RMU-2
TRANSITION PLAN

[*NOTE: To be added to the Permit in its entirety*]

November 2013

TRANSITION PLAN
DEVELOPMENT OF
RESIDUALS MANAGEMENT UNIT NO. 2

CWM CHEMICAL SERVICES, LLC
MODEL CITY, NEW YORK

April 2013
(Revised November 2013)

Prepared By: *CWM Chemical Services, LLC.*
1550 Balmer Road
Model City New York, 14107

TABLE OF CONTENTS

1.0 INTRODUCTION

CWM Chemical Services, LLC (CWM) proposes to construct and operate a residuals management unit for the permanent disposal of hazardous and industrial non-hazardous wastes at the CWM Chemical Services, LLC (CWM), Model City Hazardous Waste Management Facility (Model City Facility).

Prior to and during development of Residuals Management Unit No. 2 (RMU-2), operations at the facility will be modified both temporarily and permanently. This includes the closure, removal/demolition, and/or replacement of Part 373 permitted units and supporting operations that do not require inclusion in the Part 373 permit.

This plan will be used as guide for transition of the facility during the development of RMU-2 and site facilities affected by the development of the landfill.

1.1 DESCRIPTION OF PROPOSED RESIDUALS MANAGEMENT UNIT 2

Proposed RMU-2 incorporates a six (6) cell double-lined fully permittable land burial facility design, in a geologically suitable location, to provide a safe approach to addressing part of the state's hazardous and industrial non-hazardous waste disposal capacity needs over the next 10 to 20 years. RMU-2 will accommodate approximately 4,030,700 cubic yards of waste and will be situated on approximately 43.5 acres of land in the location indicated on Permit Drawing No. 2 of the Part 373 Permit Modification Application. The unit will be constructed in accordance with the requirements of 6 NYCRR 373-2.14. As provided in 6 NYCRR 360-1.1(b), non-hazardous industrial wastes disposed in RMU-2 will be managed in accordance with 6 NYCRR Part 373.

The RMU-2 development area includes current RCRA permitted units, existing supporting facilities not requiring RCRA permit, former RCRA Solid Waste Management Units (SWMUs), RCRA investigation/corrective action areas, underground and above ground utilities, and third-party SWMUs/investigation areas.

1.2 EXISTING FACILITIES IN THE RMU-2 LOCATION

The proposed location for RMU-2 is within an existing developed portion of the Model City Facility currently occupied by the following structures, buildings and operational areas:

1. Drum Management Building (Part 373 Container Storage);
2. Empty Trailer Parking Area;
3. South Trailer Parking Area (Part 373 Container Storage);
4. Emergency Response Garage;

5. Heavy Equipment Maintenance Building;
6. McArthur and "M" Streets;
7. Various aboveground and belowground utilities and communications services;
8. Facultative (Fac) Pond 8 (Part 373 Surface Impoundment);
9. Fac Pond 3 (Part 373 Surface Impoundment);
10. Stabilization Facility Trailer Parking Area (Part 373 Container Storage);
11. Secure landfill- (SLF-) 10 Leachate Building Unloading Ramp (Part 373 Container Storage); and
12. SLF 1-11 Oil/Water Separator Building Unloading Ramp (Part 373 Container Storage).
13. RMU-1 Lift Station (Part 373 Tank)
14. RMU-1 Leachate Forcemain to the Oil Water Separator Building (Part 373 Tank Ancillary Equipment)

RMU-2 development will occur in phases. The initial phase of development will occur over multiple years due to the number of site facilities that will be affected. Multiple facilities will be closed, demolished, and constructed during the first phase of RMU-2 development.

Attachment A presents a conceptual construction/closure sequencing schedule for the first phases of development of RMU-2. The RMU-2 development area includes current RCRA permitted units, existing support facilities not requiring RCRA permits, former RCRA Solid Waste Management Units (SWMUs), RCRA investigation/corrective action areas, underground and above ground utilities, and third-party SWMUs/investigation areas.

As required by CWM's Sitewide 6 NYCRR Part 373 Permit, a Project Specific Soil Excavation Monitoring and Management Plan (SEMMP) is required for all excavations/soil disturbances exceeding 1,000 square meters (m^2) or 150 cubic meters (m^3). RMU-2 development will exceed these thresholds. A Project Specific SEMMP has been submitted to the NYSDEC for the development of RMU-2 (April, 2013). The SEMMP also includes the procedures to be employed during the excavation and closure of RCRA SWMUs, RCRA investigation/corrective action areas, and third-party SWMUs/investigation areas. RCRA permitted units will be closed in accordance with the Sitewide Closure Plan in CWM's Part 373 Permit.

The following sections describe the affect on existing operations during the construction of RMU-2 for the initial and subsequent phases.

