does not interface live with the Product Application Tracking and History (PATH) database where the APL data is published
 - MAC gets a daily snapshot of limited APL data from PATH
- It is crucial MAC data entry is done in a timely manner
 - Products may be acceptable at the time of placement, but if entered at a later date and the product is no longer acceptable, MAC may indicate the product is not acceptable
- Each product may have one or more situations that impact acceptability for a specific project
 - Do not assume that a product is acceptable based on having an APL Number
- A review of the product limitations, exceptions, waivers, etc. must be performed in PATH before the project is placed
 - o Some products have comments that may limit the usage or placement of the product
 - Comment: Approved for 12,18, 24, & 36 inch depths
 - Some products have limitations such as workbook let date
 - Some products have additional information on the product details page about limitations or waivers



Only eligible on this project

Some products are not BABA eligible

- BABA Eligible: Not Eligible
 Limitation: Not Eligible for Federally funded projects let on or after January 1, 2024
 - Some have all of these
- Enter one sample for each unique APL or BABA product placed on each project and left in place permanently.

Chapter 1 - Reviewing the APL

Before a product is placed on the project and a tracking sample is entered into MAC, project personnel must check PATH to confirm the acceptability of the product. This review includes confirming any limitations, comments, or statuses. Just because a product has an APL number does not mean it is acceptable for a specific project.

The address is as follows: https://path.fdot.gov/Specifications

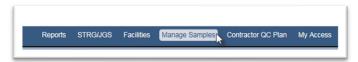
Search for the product and review any comments, statuses, limitations, etc. Check the product details page for more information. If there are any questions about a product's acceptability for a specific project, contact the Product Evaluation Office by selecting the Help link on the upper right corner of any screen in PATH.



MAC Support cannot provide input on product acceptability. We can assist with general MAC questions such as login or result entry. For product specific questions, contact the Product Evaluation Office.

Chapter 2 – Sample Login

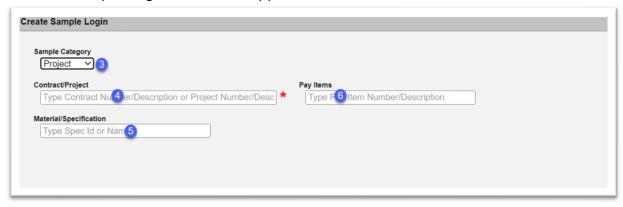
You must be in your company roles to process samples in MAC. These instructions assume the user is already logged into MAC, is familiar with sample functions, and has the correct role(s) to create samples, enter test results, and submit samples to FDOT.



1. Select the Manage Samples option from the MAC menu. You will be navigated to the Sample screen.



- 2. Select the Create Sample Login option
- A Create Sample Login screen will appear.



- 3. Sample Category this field defaults to Project. Leave it as is for APL/BABA tracking samples.
- 4. **Contract/Project** begin typing the contract number or Financial Project Id in the field. Either can be supplied. Select an entry from the returned list.

NOTE: If the same product is used on more than one project on a contract, log a sample in for each project so the quantity installed can be associated with each project.

5. **Material/Specification** – select the Material before selecting a pay item. From the dropdown, select the appropriate Material for the product the sample represents. If you are not sure what Material to use, contact the appropriate SMO technical unit or a system administrator.

NOTE: In most cases, the MAC Material will be the same as the APL Spec Category. In some cases, the MAC Material is based on a Division III Specification, not the APL Spec Category. See Chapter 6 – APL Product to MAC Spec Crosswalk.

NOTE: If the material is not available:

- a. Standard JGS contact the MAC Support Team. We may need to assign the pay item to MAC Material(s).
- b. Nonstandard JGS review the Materials tab on the Nonstandard JGS to ensure that the MAC Material has been added. If the Material is on the Materials tab and it does not appear on the sample login screen, contact the MAC Support Team.

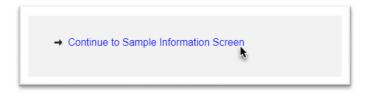
6. Pay Items -

- a. **Standard JGS** select the pay item the product represents. If the same product is used on more than one pay item, log a sample in for each pay item so the quantity installed can be associated with each pay item.
- b. **Nonstandard JGS** Do not select a pay item on a nonstandard JGS project. After selecting the Material, you will not have an option to select a pay item.



