Meeting Minutes
NTPEP Geosynthetics TC/GMA Geotextile Audit Program Task Group Leaders
Update on GMA Task Group Discussions
June 8, 2011, 11:00 a.m.
Jefferson, GA (at TenCate manufacturing Plant)

Attendees:

Brian Whitaker (and assistant Ben) – Fiberweb
Davis Taylor – Thrace-Link
John Henderson – TenCate
Katheryn Malusky – AASHTO NTPEP
Andrew Aho – GMA (by phone, first 20 minutes of meeting only)
Sam Allen – TRI
Tony Allen – WSDOT

Issues Discussed:

The purpose of the meeting was to update NTPEP and the Geosynthetics TC of the progress made by the task groups set up through the Geosynthetic Materials Association (GMA) to address industry concerns regarding the recently approved NTPEP work plan for a geotextile manufacturing plant audit program.

They reported that there is a significant portion of the industry that has concerns regarding product marking and how it is carried out, the requirement to have all manufacturer geotextile labs to be certified through the GAI-LAP program, and the requirement to audit those who private label products manufactured by others.

Product Marking: The key issues regarding product marking include the cost and the space on the geotextile required, and how to preserve anonymity, especially for those who private label geotextiles. Using some type of manufacturer code (or the manufacturer name, if the manufacturer chooses to do that) that is printed directly on the fabric on the edges every 5 to 10 meters is doable and generally acceptable to the industry. What gets more complicated and costly is printing the product name, M288 class(es), or product properties. The proposal presented by the GMA task group leaders to the NTPEP representatives present is attached with these meeting minutes. After discussion of this proposal between the GMA task group leaders and the NTPEP representatives present, it was decided that the option summarized below in parts (a) and (b) would be presented to NTPEP for its consideration, as an alternative to what is currently in the NTPEP approved geotextile audit program work plan:

   a) Permanently mark the edge of the geotextile roll with the manufacturer name or code number every 5 to 10 m (suggested that up to 10 code numbers be given to a manufacturer to be used at random – the state inspectors would need to have access to the list of code numbers for each manufacturer).
   b) Include specific information about the particular product on labels affixed/glued to the outside of the geotextile roll and on the inside and outside of the geotextile roll core (i.e.,
the cardboard tube the geotextile is rolled on). Specific information could include the AASHTO M288 Classes met by the product, certifiable values for key properties, and the roll number for traceability.

Permanently marking the edges of the geotextile with the manufacturer name or code number would meet the need the states have to know who actually manufactured the geotextile. Putting labels on the outside of the roll and on the inside and outside of the core would insure that the labels are not lost, and the labels would be less costly to implement, and provide the flexibility needed to include as much information about the specific product as the states need.

Both the marking and the labels would be placed by the manufacturer, not the private labeler or the manufacturer’s distributor. However, if the private labeler wished to place another label in a different location on the wrapping or roll, that could be done. But doing that would not replace or cover up the labels affixed by the manufacturer.

The GMA would like NTPEP to survey the states to see if this plan would be acceptable.

Note: regarding the product marking with the manufacturer, the manufacturers present indicated that even this could be a bit problematic for woven geotextile manufacturers, since so many different looms are often used to produce a product line, requiring that each loom be outfitted with marking equipment, which could be rather costly. A solution for this issue was not proposed, and the GMA task groups did not fully agree that the proposal described above that will be considered by NTPEP will be acceptable to all the manufacturers.

**GAI-LAP Certification:** Some of the manufacturers are concerned with the cost and trouble required to get this certification. They are also concerned that they should not have to get this certification if the state DOT labs who do geotextile testing are not required to get this certification. The reason this concerns the manufacturers is that a non-certified state DOT lab could trump the certified manufacturer lab if there is a conflict on the state acceptance test results. If there is a dispute regarding acceptance test results, the manufacturers feel that both labs should be on equal footing in how they are running the test.

The GMA also wondered if the audit would suffice regarding making sure the manufacturers are running the tests correctly, considering that the detailed test procedures are reviewed as part of the audit, and split sample evaluation could substitute for proficiency testing.

It was agreed that NTPEP would survey the states to find out whether or not the state DOT’s who do geotextile testing would be willing to get GAI-LAP certification (since AASHTO does not certify geotextile testing currently). Note that information about the GAI-LAP accreditation program can be found at the following web site (see application form for cost information):

http://www.geosynthetic-institute.org/gai.htm

If the states decide that they do not wish to pursue GAI-LAP accreditation, we (NTPEP) will consider modifying the work plan accordingly.
Auditing Private Label Companies: There apparently is some confusion regarding what would be included in an audit of private label companies and the focus of such an audit. As discussed in the meeting, the focus of such an audit would be traceability of the private labeled products to the source manufacturer. This would be a paper only audit. Since some private label companies use more than one source manufacturer for the same product designation under their private label, how the private label company controls the quality of the products they private label would also be evaluated. This does not mean that we would begin requiring private label companies to do quality control tests on the products they private label – again, the focus is on traceability to the quality control records of the prime manufacturer and verification that the prime manufacturer has gone through the NTPEP audit process.

