Attendees
Tony Allen (TC Chair) began the meeting with introductions of those present, and an overview of the meeting agenda. The attendance summary is as follows:

22 total (10 from industry, 11 from state DOT’s, 1 AASHTO staff).
5 Technical Committee members present (3 from state DOT’s, including Tony Allen, Jim Curtis, and Pete Kemp, and two from industry, including Bill Hawkins and Richard Goodrum).

The full attendance sheet is attached with these minutes.

Geotextile Testing Program

Jim Curtis (TC Vice Chair) provided a review of the activities and accomplishments of the Geosynthetics TC with regard to the geotextile program (GTX) since the 2008 annual meeting. See PowerPoint presentation for details.

Tony Allen led the presentation and facilitation of the GTX discussion items in the meeting agenda. These are summarized as follows:

NTPEP Nationwide Survey Results: The survey results showed that 34 states are currently using NTPEP results as at least a part of the basis for adding geotextiles to their approved or qualified products lists. The remainder of the states are still relying on manufacturer certifications or other approaches to evaluate and approve geotextiles for state use. While this level of NTPEP test result use is better than the average for the NTPEP program as a whole, these results still point to the need to work the remaining states to find out if there is anything the current NTPEP GTX work plan lacks or to provide them with the information they need to accept the NTPEP results. No specific action items required.

DataMine Revisions for GTX: The revisions already proposed to the DataMine Task Force were presented. Other DataMine needs are discussed below relative to the discussion items to which they pertain. Jim Curtis (NYDOT) will follow up with the DataMine needs for GTX.

GTX PEF Revisions: Updated PEF for GTX will be posted on website soon (has been turned into Keith Platte for posting). Key difference is addition of UV testing and treatment as a product line for that testing. Discussion on the UV testing was deferred to later in the discussion section. No specific action items required, other than Keith getting the revised PEF posted on the GTX website.

Implementation of QA GTX Tests per Work Plan: While the work plan describes under what circumstances additional QA tests for geotextiles would be conducted, administrative details to accomplish that are yet to be worked out. Examples of those details include who pays for the
testing, how to find out when a certain product has been shipped to a state project construction site that we can sample, how often to do such testing, etc. Action item is for Tony Allen and Jim Curtis to meet with Keith Platte to discuss the administrative details that need to be worked out.

Follow-Up on QA Testing (meeting with Keith Platte): Regarding sampling from stat DOT construction projects, could aim at doing this once per month, and only testing one or two representative products from the product line to check for consistency with the previous NTPEP testing. The cost of this QA testing could be covered using a small additional fee applied to the regular NTPEP geotextile testing. Finding out from the states when product from a given product line has or will be arriving at their project sites that we could sample may prove challenging.

Publish Coefficient of Variation (COV) rather than Standard Deviation in GTX Report: Tony Allen proposed to publish the COV rather than the standard deviation in the GTX report. Advantages include better ability to compare the degree of variation in the test results between products, and this also minimizes the temptation of users of the data to attempt to calculate a MARV for the product based on these statistically limited NTPEP test results. Dave Suits brought up the fact that these NTPEP results are not statistically adequate to produce a statistically valid COV value for the product (the same applies to the mean). This is why it would be incorrect to use such statistics to calculate a MARV for the product. Dave recommended that a disclaimer be added below the data tables in the GTX report to alert users of the data of that fact. The intent of the NTPEP test results in this case is to simply provide some independent verification to the states, when considering products to be added to the qualified or approved products lists, that for the given product, the manufacturer is capable of producing product that meets the manufacturer’s MARV (or not, if the test results fall short). Action item is to change the GTX tables to provide the COV rather than the standard deviation, and to add the disclaimer suggested. This change will also need to be made in DataMine. Jim Curtis will take the lead on getting that done.

Expiration Date for Data Published in the GTX Reports: Tony Allen suggested that an expiration date column be added to the GTX data tables to clearly indicate when new test results must be available so that the GTX reports are kept current in accordance with the work plan. No one objected to this proposal. Action item is to change the GTX data tables in the reports and in DataMine to accommodate this. Jim Curtis will take the lead in getting that accomplished.