2.0 RMU-2 PHASED CONSTRUCTION

2.1 GENERAL

The initial phases of construction for Cells 20 and 18 will include the closure, demolition, and/or removal of the following facilities:

1. Closure of Fac Pond 8
2. Closure & demolition of South Trailer Parking Area
3. Remove/close Empty Trailer Parking Area
4. Demolition of SLF-10 Loading/Unloading Ramp
5. Closure of Fac Pond 3

The initial phases of construction for Cells 20 and 18 will include the construction of the following facilities:

1. Fac Pond 5
2. Fac Pond 5 Transfer Line
3. New Full Trailer Parking Area and Utilization of Empty Trailer Parking Area Northwest of SLF-12
4. New SLF-10 Loading/Unloading Ramp
5. Upgrade Tank T-150 Lift Station
6. New Tank T-150 Transfer Line
7. West Leachate Forcemain Transfer Line
8. Cells 20 and 18 including Cut-off-Wall, MSE Wall, Subgrade excavation, baseliner installation
9. Wetlands Mitigation Area

Subsequent phases of development of RMU-2 will include construction of Cells 19, 17, 16, and 15 and will include the closure/demolition and the construction of the following:

1. Relocation of Site Water Lines and Site Electric
2. Construction of New Drum Management Building
3. Closure & Demolition of Existing Drum Building & Water Tank Demolition
4. Closure & Demolition of Existing Stabilization Full Trailer Parking Areas I & II
5. Construction of New Stabilization Full Trailer Parking Area
6. Closure & Demolition of Existing Stabilization Full Trailer Parking Areas III & IV

7. Demolition of RMU-1 Lift Station and Force Main
6. Relocation of Meteorological Tower
7. Demolition of existing Heavy Equipment Maintenance Building. Construction of new Heavy Equipment Maintenance Building
8. Demolition Emergency Response Garage and Relocate to the Former Transportation Building
9. Construction of new SLF 1-11 Oil/Water Separator Loading/Unloading Ramp. Closure & Demolition of existing SLF 1-11 Oil/Water Separator Loading/Unloading Ramp.
10. MacArthur/M Streets - Removal of old Underground Leachate/Water/Sewer Lines
11. Demolition of leachate transfer lines
12. Closure of Former Railroad Bed Area
13. Closure/Removal of DOD Trash Pit
14. Cells 19, 17, 16 and 15 Construction including Cut-off-Wall, MSE Wall, Subgrade excavation, baseliner installation

The following sections describe the phases of development of RMU-2 and how these phases will affect the operation of the facility.

2.2 FACULTATIVE PONDS

The proposed RMU-2 footprint includes land currently occupied by two fac ponds designated as Fac Pond 3 and Fac Pond 8. Fac Pond 8, located immediately west of RMU-1, is permitted for storage of treated wastewater from the facility's Aqueous Wastewater Treatment System (AWTS). Fac Pond 8 is currently out of service and undergoing closure. Fac Pond 3, located west of Fac Pond 8, is currently being used for storage of treated wastewater. Wastewater stored in Fac Pond 3 is discharged to the Niagara River following approval of the pre-qualification testing requirements included in CWM's State Pollutant Discharge Elimination System (SPDES) Permit. Fac Pond 3 will also be closed as a result of RMU-2 development. The closure of Fac Pond 3 will be performed in accordance with the Site-Wide Part 373 Permit requirements, and is described in greater depth below.

In order to compensate for the treated wastewater volume reduction due to the removal of Fac Ponds 3 and 8, new Fac Pond 5 will be constructed between SLF-12 and SLF-7. The construction of Fac Pond 5 will include the construction of Part 373-compliant baseliner system as indicated in the RMU-2 Engineering Report.

Standard operations following construction would include the periodic transfer of treated wastewater from Fac Ponds 1/2 to new Fac Pond 5, which would be installed to replace Fac Pond 3 as the final qualification pond prior to discharge to the Niagara River.

It is anticipated that Fac Pond 5 will be constructed in the first year of site development for RMU-2 . Fac Pond 3 will be used utilized during the construction of Fac Pond 5 and will be closed prior to construction of Cell 18 of RMU-2. Included in the construction of Fac Pond 5 is the installation of two double contained underground transfer pipes for the transfer of the treated wastewater between the Fac Ponds 1/2 and Fac Pond 5 and/or to discharge to the Niagara River upon pre-qualification. The existing influent and effluent piping at Fac Ponds 1/2 and Fac Pond 3 will be modified, as necessary, to accommodate the fac pond reconstruction.

Upon construction of Fac Pond 5, Fac Pond 3 will be closed in accordance with the procedures in the Site-Wide Closure Plan with the exception that the pond area will not be backfilled to grade. The Site-Wide Closure Plan will be modified to allow for only backfilling the Fac Pond 3 to offset hydrostatic uplift.

The closure of Fac Pond 3, as described in the Model City Facility's Site-Wide Closure Plan, consists of discharging treated effluent from the fac pond following approval of the pre-qualification testing requirements included in CWM's SPDES Permit. Following discharge of treated effluent, residual water may be transferred to Fac Ponds 1/2 or Fac Pond 5, and the soils at the base of Fac Pond 3 will then be sampled in accordance the Site-Wide Closure Plan.

It will then be determined if removal of the soils and sediments from the bottom of Fac Pond 3 is needed based on the results of the initial sampling described above. If concentrations of hazardous constituents do not exceed Industrial Soil Cleanup Objectives provided in 6 NYCRR Part 375-6.8(b), the soils and sediments from the pond areas will be excavated to achieve design grades for RMU-2. In the event concentrations of hazardous constituents exceed Industrial Soil Cleanup Objectives provided in 6 NYCRR Part 375-6.8(b) in the surface samples, but not in the samples collected at the 6-inch depth, a minimum of 6 inches of soil/sediment will be removed from the base of the pond and properly disposed. The remaining soils will be excavated to achieve design grades for RMU-2.

If concentrations of hazardous constituents exceed the criteria indicated 6 NYCRR Part 375-6.8(b) in the subsurface samples, but not in the surface samples, the upper twelve inches of material will be removed from the bottom of the facultative pond and disposed of properly. In the event that materials are removed, post-removal sampling will be conducted to confirm that the indicated criteria above have been achieved. The sampling and analysis program described in the Site-Wide Closure Plan will be repeated (including sampling locations and analytical parameters) except that only the one inch surface samples will be collected. The results of the post-removal sampling will be used to demonstrate clean closure.

