

APPENDIX H
LANDFILL SEEDING



SOIL & MATERIAL TESTING, INC.

157 SOUTH MAIN STREET • CASTLETON, N.Y. 12033

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(914) 336-4471
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November 30, 1998

Mr. Mike Hayes
Kubricky Construction Corp.
PO Box 3202
Glens Falls, NY 12801-7202

Re: *Moreau Landfill*

SMT No.: 82135

Soil & Material Testing Inc. is pleased to submit test results for the above referenced project. The samples will be stored at SMT for 30 days. Please contact us for longer storage periods.

Test Procedure: *ASTM D 2974; Standard Practice for Organic Content*

Sample ID	Organic Content, %	Specifications
Topsoil	5.01%	2-6%

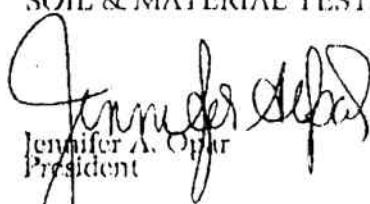
Test Procedure: *ASTM D 4972; pH of Soils*

Sample ID	pH	Specifications
Topsoil	6.8	5.0-7.0

If you have any questions or comments about these results or any other matter, please feel free to contact us.

Sincerely,

SOIL & MATERIAL TESTING, INC.


Jennifer A. Opler
President

FILE COPY

March 12, 1999

Mr. David Mt. Pleasant, P.E.
NYSDEC - Region 5
Hudson Street - P.O. Box 220
Warrensburg, NY 12885-0220

Re: Revised Seeding Plan
Town of Moreau Landfill Closure
Contract No. 10
S&W No. 70011PA.5

Dear Mr. Mt. Pleasant:

As we have discussed, Kubricky Construction Corporation has submitted a revised seeding plan for the above-referenced project. Our specifications allow the contractor to submit a variation to the seeding mixture and application rate based on the recommendations of a turf grass specialist. Kubricky's seeding/fertilizing subcontractor for the project, Simpson Seeding, Inc., has contacted and received recommendations from the United States Department of Agriculture Natural Resources Conservation Service in Syracuse, New York. A copy of their recommended seed mix and application rate is attached for your reference. The recommendation significantly reduces the application rate specified in the Contract Documents and adds two seed species to the mix. Our landscape architect has reviewed the submitted variation. As Simpson Seeding, Inc. appears to understand the goal of the specified warm season grasses, we have agreed to the submitted variation.

Simpson Seeding has also proposed to evaluate individual sections of the landfill prior to seeding to determine the best alternative for erosion control based on the site specific conditions for that individual section. A copy of their request is also attached. Again, based on the research performed by Simpson Seeding, we are willing to work with the contractor to select the best erosion control system and establish the desired vegetative cover system.

Mr. David Mt. Pleasant, P.E.
NYSDEC - Region 5

March 12, 1999
Page 2

We note that the Contract Documents still require the contractor to provide a full, uniform stand of grass within the 1-year guarantee period following completion of construction. Please append this information to the approved closure plan for your reference during review of our construction documentation report.

If you have any questions, please feel free to contact our office.

Very truly yours,



Bradford L. Smith, P.E.
Senior Project Manager

BLS/jlb

Enclosure

cc: Stearns & Wheeler Field Representative (w/ enc.)
Donaid Ferlow, Stearns & Wheeler (w/ enc.)



United States
Department of
Agriculture

441 S. Salina St, Suite 354
Syracuse, NY 13202-2460

Office: (315) 477-6538
Fax: (315) 477 6550

Feb. 10, 1999

Carol Simpson
Simpson Seeding Inc.
PO Box 237
West Stockholm, NY 13696

Dear Ms. Simpson-

You called in reference to seeding work to be done this spring on the Moreau Landfill, Saratoga County, which your firm will perform. You have technical questions regarding the seeding rates specified for the project, about the soil medium alternatives, and mulching choices. Not being familiar with this site, I can only speak in general terms about the current specifications.

The soil test you provided is from the current surface material on the cap. This shows a fines (<200 mesh) at 46 percent, which should allow for the successful use of either a cool season grass or a warm season grass cover. The pH of 6.4 is very good for either cover type. It would appear that adding topsoil to the site is unnecessary. The site is over 40 acres in size, with side slopes of 10-20 percent.