UV Test Results in the GTX Reports: Tony Allen discussed that the UV test results must be considered and presented in the context of the product line. We generally test the lightest weight product in the product line and conservatively apply those results to the heavier weight products in the line. Some manufacturers may choose to test an intermediate weight product as well, especially if the UV test results for the lightest weight product are marginal with regard to acceptability. The GTX report as well as DataMine will need a minor modification to provide a place for these UV test results. Furthermore, it is not optional testing. Some manufacturers have so far been treating it as optional. Jim Curtis will take the lead to make sure the test data tables and DataMine are set up to accommodate the UV test results.
**Sampling Protocol for GTX:** It was brought up in the meeting that the sampling protocol for GTX is not documented in the GTX work plan, but is only documented in the letter that goes out to the sampler when samples are requested. This does need to be added to the GTX work plan. Tony Allen will work with Jim Curtis to make the changes to the work plan to include the sampling protocol.

**Geosynthetic Reinforcement Testing Program**

Tony Allen (TC Chair) provided a review of the activities and accomplishments of the Geosynthetics TC with regard to geosynthetic reinforcement (REGEO) since the 2008 annual meeting. So far, two product line geosynthetic reinforcement reports have been produced, four more reports will be produced in the next few months, and a fifth report will be produced by Spring of 2010. The REGEO program is definitely gaining momentum. Sam Allen (TRI) also made a brief presentation on issues TRI has faced in testing some of the more unique reinforcement materials. See PowerPoint presentation for details.

Tony Allen led the presentation and facilitation of the REGEO discussion items in the meeting agenda. These are summarized as follows:

**NTPEP Nationwide Survey Results:** The survey results showed that 18 states are currently using NTPEP results as at least a part of the basis for adding geosynthetic reinforcement products to their approved or qualified products lists. The remainder of the states are still relying on manufacturer certifications or other approaches to evaluate and approve geosynthetic reinforcement for state use. While improvement here is definitely needed, this is a good start for this program.

**Improving the Format/Content of REGEO Reports:** Tony Allen presented a summary of the effort that has just gotten underway to improve the content and format of REGEO reports. This effort began as the result of comments received from the FHWA as they consider recommending the NTPEP geosynthetic reinforcement reports in the FHWA MSE wall/Reinforced Soil Slope (MSE/RSS) design manual and training class as a key source of the data needed to calculate long-term geosynthetic strength. These report changes will affect the previously published reports as well as those currently being produced. Tony requested that the state representatives present take a look at the rewritten reports and provide feedback as to any other improvements in the user friendliness of the reports is needed. Tony also noted that if the FHWA, in their manual and training course, does include the recommendation to consider NTPEP results as a source of geosynthetic reinforcement properties, since they will carry that training to all 50 states, it will help to get the word out and provide the needed training to improve implementation of the NTPEP REGEO testing program. This is potentially very good news for this program.

**Testing Cycle Issues:** Determining when to begin the effort to sample and test geosynthetic reinforcement products near the end of the 3 year or 6 year testing cycle as defined in the work plan is not straight-forward. Part of the problem is the length of time required to do the testing (approximately 1.5 years). Furthermore, the first two reports took quite a bit of time to get published once the testing was complete and also contained “grandfathered” data, which further impacts how soon the sampling and testing for the next test cycle should begin (see PowerPoint
presentation). The recommendation made to address this was to base the sampling date on the previous report publication data minus one year to allow for testing time for all reports in progress or completed. For all new submittals, the previous sampling date will be used as the trigger to begin the new sampling/testing effort for the next cycle. To insure clarity on these cycle issues, reports will be provided with expiration dates:

- Front cover: “Report Expiration Date: month, yr”
- Headers: “Report Expiration Date: month, yr”, located on left right below report date
- If next test cycle is for QA testing only, then add below expiration date: “Next QA Update Report: month, yr”

Tony asked for any comments or concerns about this proposed approach, but no one offered any. Therefore, this will be implemented as stated. One action item is to modify the work plan to address the testing cycle issue more clearly. Tony will take the lead on that.

**Use of SIM for Creep Rupture Testing:** For product lines already tested by NTPEP, if the comparison between “conventional” 10,000 hour creep data and the SIM test results met the criteria in T925, provided the product line has not changed regarding its polymer and creep characteristics, and the manufacturing process used, 10,000 hour creep data should not be required for the next qualification testing round for that product line. This can be tested by simply comparing the new SIM data to the previous SIM data for consistency. This being the case, the time and cost required for the qualification testing can be significantly reduced. This also does not appear to violate the requirements in T925. No one present objected to that interpretation.