Excavation and disturbance of soils associated with construction of Fac Pond 5 and closure of Fac Pond 3 will be performed in accordance with the requirements of the RMU-2 Soil Excavation Monitoring and Management Plan.

2.3 SOUTH TRAILER PARKING AREA

The existing South Trailer Parking Area, located south of the existing Empty Trailer Parking Area, is used for the storage of liquid and solid, RCRA regulated, TSCA regulated and non-hazardous containers. These containers consist of the following:

- Box trailers holding hazardous and non-hazardous, New York State Department of Transportation- (NYSDOT-) approved containers;
- Bulk tanker trailers, vacuum trailers or other bulk containers holding liquids;
- Covered roll-off trailers, covered dump trailers or other bulk containers holding solid materials; and
- Flatbed or lowboy trailers holding transformers or containers of contaminated solid materials.

A portion of the existing South Trailer Parking Area is located within the footprint of RMU-2 and the West Leachate Forcemain. As such, the existing South Trailer Parking Area will be removed and a new area will be constructed along the western edge of RMU-2. The new Full Trailer Parking Area would include a reinforced concrete base with concrete curbing on three sides. Prior to construction of the new Full Trailer Parking Area, the existing South Trailer Parking Area will be closed in accordance the closure requirements included in the Site-Wide Part 373 Permit. In general, closure activities to be implemented for the existing South Trailer Parking Area will include the following:

- An initial inventory of all wastes within the South Trailer Parking Area will be performed to verify accuracy with current records, to confirm the integrity of all waste containers for removal and to identify, by visual observation, any potentially contamination areas.
- All trailers will be transported to the Stabilization Full Trailer Parking Area.
- Following removal of all waste containers, the existing South Trailer Parking Area will be decontaminated by sweeping or vacuuming the floors, followed by washing the floors. Any wastewater generated by the washing will be treated on site at the AWT facility.
- Once the cleaning process has concluded, the structure will be demolished. The containment demolition debris will be landfilled on site or shipped to an appropriate waste management facility.
- Once the concrete is removed, the soil will be inspected for signs of contamination. Any soil showing contamination will be sampled in in accordance with the Sitewide Closure Plan. Depending on the characterization results, the soils will either be removed and disposed of in a RCRA and/or TSCA permitted landfill on-site or off-site or disposed of in a solid waste permitted landfill off-site.

- Soils underlying the South Trailer Parking Area will be excavated as part of RMU-2 construction, in accordance with the requirements of the RMU-2 Soil Excavation Monitoring and Management Plan.

During the closure of the existing South Trailer Parking area and construction of a new containment area the total site capacity for the storage of roll-offs and trailers will be temporarily reduced until the replacement parking area is constructed. The total site capacity will be temporarily reduced by 58 roll-offs or 29 tankers from the existing South Trailer Parking Area. During the closure of the South Trailer Parking area and the construction of the New Full Trailer Parking Area, the Stabilization Full Trailer Parking Area will have sufficient capacity to store the containers from the South Trailer Parking area. The following table provides a summary containment capacities of the South Trailer Parking area and the New Full Trailer Parking Area.

LOCATION	WASTE TYPE	CONTAINER TYPE	STORAGE CAPACITY	AVAILABLE SECONDARY CONTAINMENT (gallons)	REQUIRED SECONDARY CONTAINMENT (gallons)
Existing South Trailer Parking Area	Liquid/Solid	tankers/roll-offs	58 roll-offs or 29 tankers	82,481	68,521
New Full Trailer Parking Area	Liquid/Solid	tankers/roll-offs	48 roll-offs or 24 tankers	66,583	47,449

Note: A maximum of 55,000 gallons of incinerable liquids in tankers will be stored in the New Full Trailer Parking Area and the Stabilization Trailer Parking Area.

2.4 EMPTY TRAILER PARKING AREA

The Empty Trailer Parking Area is used to stage trailers following the off-loading of wastes. The existing Empty Trailer Parking area, currently located southeast of the Leachate Tank Farm (LTF), will be removed. Empty trailers will continue to be stored in an existing area northwest of SLF-12.

2.5 LOADING/UNLOADING RAMPS FOR THE SLF-10 LEACHATE BUILDING AND SLF 1-11 OIL/WATER SEPARATOR BUILDING.

Existing loading/unloading ramps are provided at the SLF-10 Leachate Collection Building west of SLF-10 and the SLF 1-11 Oil/Water Separator Building east of the LTF to provide facilities for vehicle loading/unloading of the tanks within these buildings. Although these buildings and their unloading ramps are not located within the footprint of RMU-2, access to the ramps will be impacted by the RMU-2 project. New ramps will be installed south of the SLF-10 Leachate Collection Building and east of the SLF 1-11 Oil/Water Separator Building and will generally be the same dimensions as the existing ramps. Therefore, the secondary containment capacities will only change slightly. Following construction of the new ramps, the existing ramps will be closed in accordance the closure requirements included in the Site-Wide Part 373 Permit. In general, closure activities to be implemented for the existing ramps will include the following:

- Following construction of the new ramps, the existing ramps will be decontaminated by sweeping or vacuuming the floors, followed by washing the floors. Any wastewater generated by the washing will be treated on site at the AWT facility.
- Once the cleaning process has concluded, the ramp structures will be demolished. The containment demolition debris will be landfilled on site or shipped to an appropriate waste management facility.
- Once the concrete is removed, the soil will be inspected for signs of contamination. Any soil showing contamination will be sampled in in accordance with the Sitewide Closure Plan. Depending on the characterization results, the soils will either be removed and disposed of in a RCRA and/or TSCA permitted landfill on-site or off-site or disposed of in a solid waste permitted landfill off-site.
- Soils underlying the ramps will be excavated as part of RMU-2 construction, in accordance with the requirements of the RMU-2 Soil Excavation Monitoring and Management Plan.