Regarding testing private label company products, the focus of the testing is to provide a spot check of the accuracy of a few key properties with regard to their traceability to the prime manufacturer QC test results. The audit program in this instance would not be requiring split sample testing for the private label company.

NTPEP’s intent is to conduct a training audit later this summer of a candidate private label company that would provide an opportunity for that portion of the industry to provide direct input into how audits of private label companies would be fleshed out and implemented. NTPEP would like the GMA’s assistance in finding a volunteer private label company to do this. It would not be an official audit, nor would the results of that audit be reported. It would only be used to develop the detailed audit plan for such facilities.

Tony Allen brought up that reporting property values for private labeled products may be problematic for NTPEP, in that any test results reported would be for a specific source manufacturer. The GMA representatives present suggested that NTPEP only report the minimum certifiable values (MARV’s) for the private label products. So what do we do with the test results we obtain specifically on the private labeled products? Indicate in the NTPEP report/DataMine that the reported test results represent only one source manufacturer used by the private label company for the product designation tested? NTPEP will consider this further and get back to the GMA with their thoughts.

Other Discussions Regarding the New NTPEP Audit Program: The GMA wanted NTPEP to realize that this program could entail auditing over 50 manufacturing plants, 75% of which are outside the US. They wanted to make sure that NTPEP is prepared for the significant magnitude of such a program. NTPEP does recognize this fact, and that AASHTO NTPEP may need to hire contract auditors to help meet that need.

Tony Allen brought up that minimum requirements for manufacturer QC programs, including how a “lot” is defined, need to be more fully developed. Every manufacturer appears to define a lot differently, and also appear to have a wide range of QC programs, both for raw materials and for the finished products. NTPEP would like the GMA task groups to discuss this issue and provide recommendations to NTPEP on what the audits should be targeting as minimum QC requirements and how those QC requirements apply to what is defined as a lot, and how lots are defined, both for raw materials and for the finished products. That is, how does NTPEP define...
“compliance” with regard to this issue? The GMA representatives present said that they would do that.

NTPEP and the Geosynthetics TC requested the GMA’s assistance in selecting a few other companies to participate in training audits to help establish the detailed plans and audit objectives so that manufacturers with a wide range of quality control processes and programs are considered. We want to make sure that the bar is not set too high or too low, especially regarding what we will target for compliance regarding minimum quality control program requirements. The GMA representatives present said they would get back to us (NTPEP) on this.

To gain full acceptance of this new audit program among the states, it was mentioned that it could be helpful if representatives from the GMA participate in the NTPEP peer exchanges conducted. NTPEP will consider this.

The GMA representatives present requested specific responses to the questions e-mailed to Tony Allen and Katheryn Malusky on Tuesday, 6-6-11. Each question was discussed at the meeting. Specific responses are included in the attached document.

Meeting was adjourned at approximately 3:00 p.m.

Attachment: GMA Product Marking Proposal Presented June 8, 2011 to NTPEP
Proposal: The manufacturer will identify on the outside and inside of the roll, the manufacturer (code number or name) and the universal AASHTO product code(s). The manufacturer will employ the method of providing this information that best matches its capability and its business requirements. These methods will include additional labeling and/or printing on the product.

This proposal will:
- Provide traceability to the manufacturer
- Provide approved AASHTO classification
- Provide a method of determining manufacturer and classification if the exterior wrap is removed.

Exceptions: While the manufacturer will make every attempt to apply the proper marking, some processes are still undefined at this point on how the product can be properly identified. An example is the “downstream” processing of silt fence rolls made from master rolls.

Definitions:

Manufacturer Code: NTPEP will assign each approved manufacturer multiple random, confidential, non-sequential, unique four digit codes. The manufacture will change these codes based on its business requirements. The manufacture may also use the registered NTPEP name instead of the numerical code. The “manufacturer code” will be defined as the 4 digit code or the registered NTPEP name.

Universal Product Classification: A set of codes using significant digits will be established for all AASHTO products. (see example) : The codes will be used to identify the product’s approved classifications and by using significant digits the system would be “universal” and permanent.

Product and Manufacturing Identification Methods: Each manufacture will be required to implement either one of the below methods (or both, if the manufacturer chooses) when producing an AASHTO approved product.