**New business (Tony Allen, WSDOT)**

**Proposed Manufacturer Certification Program:** Andrew Aho (GMA) and John Henderson (Ten Cate Nicolon) presented a proposed geosynthetic manufacturing certification program for NTPEP to consider. The program would be similar to the one used for the NTPEP HDPE pipe program. The manufacturers feel that such a program would improve the identification and traceability of their products and overall be a step up from the current NTPEP geosynthetics program. The presenters asked if the state DOT representatives present felt if this would enhance the NTPEP geosynthetics program. All those present said that they thought it would. Tony Allen asked Andrew and John if the manufacturers perceive this as a potential benefit, considering that such a program will be costly to the manufacturers to implement and maintain. The bottom line for the manufacturers regarding this proposal is whether or not it would cause usage of the NTPEP test results, and geosynthetic usage overall, to increase significantly. The GMA would still like a nationwide survey conducted to assess this. Action item is for GMA to develop potential list of questions for survey. The TC would need to review the survey before sending it to AASHTO staff to have it conducted (TC action item).

**Handling Recycled Materials in Geotextiles:** Jim Curtis presented NYDOT’s concerns about how to handle geotextiles that contain recycled materials, especially post-consumer recycled materials. Since the source of post-consumer recycled materials can be quite varied, the concern is that this variability will affect the properties of the geotextile product. Potential for variability is the key concern regarding this recycled material issue. The first step to address this is to be able to know that a product does contain post-consumer recycled material. Jim suggested adding
a question on the GTX PEF regarding the percent post-consumer recycled material and/or percent of regrind (i.e., in-house recycled material) contained in the product. The manufacturers attending the meeting did not object to this. It was noted that TRI is attempting to develop a test protocol for HDPE pipe to identify the presence of contaminants and other plastics that are typical in products containing post-consumer recycled material. The protocol they develop should be considered for application to geotextiles as well. The next step is to assess ways to determine the effect recycled material has on product variability. This potential for variability could be assessed through evaluation of the manufacturer’s QC data, an increased testing frequency (say, every year to 1.5 years), and if available, through the NTPEP archived data for the product in question. Action item is to modify the PEF to request information on recycled material content (Jim Curtis will take lead for this). The next time a recycled product comes to NTPPEP for testing, we will also consider obtaining manufacturer QC data to help assess how variable these products are.

Meeting was adjourned at 5:10 p.m.
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NTPEP Geosynthetic Reinforcement Program 2009 Activities

by

Tony M. Allen

WSDOT Geotechnical Division
Olympia, WA
May 5, 2009
Agenda

• REGEO test program status
• Perspectives on the test program (Sam Allen, TRI)
• Recently approved REGEO work plan rewrite
• REGEO application package modifications
• REGEO discussion items
  – Feb. 2009 NTPEP use survey results – implications to program
  – Test report format and content revisions to be more user friendly
  – Handling product line modifications after product line has been tested
  – Testing cycle issues
Status of NTPEP Geosynthetic Reinforcement Submissions

- ACE Geosynthetics, Ltd., Taiwan (ACE Geogrids) – report being reformatted
- Ten Cate Nicolon (Miragrid) – report being reformatted
- Synteen (Sympaforce geogrids) – final report in review
- Maccaferri (Paragrid) – final draft report in preparation
- Lukenhaus (Raugrid) - final draft report in preparation
- Tensar – testing to be completed Summer 2009
- Linear Composites – testing to be completed Feb. 2010
- Strata Systems (Stratagrid) – will resubmit once new product line is established, probably Summer 2009?
- Naue Fasertechnik (Germany, Secugrid) have told us they plan to submit, plus two others, one in China and one in India, who will submit once their product line is developed
- Huesker (Fortrac geogrids) – Has expressed interest only
Testing Items of Interest

• Unique materials
Testing Items of Interest

- Tensile test challenges
Testing Items of Interest

- Tensile properties requiring special clamps... Demgen Clamps
Testing Items of Interest