It is anticipated that the ramp at the SLF-10 Lift Station will be replaced for the construction of Cell 20 of RMU-2 and the ramp at the SLF 1-11 Oil/Water Separator Building will be replaced for the construction of Cell 15.

2.6 UPGRADE T-150 LIFT STATION AND NEW TRANSFER LINE

Leachate collected from both RMU-1 and RMU-2 will be pumped to the existing SLF-12 lift station (tank T-150), which will be upgraded to accommodate the anticipated flow rates. To manage this peak flow rate, the existing SLF-12 lift station pump will be replaced with two Godwin GSP300HV or equivalent submersible pumps.

Leachate pumped from the SLF-12 lift station will discharge to the three existing storage tanks located in the LTF for temporary storage prior to treatment at the aqueous wastewater treatment system (AWTS) facility. Two new double-walled HDPE leachate underground transfer lines will be installed from the SLF-12 Lift Station to the LTF during construction of Cell 18. Based on the results of the LTF storage capacity analysis presented in Appendix F of the Engineering Report (February 2013), the temporary storage and treatment capacities of the LTF and AWTS, respectively, are sufficient to manage the anticipated leachate volumes collected from RMU-2.

2.7 REPLACEMENT OF DRUM MANAGEMENT BUILDING

The existing Drum Management Building, located west of RMU-1, is located within the footprint of RMU-2. The new DMB will be constructed prior to closure of the existing DMB and is to be located east of RMU-1. Drum management capacities and procedures in the current Part 373 Permit will be utilized until the New DMB is constructed and certified. Storage capacities and operations will not be affected during construction of the new DMB. The new Drum Management Building will include facilities for storage of drums and other containers, offices, a laboratory and mechanical room. Provisions will also be included for fuels bulking (as is

currently performed in the existing Drum Management Building) and transformer decommissioning (to be relocated from the existing T.O. Building). The new DMB will be operated according to the operating procedures for the existing DMB. Following construction of the new Drum Management Building, the existing Drum Management Building will be closed in accordance with the closure requirements included in the Site-Wide Part 373 Permit. In general, closure activities to be implemented for the existing Drum Management Building will include the following:

- An initial inventory of all wastes within the building will be performed to verify accuracy with current records, to confirm the integrity of all waste containers for removal and to identify, by visual observation, any potentially contamination areas.
- All wastes will then be removed from the building and either relocated to the new Drum Management Building, disposed on site or transported off site to an approved hazardous waste management facility.
- Following removal of all waste containers, the Drum Management Building will be decontaminated by sweeping or vacuuming the floors, followed by washing the floors. Any wastewater generated by the washing will be treated on site at the aqueous wastewater treatment (AWT) facility. Once the cleaning process has concluded, the area will be inspected to verify no staining, PCB wipe testing will be performed to confirm PCB decontamination, the the building will be demolished. The building demolition debris will be landfilled on site or shipped to an appropriate waste management facility.
- Once the concrete is removed, the soil will be inspected for signs of contamination. Any soil showing contamination will be sampled in in accordance with the Sitewide Closure Plan. Depending on the characterization results, the soils will either be removed and disposed of in a RCRA and/or TSCA permitted landfill on-site or off-site or disposed of in a solid waste permitted landfill off-site.
- The soils underlying the Drum Management Building will be excavated as part of RMU-2 construction, in accordance with the requirements of the RMU-2 Soil Excavation Monitoring and Management Plan. Following completion of the closure activities, CWM will submit to the NYSDEC a certification that the Drum Management Building has been closed in accordance with the specifications in the Site-Wide Part 373 Permit within 60 days of final closure. Because existing operations will continue at the new Drum Management Building, it is anticipated that most mobile and stationary equipment utilized in the existing Drum Management Building will be transferred to the new building for continued use. Any equipment not planned for reuse will be cleaned, tested for alternate use or managed in accordance with the Site-Wide Part 373 Permit requirements.

The capacity of the existing Drum Management Building is provided in the following table. These capacities will be maintained during the construction of the new Drum Management Building. The capacity of the new Drum Management Building upon completion is also provided below and is included in proposed modifications to Appendix D-1, Attachment D of the

Sitewide Part 373 Permit include in the Permit Modification Application for RMU-2 (February 2013).

Current Permitted Capacity of Drum Management Building

LOCATION	WASTE TYPE	CONTAINER TYPE	STORAGE CAPACITY	AVAILABLE SECONDARY CONTAINMENT (gallons)	REQUIRED SECONDARY CONTAINMENT (gallons)
Area I	Liquid/Solid	drums	688 55-gal drums	4,675	3,784
Area II	Liquid/Solid	drums	320 55-gal drums	1,989	1,760
Area III	Liquid/Solid	drums	36 55-gal drums	251	198
Area IV	Liquid/Solid	drums	36 55-gal drums	251	198
Area V (Floor Trench System)	Liquid	drums	117 55-gal drums	648	644
	Solid	drums	1,376 55-gal drums	NA	NA
Drum Building West Ramp	Liquid	tankers	2-5,500-gal tankers	22,118	10,104
Truck Loading/Unloading Area & Ramp	Solid	drums	1,040 55-gal drums	NA	NA
Area VI, Sections 1, 2 & 3	Solid	drums	956 55-gal drums	NA	NA

