HALEY ALDRICH

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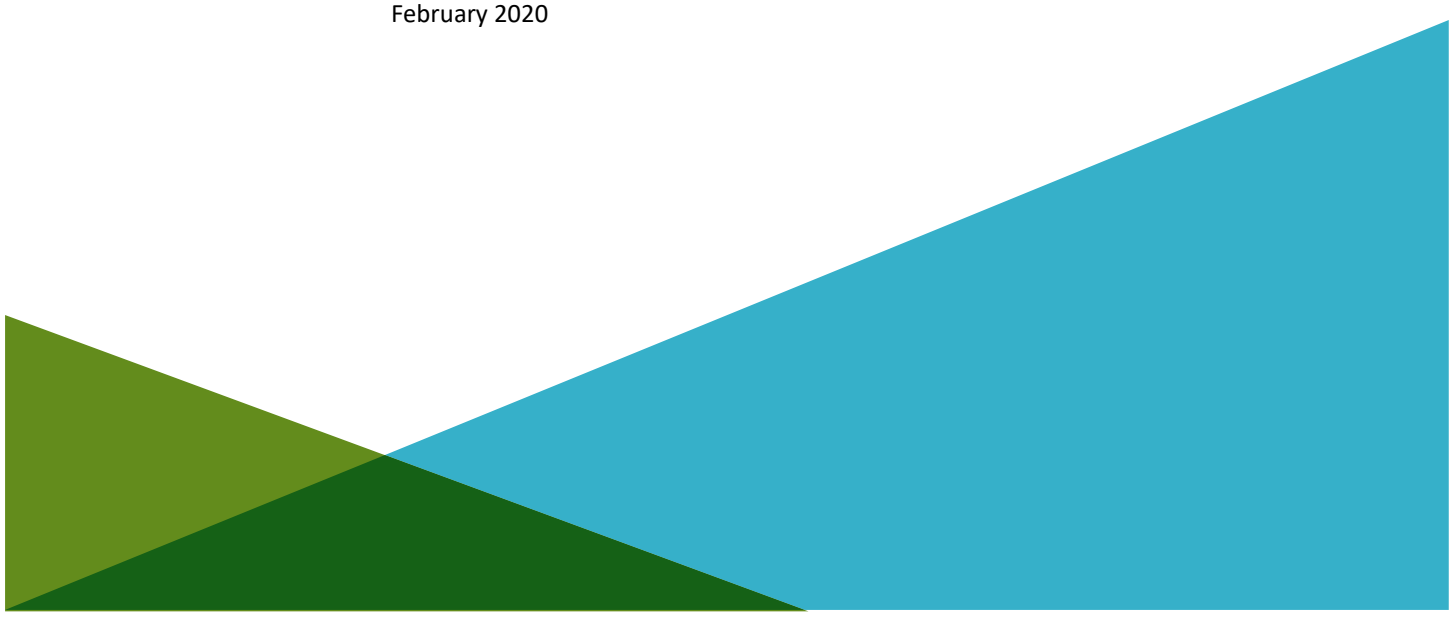
BENEFICIAL REUSE - SOIL MANAGEMENT PLAN
171 TOLLAND TURNPIKE
WILLINGTON, CONNECTICUT

by
Haley & Aldrich, Inc.
Rocky Hill, Connecticut

for
Becker Construction Company
Willington, Connecticut

File No. 128663-003
February 2020



HALEY & ALDRICH, INC.
100 CORPORATE PLACE
SUITE 105
ROCKY HILL, CT 06067
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21 February 2020
File No. 128663-003

Becker Construction Company
171 Tolland Turnpike
Willington, Connecticut 06279

Attention: Diane Becker, General Manager
John Patton, Accounts Manager

Subject: Beneficial Reuse - Soil Management Plan
171 Tolland Turnpike
Willington, Connecticut

Ladies and Gentlemen:

We are pleased to present this Soil Management Plan for the beneficial reuse and reclamation of the Becker Construction Company (Becker) Sand and Gravel Pit located at 171 Tolland Turnpike in Willington, Connecticut.

This Plan is a working document that will be reviewed and updated on a regular basis, typically as a result of site inspections and/or a review of chemical test results.

Sincerely yours,
HALEY & ALDRICH, INC.

Jennifer N. Buchanon, P.E.
Senior Engineer

Chris G. Harriman, LEP
Senior Associate

Enclosures

Executive Summary

This Soil Management Plan (SMP) describes the practices necessary to import and beneficially reuse materials at the sand and gravel pit located at 171 Tolland Turnpike, Willington, CT in a manner that complies with the Town of Willington, the Connecticut Department of Energy and Environmental Protection (CTDEEP), and industry standard Best Management Practices (BMPs) for the work being undertaken.

This SMP will describe the following activities:

- BMPs for importing and placing fill material
- Process for requesting approval to import material for beneficial reuse
- Guidelines under which materials will be received and utilized
- Groundwater and surface water monitoring program

This SMP will provide interested parties with a general understanding of the beneficial reuse operation at the facility.

This SMP is a living document that should be periodically amended to include things such as construction of new BMPs, relevant permit related correspondence, and other changed conditions at the site.

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1. Site Description & Contact Information

1.1 FACILITY DESCRIPTION

The 171 Tolland Turnpike in Willington, Connecticut site is a sand and gravel operation. Sand and Gravel operations are complete in the area identified for imported fill placement. The facility occupies an area of about 110 acres, of which approximately 15 acres are presently accepting fill for beneficial reuse.

1.2 GENERAL LOCATION

The site is located on the north side of Route 74 (Tolland Turnpike) in Willington, Connecticut. It is bounded by Tolland Turnpike to the south, wooded areas and Old Cemetery Road to the east, wooded areas to the west, and wooded areas and Eldredge Mill Road to the north.

1.3 PURPOSE OF ACTIVITIES

Becker Quarry is planning to fill in the areas of the former sand and gravel quarry that are no longer in use by importing fill material and grading the area (i.e. reclaiming or restoring the land back to its previous grade and condition). The total estimated quantity of soil proposed for import is 4,000,000 cubic yards. Becker anticipates the fill process will take between 30 and 35 years, depending on availability of acceptable material.

Anticipated sources of fill material include large volumes of excess soil from excavation and construction projects in Connecticut, Massachusetts, and Rhode Island. Fill material will be naturally occurring mixtures of clay, silt, sand, gravel, and rock. Depending on the material's source site, it may contain compounds that are above background levels. Material with chemical concentrations above background levels must meet the Becker Acceptance Criteria that has been established (refer to Section 3).

1.4 CTDEEP REGULATED AREAS

There are no CTDEEP-delineated Natural Diversity Database or Aquifer Protection areas within 1 mile and 5 miles of the facility, respectively.

1.5 WATERSHED & SURFACE WATER QUALITY CLASSIFICATIONS

The site is located in the Thames River Major Drainage Basin, Willimantic Regional Drainage Basin, and the Willimantic River Sub-Regional Drainage Basin. Groundwater generally flows in a south-southwest direction toward the Willimantic River. Groundwater below the majority of the site is classified by CTDEEP as A and in the far eastern portion of the site is classified as AA.

Surface water bodies within the Willimantic River watershed are typically classified by CTDEEP as A, however the Willimantic River is classified as B.

1.5.1 Local Drainage Basins

The local drainage basin is identified as 3100-11-1-L1 and -L2 and drains south-southwest to Conant Brook, then to the Willimantic River.

1.5.2 Nearby Surface Water Bodies

Nearby surface water bodies consist of Conant Brook, Parizek Pond, and Deveresky Pond to the west and southwest, and Conant Brook to the north and west.

1.5.3 Nearby Public Water Supplies

The Deer Park Apartment public water supply is located upgradient approximately ¼-mile. north of the site.

2. Best Management Practices (BMPs)

2.1 GENERAL

Approved materials planned for beneficial reuse will be accepted at the site. The materials will be placed in the northern portion of the site and spread as needed to fill in the former sand and gravel area. On-site streams, ponds, and off-site roadways, stormwater systems, etc., need to be protected from receiving excess sediment from stormwater runoff from the fill area. This section provides BMPs to reduce the potential for discharge of pollutants into stormwater discharges.

2.2 GOOD HOUSEKEEPING

Generally, good housekeeping across the site is accomplished by observing site conditions at least once daily. Proposed BMPs will be inspected and repaired as required. Ruts or new locations of channelized stormwater runoff due to heavy rain are repaired as required.

Silt fence is proposed for installation along the downstream (south and west sides) of the active fill area. Accepted material that is brought in and cannot be spread and compacted immediately will be temporarily stockpiled in bins surrounded by jersey barriers and silt fence. The bins will be maintained regularly until the material is ready for placement in the fill area.

At the end of each day when material is spread in the fill area, the new material will be compacted by tracking with a bulldozer and/or compacting with a vibratory roller. Compacting the material at the surface will allow stormwater to run across the soil and minimize the amount of sediment that is carried with it.

2.3 DUST CONTROL

During dry weather, a water truck will spread the access road to the fill area to keep dust from circulating during transport of material.

2.3.1 Anti-Tracking

A 500 foot paved surface will be maintained between the beneficial reuse and the entrance to Tolland Turnpike (Route 74) Past the paved area, 200 feet of the drive area will have stone placed and compacted and maintained as a tracking pad.

2.4 SPILL PREVENTION AND RESPONSE PROCEDURES

In the event of an accidental discharge of chemical material (such as equipment lubricants), regardless of spill quantity, the Site Operations Manager will be notified immediately to coordinate response procedures. If the spill represents an immediate health or explosion hazard, the Willington Hill Fire Department will be contacted immediately by dialing 911. The spill will also be reported to the CTDEEP Oil and Chemical Spills Unit at (860) 424-3338.