The specified seed mix is a combination of warm and cool season grasses:

species	lb/ac	rec. change to	rec. cultivar
lit. bluestem	15	3	Aldous
big bluestem	15	4	Niagara
switchgrass	10	3	Shafter
indiangrass	15	2	Rumsey
sand lovegrass	5	3	Bend
deertongue	10	3	Tloga
hard fescue	30	10	
sheep fescue	30	10	
add redtop		2	Streaker
add birdsfoot trefoil		5	orect type
	130	45	

The basis for these changes is two-fold. The specified seeding rates are extremely high and will be very expensive at today's prices, and they are not necessary if the seeding methodology is appropriate for warm season grasses. If the methodology is not appropriate, then the elevated



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<http://Plant-Materials.nrcs.usda.gov>

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rates will make little difference. Having 22 lb of cool season grass seed in the mix is the hedge against poor germination of the warm seasons, but will slow down the warm season grass development through competition. A legume will provide some nitrogen fixation in future years. Plant as early in the spring as soil conditions will allow.

Warm season grass seed must be incorporated, so hydroseeding followed by immediate tracking (up and down the slope) with a bulldozer is the preferred method in this case. Then, a light mulch of 1500 lb/ac small grain straw can be applied with erosion control blanket on the slopes as needed. The blanket will inhibit the warm season grasses if it provides dense shade. The straw should be tackified to resist movement.

The use of native warm season grasses will provide a cover that is beneficial to wildlife and will better tolerate drought conditions in the future. Once established these grasses produce a much more extensive root mass and above ground biomass than the cool season grasses. The cool season grasses are much faster to germinate and provide quick cover. Their other benefits are limited.

If you have questions, give me a call.

Sincerely,



John A. Dickerson
Plant Materials Specialist

cc.

Steve Machovec, RPL, Syracuse

Marilyn Stephenson, AC, Albany

Dick Rasmussen, DC, Ballston Spa

SIMPSON SEEDING, INC.
P.O. Box 237, W. STOCKHOLM, N.Y. 13696
PHONE: 315-265-8213 FAX: 315-265-1914

March 10, 1999

Michael Hayes
Kubricky Construction Corp.
P.O. Box 3202
Glens Falls, NY 12301

RE: Moreau landfill - Erosion Control Blanket

Dear Michael:

Our research into the growth habit of warm season grasses has revealed that they need warm soil to germinate and grow. Since erosion control blanket may inhibit their growth by providing shade and not allowing the soil to heat up, we are presented with a dilemma. If we use the blanket to protect the slope, we may reduce the establishment rate of the warm season grasses. If we don't use the blanket, we may lose some slopes to erosion, especially considering the long establishment period required by these species. Our objective is to achieve the best possible result with the least amount of risk. So, we propose the following for the seeding and erosion control work on the Moreau landfill.

First we want to include the use of a mulched wood fiber mulch with tack blended with "Fiber plus", extra tack and a copolymer to produce a bonded fiber matrix. We have had excellent results with these products in place of blanket. This mixture would be used in sloped areas that are determined to be at risk, as describe below, that are also accessible by our equipment. This has the *advantage* of being applied after the seed is tracked in, as recommended by the NRCS, and will *lay in* the tracks as opposed to *on top* of the tracks. Sloped areas that are determined at risk, as described below, that are difficult to access would receive blanket.

A general review of the site will be performed as soon as weather permits. Before work on each section begins, a careful review of the site by representatives from Simpson Seeding, Kubricky Construction and the EIC will be performed. Risks of erosion compared to the disadvantages presented by a blanket installation will be weighed. Blanket or wood fiber matrix will be installed on slopes deemed at risk for potential erosion as determined by the variables of the site. These variables will include the *slopes, length and predominant direction (N, S, E, or W) of slope as well as the area of the "collection area" above the slope.* (The "collection area" would be the potential area

SIMPSON SEEDING, INC
P.O. Box 237, W. STOCKHOLM, N.Y. 13696
PHONE: 315-265-8213 FAX: 315-265-1914

from which water would collect or gather before running down the slope. The weather patterns, temperature, potential thunderstorm activity, soil conditions and current soil temperatures will also be considered. All these variable will be considered and weighed to determine where the blanket, bonded wood fiber, or straw mulch should be installed.

We appreciate the time and consideration of all those involved in this project with respect to the sensitive issues surrounding the desired species of turf.

Sincerely,

Carol Simpson, Pres.
Simpson Seeding, Inc.