Proposed Capacity for New Drum Management Building

LOCATION	WASTE TYPE	CONTAINER TYPE	STORAGE CAPACITY	AVAILABLE SECONDARY CONTAINMENT (gallons)	REQUIRED SECONDARY CONTAINMENT (gallons)
Area 1	Liquid/Solid	drums	504 55-gal drums	9,011	2,772
Area 2	Liquid/Solid	drums	1008 55-gal drums	6,667	5,544
Area 3	Liquid/Solid	drums	1008 55-gal drums	6,914.6	5,544
Area 4	Liquid/Solid	drums	96 55-gal drums	1,244.7	528
Area 5	Liquid/Solid	drums	96 55-gal drums	765.2	528
Area 6	Liquid/Solid	drums	336 55-gal drums	3,768	1,848
Area 7 Fuels Transfer Ramp	Liquid	tankers	2-5,500-gal tankers	21,392	10,681
Area 8 Transformer Flush	Liquid	Drums/ transformers	2,065 gallons	2,065.2	2,065
Area 9 Truck Loading/Unloading Area & Ramp	Liquid/Solid	drums	1,040 55-gal drums	95,681	5,720

2.8 STABILIZATION TRAILER PARKING AREA

The existing Stabilization Trailer Parking Area consists of three separate concrete secondary containment areas, which are located west of the Stabilization Building. The south and west areas (also known as Areas III and IV) are currently permitted for bulk container storage similar to the Full Trailer Parking Area. The north area (also known as Areas I and II) is currently used for storage of non-hazardous materials. The south and west areas are located within the footprint of RMU-2. Prior to RMU-2 construction, the existing north area will be closed in accordance with the Site-Wide Part 373 Permit and removed and a new longer concrete secondary containment will be installed in that location, designed similar to the existing areas.

Following construction of the new Stabilization Trailer Parking Area, the existing west and south Stabilization Trailer Parking Areas will be closed in accordance with the closure requirements included in the Site-Wide Part 373 Permit. In general, closure activities to be implemented for the Stabilization Trailer Parking Areas will include the following:

- An initial inventory of all wastes within the west and south Stabilization Trailer Parking Areas will be performed to verify accuracy with current records, to confirm the integrity of all waste containers for removal and to identify, by visual observation, any potentially contamination areas.
- All trailers will be transported to the new Stabilization Trailer Parking Area or alternative area.
- Following removal of all waste containers, the existing west and south Stabilization Trailer Parking Areas will be decontaminated by sweeping or vacuuming the floors, followed by washing the floors. Any wastewater generated by the washing will be treated on site at the AWT facility.
- Once the cleaning process has concluded, the structures will be demolished. The containment demolition debris will be landfilled on site or shipped to an appropriate waste management facility.
- Once the concrete is removed, the soil will be inspected for signs of contamination. Any soil showing contamination will be sampled in in accordance with the Sitewide Closure Plan. Depending on the characterization results, the soils will either be removed and disposed of in a RCRA and/or TSCA permitted landfill on-site or off-site or disposed of in a solid waste permitted landfill off-site.
- Soils underlying the west and east Stabilization Trailer Parking Areas will be excavated as part of RMU-2 construction, in accordance with the requirements of the RMU-2 Soil Excavation Monitoring and Management Plan.

During the closure of the north Stabilization Trailer Parking area and construction of a new containment area the total site capacity for the storage of roll-offs will be temporarily reduced until the replacement parking area is constructed. The total site capacity will be temporarily reduced by 20 roll-offs from the north Stabilization Trailer Parking area. The south and west Stabilization Trailer Parking Areas (Areas III and IV) will continue to be utilized until the new

Stabilization Full Trailer Parking Area is complete. Following completion of the New Stabilization Full Trailer Parking Area, Trailer Parking Areas III and IV will be closed in accordance with the Site-Wide Closure Plan and demolished. The following table provides a summary of the existing Stabilization Trailer Parking area containment capacity and containment capacity upon demolition of the existing containment areas and construction of the New Stabilization Trailer Parking Area.

LOCATION	WASTE TYPE	CONTAINER TYPE	STORAGE CAPACITY	AVAILABLE SECONDARY CONTAINMENT (gallons)	REQUIRED SECONDARY CONTAINMENT (gallons)
Stabilization Facility					
Existing Trailer Parking (north) Area I	Solid	Roll-offs	6 roll-offs	NA	NA
Existing Trailer Parking (north)Area II	Solid	Roll-offs	14 roll-offs	NA	NA
Existing Trailer Parking (west) Area III	Liquid/Solid	Roll-offs	19 roll-offs	39,273	27,887
Existing Trailer Parking (south) Area IV	Liquid/Solid	Roll-offs	9 roll-offs	19,636	13,668
New Stabilization Full Trailer Parking Area	Liquid/Solid	tankers/roll-offs	37 roll-offs or 26 rolloffs and 11 tankers (2,500 gal)	56,106	41,977

Note: A maximum of 55,000 gallons of incinerable liquids in tankers will be stored in the New Full Trailer Parking Area and the Stabilization Trailer Parking Area.

2.9 RMU-1 LIFT STATION AND FORCEMAINS

Construction of RMU-2 will require the closure and demolition of the RMU-1 lift station, including tank T-160, and removal of an underground pipeline currently used to transfer leachate from the RMU-1 lift station to the leachate tank farm. The RMU-1 lift station and tank T-160 will be closed in accordance with the Site-Wide Closure Plan in CWM's Site-Wide Permit.