Containment of the spill will begin immediately using available manpower and materials. Sorbent material will be clearly marked and available at the maintenance garage. The spill will be contained

as close to the source as possible with absorbent materials. These materials will be removed immediately and disposed of in a proper manner. Expended sorbent and its associated fluid will be removed and placed into a sorbent disposal drum. The waste drum will be located in an appropriate disposal area and removed to a qualified facility for proper disposal. In the event that containment of the spill is beyond the capability of the available manpower, the nearest available cleanup contractor will be notified.

2.5 INSPECTIONS

Person responsible for conducting Facility Inspections: Jennifer Buchanon (or other designated representative of Haley & Aldrich)

Schedule for Conducting Facility Inspection: Inspections will be performed during or immediately following at least one rain event occurring in February-March and in October-November of each year.

List of Documents to be Reviewed Prior to Each Semi-Annual Inspection:

- The current site map
- The current location of all BMPs
- Reports of all routine inspections since last semi-annual inspection
- Notes / documentation of maintenance or repair work for BMPs
- Analytical stormwater monitoring reports since last semi-annual inspection
- Spill reports (if applicable)

3. Beneficial Reuse Guidelines

Becker has prepared informational packets that include the processes that should be followed to request beneficial reuse of material at the site. There are two packets, (1) for clean fill and (2) for regulated fill. The packages are included as Appendix A and B, respectively. A general process for requesting beneficial reuse of either of these material types is as follows:

1. Customer contacts Becker Construction for initial feasibility of shipping material to the Becker Quarry Reclamation.
2. Becker Construction explains the process the customer must do to get analytical sampling of the soil.
3. Information packet is sent to the Customer. This includes the Soil Request and Profile sheet and instruction on how/what to fill out on the Profile.
4. The customer sends the appropriate form (completed with their information) to Haley Aldrich, Licensed Environmental Professional (LEP).
5. Haley & Aldrich performs their analysis and provides Becker with recommendations for acceptance/rejection of material. Allow up to two weeks for this review depending on project size.
6. An approval number and an acceptance letter is sent to the customer from Becker along with pricing, and a master Transport Manifest form and form instructions. A copy of this letter is also sent to the Town of Willington.
7. Customer obtains the applicable signatures for completion of the Financial Responsibility form. Upon completion, the form is sent to John Patton and Diane Becker, at Becker .
8. Communication between Becker and customer is made (email or telephone) finalizing dates and location of fill delivery.
9. Customer/originator completes the prenumbered Transport Manifest form and supplies these forms with each load that is delivered to Becker. Each load manifest form must have the assigned approval number, located at the top of the form, filled in, along with other required signatures.
10. Transport Manifest is left with Becker at the time of delivery and acceptance into the sand and gravel area. Weight slip is attached to the form and kept for billing and record of fill. The records of the incoming fill are filed at Becker's office.

3.1 SOIL ACCEPTANCE CRITERIA

Material acceptance criteria has been established for various constituents in soil intended for use as fill material at the site. The criteria were based on review of available and applicable soil standards, guidelines, values, criteria, and background levels established by CTDEEP in various regulations and guidelines. A summary table of the criteria is provided as Table I and is also included in the two informational packets referenced above.

Specifically, imported soil fill must be either "clean" or "regulated".

- Clean fill does not contain measurable levels of chemical compounds at concentrations above standard laboratory minimum detection limits. Clean fill also contains metals at or below typical background concentrations.
- Regulated fill contains measurable levels of chemical compounds and/or elements at concentrations above standard laboratory minimum detection limits and/or typical background

concentrations, but below CTDEEP Residential Direct Exposure Criteria and GA Pollutant Mobility Criteria.

3.1.1 Chemical Testing Criteria

Table I and the Beneficial Reuse of Soil Request & Profile Sheet provide the criteria and frequency of samples needed prior to applying for a request for beneficial reuse. Becker reserves the right to change the frequency, types of chemical testing, detection criteria, etc. for any project.

Becker may perform periodic QA/QC testing. Should QA/QC test results indicate a delivered material load does not meet the acceptance criteria, then the generator of that soil and the party contracting with Becker for placement of the soil for beneficial reuse must promptly remove the material from the site.

Soil will contain no free liquid at the time of loading or upon arrival at the project site. Soil containing free liquid is subject to rejection upon arrival and inspection.

3.1.2 Right to Refuse

Loads arriving at 171 Tolland Turnpike that appear inconsistent with other approved loads from the same project site (i.e. an odor is present, color is different, debris is present, etc.) will be rejected and the person responsible for delivery of the load will be responsible for removing it from the site. Such loads will be removed immediately from the project site in the same truck they were delivered in.

3.2 SITE ACCESS AND WEIGHING PROCEDURES

Trucks delivering material accepted for beneficial reuse will be weighed at 180 Tolland Turnpike prior to delivering material. Drivers will provide the scale attendant with the appropriate Manifest Form with approval number and signatures (refer to Appendix A and B). The manifest will be left with Becker. The driver will receive a copy of the weight slip and can then drive across Tolland Turnpike to the beneficial reuse area to deliver the load.

Truck drivers must follow the routes provided by Becker.

Normal operating hours for delivery of material for beneficial reuse are Monday through Friday from 7 AM to 4 PM.

4. Water Monitoring Program

4.1 GROUNDWATER MONITORING WELLS

Groundwater monitoring wells are proposed for installation around the fill area. The wells on the east side of the site will be installed as bedrock wells. On the west side of the side, the wells will be in the overburden.

The wells will be samples shortly after installation to determine a baseline for background constituents that may be present in the groundwater. Thereafter, wells will be sampled quarterly for two years to establish a basis for seasonal fluctuations. Provided the chemical data from each sampling event is consistent, wells will then be sampled annually.

4.2 SURFACE WATER SAMPLING

Two locations are proposed for surface water samples. An initial sample will be obtained, then samples will be collected a minimum of twice annually during or immediately following a large storm event.

4.3 RECORD KEEPING

A log of sample locations, names, dates, chemical test results, and any actions taken will be maintained and updated as required.

TABLES

BECKER CONSTRUCTION COMPANY

171 TOLLAND TURNPIKE (ROUTE 74), P. O. BOX 535, WILLINGTON, CT 06279

(860) 429-2461 • (860) 429-2610 • FAX (860) 429-0542

Beneficial Reuse of Soil Request & Profile Sheet **FORM BSP** **Approval #:** _____

Becker Quarry Reclamation - Willington, Connecticut (for Becker Quarry use only)

Section IV - Summary of Analytical Data for Soils Proposed for Reuse at Becker Quarry

Using the representative analytical data (refer to Section II for testing requirements), the following table shall be completed.

A. Summary Table (continued on Page 4)

Materials must be analyzed by mass/total or SPLP/TCLP analysis as shown in the acceptance criteria below and in accordance with the testing frequency outlined in Section II. Materials must not be present at concentrations above either CTDEEP RDEC or GA PMC. GA PMC acceptance is based on either total or SPLP/TCLP results as indicated below.

Constituent	# Samples	Acceptance Criteria			Concentration		
		RDEC	GA PMC	Units	Minimum	Maximum	Units
Total VOCs (sum)		--	--	ug/kg			
1,1-Dichloroethane		500,000	1,400	ug/kg			
1,1-Dichloroethylene		1,000	140	ug/kg			
1,2-Dichlorobenzene		500,000	2,000	ug/kg			
1,2-Dichloroethane		6,700	20	ug/kg			
1,2-Dichloropropane		9,000	100	ug/kg			
1,1,1-Trichloroethane (TCA)		500,000	4,000	ug/kg			
1,1,2-Trichloroethane		11,000	100	ug/kg			
1,1,1,2-Tetrachloroethane		24,000	20	ug/kg			
1,1,2,2-Tetrachloroethane		3,100	10	ug/kg			
cis-1,2-Dichloroethylene		500,000	1,400	ug/kg			
trans-1,2-Dichloroethylene		500,000	2,000	ug/kg			
1,3-Dichlorobenzene		500,000	12,000	ug/kg			
1,3-Dichloropropene		3,400	100	ug/kg			
1,4-Dichlorobenzene		26,000	1,500	ug/kg			
Acetone		500,000	14,000	ug/kg			
Acrylonitrile		1,100	10	ug/kg			
Benzene		21,000	20	ug/kg			
Bromoform		78,000	80	ug/kg			
2-Butanone (MEK)		500,000	8,000	ug/kg			
Carbon tetrachloride		4,700	100	ug/kg			
Chlorobenzene		500,000	2,100	ug/kg			
Chloroform		100,000	120	ug/kg			
Dibromochloromethane		7,300	10	ug/kg			
Ethylbenzene		500,000	10,100	ug/kg			
Ethylene Dibromide		7	10	ug/kg			
Methyl-tert-butyl-ether (MTBE)		500,000	2,000	ug/kg			
Methyl isobutyl ketone		500,000	7,000	ug/kg			
Methylene chloride		82,000	100	ug/kg			
Styrene		500,000	2,000	ug/kg			
Tetrachloroethylene (PCE)		12,000	100	ug/kg			
Toluene		500,000	20,000	ug/kg			
Trichloroethylene (TCE)		56,000	100	ug/kg			
Vinyl Chloride		320	40	ug/kg			
Xylenes		500,000	19,500	ug/kg			
Other:							
Total SVOCs (sum)		--	--	ug/kg			
2-Chlorophenol		340,000	1,000	ug/kg			
2,4-Dichlorophenol		200,000	1,000	ug/kg			
Benzo(a)anthracene		1,000	1,000	ug/kg			
Benzo(b)fluoranthene		1,000	1,000	ug/kg			
Benzo(k)fluoranthene		8,400	1,000	ug/kg			
Benzo(a)pyrene		1,000	1,000	ug/kg			
Bis(2-chloroethyl)ether		1,000	1,000	ug/kg			
Bis(2-chloroisopropyl)ether		8,800	1,000	ug/kg			
Bis(2-ethylhexyl)phthalate		44,000	1,000	ug/kg			
Butyl benzl phthalate		1,000,000	20,000	ug/kg			
Di-n-butyl phthalate		1,000,000	14,000	ug/kg			
Di-n-octyl phthalate		1,000,000	2,000	ug/kg			
Fluoranthene		1,000,000	5,600	ug/kg			

BECKER CONSTRUCTION COMPANY

171 TOLLAND TURNPIKE (ROUTE 74), P. O. BOX 535, WILLINGTON, CT 06279

(860) 429-2461 • (860) 429-2610 • FAX (860) 429-0542

Beneficial Reuse of Soil Request & Profile Sheet **FORM BSP** **Approval #:** _____

Becker Quarry Reclamation - Willington, Connecticut (for Becker Quarry use only)

Section IV (continued)- Summary of Analytical Data for Soils Proposed for Reuse at Becker Quarry

Using the representative analytical data (refer to Section II for testing requirements), the following table shall be completed.