Town of Moreau
SARATOGA COUNTY, STATE OF NEW YORK
TOWN OFFICE BUILDING
P.O. Box 1349
South Glens Falls, NY 12803
PHONE (518) 792-1030



July 10, 1998

Ms. Tanya Reinhard
NYSDEC - Region 5
Hudson Street
P. O. Box 220
Warrensburg, NY 12885-0220

Dear Ms. Reinhard:

As instructed by our engineers, Stearns & Wheeler, enclosed please find a Wetland Permit Application for the Town of Moreau and a Short Environmental Assessment Form for Town of Moreau Landfill closure.

Very truly yours,

A handwritten signature in black ink, appearing to read "Harry C. Gutheil, Jr." with a stylized flourish at the end.

Harry C. Gutheil, Jr.
Supervisor

HG/mb

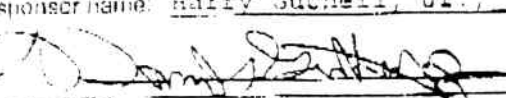
CC: Town Board
Brad Smith, Stearns & Wheeler

14-10-98 (9/95) - Form 12

PROJECTED NUMBER

State Environmental Quality Review **SHORT ENVIRONMENTAL ASSESSMENT FORM** For UNLISTED ACTIONS Only

PART I—PROJECT INFORMATION (To be completed by Applicant or Project sponsor)

1. APPLICANT/SPONSOR Town of Moreau, New York	2. PROJECT NAME Town of Moreau Landfill Closure
3. PROJECT LOCATION: Municipality: Town of Moreau, New York County: Saratoga	
4. PRECISE LOCATION (Street address and road intersections, prominent landmarks, etc., or provide map) Immediately west of the Town Transfer Station and County Recycling Facility on Butler Road, just west of U.S. Route 9 in the central portion of the Town of Moreau.	
5. IS PROPOSED ACTION: <input checked="" type="checkbox"/> New <input type="checkbox"/> Expansion <input type="checkbox"/> Modification/alteration	
6. DESCRIBE PROJECT BRIEFLY: Excavation of less than 1,000 CY of eroded material from the buffer area of State Wet land GF-3 as required by NYSDEC letter to Town dated 3/2/98, and installation of the top of the landfill cap in the buffer area involving less than 200 CY of material.	
7. AMOUNT OF LAND AFFECTED: Initially: 0.12 acres Ultimately: 0.12 acres	
8. WILL PROPOSED ACTION COMPLY WITH EXISTING ZONING OR OTHER EXISTING LAND USE RESTRICTIONS? <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No If No, describe briefly	
9. WHAT IS PRESENT LAND USE IN VICINITY OF PROJECT? <input type="checkbox"/> Residential <input type="checkbox"/> Industrial <input type="checkbox"/> Commercial <input type="checkbox"/> Agriculture <input type="checkbox"/> Park/Forest/Open space <input checked="" type="checkbox"/> Other Describe: Former Town Landfill	
10. DOES ACTION INVOLVE A PERMIT APPROVAL, OR FUNDING, NOW OR ULTIMATELY FROM ANY OTHER GOVERNMENTAL AGENCY (FEDERAL, STATE OR LOCAL)? <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No If yes, list agency(s) name and permit/approvals Possible involvement by the U.S. Army Corps of Engineers who have been contacted.	
11. DOES ANY ASPECT OF THE ACTION HAVE A CURRENTLY VALID PERMIT OR APPROVAL? <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No If yes, list agency name and permit/approval	
12. AS A RESULT OF PROPOSED ACTION WILL EXISTING PERMIT/APPROVAL REQUIRE MODIFICATION? <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	
I CERTIFY THAT THE INFORMATION PROVIDED ABOVE IS TRUE TO THE BEST OF MY KNOWLEDGE	
Applicant/sponsor name: <u>Harry Gutheil, Jr., Supervisor</u> Date: <u>July 9, 1998</u>	
Signature: 	

If the action is in the Coastal Area, and you are a state agency, complete the Coastal Assessment Form before proceeding with this assessment

PART II—ENVIRONMENTAL ASSESSMENT (To be completed by Agency)