- Creep-rupture testing – elevated temperature testing
Recently Approved REGEO Work Plan

Revisions

• Reformatting, consolidating, and general clean-up
• “Terms and Conditions” and other administrative items moved out of work plan to separate application package document
• Ability to handle adding new products to a previously tested product line
• “Grandfather” clause completely removed
• Improved definition of when/what circumstances QA testing is conducted
• The relationship between the testing program and the product line concept is better defined
• Sampling requirements added (previously in separate document)
• Improved test report outline
REGEO PEF/Application Package Changes

• Now have separate “Terms and Conditions” document – to be signed by manufacturer to indicate their agreement with NTPEP policies
• Step-by-step process to apply for testing
• Description of entire process from beginning to end (i.e., report produced), with time frames
• Product Evaluation Form (PEF) with checklist of items/information that must be submitted
• Adapted to recent work plan changes
REGEO Discussion Items – Feb. 2009
NTPEP Survey Results on Test Data Usage

• Currently only two NTPEP REGEO reports (product line evaluations) available
• A total of 18 states are using that data for their QPL/Approved Lists
• Reports have only been available since 2008
• Implications to program
Use of NTPEP Test Results - Geosynthetic Reinforcement - Feb. 2009

- AK, ID, IN, KS, KY, NE, NM, OK, TN, UT, WA: 11
- CO, IA, OR: 3
- IL, MO, ND, VT: 4
- Accept on Certification: 8
- Do not use in state: 4
- Use Different Evaluations: 4
- Use to generate QPL: 21
- Use for QPL with additional field evaluation: 3
- Use for QPL with additional lab testing:
NTPEP Data Usage (REGEO)
State Usage Survey Feb 2009

Blue = QPL Add'l Eval
Red = Use Different Eval Accept on Cert
No Shade: Do not Use Product

“AASHTO’s Win-Win Solution for Government and Industry”
Use of NTPEP Test Results Feb., 2009

Number of States

Type of Usage

- Accept on Certification
- Do not use in state
- Use Different Evaluations
- Use to generate QPL
- Use for QPL with additional field evaluation
- Use for QPL with additional lab testing

- REGEO
- GTX
- Ave. for all TC's
REGEO Discussion Items – Report Usability

• Improving the usability of REGEO reports
  – Significant reformatting, moving more details into appendices
  – Executive summary provides specific key findings to guide users on the data needed in report to estimate $R_{ID}$, $R_{CR}$, and $R_{D}$
  – Main report provides only the key data needed to estimate the reduction factors, with some guidance on data use and interpretation
  – Working with FHWA and their MSE/RSS course to incorporate NTPEP REGEO program results in their design training
    • Report usability improvements based on FHWA input
    • FHWA course could help with implementation of the REGEO program nationwide

• Please review new report format and provide input to us on its clarity and usability, and other improvements
REGEO Discussion Items – Adding Products to Previously Tested Product Lines

• Adding new products to previously tested product lines
  – Suite of tests required on each new product focused on verifying that new product does fit in with existing product line
  – The new products must fit in with the product line definition as it applied to the existing product line
  – The previous testing must be less than 4 yrs old.

• Are there any other issues that should be considered that are not addressed?
REGEO Discussion Items – Testing Cycle Issues

• Trigger date for new sampling/testing to be initiated
  – Report date vs. previous sampling date
  – Time required for testing (0.5 to 1.5 yrs) should be considered

• For reports that took advantage of “grandfathered” data, next test cycle should be a qualification test cycle
  – Must consider age of grandfather data – may be up to 5 years old already when report was issued
  – What if only some grandfather data was used, and some NTPEP qualification was conducted – how much qualification testing should be conducted in first 3 year test cycle?
  – Should we go to a full qualification test cycle regardless if some grandfather data was used?
REGEO Discussion Items – Testing Cycle Issues

• For testing/reports completed or in progress, will base sampling/testing trigger date on final report publication date minus 1 year to allow time for testing
  – The first two reports took much extra time to produce (2 yrs+)
  – Work plan is not specific about this

• For any new products/product line, will base trigger date on last sampling date

• Need REGEO work plan modification to specify this
REGEO Discussion Items – Report Expiration Dates

• Program requires QA testing at mid-point of 6 year qualification test cycle, and full qualification testing every 6 yrs

