



November 17, 2020

To: Benjamin McPherson (NYSDEC)

From: John Black

CC: Jon Williams (Riverview); John Yensan (OSC); Craig Slater (CS Law); Todd Waldrop (Inventum) and James Edwards (Inventum)

RE: South Ditch Road Restoration and Improvement
Surface Water System Maintenance, Phase 3 Work Plan
Riverview Innovation & Technology Campus, Inc.
Brownfield Cleanup Program Site No. C915353
Town of Tonawanda, New York

Inventum Engineering, P.C. (Engineering), on behalf of Riverview Innovation & Technology Campus, Inc. (Riverview), is submitting this Interim Remedial Measures (IRM) Work Plan for improvements to the surface water management system along the South Ditch to the New York State Department of Environmental Conservation (NYSDEC) for the Riverview Brownfield Cleanup Program (BCP) Site (#C915353) located at 3875 River Road, Tonawanda, New York.

Background and Purpose

The South Drainage Ditch Road was constructed by the Tonawanda Coke Corporation (TCC) to provide a continuous elevated “berm” to direct surface water from the south coal yard to a series of Catch Basins (CB03 through CB07). The South Ditch Road serves(ed) a secondary purpose, to provide a safe means of access and egress to the south ditch, catch basins and the east side of the coal yards. The road had deteriorated over the course of the TCC Operations. At the time Riverview acquired the property, several portions of the road had been destroyed and there were numerous locations where surface runoff bypassed the collection system as flowed directly to the south ditch. Riverview immediately and has continuously redirected the runoff from the coal yard and catch basins using a series of check dams along the compromised road. The check dams have been effective, but cannot overcome the fact that large portions of the road surface are at elevations below the catch basin inlets.



Photograph No. 1
View Looking West

Catch Basin #03 in Grasses on Left Side of Photograph, inlet is higher than the road and the south ditch
on the Right Side of the Photograph
Original Road was Level and 6-inches higher than the Catch Basin #03 Inlet





Photograph No. 2
Catch Basin No. 3
Note: Gravel Check Dams





Photograph No. 3
Accumulations of Water Rising to potentially Flow Around Check Dams at CB-03





Photograph No. 4

Catch Basin No. 4 Elevation above South Ditch Access Road

No water can reach catch basin before potentially overflowing directly to South Ditch





Photograph No. 5

Area Between Catch Basins

Road completely degraded, no pavement remains. No control of surface water flow to the south ditch remains in this section of road because it is lower than all nearby catch basins.





Photograph No. 6
Bend in South Ditch Road
Pavement Intermittently Degraded or Missing.





Photograph No. 7
South Ditch Road East of Curve
TCC Road was Completely Degraded





Photograph No. 8
East End of South Ditch Road
Pavement Missing until Point Near Air Monitoring Station

The purpose of this phase of the IRM work plan is to restore the South Ditch Road to the original function of redirecting the stormwater to the Catch Basins. It is not intended to replace the asphalt pavement, but the function can be replaced with a berm created with crushed concrete from Swift River. The Catch Basins in the edge of the Coal Yard allow settling and retention of surface water. The settling that would occur prior to flow into the catch basins protects the surface water system, and is considered critical to allow the runoff to continue to meet the Action Levels at Outfalls #002 and #004.

The barrier must be substantial and continuous to avoid surface water accumulations from circumventing the barrier. A 12-foot wide berm would allow access for the daily inspections, monthly stormwater inspections, and access for maintenance in all weather conditions.

Proposed Phase 3 Scope of Work

Based on the observations of the system, documented in the Photographs above the following recommendations are made:

1. Mobilization – The work for the South Drainage Improvement requires no equipment that is not currently on the property; a dozer and smooth wheel compactor. The mobilization required in the procurement of the materials required, surveying of the road and catch basins, and coordination of all onsite and transportation activities.