- A. DOES ACTION EXCEED ANY TYPE I THRESHOLD IN 6 NYCRR, PART 617.4? If yes, coordinate the review process and use the FULL EAF.
☐ Yes ☒ No
- B. WILL ACTION RECEIVE COORDINATED REVIEW AS PROVIDED FOR UNLISTED ACTIONS IN 6 NYCRR, PART 617.6? If No, a negative declaration may be superseded by another involved agency.
☐ Yes ☒ No
- C. COULD ACTION RESULT IN ANY ADVERSE EFFECTS ASSOCIATED WITH THE FOLLOWING: (Answers may be handwritten, if applicable.)
- C1. Existing air quality, surface or groundwater quality or quantity, noise levels, existing traffic patterns, solid waste production or disposal, potential for erosion, drainage or flooding problems? Explain briefly:
No
 - C2. Aesthetic, agricultural, archaeological, historic, or other natural or cultural resources, or community or neighborhood character? Explain briefly:
No
 - C3. Vegetation or fauna, fish, shellfish or wildlife species, significant habitats, or threatened or endangered species? Explain briefly:
No
 - C4. A community's existing plans or goals as officially adopted, or a change in use or intensity of use of land or other natural resources? Explain briefly:
No
 - C5. Growth, subsequent development, or related activities likely to be induced by the proposed action? Explain briefly:
No
 - C6. Long term, short term, cumulative, or other effects not identified in C1-C5? Explain briefly:
No
 - C7. Other impacts (including changes in use of either quantity or type of energy)? Explain briefly:
No

D. WILL THE PROJECT HAVE AN IMPACT ON THE ENVIRONMENTAL CHARACTERISTICS THAT CAUSED THE ESTABLISHMENT OF A CEA?
☐ Yes ☒ No

E. IS THERE, OR IS THERE LIKELY TO BE, CONTROVERSY RELATED TO POTENTIAL ADVERSE ENVIRONMENTAL IMPACTS?
☐ Yes ☒ No If Yes, explain briefly

PART III—DETERMINATION OF SIGNIFICANCE (To be completed by Agency)

INSTRUCTIONS: For each adverse effect identified above, determine whether it is substantial, large, important or otherwise significant. Each effect should be assessed in connection with its (a) setting (i.e. urban or rural); (b) probability of occurring; (c), duration; (d) irreversibility; (e) geographic scope; and (f) magnitude. If necessary, add attachments or reference supporting materials. Ensure that explanations contain sufficient detail to show that all relevant adverse impacts have been identified and adequately addressed. If question D of Part II was checked yes, the determination and significance must evaluate the potential impact of the proposed action on the environmental characteristics of the CEA.

- ☐ Check this box if you have identified one or more potentially large or significant adverse impacts which **MAY** occur. Then proceed directly to the FULL EAF and/or prepare a positive declaration.
- ☒ Check this box if you have determined, based on the information and analysis above and any supporting documentation, that the proposed action **WILL NOT** result in any significant adverse environmental impacts **AND** provide on attachments as necessary, the reasons supporting this determination:

Town of Moreau
Name of Lead Agency

Harry G. Gulheil, Jr. <small>Print or Type Name of Responsible Officer in Lead Agency</small>	Town Supervisor <small>Title of Responsible Officer</small>
 <small>Signature of Responsible Officer in Lead Agency</small>	 <small>Signature of Preparer (if different from responsible officer)</small>
 <small>Date</small>	

APPENDIX I

WETLAND CORRESPONDENCE

August 14, 1998

Mr. John Connell
U.S. Army Corps of Engineers
One Bond Street
Troy, NY 12180

Re: US ACOE Wetland Preconstruction Notification
Town of Moreau Landfill Closure
Town of Moreau, New York
S&W No. 70011PA5000

Dear Mr. Connell:

The Town of Moreau, Saratoga County, New York hereby submits a preconstruction notification and requests a wetland permit from the US Army Corp of Engineers (ACOE) to impact ± 1.61 acres of field identified wetlands and sediment 'runout' area in order to complete the landfill closure plan for the former landfill. This permit request is submitted under the terms of ACOE Nationwide Permit 38.

The Town of Moreau is under a New York State Department of Environmental Conservation (NYSDEC) "Consent Order" (see copy attached) to close and cap this Class 3 inactive hazardous waste landfill. The landfill closure plan delineates a reduced depth cap thickness of ± 18 inches, which includes the geomembrane, drainage layer, and topsoil planting medium. In addition, some minor grading of the existing landfill surface is required to achieve appropriate surface drainage patterns. These two activities will require that the landfill slope be extended approximately 5 feet from its present toe in order to fully cover the underlying garbage, trash, and debris. In some locations, this work shall involve activity within the delineated wetlands and, in other locations, the work will occur within mapped uplands.

