NYSDEC OHMS Document No. 201469232-00108

WASTE MANAGEMENT

CWM CHEMICAL SERVICES, LLC
1550 Balmer Road
Model City, NY 14107
716 286 1550
716 286 0211 Fax

November 19, 2014

James T. McClymonds
Chief Administrative Law Judge
NYSDEC Office of Hearings and Mediation Services
625 Broadway, 1st Floor
Albany, NY 12233-5500

Re: Draft Permit Modification for Residuals Management Unit-Two [RMU-2]
DEC PERMIT No. 9-2934-00022/00097
CWM Chemical Services, LLC, Comments

Dear Mr. McClymonds:

CWM Chemical Services, LLC (CWM) has reviewed the draft permit for the modification of CWM's 6NYCRR Part 373 Permit for Residuals Management Unit-Two [RMU-2], which was issued by the New York State Department of Environmental Conservation (NYSDEC) on May 5, 2014. Attached are CWM's comments on the draft permit modification. CWM welcomes the opportunity to meet with the NYSDEC at your earliest convenience to discuss these comments.

If you have any questions, please contact either myself at (716) 286-0246 or Mr. Jonathan Rizzo at (716) 286-0354.

"I certify under penalty of law that this document and all attachments were prepared under my direction or supervision according to a system designed to assure that qualified personnel properly gather and evaluate the information submitted. Based on my inquiry of the person or persons who manage the system, or those persons directly responsible for gathering the information, the information submitted is, to the best of my knowledge and belief, true, accurate and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment for knowing violations."

Sincerely,
CWM CHEMICAL SERVICES, LLC

Jill A. Banaszak
Technical Manager
Model City Facility

JPR/JAB/jpr
Attachment

cc:

D. Stever - NYSDEC/Region 9 (electronic copy)
M. Mahar - CWM/Model City, NY (electronic copy)
D. Darragh - Cohen & Grigsby, PC/Pittsburgh, PA (electronic copy)
EMD Subject File
Q & A

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CWM COMMENT NUMBER: 1

TOPIC:

Permitted Activities

LOCATION OF CONDITION:

Schedule 1, Condition A, Page S1-1

EXISTING CONDITION:

Containers (S01), Quantities is listed at 2,153,552 gallons.

PROPOSED MODIFICATION:

Revise as follows:

Containers (S01), Quantities should be listed at 2,161,796 gallons.

REASON:

Based on CWM's calculations, the total quantity in gallons for Containers (S01) should be listed at 2,161,796 gallons. See **Attachment A** for a summary of the capacities of the current and proposed container storage areas.

See Comments 14, 15, 105, 114 and 115 for comments related to the container storage in the New Stabilization Full Trailer Parking Area and the New Drum Management Building Transformer Flushing Room.

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CWM COMMENT NUMBER: 2

TOPIC:

Schedule of Deliverables

LOCATION OF CONDITION:

Schedule 1, Condition D, Page S1-11, Line 5

EXISTING CONDITION:

New T-109 & T-158 Loading Areas' Technical Specifications and CQA Plans	Provide technical specifications and CQA Plans for the construction of the New T-109 & T-158 Loading Areas, in accordance with Condition C.1.h.i.'a' & 'b' in Exhibit C of Schedule 1 of Module I of this Permit.	At least 90 days prior to the anticipated start of construction of each new CSA.

PROPOSED MODIFICATION:

Revise as follows:

New T-109 & T-158 Loading Areas' Technical Specifications and CQA Plans	Provide technical specifications and CQA Plans for the construction of the New T-109 & T-158 Loading Areas, in accordance with Condition C.1.h.i.'a' & 'b' in Exhibit C of Schedule 1 of Module I of this Permit.	At least 90 days prior to the anticipated start of construction of each new CSA cell*, or other time-frame as approved by the Department*.

REASON:

CWM requests flexibility with respect to submittal of the New T-109 & T-158 Loading Areas' Technical Specifications and CQA Plans. The technical specifications and CQA Plan for the New T-109 Loading Area cannot or will not be submitted until the Sitewide Permit

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Modification for RMU-2 is issued. To meet construction timeframes, construction of the loading area may have to be started soon after modification of the sitewide permit.

SEE COMMENT NO. 27

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CWM COMMENT NUMBER: 3

TOPIC:

Schedule of Deliverables

LOCATION OF CONDITION:

Schedule 1, Condition D, Page S1-12, Line 5

EXISTING CONDITION:

Fac Pond 5 Wastewater Compatibility Demonstration	Submit reports demonstrating the wastewater compatibility of Fac Pond 5 wastewater management components, in accordance with Conditions E.1.a & E.1.b in Exhibit E of Schedule 1 of Module I of this Permit.	Prior to construction of Fac Pond 5.

PROPOSED MODIFICATION:

Revise as follows:

Delete requirement for wastewater compatibility testing of natural and synthetic materials used to construct Fac Pond 5.

REASON:

Delete requirement for wastewater compatibility testing of natural and synthetic materials used to construct Fac Pond 5. According to the draft permit, Fac Pond 5 will be only used for the storage of treated wastewater from the onsite Aqueous Wastewater Treatment System. Fac Pond 5 will be used as the final prequalification pond for discharges to the Niagara River in accordance with the State Pollutant Discharge Elimination System (SPDES) Permit. Currently, final prequalification is performed in Fac Pond 3. A summary of analytical results for the most recent prequalification sampling are included in Attachment B. As shown in the summary the treated effluent is just water with <0.4% salts; and no Priority Pollutant Organics were reported in the samples.

SEE COMMENT NO. 37

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CWM COMMENT NUMBER: 4

TOPIC:

Schedule of Deliverables

LOCATION OF CONDITION:

Schedule 1, Condition D, Page S1-13, Line 1

EXISTING CONDITION:

Fac Pond 5 Material Testing	Submit results of Fac Pond 5 material tests, in accordance with Condition E.1.b in Exhibit E of Schedule 1 of Module I of this Permit.	At least 2 weeks prior to the installation of each material in Fac Pond 5 liner / leak detection system.

PROPOSED MODIFICATION:

Revise as follows:

No revision to Condition D, Page S1-13, Line 1 at this time See Comment No. 38 however, CWM is requesting revisions to Condition E.1.b.ii & iii, Page E-5 of Exhibit E.

REASON:

Condition E.1.b.ii in Exhibit E indicates that transmissivity testing should be performed 1/100,000 sq ft using treated wastewater. Comment No. 38 requests that the requirement for use of treated wastewater for the transmissivity testing be deleted. CWM will still perform transmissivity testing at 1/100,000 sq ft.

Comment No. 38 will request that Condition E.1.b.iii in Exhibit E be deleted and indicate that Interface shear testing is not necessary.

SEE COMMENT NO. 38

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CWM COMMENT NUMBER: 5

TOPIC:

Schedule of Deliverables

LOCATION OF CONDITION:

Schedule 1, Condition D, Page S1-13, Line 6

EXISTING CONDITION:

RMU-2 Material Leachate Compatibility Demonstration	Submit reports demonstrating the leachate compatibility of individual RMU-2 liner & leachate management components, in accordance with Conditions C.1.a, C.2 & C.3 in Exhibit G of Schedule 1 of Module I of this Permit.	Prior to construction of each RMU-2 Cell.

PROPOSED MODIFICATION:

RMU-2 Material Leachate Compatibility Demonstration	Submit reports demonstrating the leachate compatibility of individual RMU-2 liner & leachate management components, in accordance with Conditions C.1.a &~~,~~ C.2 ~~& C.3~~ in Exhibit G of Schedule 1 of Module I of this	Prior to construction of each RMU-2 Cell.

REASON:

Condition C.3 of Exhibit G should be deleted. Leachate riser vaults are HDPE.

SEE COMMENT NO. 58

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CWM COMMENT NUMBER: 6

TOPIC:

Schedule of Deliverables

LOCATION OF CONDITION:

Schedule 1, Condition D, Page S1-14, Line 3

EXISTING CONDITION:

RMU-2 Design Re- Evaluation Report	Submit RMU-2 Design Re-Evaluation Reports, in accordance with Condition D.3 in Exhibit G of Schedule 1 of Module I of this Permit.	At least 120 days prior to the start of construction of each cell (except the first cell) and each final cover phase.

PROPOSED MODIFICATION:

RMU-2 Design Re- Evaluation Report	Submit RMU-2 Design Re-Evaluation Reports, in accordance with Condition D.3 in Exhibit G of Schedule 1 of Module I of this Permit.	At least 120 days prior to the start of construction of each cell (except the first cell) and *if requested by the Department prior to* each final cover phase.

REASON:

The re-evaluation of the design of the final cover is not currently required for Residuals Management Unit No. 1. Final cover design technologies have not changed in years and CWM does not foresee any new design technologies available in the near future. If requested by the Department, CWM would perform a design re-evaluation of the final cover.

SEE COMMENT NO. 66

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CWM COMMENT NUMBER: 7

TOPIC:

Schedule of Deliverables

LOCATION OF CONDITION:

Schedule 1, Condition D, Page S1-14, Line 4

EXISTING CONDITION:

RMU-2 Subgrade Piezometer Installation Plans	Submit subgrade wire piezometer installation plans, in accordance with Condition D.5.a.iv in Exhibit G of Schedule 1 of Module I of this Permit.	At least 90 days prior to the start of construction of each cell.

PROPOSED MODIFICATION:

RMU-2 Subgrade Piezometer Installation Plans	Submit subgrade wire piezometer installation plans, in accordance with Condition D.5.a.iv in Exhibit G of Schedule 1 of Module I of this Permit.	At least 90 days prior to the start of construction of each cell*, or other time-frame as approved by the Department*.

REASON:

The requirement to submit a detailed plan at least ninety (90) days prior to commencing excavation of any RMU-2 cell for the installation of vibrating wire piezometers to monitor pore pressures during waste placement is too restrictive. Upon issuance of the permit modification for RMU-2, CWM will want likely want to start excavations, MSE wall construction, and filling procedures to attain subgrade elevations.

SEE COMMENT NO. 69

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CWM COMMENT NUMBER: 8

TOPIC:

Schedule of Deliverables

LOCATION OF CONDITION:

Schedule 1, Condition D, Page S1-14, Line 6

EXISTING CONDITION:

RMU-2 Incoming Waste Truck Management Plan	Submit an RMU-2 Incoming Waste Truck Management Plan, in accordance with Condition E.2 in Exhibit G of Schedule 1 of Module I of this Permit.	Prior to commencing construction of the first RMU-2 cell.

PROPOSED MODIFICATION:

Delete this deliverable and delete Condition D.2.c in Exhibit A and Condition E.2 in Exhibit G.

REASON:

This Plan is not necessary.

SEE COMMENTS NO. 12 and 81

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CWM COMMENT NUMBER: 9

TOPIC:

Schedule of Deliverables

LOCATION OF CONDITION:

Schedule 1, Condition D, Page S1-14 Line 7 & Page S1-15, Lines 1 & 2

EXISTING CONDITION:

RMU-2 Operations & Maintenance (O&M) Manual	Submit an RMU-2 O&M Manual and cell addendums, in accordance with Conditions F.1.a, F.7.c & F.8 in Exhibit G of Schedule 1 of Module I of this Permit.	Prior to commencing construction of the first RMU-2 cell, with addendums prior to construction of each subsequent cell.
RMU-2 Cell Fill Progression Plan	Submit an RMU-2 Cell Fill Progression Plan and cell addendums, in accordance with Condition F.1.b in Exhibit G of Schedule 1 of Module I of this Permit.	Prior to commencing construction of the first RMU-2 cell, with addendums prior to construction of each subsequent cell.
RMU-2 Cell Leachate and Storm Water Management Plan	Submit an RMU-2 Cell Leachate and Storm Water Management Plan and cell addendums, in accordance with Condition F.1.c in Exhibit G of Schedule 1 of Module I of this Permit.	Prior to commencing construction of the first RMU-2 cell, with addendums prior to construction of each subsequent cell.

PROPOSED MODIFICATION:

RMU-2 Operations & Maintenance (O&M) Manual	Submit an RMU-2 O&M Manual and cell addendums, in accordance with Conditions F.1.a, F.7.c & F.8 in Exhibit G of Schedule 1 of Module I of this Permit.	Prior to commencing construction of the first RMU-2 cell, *or other time-frame as approved by the Department,* with addendums prior to construction of each subsequent cell.

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RMU-2 Cell Fill Progression Plan	Submit an RMU-2 Cell Fill Progression Plan and cell addendums, in accordance with Condition F.1.b in Exhibit G of Schedule 1 of Module I of this Permit.	Prior to commencing construction of the first RMU-2 cell, *or other time-frame as approved by the Department,* with addendums prior to construction of each subsequent cell.
RMU-2 Cell Leachate and Storm Water Management Plan	Submit an RMU-2 Cell Leachate and Storm Water Management Plan and cell addendums, in accordance with Condition F.1.c in Exhibit G of Schedule 1 of Module I of this Permit.	Prior to commencing construction of the first RMU-2 cell, *or other time-frame as approved by the Department,* with addendums prior to construction of each subsequent cell.

REASON:

The timing of the submittals would be too restrictive. CWM may want to start construction of certain components of the first cell of RMU-2 upon receipt of Sitewide Permit Modification for RMU-2.

SEE COMMENTS NO. 86, 87, and 88

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CWM COMMENT NUMBER: 10

TOPIC:

Routine Reporting

LOCATION OF CONDITION:

Schedule 1, Condition F, Page S1-19, Line 2

EXISTING CONDITION:

Fac Ponds' Sediment Depth Measurement and Removal	Every five years	180 to 365 days prior to Permit expiration	Condition B.6 of Exhibit E

PROPOSED MODIFICATION:

Delete requirement.

REASON:

Performance of Fac Ponds Sediment and Depth Measurement and Removal is not necessary.

SEE COMMENTS NO. 36

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CWM COMMENT NUMBER: 11

TOPIC:

Routine Reporting

LOCATION OF CONDITION:

Schedule 1, Condition F, Page S1-19, Line 9 & 10

EXISTING CONDITION:

Results of LCS Chemical Analyses	Monthly	90 days after month of event	Condition G.2 of Exhibit F and Condition G.2 of Exhibit G
Results of LCS Level and Flow Monitoring	Quarterly	Within 30 days of end of quarter	Condition G.2 of Exhibit F and Condition G.2 of Exhibit G

PROPOSED MODIFICATION:

Revise as follows:

Results of LCS Chemical Analyses	Monthly	90 days after month of event	Condition G.2 of Exhibit F and Condition G.2 of Exhibit G
Results of LCS ~~Level and~~ Flow Monitoring	~~Quarterly~~ Monthly	~~Within 30 days of end of quarter~~90 days after month of event	~~Condition G.2 of Exhibit F and~~ Condition G.2 of Exhibit G

REASON:

The LCS for each cell of RMU-2 will be constructed with a flow meter. CWM is proposing to record the flow (i.e. quantity of leachate pumped) from each RMU-2 cell on a monthly basis and report this information with the monthly environmental monitoring report along with the flow (i.e. quantity of water removed) from SLCS. Flow from the LCS of each cell of RMU-1 is not available, as there are no individual flow meters for each cell. RMU-1 LCS

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flow is recorded at the RMU-1 lift station and reported in the monthly environmental monitoring report.

CWM currently monitors the LCS Levels of RMU-1 on a continuous basis. The LCS Levels must be maintained less than 1-foot pursuant to the regulations. Alarms are sounded if the LCS Level of any cell goes above 1-foot. On a daily basis a computer printout is produced to show any alarms during the previous day. The system may also print out a daily sheet per cell of the level trends. However, this is not necessary and is cumbersome. This would produce approximately 900 pages of level trends for RMU-1 per quarter and approximately 540 pages of level trends per quarter for RMU-2. If the condition is maintained the quarterly report of LCS Levels would be at least approximately 1460 pages of print outs per quarter for RMU-1 and RMU-2 showing levels less than 1-foot.

SEE COMMENT NO. 96

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CWM COMMENT NUMBER: 12

TOPIC:

Special Waste Transportation Conditions - Waste Transport Arrivals and Within the Facility

LOCATION OF CONDITION:

Exhibit A, Supplement to Module I - General Provisions,
Condition D.2.c, Page A-7

EXISTING CONDITION:

c. Upon arrival of waste transport vehicles whose contents are ultimately destined for land disposal in the RMU-2 landfill, the Permittee must manage these incoming waste loads in accordance with the Department-approved "Incoming Waste Truck Management Plan" required by Condition E.2 of Exhibit G.

PROPOSED MODIFICATION:

Delete Condition and delete Condition D, Page S1-14, Line 6 in Schedule 1 and Condition E.2 in Exhibit G.

REASON:

Not necessary.

SEE COMMENT NO. 8 and 81

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CWM COMMENT NUMBER: 13

TOPIC:

Special Fire Protection Conditions - Water Storage Tank

LOCATION OF CONDITION:

Exhibit A, Supplement to Module I - General Provisions,
Condition I, Page A-12

EXISTING CONDITION:

I. Special Fire Protection Conditions

1. Water Storage Tank

At least 180 days prior to the planned demolition of the facility's existing 350,000 gallon water storage tank (in conjunction with RMU-2 construction), the Permittee must submit for Department approval one of the following documents:

a. A set of design plans for construction of a replacement water tank of similar height and equal or greater capacity to that of the existing tank. The Permittee must construct the new tank prior to demolition of the existing tank.

or

b. A report that evaluates and justifies that the available water volume and pressure provided by the hydrant system without the existing 350,000 gallon water tank is adequate to meet the fire suppression needs of the fire loads attributable to the structures/units at the facility, including the active landfills. The report must be prepared by an independent professional engineer registered in New York State who is qualified in the field of fire insurance underwriting. If the Department does not approve this report, the Permittee must provide the set of design plans for a replacement tank as required by **Condition I.1.a** of this Exhibit, and construct the new tank prior to demolition of the existing tank.

PROPOSED MODIFICATION:

Delete Condition

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REASON:

Condition is not necessary and would require an additional report that is not necessary. The current 350,000 gallon fire water tank is only required for fire suppression needs for the Existing Drum Management Building (EDMB). The tank is directly piped to the sprinkler system of the EDMB and a diesel fired pump provides the water pumping capabilities during an emergency. The New Drum Management Building (NDMB) will be provided with a dry fire suppression system in the waste storage areas of the building. Therefore, an emergency fire water tank is not needed for the NDMB.

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CWM COMMENT NUMBER: 14

TOPIC:

Authorized Storage Area, Waste Types and Storage Volume

LOCATION OF CONDITION:

Exhibit C Supplement to Module III – Containers
Condition A.1, Page C-5, Line 4
CSA 41

EXISTING CONDITION:

Storage Area	Waste Type and Codes	Container Specifications[1,17]	Quantity[2]
41. New Drum Management Bldg. (NDMB)19 – Area 8 – Transformer Area[4,27] (29' x 57')	PCB Transformers & Electrical Devices with Solid & Liquid Wastes Listed in Attachment C, Section C-1, including Tables C-1 & C-2	PCB Transformers (< 386 gallons) or Containers (< 55 gallons) 1A, 1H	Total Limit=6 transformers or 37 drums (solid & liquid) Liquid Limit = 37 drums

PROPOSED MODIFICATION:

Storage Area	Waste Type and Codes	Container Specifications[1,17]	Quantity[2]
41. New Drum Management Bldg. (NDMB)19 – Area 8 – Transformer Area[4,27] (29' x 57')	PCB Transformers & Electrical Devices with Solid & Liquid Wastes Listed in Attachment C, Section C-1, including Tables C-1 & C-2	PCB Transformers (< ~~386~~ *2,065* gallons) or Containers (< 55 gallons) 1A, 1H	Total Limit=~~6~~ 7,920 *gallons* ~~transformers~~ or ~~37~~ *144* drums (solid & liquid) Liquid Limit = ~~37~~ *144* drums

REASON:

The 386-gallon limit in the current permit was based on the volume of the secondary containment steel pans in the TO Building. The New Drum Management Building will be constructed with coated concrete secondary containment with a capacity of 2,065 gallons. Therefore, transformers up to 2,065 gallons or 375 drums could be stored in the transformer room based on the secondary containment. Based on the physical constraints of the room, a maximum of 144 drums containing liquids could be stored in the transformer room. SEE COMMENTS NO. 1 and 105

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CWM COMMENT NUMBER: 15

TOPIC:

Authorized Storage Area, Waste Types and Storage Volume

LOCATION OF CONDITION:

TION OF CONDITION:

Exhibit C Supplement to Module III – Containers
Condition A.1, Page C-5, Line 7
CSA 44

EXISTING CONDITION:

Storage Area	**Waste Type and Codes**	**Container Specifications[1,17]**	**Quantity[2]**
44. Stabilization Facility New Trailer Park (SFNTP) Area[8,9,28] (35' x 375')	Solid & Liquid Wastes Listed in Attachment C, Section C-1, including Tables C-1 & C-2	Roll-offs (< 30 cy) or Cargo Tanks (< 5,500 gallons)	Total Limit = 37 bulk containers (solid) Liquid Limit = 11 cargo tanks

PROPOSED MODIFICATION:

Revise as follows:

Storage Area	**Waste Type and Codes**	**Container Specifications[1,17]**	**Quantity[2]**
44. Stabilization Facility New Trailer Park (SFNTP) Area[8,9,28] (35' x 375')	Solid & Liquid Wastes Listed in Attachment C, Section C-1, including Tables C-1 & C-2	Roll-offs (< 30 cy) or Cargo Tanks (< 5,500 gallons)	Total Limit = 37 bulk containers (solid) Liquid Limit = ~~11~~ 5 cargo tanks

Correct the container quantity.

REASON:

The assumptions for container storage include Cargo Tanks with a maximum volume of 5,500 gallons each for a total storage capacity of 27,500 gallons of incinerable liquids in the New Stabilization Full Trailer Parking Area. The revised closure cost estimate for the Stabilization Area includes this quantity for disposal offsite. SEE COMMENTS NO. 1, 105, 115, and 120

CWM COMMENT NUMBER: 16

TOPIC:

Authorized Storage Area, Waste Types and Storage Volume

LOCATION OF CONDITION:

Exhibit C Supplement to Module III – Containers
Condition A.1, Page C-7, Footnotes 19 through 24

EXISTING CONDITION:

19. See Conditions C.1.f & D.1.b of this Exhibit regarding specific requirements for the New Drum Management Building (NDMB) related to construction and operation.

20. Flammable waste (USDOT Class/Divisions 2.1, 3, 4.1, 4.2 & 4.3) may only be stored in Area 1 of the NDBM. Flammable waste may only be stored in USDOT Container designations 1A, 1G, 1H, 4G & 11G or other compatible designations as determined in accordance with Section B.(4).(a) in Attachment D, Appendix D-1 of this Permit.

21. Acid waste (USDOT Class 8) may only be stored in Area 2 of the NDBM. Acid waste may only be stored in USDOT Containers with designations 1A, 1H & 31H or other compatible designations as determined in accordance with Section B.(4).(a) in Attachment D, Appendix D-1 of this Permit.

22. Caustic waste (USDOT Class 8) may only be stored in Area 3 of the NDBM. Caustic waste may only be stored in USDOT Containers with designations 1A, 1G, 1H, 4G & 11G or other compatible designations as determined in accordance with Section B.(4).(a) in Attachment D, Appendix D-1 of this Permit.

23. Poison (Toxic) waste (USDOT Class/Division 6.1) may only be stored in Area 4 of the NDBM. Poison (Toxic) waste may only be stored in USDOT Containers with designations 1A, 1H, 1G, 4G, 11G & 31H or other compatible designations as determined in accordance with Section B.(4).(a) in Attachment D, Appendix D-1 of this Permit.

24. Only Oxidizer and Organic Peroxide waste (USDOT Class/Divisions 5.1 & 5.2) may be stored in Area 5 of the NDBM, and such wastes may not be stored in other NDMB areas. Oxidizer and Organic Peroxide waste may only be stored in USDOT Containers with designations 1A, 1H, 1G, 4G & 31H or other compatible designations as determined in accordance with Section B.(4).(a) in Attachment D, Appendix D-1 of this Permit.

