

| Permit No. | Date | Document ID No. |
|------------|------------------|-----------------|
| 96-06 | January 28, 2013 | 18295 |

From: Chao, Ming-tai
To: [Wayne Sullivan \(wsullivan@mesco.com\)](mailto:wsullivan@mesco.com)
Subject: additional comment, Wayne County MSWLF, Phase 3, 96-09
Date: Monday, January 28, 2013 1:12:00 PM

Issued via an e-mail
Date: January 28, 2013
Solid Waste Section
Raleigh Central Office

Hey Wayne:

I have completed a review of the 01/22/13 responses to DWM comment Nos. 10 and 11 and have additional comments on the as-built drawing for the 60-mil HDPE Installation and the FML Repair Report (Doc ID 18209):

As-Built Drawings

1. (60Mil Textured Geomembrane As-Built Record Drawing, Sheet No. 1 of 1) Please address the following concerns:
 - i. The location of the following repair samples is not available on the as-built drawing but recorded in the Repair Report: R297, R298, R358. Please add the locations to the As-Built Record Drawing.
 - ii. The description of the location of repair sample R180 in the Repair Report (P17/P60) is inconsistent with that (P18/P60) shown on the As-Built Record Drawing. Please clarify and make necessary correction.
 - iii. There is the second location R340 at P109/P110 shown on the As-Built Record Drawing but not recorded in the Repair Report. Please clarify.

Please contact me if you have any questions.

Ming

From: Chao, Ming-tai
Sent: Wednesday, January 23, 2013 2:57 PM
To: 'Wayne Sullivan'
Cc: Ritter, Christine
Subject: RE: Wayne County MSWLF, Phase 3, 96-09

Hey Wayne:

I have reviewed responses - No. 1 through No. 9 and have no further questions at this time except the response to the **comment No. 8i** regarding the compaction effort of compacted clay liner (CCL) samples less than 95% of the determined maximum dry density. I believe the answer is described in the Section 3.3.1 (p 209) and Section 4.2.2(b) (p. 238) of the approved PTC application (Doc ID 14016) which specify that

“A permeability “window” shall be developed for each type of soil from the borrow material that will be used for construction of the cohesive soil liner. The window is developed from the accepted remolded samples and moisture contents from the semi-log plot. A straight line is typically drawn between the

acceptable points on the **moisture-density curve** to indicate a range of probable **acceptable permeability results**. The window will be used in the construction of the test strip to verify the laboratory remolded permeability results.”

Please direct Mr. David Page of ES&J and his contracting lab – Engineering & Environmental Science Company that the “window” described above or an “**acceptable zone**” of water content/dry unit weight based on hydraulic conductivity consideration [which can be found in the EPA Technical Guidance Document: Quality Assurance & Quality Control for Waste Containment Facility (EPA/600/R-93/182, dated September 1993, by David E. Daniel and Robert M. Koerner. http://cfpub.epa.gov/si/si_public_record_report.cfm?dirEntryId=124793] must be established and used to confirm if the measured water content/dry density is acceptable for this project.

As long as the measured water content/dry density of a sample falls inside the established acceptable zone or window, it pass the specified criteria for CCL.

Please contact me if you have any question of the comment No. 8i.

Christine has informed me that she has received the GW background sample results, gas and GW well logs, and piezometer abandonment logs (10/03/2012 Comments Nos. 20 thru 23) which has been combined into a single document with a Doc ID 17780. Therefore, I am looking forward to receiving your responses to the 10/03/2012 comment Nos. 12 through 19 and No. 24.

Ming

From: Wayne Sullivan [<mailto:wsullivan@mesco.com>]
Sent: Monday, January 21, 2013 4:07 PM
To: Chao, Ming-tai
Cc: Tim.Rogers@waynegov.com
Subject: RE: Wayne County MSWLF, Phase 3, 96-09

Ming,

Hope you are doing good in the New Year. Please find attached responses for items 1 thru 9 to your comment letter dated October 2, 2012. I will send it in more than 1 email because the perm tests are quite large.

Thanks and have a good day.

D. Wayne Sullivan
Municipal Engineering Services Co., Inc.
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From: Chao, Ming-tai [<mailto:ming.chao@ncdenr.gov>]
Sent: Wednesday, November 28, 2012 12:01 PM
To: Wayne Sullivan
Subject: RE: Wayne County MSWLF, Phase 3, 96-09

Thanks for the update.

Ming

From: Wayne Sullivan [<mailto:wsullivan@mesco.com>]
Sent: Wednesday, November 28, 2012 12:24 PM
To: Chao, Ming-tai
Cc: Ritter, Christine; Tim.Rogers@waynegov.com; Mussler, Ed
Subject: RE: Wayne County MSWLF, Phase 3, 96-09

Ming,

Hope you had a nice Thanksgiving. The time of was restful. We are working on the comments now and hope to get back to you within the week. The hyrdo part has been sent to Christine.

Thanks and have a nice day.

D. Wayne Sullivan
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email: wsullivan@mesco.com

From: Chao, Ming-tai [<mailto:ming.chao@ncdenr.gov>]
Sent: Tuesday, November 27, 2012 8:34 AM
To: Wayne Sullivan (wsullivan@mesco.com)
Cc: Ritter, Christine; 'Tim.Rogers@waynegov.com' (Tim.Rogers@waynegov.com); Mussler, Ed
Subject: Wayne County MSWLF, Phase 3, 96-09

Hey Wayne:

Hope you have a wonderful and restful Thanksgiving Day.

I am writing this e-mail to you for checking on the status of the responses to the Solid Wastes Section (SWS) comments on the CQA Report (Doc ID 17224) which was received by the SWS on 09/14/2012. The SWS comment (Doc ID 17328) was issued to the County and cc to you via an e-mail on 10/03/2012. Could you please provide me the tentative schedule for submitting your responses and revised portions of the CQA Report for Phase 3? I also would like to know if there is anything that the Christine and I can assist the County and you in moving the project forward and eventually granting the Permit to Operate for the constructed Phase 3. I am looking forward to hearing from you.

Best regard,

Ming-Tai Chao, P.E.
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