WETLAND DELINEATION

A field inspection and wetland delineation was conducted on the landfill site on July 20, 1998. The borders of the landfill footprint were walked. Two representative test plots were made in accordance the standards of the 1987 Federal Wetland Delineation Manual (see attached). The wetland limits were identified based upon the presence of hydrophytic vegetation, disturbed soils showing aquatic

indicators, and the observance of wetland hydrology indicators. The wetland border was documented with numbered flags and a wetland field map was drawn. Photographs of the existing site conditions and physical features were taken.

On August 5, 1998, a separate field inspection was made and the 'runout' edge of waterborne sands, silts, and sediments was mapped using the wetland flagging as a base line. These materials have been 'washed' from the landfill surface over a period of years into original wetland areas adjacent to the landfill footprint. In locations, they have degraded the original wetland and have caused a decline or change in the wetland habitat.

The wetland field map was given to the surveyor and the wetland flagged limits were surveyed. The survey field data was plotted on the base topographic map of the landfill closure plan and has been used as the basis for determining the anticipated wetland impacts for this permit application. The identified edge of waterborne materials impact was also plotted on the project topographic map and involves ± 1.29 acres.

HISTORIC WETLANDS

A review of aerial photographs of the site was made to identify where wetland ecosystems might have been located during a significant portion of the life of the landfill. Aerial photos of site conditions in 1995 and 1984 were obtained and studied. The 1995 photo shows the base edge of the landfill disturbance at the approximate same position as it is in 1998. The 1984 photo depicts an area that displays upland (evergreen tree growth) and wetland features within a portion of the site that is now covered by the landfill footprint. This area involves approximately 5.0 acres of the landfill of which an estimated 30 percent might have displayed wetland features. Therefore, the wetlands impacted since 1984 are estimated to involve ± 1.5 acres.

NYSDEC WETLANDS

One section of the field mapped wetlands is also delineated as an NYSDEC wetland ecosystem, though the wetland border has been established by the state at a location further from the landfill than the ACOE wetland limits. The NYSDEC has requested that the accumulated sediments that have been deposited along sections of the site bordering the state wetland be excavated back to what might be considered the approximate original grades and that wetland system features be reestablished.

PROPOSED ACTIVITY

The Supreme Court of the State of New York, County of Saratoga, acting on behalf of the NYSDEC (plaintiffs) has ordered, adjudged and decreed that the Moreau Landfill shall be closed and appropriately capped and set a final closure date for the facility of December 31, 1998. This Consent Order has resulted in a landfill closure plan being prepared for the site. The plan has been reviewed and approved by the NYSDEC. Prices have been received from contractors and a September 1998 start of construction has been scheduled in order to meet the court deadline.

The landfill closure plan calls for the final shaping of the landfill surface and the installation of a geomembrane, drainage layer, and topsoil planting medium over the surfaces of the disturbed site areas that are underlain by garbage, trash, and debris. The depth of the cap is ± 18 inches. The proposed action will require the use of heavy earth moving machinery (backhoes, dump trucks, loaders, dozers) to move earth and shape final surface slopes, plus will involve the use of special equipment to install the geomembrane material.

Sections of the field mapped wetlands will be impacted to achieve this plan, with ± 0.32 acres of wetlands filled or disturbed within a ± 3100 -foot long narrow linear band along the base of the landfill slope as a direct result of the landfill closure. This work shall require the placement of ± 500 cubic yards of 'fill' that includes the geomembrane, 12-inch drainage layer, and 6-inch topsoil planting medium layer. In addition, ± 0.2 acres of existing modified and altered wetlands bordering the base of the landfill slope will be impacted as a result of the NYSDEC directive to excavate and remove accumulated silts, sands, and sediments from this area. This remedial action shall result in the removal of ± 100 cubic yards of accumulated material from the original wetland.

The proposed landfill closure plan includes an erosion and sediment control plan to prevent further impacts to the adjacent wetlands.

A total of ± 1.61 acres of highly altered and modified mapped wetland ecosystems will be impacted by the landfill closure, either by filling and grading or by excavation and reestablishment as wetland habitat.

ALTERNATES FOR THE PROPOSED ACTION

Alternates to the proposed action involve a no-action alternate and alternate plans for meeting the conditions of the Consent Order.

bluegrass, birdsfoot trefoil, timothy, switch grass, and foxtail grass. This work shall occur on the outer fringes of the landfill cap and will establish ± 0.7 acres of naturalistic habitat along the wetland border.