PROPOSED MODIFICATION:

19. See Conditions C.1.f & D.1.b of this Exhibit regarding specific requirements for the New Drum Management Building (NDMB) related to construction and operation.

20. Flammable waste (USDOT Class/Divisions 2.1, 3, 4.1, 4.2 & 4.3) may only be stored in Area 1 of the NDBM. Flammable waste may only be stored in USDOT Container designations 1A, 1G, 1H, 4G & 11G or other compatible designations as determined in accordance with Section B.(4).(a) in Attachment D, Appendix D-1 of this Permit.

21. Acid waste (USDOT Class 8) may only be stored in Area 2 of the NDBM. Acid waste may only be stored in USDOT Containers with designations 1A, 1H & 31H or other compatible designations as determined in accordance with Section B.(4).(a) in Attachment D, Appendix D-1 of this Permit. *Acid compatible waste may also be stored in Area 2 of the NDMB.*

22. Caustic waste (USDOT Class 8) may only be stored in Area 3 of the NDBM. Caustic waste may only be stored in USDOT Containers with designations 1A, 1G, 1H, 4G & 11G or other compatible designations as determined in accordance with Section B.(4).(a) in Attachment D, Appendix D-1 of this Permit. *Caustic compatible waste may also be stored in Area 3 of the NDMB.*

23. Poison (Toxic) waste (USDOT Class/Division 6.1) may only be stored in Area 4 of the NDBM. Poison (Toxic) waste may only be stored in USDOT Containers with designations 1A, 1H, 1G, 4G, 11G & 31H or other compatible designations as determined in accordance with Section B.(4).(a) in Attachment D, Appendix D-1 of this Permit.

24. Only Oxidizer and Organic Peroxide waste (USDOT Class/Divisions 5.1 & 5.2) may be stored in Area 5 of the NDBM, and such wastes may not be stored in other NDMB areas. Oxidizer and Organic Peroxide waste may only be stored in USDOT Containers with designations 1A, 1H, 1G, 4G & 31H or other compatible designations as determined in accordance with Section B.(4).(a) in Attachment D, Appendix D-1 of this Permit.

REASON:

These conditions should not preclude CWM from storing compatible waste in each of these areas. Areas 2 and 3 should not be limited to Acids and Caustics, respectively. Acid compatible wastes may also be stored in Area 2 and caustic compatible waste may also be stored in Area 3 of the NDMB.

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CWM COMMENT NUMBER: 17

TOPIC:

Special Conditions for Containers (General)
CSA Closure Cost Estimation and Financial Assurance

LOCATION OF CONDITION:

Exhibit C Supplement to Module III – Containers
Condition B.1.e, Page C-10

EXISTING CONDITION:

e. CSA Closure Cost Estimation and Financial Assurance

PROPOSED MODIFICATION:

Delete entire condition

REASON:

Condition appears redundant with the regulations and other sections of the permit and is not necessary.

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CWM COMMENT NUMBER: 18

TOPIC:

Special Conditions for Containers (Specific)
New Drum Management Bldg. (NDMB)

LOCATION OF CONDITION:

Exhibit C Supplement to Module III – Containers
Condition C.1.f.i.'a', Page C-13/14
Sixth (6th) Bullet

EXISTING CONDITION:

- fire suppression sprinkler system.

PROPOSED MODIFICATION:

Revise as follows:

- fire suppression ~~sprinkler~~ system.

REASON:

The New Drum Management Building will include a dry fire suppression system in the waste storage areas and a sprinkler system in the office areas.

CWM COMMENT NUMBER: 19

TOPIC:

Special Conditions for Containers (Specific)
New Drum Management Bldg. (NDMB)

LOCATION OF CONDITION:

Exhibit C Supplement to Module III – Containers
Condition C.1.f.i.'b', Page C-14

EXISTING CONDITION:

'b') NDMB Construction Quality Assurance (CQA) Plan

At least ninety (90) days prior to the anticipated start of NDMB construction, the Permittee must submit for Department approval, a CQA Plan for NDMB construction which is consistent with the format used for landfill construction in Attachment J, Appendix D-8 of this Permit. The CQA Plan must provide qualifications of the CQA Engineer and all subordinate engineers and other personnel involved in overseeing the construction. The plan must also include the detailed observation, inspection and testing activities to be conducted by the CQA firm so as to confirm that the NDMB has been constructed in accordance with the NDMB Design Drawings and Department approved Technical Specifications with respect to the construction elements listed under **Condition C.1.f.i.'a'** of this Exhibit. The Permittee must receive Department approval of the NDMB CQA Plan before beginning construction of the NDMB.

PROPOSED MODIFICATION:

Revise as follows:

'b') NDMB Construction Quality Assurance (CQA) Plan

At least ninety (90) days prior to the anticipated start of NDMB construction, the Permittee must *verify that the approved Technical Specifications submitted under Condition C.1.f.i.a of this Exhibit, the Design Drawings, and specific permit conditions for the NDMB meet the requirements for a CQA Plan for* ~~submit for Department approval, a CQA Plan for NDMB~~ construction ~~which is consistent with the format used for landfill construction in Attachment J, Appendix D-8 of this Permit~~. ~~The CQA Plan must provide qualifications of the CQA Engineer and all subordinate engineers and other personnel involved in overseeing the construction~~. The ~~plan~~ *Technical Specifications submitted under* ***Condition C.1.f.i.'a'*** *of this Exhibit* must ~~also~~ include the detailed observation, inspection and testing activities to be conducted by ~~the~~ *a* CQA firm so as to confirm that the

NDMB has been constructed in accordance with the NDMB Design Drawings and Department approved Technical Specifications with respect to the construction elements listed under **Condition C.1.f.i.'a'** of this Exhibit. The Permittee must receive Department approval of the NDMB ~~CQA~~ ~~Plan~~ *Technical Specifications* before beginning construction of the NDMB.

At least two (2) weeks prior to anticipated start of NDMB construction the Permittee must submit the qualifications of the CQA Engineer and all subordinate engineers and other personnel involved in overseeing the construction.

REASON:

The Quality Assurance Manual for landfill construction in Attachment J, Appendix D-8 of the Permit mostly pertains to the QA requirements for landfill liner which are not applicable to building construction. The technical specifications and design drawings will include quality assurance requirements. The approved Technical Specifications, Design Drawings, and specific conditions for the NDMB should be considered the CQA Plan. A separate CQA Plan is not necessary with the exception that the qualifications of the quality assurance engineer will be submitted to the NYSDEC two weeks prior to construction of the NDMB.

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CWM COMMENT NUMBER: 20

TOPIC:

Special Conditions for Containers (Specific)
New Drum Management Bldg. (NDMB)

LOCATION OF CONDITION:

Exhibit C Supplement to Module III – Containers
Condition C.1.f.i.'c', Page C-14
Second Paragraph

EXISTING CONDITION:

NDMB construction must be completed in accordance with the above requirements and all NDMB Areas placed into operation (i.e., receiving containerized waste) prior to commencing closure of the existing DMB, in accordance with the "Transition Plan for RMU-2" which is incorporated by reference into this Permit by Schedule 1 of Module I of this Permit, unless the Permittee elects to close the existing DMB before NDMB construction as part closure of the entire facility.

PROPOSED MODIFICATION:

Revise as follows:

NDMB construction must be completed in accordance with the above requirements and all NDMB Areas placed into operation (i.e., receiving containerized waste) prior to ~~commencing~~ closure of the existing DMB, in accordance with the "Transition Plan for RMU-2" which is incorporated by reference into this Permit by Schedule 1 of Module I of this Permit, unless the Permittee elects to close the existing DMB before NDMB construction as part closure of the entire facility.

REASON:

CWM may elect to start closing portions of the existing Drum Management Building prior to completion of the construction of the NDMB. This may include reduction of the volume of waste stored in the existing building and moving ancillary equipment (e.g. laboratory equipment).

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CWM COMMENT NUMBER: 21

TOPIC:

Special Conditions for Containers (Specific)
New Drum Management Bldg. (NDMB)

LOCATION OF CONDITION:

Exhibit C Supplement to Module III – Containers
Condition C.1.f.ii.'a', Page C-15

EXISTING CONDITION:

'a') NDMB Areas 6 & 9 Special Operational Requirements

All waste containers in Area 9 must be in box trailers or on flatbed trailers. At the end of each operating day, the Permittee must inspect the waste containers in Areas 6 & 9 and records describing the wastes in these containers, and identify any incompatible wastes in each of these areas. If incompatible wastes are identified in either Area 6 or 9, such wastes must be re-located to the appropriate area in the NDMB before the end of each operating day to provide proper separation of incompatible wastes in accordance with 6 NYCRR 373-2.9(h). Under no circumstances shall incompatible wastes be stored unattended in either Area 6 or 9 of the NDMB.

PROPOSED MODIFICATION:

Revise as follows:

'a') NDMB Areas 6 & 9 Special Operational Requirements

All waste containers in Area 9 *(dock)* must be in box trailers or on flatbed trailers. *Flatbeds used to collect containers for processing and/or disposal must be designated for a waste compatibility type (in accordance with Section C-2f(1)(a) of the Waste Analysis Plan, Attachment C of the Permit). All containers placed on a flatbed must be compatible.* At the end of each operating day, the Permittee must *confirm that all flatbeds in Area 9 contain compatible waste types and all containers in Area 6 (QC Area) are compatible.* ~~inspect the waste containers in Areas 6 & 9 and records describing the wastes in these containers, and identify any incompatible wastes in each of these areas.~~ If incompatible wastes are identified in either Area 6 or 9, such wastes must be re-located to the appropriate area in the NDMB before the end of each operating day to provide proper separation of incompatible wastes in accordance with 6

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NYCRR 373-2.9(h). Under no circumstances shall incompatible wastes be ~~stored~~ *left* unattended *at the end of the operating day* in either Area 6 or 9 of the NDMB.

REASON:

Condition revised to be consistent with current operations at the existing Drum Management Building. Assessment of container compatibility is an on-going process as the containers are placed on flatbeds in Area 9. Doing a review of all waste tracking forms for all the containers on flatbeds at the end of the day would burdensome and unnecessary.

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CWM COMMENT NUMBER: 22

TOPIC:

Special Conditions for Containers (Specific)
New Drum Management Bldg. (NDMB)

LOCATION OF CONDITION:

Exhibit C Supplement to Module III – Containers
Condition C.1.f.ii.'b', Page C-15

EXISTING CONDITION:

'b') NDMB Area 7 Special Operational Requirements

A Cargo Tank parked in NDMB Area 7 may receive compatible liquid waste from the new NDMB Fuels Pumping Area in accordance with Condition D.1.b of this Exhibit, or from another Cargo Tank parked within NDMB Area 7.

PROPOSED MODIFICATION:

Revise as follows:

'b') NDMB Area 7 Special Operational Requirements

A Cargo Tank parked in NDMB Area 7 may receive compatible liquid waste from the new NDMB Fuels Pumping Area in ~~accordadance~~ *accordance* with Condition D.1.b of this Exhibit, or from another Cargo Tank parked within NDMB Area 7.

REASON:

Spelling error correction.

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CWM COMMENT NUMBER: 23

TOPIC:

Special Conditions for Containers (Specific)
New Drum Management Bldg. (NDMB)

LOCATION OF CONDITION:

Exhibit C Supplement to Module III – Containers
Condition C.1.f.ii.'c', Page C-15

EXISTING CONDITION:

'c') NDMB Area 8 Special Operational Requirements

Any transformer which is being flushed or is found to be leaking must be in pans or other primary containment vessel of sufficient capacity to hold the transformer/flushing liquids. All such liquids shall be removed from containment pans/vessels at the end of each operating day and managed as hazardous waste.

PROPOSED MODIFICATION:

Revise as follows:

'c') NDMB Area 8 Special Operational Requirements

~~Any transformer which is being flushed or is found to be leaking must be in pans or other primary containment vessel of sufficient capacity to hold the transformer/flushing liquids. All such liquids shall be removed from containment pans/vessels at the end of each operating day and managed as hazardous waste.~~

The Permittee may store and decommission PCB transformers and discarded electrical devices, and store drums containing such devices or solid wastes, within the NDMB Area 8 in accordance with Attachment D, Appendix D-1 of this Permit and the following requirements

Any transformer that is found to be leaking shall be addressed immediately in accordance with Section B.(4).(a) in Attachment D, Appendix D-1 of this Permit.

Permittee must maintain a minimum aisle space of 2 feet between transformers/containers and building walls.

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REASON:

Containment area will be coated with Chemtec and inspected daily on operating days and inspected annually by a Professional Engineer in accordance with Module III, Condition K. Transformers are containers and will be inspected daily on operating days. Any identified leaking transformers must be addressed immediately and the secondary containment cleaned according to RCRA or TSCA requirements, whichever are applicable. CWM will not allow any identified leaks to continue leaking. Containment pans may be used for convenience in storage and management, however, they will not be considered secondary containment.

Flushing of transformers will be performed within the secondary containment of the Transformer Flushing Area. Flushing fluids will not be intentionally discharged to the secondary containment. Any accidental spillage of flushing fluids will be cleaned up and the secondary containment will be cleaned in accordance with either RCRA or TSCA requirements, whichever are applicable.

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CWM COMMENT NUMBER: 24

TOPIC:

Special Conditions for Containers (Specific)
New Full Trailer Park (NFTP) & Stabilization Facility New Trailer Park (SFNTP)
Construction Requirements

LOCATION OF CONDITION:

Exhibit C Supplement to Module III – Containers
Condition C.1.g.i.'b', Page C-16

EXISTING CONDITION:

'b') NFTP & SFNTP Construction Quality Assurance (CQA) Plans

At least ninety (90) days prior to the anticipated start of NFTP construction and at least ninety (90) days prior to the anticipated start of SFNTP construction, the Permittee must submit for Department approval, a CQA Plan for construction of each of these new CSAs which is consistent with the format used for landfill construction in Attachment J, Appendix D-8 of this Permit. Each CQA Plan must provide qualifications of the CQA Engineer and all subordinate engineers and other personnel involved in overseeing the construction. Each plan must also include the detailed observation, inspection and testing activities to be conducted by the CQA firm so as to confirm that each of these CSAs have been constructed in accordance with the applicable Design Figures and Department-approved Technical Specifications with respect to the construction elements listed under **Condition C.1.g.i.'a'** of this Exhibit. The Permittee must receive Department approval of each CQA Plan before beginning construction of each new CSA.

PROPOSED MODIFICATION:

Revise as follows:

'b') NFTP & SFNTP Construction Quality Assurance (CQA) Plans

At least ninety (90) days prior to the anticipated start of NFTP construction and at least ninety (90) days prior to the anticipated start of SFNTP construction, the Permittee must *verify that the approved Technical Specifications submitted under Condition C.1.g.i.'a' of this Exhibit, and the Design Drawings, and specific permit conditions for the NDMB meet the requirements for a CQA Plan for construction* ~~submit for Department approval, a CQA Plan for construction of each of these new~~

~~CSAs which is consistent with the format used for landfill construction in Attachment J, Appendix D-8 of this Permit~~. ~~Each CQA Plan must provide qualifications of the CQA Engineer and all subordinate engineers and other personnel involved in overseeing the construction. Each plan~~ *The Technical Specifications submitted under Condition C.1.g.i.'a' of this Exhibit* must also include the detailed observation, inspection and testing activities to be conducted by ~~the~~ *a* CQA firm so as to confirm that each of these CSAs have been constructed in accordance with the applicable Design Figures and Department-approved Technical Specifications with respect to the construction elements listed under **Condition C.1.g.i.'a'** of this Exhibit. The Permittee must receive Department approval of each ~~CQA Plan~~ *Technical Specifications* before beginning construction of each new CSA.

At least two (2) weeks prior to anticipated start of NFTP construction and at least ninety (90) days prior to the anticipated start of SFNTP construction the Permittee must submit the qualifications of the CQA Engineer and all subordinate engineers and other personnel involved in overseeing the construction.

REASON:

The Quality Assurance Manual for landfill construction in Attachment J, Appendix D-8 of the Permit mostly pertains to the QA requirements for landfill liner which are not applicable to building construction. The technical specifications and design drawings will include quality assurance requirements. The approved Technical Specifications, Design Drawings, and specific conditions for the NFTP & SFNTP should be considered the CQA Plan. A separate CQA Plan is not necessary with the exception that the qualifications of the quality assurance engineer will be submitted to the NYSDEC two weeks prior to construction of the NFTP & SFNTP.

CWM COMMENT NUMBER: 25

TOPIC:

Special Conditions for Containers (Specific)
New Full Trailer Park (NFTP) & Stabilization Facility New Trailer Park (SFNTP)

LOCATION OF CONDITION:

Exhibit C Supplement to Module III – Containers
Condition C.1.g.i.'c', Page C-17
Second and Third Paragraphs

EXISTING CONDITION:

NFTP construction must be completed in accordance with the above requirements and the NFTP placed into operation (i.e., receiving containerized waste) prior to commencing closure of the existing South Trailer Parking Area, in accordance with the "Transition Plan for RMU-2" which is incorporated by reference into this Permit by **Schedule 1 of Module I** of this Permit, unless the Permittee elects to close the existing Area before NFTP construction as part closure of the entire facility.

SFNTP construction must be completed in accordance with the above requirements and the SFNTP placed into operation (i.e., receiving containerized waste) prior to commencing closure of the existing Stabilization Facility Trailer Parking Areas, in accordance with the "Transition Plan for RMU-2" which is incorporated by reference into this Permit by **Schedule 1 of Module I** of this Permit, unless the Permittee elects to close the existing Areas before SFNTP construction as part closure of the entire facility.

PROPOSED MODIFICATION:

Revise as follows:

~~NFTP construction must be completed in accordance with the above requirements and the NFTP placed into operation (i.e., receiving containerized waste) prior to commencing closure of the existing South Trailer Parking Area, in accordance with the "Transition Plan for RMU-2" which is incorporated by reference into this Permit by Schedule 1 of Module I of this Permit, unless the Permittee elects to close the existing Area before NFTP construction as part closure of the entire facility.~~

The existing South Trailer Parking Area must be closed prior to construction of the NFTP in accordance with the "Transition Plan for

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RMU-2" which is incorporated by reference into this Permit by ***Schedule 1 of Module I*** *of this Permit.*

~~SFNTP construction must be completed in accordance with the above requirements and the SFNTP placed into operation (i.e., receiving containerized waste) prior to commencing closure of the existing Stabilization Facility Trailer Parking Areas, in accordance with the "Transition Plan for RMU-2" which is incorporated by reference into this Permit by Schedule 1 of Module I of this Permit, unless the Permittee elects to close the existing Areas before SFNTP construction as part closure of the entire facility.~~

The existing Stabilization Trailer Parking Areas I and II must be closed prior to construction of the SFNTP in accordance with the "Transition Plan for RMU-2" which is incorporated by reference into this Permit by ***Schedule 1 of Module I*** *of this Permit.*

REASON:

As shown on Permit Drawing No. 2 of Attachment J, Appendix D-6a, the footprint of the NFTP overlaps the footprint of the existing Full Trailer Parking area. The existing Full Trailer Parking Area must be closed prior to construction of the NFTP as indicated in Section 2.3 of the Transition Plan. Any waste stored within the existing Full Trailer Parking area prior to commencing closure of the area will be transferred to other permitted storage areas at the facility, disposed in the landfill, or sent offsite for disposal.

As shown on Permit Drawing No. 2 of Attachment J, Appendix D-6a, the footprint of the SFNTP overlaps the footprint of the existing Stabilization Trailer Parking Areas I and II. The existing Stabilization Trailer Parking Areas I and II must be closed prior to construction of the SFNTP as indicated in Section 2.8 of the Transition Plan. Any waste stored within the existing Stabilization Trailer Parking Areas I and II prior to commencing closure of the area will be transferred to other permitted storage areas at the facility, disposed in the landfill, or sent offsite for disposal.

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CWM COMMENT NUMBER: 26

TOPIC:

Special Conditions for Containers (Specific)
New Full Trailer Park (NFTP) & Stabilization Facility New Trailer Park (SFNTP)
Operating Requirements

LOCATION OF CONDITION:

Exhibit C Supplement to Module III – Containers
Condition C.1.g.ii.'a', Page C-17/18

EXISTING CONDITION:

'a') NFTP & SFNTP Special Operational Requirements

All waste in these CSAs must be stored in containers in box trailers or on flatbed trailers in accordance with **Condition B.1.b.i.'d'** of this Exhibit, or in roll-offs (for solids) or cargo tanks (for liquids) in accordance with **Condition B.1.c** of this Exhibit. Containerized waste stored in each of these CSAs must be compatible in order to comply with 6 NYCRR 373-2.9(h).

PROPOSED MODIFICATION:

Revise as follows:

'a') NFTP & SFNTP Special Operational Requirements

All waste in these CSAs must be stored in containers in box trailers or on flatbed trailers in accordance with **Condition B.1.b.i.'d'** of this Exhibit, or in roll-offs (for solids) or cargo tanks (for liquids) in accordance with **Condition B.1.c** of this Exhibit. Containerized waste stored in each of these CSAs must be ~~compatible in order to comply~~ *managed in accordance* with 6 NYCRR 373-2.9(h).

REASON:

6 NYCRR 373-2.9(h) of the regulations specify the Special requirements for incompatible wastes. For example, incompatibles may be stored in the same CSA if separated by a physical barrier. CWM could like the flexibility provided in the container regulations. The proposed revision clearly indicates the storage requirements for incompatible wastes.

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CWM COMMENT NUMBER: 27

TOPIC:

Special Conditions for Containers (Specific)
New T-109 Loading Area (NT-109LA) & New T-158 Loading Area (NT-158LA)
Construction Requirements

LOCATION OF CONDITION:

Exhibit C Supplement to Module III – Containers
Condition C.1.h.i.'b', Page C-19

EXISTING CONDITION:

'b') NT-109LA & NT-158LA Construction Quality Assurance (CQA) Plans

At least ninety (90) days prior to the anticipated start of NT-109LA construction and at least ninety (90) days prior to the anticipated start of NT-158LA construction, the Permittee must submit for Department approval, a CQA Plan for construction of each of these new CSAs which is consistent with the format used for landfill construction in Attachment J, Appendix D-8 of this Permit. Each CQA Plan must provide qualifications of the CQA Engineer and all subordinate engineers and other personnel involved in overseeing the construction. Each plan must also include the detailed observation, inspection and testing activities to be conducted by the CQA firm so as to confirm that each of these CSAs have been constructed in accordance with the applicable Design Figures and Department-approved Technical Specifications with respect to the construction elements listed under **Condition C.1.h.i.'a'** of this Exhibit. The Permittee must receive Department approval of each CQA Plan before beginning construction of each new CSA.

PROPOSED MODIFICATION:

'b') NT-109LA & NT-158LA Construction Quality Assurance (CQA) Plans

At least ninety (90) days prior to the anticipated start of NT-109LA construction and at least ninety (90) days prior to the anticipated start of NT-158LA construction, the Permittee must *verify that the approved Technical Specifications submitted under Condition C.1.g.i.'a' of this Exhibit, and the Design Drawings, and specific permit conditions for the NDMB meet the requirements for a CQA Plan for construction* ~~submit for Department approval, a CQA Plan for construction of each of these new CSAs which is consistent with the format used for landfill construction in Attachment J, Appendix D-8 of this Permit. Each CQA Plan must provide qualifications of the CQA Engineer and all subordinate~~

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~~engineers and other personnel involved in overseeing the construction. Each plan~~ *The Technical Specifications submitted under Condition C.1.h.i.'a' of this Exhibit* must also include the detailed observation, inspection and testing activities to be conducted by ~~the~~ *a* CQA firm so as to confirm that each of these CSAs have been constructed in accordance with the applicable Design Figures and Department-approved Technical Specifications with respect to the construction elements listed under **Condition C.1.h.i.'a'** of this Exhibit. The Permittee must receive Department approval of each ~~CQA Plan~~ *Technical Specifications* before beginning construction of each new CSA.

At least two (2) weeks prior to anticipated start of NT-109LA construction and at least ninety (90) days prior to the anticipated start of NT-158LA construction the Permittee must submit the qualifications of the CQA Engineer and all subordinate engineers and other personnel involved in overseeing the construction.