• Propose adding expiration date on front cover and in header of each page
  – Front cover: “Report Expiration Date: month, yr”
  – Headers: “Report Expiration Date: month, yr”, located on left right below report date
  – If next test cycle is for QA testing only, then add below expiration date: “Next QA Update Report: month, yr”

• The report expiration date would be 7 years after report date for last product qualification test report (extra yr to provide grace period)

• For reports with grandfather data, expiration date will be 4 years after last report date

• If next test cycle is for QA testing only, the next QA update report would be targeted for up to 4 years after last qualification test report (again, adding a grace period of 1 year)
REGEO Discussion Items – Use of SIM for Qualification Testing of Previously Tested Product Lines

• T925 requirement as that must have 10,000 hr “conventional” creep data to compare to SIM to validate its accuracy for the product(s) tested

• For next cycle of qualification testing, is more 10,000 hr conventional creep data needed if SIM is used?
  – Has product changed since last qualification testing?
  – Does new SIM data line up well with previous 10,000 hr data?

• If can use previous 10,000 hr data, qualification test time cut in half or less, and cost goes down
Questions??
Comments??
New Business

• Proposed manufacturer certification program (Andrew Aho – GMA)
• Handling products that contain post-consumer recycled materials (Jim Curtis – NYDOT)
• Geosynthetic reinforcement/facing block connection testing
• Geosynthetic reinforcement pullout testing
• Other issues?
Handling Products That Contain Post-consumer Recycled Materials

• Questions/Concerns:
  – Should NTPEP require manufacturers/suppliers to state in GTX PEF whether products contain post-consumer recycled material?
    • If “Yes”, do we want to know what percentage?
    • Note that we already request this information in the REGEO PEF for geosynthetic reinforcement
  – Source of recycled material may vary. Will that affect product consistency?
    • Might not be apparent in one evaluation cycle.
    • QA testing might reveal inconsistency, but not everyone does QA, so
Handling Products That Contain Post-consumer Recycled Materials (cont’d)

• Questions:
  – Should rate of product evaluation be adjusted (i.e. more often than every three years)?
    • If “Yes”, do we reduce the duration of the cycle (say, 1 year) until we’ve established a history of the product?
    • Do we then increase accordingly based on the consistency shown in the test results?

  – What if the material is consistently highly variable?
    • Should they be kept out of the Reports?
    • If “No”, some statement should be included notifying potential users of high variability.
Handling Products That Contain Regrind from Manufacturing Process

• Questions/Concerns:
  – Does NTPEP need to be notified (via PEF) if products include regrind?
    • Note that we already request this information in the REGEO PEF for Geosynthetic reinforcement
  – If regrind is used, what affects on anti-oxidants and molecular degradation will result?
  – Will the 3-year period be sufficient to properly evaluate the potential variability that might result from using different amounts of regrind in the manufacturing process?
NTPEP Geotextile Program 2009 Activities

by
Tony M. Allen

WSDOT Geotechnical Division
Olympia, WA
May 5, 2009
Agenda

• Review of 2008 activities for the GTX program – Jim Curtis (NYDOT)

• GTX discussion items – Tony Allen (WSDOT) lead
  – Feb. 2009 NTPEP use survey results – implications to program
  – DataMine revisions for GTX – status
  – GTX work plan/application package revisions (Jim Curtis – NYDOT)
    • Recently completed revisions
    • Additional revisions needed
  – Test data expiration dates (add to data tables?)
  – Report COV rather than standard deviation
  – UV testing for geotextiles (ASTM D4355)
Review of 2008 GTX Activities

• Jim Curtis – add your slides here (including summary of key issues and decisions from 2008 TC conference calls)
NTPEP GEOTEXTILE TESTING PROGRAM (GTX)

Jim Curtis, Vice Chair, NTPEP Geotextiles Product Panel
New York State Dept. of Transportation
2008 Testing Summary
NYSDOT is the Lead State Agency for Geotextiles Testing.

Sampling coordination, most testing, and all data reporting is done by the NYSDOT Soil Mechanics Laboratory.