3. Seeding of the closed landfill surface with a warm season 'grass' species mix containing species such as switchgrass, timothy, meadow fescue, sheep fescue, Indian grass, foxtail grass, orchard grass, birdsfoot trefoil, deer tongue, and tall fescue. These species are 'clump' grasses that take a period of time to become established after seeding, but develop deep root systems that withstand drought and warm weather conditions. The character of growth enables a number of wildflower species to grow between the grass plants. This type of plant cover on a landfill site is not suited for regular mowing (lawn) but is maintained by mowing yearly or every other year to keep out woody growth. The proposed plan is to establish a viable naturalistic, rural habitat on the closed landfill surface that will provide niches for a variety of wildlife that use wetlands and uplands.

In addition, the proposed, NYSDEC required, excavation of accumulated silts, sands, and sediments from wetland areas between the base of the landfill and the NYSDEC wetland border is anticipated to result in a short term disruption to the degraded wetlands in this area but result in a long term enhancement to the wetland system.

CONCLUSION

The proposed landfill closure plan, developed to meet the requirements of the Consent Order, requires filling or impact to ± 1.61 acres of field mapped wetlands at the Moreau Landfill site. A preconstruction notification to the ACOE is required to obtain a permit to perform the activity. Alternate plans for the landfill closure with less impact to jurisdictional ecosystems have been considered are not feasible.

Anticipated impacts to wetlands are proposed to be mitigated by the creation of ± 2.0 acres of wetlands, establishment of wetland buffer plantings over ± 0.7 acres along the edge of the wetlands, and the seeding of the closed landfill surfaces to a naturalistic selection of grass species.

Very truly yours,



Donald L. Ferlow, FASLA
Associate, Senior Wetlands Scientist

DLF/smp
Attachments

Scope of Work for Wetland Mitigation Town of Moreau Landfill

Location: A + 3100-foot long narrow linear band along the base of the landfill slope. (see Figure 1) Area is about 31,000 square feet. The site is located off NY St. Rt. 9.

Work Description: Planting of the lower slope of the capped landfill berm with a mixture of shrubs and dense grass. The plantings will be located in a linear band approximately 10 feet in width that will extend from several feet into the wetland edge to approximately 2 feet in elevation above the wetland edge. (see Figure 2)

Areas along the lower slope bordering the wetland basins shall be seeded with an erosion control/restoration seed mix.

Materials: The erosion control/restoration seed mix shall be made up of: Alsike Clover, Rough Blue Grass, Meadow Fescue, Redtop, Creeping Bent Grass, Switchgrass, Meadow Foxtail, Eastern Gama-Grass, Fox Sedge, Virginia Wild-Rye, Plains Coreopsis, Grass-leaved Goldenrod, Canada Goldenrod, Blue Vervain, Joe-Pye Weed, Boneset, Tioga Deertongue, and Flat-top Aster (New England Wetmix [Supplied by New England Wetland Plants, inc., Amherst Massachusetts] or equivalent substitute). The rate of seeding shall be 35 lbs. per acres (1 lb. Per 1245 sq. ft.) of surface area not covered by shallow water.

Wetland Mitigation Material List					
Botanical Name	Common Name	NWI Status	Quantity	Size	Root
Sambucus canadensis	Elderberry	FACW	100	18-24 inches	Container
Viburnum dentatum	Arrowwood Viburnum	FAC/FACW	100	18-24 inches	Container
Alnus rogora (incana)	Speckled Alder	FACW	100	18-24 inches	Container
Cornus serica (stolinifera)	Red Stem Dogwood	FACW	100	18-24 inches	Container
Salix purpurea	Streamco Willow	FACW	100	18-24 inches	Container

Completion Date: All work completed by June 15, 1999

If interested please fax estimate to (315) 655-4180

Stearns & Wheler, LLC
Attention: David Frostelapp

A no-action alternate is not considered feasible as it would leave a highly degraded site feature on a landscape that is bordered by mapped wetlands. Further, this alternate would not be in compliance with the court's Consent Order.

Alternate plans for the landfill closure all involve the disturbance and movement of existing buried, and at least partially covered, garbage, trash, and debris, some of which may be hazardous. This design approach to the landfill closure would necessitate excavation along the wetland border to depths that are in the underlying groundwater table. Heavy earth moving machinery would be required and the material would have to be buried in another location on the landfill surface, which would necessitate additional disturbance to the landfill site. Disruption of the buried material would result in additional impacts to the adjacent wetlands and is considered to have the potential for significantly greater impact to the wetlands than the landfill closure plan submitted for the wetland permit.