Constituent	# Samples	Acceptance Criteria			Concentration		
		RDEC	GA PMC	Units	Minimum	Maximum	Units
Fluorene		1,000,000	5,600	ug/kg			
Hexachloroethane		44,000	1,000	ug/kg			
Hexachlorobenzene		1,000	1,000	ug/kg			
Napthalene		1,000,000	5,600	ug/kg			
Pentachlorophenol		5,100	1,000	ug/kg			
Phenanthrene		1,000,000	4,000	ug/kg			
Phenol		1,000,000	80,000	ug/kg			
Pyrene		1,000,000	4,000	ug/kg			
Other:							
ETPH		500	500	mg/kg			
Total Metals							
Arsenic		10	--	mg/kg			
Barium		4,700	--	mg/kg			
Cadmium		34	--	mg/kg			
Chromium		--	--	mg/kg			
Copper		2,500	--	mg/kg			
Lead		400	--	mg/kg			
Mercury		20	--	mg/kg			
Nickel		1,400	--	mg/kg			
Selenium		340	--	mg/kg			
Silver		340	--	mg/kg			
Zinc		20000	--	mg/kg			
☐ SPLP or ☐ TCLP Metals (check one)							
Arsenic		--	0.05	mg/L			
Barium		--	1	mg/L			
Cadmium		--	0.005	mg/L			
Chromium		--	0.05	mg/L			
Copper		--	1.3	mg/L			
Lead		--	0.015	mg/L			
Mercury		--	0.002	mg/L			
Nickel		--	0.1	mg/L			
Selenium		--	0.05	mg/L			
Silver		--	0.036	mg/L			
Zinc		--	5	mg/L			
Other:							
PCBs (Total)		1	--	mg/kg			
Aroclor 1016		--	0.0005	mg/L			
Aroclor 1221		--	0.0005	mg/L			
Aroclor 1232		--	0.0005	mg/L			
Aroclor 1242		--	0.0005	mg/L			
Aroclor 1248		--	0.0005	mg/L			
Aroclor 1254		--	0.015	mg/L			
Aroclor 1260		--	0.015	mg/L			
Aroclor 1262		--	0.015	mg/L			
Aroclor 1268		--	0.015	mg/L			
Pesticides (Total)		--	--				
Alachlor		7.7 mg/kg	0.02 mg/L	--			
Chlordane		0.49 mg/kg	0.003 mg/L	--			
Dieldrin		0.038 mg/kg	0.00002 mg/L	--			
Endrin		20 mg/kg	--	--			
2-4 D		680 mg/kg	0.7 mg/L	--			
Heptachlor		0.14 mg/kg	0.004 mg/L	--			
Toxaphene		0.56 mg/kg	0.03 mg/L	--			
DDT/DDE/DDD (sum)		1.8 mg/kg	0.001 mg/L	--			
Other							

FIGURES

UPPER STORMWATER COLLECTION POND

FREE STORMWATER FLOW TO COLLECTION AREA

FORMER QUARRY AREA. PROPOSED FUTURE BENEFICIAL REUSE AREA

PROPOSED FUTURE TRUCK ROUTE TO SECONDARY REUSE AREA

PROPOSED BINS FOR TEMPORARY STORAGE OF MATERIAL (APPROXIMATELY 500 CUBIC YARDS EACH)

APPROXIMATE LIMITS OF ACTIVE FILL AREA (AREA OF BENEFICIAL REUSE OF INCOMING SOIL)

PROPOSED JERSEY BARRIER BINS FOR TEMPORARY STORAGE OF INCOMING MATERIAL (APPROX. 500 CUBIC YARDS EACH)

LOWER STORMWATER COLLECTION POND

CULVERT

NATURAL DRAINAGE SWALE

PROPOSED SILT FENCE (TYP.)

POND AND QUARRY AREA ACCESS ROAD

TYPICAL TRUCK ROUTE. TRUCKS WITH INCOMING SOIL FOR REUSE ARE WEIGHED AT 180 TOLLAND TURNPIKE THEN DRIVE ACROSS STREET TO FILL AREA AT 171 TOLLAND TURNPIKE.

N/F GEORGE B. & PAMELA J. PARIZEK

N/F DIANE L. BECKER

N/F RICHARD WILSON

N/F HERBERT & LUCILLE ARICO

N/F WILLINGTON BAPTIST CHURCH

N/F LAWRENCE BECKER

N/F PHILIP D. & MARY SUE MOLI

N/F RICHARD R. & CELINE GARNEAU

N/F SHIRLEY SAUER

N/F J. JR. & M TRUAX

N/F TARA ACE REALTY LLC

N/F WILLINGTON CEMETERY ASSOCIATION

CONN. ROUTE 74 AKA TOLLAND TURNPIKE

OLD CEMETERY ROAD

WELL

SEPTIC SYSTEM LOCATION OF PLANNED AREA

Water

LEGEND

- PROPOSED SURFACE WATER SAMPLE LOCATION
- PROPOSED GROUNDWATER MONITORING WELL

NOTES

1. AERIAL BASEPLAN TAKEN FROM GOOGLE EARTH.
2. CONTOURS IN FILL AREA FROM DRONE SURVEY IN FEBRUARY 2018, PROVIDED BY BECKER.
3. BASE PLAN SURVEY PREPARED BY GARDNER & PETERSON ASSOCIATES, LLC, DATED 31 DECEMBER 2007.

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SCALE IN FEET

KEY PLAN
NOT TO SCALE

Project No.:	128663-003
Scale:	AS SHOWN
Date:	JANUARY 2020
Drawn By:	
Designed By:	
Checked By:	
Approved By:	
Stamp:	

Rev.	Description	By	Date

BECKER CONSTRUCTION
BENEFICIAL REUSE
SOIL MANAGEMENT PLAN

SITE PLAN
WITH BMPS

SMP-1

Sheet: 1 of 1

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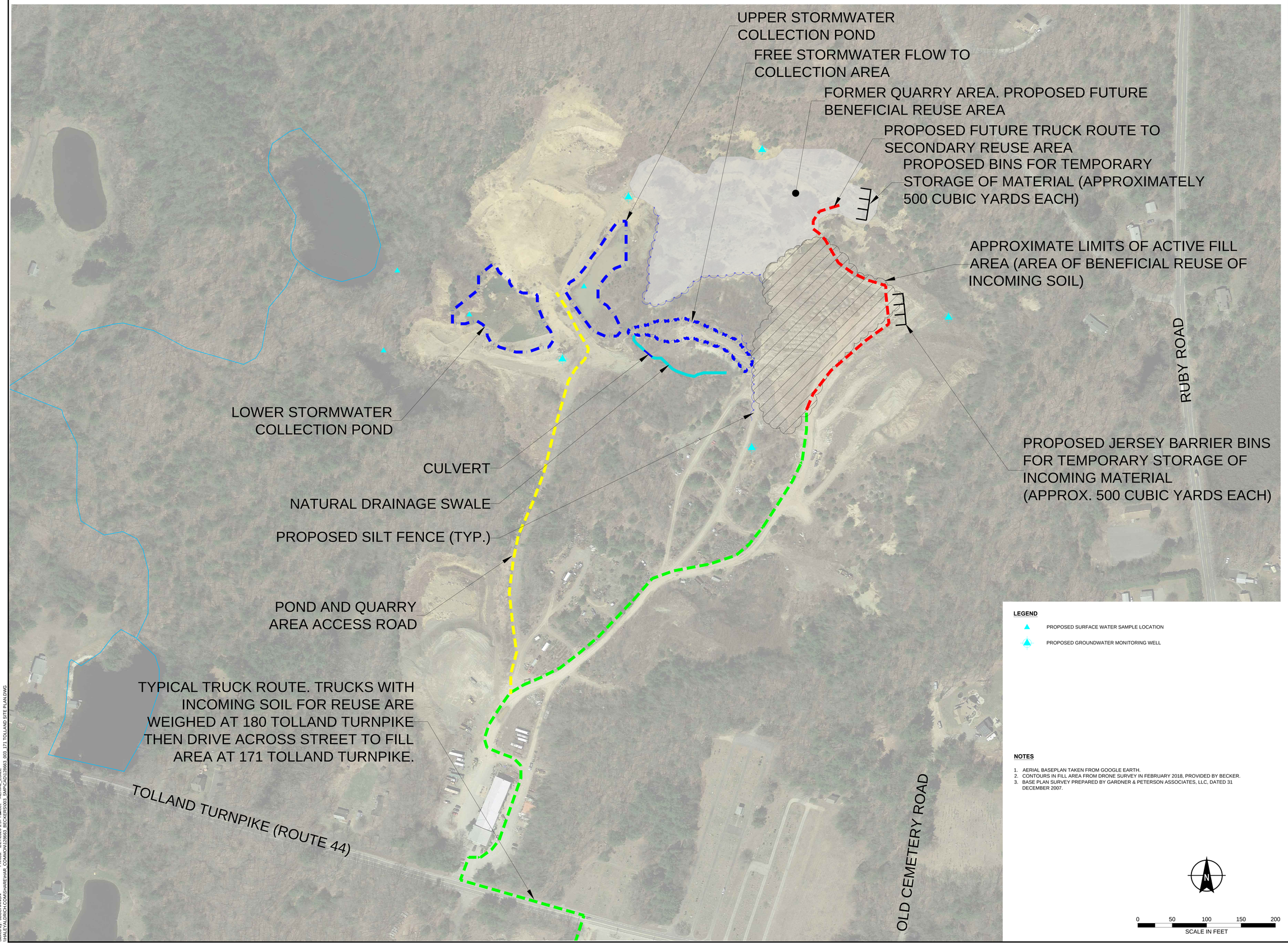