2. Preparation – The road surface is extremely irregular. The ponded water must be removed, the deeper depressions must be filled with compacted free draining borrow from the property, and the wet materials must be removed and placed in the coal yard to drain.
3. Geotextile – A layer of geotextile will be placed to provide two functions; (1) prevent loss of the overlying material into the subgrade in the multiple sections of missing pavement, and (2) a demarcation layer to differentiate the new aggregate from the preexisting materials.
4. Recycled Material Fill – The berm/road will be constructed using recycled material from Swift River (Appendix A). This material was previously approved by NYSDEC on May 1, 2020. The materials meet the import requirements:
 - 1) Contains less than 10% material that would pass a size 80 sieve;
 - 2) Swift Rivers holds NYSDEC registration (as a construction and demolition debris processing facility); and
 - 3) Material conforms to the requirements of Section 304 of the New York State Department of Transportation *Standard Specifications Construction and Materials Volume 2*. [https://www.dot.ny.gov/main/business-center/engineering/specifications/english-spec-repository/2020_1_specs_usc_tc_vol2.pdf].
5. The recycled materials are stable under the range of seasonal conditions that will exist at the Riverview Site. The fill will be placed to raise the South Ditch Road to an elevation in each section of roadway above the Catch Basins in the associated section of road. The material can be delivered and dumped on the geotextile, limiting the amount of earthmoving required.

The work can be completed within 3 weeks of procurements as long as Swift River can deliver the required volume in that time frame. The materials to be used are the same that have been previously approved for import to the BCP Site. Procurement and delivery will be requested as soon as the south coal yard is graded and the South Ditch has been cleaned. It is assumed that 2,600 cubic yards of material will be required. The Import request is for 3,000 cubic yards to provide materials in the event additional soft sections are identified during reconstruction.



Appendix A





**NEW YORK STATE
DEPARTMENT OF ENVIRONMENTAL CONSERVATION**



Request to Import/Reuse Fill or Soil

This form is based on the information required by DER-10, Section 5.4(e). Use of this form is not a substitute for reading the applicable Technical Guidance document.

SECTION 1 – SITE BACKGROUND

The allowable site use is:

Have Ecological Resources been identified?

Is this soil originating from the site?

How many cubic yards of soil will be imported/reused?

If greater than 1000 cubic yards will be imported, enter volume to be imported:

SECTION 2 – MATERIAL OTHER THAN SOIL

Is the material to be imported gravel, rock or stone?

Does it contain less than 10%, by weight, material that would pass a size 80 sieve?

Is this virgin material from a permitted mine or quarry?

Is this material recycled concrete or brick from a DEC registered processing facility?

SECTION 3 - SAMPLING

Provide a brief description of the number and type of samples collected in the space below:

Example Text: 5 discrete samples were collected and analyzed for VOCs. 2 composite samples were collected and analyzed for SVOCs, Inorganics & PCBs/Pesticides.

If the material meets requirements of DER-10 section 5.5 (other material), no chemical testing needed.

SECTION 3 CONT'D - SAMPLING

Provide a brief written summary of the sampling results or attach evaluation tables (compare to DER-10, Appendix 5):

Example Text: Arsenic was detected up to 17 ppm in 1 (of 5) samples; the allowable level is 16 ppm.

If Ecological Resources have been identified use the "If Ecological Resources are Present" column in Appendix 5.

SECTION 4 – SOURCE OF FILL

Name of person providing fill and relationship to the source:

Location where fill was obtained:

Identification of any state or local approvals as a fill source:

If no approvals are available, provide a brief history of the use of the property that is the fill source:

Provide a list of supporting documentation included with this request:

The information provided on this form is accurate and complete.



Signature

Date

Print Name

Firm

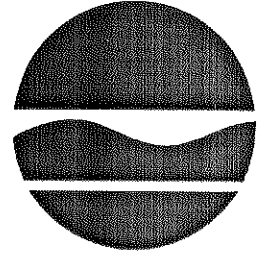
New York State Department of Environmental Conservation

Division of Solid & Hazardous Materials, Region 9

270 Michigan Avenue, Buffalo, New York, 14203-2915

Phone: (716) 851-7220 • FAX: (716) 851-7226

Website: www.dec.ny.gov



Alexander B. Grannis
Commissioner

February 25, 2009

Mr. Kenneth H. Rawe, Jr., P.E.
Swift River Associates, Inc.
4051 River Road
Tonawanda, New York 14150

Dear Mr. Rawe:

**Registered Facility #15W01
Adding BUD Corian material to process**

Enclosed is a validated copy of your registration form submitted to the New York State Department of Environmental Conservation pursuant to 6 NYCRR Part 360, effective October 9, 1993. Previously, this facility has been registered to process only recognizable uncontaminated concrete, asphalt pavement, brick, soil or rock and to process uncontaminated unadulterated wood..