REASON:

The Quality Assurance Manual for landfill construction in Attachment J, Appendix D-8 of the Permit mostly pertains to the QA requirements for landfill liner which are not applicable to building construction. The technical specifications and design drawings will include quality assurance requirements. The approved Technical Specifications, Design Drawings, and specific conditions for the NT-109LA & NT-158LA should be considered the CQA Plan. A separate CQA Plan is not necessary with the exception that the qualifications of the quality assurance engineer will be submitted to the NYSDEC two weeks prior to construction of the NT-109LA & NT-158LA.

See related Comment No. 2.

CWM COMMENT NUMBER: 28

TOPIC:

Special Conditions for Container Miscellaneous Units
New DMB Fuels Pumping Area

LOCATION OF CONDITION:

Exhibit C Supplement to Module III – Containers
Condition D.1.b.i.'a','b', & 'c', Page C-21

EXISTING CONDITION:

'a') No more than 8 containers at a time must be in the New DMB Fuels Drum Pumping Area.

'b') All containers must be removed from the new DMB Fuels Drum Pumping Area and relocated to a CSA which is designated by Condition A of this Exhibit for the storage of containers storing free liquids, prior to the end of each day's work shift.

'c') No container shall be open in this area unless it is undergoing pumping, sampling or interior inspection. Personnel must be present in the new DMB Fuels Drum Pumping Area at all times during pumping.

PROPOSED MODIFICATION:

Revise as follows:

'a') No ~~more than 8~~ containers ~~at a time must be~~ *to be pumped may be stored* in the New DMB Fuels Drum Pumping Area *at any time*.

'b') *Containers shall be staged for pumping in their respective storage areas (New DMB Areas 1, 2 or 3) near the Fuels Pumping Area*. ~~All containers must be removed from the new DMB Fuels Drum Pumping Area and relocated to a CSA which is designated by Condition A of this Exhibit for the storage of containers storing free liquids, prior to the end of each day's work shift.~~

'c') No container shall be open in this area unless it is undergoing pumping, sampling or interior inspection. Personnel must be present in the new DMB Fuels Drum Pumping Area *and/or the associated container storage area* at all times during pumping.

REASON:

As indicated in the Response to NYSDEC Comments included in the August 28, 2013 Permit Modification Request, the Fuels Pumping Area will not be used for the storage or staging of containers during the transfer of liquid to the tanker in the Fuels Transfer Ramp. The Fuels

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Pumping Area will only house pumps and piping for the transfer of liquids with the only access to the Area being man doors for ingress and regress. Drums will be staged outside of the Fuels Pumping Area in Drum Storage Area 1 (Flammables) or Areas 2 or 3 during transfer of the liquids. The area will include satellite accumulation for associated waste (e.g. filter cleanout waste). Personnel performing the pumping will be in Area 1, 2, or 3 as they opening and pumping drums.

Even though the Fuels Pumping Area will not be used for the storage of containers the area has a secondary containment capacity of approximately 1,120 gallons. During the transfer of liquids to cargo tanks in the Fuels Transfer Ramp the pumps and piping will be observed and inspected for leaks and/or spills. Leaks and/or spills would be immediately cleaned up.

CWM COMMENT NUMBER: 29

TOPIC:

Authorized Storage Tank, Waste Types and Storage Volume

LOCATION OF CONDITION:

Exhibit D Supplement to Module IV – Tanks
Condition A.1, Page D-4, Line 9

EXISTING CONDITION:

Tank System I.D.	**Capacity (gallons)**	**Tank Usage & Material of Construction**	**Waste Origin & Description**	**EPA Hazardous Waste Code Nos.**	**Second. Contain. Volume (gallons)**
Tank Located Inside A Building, Southeast of SLF 12 Landfill					
T-150[30]	8,000	Storage/ Treatment[1,24] Steel (lined)	~~Onsite Generated Aqueous Wastes~~ SLF 12, RMU-1 & RMU-2 Leachate	F039	18,388

PROPOSED MODIFICATION:

Revise as follows:

Tank System I.D.	**Capacity (gallons)**	**Tank Usage & Material of Construction**	**Waste Origin & Description**	**EPA Hazardous Waste Code Nos.**	**Second. Contain. Volume (gallons)**
Tank Located Inside A Building, Southeast of SLF 12 Landfill					
T-150[30]	8,000	Storage/ Treatment[1,24] Steel (lined)	Onsite Generated Aqueous Wastes ~~-~~*or* SLF 12, RMU-1 & RMU-2 Leachate	F039	18,388

REASON:

CWM must maintain the option of placing non-hazardous site waters from secondary containments into tank T-150. The proposed NYSDEC modification to delete Onsite Generated Aqueous Wastes is not necessary.

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CWM COMMENT NUMBER: 30

TOPIC:

Authorized Storage Tank, Waste Types and Storage Volume

LOCATION OF CONDITION:

Exhibit D Supplement to Module IV – Tanks
Condition A.1, Page D-4, Line 10

EXISTING CONDITION:

Tank System I.D.	**Capacity (gallons)**	**Tank Usage & Material of Construction**	**Waste Origin & Description**	**EPA Hazardous Waste Code Nos.**	**Second. Contain. Volume (gallons)**
Tank Located Inside A Building, On the West Side of the RMU-1 Landfill					
T-160	3,000	Storage/ Treatment[1,24] Steel (lined)	RMU-1 Leachate	F039	7,563

PROPOSED MODIFICATION:

Revise as follows:

Tank System I.D.	**Capacity (gallons)**	**Tank Usage & Material of Construction**	**Waste Origin & Description**	**EPA Hazardous Waste Code Nos.**	**Second. Contain. Volume (gallons)**
Tank Located Inside A Building, On the West Side of the RMU-1 Landfill					
T-160	3,000	Storage/ Treatment[1,24] Steel (lined)	RMU-1 Leachate *& RMU-2 Leachate*	F039	7,563

REASON:

The first cell that will be constructed for RMU-2 will be Cell 20. The leachate forcemain piping for Cell 20 will be connected to the existing RMU-1 forcemain at the RMU-1 Cell 2 riser vault. The RMU-1 leachate forcemain will then convey the leachate to the RMU-1 Lift Station tank T-160. Therefore, the management of RMU-2 leachate must be allowed in tank T-160. Tank T-160 will be used to manage RMU-1 and RMU-2 (Cell 20) leachate until the RMU-1 Lift Station is closed for construction of Cell 16 or 17.

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CWM COMMENT NUMBER: 31

TOPIC:

Authorized Storage Tank, Waste Types and Storage Volume

LOCATION OF CONDITION:

Exhibit D Supplement to Module IV – Tanks
Condition A.1, Page D-6, Line 9

EXISTING CONDITION:

Tank System I.D.	**Capacity (gallons)**	**Tank Usage & Material of Construction**	**Waste Origin & Description**	**EPA Hazardous Waste Code Nos.**	**Second. Contain. Volume (gallons)**
Tank Located West of SLF 7 (for Facultative Pond 5)					
T-9001[31]	1,100	Storage HDPE[28]	Liquid from Facultative Pond 5 Leak Detection Sys.	F039	Double-Walled Tank[9]

PROPOSED MODIFICATION:

Revise as follows:

Tank System I.D.	**Capacity (gallons)**	**Tank Usage & Material of Construction**	**Waste Origin & Description**	**EPA Hazardous Waste Code Nos.**	**Second. Contain. Volume (gallons)**
Tank Located West of SLF 7 (for Facultative Pond 5)					
T-9001[31]	1,100	Storage HDPE[28]	Liquid from Facultative Pond 5 Leak Detection Sys.	F039 *& Waste Codes Listed in Attachment C*[3]	Double-Walled Tank[9]

REASON:

The assignment of an F039 waste code number to the liquid that may accumulate in the secondary containment of the storage tank for water from the leak detection system from new Facultative Pond 5 is a conservative assessment in case minute amounts of treated wastewater do "leak" to the SLC. Water that is pumped/transferred to New Facultative Pond 5 has to meet land disposal restrictions for waste, it continues to carry all listed waste codes that were processed at the AWT facility. This should also include waste codes listed in Attachment C.

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CWM COMMENT NUMBER: 32

TOPIC:

Special Conditions for Tank Systems (Specific)
Tank Systems' Leak Detection Monitoring

LOCATION OF CONDITION:

Exhibit D Supplement to Module IV – Tanks
Condition C.1.b.i, Page D-11, Table

EXISTING CONDITION:

Tank ID	Liquid Evaluation Procedures	Liquid Evaluation Criteria
T-9001	Conductivity Testing	Conductivity Threshold Criteria = 5,000 umhos or similar to tank liquid

PROPOSED MODIFICATION:

Revise as follows:

Tank ID	Liquid Evaluation Procedures	Liquid Evaluation Criteria
T-9001	Conductivity Testing	Conductivity Threshold Criteria = 5,000 umhos ~~or similar to tank liquid~~

REASON:

The recent historic conductivity of treated wastewater storage in the current Fac Ponds ranges between 8,900 and 12,000 µmho/cm (i.e. umhos).

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CWM COMMENT NUMBER: 33

TOPIC:

Special Conditions for Tank Systems (Specific)
Leachate Tanks T-101, T-102 & T-103 Separation of Wastewaters

LOCATION OF CONDITION:

Exhibit D Supplement to Module IV – Tanks
Condition C.1.e.i, Page D-13

EXISTING CONDITION:

i. The Permittee must designate specific tanks within the Tank T-101, T-102 & T-103 system for storage of leachate from the RMU-1 and RMU-2 landfills so as to facilitate separate treatment strategies. The Permittee must not ~~at no time~~ store leachate from landfills SLF 1 through 11, groundwater extraction systems or off-site commercial aqueous waste in any tank within this system which is designated for the storage of RMU-1 and RMU-2 leachate, unless such storage is absolutely necessary to maintain compliance with landfill leachate and contaminated storm water management conditions in Exhibits F & G of this Permit (based on the RMU-2 Tank Farm Storage Analysis presented in Attachment E-5 of the "RMU-2 Engineering Report" which is incorporated by reference into this Permit by **Schedule 1 of Module I** of this Permit). The Permittee may store SLF 12 leachate ~~or contaminated groundwater~~ in any tank within this system.

PROPOSED MODIFICATION:

Revise as follows:

ii. The Permittee must designate specific tanks within the Tank T-101, T-102 & T-103 system for storage of leachate from the RMU-1 and RMU-2 landfills so as to facilitate separate treatment strategies. The Permittee must not ~~at no time~~ store leachate from landfills SLF 1 through 11, ~~groundwater extraction systems~~ or off-site commercial aqueous waste in any tank within this system which is designated for the storage of RMU-1 and RMU-2 leachate, unless such storage is absolutely necessary to maintain compliance with landfill leachate and contaminated storm water management conditions in Exhibits F & G of this Permit (based on the RMU-2 Tank Farm Storage Analysis presented in Attachment E-5 of the "RMU-2 Engineering Report" which is incorporated by reference into this Permit by **Schedule 1 of Module I** of this Permit). The Permittee may store SLF 12 leachate ~~or contaminated groundwater~~ *or contaminated groundwater* in any tank within this system.

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REASON:

The option to store contaminated groundwater in any tank of the Leachate Tank Farm must be maintained. Contaminated groundwater from some of the Corrective Action Groundwater Extraction Systems contains low levels of organics. Maintaining the current storage options for the contaminated groundwater should be allowed.

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CWM COMMENT NUMBER: 34

TOPIC:

Special Conditions for Tank Systems (Specific)
Installation & Operation of Tank T-150 Ancillary Equipment for RMU-2

LOCATION OF CONDITION:

Exhibit D Supplement to Module IV – Tanks
Condition C.1.j, Page D-17
Second Paragraph

EXISTING CONDITION:

The Permittee must commence installation of this ancillary equipment during the same calendar year in which the first cell of RMU-2 is constructed, and must complete this installation and place the equipment into operation prior to waste placement in the first RMU-2 cell in accordance with the "Transition Plan for RMU-2" which is incorporated by reference into this Permit by **Schedule 1 of Module I** of this Permit. The equipment must be operated as indicted in Appendix F of the "RMU-2 Engineering Report" which is incorporated by reference into this Permit by **Schedule 1 of Module I** of this Permit.

PROPOSED MODIFICATION:

Revise as follows:

The Permittee must commence installation of this ancillary equipment during the same calendar year in which the ~~first~~ *second* cell of RMU-2 is constructed, and must complete this installation and place the equipment into operation prior to waste placement in the ~~first~~ *second* RMU-2 cell in accordance with the "Transition Plan for RMU-2" which is incorporated by reference into this Permit by **Schedule 1 of Module I** of this Permit. The equipment must be operated as indicted in Appendix F of the "RMU-2 Engineering Report" which is incorporated by reference into this Permit by **Schedule 1 of Module I** of this Permit.

REASON:

The first cell that will be constructed for RMU-2 will be Cell 20 and the second cell will be Cell 18. The leachate forcemain piping for Cell 20 will be connected to the existing RMU-1 forcemain at the RMU-1 Cell 2 riser vault. The RMU-1 forcemain then conveys the leachate to the RMU-1 Lift Station tank T-160. From tank T-160, the leachate is conveyed to the Leachate Tank Farm. Tank T-160 will be used to manage RMU-1 and RMU-2 (Cell 20) leachate until the

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RMU-1 Lift Station is closed for construction of Cell 16. The construction of Cells 15 and 16 of RMU-2 will include the installation of a new forcemain along the north perimeter berm of RMU-2. During closure of the RMU-1 Station, the RMU-1 forcemain will be reconfigured to connect to the new forcemain to be installed along the north perimeter berm of RMU-2. The new forcemain along the north perimeter berm of RMU-2 will convey leachate to tank T-150.

During construction of the second cell (Cell 18) a new forcemain will be installed along the west perimeter berm of RMU-2 to manage leachate from Cell 18 and future Cells 17 and 19. The new forcemain will convey leachate to a new manhole (MH-15) located at the proposed northwest corner of RMU-2. Leachate will then be conveyed along a new forcemain installed from MH-15 to the tank T-150 Lift Station. In accordance with the Transition Plan, the tank T-150 will be upgraded and a set of new double walled underground forcemains will be installed from T-150 Lift Station to the Leachate Tank Farm during the construction of Cell 18.

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CWM COMMENT NUMBER: 35

TOPIC:

General Conditions

LOCATION OF CONDITION:

Exhibit E Supplement to Module V – Surface Impoundments
Condition B.2, Page E-1/2

EXISTING CONDITION:

2. Transfers of wastewater and/or accumulated precipitation from FAC Pond 1 / 2 to FAC Pond 3, from FAC Pond 3 to FAC Pond 1 / 2, and from FAC Pond 8 to FAC Pond 1 / 2 may be performed as necessary to maintain minimum freeboard and to facilitate accumulation prior to discharge. Transfers may also be performed from Fac Pond 1 / 2 to Fac Pond 5 or from Fac Pond 5 to Fac Pond 1 / 2 to maintain adequate freeboard and facilitate accumulation prior to discharge, subsequent to the Department's acceptance of the Fac Pond 5 construction certification and all other Department approvals required for operation of the constructed impoundment. All transfers of treated wastewater to, from, and between the FAC Ponds must be via rigid piping unless a specific, prior approval is granted by the Department. Transfers from FAC Pond 8 to FAC Pond 1 / 2 must be conducted in accordance with the requirements in **Condition D** of this Exhibit.

PROPOSED MODIFICATION:

Revise as follows:

2. Transfers of wastewater and/or accumulated precipitation from FAC Pond 1 / 2 to FAC Pond 3, from FAC Pond 3 to FAC Pond 1 / 2, and from FAC Pond 8 to FAC Pond 1 / 2 may be performed as necessary to maintain minimum freeboard and to facilitate accumulation prior to discharge. Transfers may also be performed from Fac Pond 1 / 2 *or Fac Pond 3* to Fac Pond 5 or from Fac Pond 5 to Fac Pond 1 / 2 *or Fac Pond 3* to maintain adequate freeboard and facilitate accumulation prior to discharge, subsequent to the Department's acceptance of the Fac Pond 5 construction certification and all other Department approvals required for operation of the constructed impoundment. All transfers of treated wastewater to, from, and between the FAC Ponds must be via rigid piping unless a specific, prior approval is granted by the Department. Transfers from FAC Pond 8 to FAC Pond 1 / 2 must be conducted in accordance with the requirements in **Condition D** of this Exhibit.

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REASON:

Subsequent to the NYSDEC's acceptance of the Fac Pond 5 construction certification and all other NYSDEC approvals required for operation of the constructed impoundment, the option of transferring Fac Pond 3 contents to Fac Pond 5 will be necessary, especially during closure of Fac Pond 3. CWM also requests the option of transferring the contents of Fac Pond 5 to Fac Pond 3.

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CWM COMMENT NUMBER: 36

TOPIC:

General Conditions

LOCATION OF CONDITION:

Exhibit E Supplement to Module V – Surface Impoundments
Condition B.6, Page E-2

EXISTING CONDITION:

6. At least once every five (5) years, the Permittee must determine the depth of sediment (if any) collected on the bottom of the operating Fac Ponds. If the depth is greater than six (6) inches, the Permittee must remove the sediment to restore the Fac Pond's capacity. For Fac Ponds which are out-of-service, the Permittee must remove any accumulated sediment before putting the pond into service. Any removed sediment must be characterized for proper disposition.

PROPOSED MODIFICATION:

Delete this condition in its entirety.

REASON:

The measurement and removal of any sediment, if greater than 6-inches in depth is unnecessary. Fac Pond 5 will receive treated wastewater either directly from the facility's Aqueous Wastewater Treatment System (AWTS) or from Fac Ponds 1 / 2. Fac Ponds 1 / 2 currently receive treated wastewater from the AWTS batch qualification tanks T-58 and T-125. The final treatment process for wastewater prior to conveyance to the batch qualification tanks T-58 and T-125 is carbon adsorption. Some of the wastewater may also be conveyed through the arsenic treatment (adsorption) system. The carbon adsorption system filters suspended solids and the wastewater treated through the arsenic adsorption system is filtered down to 5 microns. Therefore, there is minimal potential for sediment to accumulate in Fac Pond 5. Additionally, Fac Pond 5 is designed to minimize run-on of stormwater. In addition, as long as CWM continues to maintain $\geq$ 2-feet of freeboard, the pond would have sufficient capacity.

Additionally, if removal of any accumulated sediment is required the chances of damaging the baseliner are significantly increased and would require the construction and removal of a ramp into the impoundment for equipment access. Fac Pond 5 upon operation is not designed such that equipment can run on the ballast material or sideslopes.

CWM COMMENT NUMBER: 37

TOPIC:

FAC Pond 5 Construction, Operation, Monitoring & Closure
Construction Requirements
Wastewater Compatibility Tests For Liner/Leak Detection Systems

LOCATION OF CONDITION:

Exhibit E Supplement to Module V – Surface Impoundments
Condition E.1.a, Page E-4/5

EXISTING CONDITION:

a. Wastewater Compatibility Tests For Liner/Leak Detection Systems The Permittee must demonstrate that both the natural and synthetic materials used to construct Fac Pond 5's Liner & Leak Detection Systems, are compatible with the type of wastewater to be stored in the Fac Pond. For synthetic materials (i.e., geotextile, geomembrane, geosynthetic Clay Liner (GCL) & geocomposite) compatibility testing must be performed on the actual materials to be used in Fac Pond 5 construction prior to their installation. For natural materials (i.e., clay), compatibility testing must be performed on each material source (i.e., each borrow area) to be used in Fac Pond 5 construction. This compatibility demonstration must be performed using wastewater obtained from the existing Fac Ponds in accordance with the sampling, testing and reporting requirements stipulated by the following conditions from **Exhibit G in Schedule 1 of Module I** of this Permit:

- Condition C.1.a – Synthetic Liner and Leachate Collection Components
- Condition C.1.a.ii - Synthetics Sampling Frequencies and Testing Methods
- Condition C.1.b.i - Clay Liner Sampling Frequencies and Testing Methods

PROPOSED MODIFICATION:

Delete this condition in its entirety.

REASON:

Surface water impoundments at the facility receive treated wastewater from the AWTS that meets Land Disposal Restrictions (LDRs). Attachment B includes the a summary of the analytical results for the pond Discharge Pre-Qualification sampling performed in 2014 in accordance with the State Pollutant Discharge Elimination System (SPDES) Permit.

Clay Liner sources that will be used for the construction of the three feet of base liner will be subjected to immersion testing in accordance with Condition C.1.b.i of Exhibit G of the Permit Modification for RMU-2. Therefore, if this clay is qualified to be used for the base liner system for leachate, it should be qualified for use with treated effluent. See related Comment No. 3

CWM COMMENT NUMBER: 38

TOPIC:

FAC Pond 5 Construction, Operation, Monitoring & Closure
Construction Requirements
Wastewater Compatibility Tests For Liner/Leak Detection Systems

LOCATION OF CONDITION:

Exhibit E Supplement to Module V – Surface Impoundments
Condition E.1.b.ii & iii, Page E-5

EXISTING CONDITION:

b. Other Material Evaluation Requirements

ii. The Permittee must perform transmissivity testing on the actual geocomposite material to be used in the Fac Pond's leak detection system in accordance with **Exhibit G, Condition C.4.b in Schedule 1 of Module I** of this Permit, to confirm that it meets the design specification.

iii. The Permittee must perform interface shear strength testing on the actual materials to be used in the Fac Pond's liner/leak detection system in accordance with **Exhibit G, Condition C.6 in Schedule 1 of Module I** of this Permit, to confirm that it meets the design specifications.

PROPOSED MODIFICATION:

Revise Condition E.1.b.ii as follows:

ii. The Permittee must perform transmissivity testing on the actual geocomposite material to be used in the Fac Pond's leak detection system in accordance with *ASTM D4716 under simulated Fac Pond 5 conditions as determined by the Design Engineer*, to confirm that it meets the design specification. *Product samples for testing will be obtained at the frequency required by Section 12.4.1 of the RMU-2 Landfill Quality Assurance Manual in Attachment J, Appendix D-8a of this Permit.* ~~**Exhibit G, Condition C.4.b in Schedule 1 of Module I** of this Permit~~

Delete Condition E.1.b.iii in its entirety.

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REASON:

Transmissivity Testing

Transmissivity testing will be performed for the actual geocomposite material to be used in the Fac Pond's leak detection system in accordance with ASTM D4716 under simulated Fac Pond 5 conditions as determined by the Design Engineer. Section 02430, Part 1.03H of the RMU-2 Landfill Technical Specifications in Attachment J, Appendix D-7a of this Permit does not contain the conditions for testing. The simulated Fac Pond 5 conditions will have to be specified by the Design Engineer as part of the pre-construction conformance testing. Product samples for testing will be obtained at the frequency required by Section 12.4.1 of the RMU-2 Landfill Quality Assurance Manual in Attachment J, Appendix D-8a of this Permit.

Additionally, CWM should not be required to perform the transmissivity testing using actual wastewater. Even though the existing surface impoundments and the proposed impoundments at the facility contain treated wastewater that meets land disposal restrictions, the NYSDEC still considers the wastewater has F039 hazardous waste. Shipping of hazardous waste would for this testing would be an unneeded additional burden.

Interface Shear Testing

The condition for interface shear testing of the liner/leak detection system for Fac Pond 5 is not necessary. The absence of any kind of veneer cover over the geosynthetic liner means there is no destabilizing force. Consequently, the geosynthetics are stable even without any interface strength. Hydrostatic pressure due to water in the pond creates an outward force on all surfaces, meaning the force is perpendicular to the sideslopes and no destabilizing force.

See related Comment No. 4.

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CWM COMMENT NUMBER: 39

TOPIC:

FAC Pond 5 Construction, Operation, Monitoring & Closure
Construction Requirements
Construction Material Requirements
Other Liner & Leak Detection Materials

LOCATION OF CONDITION:

Exhibit E Supplement to Module V – Surface Impoundments
Condition E.1.e.iv, Page E-6/7, fourth paragraph

EXISTING CONDITION:

The material to be installed for the Fac Pond ballast layer shall be a sand bedding material which must meet the specifications and testing requirements in Section 02210 of the "RMU-2 Technical Specifications" contained in Attachment J, Appendix D-7a of this Permit.