IMPACT MITIGATION

The proposed landfill closure plan represents a plan with minimum level of impact to the mapped wetlands that will achieve the action mandated by the Consent Order. The remaining ± 1.61 acres of wetland impacts, that cannot be avoided, are proposed to be mitigated by the:

1. Creation of wetlands in another area of the site that is currently used as a storage area and contains an area of pooled water that is not a jurisdictional wetland system. Excavation and grading is proposed in this area that will lower site elevations to match the water regime of the pooled water. An undulating surface topography will be established that will have some locations above and some below the normal water level. The wetland surface and the lower slope fringe area will be seeded with a mix of grass and wildflower species containing Canada manna grass, rice cutgrass, fringed sedge, fox sedge, tussock sedge, lurid sedge, wool grass, soft rush, joe pye seed, boneset, and blue vervain. The remaining slope areas bordering the evented wetland will be seeded with the landfill seed mix. When completed, the area of mitigation wetlands will be ± 2.0 acres.
2. Planting of the lower slope of the capped landfill berm with a mixture of shrubs and dense grass and herbaceous growth pending NYSDEC approval. The plantings will be located in a linear band approximately 10 feet in width that will extend from several feet into the wetland edge to approximately 2 feet in elevation above the wetland edge. Shrub plantings are planned to set over 25 percent of the area with the remainder of the surface established as grass and wildflowers. Woody species selection will include a variety such as shrub willow, alder, elderberry, arrowwood viburnum, and red stem dogwood. Approximately 500 shrubs at 18-24 inches in height will be required. Grass species shall be a mix of fescues, redtop,

January 19, 2000

Mr. John Connell
U.S. Army Corps of Engineers
Regulatory Branch/Albany Field Office
One Bond Street
Troy, NY 12180

Re: Created Wetland Status
Permit Application No. 98-10740-YM
Town of Moreau, New York
S&W No. 70011PA.4

Dear Mr. Connell:

On November 10, 1999, we forwarded to you recent color photographs of the area proposed for wetland creation at the above-referenced site. Since that date earthwork has been completed, including grading, installation of culverts, construction of stone spillways, construction of rip rap swales, and installation of erosion control devices.

During construction, field adjustments were made based on the recommendations of our wetland personnel. The most notable of these adjustments are:

1. Two additional spillways were constructed toward the eastern portion of the two eastern most ponds. This will allow water to be maintained at a higher elevation on the eastern portion of the site, thereby increasing the water regime features area of the wetland.
2. Stumps and logs encountered during excavation of the created wetland were scattered about the created wetland areas, to ultimately create a more natural habitat with perches for birds and sunny spots for amphibians and turtles.

As construction activities were completed on December 17, 1999, seeding of the created wetland was not completed. The construction contractor has indicated that seeding and planting of the wetland area should be completed in the spring when weather permits. At this time, we anticipate that this seeding and planting will be completed by May 15, 2000.

Mr. John Connell
U.S. Army Corps of Engineers

January 19, 2000
Page 2

Enclosed are photocopies of two color photographs taken on December 17, 1999. One photograph shows a typical wetland area sign, the other provides a general view of the mitigation area and illustrates the additional berms and scattered logs and stumps.

We will continue to keep you apprised as new information becomes available. If you have any questions, please feel free to contact our office.

Very truly yours,



Bradford L. Smith, P.E.
Senior Project Manager

BLS/jlb

Enclosure

cc: Harry Gutheil, Jr., Town of Moreau (w/ enc.)
Martin Auffredou, Esq., Town Attorney (w/ enc.)



Photo 1 – Typical wetland area sign (12/17/99).