Once the closure process for the lift station and tank T-160 is complete, the tank and building will be demolished. The demolition debris will be landfilled on site or shipped to an appropriate waste management facility. Once the concrete is removed, the soil will be inspected for signs of contamination. Any soil showing contamination will be sampled in in accordance with the Sitewide Closure Plan. Depending on the characterization results, the soils will either be removed and disposed of in a RCRA and/or TSCA permitted landfill on-site or off-site or disposed of in a solid waste permitted landfill off-site.

The existing RMU-1 underground leachate forcemains in the RMU-2 footprint will be removed by excavation following the RMU-2 Project Specific Soil Excavation Monitoring and Management Plan.

The RMU-1 lift station is located at a low point along the RMU-1 leachate forcemains. A new leachate transfer manhole will, therefore, be installed at this low point and to the east of the RMU-1 lift station. The purpose of the new manhole is to provide a means for leak detection at the forcemain low point. This will allow the majority of the RMU-1 forcemains to remain in service without modification. Two new, identical underground forcemains will be installed from an existing manhole at the northwest corner of RMU-1 to a junction manhole north of RMU-2 Cells 15 and 16. At this junction manhole, flow from the RMU-1 leachate forcemains will combine with flow from RMU-2 Cells 15 and 16 and then continue flowing to the west to the SLF 12 lift station. The proposed layout for the RMU-2 leachate forcemains, as well as modifications to the RMU-1 leachate forcemains are shown on Permit Drawing No. 26.

2.10 HEAVY EQUIPMENT MAINTENANCE BUILDING

The existing Heavy Equipment Maintenance Building, located approximately 250 feet west of RMU-1, would be relocated to the area north of Fac Ponds 1/2. The existing structure, foundation and all existing utilities would be removed to facilitate construction of RMU-2. The new Heavy Equipment Maintenance Building would include a truck bay and office area, and space for maintenance repair equipment. Operations associated with the existing Heavy Equipment Maintenance Building would be maintained at the new location. Soils underlying the building will be excavated as part of RMU-2 construction, in accordance with the requirements of the RMU-2 Soil Excavation Monitoring and Management Plan.

2.11 EMERGENCY RESPONSE GARAGE

The existing Emergency Response Garage, located west of RMU-1, would be relocated to an existing building west of RMU-2 (i.e. Truck Wash Building). The existing structure, foundation and all existing utilities would be removed to facilitate construction of RMU-2. Operations associated with the existing Emergency Response Garage would be moved and maintained at the new location. Soils underlying the garage will be excavated as part of RMU-2 construction, in accordance with the requirements of the RMU-2 Soil Excavation Monitoring and Management Plan.

2.12 MCARTHUR AND "M" STREETS

To facilitate construction of RMU-2, approximately 2,000 linear feet of site roadway (portions of McArthur Street and "M" Streets) would be removed. Although portions of the roads may remain in service for use by waste trucks going to RMU-1 during the initial phase of development and by construction vehicles, the road surface material, road base and all above and belowground utilities along the portions of the roads impacted by RMU-2 would be removed. Removal and excavations in this area will be performed in accordance with the requirements of the RMU-2 Soil Excavation Monitoring and Management Plan.

2.13 EXISTING UTILITIES AND COMMUNICATIONS SERVICES

In November 2002, Blasland, Bouck & Lee, Inc. (BBL) performed a utilities investigation to identify all existing above and belowground utilities impacted by the construction of RMU-2.

There are several underground water supply pipelines and electrical service lines within the proposed RMU-2 footprint. All existing utilities would be removed during either relocation of existing facilities or prior to construction of RMU-2. Excavation would be carefully conducted so that the presence of any previously unidentified utilities can be addressed. Since no underground utilities would be left beneath the RMU-2 landfill, landfill stability would not be affected and the potential for contamination migration along pipelines would not exist. Underground utilities will be excavated as part of RMU-2 construction, in accordance with the requirements of the RMU-2 Soil Excavation Monitoring and Management Plan. Replacements for the current active utilities will be installed prior to removal of the existing utilities; therefore, site operations will not be affected.

2.14 METEOROLOGICAL TOWER

The existing MET tower, located north of SLF-1 through SLF-6, would be relocated during construction of subsequent phases of RMU-2 so that its operation would not be affected by the height of RMU-2. The new location would be determined by CWM, based on approval from the NYSDEC and the DOH.

2.15 RAILROAD BED AREA

In April 1994, a routine surface-water sampling event near the intersection of "M" Street and MacArthur Street at the Model City Facility identified the presence of elevated concentrations of VOCs. A surface-water sampling investigation was performed by CWM both upstream and downstream of the intersection to identify the source and extent of the contamination. The investigation determined that the probable source of the contamination was an abandoned railroad bed located west of the intersection. A supplemental investigation of the abandoned railroad bed was performed in 1997. The supplemental investigation determined that low level VOC contamination (less than 100 ppm) is confined to the Glacial Till layer immediately below the abandoned railroad bed, approximately 25 feet north and south of the railroad bed, extending east to the edge of MacArthur Street and west to the location of former Tank Farm E. Excavations in this area within the RMU-2 footprint will follow the RMU-2 Project Specific Soil Excavation Monitoring and Management.

2.16 CLOSURE/REMOVAL OF DOD TRASH PIT

A burn pit/trash pit was discovered by CWM during an excavation to install leachate lines for the leachate hydraulics controls upgrade (LHCU). Three drums, old batteries, and other debris were found in the pit. CWM excavated through the burn pit but did not remove all of the material. The pit is located near the Fire Water Storage Tank.