With the newly submitted registration form, the facility may also process source separated, nonputrescible solid waste recyclables. Included in "recyclables" is the waste Corian countertop composite material produced by E.I. DuPont de Nemours & Co. approved for use in the Department's Beneficial Use Determination (BUD) # 924-9-15, dated February 10, 2009.

This letter only acknowledges receipt of your registration form and does not, in any way, verify that the information which you provided on the form is true or correct.

You are reminded that 6 NYCRR Part 360 contains various requirements that must be followed to warrant your facility's continued status as a registered facility. This information was provided to you in the registration package.

STATE DEPARTMENT OF ENVIRONMENTAL CONSERVATION
SOLID & HAZARDOUS MATERIALS

REGISTRATION FORM FOR A
SOLID WASTE MANAGEMENT FACILITY

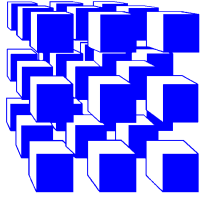
Please read and follow all instructions before
completing this registration form

PLEASE TYPE OR PRINT CLEARLY THIS IS NOT A UPA PERMIT

DEPARTMENT USE ONLY

DEC REGISTRATION # 15601
DEC ADMINISTRATION # _____
DATE RECEIVED 2/18/89

<p>1. FACILITY NAME AND LOCATION <u>Swift River Associates, Inc.</u></p>	<p>2. FACILITY OWNER'S NAME <u>Swift River Associates, Inc.</u></p>
<p>Street <u>4051 River Road</u></p>	<p>Mailing Address <u>4051 River Road</u></p>
<p>City/Village <u>Ionawanda</u></p>	<p>City/Town/Village <u>Ionawanda</u></p>
<p>Town _____ County <u>Ionawanda</u> <u>Eric</u></p>	<p>State/Zip Code <u>New York 14150</u></p>
<p>Telephone Number <u>(716) 875-0902</u></p>	<p>Telephone Number <u>(716) 875-0902</u></p>
<p>3. FACILITY OPERATOR'S NAME (if different) <u>SAME</u></p>	<p>4. SITE OWNER'S NAME (if different) <u>Carmen M. Pariso, Inc.</u></p>
<p>Mailing Address</p>	<p>Mailing Address <u>3649 River Road</u></p>
<p>City/Town/Village</p>	<p>City/Town/Village <u>Ionawanda</u></p>
<p>State/Zip Code</p>	<p>State/Zip Code <u>New York 14150</u></p>
<p>Telephone Number ()</p>	<p>Telephone Number <u>(716) 875-0158</u></p>
<p>5. TYPE OF FACILITY REGISTRATION (check all applicable)</p> <p><input type="checkbox"/> Energy Recovery Incinerators or Pyrolysis Units [360-3.1(c)]</p> <p><input type="checkbox"/> Land Clearing Debris Landfills three acres or less [360-7.2(a)]</p> <p><input type="checkbox"/> Transfer Stations (municipally owned/operated/contracted) receiving less than 50,000 cubic yards or 12,500 tons of household solid waste annually [360-11.1(b)(1)]</p> <p><input type="checkbox"/> Transfer Stations (municipally owned/operated/contracted) receiving less than 50,000 cubic yards or 12,500 tons of containerized solid waste annually [360-11.1(b)(2)]</p> <p><input checked="" type="checkbox"/> Source Separated, Nonputrescible Solid Waste Recyclables Handling and Recovery Facilities [360-12.1(d)]</p> <p><input type="checkbox"/> Waste Tire Retreaders [360-13.1(d)(1)(i)]</p> <p><input type="checkbox"/> Waste Tire Stored for On-site Energy Recovery [360-13.1(d)(1)(ii)]</p> <p><input type="checkbox"/> Tire Dealers Selling Waste Tires [360-13.1(d)(1)(iii)]</p> <p><input type="checkbox"/> Tire Manufacturing Facilities [360-13.1(d)(1)(iv)]</p> <p><input checked="" type="checkbox"/> Processing Facilities Receiving Only Recognizable Uncontaminated Concrete, Asphalt Pavement, Brick, Soil or Rock [360-16.1(d)(1)(i)]</p> <p><input checked="" type="checkbox"/> Uncontaminated Unadulterated Wood Processing Facilities [360-16.1(d)(1)(ii)]</p> <p><input checked="" type="checkbox"/> Other Facilities not specifically described above, specify type <u>Recyclables handling (360-12.1(d))</u></p>	
<p>6. SOLID WASTE HANDLED</p> <p>a. List wastes and/or materials to be accepted <u>uncontaminated concrete, asphalt pavement, brick, soil, or rock, uncontaminated wood, corium</u></p> <p>b. Quantity (specify Units - see instructions) design capacity <u>240 tons per day</u> storage on site <u>20,000 tons</u></p>	<p>7. OPERATIONS SCHEDULE - Normal schedule of operation <u>Monday - Saturday 7:00 AM - 5:00 PM</u></p> <p>8. NAME(S) OF ALL MUNICIPALITIES SERVED <u>City of N. Tonawanda, Tonawanda, Town of Tonawanda, Buffalo, Erie and Niagara County</u></p>
<p>9. CERTIFICATION: I hereby affirm under penalty of perjury that information provided on this form and attached statements and exhibits was prepared by me or under my supervision and direction and is true to the best of my knowledge and belief, and that I have the authority as <u>managing partner</u> (title) of <u>Swift River</u> (Entity) to sign this registration form pursuant to 6 NYCRR Part 360. By signing this registration form, I affirm that I have read the applicable regulations and will abide by all conditions of the registration requirements. I am aware that any false statement made herein is punishable as a Class A misdemeanor pursuant to Section 210.45 of the Penal Law.</p>	
<p>Printed/Typed Name <u>James H. Rowe, Jr.</u></p>	<p>Signature <u>James H. Rowe, Jr.</u> Mo. Day Year <u>2 18 1989</u></p>