LEGEND

- PROPOSED SURFACE WATER SAMPLE LOCATION
- PROPOSED GROUNDWATER MONITORING WELL

NOTES

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0 50 100 150 200
SCALE IN FEET

KEY PLAN
NOT TO SCALE

HALEY & ALDRICH, INC.
465 Medford Street, Suite 2200
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Approved By:	
Stamp:	

Rev.	Description	By	Date

BECKER CONSTRUCTION
BENEFICIAL REUSE
SOIL MANAGEMENT PLAN

SITE AERIAL
WITH BMPS

SMP-1

Sheet: 1 of 1

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APPENDIX A

Application to Request Beneficial Reuse of Clean Soil

BECKER CONSTRUCTION COMPANY

171 TOLLAND TURNPIKE (ROUTE 74), P. O. BOX 535, WILLINGTON, CT 06279
(860) 429-2461 • (860) 429-2610 • FAX (860) 429-0542

Instructions for completing the Beneficial Soil Request and Profile Sheet

Page 1 Section 1 – General Material Information

A. Site

Site Name – The name of the site where the material comes from
Site Address, City, State and Zip – Actual address of the originating site
Current & Former Site Usage – description of how the site has and is being used
Indicate material storage (direct/stockpile) – Check the box to indicate if this fill is

- Direct haul- from the site indicated above
- Stockpile On-site – from a pile which has been relocated from the originating site however is piled on-site in a stockpile
- -Stockpile/Stage Off site – from a pile which has been relocated from the originating site and is piled OFF SITE
- Off-site Stockpile – Address (street,) City, State and Zip of the off-site pile

B. **Generator information**

Organization, address, city, state & zip – person/company who created the contaminated soil
Contact – person in the generating organization who is the prime contact for questions/concerns re: the contaminated soil
Phone, Fax, email – numbers and email address of the contact person
Certification of Generator – name and signature of person representing the generator entity, their respective title and date of signing

C. Qualified/Licensed Environmental Profession Information – to be filled in by Haley & Aldrich

Organization – Company who is responsible for contacting CTDEEP and gaining approval/disapproval for reuse submittal
Address, City, State and Zip – street address of the qualifying company
State Licensed – state where QEP is licensed
Name of QEP – full name of the Engineer or other qualified, licensed reviewing person who is assigned to this site and contract
Phone, fax, email – numbers and email address of QEP
License number – actual license number of the QEP
Licensed Environmental Professional opinion – Name of the individual QEP who will be onsite
Signature of onsite QEP, License Number and date of signature

D. Customer Information

Name – entity identified as paying Becker Construction tipping fees
Address – Street, City, State and Zip of Customer, phone, email and fax

E. Transporter/Common Carrier information

Organization – name of the company/person who is transporting the fill
Address – street, city and state of transporter
Contact Name & tel – name and telephone number of person within the transporter organization who can answer questions/resolve issues

F. Landowner

Name – name of the company/person who owns the land where this fill was generated
Address, City and State – Street address, City and state of the landowner, phone and fax number

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Page 2 Section II – Sampling Frequency and Analytical Testing Requirements

C. Description of Material

Describe the Material – approximate percentages of gravel, sand, silt and clay. Note any other types of material, their approximate percent and size (cubic yards or tons)
Estimate volume of Materials: - this is for the entire site, either in cubic yards or tons
Indicate the following supporting documentation - Indicate what supporting data is included with this request and profile

D. Analytical Data

Does the material conform to the following required specifications – Based on this list of specification check off yes or no as to acceptable fill

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Beneficial Reuse of Soil Request & Profile Sheet FORM BS
Becker Quarry Reclamation - Willington, Connecticut

Approval #: _____
(for Becker Quarry use only)

Important Note: Refer to the General Process Flow for Regulated Soil and Instructions for Completing the Beneficial Soil Request and Profile Sheet. Upon approval, this page will be used along with the Transport Manifest to accompany each load of material delivered to Becker's Quarry.

Location for Soil Delivery and Reuse:
Becker Quarry Reclamation
171 Tolland Turnpike, Willington, CT 06279

Primary Contact for Questions & Application Submittal:
Haley & Aldrich, Inc. c/o Chris Harriman, LEP
100 Corporate Place, Suite 105, Rocky Hill CT 06067
charriman@haleyaldrich.com (860) 290-3118

Section I - General Material Information & Certification

A. Site Information (location where soil is generated / excavated)

Site Name: _____ City: _____
Site Address: _____ State & ZIP: _____
Current & Former Site Usage: _____

Indicate if material will be direct-hauled, stockpiled on-site, or stockpiled/staged off-site: ☐ Direct-Haul ☐ Stockpile On-site ☐ Stockpile/Stage Off-site

Off-site Stockpile/Staging Site Address (include City, State, ZIP): _____

B. Generator Information

Organization: _____ Contact: _____
Address: _____ Phone: _____ Fax: _____
City, State, & Zip: _____ Email: _____

Certification of Generator or Authorized Agent

"By signing below, I, the Generator, certify and warrant that, having used due diligence, all the information contained in this submittal is true, accurate and complete. All information regarding releases/spills which may have affected the site, including type of materials released/spilled has been disclosed. The materials addressed in this submittal do not contain any contaminants not disclosed in this submittal. The materials addressed in this submittal do not contain listed hazardous wastes, as determined by Connecticut's "Contained-In" policy, and do not exhibit a hazardous waste characteristic as defined by Connecticut's Hazardous Waste Management Regulations. If I am an agent signing on behalf of the Generator, I have confirmed with the Generator that information contained in this Profile is accurate and complete and I have attached information documenting my legal right to sign on behalf of the Generator. I hereby certify that payment will be made according to the terms and conditions oulined in Becker Quarry's credit application."

Name: _____ Title: _____
Signature: _____ Date: _____

C. Qualified/Licensed Environmental Professional Information

Organization: _____ Name of QEP: _____
Address: _____ Phone: _____ Fax: _____
City, State, Zip: _____ Email: _____
State Licensed: _____ License Number: _____

Qualified/Licensed Environmental Professional Statement

"I have personally examined and am familiar with the information contained on and submitted with this form. Based on this information, it is my opinion that the testing and assessment actions undertaken were adequate to characterize the soil, and that the facility or location can accept soils with the characteristics described in this submittal. I am aware that significant penalties including, but not limited to, possible fines and imprisonment may result if I willfully submit information which I know to be false, inaccurate, or materially incomplete."

Name: _____ License Number: _____
Signature: _____ Date: _____

D. Customer Information (entity identified as paying Becker Construction Company tipping fees)

Name: _____ Email: _____
Address (include City, State, Zip): _____ Phone: _____ Fax: _____

E. Transporter / Common Carrier Information

Organization: _____ Contact Name: _____
Address (include City, State, Zip): _____ Phone: _____ Fax: _____

F. Landowner Information:

Name: _____ Phone: _____ Fax: _____
Address (include City, State, Zip): _____

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BENEFICIAL REUSE OF SOIL REQUEST AND PROFILE SHEET

Approval #_____

Becker Quarry Reclamation – Willington, Connecticut

SECTION II – Sampling Frequency and Analytical Testing Requirements
Materials proposed for reuse at Becker Quarry shall be evaluated in accordance with the analytical testing requirements indicated below and the completed tables provided in Section IV prior to being approved for reuse at Becker Quarry.

A. Analytical Requirements
Materials must be sampled for chemical constituents and physical characteristics according to prevailing standards and practices for collecting and analyzing soil and sediment samples (i.e. EPA QA-G-55 or equivalent). The required sampling frequency shall be one sample per 250 cubic yards of materials proposed to reuse up to 1,000 cubic yards. The density of the sampling frequency may be decreased at Becker Quarry's discretion after review of the analytical data from the first 1,000 cubic yards.