PROPOSED MODIFICATION:

Delete this condition in it's entirety.

REASON:

The Design Engineer has specified that the Fac Pond ballast layer shall be 1-foot thick crushed/screened stone or manufactured concrete product, in accordance with Permit Drawing No. 4 in Attachment D, Appendix D-2 or the Draft Permit Modification.

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CWM COMMENT NUMBER: 40

TOPIC:

FAC Pond 5 Construction, Operation, Monitoring & Closure
Construction Requirements
Material Installation Requirements
Primary & Secondary Geomembrane

LOCATION OF CONDITION:

Exhibit E Supplement to Module V – Surface Impoundments
Condition E.1.f.iii, Page E-8

EXISTING CONDITION:

iii. Primary & Secondary Geomembrane

The Permittee shall install the Fac Pond primary and secondary geomembrane using the 30-mil thick Ethylene Interpolymer Alloy (EIA) liner material qualified for such use in accordance with **Condition E.1.f.iii** of this Exhibit. The EIA Liner Material shall be placed, seamed and tested in accordance with **Condition D.5.e of Exhibit G** (including D.5.e.i through D.5.e.v), as modified below:

PROPOSED MODIFICATION:

Revise as follows:

iii. Primary & Secondary Geomembrane

The Permittee shall install the Fac Pond primary and secondary geomembrane using the 30-mil thick Ethylene Interpolymer Alloy (EIA) liner material qualified for such use in accordance with **Condition E.1.f.iii** of this Exhibit. The EIA Liner Material shall be placed, seamed and tested in accordance with **Condition D.5.e of Exhibit G** (including ~~D.5.e.i~~ *D.5.e.ii* through D.5.e.v), as modified below:

REASON:

Exhibit G, Condition D.5.e.i is not applicable to the 30-mil reinforced Ethylene Interpolymer Alloy (EIA) liner specified for the Facultative (Fac) Pond liner system. Field seaming will be performed using heat welding or RF welding apparatus with a minimum 2-inch overlap for all welds. Field seaming will not be performed using the double fusion weld.

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CWM COMMENT NUMBER: 41

TOPIC:

FAC Pond 5 Construction, Operation, Monitoring & Closure
Construction Requirements
Material Installation Requirements
Installation of Other Liner & Leak Detection Components

LOCATION OF CONDITION:

Exhibit E Supplement to Module V – Surface Impoundments
Condition E.1.f.iv, Page E-8

EXISTING CONDITION:

iv. Installation of Other Liner & Leak Detection Components

The Geosynthetic Clay Liner (GCL) shall be installed and tested in accordance with **Condition D.5.d of Exhibit G**. The geocomposite, cushion geotextile and ballast sand material shall be installed and tested in accordance with **Condition D.5.f of Exhibit G**.

PROPOSED MODIFICATION:

Revise as follows:

iv. Installation of Other Liner & Leak Detection Components

The Geosynthetic Clay Liner (GCL) shall be installed and tested in accordance with **Condition D.5.d of Exhibit G**. The geocomposite~~,~~ *and* cushion geotextile ~~and ballast sand material~~ shall be installed and tested in accordance with **Condition D.5.f of Exhibit G**.

REASON:

The Design Engineer has specified that the Fac Pond ballast layer shall be 1-foot thick crushed/screened stone or manufactured concrete product, in accordance with Permit Drawing No. 4 in Attachment D, Appendix D-2 or the Draft Permit Modification. The ballast material will meet this requirement and it is not necessary to reference conditions in Exhibit G that are not relevant to ballast material.

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CWM COMMENT NUMBER: 42

TOPIC:

FAC Pond 5 Construction, Operation, Monitoring & Closure
Construction Requirements
Construction Completion and Certification Requirements
Fac Pond Primary Liner Leakage Rate Measurement

LOCATION OF CONDITION:

Exhibit E Supplement to Module V – Surface Impoundments
Condition E.1.h.i, Page E-8

EXISTING CONDITION:

h. Construction Completion and Certification Requirements

i. Fac Pond Primary Liner Leakage Rate Measurement

After completing construction of the Fac Pond's secondary geomembrane, the Permittee must remove the accumulated liquid in the leak detection system at a minimum of once every seven (7) days. Upon completing installation of the Fac Pond's primary geomembrane liner (including completion of the leak location survey), the Permittee must remove liquid from the leak detection system on a daily basis and take measurements of the volume removed to determine the daily flow in gallons per acre per day (gpad) based on the Pond's lined area in acres. These measurements must be taken for at least two consecutive weeks subsequent to when the depth of accumulated precipitation on the primary geomembrane reaches at least one (1) foot over the entire floor of the Fac Pond (the Permittee may use water in lieu of, or to supplement precipitation to achieve the one (1) foot depth). The Permittee must use the measured daily flow at the one (1) foot depth to calculate the Fac Pond Daily Leakage Rate at the pond's maximum permitted depth by using established hydraulic equations to account for the difference between the one foot depth and the pond's maximum operational depth. This calculated Daily Leakage Rate must be compared to the 539 gpad Response Rate set in the Fac Pond 5 Response Action Plan (RAP) in Attachment D, Appendix D-2 of this Permit. If the Daily Leakage Rate is greater than the 539 gpad Response Rate, the Permittee must conduct additional leak location surveys and implement measures in the Fac Pond 5 RAP to identify and repair defects in the primary geomembrane. No wastewater may be placed in the Fac Pond until measurements indicate a Daily Leakage Rate is below 539 gpad.

PROPOSED MODIFICATION:

Revise as follows:

h. Construction Completion and Certification Requirements

i. Fac Pond Primary Liner Leakage Rate Measurement

After completing construction of the Fac Pond's secondary geomembrane, the Permittee must remove the accumulated liquid in the leak detection system at a minimum of once every seven (7) days. Upon completing installation of the Fac Pond's primary geomembrane liner (including completion of the leak location survey), the Permittee must remove liquid from the leak detection system *at a minimum* on a ~~daily~~ *weekly* basis and take measurements of the volume removed to determine the daily flow in gallons per acre per day (gpad) based on the Pond's lined area in acres. These measurements must be taken for at least two consecutive weeks. ~~subsequent to when the depth of accumulated precipitation on the primary geomembrane reaches at least one (1) foot over the entire floor of the Fac Pond (the Permittee may use water in lieu of, or to supplement precipitation to achieve the one (1) foot depth). The Permittee must use the measured daily flow at the one (1) foot depth to calculate the Fac Pond Daily Leakage Rate at the pond's maximum permitted depth by using established hydraulic equations to account for the difference between the one foot depth and the pond's maximum opertational depth. This calculated Daily Leakage Rate must be compared to the 539 gpad Response Rate set in the Fac Pond 5 Response Action Plan (RAP) in Attachment D, Appendix D-2 of this Permit. If the Daily Leakage Rate is greater than the 539 gpad Response Rate, the Permittee must conduct additional leak location surveys and implement measures in the Fac Pond 5 RAP to identify and repair defects in the primary geomembrane. No wastewater may be placed in the Fac Pond until measurements indicate a Daily Leakage Rate is below 539 gpad~~.

REASON:

The addition of one (1) foot of water over the entire floor of the Fac Pond from natural precipitation or from the addition of water in lieu of, or to supplement precipitation is unrealistic. To achieve a one (1) foot minimum of water over the entire floor of the Fac Pond would be approximately 510,000 gallons, not accounting for the slope of base of the pond. The average precipitation during the construction season at the facility is 2.9 inches. Supplementing precipitation with water from the municipal water supply would not be looked on favorably by the municipal authorities. Utilization of stormwater accumulations from outside of the impoundment or using municipal water would likely require a modification to the State Pollutant

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Discharge Elimination System (SPDES) Permit for discharge of the water upon completion of the test.

Additionally, CWM has agreed to perform leak location survey. This survey is not required by the regulations, but CWM has agreed to perform this survey as an additional Construction Quality Assurance (CQA) measure.

The proposed baseliner system for Fac Pond 5 consists of a Geosynthetic Clay Liner (GCL). The GCL liner proposed for the construction of Fac Pond 5 is specified to have a maximum hydraulic conductivity of $5x10^{-9}$ cm/sec. If defects were present in the primary geomembrane, there would not be adequate flow in the two week time period to evaluate the Response Rate of the impoundment.

Upon operation of Fac Pond 5, CWM will be monitoring the Leak Detection System in accordance with Exhibit E, Conditions E.3.a to E.3.e. If during the operation of Fac Pond 5 the Response Rate is exceeded, CWM would implement the Response Action Plan and take any additional response actions as deemed necessary by the NYSDEC to protect human health and the environment.

CWM COMMENT NUMBER: 43

TOPIC:

FAC Pond 5 Construction, Operation, Monitoring & Closure
Operational Requirements
Fac Pond 5 Waste Storage

LOCATION OF CONDITION:

Exhibit E Supplement to Module V – Surface Impoundments
Condition E.2.a, Page E-9/10

EXISTING CONDITION:

a. Fac Pond 5 Waste Storage

The Permittee may use the constructed Fac Pond 5 for the storage/treatment of treated aqueous hazardous waste discharged from its on-site treatment process in accordance with the "Aqueous Waste Treatment System (AWTS) Operations and Maintenance (O&M) Manual" which is incorporated by reference into this Permit by **Schedule 1 of Module I**. The hazardous wastes contained in constructed FAC Pond 5 must meet all of the Land Disposal Restriction (LDR) treatment standards for wastewater as presented in 6 NYCRR 376.4 and the air emission exemption requirements in 6 NYCRR 373-2.29(c)(3). The Permittee must analyze the contents of Tanks T-58 and T-125 prior to their discharge to the Fac Pond in accordance with the Waste Analysis Plan in Attachment C, Section C of this Permit, to verify that the hazardous wastes meet LDR treatment standards. Also, the Permittee must maintain the Fac Pond 5 capacity in accordance with **Condition B.6** of this Exhibit.

PROPOSED MODIFICATION:

Revise as follows:

a. Fac Pond 5 Waste Storage

The Permittee may use the constructed Fac Pond 5 for the storage/treatment of treated aqueous hazardous waste discharged from its on-site treatment process in accordance with the "Aqueous Waste Treatment System (AWTS) Operations and Maintenance (O&M) Manual" which is incorporated by reference into this Permit by **Schedule 1 of Module I**. The hazardous wastes contained in constructed FAC Pond 5 must meet all of the Land Disposal Restriction (LDR) treatment standards for wastewater as presented in 6 NYCRR 376.4 and the air emission exemption requirements in 6 NYCRR 373-2.29(c)(3). The Permittee must analyze the contents of Tanks T-58 and T-125 prior to their discharge to the Fac Pond in accordance with the Waste Analysis Plan in Attachment C, Section C of this Permit, to verify that the hazardous wastes meet LDR treatment standards. ~~Also,~~

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~~the Permittee must maintain the Fac Pond 5 capacity in accordance with **Condition B.6** of this Exhibit.~~

REASON:

See Comment 36 related to Condition B.6, Page E-2 for request to delete the measurement and removal of any accumulated sediment within the impoundment every five years.

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CWM COMMENT NUMBER: 44

TOPIC:

FAC Pond 5 Construction, Operation, Monitoring & Closure
Inspection & Monitoring Requirements
Leak Detection Monitoring

LOCATION OF CONDITION:

Exhibit E Supplement to Module V – Surface Impoundments
Condition E.3.a.ii, Page E-10

EXISTING CONDITION:

ii. On a yearly basis, the Permittee must sample the liquid removed from the pond's LDS sump and analyze each sample for pH, specific conductance, PCBs, Priority Pollutant organics and Priority Pollutant metals (i.e., antimony, arsenic, beryllium, cadmium, chromium, copper, lead, mercury, nickel, selenium, silver, thallium, zinc).

PROPOSED MODIFICATION:

Revise as follows:

ii. On a yearly basis, the Permittee must sample the liquid removed from the pond's LDS sump and analyze each sample for pH, specific conductance, *sulfate, chloride, and total dissolved solids.* ~~PCBs, Priority Pollutant organics and Priority Pollutant metals (i.e., antimony, arsenic, beryllium, cadmium, chromium, copper, lead, mercury, nickel, selenium, silver, thallium, zinc)~~.

REASON:

Annual sampling of Fac Pond 3 for prequalification for discharge to the Niagara River in accordance with the SPDES permit includes PCBs, Priority Pollutant Organics, and Priority Pollutant metals. Results of the annual sampling have indicated that PCBs and Priority Pollutant Organics have not been detected above the detection limits and Priority Pollutant Metals have not been detected above the detection limits or have been detected at levels that meet SPDES requirements. Therefore, these parameters are not good indicators of a potential leak in the primary liner of the pond and therefore should not be analyzed. Sulfate, chloride, and total dissolved solids are better indictors of potential leaks in the primary liner of the impoundment.

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CWM COMMENT NUMBER: 45

TOPIC:

FAC Pond 5 Construction, Operation, Monitoring & Closure
Inspection & Monitoring Requirements
Fac Pond 5 Groundwater Monitoring Requirements

LOCATION OF CONDITION:

Exhibit E Supplement to Module V – Surface Impoundments
Condition E.3.f, Pages E-11 through E-13

EXISTING CONDITION:

f. Fac Pond 5 Groundwater Monitoring Requirements

The Permittee must comply with all applicable groundwater monitoring requirements set forth in 6 NYCRR 373-2.6.

The Permittee is required to maintain and adhere to the following Detection Monitoring Program for Fac Pond 5.

PROPOSED MODIFICATION:

Revise as follows:

Move the Fac Pond 5 Groundwater Monitoring Requirements to Exhibit F, Condition L.

REASON:

The proposed Fac Pond 5 Groundwater Monitoring Requirements in Exhibit E are redundant and not necessary to be included in this exhibit. Revising Exhibit E and F as proposed will maintain consistency with groundwater monitoring requirements of the existing Fac Ponds 1 / 2, 3, and 8 and other monitored units at the facility. These revisions were proposed in CWM's November 2013 Permit Modification Request/Application for RMU-2.

See Comments 50, 51, 52, and 55

CWM COMMENT NUMBER: 46

TOPIC:

Fac Pond 5 Construction Time Period

LOCATION OF CONDITION:

Exhibit E Supplement to Module V – Surface Impoundments
Condition F, Page E-13

EXISTING CONDITION:

F. Fac Pond 5 Construction Time Period

Construction of Fac Pond 5 shall commence during the same calendar year in which the first cell of the RMU-2 landfill is constructed, and must be completed and placed into operation prior to commencing closure of Fac Pond 3, in accordance with the "Transition Plan for RMU-2" which is incorporated by reference into this Permit by **Schedule 1 of Module I** of this Permit.

PROPOSED MODIFICATION:

Revise as follows:

F. Fac Pond 5 Construction Time Period

Construction of Fac Pond 5 shall commence *and must be completed prior to commencing the construction of the second* ~~during the same calendar year in which the first~~ cell of the RMU-2 landfill ~~is constructed~~, and must be completed and placed into operation prior to ~~commencing~~ completing closure of Fac Pond 3, in accordance with the "Transition Plan for RMU-2" which is incorporated by reference into this Permit by **Schedule 1 of Module I** of this Permit.

REASON:

The Transition Plan for RMU-2 submitted in the Permit Modification Request (November 2013) included a "Conceptual Schedule". It was anticipated that Fac Pond 5 would be constructed in the first year of site development for RMU-2. However, this phasing was conceptual in nature. At this time it anticipated that Fac Pond 5 will be constructed during the third year of RMU-2 development to replace the capacity lost for the closure of Fac Pond 3, which also is anticipated to commence in the third year of RMU-2 development. At this time, it is anticipated that the closure of Fac Pond 3 will be completed during the fourth year of RMU-2 development, prior to construction of the second cell of RMU-2 (Cell 18). Section 2.2 of the Transition Plan text and the "Conceptual Schedule" has been revised and included as Attachment C to these comments.

CWM COMMENT NUMBER: 47

TOPIC:

Special Closure & Financial Assurance Conditions
Closure Requirements

LOCATION OF CONDITION:

Exhibit E Supplement to Module V – Surface Impoundments
Condition G.1, Page E-14

EXISTING CONDITION:

1. Closure Requirements

The Permittee must close Fac Ponds 1 / 2, 3, 5 & 8 in accordance with 6 NYCRR 373-2.7(a) through (f), 6 NYCRR 373-2.11(f), the "Overall Site-Wide Closure Plan" in Attachment I, Section I.1 of this Permit, and the conditions of this Permit. Closure of Fac Pond 3 may not commence until Fac Pond 5 is constructed and receiving treated wastewater, in accordance with the "Transition Plan for RMU-2" which is incorporated by reference into this Permit by **Schedule 1 of Module I** of this Permit.

PROPOSED MODIFICATION:

Revise as follows:

1. Closure Requirements

The Permittee must close Fac Ponds 1 / 2, 3, 5 & 8 in accordance with 6 NYCRR 373-2.7(a) through (f), 6 NYCRR 373-2.11(f), the "Overall Site-Wide Closure Plan" in Attachment I, Section I.1 of this Permit, and the conditions of this Permit. Closure of Fac Pond 3 *must be completed prior to construction of the second cell of RMU-2 (Cell 18)* ~~may not commence until Fac Pond 5 is constructed and receiving treated wastewater~~, in accordance with the "Transition Plan for RMU-2" which is incorporated by reference into this Permit by **Schedule 1 of Module I** of this Permit.

REASON:

The Transition Plan for RMU-2 submitted in the Permit Modification Request (November 2013) included a "Conceptual Schedule". It was anticipated that Fac Pond 5 would be constructed in the first year of site development for RMU-2. However, this phasing was conceptual in nature. At this time it anticipated that Fac Pond 5 will be constructed during the third year of RMU-2 development to replace the capacity lost for the closure of Fac Pond 3, which also is anticipated to commence in the third year of RMU-2 development. At this time, it is anticipated that the closure of Fac Pond 3 will be completed during the fourth year of RMU-2 development, prior to construction of the second cell of RMU-2 (Cell 18). Section 2.2 of the

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Transition Plan text and the “Conceptual Schedule” has been revised and included as Attachment C to these comments.

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CWM COMMENT NUMBER: 48

TOPIC:

RMU-1 Monitoring and Inspection
Primary Leachate Monitoring

LOCATION OF CONDITION:

Exhibit F Supplement to Module VI – Landfills [RMU-1 & Closed Landfills]
Condition G.2.b, Page F-32

EXISTING CONDITION:

b. The Permittee must sample and analyze the primary leachate on a quarterly basis for pH, specific conductance, PCBs, and Priority Pollutant volatile organics;

PROPOSED MODIFICATION:

Revise as follows:

b. The Permittee must sample and analyze the primary leachate on a quarterly basis for pH, specific conductance, PCBs, and *Site Specific Volatile Organic Compounds (27 VOCs)* ~~Priority Pollutant volatile organics~~;

REASON:

Permit condition modified by Permit Modification No. 5 issued by the NYSDEC on May 21, 2014.

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CWM COMMENT NUMBER: 49

TOPIC:

RMU-1 Secondary Leachate Collection System (SLCS)
RMU-1 SLCS Monitoring

LOCATION OF CONDITION:

Exhibit F Supplement to Module VI – Landfills [RMU-1 & Closed Landfills]
Condition H.1.a.i.'c' & 'd', Page F-33

EXISTING CONDITION:

'c') On a quarterly basis, the Permittee must sample the liquid removed from each cell's SLCS sump and analyze each sample for pH, specific conductance, and Priority Pollutant volatile organics.

'd') On a yearly basis, the Permittee must sample the liquid removed from each cell's SLCS sump and analyze each sample for pH, specific

PROPOSED MODIFICATION:

Revise as follows:

'c') On a quarterly basis, the Permittee must sample the liquid removed from each cell's SLCS sump and analyze each sample for pH, specific conductance, and *Site Specific VOCs (27 VOCs)*~~Priority Pollutant volatile organics~~.

'd') On a yearly basis, the Permittee must sample the liquid removed from each cell's SLCS sump and analyze each sample for pH, specific conductance, *Site Specific Volatile Organic Compounds (27 VOCs), Organic* Priority Pollutants ~~organics~~*(i.e., semi-volatile organics, PCBs and pesticides)* and Priority Pollutant metals (i.e., antimony, arsenic, beryllium, cadmium, chromium, copper, lead, mercury, nickel, selenium, silver, thallium, zinc).

REASON:

Permit condition modified by Permit Modification No. 5 issued by the NYSDEC on May 21, 2014.

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CWM COMMENT NUMBER: 50

TOPIC:

Groundwater Protection

LOCATION OF CONDITION:

Exhibit F Supplement to Module IV – Landfills
Condition L.1, Page F-56

EXISTING CONDITION:

Active:

Residuals Management Unit 1 (RMU-1)
Facultative Ponds 1, 2, 3, and 8

PROPOSED MODIFICATION:

Revise as follows:

Active:

Residuals Management Unit 2 (RMU-2)
Residuals Management Unit 1 (RMU-1)
Facultative Ponds 1, 2, 3, *5,* and 8

REASON:

The proposed Fac Pond 5 Groundwater Monitoring Requirements in Exhibit E are redundant and not necessary to be included in this exhibit. Revising Exhibit E and F as proposed will maintain consistency with groundwater monitoring requirements of the existing Fac Ponds 1 / 2, 3, and 8 and other monitored units at the facility. These revisions were proposed in CWM's November 2013 Permit Modification Request/Application for RMU-2.

See Comment 45, related to Exhibit E, Condition E.3.f. and Comment 99 related to Exhibit G, Condition L.

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CWM COMMENT NUMBER: 51

TOPIC:

Groundwater Protection
Point of Compliance

LOCATION OF CONDITION:

Exhibit F Supplement to Module IV – Landfills
Condition L, Page F-56 & 57

EXISTING CONDITION:

1. Point of Compliance. The Points of Compliance for the applicable units are as follows:

   a. Residuals Management Unit 1: The Point of Compliance for this landfill is defined as the vertical surface passing through the downgradient monitoring wells R101S, R102SR, R103S, R104S, R105S, R106S, R107S, R1N08S, R109S, R1N10S, R111S, R112S, R113S, R114S, R115S R116S, R118S, R125D, R126D, R127D, R128D, R129D, R130D, R131D, R132D, R133D, R134D and R135D.

   b. Facultative Ponds 1 & 2: The Point of Compliance for this surface impoundment is defined as the vertical surface passing through the downgradient monitoring wells F101S, F102S and F103S.

   c. Facultative Pond 3: The Point of Compliance for this surface impoundment is defined as the vertical surface passing through the downgradient monitoring wells F301S and F302S.

   d. Facultative Pond 8: The Point of Compliance for this surface impoundment is defined as the vertical surface passing through the downgradient monitoring wells F801S and F802S.

PROPOSED MODIFICATION:

Revise as follows:

1. Point of Compliance. The Points of Compliance for the applicable units are as follows:

   a. Residuals Management Unit 2: The Point of Compliance for this landfill is defined as the vertical surface passing through the downgradient monitoring wells R201SR, R204S, R205S, R206S, R207S, R208S, R209S, R210S, R211S, R212S, R213S, R214S, R215S, and R216S.

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~~a~~*b*. Residuals Management Unit 1: The Point of Compliance for this landfill is defined as the vertical surface passing through the downgradient monitoring wells R101S, R102SR, R103S, R104S, R105S, R106S, R107S, R1N08S, R109S, R1N10S, R111S, R112S, R113S, R114S, R115S R116S, R118S, R125D, R126D, R127D, R128D, R129D, R130D, R131D, R132D, R133D, R134D and R135D.

~~b~~*c*. Facultative Ponds 1 & 2: The Point of Compliance for this surface impoundment is defined as the vertical surface passing through the downgradient monitoring wells F101S, F102S and F103S.

~~c~~*d*. Facultative Pond 3: The Point of Compliance for this surface impoundment is defined as the vertical surface passing through the downgradient monitoring wells F301S and F302S.

e. Facultative Pond 5: The Point of Compliance for this surface impoundment is defined as the vertical surface passing through the downgradient monitoring wells F501S and F502S.