CME
Associates, Inc.

2727 Broadway St. Suite 2
Cheektowaga, New York 14227
(716) 877-9577
(716) 877-9629 (Fax)

www.cmeassociates.com

TRANSMITTAL

Date: 6/12/19

To: Swift River Associates, Inc.
4051 River Rd
Tonawanda, NY 14150

Attn: Mr. Ken Rawe

Re: Source Pre-Qualification

Gentlepeople:

Enclosed you will find.....

Number of Copies
1

Report No.:
17120L-04-061219-BL2932

Respectfully Submitted:

CME ASSOCIATES, INC.

Michael Shelby, P.E.
Supervisor of Special Inspections

A New York State Certified Woman Owned Business Enterprise (WBE)



2727 Broadway St., Suite 2
 Cheektowaga, New York 14227
 (716) 877-9577
 (716) 877-9629 (Fax)

www.cmeassociates.com

LAB REPORT SUMMARY

PROJECT: Source Pre-Qualification
CLIENT: Swift River
DATE: 6/12/19

REPORT NO.: 17120L-04-0619
REPRESENTATIVE: Sam Ferreira

This CME Associates, Inc representative performed a sieve analysis and moisture density test (standard proctor) on a recycled concrete sample picked up by Ozan Celik and delivered to CME's Buffalo laboratory on 6/10/2019.

Structural fill materials, should at a minimum, meet the requirements of the New York State Department of Transportation, standard specifications, Item 203-07 Select Granular Fill.