B. Analytical Requirements
The materials proposed for reuse at Becker Quarry must be tested using current test methods in EPA SW-846, except for ETPH, which must be analyzed by the CTDEEP approved method. Attach a summary table, or complete Section IV.A) comparing CTDEEP GAPMC and RDEC to the Laboratory Analytical data for each sample tested. Attach analytical data with QA/QC information and (if present) indicate data that do not apply to the material proposed for reuse at Becker Quarry and an explanation. Indicate soil location at time of testing on the summary table (i.e. in-situ or stockpile)

Analytical Test	Test Method
Extractable Petroleum Hydrocarbons (ETPH)	CTDEEP Approved Method
Polychlorinated Biphenyls (PCBs)	EPA SW-846 Method 8082A
Total Metals (As, Ba, Cd, Cr, Pb, Se, Ag, Cu, Ni, Zn)	EPA SW-846 Method 6010C
Total Mercury (Hg)	EPA SW-846 Method 7471B
Metals by Synthetic Precipitation Leaching Procedure*	EPA SW-846 Method 1312
Metals by Toxicity Characteristic Leaching Procedure	EPA SW-846 Method 1311
Semi-volatile Organic Compounds (SVOCs)	EPA SW-846 Method 8270D
Volatile Organic Compounds (VOCs)	EPA SW-846 Method 88260C
Any other substance reasonably expected to be present based on the environmental conditions at the material source.	Appropriate/Current EPA SW-846 Test Method

*At minimum, required for Arsenic, Lead, and Mercury.

C. Description of Material
1. Describe the Material: % Gravel_____ % Sand_____% Silt_____% Clay_____
Note other components of material not listed above, approx.. %, and size:_____

2. Estimated volume of Materials: (for the entire site) _____cubic yards tons (circle one)

3. Indicate whether the following required supporting data are included with this application (check all that apply).
____Site history information ____ Analytical Methods/Procedures & Lab Data
____ Site/Sampling Plan ____ Other Relevant Information
____ Completed Section IV Table (pages 3 and 4) comparing CTDEEP GA PMC and RDEC to Laboratory

4. Analytical Data
Does the material conform to the following required specifications: ____ Yes ____ No
Material is Non-hazardous Material does not contain asbestos. Material does not contain listed waste.
Material does not contain listed waste. Material is free of rubbish, ice, organic material, and tree stumps.

Section IV - Summary of Analytical Data for Soils Proposed for Reuse at Becker Quarry

Using the representative analytical data (refer to Section II for testing requirements), the following table (or a similar summary) shall be completed.

A. Summary Table (continued on Page 4)

Materials must be analyzed by mass/total or SPLP/TCLP analysis as shown in the acceptance criteria below and in accordance with the testing frequency outlined in Section II. Materials must not be present at concentrations above either CTDEEP RDEC or GA PMC. GA PMC acceptance is based on either total or SPLP/TCLP results as indicated below.

Constituent	# Samples	Acceptance Criteria			Concentration		
		RDEC	GA PMC	Units	Minimum	Maximum	Units
Total VOCs (sum)		--	--	ug/kg			
1,1-Dichloroethane		500,000	1,400	ug/kg			
1,1-Dichloroethylene		1,000	140	ug/kg			
1,2-Dichlorobenzene		500,000	2,000	ug/kg			
1,2-Dichloroethane		6,700	20	ug/kg			
1,2-Dichloropropane		9,000	100	ug/kg			
1,1,1-Trichloroethane (TCA)		500,000	4,000	ug/kg			
1,1,2-Trichloroethane		11,000	100	ug/kg			
1,1,1,2-Tetrachloroethane		24,000	20	ug/kg			
1,1,2,2-Tetrachloroethane		3,100	10	ug/kg			
cis-1,2-Dichloroethylene		500,000	1,400	ug/kg			
trans-1,2-Dichloroethylene		500,000	2,000	ug/kg			
1,3-Dichlorobenzene		500,000	12,000	ug/kg			
1,3-Dichloropropene		3,400	100	ug/kg			
1,4-Dichlorobenzene		26,000	1,500	ug/kg			
Acetone		500,000	14,000	ug/kg			
Acrylonitrile		1,100	10	ug/kg			
Benzene		21,000	20	ug/kg			
Bromoform		78,000	80	ug/kg			
2-Butanone (MEK)		500,000	8,000	ug/kg			
Carbon tetrachloride		4,700	100	ug/kg			
Chlorobenzene		500,000	2,100	ug/kg			
Chloroform		100,000	120	ug/kg			
Dibromochloromethane		7,300	10	ug/kg			
Ethylbenzene		500,000	10,100	ug/kg			
Ethylene Dibromide		7	10	ug/kg			
Methyl-tert-butyl-ether (MTBE)		500,000	2,000	ug/kg			
Methyl isobutyl ketone		500,000	7,000	ug/kg			
Methylene chloride		82,000	100	ug/kg			
Styrene		500,000	2,000	ug/kg			
Tetrachloroethylene (PCE)		12,000	100	ug/kg			
Toluene		500,000	20,000	ug/kg			
Trichloroethylene (TCE)		56,000	100	ug/kg			
Vinyl Chloride		320	40	ug/kg			
Xylenes		500,000	19,500	ug/kg			
Other:							
Total SVOCs (sum)		--	--	ug/kg			
2-Chlorophenol		340,000	1,000	ug/kg			
2,4-Dichlorophenol		200,000	1,000	ug/kg			
Benzo(a)anthracene		1,000	1,000	ug/kg			
Benzo(b)fluoranthene		1,000	1,000	ug/kg			
Benzo(k)fluoranthene		8,400	1,000	ug/kg			
Benzo(a)pyrene		1,000	1,000	ug/kg			
Bis(2-chloroethyl)ether		1,000	1,000	ug/kg			
Bis(2-chloroisopropyl)ether		8,800	1,000	ug/kg			
Bis(2-ethylhexyl)phthalate		44,000	1,000	ug/kg			
Butyl benzl phthalate		1,000,000	20,000	ug/kg			
Di-n-butyl phthalate		1,000,000	14,000	ug/kg			
Di-n-octyl phthalate		1,000,000	2,000	ug/kg			
Fluoranthene		1,000,000	5,600	ug/kg			

BENEFICIAL REUSE OF SOIL REQUEST AND PROFILE SHEET
Becker Quarry Reclamation - Willington, Connecticut

Approval #: _____
(for Becker Quarry use only)

Section IV (continued)- Summary of Analytical Data for Soils Proposed for Reuse at Becker Quarry

Using the representative analytical data (refer to Section II for testing requirements), the following table (or a similar summary) shall be completed.

Constituent	# Samples	Acceptance Criteria RDEC	Acceptance Criteria GA PMC	Acceptance Criteria Units	Concentration Minimum	Concentration Maximum	Concentration Units
Fluorene			5,600	ug/kg			
Hexachloroethane			1,000	ug/kg			
Hexachlorobenzene			1,000	ug/kg			
Napthalene			5,600	ug/kg			
Pentachlorophenol		5,100	1,000	ug/kg			
Phenanthrene		1,000,000	4,000	ug/kg			
Phenol		1,000,000	80,000	ug/kg			
Pyrene		1,000,000	4,000	ug/kg			
Other:							
ETPH		500	500	mg/kg			
Total Metals							
Arsenic		10	--	mg/kg			
Barium		4,700	--	mg/kg			
Cadmium		34	--	mg/kg			
Chromium		--	--	mg/kg			
Copper		2,500	--	mg/kg			
Lead		400	--	mg/kg			
Mercury		20	--	mg/kg			
Nickel		1,400	--	mg/kg			
Selenium		340	--	mg/kg			
Silver		340	--	mg/kg			
Zinc		20000	--	mg/kg			
□ SPLP or □ TCLP Metals (check one)							
Arsenic		--	0.05	mg/L			
Barium		--	1	mg/L			
Cadmium		--	0.005	mg/L			
Chromium		--	0.05	mg/L			
Copper		--	1.3	mg/L			
Lead		--	0.015	mg/L			
Mercury		--	0.002	mg/L			
Nickel		--	0.1	mg/L			
Selenium		--	0.05	mg/L			
Silver		--	0.036	mg/L			
Zinc		--	5	mg/L			
Other:							
PCBs (Total)		1	0.0005	mg/kg			
Aroclor 1016		--	0.0005	mg/L			
Aroclor 1221		--	0.0005	mg/L			
Aroclor 1232		--	0.0005	mg/L			
Aroclor 1242		--	0.0005	mg/L			
Aroclor 1248		--	0.0005	mg/L			
Aroclor 1254		--	0.015	mg/L			
Aroclor 1260		--	0.015	mg/L			
Aroclor 1262		--	0.015	mg/L			
Aroclor 1268		--	0.015	mg/L			
Pesticides (Total)		--	--				
Alachlor		7.7	0.23	mg/kg			
Chlordane		0.49	0.066	mg/kg			
Dieldrin		0.038	0.007	mg/kg			
Endrin		20	--	mg/kg			
2-4 D		680	1.4	mg/kg			
Heptachlor		0.14	0.013	mg/kg			
Toxaphene		0.56	0.33	mg/kg			
DDT/DDE/DDD		1.8	3.0	mg/kg			
Other							

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General process flow for Beneficial reuse of regulated soil

1. Customer contacts Becker Construction for initial feasibility of shipping regulated fill to the Becker Quarry Reclamation.
2. Becker Construction explains the process the customer must do to get an analytical sampling of the soil and gain CT DEEP approval.
3. Information packet is sent to the Customer. This includes the Soil Request and Profile sheet and instruction on how/what to fill out on the Profile.
4. The customer sends the form (completed with their information) to Haley Aldrich, Licensed Quality Engineer.
5. Haley & Aldrich performs their analysis and sends required information to CT DEEP for approval. This is an iterative process and will require communication back and forth between H&A and the customer to complete the DEEP requirements.
6. Allow 3 weeks at a minimum for Ct DEEP approval.
7. Ct DEEP approval letter and other required supporting documentation is obtained and returned to Haley and Aldrich and John Patton.
8. John Patton provides an approval number and an acceptance letter is sent to the customer from Becker Construction Company along with pricing, and prenumbered Transport Manifest forms and form instructions. A copy of this letter is also sent to the Town of Willington.
9. Communication between Becker Construction and customer is made (email or telephone) finalizing dates and location of the scales.
10. Haley and Aldrich sends electronic copy of application to John Patton and Diane Becker at Becker Construction.
11. Customer/originator completes the prenumbered Transport Manifest form and supplies these forms with EACH load that is delivered to the Becker Quarry. Each load manifest form MUST have the assigned approval number, located at the top of the form, filled in, along with other required signatures.
12. Customer obtains the applicable signatures for completion of the Financial Responsibility form. Upon completion, the form is sent to John Patton and Diane Becker, at Becker Construction prior to dumping fill.
13. Transport Manifest is left with Becker Construction Company at the time of delivery and acceptance into the quarry. Weight slip is attached to the form and kept for billing and record of fill.