REASON:

The proposed Fac Pond 5 Groundwater Monitoring Requirements in Exhibit E and the proposed RMU-2 Groundwater Monitoring Requirements in Exhibit G are redundant and not necessary to be included in the respective exhibits. Revising Exhibit E and F as proposed will maintain consistency with groundwater monitoring requirements of the existing Fac Ponds 1 / 2, 3, and 8, RMU-1, and other monitored units at the facility. These revisions were proposed in CWM's November 2013 Permit Modification Request/Application for RMU-2.

See Comment 45, related to Exhibit E, Condition E.3.f and Comment 99, related to Exhibit G

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CWM COMMENT NUMBER: 52

TOPIC:

Groundwater Protection
Description of Wells

LOCATION OF CONDITION:

Exhibit F Supplement to Module IV – Landfills
Condition L.3, Page F-58

EXISTING CONDITION:

Active:

3. Description of Wells. The Detection Monitoring network shall consist of the following wells:

   a. Upgradient. Background monitoring wells BW01S, BW01D, BW03S, BW03D, BW04S, BW04D, BW05S and BW05D.

   b. Downgradient. Monitoring wells R101S, R101D, R102SR, R102D, R103S, R103D, R104S, R104D, R105S, R105D, R106S, R106D, R107S, R107D, R1N08S, R108D, R109S, R109D, R1N10S, R110D, R111S, R111D, R112S, R113S, R114S, R114D, R115S, R116S, R116D, R118S, R125D, R126D, R127D, R128D, R129D, R130D, R131D, R132D, R133D, R134D and R135D will be used to monitor Secure Landfill RMU-1.

      Monitoring wells F101S, F102S, F102D and F103S will be used to monitor Facultative Pond 1 & 2.

      Monitoring wells F301S, F302S and F302D will be used to monitor Facultative Pond 3.

      Monitoring wells F801S, F802S, F802UD and F802LD will be used to monitor Facultative Ponds 8.

PROPOSED MODIFICATION:

Revise as follows:

3. Description of Wells. The Detection Monitoring network shall consist of the following wells:

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a. Upgradient. Background monitoring wells BW01S, BW01D, BW03S, BW03D, BW04S, BW04D, BW05S and BW05D.

b. Downgradient. Monitoring wells R201SR, R201DR, R204S, R204D, R205S, R205D, R206S, R206D, R207S, R207D, R208S, R208D, R209S, R209D, R210S, R210D, R211S, R211D, R212S, R212UD, R212LD, R213S, R213D, R214S, R214D, R215S, R215D, R216S, and R216D will be used to monitor Secure Landfill RMU-2.

Monitoring wells R101S, R101D, R102SR, R102D, R103S, R103D, R104S, R104D, R105S, R105D, R106S, R106D, R107S, R107D, R1N08S, R108D, R109S, R109D, R1N10S, R110D, R111S, R111D, R112S, R113S, R114S, R114D, R115S, R116S, R116D, R118S, R125D, R126D, R127D, R128D, R129D, R130D, R131D, R132D, R133D, R134D and R135D will be used to monitor Secure Landfill RMU-1.

Monitoring wells F101S, F102S, F102D and F103S will be used to monitor Facultative Pond 1 & 2.

Monitoring wells F301S, F302S and F302D will be used to monitor Facultative Pond 3.

Monitoring wells F501S, F501D and F502S will be used to monitor Facultative Pond 5.

Monitoring wells F801S, F802S, F802UD and F802LD will be used to monitor Facultative Ponds 8.

REASON:

The proposed Fac Pond 5 Groundwater Monitoring Requirements in Exhibit E and the proposed RMU-2 Groundwater Monitoring Requirements in Exhibit G are redundant and not necessary to be included in the respective exhibits. Revising Exhibit E and F as proposed will maintain consistency with groundwater monitoring requirements of the existing Fac Ponds 1 / 2, 3, and 8, RMU-1, and other monitored units at the facility. These revisions were proposed in CWM's November 2013 Permit Modification Request/Application for RMU-2.

See Comment 45, related to Exhibit E, Condition E.3.f and Comment 99, related to Exhibit G.

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CWM COMMENT NUMBER: 53

TOPIC:

Groundwater Protection

LOCATION OF CONDITION:

Exhibit F Supplement to Module IV – Landfills
Condition L.4, Page F-59

EXISTING CONDITION:

4. Additional Monitoring

   a. Each time the active RMU-1 Detection monitoring wells are sampled during the active life of the Landfill:

      i. Samples of RMU-1 leachate from the primary and secondary leachate collection/detection systems must be collected and analyzed for the same suite of parameters as the monitoring wells.

      ii. Water level measurements will be taken from all RMU-1 piezometers and all inactive RMU-1 Detection Monitoring Wells.

PROPOSED MODIFICATION:

Revise as follows:

4. Additional Monitoring

   a. Each time the active RMU-2 Detection monitoring wells are sampled during the active life of the Landfill:

      i. Samples of RMU-2 leachate from the primary and secondary leachate collection/detection systems must be collected and analyzed for the same suite of parameters as the monitoring wells.

      ii. Water level measurements will be taken from all RMU-2 piezometers and all inactive RMU-2 Detection Monitoring Wells.

   ~~a~~*b*. Each time the active RMU-1 Detection monitoring wells are sampled during the active life of the Landfill:

      i. Samples of RMU-1 leachate from the primary and secondary leachate collection/detection systems must be collected and analyzed for the same suite of parameters as the monitoring wells.

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ii. Water level measurements will be taken from all RMU-1 piezometers and all inactive RMU-1 Detection Monitoring Wells.

REASON:

The proposed RMU-2 Groundwater Monitoring Requirements in Exhibit G are redundant and not necessary to be included in the respective exhibits. Revising Exhibit F as proposed will maintain consistency with groundwater monitoring requirements of the existing RMU-1, and other monitored units at the facility. These revisions were proposed in CWM's November 2013 Permit Modification Request/Application for RMU-2.

See Comment 99, related to Exhibit G.

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CWM COMMENT NUMBER: 54

TOPIC:

Groundwater Protection

LOCATION OF CONDITION:

Exhibit F Supplement to Module IV – Landfills
Condition L.5, Page F-59

EXISTING CONDITION:

5. Sampling Frequency. All monitoring wells in the Detection Monitoring Program, with the exception of monitoring wells F802LD, W202LD, W121LD, W122LD, W123LD and W128LD, must be sampled at least semiannually. Monitoring wells F802LD, W202LD, W121LD, W122LD, W123LD and W128LD must be sampled at least once every two years.

PROPOSED MODIFICATION:

Revise as follows:

5. Sampling Frequency. All monitoring wells in the Detection Monitoring Program, with the exception of monitoring wells F802LD, W202LD, W121LD, W122LD, W123LD, ~~and~~ W128LD, *and R212LD* must be sampled at least semiannually. Monitoring wells F802LD, W202LD, W121LD, W122LD, W123LD, ~~and~~ W128LD, *and R212LD* must be sampled at least once every two years.

REASON:

The proposed RMU-2 Groundwater Monitoring Requirements in Exhibit G are redundant and not necessary to be included in the respective exhibits. Revising Exhibit F as proposed will maintain consistency with groundwater monitoring requirements of the existing RMU-1, and other monitored units at the facility. These revisions were proposed in CWM's November 2013 Permit Modification Request/Application for RMU-2.

See Comment 99, related to Exhibit G.

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CWM COMMENT NUMBER: 55

TOPIC:

Groundwater Protection

LOCATION OF CONDITION:

Exhibit F Supplement to Module IV – Landfills
Condition L.8.a, Page F-60

EXISTING CONDITION:

a. Statistical Criterion 1 - Poisson Prediction Interval (Concentration): A concentration based t-prediction interval has been developed for the Model City site. Based on data obtained from analysis of background groundwater quality, field and trip blanks, the t-prediction interval has been calculated to be a sum total of indicator parameters in a single scan. The prediction interval for the specific units covered by this Exhibit is as follows:

   i. RMU-1: For wells, except R105S, R106S and R107S, which comprise the Point of Compliance for the landfill, the prediction interval (PI) has been calculated to be 23 ug/l as a summed total concentration of all indicator parameters, excluding Methylene Chloride.

      ‘a’) For well R105S, data will be evaluated using a modified PI, namely that the summed total concentration of all indicator parameters, excluding Methylene Chloride and 1,1 Dichloroethane (1,1 DCA), must not exceed 23 ug/l. Furthermore, the concentration of 1,1 DCA will then be compared with a compound specific PI of 23 ug/l, which was derived from the analytical history of this well. In addition, routine evaluation procedures for Multiple and Persistent Detections will be used, excluding Methylene Chloride and 1,1 DCA.

      ‘b’) For well R106S, data will be evaluated using a modified PI, namely that the summed total concentration of all indicator parameters, excluding Methylene Chloride, Vinyl Chloride and 1,1 Dichloroethane (1,1 DCA), must not exceed 23 ug/l. Furthermore, the concentrations of Vinyl Chloride and 1,1 DCA will each be compared with a compound specific PI of 23 ug/l, which was derived from the analytical history of this well. In addition, routine evaluation procedures for Multiple and Persistent Detections will be used, excluding Methylene Chloride, Vinyl Chloride and 1,1 DCA.

‘c’) For well R107S, data will be evaluated using a modified PI, namely that the summed total concentration of all indicator parameters, excluding Methylene Chloride, Trichloroethene (TCE), 1,2 Dichloroethane (1,2 DCA) and 1,1 Dichloroethane (1,1 DCA), must not exceed 23 ug/l. Furthermore, the concentrations of TCE, 1,2 DCA and 1,1 DCA will each be compared with a compound specific PI of 23 ug/l, which was derived from the analytical history of this well. In addition, routine evaluation procedures for Multiple and Persistent Detections will be used, excluding Methylene Chloride, TCE, 1,2 DCA and 1,1 DCA.

ii. Facultative Ponds 1, 2, 3 & 8: For wells which comprise the Point of Compliance for the Facultative Ponds, the prediction interval (PI) has been calculated to be 23 ug/l as a summed total concentration of all indicator parameters, excluding Methylene Chloride.

PROPOSED MODIFICATION:

Revise as follows:

a. Statistical Criterion 1 - Poisson Prediction Interval (Concentration): A concentration based t-prediction interval has been developed for the Model City site. Based on data obtained from analysis of background groundwater quality, field and trip blanks, the t-prediction interval has been calculated to be a sum total of indicator parameters in a single scan. The prediction interval for the specific units covered by this Exhibit is as follows:

i RMU 2: For wells, except R204S and R208S, which comprise the Point of Compliance for the landfill, the prediction interval (PI) has been calculated to be 23 ug/l as a summed total concentration of all indicator parameters, excluding Methylene Chloride.

‘a’) For well R204S, data will be evaluated using a modified PI, namely that the summed total concentration of all indicator parameters, excluding Methylene Chloride and 1,1 Dichloroethane (1,1 DCA), 1,2-Dichloroethane (1,2-DCA), and Trichloroethene (TCE), must not exceed 23 ug/l. Furthermore, the concentration of 1,1 DCA, 1,2-DCA, and TCE will each be compared with a compound with a compound specific PI of 23 ug/l, which was derived from the analytical history of this well. In addition, routine evaluation procedures for Multiple and Persistent Detections will be used, excluding Methylene Chloride and 1,1 DCA, 1,2-DCA, and TCE.

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'b') For well R208S, data will be evaluated using a modified PI, namely that the summed total concentration of all indicator parameters, excluding Methylene Chloride and Benzene, Ethylbenzene, and Toluene, must not exceed 23 ug/l. Furthermore, the concentration of Benzene, Ethylbenzene, and Toluene will each be compared with a compound with a compound specific PI of 23 ug/l, which was derived from the analytical history of this well. In addition, routine evaluation procedures for Multiple and Persistent Detections will be used, excluding Methylene Chloride and Benzene, Ethylbenzene, and Toluene.

i*i* RMU-1: For wells, except R105S, R106S and R107S, which comprise the Point of Compliance for the landfill, the prediction interval (PI) has been calculated to be 23 ug/l as a summed total concentration of all indicator parameters, excluding Methylene Chloride.

'a') For well R105S, data will be evaluated using a modified PI, namely that the summed total concentration of all indicator parameters, excluding Methylene Chloride and 1,1 Dichloroethane (1,1 DCA), must not exceed 23 ug/l. Furthermore, the concentration of 1,1 DCA will then be compared with a compound specific PI of 23 ug/l, which was derived from the analytical history of this well. In addition, routine evaluation procedures for Multiple and Persistent Detections will be used, excluding Methylene Chloride and 1,1 DCA.

'b') For well R106S, data will be evaluated using a modified PI, namely that the summed total concentration of all indicator parameters, excluding Methylene Chloride, Vinyl Chloride and 1,1 Dichloroethane (1,1 DCA), must not exceed 23 ug/l. Furthermore, the concentrations of Vinyl Chloride and 1,1 DCA will each be compared with a compound specific PI of 23 ug/l, which was derived from the analytical history of this well. In addition, routine evaluation procedures for Multiple and Persistent Detections will be used, excluding Methylene Chloride, Vinyl Chloride and 1,1 DCA.

'c') For well R107S, data will be evaluated using a modified PI, namely that the summed total concentration of all indicator parameters, excluding Methylene Chloride, Trichloroethene (TCE), 1,2 Dichloroethane (1,2 DCA) and 1,1 Dichloroethane (1,1 DCA), must not exceed 23 ug/l. Furthermore, the concentrations of TCE, 1,2 DCA and 1,1 DCA will each be compared with a compound specific PI of 23 ug/l, which was derived from the analytical history of this well. In

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addition, routine evaluation procedures for Multiple and Persistent Detections will be used, excluding Methylene Chloride, TCE, 1,2 DCA and 1,1 DCA.

iii. Facultative Ponds 1, 2, 3, 5 & 8: For wells which comprise the Point of Compliance for the Facultative Ponds, the prediction interval (PI) has been calculated to be 23 ug/l as a summed total concentration of all indicator parameters, excluding Methylene Chloride.

REASON:

The proposed Fac Pond 5 Groundwater Monitoring Requirements in Exhibit E and the proposed RMU-2 Groundwater Monitoring Requirements in Exhibit G are redundant and not necessary to be included in the respective exhibits. Revising Exhibit E and F as proposed will maintain consistency with groundwater monitoring requirements of the existing Fac Ponds 1 / 2, 3, and 8, RMU-1, and other monitored units at the facility. These revisions were proposed in CWM's November 2013 Permit Modification Request/Application for RMU-2.

See Comment 45, related to Exhibit E, Condition E.3.f and Comment 99, related to Exhibit G.

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CWM COMMENT NUMBER: 56

TOPIC:

Groundwater Protection

LOCATION OF CONDITION:

Exhibit F Supplement to Module IV – Landfills
Condition L.14, Page F-71

EXISTING CONDITION:

14. Leak Detection. In the event that the Detection Monitoring Program for the secondary leachate collection/detection systems that is set forth in this Permit indicates the exceedence of volumetric "trigger" values in the secondary system of any landfill or there is a significant change in water quality (as expressed in **Condition K** of this Exhibit for SLF 11 & 12 and **Condition H** of this Exhibit for RMU-1), the Permittee must sample the wells in the Detection Monitoring network downgradient of the cell within fourteen (14) days and perform a statistical comparison of the indicator parameters.

    For the RMU 1 landfill, if hazardous waste constituents are present in the secondary leachate collection/detection system and the results of the statistical analysis of the indicator parameters in monitoring wells downgradient of the landfill cell indicates that the landfill may be impacting the groundwater, the Permittee must discontinue the placement of additional wastes in the landfill cell. Thereafter, future landfilling of wastes may only take place with written approval of the Department.

PROPOSED MODIFICATION:

Revise as follows:

14. Leak Detection. In the event that the Detection Monitoring Program for the secondary leachate collection/detection systems that is set forth in this Permit indicates the exceedence of volumetric "trigger" values in the secondary system of any landfill or there is a significant change in water quality (as expressed in **Condition K** of this Exhibit for SLF 11 & 12, ~~and~~ **Condition H** of this Exhibit for RMU-1*, and Condition H of Exhibit G for RMU-2*), the Permittee must sample the wells in the Detection Monitoring network downgradient of the cell within fourteen (14) days and perform a statistical comparison of the indicator parameters.

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For the RMU-1 *and RMU-2* landfill*s*, if hazardous waste constituents are present in the secondary leachate collection/detection system and the results of the statistical analysis of the indicator parameters in monitoring wells downgradient of the landfill cell indicates that the landfill may be impacting the groundwater, the Permittee must discontinue the placement of additional wastes in the landfill cell. Thereafter, future landfilling of wastes may only take place with written approval of the Department.

REASON:

The proposed RMU-2 Groundwater Monitoring Requirements in Exhibit G are redundant and not necessary to be included in the respective exhibit. Revising Exhibit F as proposed will maintain consistency with groundwater monitoring requirements of the existing RMU-1, and other monitored units at the facility. These revisions were proposed in CWM's November 2013 Permit Modification Request/Application for RMU-2.

See Comment 99, related to Exhibit G.

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CWM COMMENT NUMBER: 57

TOPIC:

RMU-2 Liner, Leachate Collection and Final Cover Materials
Leachate Compatibility Tests For Liner/Leachate Collection Systems [CELL ONLY]
Natural Liner and Leachate Collection Components
Granular Material Sampling Frequencies and Testing Methods

LOCATION OF CONDITION:

Exhibit G, Supplement to Module VI – Landfills [RMU-2]
Condition C.1.b.ii, Page G-4

EXISTING CONDITION:

ii. Granular Material Sampling Frequencies and Testing Methods

Representative samples of granular material from each quarry to be used to supply RMU-2 granular drainage and operations layer material, shall be tested using leachate from RMU-1 initially, then from RMU-2 once it begins to generate leachate. Other granular material samples from the same quarry shall be simultaneously tested using tap water to act as a "control". All samples shall be tested in accordance with USEPA Method 9100 from the latest edition of the USEPA SW-846, utilizing the hydraulic conductivity laboratory method ASTM D2434. Upon completion of these tests, the Permittee shall submit to the Department a Report which includes all test results from the independent laboratory and an evaluation of the results by the Engineer, which indicates whether or not the hydraulic conductivity of the tested granular material was measurably decreased by the leachate based on a comparison to the control tests. The Department must grant its acceptance of this Report prior to waste placement in any RMU-2 Cell which contains the granular material from the tested quarry. The Permittee may, at its own risk, install the granular material from the tested quarry, prior to the Permittee's submission of this Report, as long as the Engineer agrees that the results indicate the granular material to be compatible with the leachate.

PROPOSED MODIFICATION:

Revise as follows:

Delete Condition.

REASON:

Leachate compatibility testing of the granular material is not necessary. Historic use of granular material has shown that the effective of the granular material is maintained. Attachment D of these comments contains a summary of the leachate analysis for Residuals Management

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Unit No. 1 (RMU-1) obtained from T-160. Attachment D also provides a summary of ranges of constituents contained in the leachate from Subtitle D (Municipal Solid Waste) landfills in the Northeast United States, excluding New York State. These results for the leachate from RMU-1 show that the leachate contains far less constituents and concentrations than the leachate from Subtitle D (6 NYCRR Part 360) in the Northeast. CWM is unaware of any compatibility testing requirements of the granular material for Subtitle D (6 NYCRR Part 360) landfills in New York State, therefore, the compatibility testing of the granular material for RMU-2 should not be required.

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CWM COMMENT NUMBER: 58

TOPIC:

RMU-2 Liner, Leachate Collection and Final Cover Materials
Riser Vault Concrete Coating Compatibility Demonstration [CELL ONLY]

LOCATION OF CONDITION:

Exhibit G, Supplement to Module VI – Landfills [RMU-2]
Condition C.3, Page G-5

EXISTING CONDITION:

3. Riser Vault Concrete Coating Compatibility Demonstration [CELL ONLY]

The Permittee shall submit to the Department, at least 60 days prior to first application of riser vault concrete coatings, compatibility information for the coating system selected in accordance with the project specifications. This information shall demonstrate compatibility with constituents contained in the leachate. The Permittee shall receive written approval from the Department for this coating before it is applied to the concrete.

PROPOSED MODIFICATION:

Revise as follows:

3. Riser Vault Concrete Coating Compatibility Demonstration [CELL ONLY]

If the Permittee elects to switch to concrete riser vaults, t~~T~~he Permittee shall submit to the Department, at least 60 days prior to first application of riser vault concrete coatings, compatibility information for the coating system selected in accordance with the project specifications. This information shall demonstrate compatibility with constituents contained in the leachate. The Permittee shall receive written approval from the Department for this coating before it is applied to the concrete.

REASON:

Permit Drawing No. 28 (Riser Vault Sections and Details) indicates that the cell riser vaults will consist of below grade 5-foot diameter HDPE manholes with prefabricated concrete vaults installed above the manholes. HDPE flat stock will be installed in the vaults on the interior floors and 10-inches up the sidewalls of the vaults. The HDPE portions of the vaults and the HDPE manholes will provide the secondary containment for potential leaks. Leak detection probes will be installed in each vault manhole.

See related Comment No. 5.

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CWM COMMENT NUMBER: 59

TOPIC:

RMU-2 Liner, Leachate Collection and Final Cover Materials
Flow Testing of Leachate Collection & Final Cover Drainage Geosynthetics
Geotextile Permittivity Testing

LOCATION OF CONDITION:

Exhibit G, Supplement to Module VI – Landfills [RMU-2]
Condition C.4.a, Page G-5/6

EXISTING CONDITION:

a. Geotextile Permittivity Testing

Prior to the construction of each RMU-2 cell and each phase of the final cover, the Permittee shall have testing performed on each geotextile product to be used in leachate collection and final cover drainage systems (including the geotextile component of the geocomposite products) to determine their permittivity. This testing shall be conducted in accordance with ASTM D4491 on product samples obtained at the frequency required by Section 11.4.1 of the RMU-2 Landfill Quality Assurance Manual in Attachment J, Appendix D-8a of this Permit. For geotextile products to be installed in the RMU-2 leachate collection systems, testing shall be conducted using leachate obtained from RMU-1 for the initial RMU-2 cell construction, then from RMU-2 operational cells for subsequent cell construction. The Engineer shall evaluate all test results to verify that each geotextile product meets the permittivity specifications required under Part 2.01 in Section 02410 (Section 02430 for geocomposites) of the RMU-2 Landfill Technical Specifications in Attachment J, Appendix D-7a of this Permit. These results along with the Engineer's evaluation must be submitted to the Department at least two (2) weeks prior to installation of the geotextile product(s).

PROPOSED MODIFICATION:

Revise as follows:

a. Geotextile Permittivity Testing

Prior to the construction of each RMU-2 cell and each phase of the final cover, the Permittee shall have testing performed on each geotextile product to be used in leachate collection and final cover drainage systems (including the geotextile component of the geocomposite products) to determine their permittivity. This testing shall be conducted in accordance with ASTM D4491 on product samples obtained at the frequency required by Section 11.4.1 of the RMU-2 Landfill Quality Assurance Manual in Attachment J,

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Appendix D-8a of this Permit. ~~For geotextile products to be installed in the RMU-2 leachate collection systems, testing shall be conducted using leachate obtained from RMU-1 for the initial RMU-2 cell construction, then from RMU-2 operational cells for subsequent cell construction.~~ The Engineer shall evaluate all test results to verify that each geotextile product meets the permittivity specifications required under Part 2.01 in Section 02410 (Section 02430 for geocomposites) of the RMU-2 Landfill Technical Specifications in Attachment J, Appendix D-7a of this Permit. These results along with the Engineer's evaluation must be submitted to the Department at least two (2) weeks prior to installation of the geotextile product(s).

REASON:

Requiring permittivity testing at the frequency specified and using leachate would cause unnecessary burden of shipping large quantities of leachate (F039 hazardous waste) to and from the testing facility. Testing using leachate would also generate additional hazardous based on the leachate contacting the testing geotextile product.