NOTE: If the pay item does not appear, contact the MAC Support Team. It may need to have the MAC Material assigned to the pay item in MAC. If the missing pay item is the only one that would have the material assigned to it, the material may not appear in the Material/Specification field.

NOTE: When a project specific MAC Spec is assigned on a standard JGS, the pay item dropdown will disappear when you select the Material and you will receive the message "No Pay Items found related to all select projects/materials".



7. Select the Continue to Sample Information Screen option to continue.

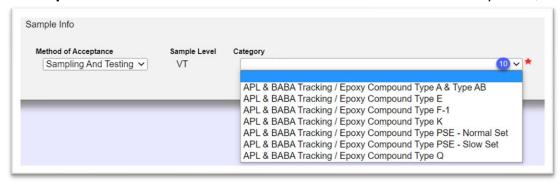
New fields will appear on the login screen.



8. **Method of Acceptance** – the method of acceptance for APL/BABA tracking samples is Sampling and Testing. Sometimes this field will be a default. Some Materials may have a dropdown, especially those that are APL and require a certification document and/or a physical sample of the material to be logged into MAC. Always select Sampling and Testing for APL/BABA tracking samples.



9. Sample Level – this defaults to VT in most cases. If there is a dropdown, select VT.



10. **Category** – some MAC Specs will have categories and types for physical samples needed for acceptance. For this process, select the category / type associated with the APL tracking. This is a key field. If the incorrect category / type is selected, the sample must be deleted and reentered.

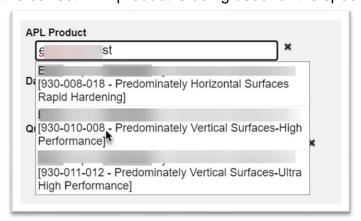
NOTE: If an incorrect category / type is selected and the sample is saved, do not return the sample for Sample Information corrections to update the category / type even though MAC will allow it. Have a new sample with the correct category / type entered and processed, then have the appropriate DAC delete the incorrect sample.

Different MAC Specs will have different sample login fields. The following instructions will cover all fields that may appear on an APL tracking login screen. However, they may not all appear on a specific login screen.



11. **APL Product** – begin typing the APL number or description of the and select the entry from the returned list.

NOTE: Make sure the appropriate number is selected. Some products have more than one APL number because they are approved for multiple applications. Project personnel must ensure that the correct APL product is being used for the specific application.

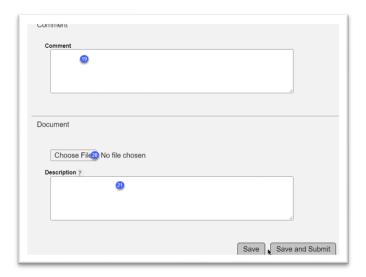


For example, this concrete repair material is designated as Predominately Horizontal Surfaces Rapid Hardening, Predominately Vertical Surfaces-High Performance and Predominately Vertical Surfaces-Ultra High Performance. In this case, it was used in a predominantly vertical surface-high performance application so the correct APL Number to select is the 2nd entry.

- 12. **Date Sample Taken** this field is required on all samples in MAC. Enter the date the product was last placed or select the date from the calendar.
- 13. **Quantity Installed** enter the total amount of the product that was (or will be) placed on the project. For example, if 500 pounds of Fiber Reinforced Polymer rebar was placed, enter 500.
- 14. **Unit of Measure** enter the measure for the quantity placed; for example, 500 pounds of Fiber Reinforced Polymer rebar was placed, enter pound and select Pound(s) from the returned list.

NOTE: The frequency requirement has changed from one per product per placement to one per product. Some products will not be placed all at once. You can either enter a sample to represent the product when it is first placed and update the total quantity later when all the quantity for the product has been place. Or you may wait until all the product is placed and enter one sample for the total quantity. However, consideration must be given to the product acceptability at each placement. There is a hazard that the product is acceptable on the initial placement but becomes unacceptable before the final placement(s).

- 15. **Wall #** if the product is part of a wall or placed in a wall, enter the Wall Number from the project plans.
- 16. **Bridge** # if the product is part of a bridge or placed on a bridge, enter the FDOT Bridge Number.



NOTE: Some samples may have Station Sampled under the Location information. This is for products that cannot be readily detected, for example, concrete repair materials. When the Station Sample field appears, enter the station location where the product is placed.