John Remmers, Soils Engineering Laboratory Supervisor
Jim Simonds, Principal engineering Technician (Soils)
New York State DOT

is granted accreditation
for designated geosynthetic test methods in accordance with the Geosynthetic Accreditation Institute - Laboratory Accreditation Program (GAI-LAP), as published in its annual directory. This accreditation is valid until June 30, 2009.

Robert M. Koerner, Ph.D., P.E.
Director

George R. Koerner, Ph.D., P.E. & CQA
Auditor
NTPEP Geotextile Testing Overview


- Each sample is cut into multiple specimens for the following tests:

<table>
<thead>
<tr>
<th>TEST</th>
<th>TESTING LABORATORY</th>
</tr>
</thead>
<tbody>
<tr>
<td>Grab Strength &amp; Elongation</td>
<td>NYSDOT</td>
</tr>
<tr>
<td>Trapezoid Tearing Strength</td>
<td>NYSDOT</td>
</tr>
<tr>
<td>Puncture Resistance</td>
<td>NYSDOT</td>
</tr>
<tr>
<td>Mass</td>
<td>NYSDOT</td>
</tr>
<tr>
<td>Permittivity</td>
<td>NYSDOT</td>
</tr>
<tr>
<td>Apparent Opening Size</td>
<td>NYSDOT</td>
</tr>
<tr>
<td>ASTM D4355, UV Deterioration (recently added)</td>
<td>TRI</td>
</tr>
</tbody>
</table>
Summary of 2008 Testing

• 65 Sample Submissions Received
  – 14 from Prime Manufacturers
  – 27 from Private Label Agreements

• The latest NTPEP Report
  “LABORATORY RESULTS OF EVALUATIONS ON GEOTEXTILES & GEOSYNTHETICS (JUNE 2005 TO JAN. 2009 CYCLES), MARCH 2009 ”, contains test data for
  – 326 geotextile styles (330 in ’07, 310 in ‘06), from
  – 33 companies (36 in ’07, 32 in ‘06).
Status of Current Round

The January 2008 submissions include 26 products from seven companies. Testing is nearly complete on the products received. Testing summaries are submitted to the NTPEP Manager (Keith Platte) as they are completed.
GTX Program Issues
Action Items from 2008 - Completed

- GTX PEF Revisions (in “Discussion Items”)

- Updated Work Plan ("Discussion Items")

- Add UV Testing ("Discussion Items")
**Action Items from 2008 - Completed**

- **Silt Fence Logo**
  - OK, but only on upper third of fabric.
  - Will test areas with logos to determine affects.
  - If the logo is placed on the material after NTPEP evaluation, it must be submitted as a new style.
  - Overall durability will be proven in field.
Action Items from 2008 - Completed

• Reduced Turn-around Time
  
  – Many processes were improved:
    • GTX Assignment letters from NTPEP to manufacturers;
    • sampling requests to States;
    • testing time;
    • test data submission back to NTPEP;
    • Manufacturer review;
    • Report release.

  – Last two Reports were published two months after completion of test cycle. This is down from > 6 months for previous Reports.
Action Items from 2008 – Not Yet Completed

• **DataMine Revisions** *(Discussion items)*

• **NTPEP QA Sampling From Member Department Projects**
  – Has not been done yet
February 21

Geotextile Manufacturer Name Changes

- What is current notification process?
  - Decision: Needs improvement.

- How?
  - Decision: Provide standard form. We developed an Annual Survey.

- Should Name Changes be reflected on PEF?
  - Decision: Yes; Will revise PEF to accommodate this.
February 21 (cont’d)

• Geotextile Manufacturer Name Changes
  – Should Name changes be reflected in GTX Reports?
    • Decision: Yes; must consider industry’s reaction. Report users must know what fabrics they’re dealing with, avoid confusion re: name overlaps, material left over after name change, etc. Keep both names in Report for possibly 3 years.

  – How can we determine if name change means a change in Facility location, manufacturing process, or management?
    • Decision: Report on revised PEF and Annual Survey.
February 21 (cont’d)

• **Geotextile Manufacturer Name Changes**
  – How will name change affect status in NTPEP?
    • Depending on info listed on revised PEF: Possibly run QA verification tests, or resubmit as entirely new product.
April 11

• **Proposed GTX Work Plan Revisions**
  – Will be described later in “Discussion Items”.