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CWM COMMENT NUMBER: 60

TOPIC:

RMU-2 Liner, Leachate Collection and Final Cover Materials
Flow Testing of Leachate Collection & Final Cover Drainage Geosynthetics
Geocomposite Transmissivity Testing

LOCATION OF CONDITION:

Exhibit G, Supplement to Module VI – Landfills [RMU-2]
Condition C.4.b, Page G-6

EXISTING CONDITION:

b. Geocomposite Transmissivity Testing

Prior to the construction of each RMU-2 cell and each phase of the final cover, the Permittee shall have testing performed on each geocomposite product to be used in leachate collection and final cover drainage systems to determine their transmissivity. This testing shall be conducted in accordance with ASTM D4716 under the simulated RMU-2 landfill conditions required by Section 02430, Part 1.03H of the RMU-2 Landfill Technical Specifications in Attachment J, Appendix D-7a of this Permit. Product samples for testing shall be obtained at the frequency required by Section 12.4.1 of the RMU-2 Landfill Quality Assurance Manual in Attachment J, Appendix D-8a of this Permit. For geocomposite products to be installed in the RMU-2 leachate collection systems, testing shall be conducted using leachate obtained from RMU-1 for the initial RMU-2 cell construction, then from RMU-2 operational cells for subsequent cell construction. The Engineer shall evaluate all test results to verify that each geocomposite product meets the transmissivity specifications required under Part 2.01 in Section 02430 of the RMU-2 Landfill Technical Specifications in Attachment J, Appendix D-7a of this Permit. These results along with the Engineer's evaluation must be submitted to the Department at least two (2) weeks prior to installation of the geocomposite product(s).

PROPOSED MODIFICATION:

Revise as follows:

b. Geocomposite Transmissivity Testing

Prior to the construction of each RMU-2 cell and each phase of the final cover, the Permittee shall have testing performed on each geocomposite product to be used in leachate collection and final cover drainage systems to determine their transmissivity. This testing shall be conducted in accordance with ASTM D4716 under the simulated RMU-2 landfill conditions required by Section 02430, Part 1.03H of the RMU-2 Landfill

Technical Specifications in Attachment J, Appendix D-7a of this Permit. Product samples for testing shall be obtained at the frequency required by Section 12.4.1 of the RMU-2 Landfill Quality Assurance Manual in Attachment J, Appendix D-8a of this Permit. ~~For geocomposite products to be installed in the RMU-2 leachate collection systems, testing shall be conducted using leachate obtained from RMU-1 for the initial RMU-2 cell construction, then from RMU-2 operational cells for subsequent cell construction.~~ The Engineer shall evaluate all test results to verify that each geocomposite product meets the transmissivity specifications required under Part 2.01 in Section 02430 of the RMU-2 Landfill Technical Specifications in Attachment J, Appendix D-7a of this Permit. These results along with the Engineer's evaluation must be submitted to the Department at least two (2) weeks prior to installation of the geocomposite product(s).

REASON:

Requiring transmissivity testing at the frequency specified and using leachate would cause unnecessary burden of shipping large quantities of leachate (F039 hazardous waste) to and from the testing facility. Testing using leachate would also generate additional hazardous based on the leachate contacting the testing geotextile product.

Additionally, transmissivity testing using leachate will be performed as part of the compatibility testing as required by Exhibit G, Condition C.1.a.ii.

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CWM COMMENT NUMBER: 61

TOPIC:

RMU-2 Liner, Leachate Collection and Final Cover Materials
MSE Wall Material Testing [CELL ONLY]
MSE Geosynthetics Testing

LOCATION OF CONDITION:

Exhibit G, Supplement to Module VI – Landfills [RMU-2]
Condition C.7.a, Page G-7

EXISTING CONDITION:

a. MSE Geosynthetics Testing

Prior to the construction of each RMU-2 cell, the Permittee shall have interface interaction testing performed on the actual geosynthetic materials to be used in the MSE Wall. This testing shall be conducted in accordance with ASTM D6706 on samples obtained in accordance with ASTM D4353 and under the conditions required by Section 02450, Part 2.04 of the RMU-2 Landfill Technical Specifications in Attachment J, Appendix D-7a of this Permit. The Engineer shall evaluate all test results to verify that the MSE geosynthetics meet the interface interaction specifications required under Part 2.04 in Section 02450 of the RMU-2 Landfill Technical Specifications in Attachment J, Appendix D-7a of this Permit. These results along with the Engineer's evaluation must be submitted to the Department at least two (2) weeks prior to installation of the geosynthetic products.

PROPOSED MODIFICATION:

Revise as follows:

a. MSE Geosynthetics Testing

Prior to the construction of each RMU-2 cell, the Permittee shall have interface interaction testing performed on the actual geosynthetic materials to be used in the MSE Wall. This testing shall be conducted in accordance with ASTM D6706 on samples obtained in accordance with ASTM ~~D4353~~ D4354 and under the conditions required by Section 02450, Part 2.04 of the RMU-2 Landfill Technical Specifications in Attachment J, Appendix D-7a of this Permit. The Engineer shall evaluate all test results to verify that the MSE geosynthetics meet the interface interaction specifications required under Part 2.04 in Section 02450 of the RMU-2 Landfill Technical Specifications in Attachment J, Appendix D-7a of this Permit. These results along with the Engineer's evaluation must be

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submitted to the Department at least two (2) weeks prior to installation of the geosynthetic products.

REASON:

Typographical error. ASTM D4354 is the correct method for obtaining samples of the geosynthetic material to be used for the MSE Wall.

CWM COMMENT NUMBER: 62

TOPIC:

RMU-2 Cell & Final Cover Construction

LOCATION OF CONDITION:

Exhibit G, Supplement to Module VI – Landfills [RMU-2]
Condition D, Page G-8, third paragraph

EXISTING CONDITION:

Prior to commencing physical construction of either RMU-2 Cell 18 or 19, the Permittee must complete and certify closure of Fac Pond 3 and the existing T-109 Load/Unload Area in accordance with the "Transition Plan for RMU-2" which is incorporated by reference into this Permit by **Schedule 1 of Module I** of this Permit. Closure of Fac Pond 3 will be considered achieved upon completion of the radiological survey of the Fac Pond required by **Condition D.1 in Exhibit E** and all closure activities required by **Condition F in Module V** of this Permit, including submission and Department acceptance of the closure certification. Closure of the existing T-109 Load/Unload Area will be considered achieved upon completion of all closure activities required by **Condition I in Module III** of this Permit, including submission and Department acceptance of the closure certification. Also, all above and below grade structural components of this existing CSA must be removed prior to commencing construction of the aforementioned cells.

PROPOSED MODIFICATION:

Revise as follows:

Prior to commencing physical construction of either RMU-2 Cell 18 or 19, the Permittee must complete and certify closure of Fac Pond 3 ~~and the existing T-109 Load/Unload Area~~ in accordance with the "Transition Plan for RMU-2" which is incorporated by reference into this Permit by **Schedule 1 of Module I** of this Permit. *During physical construction of RMU-2 Cell 20, the Permittee must complete and certify closure of the existing T-109 Load/Unload Area in accordance with the "Transition Plan for RMU-2".* Closure of Fac Pond 3 will be considered achieved upon completion of the radiological survey of the Fac Pond required by **Condition D.1 in Exhibit E** and all closure activities required by **Condition F in Module V** of this Permit, including submission and Department acceptance of the closure certification. Closure of the existing T-109 Load/Unload Area will be considered achieved upon completion of all closure activities required by **Condition I in Module III** of this Permit, including submission and Department acceptance of the closure certification. Also, all above and below grade structural components of this existing CSA must be removed prior to commencing construction of the aforementioned cells.

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REASON:

In accordance with Section 2.5 of the RMU-2 Transition Plan, the existing T-109 Load/Unload Area will be closed during the construction of Cell 20. Upon construction of the MSE Wall and wall runout, access to the existing T-109 Load/Unload Area will be eliminated. Construction for the replacement of the existing T-109 Load/Unload will also occur during this time period.

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CWM COMMENT NUMBER: 63

TOPIC:

RMU-2 Cell & Final Cover Construction

LOCATION OF CONDITION:

Exhibit G, Supplement to Module VI – Landfills [RMU-2]
Condition D, Page G-8/9, fifth paragraph of the section and first paragraph on Page G-9

EXISTING CONDITION:

Prior to commencing physical construction of RMU-2 Cell 15, the Permittee must complete and certify closure of the existing T-158 Load/Unload Area in accordance with the "Transition Plan for RMU-2" which is incorporated by reference into this Permit by **Schedule 1 of Module I** of this Permit. Closure of the existing T-158 Load/Unload Area will be considered achieved upon completion of all closure activities required by **Condition I in Module III** of this Permit, including submission and Department acceptance of the closure certification. Also, all above and below grade structural components of this existing CSA must be removed prior to commencing construction of the aforementioned cells.

PROPOSED MODIFICATION:

Revise as follows:

Prior to commencing *or during the* physical construction of RMU-2 Cell 18 ~~15~~, the Permittee must complete and certify closure of the existing T-158 Load/Unload Area in accordance with the "Transition Plan for RMU-2" which is incorporated by reference into this Permit by **Schedule 1 of Module I** of this Permit. Closure of the existing T-158 Load/Unload Area will be considered achieved upon completion of all closure activities required by **Condition I in Module III** of this Permit, including submission and Department acceptance of the closure certification. Also, all above and below grade structural components of this existing CSA must be removed prior to commencing construction of the aforementioned cells.

REASON:

Upon further review of Permit Drawing No. 26, the leachate transfer line along the west side of RMU-2 will require installation during the construction of RMU-2 Cell 18. Permit Drawing No. 26 shows the leachate transfer line will exit Manhole No. 15 and cross the footprint of existing T-158 Load/Unload Area. Therefore, the existing T-158 Load/Unload area must be closed and removed and replace with the new ramp during Cell 18 construction. Section 2.5 of the RMU-2 Transition Plan and the "Conceptual Schedule" have been revised to reflect that the existing T-158 Load/Unload Area will be closed and construction of a replacement will occur during the construction of Cell 18. See Attachment C for a revision to the Transition Plan.

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CWM COMMENT NUMBER: 64

TOPIC:

RMU-2 Cell & Final Cover Construction
General Cell & Final Cover Construction Conditions
Weekly Construction Reports

LOCATION OF CONDITION:

Exhibit G, Supplement to Module VI – Landfills [RMU-2]
Condition D.1.k, Page G-12

EXISTING CONDITION:

k. Weekly Construction Reports

The Permittee must ensure that weekly construction reports, prepared and approved by the Engineer, are submitted for review and acceptance to the Department every week that construction occurs. These reports must address the applicable items listed in the bullets for Weekly Construction Reports presented in **Condition D.8** of this Exhibit, and must be used to track items or issues to resolution. These reports must be submitted to the Department in accordance with **Module I, Condition N** of this Permit within 2 weeks of the end of the construction work week.

PROPOSED MODIFICATION:

Revise as follows:

k. Weekly Construction Reports

The Permittee must ensure that weekly construction reports, prepared and approved by the Engineer, are submitted for review and acceptance to the Department every week that construction occurs. These reports must address the applicable items listed in the bullets for Weekly Construction Reports presented in **Condition D.8** of this Exhibit, and must be used to track items or issues to resolution. These reports must be submitted to the Department in accordance with **Module I, Condition N.*2 & N.3*** of this Permit within 2 weeks of the end of the construction work week.

REASON:

Module I, Condition N contains conditions for the submittal of Data and Document Standards, which includes analytical data and reports. The Weekly Construction Reports are reports and will be submitted in accordance with Module I, Condition N.2 and N.3. Analytical data required by other conditions of the Permit would be submitted in accordance with Module I, Condition N.1.

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CWM COMMENT NUMBER: 65

TOPIC:

RMU-2 Cell & Final Cover Construction
Design Clarification Procedure

LOCATION OF CONDITION:

Exhibit G, Supplement to Module VI – Landfills [RMU-2]
Condition D.2, Page G-12/13

EXISTING CONDITION:

2. Design Clarification Procedure

For all design clarifications and additions to design details, the Permittee must follow the procedure presented under this condition. This procedure shall not be used to modify the RMU-2 design as presented in the conditions, attachments and incorporated documents of this Permit. Such modifications, if necessary, must be proposed in accordance with 6 NYCRR Parts 373-1.7 and 621:

a. Make a thorough verbal or written presentation to the Department demonstrating the need for the clarification/addition, the engineering basis for the clarification/addition, and that the clarification/addition will provide equal or better service (the Permittee must have the Design Engineer or the Engineer make supporting portions of the presentation).

b. Obtain the Design Engineer's written approval and submit it to the Department. The Department, at its discretion, may accept the verbal concurrence of the Design Engineer prior to receiving the written approval.

c. Obtain the written approval of the Department or, at its discretion, the Department may give verbal approval to institute the clarification/addition prior to giving its written approval.

d. Record the details of clarification or addition in weekly or special construction reports.

e. Detail clarifications or additions in as-built drawings or other construction certification documents.

Failure to adhere to any of above procedure can be basis for qualification of acceptance of certification by the Department.

PROPOSED MODIFICATION:

Revise as follows:

2. Design Clarification Procedure

For all design clarifications and additions to design details, the Permittee must follow the procedure presented under this condition:. ~~This procedure shall not be used to modify the RMU-2 design as presented in the conditions, attachments and incorporated documents of this Permit. Such modifications, if necessary, must be proposed in accordance with 6 NYCRR Parts 373-1.7 and 621:~~

a. Make a thorough verbal or written presentation to the Department demonstrating the need for the clarification/addition, the engineering basis for the clarification/addition, and that the clarification/addition will provide equal or better service (the Permittee must have the Design Engineer or the Engineer make supporting portions of the presentation).

b. Obtain the Design Engineer's written approval and submit it to the Department. The Department, at its discretion, may accept the verbal concurrence of the Design Engineer prior to receiving the written approval.

c. Obtain the written approval of the Department or, at its discretion, the Department may give verbal approval to institute the clarification/addition prior to giving its written approval.

d. Record the details of clarification or addition in weekly or special construction reports.

e. Detail clarifications or additions in as-built drawings or other construction certification documents.

Failure to adhere to any of above procedure can be basis for qualification of acceptance of certification by the Department.

This procedure shall not be used to modify the RMU-2 design as presented in the conditions, attachments and incorporated documents of this Permit. Such modifications, if necessary, must be proposed in accordance with 6 NYCRR Parts 373-1.7 and 621.

REASON:

As written, the condition for Design Clarification Procedures is confusing. Revising as suggested would clarify this condition.

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CWM COMMENT NUMBER: 66

TOPIC:

RMU-2 Cell & Final Cover Construction
Design Clarification Procedure

LOCATION OF CONDITION:

Exhibit G, Supplement to Module VI – Landfills [RMU-2]
Condition D.3, Page G-13

EXISTING CONDITION:

3. RMU-2 Cell & Final Cover Periodic Design Re-Evaluation

Subsequent to the construction of the first RMU-2 cell, but at least 180 days prior to starting construction of additional cells or any phase of the final cover, the Permittee must re-evaluate the RMU-2 cell / final cover design, construction materials and quality assurance/quality control procedures in comparison with the current Federal and State regulations and guidance documents deemed applicable by the Department which have been published to assist the regulated community in meeting the current regulations.

PROPOSED MODIFICATION:

Revise as follows:

3. RMU-2 Cell & Final Cover Periodic Design Re-Evaluation

Subsequent to the construction of the first RMU-2 cell, but at least 180 days prior to starting construction of additional cells or *if requested by the Department prior to each* ~~any~~ phase of the final cover, the Permittee must re-evaluate the RMU-2 cell / final cover design, construction materials and quality assurance/quality control procedures in comparison with the current Federal and State regulations and guidance documents deemed applicable by the Department which have been published to assist the regulated community in meeting the current regulations.

REASON:

The re-evaluation of the design of the final cover is not currently required for Residuals Management Unit No. 1. Final cover design technologies have not changed in years and CWM does not foresee any new design technologies available in the near future. If requested by the Department, CWM would perform a design re-evaluation of the final cover.

See related Comment No. 6.

CWM COMMENT NUMBER: 67

TOPIC:

RMU-2 Cell & Final Cover Construction
RMU-2 Cell & Final Cover Specific Construction Requirements
Cell, Cutoff Wall and Sump Excavations [CELL ONLY]
Cutoff Wall & Sump Excavation Uplift Precautions

LOCATION OF CONDITION:

Exhibit G, Supplement to Module VI – Landfills [RMU-2]
Condition D.5.a.i, Page G-16

EXISTING CONDITION:

i. Cutoff Wall & Sump Excavation Uplift Precautions

Piezometric measurements must be taken in the wells nearest to the cutoff wall section or sump to be excavated, and test pits excavated to below wall/sump designed excavation depths. The measurements and test pit observations must be reviewed and evaluated by the Engineer, and the Engineer must determine if there is an adequate factor of safety against heave to allow for wall section or sump excavation. For each wall section or sump, the Permittee shall provide the Department's on-site representative with the Engineer's evaluation of the piezometric measurements and test pit observations (along with the measurements and observations themselves), the determined factor of safety and any recommendations he/she may have with regard to additional measures needed to protect against subgrade heave during wall section or sump excavation. This information must be provided to the Department's representative at least 24 hours prior to wall section/sump excavation, for Department review and acceptance and documented in Weekly Construction Reports required by **Condition D.1.k** of this Exhibit. As soon as wall section or sump excavation is complete, clay shall be placed and compacted to sufficient grades to prevent heaving due to changes in the peizometric surface, in accordance with Part 3.04 in Section 02210 of the RMU-2 Landfill Technical Specifications in Attachment J, Appendix D-7a of this Permit.

PROPOSED MODIFICATION:

Revise as follows:

i. Cutoff Wall & Sump Excavation Uplift Precautions

Piezometric measurements must be taken in the wells nearest to the cutoff wall section or sump to be excavated, and test pits excavated to below wall/sump designed excavation depths. The measurements and test pit observations must be reviewed and evaluated by

the Engineer, and the Engineer must determine if there is an adequate factor of safety against heave to allow for wall section or sump excavation. For each wall section or sump, the Permittee shall provide the Department's on-site representative with the Engineer's evaluation of the piezometric measurements and test pit observations (along with the measurements and observations themselves), the determined factor of safety and any recommendations he/she may have with regard to additional measures needed to protect against subgrade heave during wall section or sump excavation. This information must be provided to the Department's representative at least 24 hours prior to wall section/sump excavation, for Department review and acceptance and documented in Weekly Construction Reports required by **Condition D.1.k** of this Exhibit. As soon as wall section or sump excavation is complete, ~~clay~~ backfill shall be placed ~~and compacted~~ to sufficient grades to prevent heaving due to changes in the peizometric surface, in accordance with Part 3.04 in Section 02210 of the RMU-2 Landfill Technical Specifications in Attachment J, Appendix D-7a of this Permit.

REASON:

In accordance with Part 3.04 in Section 02210 of the RMU-2 Landfill Technical Specifications, the sumps shall be backfilled with re-compacted clay as soon as excavation is complete and grades documented to prevent sump blowout due to changes in potentiometric surface. Excavations for the Cutoff walls will be backfilled with soil/bentonite slurry as soon as practical to prevent blowout.

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CWM COMMENT NUMBER: 68

TOPIC:

RMU-2 Cell & Final Cover Construction
RMU-2 Cell & Final Cover Specific Construction Requirements
Cell, Cutoff Wall and Sump Excavations [CELL ONLY]
Cutoff Wall and Glaciolucustrine Clay (GC) Key-In

LOCATION OF CONDITION:

Exhibit G, Supplement to Module VI – Landfills [RMU-2]
Condition D.5.a.ii, Page G-16/17

EXISTING CONDITION:

ii. Cutoff Wall and Glaciolucustrine Clay (GC) Key-In

To the greatest extent feasible, the cutoff wall compacted clay shall be keyed into the insitu GC layer. If the GC layer does not appear to be present at the base of the excavation of a cutoff wall section, the Engineer shall evaluate whether deepening or widening of the wall section excavation may facilitate keying into the GC layer. If the Engineer determines that a wall section cannot feasibly be keyed into the GC layer and the Department's representative accepts this determination, the Permittee shall proceed with the excavation using the alternate procedure required by Part 3.04.C.6 in Section 02210 of the RMU-2 Landfill Technical Specifications in Attachment J, Appendix D-7a of this Permit. The Engineer shall document the location and length of any cutoff wall section that was not keyed into the GC layer in Weekly Construction Reports required by **Condition D.1.k** of this Exhibit.

PROPOSED MODIFICATION:

Revise as follows:

To the greatest extent feasible, the cutoff wall ~~compacted clay~~ shall be keyed into the insitu GC layer. If the GC layer does not appear to be present at the base of the excavation of a cutoff wall section, the Engineer shall evaluate whether deepening or widening of the wall section excavation may facilitate keying into the GC layer. If the Engineer determines that a wall section cannot feasibly be keyed into the GC layer and the Department's representative accepts this determination, the Permittee shall proceed with the excavation using the alternate procedure required by Part 3.04.C.6 in Section 02210 of the RMU-2 Landfill Technical Specifications in Attachment J, Appendix D-7a of this Permit. The Engineer shall document the location and length of any cutoff wall section that was not keyed into the GC layer in Weekly Construction Reports required by **Condition D.1.k** of this Exhibit.

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REASON:

The Cutoff wall will be constructed of a soil/bentonite slurry mixture.

CWM COMMENT NUMBER: 69

TOPIC:

RMU-2 Cell & Final Cover Construction
RMU-2 Cell & Final Cover Specific Construction Requirements
Cell, Cutoff Wall and Sump Excavations [CELL ONLY]
Installation of Wire Piezometers

LOCATION OF CONDITION:

Exhibit G, Supplement to Module VI – Landfills [RMU-2]
Condition D.5.a.iv, Page G-17

EXISTING CONDITION:

iv. Installation of Wire Piezometers

At least ninety (90) days prior to commencing excavation of any RMU-2 cell, the Permittee must submit for Department approval, a detailed plan for the installation of vibrating wire piezometers and all appurtances necessary for their operation, as required by Appendix C-9 of the "RMU-2 Engineering Report" which is incorporated by reference into this Permit by **Schedule 1 of Module I** of this Permit. The plan shall indicate the number and location of the cell's piezometers as prescribed by the Design Engineer in order to provide for sufficient monitoring of subgrade pore pressures to insure landfill stability during waste placement. The Permittee shall not commence construction of the cell's MSE Wall or its soil liner prior to the Department's approval of the wire piezometer installation plan. Subsequent to plan approval, the Permittee shall install the wire piezometers in accordance with the plan, and the Engineer shall witness the installation and verify compliance with the approved plan.

PROPOSED MODIFICATION:

Revise as follows:

Move Condition D.5.a.iv to Condition D.5.c.ii.

i*i*~~v~~. Installation of Wire Piezometers

At least ninety (90) days*, or other time-frame as approved by the Department,* prior to commencing excavation of any RMU-2 cell, the Permittee must submit for Department approval, a detailed plan for the installation of vibrating wire piezometers and all appurtances necessary for their operation, as required by Appendix C-9 of the "RMU-2 Engineering Report" which is incorporated by reference into this Permit by **Schedule 1 of Module I** of this Permit. The plan shall indicate the number and location of the cell's

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piezometers as prescribed by the Design Engineer in order to provide for sufficient monitoring of subgrade pore pressures to insure landfill stability during waste placement. The Permittee shall not commence construction of the cell's ~~MSE Wall or its~~ soil liner prior to the Department's approval of the wire piezometer installation plan. Subsequent to plan approval, the Permittee shall install the wire piezometers in accordance with the plan, and the Engineer shall witness the installation and verify compliance with the approved plan.

REASON:

The requirement to submit a detailed plan at least ninety (90) days prior to commencing excavation of any RMU-2 cell for the installation of vibrating wire piezometers to monitor pore pressures during waste placement is too restrictive. Upon issuance of the permit modification for RMU-2, CWM will want likely want to start excavations, MSE wall construction, and filling procedures to attain subgrade elevations. The vibrating wire piezometers will be installed upon reaching the specified subgrade elevations in the floor of the respective cell. Appendix C-8 of the Engineering Report (November 2013) for RMU-2 presents the stability analyses for the MSE wall, including external, internal and global stability. The Engineering Report supports that the wall section could be constructed in as little as 6-days and that pore pressure monitoring is not necessary for construction of the MSE wall. See Comment 70 below for further details and Comment 71.