17. Save or Save & Submit -

a. Select Save if you are not ready to respond to the test question and want to save the data you have entered so far. For example, review the product in the PATH to ensure you have confirmed all the statuses, comments and limitations. If you select Save, the sample will be designated as Logged and will need to be Submitted for Testing even if the test results have been entered.

b. Select Save & Submit if you are ready to respond to the test question.

NOTE: APL tracking samples can be returned for corrections. The status of the APL product may be impacted, depending on how long after the product was placed and if it is still acceptable.

NOTE: APL/BABA tracking in MAC does **NOT eliminate** other methods of acceptance requirements.

In some cases, a product may require

- an APL tracking sample
- a certification reviewed by SMO or a physical sample
- and a Program MAC Spec random sample

For example, Specification Section 932 requires:

- The Low Modulus Silicone sealant must be on the APL and meet any limitations, etc.
 - An APL tracking sample to document the APL Number and the product acceptability based on limitations
- A physical sample of the Low Modulus Silicone sealant to be taken for project acceptance and sent to the SMO
- A Program MAC Spec random sample may be needed (<u>Chapter 7 Random Sampling Program</u>).

Chapter 3 – Result Entry, Review and Submittal to FDOT

A. Result Entry



- 1. Click on the Associated Test tab to expand it.
- 2. Select the Perform Test option.

NOTE: The Mark Test Not Performed option appears but does not apply. This option should not be selected for APL/BABA tracking samples.

A Perform Test dialog box appears. The Test name is APL Tracking. It is used for both APL and BABA tracking.



- 3. **Tester** this field is required on all tests in MAC. This is the person who reviewed the product and determined if it is acceptable for the project. They do not have to have a Technician Identification Number (TIN). If the person who performed the review does not have a TIN, MAC will display a message, No Results Found and it will look like you cannot move forward. Select the Tab key to move to the Date Test Performed field or click in the Date Test Performed field to navigate away from the Tester field. MAC will bypass the message and store the name.
- 4. **Date Test Performed** this field is required on all tests in MAC. Enter the same date that was used in Date Sample Taken (date product placed).
- 5. Does the selected APL product meet Contract Document requirements (verify limitations and comments)? select Yes if the review of the product in PATH confirms it is acceptable for the project. Select No if it is not due to a status, comment, or limitation.

- 6. **Material Justification** this field only appears if the response in field #5 is No. There are times when it is okay to use a product that may not meet the statuses, comments, and limitations. The most common allowances are available to be selected from the dropdown; for example, there is a blanket waiver that allows the product to be used due to supply shortages. If the product is acceptable to be used, select the appropriate justification.
- a. **Blanket Waiver** Product Evaluation has issued a blanket waiver for the product's use to be used on all projects.
- b. **Project Waiver** Product Evaluation has issued a project waiver for the product's use to be used on this project.
- c. **Exempt** the product is exempt. This designation is found on the product details in PATH.
- d. **Other** if there is no applicable reason, select Other from the dropdown.
- 7. **Other Description** this field only appears if the response in field #6 is Other. If Other is selected, the test will show as failing regardless of the information included in the Description field. MAC will create a Materials Certification (MC) Review finding that will need to be processed. Enter a short description of why the product was placed on the project. You don't need to provide the full disposition. Additional details will need to be provided on an MC Review finding that will be generated automatically due to the failing test disposition. Since PAs will need to respond to the finding and provide information on the material acceptance disposition, that information does not need to be included in the field. Just include enough information to begin that process in the PA response and MAR resolution (see the <u>Project Administrator MC Review</u> manual).
- 8. Select the Save option.

B. Review and Submittal to FDOT

A Data Reviewer must confirm the sample information and test result. If the data is incorrect, make changes as needed. When the data is confirmed and/or updated, the sample can be Submitted to FDOT. If the contract, project, pay item, Material, category/type are incorrect, they cannot be updated or if they are updatable, it will not work properly. Samples with incorrect information in these fields must be deleted and reentered.

Check the following information

- Contract Number/Financial Project Id
- Pay Item(s) if it is not LS, DB or non-PrC contract
- MAC Spec
- Category/Type
- APL Number for products with multiple APL numbers, ensure the correct number was selected for the application



When the information is correct, select the Submit to FDOT option. The sample will be submitted. These samples are designated as auto finalized so the sample status will be updated to Finalized and it is considered to be closed.