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Instructions for completing Transport Manifest FORM BSC-1 for Beneficial Soil Reuse

This completed form must accompany every load of fill that is targeted for delivery to Becker Quarry Willington, Ct. It must have a prefilled approval number on the top of the page in the designated field. It must have a copy of FORM BS (Beneficial Soil Reuse Profile) on the front side.

SECTION 1 - Load Origin

Load Origin (Site Name and Address) – The name of the site where the material comes from and the actual street, state and zip. This can be prefilled with the Origin information on the Soil Reuse request and profile form.

Stockpile information – this is the actual location where this load was taken IF this is different from the originating site.

Color – the color of the fill (example; reddish, gray, combination of red and gray)

Approx. percent of truck loaded with material –percent of the truck's total capacity filled with defined material

Date/Time leaving Origin – date and time truck leaves originating loading site

Special Handling – specific instructions for a particular load

SECTION II – On-Site QEP Statement

QEP Company Name, Address & Phone # - prefilled with Haley & Aldrich

QEP Representative Signature – Haley and Aldrich designated representative authorized to validate material load. This must be an original signature, not a photocopy

Print QEP Representative Name – print name of QEP representative

SECTION III – Transporter Information (for this load)

Name & Contact Person for Common Transporter – name of the transporter firm and name of the transporter carrying this load

Address & Telephone – street, state, zip and telephone number of transporter firm

Emergency Contact – Name of person to contact in case of an emergency, and phone #

Truck/Tractor License Plate # - license plate of the truck hauling this load of material

Truck Number – number on the truck (if applicable)

Signature of Transporter/Driver – signature of the truck driver

SECTION IV – DESTINATION (For Becker use ONLY)

Becker Site Name and Address – prefilled

Date received and Time of arrival – date and time of the truck arrival to the scales

Confirmation of license plate and approval number – Becker scale operator confirms License Plate # and approval number

Signature – signature of the scale operator verifying license plate number and prefilled approval number

Miscellaneous Notes - any information pertinent to the load that should be noted

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Transport Manifest for Beneficial Soil Reuse FORM BSC-1
Becker Quarry Reclamation - Willington, Connecticut

Approval #: _____
(for Becker Quarry use only)

Important Notes:

1. Any load arriving at Becker's Quarry without this manifest will be turned away.
2. This manifest must have a pre-filled Approval number, which is generated by Becker Construction Company.
3. Page 1 of the approved Beneficial Reuse of Soil Request & Profile Sheet must be copied onto the reverse side of this transport manifest.
4. Weight slip must be attached to this transport manifest.

Section I - Load Origin

Load Origin (Site Name & Address from Profile Sheet): _____

Is load material from a stockpile? □ Yes □ No

If Yes, indicate address of stockpile / staging site (if different from Load Origin): _____

Color of Material: _____

Approx. Percent of Truck Loaded with Material:

(Refer to Page 2, Section III of Profile for detailed Material Information) 20% 40% 60% 80% 100% Other: _____

Date / Time Leaving Origin: _____

Special Handling Instructions*: _____ *if None, check here: □

Section II - On-Site QEP Statement

"I am familiar with the information contained on and submitted for approval with the Beneficial Reuse of Soil Request and Profile Sheet to transport soils to Becker Quarry. Based on this information and my observations on-site, it is my opinion that the soils being transported in this load are consistent with the characteristics described in the submittal and on the Material Record & Log form. It is my opinion that the material does not contain free liquid as defined by 40 CFR Part 260.10 (soils) and is not hazardous waste as defined by 40 CFR Part 261 and has been described, classified, and is in proper condition for transportation according to applicable regulations."

QEP Company Name & Phone Number: _____

QEP Representative Signature: _____

Print QEP Representative Name: _____

Section III - Transporter Information (for this load)

Name & Contact Person for Common Transporter: _____

Address (Street, City & State): _____

Emergency Contact: _____ Emergency Phone #: _____

Truck/Tractor License Plate #: _____ Truck #: _____

Signature of Transporter/Driver: _____

Section IV - Destination

Becker Site Name & Address: Becker Reclamation Quarry, 171 Tolland Turnpike, Willington, CT

For Becker Quarry Use Only:

Date Received: _____

I have confirmed the following (circle Yes or No as appropriate):

The Truck/Tractor License Plate# and Truck# delivering the load are the same as Section K of this Form: Yes No

The Page 1 (Front Side) of this Form is a signed MR&L that matches the information on this Load Shipping Form: Yes No

Signature of Scale Operator: _____

Miscellaneous Notes:

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Financial information
The following information identifies who is responsible for paying the bill generated by Becker Construction Company for dumping Urban Fill at the Becker reclamation site. By signing this form, you agree to the terms of the contracted price of the fill, per yard.
No tipping will be allowed until this form is signed and in our office.

Company responsible for payment

Billing Address (street or P O Box)

City State

Person authorized to sign for payment (print full name)

Signature Date

BECKER CONSTRUCTION COMPANY

171 TOLLAND TURNPIKE (ROUTE 74), P. O. BOX 535, WILLINGTON, CT 06279
(860) 429-2461 • (860) 429-2610 • FAX (860) 429-0542

Instructions for completing the Financial Information form for Beneficial Soil and Reuse

1. Company responsible for payment – entity that will pay the tipping fees associated with this submittal
2. Billing address Street, city and state – street or post office box address, city and state where bills will be sent
3. Person authorized to sign for payment – designated person who is authorized to sign for payment
4. Signature – actual signature of designated authorized person

APPENDIX B

Application to Request Beneficial Reuse of Polluted Soil

BECKER CONSTRUCTION COMPANY

171 TOLLAND TURNPIKE (ROUTE 74), P. O. BOX 535, WILLINGTON, CT 06279
(860) 429-2461 • (860) 429-2610 • FAX (860) 429-0542

Instructions for completing the Beneficial Soil Request and Profile Sheet

Page 1 Section 1 – General Material Information

A. Site

Site Name – The name of the site where the material comes from
Site Address, City, State and Zip – Actual address of the originating site
Current & Former Site Usage – description of how the site has and is being used
Indicate material storage (direct/stockpile) – Check the box to indicate if this fill is

- Direct haul- from the site indicated above
- Stockpile On-site – from a pile which has been relocated from the originating site however is piled on-site in a stockpile
- -Stockpile/Stage Off site – from a pile which has been relocated from the originating site and is piled OFF SITE
- Off-site Stockpile – Address (street,) City, State and Zip of the off-site pile

B. **Generator information**

Organization, address, city, state & zip – person/company who created the contaminated soil
Contact – person in the generating organization who is the prime contact for questions/concerns re: the contaminated soil
Phone, Fax, email – numbers and email address of the contact person
Certification of Generator – name and signature of person representing the generator entity, their respective title and date of signing

C. Qualified/Licensed Environmental Profession Information – to be filled in by Haley & Aldrich

Organization – Company who is responsible for contacting CTDEEP and gaining approval/disapproval for reuse submittal
Address, City, State and Zip – street address of the qualifying company
State Licensed – state where QEP is licensed
Name of QEP – full name of the Engineer or other qualified, licensed reviewing person who is assigned to this site and contract
Phone, fax, email – numbers and email address of QEP
License number – actual license number of the QEP
Licensed Environmental Professional opinion – Name of the individual QEP who will be onsite
Signature of onsite QEP, License Number and date of signature

D. Customer Information

Name – entity identified as paying Becker Construction tipping fees
Address – Street, City, State and Zip of Customer, phone, email and fax

E. Transporter/Common Carrier information

Organization – name of the company/person who is transporting the fill
Address – street, city and state of transporter
Contact Name & tel – name and telephone number of person within the transporter organization who can answer questions/resolve issues

F. Landowner

Name – name of the company/person who owns the land where this fill was generated
Address, City and State – Street address, City and state of the landowner, phone and fax number

BECKER CONSTRUCTION COMPANY

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Page 2 Section II – Sampling Frequency and Analytical Testing Requirements

C. Description of Material

Describe the Material – approximate percentages of gravel, sand, silt and clay. Note any other types of material, their approximate percent and size (cubic yards or tons)
Estimate volume of Materials: - this is for the entire site, either in cubic yards or tons
Indicate the following supporting documentation - Indicate what supporting data is included with this request and profile

D. Analytical Data

Does the material conform to the following required specifications – Based on this list of specification check off yes or no as to acceptable fill

BECKER CONSTRUCTION COMPANY

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General process flow for Beneficial reuse of regulated soil

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4. The customer sends the form (completed with their information) to Haley Aldrich, Licensed Quality Engineer.
5. Haley & Aldrich performs their analysis and sends required information to CT DEEP for approval. This is an iterative process and will require communication back and forth between H&A and the customer to complete the DEEP requirements.
6. Allow 3 weeks at a minimum for Ct DEEP approval.
7. Ct DEEP approval letter and other required supporting documentation is obtained and returned to Haley and Aldrich and John Patton.
8. John Patton provides an approval number and an acceptance letter is sent to the customer from Becker Construction Company along with pricing, and prenumbered Transport Manifest forms and form instructions. A copy of this letter is also sent to the Town of Willington.
9. Communication between Becker Construction and customer is made (email or telephone) finalizing dates and location of the scales.
10. Haley and Aldrich sends electronic copy of application to John Patton and Diane Becker at Becker Construction.
11. Customer/originator completes the prenumbered Transport Manifest form and supplies these forms with EACH load that is delivered to the Becker Quarry. Each load manifest form MUST have the assigned approval number, located at the top of the form, filled in, along with other required signatures.
12. Customer obtains the applicable signatures for completion of the Financial Responsibility form. Upon completion, the form is sent to John Patton and Diane Becker, at Becker Construction prior to dumping fill.
13. Transport Manifest is left with Becker Construction Company at the time of delivery and acceptance into the quarry. Weight slip is attached to the form and kept for billing and record of fill.