With pore pressure monitoring not necessary during MSE wall construction, the vibrating wire piezometers will be installed after subgrade elevations are reached and prior to placement of the three-foot compacted clay liner. Therefore, this condition should be moved to Condition D.5.c.ii of Exhibit G.

See related Comment No. 7.

CWM COMMENT NUMBER: 70

TOPIC:

RMU-2 Cell & Final Cover Construction
RMU-2 Cell & Final Cover Specific Construction Requirements
MSE Wall Construction [CELL ONLY]

LOCATION OF CONDITION:

Exhibit G, Supplement to Module VI – Landfills [RMU-2]
Condition D.5.b, Page G-17/18

EXISTING CONDITION:

b. MSE Wall Construction [CELL ONLY]

The MSE Wall shall be constructed in strict accordance with the RMU-2 Drawings contained in Attachment J, Appendix D-6a of this Permit, and Sections 02210 & 02450 of the RMU-2 Landfill Technical Specifications in Attachment J, Appendix D-7a of this Permit. During MSE Wall construction, the Engineer shall perform inspections of the work, conduct conformance testing on both natural and geosynthetic MSE Wall materials and carry out construction testing as required by Section 9 of the RMU-2 Landfill Quality Assurance Manual in Attachment J, Appendix D-8a of this Permit. The Permittee must discard any amount of natural or geosynthetic material which the Engineer indicates as not meeting technical specifications based on conformance testing results and/or inspections. Each lift of the MSE Wall must be tested and approved as meeting compaction specifications by the Engineer prior to placement of the subsequent lift.

The MSE Wall shall be constructed in lifts, with the vertical construction from base to crest (top) of any wall section evenly spread out over a period of not less than 60 days to allow for pore pressure dissipation in the underlying in-situ Glaciolacustrine Clay (GC) layer as assumed by the stability analyses in Appendix C-8 of the "RMU-2 Engineering Report" which is incorporated by reference into this Permit by **Schedule 1 of Module I** of this Permit. The Permittee may request and the Department may approve a shortening of the 60 day vertical construction period for any MSE Wall segment. However, any such request must be accompanied by an approval of the Design Engineer and a plan to conduct piezometric monitoring during MSE Wall construction.

PROPOSED MODIFICATION:

Revise as follows: Delete the second paragraph of the condition.

b. MSE Wall Construction [CELL ONLY]

The MSE Wall shall be constructed in strict accordance with the RMU-2 Drawings contained in Attachment J, Appendix D-6a of this Permit, and Sections 02210 & 02450 of the RMU-2 Landfill Technical Specifications in Attachment J, Appendix D-7a of this Permit. During MSE Wall construction, the Engineer shall perform inspections of the work, conduct conformance testing on both natural and geosynthetic MSE Wall materials and carry out construction testing as required by Section 9 of the RMU-2 Landfill Quality Assurance Manual in Attachment J, Appendix D-8a of this Permit. The Permittee must discard any amount of natural or geosynthetic material which the Engineer indicates as not meeting technical specifications based on conformance testing results and/or inspections. Each lift of the MSE Wall must be tested and approved as meeting compaction specifications by the Engineer prior to placement of the subsequent lift.

~~The MSE Wall shall be constructed in lifts, with the vertical construction from base to crest (top) of any wall section evenly spread out over a period of not less than 60 days to allow for pore pressure dissipation in the underlying in-situ Glaciolacustrine Clay (GC) layer as assumed by the stability analyses in Appendix C-8 of the "RMU-2 Engineering Report" which is incorporated by reference into this Permit by **Schedule 1 of Module I** of this Permit. The Permittee may request and the Department may approve a shortening of the 60 day vertical construction period for any MSE Wall segment. However, any such request must be accompanied by an approval of the Design Engineer and a plan to conduct piezometric monitoring during MSE Wall construction.~~

REASON:

Appendix C-8 of the Engineering Report (November 2013) for RMU-2 presents the stability analyses for the MSE wall, including external, internal and global stability. Three types of analyses were performed in the design:

- Long term conditions,
- Seismic Response,
- Short term loadings,
  - Traffic loads, and
  - Construction.

The analyses for short term loadings (Construction Conditions) were conservative and ignored the effect of reinforcement materials (i.e. geosynthetics). A construction duration of approximately 6 days was chosen to reflect a faster than possible construction schedule. This was simulated by placing the entire berm geometry instantaneously in the model, and using pore pressure levels three days after the instantaneous loading for the stability analysis.

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The analyses of the MSE wall assuming fill material with some cohesion resulted in a factor-of-safety (FS) of 1.38. An additional analyses utilizing the same time of construction but using cohesionless structural fill, obtained a factor-of-safety of 1.65. Both analyses support a 6-day construction period. As presented in the Engineer Report, the MSE wall embankment can be safely built to final grade in as little as 6-days without generating pore pressures in the Glaciolacustrine Clay that could destabilize the embankment.

Therefore, the selection by the Department of a minimum 60-day time period for construction of a section of MSE wall without pore pressure monitoring is arbitrary and not supported by the Engineering Report. The Engineering Report supports that the wall section could be constructed in as little as 6-days and that pore pressure monitoring is not necessary for construction of the MSE wall.

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CWM COMMENT NUMBER: 71

TOPIC:

RMU-2 Cell & Final Cover Construction
RMU-2 Cell & Final Cover Specific Construction Requirements
Cut-off Wall and Cell Soil Liner Clay Placement and Compaction [CELL ONLY]

LOCATION OF CONDITION:

Exhibit G, Supplement to Module VI – Landfills [RMU-2]
Condition D.5.c, Page G-18

EXISTING CONDITION:

c. Cut-off Wall and Cell Soil Liner Clay Placement and Compaction [CELL ONLY]

The natural clay material must be placed to the lines and grades indicated on the RMU-2 Drawings contained in Attachment J, Appendix D-6a of this Permit, and compacted in conformance with, and to the specifications found in Section 02210 of the RMU-2 Landfill Technical Specifications in Attachment J, Appendix D-7a of this Permit, to the lines and grades shown in the RMU-2 Drawings contained in Attachment J, Appendix D-6a of this Permit. The Construction Testing (Soil Compaction and Moisture Content, and Lab Hydraulic Conductivity) shall be as specified in Section 4.6 of the RMU-2 Landfill Quality Assurance Manual in Attachment J, Appendix D-8a of this Permit, and shall meet the pass criteria specified therein.

All laboratory hydraulic conductivity tests on the undisturbed clay samples must be performed by a laboratory independent from the Permittee and approved by the Engineer and all must have a result of $1x10^{-7}$ cm/sec or less. The sample preparation, test methods and parameters shall not alter the sample properties from that which existed at the time the sample was obtained from the compacted clay lift.

PROPOSED MODIFICATION:

Revise as follows:

c. Cut-off Wall and Cell Soil Liner Clay Placement and Compaction [CELL ONLY]

i. Cut-off Wall Placement

Prior to commencing construction of the first RMU-2 cell, or other time-frame as approved by the Department, the Permittee must submit for Department approval, RMU-2 Cut-off Wall Technical Specifications and a Construction Quality Assurance (CQA) Plan for Cut-off Wall installation.

The Cut-off Wall material must be placed to the lines and grades indicated on the RMU-2 Drawings contained in Attachment J, Appendix D-6a of this Permit, and installed in conformance with, and to the approved Cut-off Wall Technical Specifications and a, to the lines and grades shown in the RMU-2 Drawings contained in Attachment J, Appendix D-6a of this Permit. The Construction Testing shall be as specified in the Construction Quality Assurance (CQA) Plan, and shall meet the pass criteria specified therein.

Insert from Condition D.5.a.iv as modified by COMMENT NO. 69

ii Installation of Wire Piezometers

At least ninety (90) days, or other time-frame as approved by the Department, prior to commencing excavation of any RMU-2 cell, the Permittee must submit for Department approval, a detailed plan for the installation of vibrating wire piezometers and all appurtances necessary for their operation, as required by Appendix C-9 of the "RMU-2 Engineering Report" which is incorporated by reference into this Permit by ***Schedule 1 of Module I*** *of this Permit. The plan shall indicate the number and location of the cell's piezometers as prescribed by the Design Engineer in order to provide for sufficient monitoring of subgrade pore pressures to insure landfill stability during waste placement. The Permittee shall not commence construction of the cell's ~~MSE Wall or its~~ soil liner prior to the Department's approval of the wire piezometer installation plan. Subsequent to plan approval, the Permittee shall install the wire piezometers in accordance with the plan, and the Engineer shall witness the installation and verify compliance with the approved plan.*

iii Cell Soil Liner Clay Placement and Compaction

The natural clay material must be placed to the lines and grades indicated on the RMU-2 Drawings contained in Attachment J, Appendix D-6a of this Permit, and compacted in conformance with, and to the specifications found in Section 02210 of the RMU-2 Landfill Technical Specifications in Attachment J, Appendix D-7a of this Permit, to the lines and grades shown in the RMU-2 Drawings contained in Attachment J, Appendix D-6a of this Permit. The Construction Testing (Soil Compaction and Moisture Content, and Lab Hydraulic Conductivity) shall be as specified in Section 4.6 of the RMU-2 Landfill Quality Assurance Manual in Attachment J, Appendix D-8a of this Permit, and shall meet the pass criteria specified therein.

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All laboratory hydraulic conductivity tests on the undisturbed clay samples must be performed by a laboratory independent from the Permittee and approved by the Engineer and all must have a result of $1x10^{-7}$ cm/sec or less. The sample preparation, test methods and parameters shall not alter the sample properties from that which existed at the time the sample was obtained from the compacted clay lift.

REASON:

Technical Specifications and a Construction Quality Assurance Plan for the Cut-off Wall installation will be provided prior to construction. See Comment No. 69 for revision related to vibrating wire piezometer monitoring plan.

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CWM COMMENT NUMBER: 72

TOPIC:

RMU-2 Cell & Final Cover Construction
RMU-2 Cell & Final Cover Specific Construction Requirements
Textured Geomembrane Cell & Final Cover Installation
Visual Inspection and Non-Destructive Testing of Trial & Field Seams

LOCATION OF CONDITION:

Exhibit G, Supplement to Module VI – Landfills [RMU-2]
Condition D.5.e.ii, Page G-19/20

EXISTING CONDITION:

ii. Visual Inspection and Non-Destructive Testing of Trial & Field Seams

All trial seams and 100% of the length of all field seams shall be visually inspected and non-destructively tested using an air pressure test for all double fusion seams and a vacuum test for all single fusion seams, in accordance with the procedures in Part 3.04 in Section 02401 of the RMU-2 Landfill Technical Specifications in Attachment J, Appendix D-7a of this Permit and Section 10.8 of the RMU-2 Landfill Quality Assurance Manual in Attachment J, Appendix D-8a of this Permit. Trial and field seam non-destructive test results meeting the requirements of Part 3.04 in Section 02401 of the RMU-2 Landfill Technical Specifications in Attachment J, Appendix D-7a of this Permit, shall be deemed a passing test with respect to seam integrity. A passing non-destructive test on a trial seam shall be an indicator of the adequacy of the seaming unit and seamer working under prevailing site conditions to produce seams of adequate integrity for field seaming. No seamer or seaming unit failing a trial seam non-destructive test shall be allowed to perform field seaming until the problem causing the failure is identified, corrected and the seamer and seaming unit passes a non-destructive test on a trial seam. Any field seam failing non-destructive testing shall require repair of all identified defects in accordance with the procedures in Part 3.03.H in Section 02401 of the RMU-2 Landfill Technical Specifications in Attachment J, Appendix D-7a of this Permit and Section 10.10.3 of the RMU-2 Landfill Quality Assurance Manual in Attachment J, Appendix D-8a of this Permit, and re-tested using the appropriate non-destructive procedure.

PROPOSED MODIFICATION:

Revise as follows:

ii. Visual Inspection and Non-Destructive Testing of Trial & Field Seams

All trial seams and 100% of the length of all field seams shall be visually inspected. ~~and~~ *One Hundred Percent (100%) of the length of all field seams shall be* non-destructively tested using an air pressure test for all double fusion seams and a vacuum test for all single fusion seams, in accordance with the procedures in Part 3.04 in Section 02401 of the RMU-2 Landfill Technical Specifications in Attachment J, Appendix D-7a of this Permit and Section 10.8 of the RMU-2 Landfill Quality Assurance Manual in Attachment J, Appendix D-8a of this Permit. ~~Trial and f~~*F*ield seam non-destructive test results meeting the requirements of Part 3.04 in Section 02401 of the RMU-2 Landfill Technical Specifications in Attachment J, Appendix D-7a of this Permit, shall be deemed a passing test with respect to seam integrity. ~~A passing non-destructive test on a trial seam shall be an indicator of the adequacy of the seaming unit and seamer working under prevailing site conditions to produce seams of adequate integrity for field seaming. No seamer or seaming unit failing a trial seam non-destructive test shall be allowed to perform field seaming until the problem causing the failure is identified, corrected and the seamer and seaming unit passes a non-destructive test on a trial seam.~~ Any field seam failing non-destructive testing shall require repair of all identified defects in accordance with the procedures in Part 3.03.H in Section 02401 of the RMU-2 Landfill Technical Specifications in Attachment J, Appendix D-7a of this Permit and Section 10.10.3 of the RMU-2 Landfill Quality Assurance Manual in Attachment J, Appendix D-8a of this Permit, and re-tested using the appropriate non-destructive procedure.

REASON:

Industry standard for testing of trial seams is to perform visual and destructive testing of the completed trial seam as provided in Part 3.04 in Section 02401 of the RMU-2 Landfill Technical Specifications in Attachment J, Appendix D-7a of this Permit and Section 10.8 of the RMU-2 Landfill Quality Assurance Manual in Attachment J, Appendix D-8a of this Permit. Destructive testing of trial seams is required in **Condition D.5.e.iii of Exhibit G**.

CWM COMMENT NUMBER: 73

TOPIC:

RMU-2 Cell & Final Cover Construction
RMU-2 Cell & Final Cover Specific Construction Requirements
Textured Geomembrane Cell & Final Cover Installation
Field and Laboratory Destructive Testing of Trial & Field Seams

LOCATION OF CONDITION:

Exhibit G, Supplement to Module VI – Landfills [RMU-2]
Condition D.5.e.iii, Page G-20

EXISTING CONDITION:

iii. Field and Laboratory Destructive Testing of Trial & Field Seams

All trial seams shall be subjected to field destructive testing in accordance with ASTM D 4437 and the procedures in Part 3.04 in Section 02401 of the RMU-2 Landfill Technical Specifications in Attachment J, Appendix D-7a of this Permit. Trial seam field destructive test results meeting the strength requirements of Part 3.03.F in Section 02401 of the RMU-2 Landfill Technical Specifications in Attachment J, Appendix D-7a of this Permit, shall be deemed as passing the test with respect to seam strength. A passing field destructive test on a trial seam shall be an indicator of the adequacy of the seaming unit and seamer working under prevailing site conditions to produce seams of adequate strength for field seaming. No seamer or seaming unit failing a trial seam field destructive test shall be allowed to perform field seaming until the problem causing the failure is identified, corrected and the seamer and seaming unit passes a field destructive test on a trial seam.

Field seams shall be sampled for field/laboratory destructive testing at the frequency specified by Part 3.04 in Section 02401 of the RMU-2 Landfill Technical Specifications in Attachment J, Appendix D-7a of this Permit. Whenever possible during cell construction, preference shall be given to obtaining samples from the top of berm and anchor trench areas so as to minimize the number of holes and patches in the waste containment portion of each cell. Each sample shall be cut into sub-samples to be divided up for field and laboratory testing in accordance with ASTM D 4437 and as required by Part 3.04 in Section 02401 of the aforementioned Permit Attachment and Section 10.9 of the RMU-2 Landfill Quality Assurance Manual in Attachment J, Appendix D-8a of this Permit. Field and laboratory seam destructive test results meeting the strength requirements of Part 3.03.F in Section 02401 of the RMU-2 Landfill Technical Specifications in Attachment J, Appendix D-7a of this Permit, shall be deemed a passing test with respect to seam strength. Each set of sub-samples passing field (i.e., onsite) destructive testing shall have the sub-samples from their corresponding original sample sent to a laboratory independent of the Permittee and designated by the Engineer for confirmatory strength testing. If either a field or laboratory tested sub-sample fails to meet strength requirements, it shall constitute a failed

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destructive test for the sample and indicates the possibility of inadequate strength in the field seam from which the sample was obtained. Such situations will require repair of the entire seam represented by the failed destructive sample (i.e., from the failed sample to passing destructive samples in both directions). These seams will require repair by use of a cap strip in accordance with the procedures in Part 3.03.H in Section 02401 of the RMU-2 Landfill Technical Specifications in Attachment J, Appendix D-7a of this Permit and Section 10.10.3 of the RMU-2 Landfill Quality Assurance Manual in Attachment J, Appendix D-8a of this Permit. All cap strip welds shall undergo non-destructive testing.

PROPOSED MODIFICATION:

Revise as follows:

Delete ASTM D 4437 in the first and second paragraph and replace with ASTM D 6392.

REASON:

Incorrect method reference. ASTM D 4437 is the Standard Practice for Non-Destructive Testing (NDT). ASTM D6392 is the Standard Test Method for Determining the Integrity of Non-reinforced Geomembrane Seams Produced Using Thermo-Fusion Methods (Destructive Testing).

Part 3.03.F in Section 02401 of the RMU-2 Landfill Technical Specifications in Attachment J, Appendix D-7a of the Permit also reference the incorrect ASTM method. See Attachment E for revised Page 02401-13 of the Technical Specifications. See related Comment No. 117

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CWM COMMENT NUMBER: 74

TOPIC:

RMU-2 Cell & Final Cover Construction
RMU-2 Cell & Final Cover Specific Construction Requirements
Primary & Secondary Leachate Collection Systems' Installation [CELL ONLY]

LOCATION OF CONDITION:

Exhibit G, Supplement to Module VI – Landfills [RMU-2]
Condition D.5.f, Page G-22, first paragraph

EXISTING CONDITION:

f. Primary & Secondary Leachate Collection Systems' Installation [CELL ONLY]

Primary and secondary geotextiles and geocomposites shall be installed in accordance with the RMU-2 Drawings contained in Attachment J, Appendix D-6a of this Permit, Section 02430 of the RMU-2 Landfill Technical Specifications in Attachment J, Appendix D-7a of this Permit and Sections 11 & 12 of the RMU-2 Landfill Quality Assurance Manual in Attachment J, Appendix D-8a of this Permit. The Department reserves the right to reject stored rolls of geotextile and geocomposite, or portions thereof, which it considers as being damaged or clogged with soil.

PROPOSED MODIFICATION:

Revise as follows:

f. Primary & Secondary Leachate Collection Systems' Installation [CELL ONLY]

Primary and secondary geotextiles and geocomposites shall be installed in accordance with the RMU-2 Drawings contained in Attachment J, Appendix D-6a of this Permit, Section*s 02410 and* 02430 of the RMU-2 Landfill Technical Specifications in Attachment J, Appendix D-7a of this Permit and Sections 11 & 12 of the RMU-2 Landfill Quality Assurance Manual in Attachment J, Appendix D-8a of this Permit. The Department reserves the right to reject stored rolls of geotextile and geocomposite, or portions thereof, which it considers as being damaged or clogged with soil.

REASON:

Add the reference to Section 02410 of the RMU-2 Landfill Technical Specifications in Attachment J, Appendix D-7a for completeness and clarity.

CWM COMMENT NUMBER: 75

TOPIC:

RMU-2 Cell & Final Cover Construction
RMU-2 Cell & Final Cover Specific Construction Requirements
Primary & Secondary Leachate Collection Systems' Installation [CELL ONLY]
Leachate Collection Piping

LOCATION OF CONDITION:

Exhibit G, Supplement to Module VI – Landfills [RMU-2]
Condition D.5.f.i, Page G-23

EXISTING CONDITION:

i. Leachate Collection Piping

Primary and secondary leachate collection piping shall be installed in accordance with Section 15064 of the RMU-2 Landfill Technical Specifications in Attachment J, Appendix D-7a of this Permit. All vehicles/equipment operating above leachate collection piping must exhibit a ground pressure of 4.4 psi or less.

Subsequent to completion of the secondary granular drainage layer, but prior to installation of succeeding layers, the Permittee must run video camera equipment along the entire length of the secondary leachate collection pipe. Also, subsequent to completion of the operations layer, but prior to placing waste in the cell, the Permittee must run video camera equipment along the entire length of the primary leachate collection pipe. In each case, the Permittee must confirm that the equipment can access the entire length of each pipe without any problems and use the video to inspect the pipes interior for defects, deflections or other problems that could affect pipe flow. Any identified defects, deflections or other problems must be corrected prior to waste placement in the cell. The Department's on-site representative shall be notified at least forty-eight (48) hours prior to video inspection of each pipe, and the Engineer or his/her qualified subordinate shall be present to observe each inspection. A video recording shall be made of each pipe inspection and included with the cell construction documents.

PROPOSED MODIFICATION:

Revise as follows:

i. Leachate Collection Piping

Primary and secondary leachate collection piping shall be installed in accordance with Section 15064 of the RMU-2 Landfill Technical Specifications in Attachment J, Appendix

D-7a of this Permit. All vehicles/equipment operating above leachate collection piping must exhibit a ground pressure of 4.4 psi or less *or if the pipe and geosynthetics are covered by sufficient thickness of material as determined by the Design Engineer*.

Subsequent to completion of the secondary granular drainage layer, but prior to installation of succeeding layers, the Permittee must run video camera equipment along the entire length of the secondary leachate collection pipe. Also, subsequent to completion of the operations layer, but prior to placing waste in the cell, the Permittee must run video camera equipment along the entire length of the primary leachate collection pipe. In each case, the Permittee must confirm that the equipment can access the entire length of each pipe without any problems and use the video to inspect the pipes interior for defects, deflections or other problems that could affect pipe flow. Any identified defects, deflections or other problems must be corrected prior to waste placement in the cell. The Department's on-site representative shall be notified at least forty-eight (48) hours prior to video inspection of each pipe, and the Engineer or his/her qualified subordinate shall be present to observe each inspection. A video recording shall be made of each pipe inspection and included with the cell construction documents.

REASON:

The Departments selection of 4.4 psi as the limit for the ground pressure of vehicles/equipment above the collection pipe and geosynthetics is arbitrary. The condition as written would preclude any equipment with a ground pressure greater than 4.4 psi to run above the leachate collection no matter how much material is placed above the pipe. Appendix E-2 of the Engineering Report provides pipe crush calculations for the primary leachate collection at full waste depth and with only the drainage stone and operations stone in place prior to waste placement.

The pipe deflection analysis in the Engineering Report indicates that the selected pipe is adequate under a final buildout scenario based on an estimated deflection of less than 5.0%. A separate pipe deflection analysis demonstrates that completion of the primary leachate collection system layer (i.e., 1 foot of granular drainage layer plus 1 foot of operations layer) provides adequate cover to protect the pipe from excessive deflection under vehicle loading by a fully-loaded waste-hauling truck.

CWM will prepare the O&M Manual for RMU-2 with requirements that waste trucks will only be operated within the cells above the first lift as an added assurance to protect the primary leachate collection pipe and the geosynthetics.