Chapter 4 – Pay Items with multiple APL products

Some pay items include multiple APL products as part of a system. For APL/BABA tracking, a sample for each component will need to be logged. Many of these items are part of a submittal package including shop drawings so the information may have to be gleaned from there. Other times, the system has an APL number that covers all or most of the system. Here are some examples. These are intended to indicate some of the requirements but may not be a full list.

A. Guardrail

- Approach Terminal 31" TL-2 (End Anchorage Assembly) NCHRP 350
- Approach Terminal 31" TL-2, MASH
- Approach Terminal 31" TL-3 (End Anchorage Assembly) NCHRP 350
- Barrier Delineator
- Composite Offset Block
- End Anchorage Assembly 27" (Approach Terminal) NCHRP 350

B. Retaining Wall Systems

- Retaining Wall (548)
- Geotextile Fabric (985 physical sample no APL/BABA tracking sample)

C. Traffic Engineering

Traffic Engineering includes many components under different APL Specs. For example a signalized intersection may include Traffic Signals (650), Pedestrian Signal Assemblies (653), Mast Arm, Span Wire and Pole Mounting Assemblies (659), Vehicle Detection Systems (660), Traffic Controllers (671), Traffic Cabinets (676) and Traffic Controller Accessories (678).

D. Highway Signs

1. Single Post Signs & Multi Post Signs

- Sign Sheeting (700)
 - May include reflective and non-reflective depending on the sign

2. Sign Panel

- Sign Sheeting (700)
 - May include reflective and non-reflective depending on the sign

3. Overhead Signs

- Sheeting (700)
 - May include reflective and non-reflective depending on the sign
- Pull Box (635)
- LED Luminaire, (Sign) (715)
 - o If used

4. Internally illuminated Signs

- Illuminated Sign Highlighted Sign (700)
- Illuminated Sign Internally Illuminated Sign (700)
- Pull Box (635)
- Transformer Base (646)

5. Dynamic Message Signs

- Dynamic Message Sign DMS LED Retrofit Kit (700)
- Dynamic Message Sign Embedded DMS (700)
- Dynamic Message Sign Front Access DMS (700)
- Dynamic Message Sign Walk-In DMS (700)
- Pull Box (635)
- Transformer Base (646)

6. Electronic Display Sign

- Electronic Display Sign (EDS) Blank-Out Sign (BOS) (700)
- Electronic Display Sign (EDS) Electronic Regulatory Sign (ERS) (700)
- Electronic Display Sign (EDS) Electronic Speed Feedback Sign (ESFS) (700)
- Electronic Display Sign (EDS) Electronic Warning Sign (EWS) (700)
- Pull Box (635)
- Transformer Base (646)

7. Sign Beacon

- Sign Beacon (700)
- Pull Box (635)
- Transformer Base (646)

E. Highway Lighting

1. Luminaire (715)

- LED Luminaire Retrofit Kits, (Conventional)
- LED Luminaire Wildlife (Conventional)
- LED Luminaire, (Conventional)
- LED Luminaire, (Underdeck)
- Pull Box (635)
- Transformer Base (646)

2. High Mast Light Pole

- LED Luminaire, (High Mast) (715)
- Pull Box (635)
- Transformer Base (646)

3. Pole Cable Distribution System - (715)

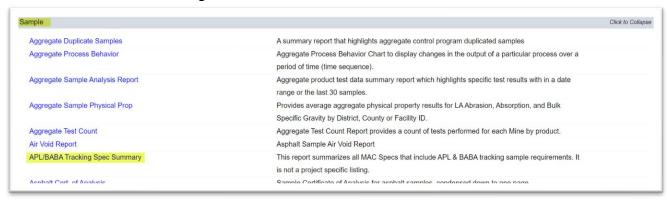
- Alternate Systems
- Products meeting Standard Plans 715-001 do not require listing on the APL