BECKER CONSTRUCTION COMPANY

171 TOLLAND TURNPIKE (ROUTE 74), P. O. BOX 535, WILLINGTON, CT 06279
(860) 429-2461 • (860) 429-2610 • FAX (860) 429-0542

Beneficial Reuse of Soil Request & Profile Sheet **FORM BSP** **Approval #:** _____
(for Becker Quarry use only)
Becker Quarry Reclamation - Willington, Connecticut

Important Note: Refer to the General Process Flow for Regulated Soil and Instructions for Completing the Beneficial Soil Request and Profile Sheet. Upon approval, this page will be used along with the Transport Manifest to accompany each load of material delivered to Becker's Quarry.

Location for Soil Delivery and Reuse:
Becker Quarry Reclamation
171 Tolland Turnpike, Willington, CT 06279

Primary Contact for Questions & Application Submittal:
Haley & Aldrich, Inc. c/o Chris Harriman, LEP
100 Corporate Place, Suite 105, Rocky Hill CT 06067
charriman@haleyaldrich.com (860) 290-3118

Section I - General Material Information & Certification

A. Site Information (location where soil is generated / excavated)

Site Name: _____ City: _____
Site Address: _____ State & ZIP: _____

Current & Former Site Usage: _____

Indicate if material will be direct-hauled, stockpiled on-site, or stockpiled/staged off-site: ☐ Direct-Haul ☐ Stockpile On-site ☐ Stockpile/Stage Off-site

Off-site Stockpile/Staging Site Address (include City, State, ZIP): _____

B. Generator Information

Organization: _____ Contact: _____
Address: _____ Phone: _____ Fax: _____
City, State, & Zip: _____ Email: _____

Certification of Generator or Authorized Agent

"By signing below, I, the Generator, certify and warrant that, having used due diligence, all the information contained in this submittal is true, accurate and complete. All information regarding releases/spills which may have affected the site, including type of materials released/spilled has been disclosed. The materials addressed in this submittal do not contain any contaminants not disclosed in this submittal. The materials addressed in this submittal do not contain listed hazardous wastes, as determined by Connecticut's "Contained-In" policy, and do not exhibit a hazardous waste characteristic as defined by Connecticut's Hazardous Waste Management Regulations. If I am an agent signing on behalf of the Generator, I have confirmed with the Generator that information contained in this Profile is accurate and complete and I have attached information documenting my legal right to sign on behalf of the Generator. I hereby certify that payment will be made according to the terms and conditions oulined in Becker Quarry's credit application."

Name: _____ Title: _____
Signature: _____ Date: _____

C. Qualified/Licensed Environmental Professional Information

Organization: _____ Name of QEP: _____
Address: _____ Phone: _____ Fax: _____
City, State, Zip: _____ Email: _____
State Licensed: _____ License Number: _____

Qualified/Licensed Environmental Professional Statement

"I have personally examined and am familiar with the information contained on and submitted with this form. Based on this information, it is my opinion that the testing and assessment actions undertaken were adequate to characterize the soil, and that the facility or location can accept soils with the characteristics described in this submittal. I am aware that significant penalties including, but not limited to, possible fines and imprisonment may result if I willfully submit information which I know to be false, inaccurate, or materially incomplete."

Name: _____ License Number: _____
Signature: _____ Date: _____

D. Customer Information (entity identified as paying Becker Construction Company tipping fees)

Name: _____ Email: _____
Address (include City, State, Zip): _____ Phone: _____ Fax: _____

E. Transporter / Common Carrier Information

Organization: _____ Contact Name: _____
Address (include City, State, Zip): _____ Phone: _____ Fax: _____

F. Landowner Information:

Name: _____ Phone: _____ Fax: _____
Address (include City, State, Zip): _____

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Beneficial Reuse of Soil Request & Profile Sheet **FORM BSP** **Approval #:** _____

(for Becker Quarry use only)

Becker Quarry Reclamation - Willington, Connecticut

Section II - Sampling Frequency and Analytical Testing Requirements

Materials proposed for reuse at Becker Quarry shall be evaluated in accordance with the analytical testing requirements indicated below and the completed tables provided in Section IV prior to being approved for reuse at Becker Quarry. As a condition of approval for Beneficial Reuse of soil at Becker Quarry, a qualified representative of the QEP will be required to be on-site full time to make observations during excavation, loading, and to coordinate and sign the manifests for material being transported to Becker Quarry.

A. Sampling Frequency

Materials must be sampled for chemical constituents and physical characteristics according to prevailing standards and practices for collecting and analyzing soil and sediment samples (i.e. EPA QA-G-5S or equivalent). The requried sampling frequency shall be one sample per 250 cubic yards of materials proposed for reuse up to 1,000 cubic yards. The density of the sampling frequency may be decreased at Becker Quarry's discretion after review of the analytical data from the first 1,000 cubic yards.

B. Analytical Requirements

The materials proposed for reuse at Becker Quarry must be tested using current test methods in EPA SW-846, with the exception of ETPH, which must be analyzed by the CTDEEP approved method. Attach a summary table, or complete Setion IV.A) comparing CTDEEP GAPMC and RDEC to the Laboratory Analytical data for each sample tested. Attach analytical data with QA/QC information and (if present) indicate data that do not apply to the material proposed for reuse at Becker Quarry and an explanation. Indicate soil location at time of testing on the summary table (i.e. in-situ or stockpile).

Analytical Test	Test Method
Extractable Total Petroleum Hydrocarbons (ETPH)	CTDEEP Approved Method
Polychlorinated Biphenyls (PCBs)	EPA SW-846 Method 8082A
Total Metals (As, Ba, Cd, Cr, Pb, Se, Ag, Cu, Ni, Zn)	EPA SW-846 Method 6010C
Total Mercurg (Hg)	EPA SW-846 Method 7471B
Metals by Synthetic Precipitation Leaching Procedure*	EPA SW-846 Method 1312
Metals by Toxicity Characteristic Leaching Procedure	EPA SW-846 Method 1311
Semi-volatile Organic Compounds (SVOCs)	EPA SW-846 Method 8270D
Volatile Organic Compounds (VOCs)	EPA SW-846 Method 8260C
Any other substance reasonably expected to be present based on the environmental conditions at the material source.	Appropriate/Current EPA SW-846 Test Method

*At minimum, required for Arsenic, Lead, and Mercury.

Section III - Material Properties

A. Description of Material

1. Describe the material: % Gravel _____ % Sand _____ % Silt _____ % Clay _____

Note other components of material not listed above, approx. %, and size: _____

2. Estimated Volume of Material: _____ cubic yards tons (circle one)

3. Indicate whether the following required supporting data are included with this application (check all that apply).

- ☐ Site history Information
- ☐ Analytical Methods/Procedures & Lab Data
- ☐ Site/Sampling Plan
- ☐ Other Relevant Informa. on
- ☐ Completed Section IV Table (pages 3 and 4) comparing CTDEEP GA PMC and RDEC to Laboratory Analytical Data.

Does the material conform to the following required specifications: ☐ Yes ☐ No

Material is Non-hazardous.

Material does not contain asbestos.

Material does not contain listed waste.

Material is free of rubbish, ice, organic material, and tree stumps.

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Beneficial Reuse of Soil Request & Profile Sheet **FORM BSP** **Approval #:** _____

Becker Quarry Reclamation - Willington, Connecticut (for Becker Quarry use only)

Section IV - Summary of Analytical Data for Soils Proposed for Reuse at Becker Quarry

Using the representative analytical data (refer to Section II for testing requirements), the following table shall be completed.

A. Summary Table (continued on Page 4)

Materials must be analyzed by mass/total or SPLP/TCLP analysis as shown in the acceptance criteria below and in accordance with the testing frequency outlined in Section II. Materials must not be present at concentrations above either CTDEEP RDEC or GA PMC. GA PMC acceptance is based on either total or SPLP/TCLP results as indicated below.