Sample No.: BL2932 Location: Stockpile 19-5 Swift River 4051 River Road, Tonawanda

MECHANICAL ANALYSIS (ASTM C136, C117)

Sieve Size	Percent Passing by Weight		NYSDOT Spec 304-15 Type II	NYSDOT Spec 203-07 203-21
	Sample BL2932			
2"	100		100	
1"	88			
3/4"	74			
1/2"	57			
3/8"	46			
1/4"	36		30-65	
No. 4	32			
No. 10	23			
No. 40	13		5-40	0 - 70
No. 200	6		0-10	0 - 15

CLASSIFICATION

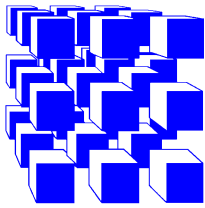
2" Minus Recycled Concrete

LABORATORY MOISTURE-DENSITY RELATIONSHIP (ASTM D698)

Corrected Maximum Dry Density	=	117.8	Pcf
Corrected Optimum Moisture Content	=	9.8	%

It is recommended the engineer of record review and comment on the use of this material. Please see attached documents for lab test results.

Feel free to contact this office should you have any questions.



LABORATORY TEST SUMMARY

Swift River
Source Pre-Qualification
CME Report Number: 17120L-04-0619
6/11/2019
Page 2 of 3

The CME Associates Representative obtained a sample at the above referenced project. The sample was delivered to CME's Buffalo facility, an AASHTO¹ accredited laboratory, for a Particle Size Analysis and a Moisture Density Relationship determination. The results are as follow:

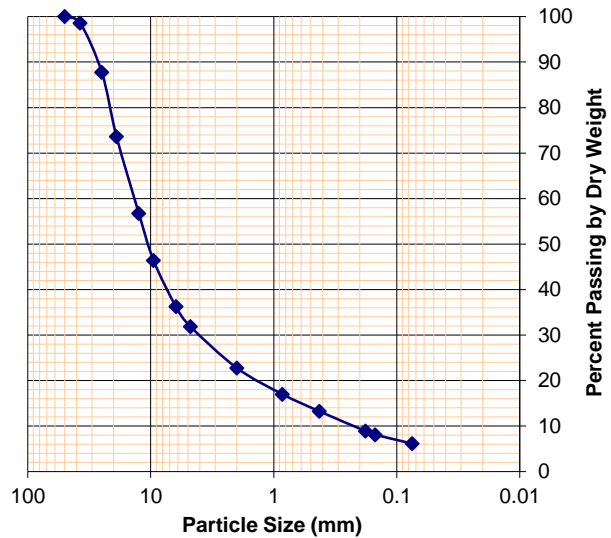
1) Material Identification

<u>Sample #</u>	<u>Date Sampled</u>	<u>Classification</u>	<u>Source</u>
BL2932	06/10/19	2" Minus Recycled Concrete	Stockpile 19-5 Swift River 4051 River Rd., Tonawanda, NY

2) Particle Size Analysis ASTM D422

<u>Sieve Size</u>	<u>Sieve Size (mm)</u>	<u>% Passing by Dry Weight Sample # BL2932</u>
2"	50	100
1-1/2'	37.5	99
1"	25	88
3/4"	19	74
1/2"	12.5	57
3/8"	9.50	46
1/4"	6.25	36
#4	4.75	32
#10	2.00	23
#20	0.850	17
#40	0.425	13
#80	0.180	9
#100	0.150	8
#200	0.075	6

Grain Size Distribution



Note: Proposed use of material not provided.

3) Moisture-Density Relationship (ASTM D-698: Standard Proctor)

	<u>Sample #</u>
	<u>BL2932</u>
Corrected Maximum Dry Density (pcf)	= 117.8
Corrected Optimum Moisture Content (%)	= 9.8
Oversized Particles, Percent by Weight (%)	= 26 *

* Particles retained on 3/4-inch sieve

¹AASHTO - American Association of State Highway & Transportation Officials (AASHTO) Materials Reference Laboratory. CME Buffalo accreditation includes tests of Portland Cement Concrete, Aggregate and Soil Materials. www.aashtoresource.org