Method #1 - Printing: The product will be identified by the universal product code and manufacturer code on an exterior label and printed on the product.
1. One clearly visible label will be placed on the outside of the roll with the universal product code and manufacture’s code clearly indicated.
2. The universal product code and manufacture’s code will be printed on the fabric per current proposed “work plan”.

Method #2 - Labeling: The product will be identified by the universal product code and the manufacturer code on an exterior label and by using internal labeling on the product and core. Each label listed below will be printed with the manufacturer code and universal product classification(s):
1. One label will be placed on the outside of the roll
2. One label will be placed on the inside of the core on both ends of the roll
3. One label will be placed on the outside of the core under the first wrap of fabric
4. One label will be placed on the fabric under the last wrap of the fabric

Note: The standard will be that the manufacturer name or code and the universal product classification codes will be easily identifiable on the product. However manufacturers may decide to use different formats in providing the information.

**Implementation:** AASHTO would develop the universal product codes and NTPEP would have to assign manufacturer codes to all currently approved manufacturers. All currently approved NTPEP manufacturers will be “grandfathered in”. Once the codes have been established and issued implementation, should be completed within several months of approval.

**Examples:**

Example Product: Thrace-LINQ 150EX – (approved for all Class 2 Nonwoven applications)
- Manufacturer code: 1305 (random number)
- Universal Product Codes: 250, 260, 270, 280

<table>
<thead>
<tr>
<th>Application</th>
<th>CLASS 1</th>
<th>CLASS 2</th>
<th>CLASS 3</th>
</tr>
</thead>
<tbody>
<tr>
<td>Subsurface Drainage</td>
<td>(Woven (elongation &lt; 50%), Nonwoven (elongation &gt; 50%))</td>
<td>(Woven (elongation &lt; 50%), Nonwoven (elongation &gt; 50%))</td>
<td>(Woven (elongation &lt; 50%), Nonwoven (elongation &gt; 50%))</td>
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<tr>
<td>% Fines</td>
<td>100(all), 150(all), 200(all)</td>
<td>250(all), 300(all), 350(all)</td>
<td></td>
</tr>
<tr>
<td>&lt; 15%</td>
<td>101, 151, 201</td>
<td>251, 301, 351</td>
<td></td>
</tr>
<tr>
<td>15% to 50%</td>
<td>102, 152, 202</td>
<td>252, 302, 352</td>
<td></td>
</tr>
<tr>
<td>&gt; 50%</td>
<td>103, 153, 203</td>
<td>253, 303, 353</td>
<td></td>
</tr>
<tr>
<td>Stabilization</td>
<td>110, 160, 210, 260, 310, 360</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Separation</td>
<td>120, 170, 220, 270, 320, 370</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Perm Erosion Control</td>
<td>130(all), 180(all), 230(all)</td>
<td>280(all), 330(all), 380(all)</td>
<td></td>
</tr>
<tr>
<td>% Fines</td>
<td>131, 181, 231, 281, 331, 381</td>
<td></td>
<td></td>
</tr>
<tr>
<td>&lt; 15%</td>
<td>132, 182, 232, 282, 332, 382</td>
<td></td>
<td></td>
</tr>
<tr>
<td>15% to 50%</td>
<td>133, 183, 233, 283, 333, 383</td>
<td></td>
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</tr>
</tbody>
</table>
Note: Shown on the following pages are several examples of different examples of the labeling and printing, but these examples are not all inclusive of what can be done to provide the information required.
Method #1 – Printing - Example #1

Description: Manufacture would use method #1 and print its company’s name on the fabric along with the universal product codes.

Exterior label could include the information like the following:

OR manufacturer could add an extra AASHTO label like below along with normal label:

AND the manufacturer would print the following on the product per the current work plan:

Thrace-LINQ – 250, 260, 270, 280
Method #1 – Printing - Example #2

Description: Manufacture would use method #1 and print its company’s code on the fabric and label along with the universal product codes.

Exterior label could include the information on the private label like the following:

OR manufacturer could add an extra AASHTO label like below along with normal “private” label:

Manufacturer would print the following per the current work plan on the product:

1305 – 250, 260, 270, 280

Updated 7-22-11 based on late comments from the GMA
Method #2 – Labeling - Example #1

Description: Manufacture would use method #2 and print its company’s code on the labels along with the universal product codes.

Manufacturer would add an extra AASHTO labels like below at the proposed locations:

```
<table>
<thead>
<tr>
<th>Manufacture Code: 1305</th>
</tr>
</thead>
<tbody>
<tr>
<td>Product Code: 250-260-270-280</td>
</tr>
</tbody>
</table>
```

Manufacturer could put name here instead of code.