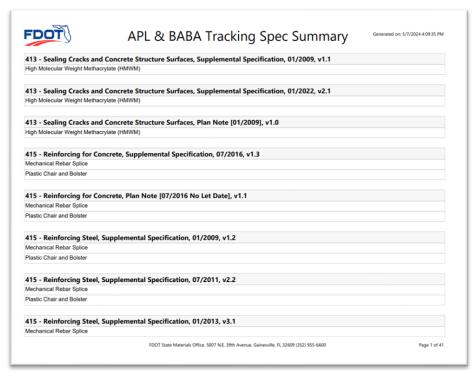
Chapter 5 – Tracking Reports

The following reports are available on the MAC Report page. These are for PAs and MC Reviewers to confirm the APL Method of Acceptance. They will not identify when a product was placed that is required to be on the APL but is not. For example, if the contractor uses sand-cement bags for riprap that are not on the APL, the PA will need to enter a manual finding to document the material acceptance disposition of the sand cement bags. This is an Exception to the Project Materials Certification Letter (PMCL) under the Non-standard Material category.

A. APL Tracking Summary

This report is a list of all MAC Specs that include a requirement for a sample to be logged into MAC for APL/BABA Tracking.

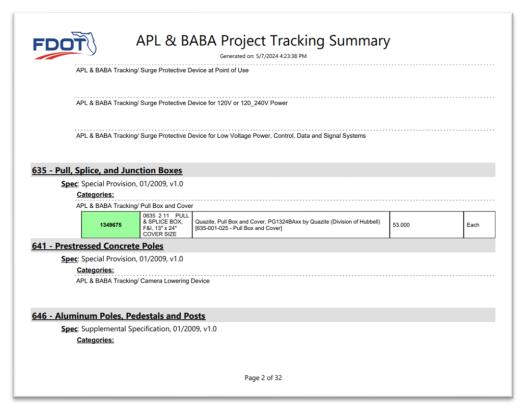




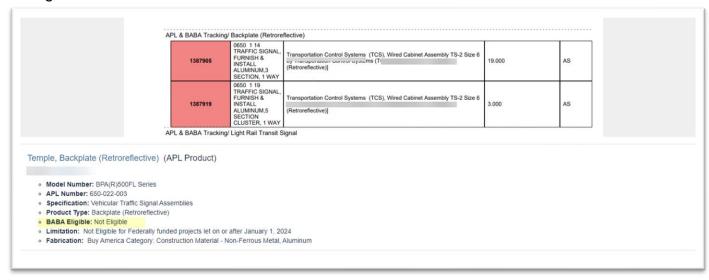
B. APL Project Tracking Summary

This report lists all the APL/BABA tracking samples on a specific project with their eligibility indicators (yes/no) and the user's responses to the test question (yes/no). Each sample will need to be evaluated to ensure that there is no issue with the material acceptance. Those that did not get an automatic finding may need to have a manual finding added to the MC Review so the MAR resolution can be documented.





Here is an example of a product that was designated as passing on the test but was flagged as not eligible.



Chapter 6 – APL Product to MAC Spec Crosswalk

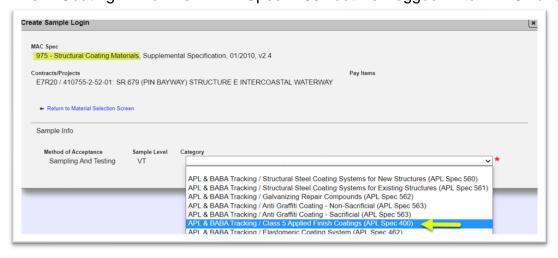
In some cases, APL/BABA tracking samples will be logged under a different MAC Spec. Listed below are APL Specs that do not have APL tracking samples in MAC (Table 1) and those logged a different MAC Spec from the APL Spec (Table 2).

Table 1 – Materials that do not require and APL/BABA tracking sample		
APL Spec	APL Product	MAC Material
102	All	N/A
102 products are not tracked in MAC because they are temporary.		
916	All	N/A
919	All	N/A
924	All	N/A
916, 919 & 924 products tracked through mix design, not by project personnel. Prime and tack coat		
tracking is by physical sample under MAC Spec 916. An APL tracking sample is not needed.		
925	All	N/A
Curing compound is not considered a "permanently installed" product.		
985	D-1, D-2, D-3, D-4&6, D-5, R-1, R-2, R-3, R-4, R-5 Geotextile Materials	N/A
Tracking is by physical sample submitted to the SMO under MAC Spec 985. An APL tracking sample is		
not needed.		
<mark>985</mark>	E-1, E-2, E-3, E-4, E-5 Geotextile Materials require an APL tracking Sample if left in place permanently.	<mark>985</mark>
For E-1, E-2, E-3, E-4 and E-5, do not submit a physical sample to the SMO. Create an APL tracking sample if the material is left in place permanently.		