CWM COMMENT NUMBER: 76

TOPIC:

RMU-2 Cell & Final Cover Construction
RMU-2 Cell & Final Cover Specific Construction Requirements
Primary & Secondary Leachate Collection Systems' Installation [CELL ONLY]
Secondary Leachate Collection System (SLCS) Flow Measurement

LOCATION OF CONDITION:

Exhibit G, Supplement to Module VI – Landfills [RMU-2]
Condition D.5.f.ii, Page G-23

EXISTING CONDITION:

ii. Secondary Leachate Collection System (SLCS) Flow Measurement

After completing construction of the cell's SLCS, the Permittee must remove the accumulated water in the system at a minimum of once every seven (7) days. Upon completing installation of the cell's primary geomembrane liner (including completion of the leak location survey), the Permittee must remove SLCS water on a daily basis and take measurements of volume removed to determine the Daily SLCS Flow Rate in gallons per acre per day (gpad) based on each cell's lined area in acres. These measurements must be taken for at least two consecutive weeks during which at least one precipitation event occurs that generates a volume of 1-inch or greater. Alternatively, the Permittee may apply an equivalent volume of water over the entire cell. The Permittee must compare the Daily SLCS Flow Rate to the 20 gpad Response Rate set by **Condition H.3** of this Exhibit. If the Daily SLCS Flow Rate is greater than the 20 gpad Response Rate, the Permittee must conduct additional leak location surveys and implement measures in the RMU-2 Response Action Plan (RAP) in Attachment Ka of this Permit to identify and repair defects in the primary geomembrane. No waste may be placed in the cell until measurements indicate a Daily SLCS Flow Rate at or below 20 gpad.

PROPOSED MODIFICATION:

Revise as follows:

ii. Secondary Leachate Collection System (SLCS) Flow Measurement

After completing construction of the cell's SLCS, the Permittee must remove the accumulated water in the system at a minimum of once every seven (7) days. Upon completing installation of the cell's primary geomembrane liner (including completion of the leak location survey), the Permittee must remove SLCS water *at a minimum* on a ~~daily~~ *weekly* basis and take measurements of volume removed to determine the Daily

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SLCS Flow Rate in gallons per acre per day (gpad) based on each cell's lined area in acres. ~~These measurements must be taken for at least two consecutive weeks during which at least one precipitation event occurs that generates a volume of 1-inch or greater. Alternatively, the Permittee may apply an equivalent volume of water over the entire cell.~~ The Permittee must compare the Daily SLCS Flow Rate to the 20 gpad Response Rate set by **Condition H.3** of this Exhibit. If the Daily SLCS Flow Rate is greater than the 20 gpad Response Rate, the Permittee must conduct additional leak location surveys and implement measures in the RMU-2 Response Action Plan (RAP) in Attachment Ka of this Permit to identify and repair defects in the primary geomembrane. No waste may be placed in the cell until measurements indicate a Daily SLCS Flow Rate at or below 20 gpad.

REASON:

Rainfall totals greater than one-inch are infrequent at the facility. Relying on rainfall totals of greater than 1-inch is unrealistic and the addition of potable water to the cells is unnecessary and wasteful of resources. The primary geomembrane will undergo stringent Construction Quality Control and Quality Assurance testing. This testing will include Geomembrane Leak Location Survey in accordance with Condition D.5.e.v of Exhibit G.

The proposed baseliner system for RMU-2 consists of a Geosynthetic Clay Liner (GCL). The GCL proposed for the construction of RMU-2 is specified to have a maximum hydraulic conductivity of $5x10^{-9}$ cm/sec. If defects were present in the primary geomembrane, there would not be adequate flow in the two week time period to evaluate the Response Rate of the impoundment.

CWM COMMENT NUMBER: 77

TOPIC:

RMU-2 Cell & Final Cover Construction
RMU-2 Cell & Final Cover Specific Construction Requirements
Primary & Secondary Leachate Collection Systems' Installation [CELL ONLY]
Secondary Leachate Collection System (SLCS) Flow Chemical Analysis

LOCATION OF CONDITION:

Exhibit G, Supplement to Module VI – Landfills [RMU-2]
Condition D.5.f.iii, Page G-23/24

EXISTING CONDITION:

iii. Secondary Leachate Collection System (SLCS) Flow Chemical Analysis

After the construction of the SLCS, the Permittee must analyze the accumulated water removed from the cell's secondary sump for the constituents found in Appendix 33 of 6 NYCRR 373-2. The Permittee shall sample the accumulated SLCS water on two separate occasions prior to waste placement in the cell and submit the results to the Department for review and acceptance. The scope of the second round of analyses shall include the target compound list, TCL parameters and any other Appendix 33 constituent which was detected in the sump during the initial sampling event.

PROPOSED MODIFICATION:

Revise as follows:

iii. Secondary Leachate Collection System (SLCS) Flow Chemical Analysis

The Permittee shall sample the accumulated SLCS water on two separate occasions prior to waste placement in the cell and submit the results to the Department for review and acceptance. After the construction of the SLCS, the Permittee must analyze the accumulated water removed from the cell's secondary sump for *pH, specific conductance, and* the constituents found in Appendix 33 of 6 NYCRR 373-2. ~~The Permittee shall sample the accumulated SLCS water on two separate occasions prior to waste placement in the cell and submit the results to the Department for review and acceptance.~~ The scope of the second round of analyses shall include ~~the target compound list, TCL parameters~~ *pH and specific conductance, Site Specific Volatile Organic Compounds (27 VOCs), Organic Priority Pollutants (i.e., semi-volatile organics, PCBs, and pesticides), Priority Pollutant Metals (i.e., antimony, arsenic, beryllium, cadmium, chromium, copper, lead, mercury, nickel, selenium, silver, thallium, zinc),* and any other

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Appendix 33 constituent which was detected in the sump during the initial sampling event.

REASON:

The analysis for pH and specific conductance has been added to be consistent with the current analyses for the SLCS from active cells. Target compound list and TCL parameters are not defined in the condition as written. The condition has been modified to require analysis of the second sample event of water removed from the SLCS for the routine parameters for the SLCS for active landfill cells plus any additional constituents that were found in the first round of sampling.

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CWM COMMENT NUMBER: 78

TOPIC:

RMU-2 Cell & Final Cover Construction
Surface Water Management During RMU-2 Cell & Final Cover Construction

LOCATION OF CONDITION:

Exhibit G, Supplement to Module VI – Landfills [RMU-2]
Condition D.6, Page G-24/25

EXISTING CONDITION:

6. Surface Water Management During RMU-2 Cell & Final Cover Construction

The Permittee must reduce impacts on surface water quality for all RMU-2 construction activities through proper operation and maintenance of construction equipment and sediment control techniques, and must comply with the "Surface Water Sampling and Analysis Plan (SWSAP)" in Attachment M of this Permit and the Facility's "State Pollution Discharge Elimination Systems (SPDES)" Permit. Any exceedance of the criteria or standards in the SWSAP or SPDES Permit related to construction shall require immediate suspension of all earthwork activities and implementation of all necessary surface water management and control measures.

a. Additional Surface Water Management Controls

Surface water management during construction shall focus on the restriction of sediment discharge from the work areas. Construction surface water management measures to be taken by the Permittee must involve sediment control barriers consisting of silt fences, hay bales or other Department approved sediment control measures. The number and location of these shall be determined by the progress of construction in order to cover the perimeter of construction zones.

Placement procedures for any silt fence used must involve the use of 2-foot wide geotextile either supported by a ¾-inch polypropylene mesh with a nylon top cord and 4-foot wooded posts at 3-foot maximum spacing or by a 6-inch mesh with a 14-gauge wire support fence and a steel top cord, secured by 4-foot wooded posts at a 8-foot spacing. Additional bracing shall be added as required. Anchoring of the geotextile must consist of a 4-inch wide by 6-inch deep trench with backfill compacted over the folded fabric.

Any erosion prevention hay bales used shall be placed with twine parallel to the ground and must be secured with two 2"x2" stakes per bale each 30 inches in length, driven through the top of the bale.

Removal of silt fences, hay bales or other Department approved sediment controls shall only be done after vegetation is firmly established on the berm, drainage channels or final cover topsoil areas, and the soil areas of these removed sedimentation controls must be re-vegetated.

Unless otherwise approved by the Department on a case specific basis, synthetic mesh, jute mesh, cellulose or wood fiber, or other biodegradable meshes must be installed in channels designed to have a vegetative cover to enhance the establishment of such vegetation.

PROPOSED MODIFICATION:

Revise as follows:

6. Surface Water Management During RMU-2 Cell & Final Cover Construction

The Permittee must reduce impacts on surface water quality for all RMU-2 construction activities through proper operation and maintenance of construction equipment and sediment control techniques, and must comply with the "Surface Water Sampling and Analysis Plan (SWSAP)" in Attachment M of this Permit and the Facility's "State Pollution Discharge Elimination Systems (SPDES)" Permit. Any exceedance of the criteria or standards in the SWSAP or SPDES Permit related to construction shall require immediate suspension of all earthwork activities and implementation of all necessary surface water management and control measures.

a. Additional Surface Water Management Controls

Surface water management during construction shall focus on the restriction of sediment discharge from the work areas. Construction surface water management measures to be taken by the Permittee must involve sediment control barriers consisting of silt fences, hay bales or other ~~Department approved~~ sediment control measures. The number and location of these shall be determined by the progress of construction in order to cover the perimeter of construction zones.

~~Placement procedures for any silt fence used must involve the use of 2-foot wide geotextile either supported by a ¾-inch polypropylene mesh with a nylon top cord and 4-foot wooded posts at 3-foot maximum spacing or by a 6-inch mesh with a 14-gauge wire support fence and a steel top cord, secured by 4-foot wooded posts at a 8-foot spacing. Additional bracing shall be added as required. Anchoring of the geotextile must consist of a 4-inch wide by 6-inch deep trench with backfill compacted over the folded fabric.~~

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~~Any erosion prevention hay bales used shall be placed with twine parallel to the ground and must be secured with two 2”x2” stakes per bale each 30 inches in length, driven through the top of the bale.~~

Removal of silt fences, hay bales or other ~~Department approved~~ sediment controls shall only be done after vegetation is firmly established on the berm, drainage channels or final cover topsoil areas, and the soil areas of these removed sedimentation controls must be re-vegetated.

Unless otherwise approved by the Department on a case specific basis, synthetic mesh, jute mesh, cellulose or wood fiber, or other biodegradable meshes must be installed in channels designed to have a vegetative cover to enhance the establishment of such vegetation.

REASON:

New York State regulations require the preparation of a Stormwater Pollution Prevention Plan (SWPPP). The SWPPP will include a sediment and erosion for implementation for the construction of RMU-2. The SWPPP will be prepared utilizing the New York State Standards and Specification for Erosion and Sediment Control. The permit should not limit the sediment and erosion control to silt fence and hay bales. There are multiple products in the market place that are acceptable for use in erosion and sediment control for construction projects. The details for the types and placement of the sediment and erosion control will be provided in the SWPPP.

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CWM COMMENT NUMBER: 79

TOPIC:

RMU-2 Cell & Final Cover Construction
Fugitive Dust Control During RMU-2 Cell & Final Cover Construction

LOCATION OF CONDITION:

Exhibit G, Supplement to Module VI – Landfills [RMU-2]
Condition D.7, Page G-25

EXISTING CONDITION:

7. Fugitive Dust Control During RMU-2 Cell & Final Cover Construction

The Permittee must reduce impacts on air quality for all construction activities for RMU-2 through proper operation and maintenance of construction equipment and fugitive dust control techniques and must comply with Sections II & III of the "Fugitive Dust Control Plan (FDCP)" in Attachment L of this Permit. Any exceedance of the particulate standards in the FDCP related to construction shall require immediate suspension of all earthwork activities and implementation of all necessary dust suppression and control measures.

PROPOSED MODIFICATION:

Revise as follows:

7. Fugitive Dust Control During RMU-2 Cell & Final Cover Construction

The Permittee must reduce impacts on air quality for all construction activities for RMU-2 through proper operation and maintenance of construction equipment and fugitive dust control techniques and must comply with Sections II & III of the "Fugitive Dust Control Plan (FDCP)" in Attachment L of this Permit. ~~Any exceedance of the particulate standards in the FDCP related to construction shall require immediate suspension of all earthwork activities and implementation of all necessary dust suppression and control measures.~~

REASON:

The Fugitive Dust Control Plan contains the procedures to be utilized if there is an exceedance of the particulate standards.

CWM COMMENT NUMBER: 80

TOPIC:

RMU-2 Waste Disposal
Annual, Monthly & Daily Waste Disposal Limits

LOCATION OF CONDITION:

Exhibit G, Supplement to Module VI – Landfills [RMU-2]
Condition E.1, Page G-28

EXISTING CONDITION:

1. Annual, Monthly & Daily Waste Disposal Limits

The Permittee shall not accept for land disposal in RMU-2 hazardous and industrial non-hazardous wastes in quantities above the annual, monthly and daily limits indicated below:

- Annual Limit = 500,000 tons per calendar year (Ref.: RMU-2 Part 361 application)
- Monthly Limit = 41,650 tons per calendar month (Ref.: RMU-2 Part 361 application)
- Daily Limit = 1600 tons per operating day (Ref.: Derived from monthly limit above)

For the purposes of determining the disposal quantities of hazardous and industrial non-hazardous wastes subject to the above restrictions, "hazardous waste" shall include all wastes meeting the definition of hazardous waste set forth in 6 NYCRR 37l.1(c), (d) and (e) and in 40 CFR 261 and "industrial non-hazardous waste" shall include all other wastes generated by industry. The Permittee must determine and record the waste quantities, in tons, by weighing each incoming waste load destined for RMU-2 disposal and adding up the weights at the end of each operating day, each calendar month and each calendar year. To demonstrate compliance with the above limits, the Permittee must provide these daily, monthly and annual RMU-2 disposal quantities in reports to the Department in accordance with **Condition I.2** of this Exhibit.

PROPOSED MODIFICATION:

Revise as follows:

1. Annual~~, Monthly & Daily~~ Waste Disposal Limit~~s~~

The Permittee shall not accept for land disposal in RMU-2 hazardous and industrial non-hazardous wastes in quantities above the annual~~, monthly and daily~~ limits indicated below:

- Annual Limit = 500,000 tons per calendar year (Ref.: RMU-2 Part 361 application)

- ~~Monthly Limit = 41,650 tons per calendar month (Ref.: RMU-2 Part 361 application)~~

- ~~Daily Limit = 1600 tons per operating day (Ref.: Derived from monthly limit above)~~

For the purposes of determining the disposal quantities of hazardous and industrial non-hazardous wastes subject to the above restrictions, "hazardous waste" shall include all wastes meeting the definition of hazardous waste set forth in 6 NYCRR 37l.1(c), (d) and (e) and in 40 CFR 261 and "industrial non-hazardous waste" shall include all other wastes generated by industry. The Permittee must determine and record the waste quantities, in tons, by weighing each incoming *bulk* waste load destined for RMU-2 disposal and adding up the weights at the end ~~of each operating day,~~ each calendar month and each calendar year. To demonstrate compliance with the above limit~~s~~, the Permittee must provide the~~se daily, monthly and~~ annual RMU-2 disposal quantities in reports to the Department in accordance with **Condition I.2** of this Exhibit.

REASON:

The NYSDEC's selection of a daily waste receipt limit for land disposal is arbitrary. Additionally, it appears that the NYSDEC's selection of a monthly waste receipt limit for land disposal is based on Section 1.4 of the Part 361 Application. The Part 361 Application indicates, "*The maximum amount of hazardous and industrial non-hazardous waste projected for disposal in RMU-2 is 41,650 tons per month.*" The monthly quantity was included in the Part 361 Application as a projection. The monthly projection was simply derived by dividing the annual limit 500,000 tons by twelve months to derive the 41,650 tons. CWM may at times have the potential to accept greater than 41,650 tons per month. A daily limit for land disposal should not be derived from this monthly projection.

Daily limits could be established using the Traffic Analysis prepared and submitted in the Draft Environmental Impact Statement (DEIS). The DEIS included an evaluation of the truck traffic at 220 trucks per day or 250 trucks per day for unusual circumstances.

Additionally, the initial phase geotechnical evaluation limits the amount of waste to 50,000 cubic yards per quarter. The evaluation used 111 pounds per square foot (psf) for the waste unit weight. This would translate to approximately 75,000 tons per quarter. Vibrating wire piezometers will be installed and monitored during waste filling (weekly or biweekly) and this quarterly limit may be modified based on a vibrating wire piezometer monitoring plan to be submitted as required by Condition D.5 of Exhibit G.

Section 3.3.2 of Appendix C-9 of the Engineering Report for RMU-2 indicates that all factors of safety for the design are greater than 1.5 during filling at the maximum rate proposed (i.e. 50,000 yd^3 per quarter). The sensitivity analysis in the geotechnical evaluation shows that

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the factor of safety remains above 1.5 even if the Glaciolacustrine Silt/Sand (GSS) layer permeability is one order of magnitude lower than indicated by site data. In addition, the analyses indicate that the factors of safety are sufficiently high through waste lift 9 to allow temporary variations in the filling rate as long as the quarterly average is consistent with the 50,000 yd^3 per quarter proposed maximum.

Waste volumes will be tracked on a quarterly basis during the waste mass survey as required by Condition I.1 of Exhibit G. Waste volume reports are provided to the NYSDEC 30 days after the end of the quarter.

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CWM COMMENT NUMBER: 81

TOPIC:

RMU-2 Waste Disposal
Management of Incoming RMU-2 Waste Loads

LOCATION OF CONDITION:

Exhibit G, Supplement to Module VI – Landfills [RMU-2]
Condition E.2, Page G-28/29

EXISTING CONDITION:

2. Management of Incoming RMU-2 Waste Loads

To prevent the parking or stopping of incoming RMU-2 waste loads (i.e. waste trucks) on the public road outside the entrance to the facility, the Permittee must submit for Department approval, an "Incoming Waste Truck Management Plan". The Plan must be submitted prior to beginning construction of the first RMU-2 cell, and no waste shall be placed in RMU-2 prior to Department approval of this Plan. This Plan must contain the following:

a. Incoming Waste Truck Management Plan Content Requirements

This Plan must be designed to prevent any backup of arriving RMU-2 waste trucks onto the public road based on an average 20 ton load and the RMU-2 daily disposal limit in **Condition E.1** of this Exhibit. The plan must also contain the following elements:

- A proposal for the establishment of an on-site waste truck check-in point, at or near the facility's existing Scale House, with procedures for checking of manifests, inspection of waste container(s) and rectifying any identified manifest or container integrity problems.

- A proposal for the establishment of no fewer than twenty (20) on-site waste truck parking spaces between the above check-in point and the facility entrance gate, either along existing facility roads or in a newly constructed parking area. Each parking space should be designed based on the dimensions of a typical waste truck.

- A procedure allowing waste trucks to rapidly pass through the facility entrance gate and continue on to the on-site check-in point or parking spaces.

- A set of rules requiring that waste trucks not be left un-attended while in parking spaces and which require that no waste trucks be left in parking spaces at the end of each operating day.

- A waste truck arrival scheduling method which will prevent the backup of arriving waste trucks onto the public road, based on the RMU-2 daily disposal limit in **Condition E.1** of this Exhibit, the limitations on waste truck arrival times stipulated by **Condition D** in **Schedule 1 of Module I, Exhibit A** of this Permit, an average waste truck capacity of 20 tons, an average waste truck check-in time and the Permittee's proposed number of on-site parking spaces.

PROPOSED MODIFICATION:

Revise as follows:

2. Management of Incoming RMU-2 Waste Loads

To prevent the parking or stopping of incoming RMU-2 waste loads (i.e. waste trucks) on the public road outside the entrance to the facility, the Permittee must *limit the number of trucks per hour in accordance with the Site Operations Plan (Appendix 1 of the CAC Agreement dated July 21, 1993 or most recent approved edition)* ~~submit for Department approval, an "Incoming Waste Truck Management Plan". The Plan must be submitted prior to beginning construction of the first RMU-2 cell, and no waste shall be placed in RMU-2 prior to Department approval of this Plan. This Plan must contain the following:~~.

a. Incoming Waste Truck Management ~~Plan Content~~ Requirements

In order to prevent backup of arriving RMU-2 waste trucks onto the public road, trucks will be assigned a scheduled time slot for delivery. The number of trucks per hour and delivery times will be enforced by the permittee as provided for in the "CWM Model City Transportation Rules and Regulations" (see Condition D.1. of Exhibit A in Schedule 1 of Module I).

- *Upon arrival at the facility, the permittee must inspect the vehicles and the Waste Transporter Permits in accordance with condition D.2 of Exhibit A in Schedule 1 of Module I. If problems are noted, the on-site Department staff will be notified. Pending resolution, the truck may be held on the shoulder of the facility entrance road (Marshall Street, past the Guard House).*

- *From the Guard House, waste trucks proceed to the Scale House. At the Scale House, bulk shipments are weighed in and manifests reviewed. If there is a problem with the shipping papers, trucks may be held in the*

Scale area pending resolution. No trucks will remain in the Guard House or Scale areas at the end of the operating day.

- *After the Scale House, trucks proceed to the sampling and inspection racks. Upon inspection, sampling, testing and paperwork review, if a discrepancy is identified, the truck may be temporarily held in the sampling rack area or received and placed in permitted storage in the Parking Containment Area pending resolution.*

~~This Plan must be designed to prevent any backup of arriving RMU-2 waste trucks onto the public road based on an average 20 ton load and the RMU-2 daily disposal limit in **Condition E.1** of this Exhibit. The plan must also contain the following elements:~~

- ~~A proposal for the establishment of an on-site waste truck check-in point, at or near the facility's existing Scale House, with procedures for checking of manifests, inspection of waste container(s) and rectifying any identified manifest or container integrity problems.~~

- ~~A proposal for the establishment of no fewer than twenty (20) on-site waste truck parking spaces between the above check-in point and the facility entrance gate, either along existing facility roads or in a newly constructed parking area. Each parking space should be designed based on the dimensions of a typical waste truck.~~

- ~~A procedure allowing waste trucks to rapidly pass through the facility entrance gate and continue on to the on-site check-in point or parking spaces.~~

- ~~A set of rules requiring that waste trucks not be left un-attended while in parking spaces and which require that no waste trucks be left in parking spaces at the end of each operating day.~~

- ~~A waste truck arrival scheduling method which will prevent the backup of arriving waste trucks onto the public road, based on the RMU-2 daily disposal limit in **Condition E.1** of this Exhibit, the limitations on waste truck arrival times stipulated by **Condition D** in **Schedule 1 of Module I, Exhibit A** of this Permit, an average waste truck capacity of 20 tons, an average waste truck check-in time and the Permittee's proposed number of on-site parking spaces~~.

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REASON:

An additional plan for the control of waste truck traffic onsite is not necessary. CWM currently has sufficient controls in place to prevent the backing up of waste trucks on the public highways.

"CWM Model City Transportation Rules and Regulations" and Site Operations Plan (Appendix 1 of the CAC Agreement dated July 21, 1993 or most recent approved edition) include limits on the number of trucks per hour and scheduling restrictions. As such, CWM uses a scheduling program to schedule trucks for delivery into the facility. A separate Truck Management Plan is not required to ensure that trucks do not back up on public roadways. A turning lane is provided on Balmer Road for trucks as they slow down to enter the facility. The permit check and inspection for leakers by the Guard moves quickly. Ample room is available on Marshall Street (just past the Guard House) to hold trucks pending arrival of Department staff. The trucks then proceed about 0.3 miles to the Scale House. There is a large paved approach to the Scale. Trucks may be held in this area pending resolution of paperwork discrepancies (e.g. a question about the profile number, the generator's EPA Id#, etc.). The drivers must remain with their trucks in this area. No trucks are allowed to remain in this area at the end of the day. CWM, as a permitted TSDF and the destination facility identified on the manifest is not allowed to operate as a 10 day transfer facility. Upon arrival at the facility, CWM must sign the manifest and either receive the shipment, reject it to an alternate TSDF or reject it back to the generator. It cannot remain "in transportation" in a temporary (10 day) parking area.

After the Scale, the trucks proceed about a half of a mile to the sampling and inspection racks near the laboratory. Upon inspection, sampling, testing and paperwork review, if a discrepancy is identified, the truck may be temporarily held in the sampling rack area. Again, the drivers must remain with their trucks in this area. No trucks are allowed to remain in this area at the end of the day. If the container can be separated from the transport vehicle, for example, a roll-off box, the manifest may be signed, the shipment received and placed in permitted storage in one of the Parking Containment Areas pending discrepancy resolution. Given the space available in each of the receiving areas, no new truck parking area is needed. No additional plan with rules prohibiting trucks left in receiving areas at the end of the day is necessary as this would not be allowed by the DOT hazardous materials regulations.

The proposed onsite waste truck route is shown on Figure 4.2 of the DEIS for RMU-2 (November 2014).