The Department of Energy (DOE) investigated the Trash Pit by geophysical investigation, test trenches, direct-push borings, soil, and groundwater sampling. Impacts include lithium, boron, and VOCs. DOE indicated in a Remedial Investigation Report/Management Plan that the preferred remedy is removal with confirmatory soil sampling. Excavations in this area within the RMU-2 footprint will follow the RMU-2 Project Specific Soil Excavation Monitoring and Management Plan.

2.17 SITE CLEARING ACTIVITIES

Prior to construction of RMU-2 and the aforementioned relocated facilities, the limits of work will be surveyed and staked. Erosion control measures will be established prior to any soil disturbance. The areas within the limits of work will then be cleared and grubbed to remove and dispose all objectionable material, such as trees, stumps, stones, brush, shrubs, roots, rubbish and other debris. Trees and other large woody debris will be chipped. Trees and stumps too large to be chipped will be properly disposed. Any existing groundwater monitoring wells or piezometers in the proposed areas for construction will either be marked for protection or abandoned in accordance with applicable regulations.

2.18 EXCAVATION AND LANDFILL SUBBASE

After site preparation has been completed, excavation for RMU-2 would proceed to the subbase grade. The average depth of excavation is approximately 12 feet. On-site visual inspection would confirm the suitability of the subbase and any need for over-excavation of unsuitable material. Compacted clay (that may be taken from approved on-site stockpiles or off-site sources) would be placed in over-excavated areas. A rigid Construction Quality Assurance (CQA) Plan, meeting the requirements of the USEPA and NYSDEC, would be implemented during preparation of the subbase and all aspects of landfill construction.

Hydrostatic uplift calculations in the RMU-2 Engineering Report were based on current available data. Prior to construction, water levels would be confirmed to verify hydrostatic uplift assumptions by the design engineer or qualified geotechnical engineer. Piezometers would be monitored prior to sump excavation to determine if the water level is the same or lower than the design water table. If the same or lower, construction would proceed to design grades, otherwise further evaluation would be conducted before proceeding with construction.

Excavated material would be segregated and stockpiled on site at the Model City Facility for future appropriate uses, including construction of the exterior berms, the compacted clay secondary liner system and the final cover. Additional clay for use in the liner system (described below) would be obtained from existing on-site stockpiles or off-site sources. The exact sources of this clay are not currently known, but would be obtained on a contract basis from appropriately permitted or exempt sources.

During excavation activities to achieve RMU-2 design subgrade elevations, the possibility of encountering contaminated soils within the Glacial Till layer exists. This contamination may be chemical (i.e., volatile organic compounds [VOCs]) or radiological. All excavated contaminated soils would be segregated from soils that would potentially be used in construction of RMU-2. Excavated contaminated soils would be disposed in accordance with all applicable requirements. All excavation and soil disturbance performed as part of construction for RMU-2, relocated facilities or other associated activities, shall be completed in accordance with the requirements of the RMU-2 Soil Excavation Monitoring and Management Plan.

3.0 SURFACEWATER AND LEACHATE MANAGMENT

3.1 SURFACEWATER MANAGEMENT

A Stormwater Pollution Prevention Plan (SWPPP) will be prepared for the development of RMU-2 and related facilities. Surface-water management measures during construction of individual cells (i.e., before placement of wastes into the cells) would involve sediment control barriers consisting of rock check dams, silt fences and/or hay bales. The number and location of these would be determined by the progress of construction operations. All silt fences and hay bales would be removed following re-vegetation of areas that have been disturbed as a result of construction operations. During construction, surface water would be directed to the Model City Facility's existing surface-water collection system. The existing surface-water collection system is monitored for hazardous constituents according to the Model City Facility's *SurfaceWater Sampling and Analysis Plan*. During operation of RMU-2, precipitation entering the cells would be collected in the leachate collection system and treated as leachate.

Water from the final cover system would be treated as surface water. All surfacewater runoff from the final cover system would be directed to the existing stormwater management system and retention basins. The proposed grading for RMU-2 would cause a portion of the perimeter ditch along the western edge of RMU-1 to be unable to gravity drain along the surface to any stormwater basin. Consequently, a storm sewer system would be installed between RMU-1 and RMU-2 to convey runoff that enters this segment of the perimeter ditch to the existing V01 basin. The storm sewer system would consist of a single drop inlet (consisting of pre-cast concrete catch basin structure and a frame and inlet grate) and a series of pre-cast concrete manholes interconnected by smooth-bore corrugated HDPE piping. The storm sewer system would convey flow along the existing RMU-1 perimeter berm and would daylight at the northwest corner of RMU-1. The storm sewer system has been designed to convey the 25-year, 24-hour storm event estimated peak discharge under newly graded conditions.

Ground surfaces surrounding all other areas that will be disturbed as part of the RMU-2 project (e.g., relocated facilities and Fac ponds) will be regraded as necessary to promote drainage to the existing stormwater management system and appropriate stormwater basins. Provisions for increasing the capacity of the stormwater retention areas will be completed as needed based on the 25-year, 24-hour storm event.