Ta	able 2 – Materials with a different MAC Spec on the tracking sample than the APL	. Spec
APL Spec	APL Product	MAC Material
400	Class 5 Applied Finish Coatings705	975
458	Strip Seal Joint System	932
462	Elastomeric Coating System	975
521	Barrier Delineator – Barrier Walls	993
546	Rumble Strips	971
560	Structural Steel Coating Systems for New Structures	975
561	Structural Steel Coating Systems for Existing Structures	975
562	Galvanizing Compounds	975
563	Anti-Graffiti Coating	975
701	Profiled Thermoplastic Pavement Markings	971
704	Durable Tubular Markers	994
	Flexible Post Delineator	
705	High Performance Delineator	993
	High Visibility Median Separator Delineator	
	Raised Pavement Marker Adhesive	
700	Raised Pavement Marker Class A	070
706	Raised Pavement Marker Class B	970
	Raised Pavement Marker Class F	
700	Two Reactive Component Traffic Marking, White	074
709	Two Reactive Component Traffic Marking, Yellow	971
	Durable Paint, White	
	Durable Paint, Yellow	
710	Standard Paint, Black	971
	Standard Paint, White	
	Standard Paint, Yellow	
711	Pavement Marking – Alkyd Hot-Spray Thermoplastic - White	971

Table 2 – Materials with a different MAC Spec on the tracking sample than the APL Spec		
APL Spec	APL Product	MAC Material
	Pavement Marking – Alkyd Hot-Spray Thermoplastic - Yellow	
	Pavement Marking – Alkyd Thermoplastic - White	
	Pavement Marking – Alkyd Thermoplastic - Yellow	
	Pavement Marking – Alkyd Thermoplastic High Friction - White	
	Pavement Marking – Preformed Thermoplastic - Black	
	Pavement Marking – Preformed Thermoplastic - White, Route Shields & Color	
	Pavement Marking – Preformed Thermoplastic - Yellow	
	Permanent Tape – Black/Contrast	
713	Permanent Tape – White	971
	Permanent Tape – Yellow	
DEV 712	Integrated Multi-Polymer Pavement Markings – Black	
	Integrated Multi-Polymer Pavement Markings – White	971
	Integrated Multi-Polymer Pavement Markings – Yellow	
Developmental Specification 712 requires a project specific MAC Spec version of 971 to be assigned to the Financial Project Number. Contact the State Materials Office Chemistry Lab.		

When the APL Spec and MAC Material do not match, the MAC Material category / type will include the APL Spec in the type. Here is an example of the sample login screen for a Class 5 Applied Finish Coating which is APL Spec 400 but is logged into MAC under Material 975.





Why are there differences? All MAC Materials are based on the Specification Section where the Method of Acceptance (MOA) language is found. In these MAC Specs based on Division III Sections, that is where the project MOA language could be found. The Department is in the process of moving the MOA language from the Division III Sections (like 975) to the Division II Sections (400, 462, 560, 561, 562 and 563). This process would result in six new MAC Materials and MAC Specs to be maintained by the SMO. Since we still need to maintain the MAC Material based on the original Division III Specification, we are having all acceptance related samples logged under the original MAC Spec.

Chapter 7 – Random Sampling Program

Some APL products are part of the Random Sampling program. The program is described in <u>Materials Manual Section 5.10</u>. In addition to the APL tracking sample or a physical sample logged in under the project sample category, an additional program sample may need to be collected and submitted to the SMO.



Users should be aware of the process for sampling and submitting program random samples to the SMO. The full instructions can be found in the Projects instructions.

Users should contact the appropriate SMO Technical unit before collecting the sample to determine if a sample is needed for a specific product. If the SMO has already tested a specific product, we may not need a sample even if we are still testing for that Material.

- Physical Lab <u>SM-Physical@dot.state.fl.us</u>
- Chemistry Lab SM-MACChemical@dot.state.fl.us
- Corrosion Lab SM-MACCorrosion@dot.state.fl.us