• **Handling Foreign Submissions**
  – Must submit MARV’s based on ASTM standards, not ISO.
  – Testing should be conducted on material arriving in U.S.
  – Sampling must be overseen by independent third party such as BSI Group, or
  – Must have a distribution center Stateside, large enough to accommodate a lot that would accurately represent the product.
September 24

• **Retests**
  – Fees for re-tests will be assessed only if the results are similar to the original test results.
  – No fees assessed if the results are statistically variant.

• **Withdrawals**
  – Need to clear up language on resubmissions and withdrawals.
October 14

• **TC Update Issues & Concerns**
  
  – Membership Status:
    
    • Need to replace Greta Smith (Kentucky).
    • Keith will determine changes in membership: potential members need to know responsibilities, such as participation requirements.
  
  – Website up to date.
October 14 (cont’d)

• **Report Issues & Concerns**
  – Discussed outstanding Report – current testing cycle is complete.
  – Re-Testing: Policy needs to be balloted.
    • Results of ballot: Re-test results will be reported, unless manufacturer decides to withdraw.
    • Manufacturers can withdraw, but a note will be placed in the Report to reflect this:

  “Manufacturer Requested Withdrawal of Product after Evaluation”
GTX Discussion Items – Feb. 2009 NTPEP Survey Results on Test Data Usage

• A mature testing program
• A total of 34 states are using that data for their QPL/Approved Lists
• NTPEP GTX data have been available for many years
• Implications of these results
Use of NTPEP Test Results - Geotextiles

- **Accept on Certification**: 4
- **Do not use in state**: 0
- **Use Different Evaluations**: 13
- **Use to generate QPL**: 20
- **Use for QPL with add. field eval.**: 8
- **Use for QPL with add. lab testing**: 6
NTPEP Data Usage (GTX)
State Usage Survey Feb 2009

NTPEP for QPL
NTPEP w/Add’l Eval (field & lab)
Use Different Eval
Accept on Cert

All States Use Product
Use of NTPEP Test Results - Geotextiles

No. of States

Accept on Certification
Do not use in state
Use Different Evaluations
Use to generate QPL
Use for QPL with add. field eval.
Use for QPL with add. lab testing

GTX
Ave. for all NTPEP test programs
GTX Discussion Items – DataMine Revisions

• The following items have been submitted to the dataMine Task Force for consideration:
  – Add MARV’s to appear along side test results
  – Make advanced search operational for GTX data
    • Add ability to query products based on MARV’s
    • If using MARV’s as search basis, query based on user specification value or M288 value
  – Add date of sampling field for each product
  – Add new fields to address QA test results consistent with current work plan
  – Handling private label products (show base product test results but not base product name; add field for potential QA test results, identify that it is a private label product??)
• Any other DataMine revisions needed?? Data expiration dates (will discuss later)?
GTX Discussion Items – Additional Application Package/Work Plan Revisions Needed

• The most recent PEF revisions
  – What additional data do we want to be included with PEF?
  – New “Terms and Agreements” document to be signed by manufacturer
  – Step-by-step process outlined to submit products, and testing and reporting process outlined
  – Others??
PEF Revisions

- Added a category asking to identify products in product line to be UV tested – As a minimum, lightest in line must be tested, but testing can be requested for heavier products also.

- Dropped the requirements to include Technical Bulletins and MSDS.
PEF Revisions (cont’d)

• Added a “checklist” of items needed to accompany PEF:
  – Signed “Terms and Agreements” form
  – List the percent regrind used in each product
  – List the percent post-consumer material used in each product
  – Include a notarized letter from the Prime manufacturer describing relationship, if product is distributed under a Private Label Agreement.
**Terms & Agreements**

- A “Terms and Agreements” document will be added to the end of the GTX Work Plan. It will include statements regarding:
  - Sampling requirements
  - Requirements of a completed PEF
  - Assessment of handling fee for withdrawals
  - Requirements to withdraw products
  - Notification requirements for changes in manufacturing method, facility location, management changes, etc.
  - QA sampling by NTPEP
Terms & Agreements (cont’d)

- NTPEP rights regarding:
  - QA sampling by NTPEP (from plant, warehouse or construction site)
  - Unannounced visits to facilities
- Manufacturer shall maintain written QA/QC program for review by NTPEP.
- Requirement that Private Label agreements provide notarized (and confidential) letter from Prime to NTPEP stating they are source for certain styles being submitted.
- Non-interference policy statement.
- Policy regarding appeal of test results
Process for Submissions/Testing/Reporting