Constituent	# Samples	Acceptance Criteria			Concentration		
		RDEC	GA PMC	Units	Minimum	Maximum	Units
Total VOCs (sum)		--	--	ug/kg			
1,1-Dichloroethane		500,000	1,400	ug/kg			
1,1-Dichloroethylene		1,000	140	ug/kg			
1,2-Dichlorobenzene		500,000	2,000	ug/kg			
1,2-Dichloroethane		6,700	20	ug/kg			
1,2-Dichloropropane		9,000	100	ug/kg			
1,1,1-Trichloroethane (TCA)		500,000	4,000	ug/kg			
1,1,2-Trichloroethane		11,000	100	ug/kg			
1,1,1,2-Tetrachloroethane		24,000	20	ug/kg			
1,1,2,2-Tetrachloroethane		3,100	10	ug/kg			
cis-1,2-Dichloroethylene		500,000	1,400	ug/kg			
trans-1,2-Dichloroethylene		500,000	2,000	ug/kg			
1,3-Dichlorobenzene		500,000	12,000	ug/kg			
1,3-Dichloropropene		3,400	100	ug/kg			
1,4-Dichlorobenzene		26,000	1,500	ug/kg			
Acetone		500,000	14,000	ug/kg			
Acrylonitrile		1,100	10	ug/kg			
Benzene		21,000	20	ug/kg			
Bromoform		78,000	80	ug/kg			
2-Butanone (MEK)		500,000	8,000	ug/kg			
Carbon tetrachloride		4,700	100	ug/kg			
Chlorobenzene		500,000	2,100	ug/kg			
Chloroform		100,000	120	ug/kg			
Dibromochloromethane		7,300	10	ug/kg			
Ethylbenzene		500,000	10,100	ug/kg			
Ethylene Dibromide		7	10	ug/kg			
Methyl-tert-butyl-ether (MTBE)		500,000	2,000	ug/kg			
Methyl isobutyl ketone		500,000	7,000	ug/kg			
Methylene chloride		82,000	100	ug/kg			
Styrene		500,000	2,000	ug/kg			
Tetrachloroethylene (PCE)		12,000	100	ug/kg			
Toluene		500,000	20,000	ug/kg			
Trichloroethylene (TCE)		56,000	100	ug/kg			
Vinyl Chloride		320	40	ug/kg			
Xylenes		500,000	19,500	ug/kg			
Other:							
Total SVOCs (sum)		--	--	ug/kg			
2-Chlorophenol		340,000	1,000	ug/kg			
2,4-Dichlorophenol		200,000	1,000	ug/kg			
Benzo(a)anthracene		1,000	1,000	ug/kg			
Benzo(b)fluoranthene		1,000	1,000	ug/kg			
Benzo(k)fluoranthene		8,400	1,000	ug/kg			
Benzo(a)pyrene		1,000	1,000	ug/kg			
Bis(2-chloroethyl)ether		1,000	1,000	ug/kg			
Bis(2-chloroisopropyl)ether		8,800	1,000	ug/kg			
Bis(2-ethylhexyl)phthalate		44,000	1,000	ug/kg			
Butyl benzl phthalate		1,000,000	20,000	ug/kg			
Di-n-butyl phthalate		1,000,000	14,000	ug/kg			
Di-n-octyl phthalate		1,000,000	2,000	ug/kg			
Fluoranthene		1,000,000	5,600	ug/kg			

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Beneficial Reuse of Soil Request & Profile Sheet **FORM BSP** **Approval #:** _____

Becker Quarry Reclamation - Willington, Connecticut (for Becker Quarry use only)

Section IV (continued)- Summary of Analytical Data for Soils Proposed for Reuse at Becker Quarry

Using the representative analytical data (refer to Section II for testing requirements), the following table shall be completed.

Constituent	# Samples	Acceptance Criteria			Concentration		
		RDEC	GA PMC	Units	Minimum	Maximum	Units
Fluorene		1,000,000	5,600	ug/kg			
Hexachloroethane		44,000	1,000	ug/kg			
Hexachlorobenzene		1,000	1,000	ug/kg			
Napthalene		1,000,000	5,600	ug/kg			
Pentachlorophenol		5,100	1,000	ug/kg			
Phenanthrene		1,000,000	4,000	ug/kg			
Phenol		1,000,000	80,000	ug/kg			
Pyrene		1,000,000	4,000	ug/kg			
Other:							
ETPH		500	500	mg/kg			
Total Metals							
Arsenic		10	--	mg/kg			
Barium		4,700	--	mg/kg			
Cadmium		34	--	mg/kg			
Chromium		--	--	mg/kg			
Copper		2,500	--	mg/kg			
Lead		400	--	mg/kg			
Mercury		20	--	mg/kg			
Nickel		1,400	--	mg/kg			
Selenium		340	--	mg/kg			
Silver		340	--	mg/kg			
Zinc		20000	--	mg/kg			
☐ SPLP or ☐ TCLP Metals (check one)							
Arsenic		--	0.05	mg/L			
Barium		--	1	mg/L			
Cadmium		--	0.005	mg/L			
Chromium		--	0.05	mg/L			
Copper		--	1.3	mg/L			
Lead		--	0.015	mg/L			
Mercury		--	0.002	mg/L			
Nickel		--	0.1	mg/L			
Selenium		--	0.05	mg/L			
Silver		--	0.036	mg/L			
Zinc		--	5	mg/L			
Other:							
PCBs (Total)		1	--	mg/kg			
Aroclor 1016		--	0.0005	mg/L			
Aroclor 1221		--	0.0005	mg/L			
Aroclor 1232		--	0.0005	mg/L			
Aroclor 1242		--	0.0005	mg/L			
Aroclor 1248		--	0.0005	mg/L			
Aroclor 1254		--	0.015	mg/L			
Aroclor 1260		--	0.015	mg/L			
Aroclor 1262		--	0.015	mg/L			
Aroclor 1268		--	0.015	mg/L			
Pesticides (Total)		--	--				
Alachlor		7.7 mg/kg	0.02 mg/L	--			
Chlordane		0.49 mg/kg	0.003 mg/L	--			
Dieldrin		0.038 mg/kg	0.00002 mg/L	--			
Endrin		20 mg/kg	--	--			
2-4 D		680 mg/kg	0.7 mg/L	--			
Heptachlor		0.14 mg/kg	0.004 mg/L	--			
Toxaphene		0.56 mg/kg	0.03 mg/L	--			
DDT/DDE/DDD (sum)		1.8 mg/kg	0.001 mg/L	--			
Other							

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Transport Manifest for Beneficial Soil Reuse BSP-1
Becker Quarry Reclamation - Willington, Connecticut

Approval #: _____
(for Becker Quarry use only)

Important Notes:

1. Any load arriving at Becker's Quarry without this manifest will be turned away.
2. This manifest must have a pre-filled Approval number, which is generated by Becker Construction Company at the time of CTDEEP approval.
3. Page 1 of the approved Beneficial Reuse of Soil Request & Profile Sheet must be copied onto the reverse side of this transport manifest.
4. Weight slip must be attached to this transport manifest.

Section I - Load Origin

Load Origin (Site Name & Address from Profile Sheet): _____

Is load material from a stockpile? ☐ Yes ☐ No

If Yes, indicate address of stockpile / staging site (if different from Load Origin): _____

Color of Material: _____

Approx. Percent of Truck Loaded with Material:

(Refer to Page 2, Section III of Profile for detailed Material Information) 20% 40% 60% 80% 100% Other: _____

Date / Time Leaving Origin: _____

Special Handling Instructions*: _____ *if None, check here: ☐

Section II - On-Site QEP Statement

"I am familiar with the information contained on and submitted for approval with the Beneficial Reuse of Soil Request and Profile Sheet to transport soils to Becker Quarry. Based on this information and my observations on-site, it is my opinion that the soils being transported in this load are consistent with the characteristics described in the submittal and on the Material Record & Log form. It is my opinion that the material does not contain free liquid as defined by 40 CFR Part 260.10 (soils) and is not hazardous waste as defined by 40 CFR Part 261 and has been described, classified, and is in proper condition for transportation according to applicable regulations."

QEP Company Name & Phone Number: _____

QEP Representative Signature: _____

Print QEP Representative Name: _____

Section III - Transporter Information (for this load)

Name & Contact Person for Common Transporter: _____

Address (Street, City & State): _____

Emergency Contact: _____ Emergency Phone #: _____

Truck/Tractor License Plate #: _____ Truck #: _____

Signature of Transporter/Driver: _____

Section IV - Destination

Becker Site Name & Address: Becker Reclamation Quarry, 171 Tolland Turnpike, Willington, CT

For Becker Quarry Use Only:

Date Received: _____

I have confirmed the following (circle Yes or No as appropriate):

The Truck/Tractor License Plate# and Truck# delivering the load are the same as Section K of this Form: Yes No

The Page 1 (Front Side) of this Form is a signed MR&L that matches the information on this Load Shipping Form: Yes No

Signature of Scale Operator: _____

Miscellaneous Notes:

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BECKER CONSTRUCTION COMPANY

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Financial information
The following information identifies who is responsible for paying the bill generated by Becker Construction Company for dumping Urban Fill at the Becker reclamation site. By signing this form, you agree to the terms of the contracted price of the fill, per yard.
No tipping will be allowed until this form is signed and in our office.

Company responsible for payment

Billing Address (street or P O Box)

City State

Person authorized to sign for payment (print full name)

Signature Date

BECKER CONSTRUCTION COMPANY

171 TOLLAND TURNPIKE (ROUTE 74), P. O. BOX 535, WILLINGTON, CT 06279
(860) 429-2461 • (860) 429-2610 • FAX (860) 429-0542

Instructions for completing the Financial Information form for Beneficial Soil and Reuse

1. Company responsible for payment – entity that will pay the tipping fees associated with this submittal
2. Billing address Street, city and state – street or post office box address, city and state where bills will be sent
3. Person authorized to sign for payment – designated person who is authorized to sign for payment
4. Signature – actual signature of designated authorized person

APPENDIX C

Town of Willington Permit