LABORATORY TEST SUMMARY

Swift River

Source Pre-Qualification

CME Report Number: 17120L-04-0619

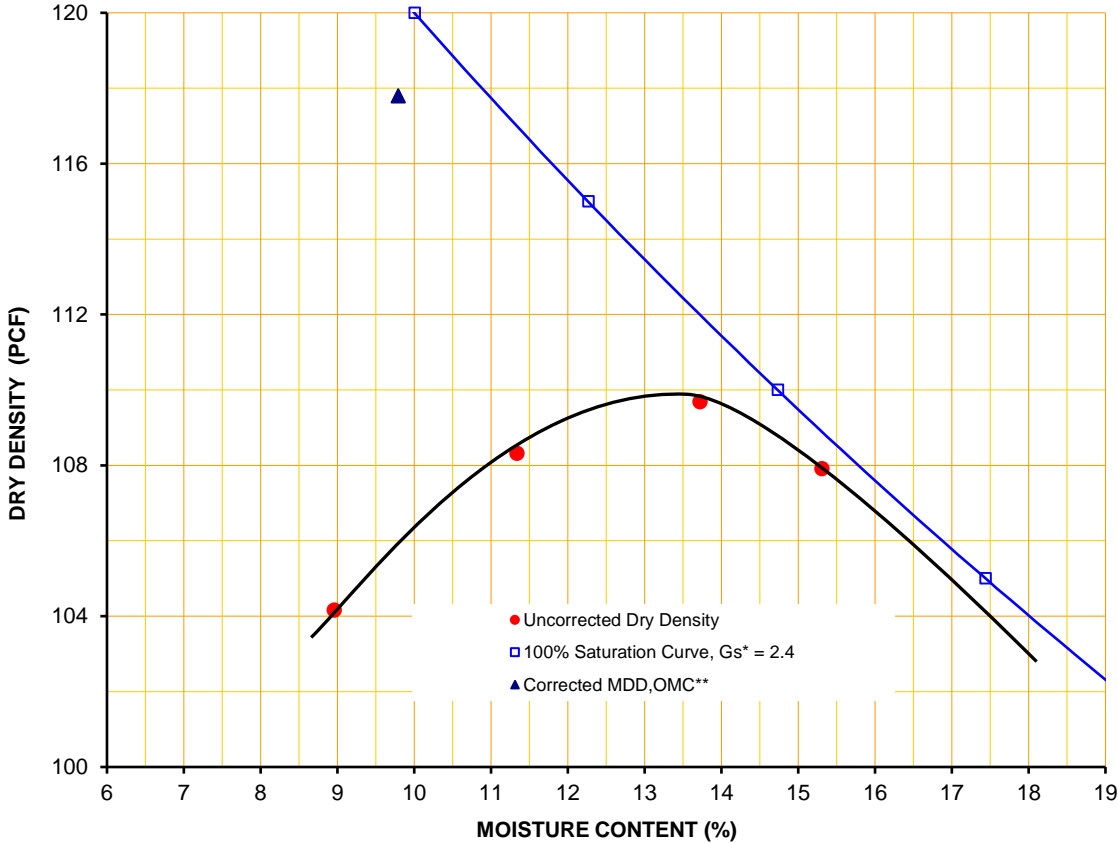
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SAMPLE LOCATION:	Stockpile 19-5 Swift River 4051 River Rd.,	DATE SAMPLED:	6/10/19
SOIL CLASSIFICATION:	2" Minus Recycled Concrete	SAMPLE NO.:	BL2932

Moisture - Density Relationship Curve

Particle Size Analysis ASTM D422



Sieve Size	% Passing
2"	100
1-1/2"	99
1"	88
3/4"	74
1/2"	57
3/8"	46
1/4"	36
No.4	32
No.10	23
No.20	17
No.40	13
No.80	9
No.100	8
No.200	6

Test Procedure Information

- Test Method ASTM D-1557 (Modified) ASTM D-698 (Standard)
- Procedure Used A B C
- Preparation Method Dry Moist
- Description of Rammer Manual Mechanical

Test Results

Corrected MDD (PCF) = **117.8**
 Corrected OMC (%) = **9.8**

Oversize Fraction by Dry Weight

26 % Retained on No.4 Sieve 3/8" Sieve 3/4" Sieve

* Specific Gravity, estimated

** MDD = Maximum Dry Density, OMC = Optimum Moisture Content

Please feel free to contact our office if you have any questions.

Sam Ferreira
 Supervising Laboratory Technician