- Manufacturer submits PEF to NTPEP.
- NTPEP assigns GTX no., sends to manufacturer and lead testing agency (NYSDOT).
- NYSDOT sends sampling request to State DOT where man. Facility is located.
- State DOT rep. randomly selects representative roll, observes sampling.
- Manufacturer submits GTX samples to NYSDOT.
Process for Submissions/Testing/Reporting

- NYSDOT prepares specimens, conducts appropriate tests for all but UV.
  - NYSDOT submits UV sample to TRI. Test approx. 4 weeks.
- NYSDOT submits test data to NTPEP.
- NTPEP submits test data to manufacturers for review.
  - Re-tests may be requested.
- NTPEP compiles all test data, prepares and releases Report.
Discussion Items – Geotextile Program

Geotextile Work Plan Revisions

Summary of Revisions

1. Program Purpose: Added comprehensive statements like:
   - “Test results can be used to assess … compliance w/ M-288.”
   - “… results may be used for initial product qualification and/or QA”.

2. Added Abbreviations & Definitions Section
   - MARV, MD, XD, etc.
   - Describes “Product Line” as a series of products manufactured using the same polymer, manufacturing process, and stabilization package for all products in the line. The only difference between each product is the weight/unit area or no. of fibers in each yarn.
Discussion Items – Geotextile Program
Geotextile Work Plan Revisions
Summary of Revisions

3. “Initial Product Quality Testing” Section describes:
   ▪ Info required for Initial product qualification testing,
   ▪ Initial Sampling,
   ▪ Tests for initial qualification testing
     ▪ Includes ASTM D4355 – UV Deterioration – For only the lightest weight product in line.
Discussion Items – Geotextile Program
Geotextile Work Plan Revisions

Summary of Revisions

   ▪ To verify consistency of product used in USA w/ that which was sampled @ for NTPEP evaluation.
   ▪ To verify consistency of product compared to initial qualification.
   ▪ Samples can be obtained from same plant, second plant, second production line, or , for validation of initial qualification results, a construction site.
   ▪ Some criteria for QA sampling: change in ownership/management, product name change, change in process, facility re-located, noticeable change in product, multiple plants.
Quality Assurance Testing Approach

Results from index QA tests will be compared to the baseline values in The NTPEP Report obtained during initial product testing. If the QA results are within acceptable tolerances relative to the NTPEP Report (i.e., the sample test results meet or exceed the MARV, or meets or is less than the MaxARV), the product will continue to remain in the NTPEP Report.

If the product name/style designation has changed, the new name will appear with the existing name for three years. This is to allow the existing products to be used by industry and reduce confusion.
Quality Assurance Testing Approach (cont’d)

Re-testing must be done if there is any change in the product. If changes in the product as identified above or identified by other means are such that the validity of the last complete assessment for initial testing is questionable, a complete assessment of the product will need to be completed as identified by the process described in “Data Requirements for Initial Product Acceptance.”
GTX Discussion Items – Test Data Expiration Dates

• Since test results are supposed to be renewed every 3 years, test results are intended to expire for state’s QPL use
• Add column in report tables – each product gets expiration date
• Expiration data established at 3.5 years after last report date for each particular product
• Expired data would be archived as historical data, using expiration date as a way to query that data
  – Can DataMine do this? If so, add to DataMine list
  – Can one query all the historical test results for specific products? Could it be plotted and/or statistics of variability calculated and reported? Could be useful
GTX Discussion Items – Report COV Rather than Standard Deviation

- In data tables in GTX reports and DataMine, replace standard deviation with COV
- COV more useful for comparison purposes – makes product variability problems more immediately obvious to users
GTX Discussion Items – UV Testing of Geotextiles

• Requirement to do UV testing has been added to GTX work Plan
• Added because AASHTO M288 specifies this property
• PEF is being modified to accommodate UV testing based on product line concept
• As minimum, lightest weight product in line is tested – would be applied to all heavier products in line
• Could test additional intermediate weight products in line to get higher UV resistance value for heavier products in line
Questions??
Comments??