3.2 LEACHATE MANAGEMENT

During the transition of landfill operations from RMU-1 to RMU-2 the amount of leachate generated and subsequently treated at the AWT facility will decrease. As of the end of 2012, approximately 10.5 acres of RMU-1 are still open and actively receiving waste. The volume of leachate generated from RMU-1 during 2012 (10.5 acres active area) was approximately 10.3 million gallons, while the average amount of leachate generated by RMU-1 the previous five years (21.8 acres active area) was approximately 15.6 million gallons. Preliminary plans are that

approximately 4.5 acres of final cover will be constructed in 2013 with the remaining 5.5 acres constructed in subsequent years depending on waste receipts. Therefore, leachate and contact water generated from the open areas of RMU-1 will be significantly reduced during development of RMU-2.

RMU-2 will be developed in phases over a number of years as landfill airspace is needed. Cell 20 (approximately 6.1) will be constructed during the first phase of landfill development, followed by construction of Cells 18, 19, 17, 16 and 15. Leachate from Cell 20 will be conveyed by double contained forcemain to the primary leachate vault for RMU-1 Cell 2 and tie into the forcemain for RMU-1 Cells 2, 4, 6, 9/10, 11/13, and 12/14. The existing RMU-1 lift station and forcemains have adequate capacity to manage leachate generated from Cell 20. The RMU-1 lift station and forcemain to the leachate tank farm will remain in use until construction of Cell 17. A Leachate Level Compliance Plan (LLCP) for RMU-2 Cell 20 will be prepared, submitted, and approved prior to acceptance of waste in Cell 20. The LLCP for Cell 20 will show that the existing RMU-1 leachate management system and the facility's Aqueous Wastewater Treatment System are adequate to manage leachate from the addition of Cell 20.

New forcemains (West Leachate Forcemain Transfer Line) to manage leachate from Cells 17, 18, and 19 of RMU-2 will be constructed during construction of Cell 18. The new RMU-2 forcemains will convey leachate to the SLF-12 lift station which will be upgraded during construction of Cell 18. The existing above ground leachate forcemains from the SLF-12 lift station to the leachate tank farm will be replaced with new underground forcemains during the Cell 18 construction season.

For construction of Cell 17, the RMU-1 lift station will be closed and demolished and new leachate forcemains (North Leachate Forcemain Transfer Line) will be constructed along the north perimeter berm of RMU-2 to replace the existing forcemains from the RMU-1 lift to the leachate tank farm. The new forcemains will convey leachate to the upgraded SLF-12 lift station.

LLCPs for RMU-2 will be prepared, submitted, and approved for each phase of landfill development prior to acceptance of waste in each new phase.

ATTACHMENT 1

RMU-2 CONCEPTUAL CONSTRUCTION SCHEDULE

CWM Chemical Services, LLC.
Model City Facility
Niagara County, New York

RMU-2 Conceptual Construction Schedule (Initial Phases)

Task ID#	Construction/Closure Description	Year 1												Year 2												Year 3												Year 4												Year 5												Year 6											
		Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
1	Complete FP8 Remediation Berm/Close			🟦	🟦	🟦																																																																			
2	RMU-1/2 Control Upgrades			🟩	🟩	🟩																																																																			
3	Construction of Cell 20 (6.1 A)					Cell 20 Constructon	🟥	🟥	🟥	🟥	🟥						Cell 20 Construction	🟥	🟥	🟥	🟥	🟥																																																			
4	Construction of Fac Pond 5					Construct FP 5	🟪	🟪	🟪	🟪	🟪	🟧				🟧					🟩			🟧				🟧					🟩		🟧					🟧					🟩		🟧					🟧					🟩		🟧					🟧					🟩		🟧		
5	Construct Fac Pond 5 Transfer Line						Transfer Line	🟪	🟪																																																																	
6	Remove/Close Fac Pond 3			⬜					🟨								Pump to FP 1/2	🟦	🟦	🟦	🟦	🟦	🟦																																																			
7	Construct New SLF-10 Loading Ramp						🟪	🟪																																																																	
8	Demo Existing SLF-10 Loading Ramp								🟥	🟥																																																															
9	Construct Cell 18 (5.8 A)																												Construct Cell 18	🟥	🟥	🟥	🟥	🟥	🟥																																																
10	Construct West Forcemain Transfer Line																													Forcemain Line	🟥	🟥																																																					
11	Demo/Close Existing Full Trailer Parking																												🟥	🟥																																																		
12	Construct New Full Trailer Parking Area																														🟪	🟪																																														
13	Upgrade Tank T-150 Lift Station																																🟪	🟪																																											
14	New Tank T-150 Transfer Line to LTF																																🟪	🟪																																											
15	Construct Cell 19 (5.8 A)																																																				Construct Cell 19	🟥	🟥	🟥	🟥	🟥	🟥																					
16	Build New Drum Building																																																			Drum Building Construction	🟦	🟦	🟦	🟦	🟦	🟦	🟦	🟦	🟦	🟦	🟦	🟦	🟦	🟦	🟦							
17	Relocate utilities																																																				Utilities	🟥	🟥	🟥	🟥	🟥	🟥																					
18	Wetlands Mitigation								Wetlands	▨	▨																																																																		

Treated Wastewater Management

- Filling of Fac Ponds 1/2 from Aqueous Wastewater Treatment System (AWTS) is continuous throughout construction of Fac Pond 5 and Closure of Fac Pond 3

⬜ - Fill Fac Pond 3 from Fac Ponds 1/2
🟨 - Discharge from Fac Pond 3 to SPDES Outfall 001
🟧 - Fill Fac Pond 5 from Fac Ponds 1/2
🟩 - Discharge Fac Pond 5 to SPDES Outfall 001

Notes: The above schedule is a conceptual schedule based on the anticipated sequencing of construction and closure of permitted units and may change based on the timing of the modification to the Sitewide Part 373 Permit.