Photo 2 – Looking west. Note new berm in middle of photograph, stumps/logs in foreground (12/17/99)



DEPARTMENT OF THE ARMY
NEW YORK DISTRICT, CORPS OF ENGINEERS
ALBANY FIELD OFFICE, FOOT OF BOND STREET
P. O. BOX 209, LANSINGBURGH STATION
TROY, NEW YORK 12182

20 SEP 1999

IN REPLY REFER TO

Regulatory Branch

SUBJECT: Permit Application Number 1998-10742-YN
by the Town of Moreau

Harry G. Gutheil, Jr., Supervisor
Town of Moreau
Town Office Building
P.O. Box 1349
South Glens Falls, New York 12803

Dear Mr. Gutheil:

I have reviewed the request for permit modification you submitted on August 27, 1999, and have determined additional information is necessary. Before processing of your request may proceed, you must provide the following information:

1. Please submit recent color photographs of the area proposed for wetland creation;
2. Since this portion of the landfill cap has failed once before in the past year, please submit information on whether you believe it is only practicable alternative available for wetland creation. We would suggest that you locate the wetland creation area on other lands owned or controlled by the Town, in an area which will give you the best chance for the success of the proposed wetland creation; and
3. As discussed in a telephone conversation with Mr. Bruce Lipinski and Mr. Martin Auffredou, of Bartlett, Pontiff, Stewart and Rhodes, P.C., on September 20, 1999, please indicate what organizations you have contacted to accept the proposed easement, and what response you received from them. If you are unable to find an organization willing to accept the proposed easement, then please submit a draft deed restriction for these areas.

As soon as you provide the above requested information, we will resume processing of your request. You are reminded that unless otherwise notified in writing by this office, all terms and conditions of our authorization dated September 15, 1998, as amended by letter dated December 9, 1998, remain in effect.

SEP 21 1998



DEPARTMENT OF THE ARMY
NEW YORK DISTRICT, CORPS OF ENGINEERS
ALBANY FIELD OFFICE, FOOT OF BOND STREET
P. O. BOX 209, LANSINGBURGH STATION
TROY, NEW YORK 12182

SEP 15 1998

IN REPLY REFER TO

Regulatory Branch

SUBJECT: Permit Application Number 98-10740-YN
by the Town of Moreau

Harry G. Gutheil, Jr., Supervisor
Town of Moreau
Town Office Building
P.O. Box 1349
South Glens Falls, New York 12803

Dear Mr. Gutheil:

On August 5, 1998, the New York District Corps of Engineers received a request for Department of the Army authorization for the discharge of fill material into waters of the United States. The purpose of the proposed work is to close an existing landfill facility as ordered by the State of New York. The site is associated with an unnamed tributary to the Hudson River, and is located off N.Y.S. Route 9 in the Town of Moreau, Saratoga County, New York.

At an inspection of the site on July 20, 1998, a representative of this office confirmed the extent of waters of the United States on the subject property in the area of the proposed work. These waters of the United States are considered to be headwaters. By letter dated August 14, 1998, the applicant indicated that approximately ten years ago an expansion of the existing facility had previously filled approximately 1.5 acres of wetlands. The letter indicated that since that time the lack of proper erosion controls along the boundary of the existing facility has led to siltation into wetland areas which has degraded an additional 1.29 acres of wetlands.

The letter dated August 14, 1998 and attached submittals entitled "Landfill Closure, Existing Conditions, Wetland Delineation Site Plan", prepared by Sterns and Wheler, LLC., dated August, 1998, and entitled "Landfill Closure, Wetland Permit Sections", prepared by Sterns and Wheler, LLC., dated August, 1998, indicate that the total proposed impacts to waters of the United States would involve the discharge of fill material into a maximum of 0.76 acres of wetlands, including the loss of 0.32 acres of the degraded wetlands.

The above referenced letter and submittals also indicate that as mitigation for the existing and proposed impacts to waters of the United States, the applicant proposes to create 2.0

acres of wetlands from uplands on the project site. In addition, the applicant proposes to enhance 0.7 acres of the remaining degraded wetlands along the boundary of the facility. The proposed enhancement would include removing accumulated silt from 0.2 acres of wetlands and planting a 10 foot wide shrub buffer along the boundary between the proposed fill and the remaining wetlands.

Based on the information submitted to this office, and accomplishment of notification in accordance with the applicable federal requirements, our review of the project indicates that an individual permit is not required. It appears that the activities within the jurisdiction of this office could be accomplished under Department of the Army Nationwide General Permit Number 38. The nationwide permits are prescribed in the December 13, 1996 Federal Register, Final Notice of Issuance, Reissuance, and Modification of Nationwide Permits (61 FR 65874). The work may be performed without further authorization from this office provided the activity complies with the permit conditions listed in Section B, No. 38, Section C, the following special conditions, and any applicable regional conditions added by the State of New York, copies enclosed.

Special Conditions

(A) The permittee shall accomplish compensatory mitigation through the successful creation of at least 2.0 acres of freshwater wetlands from uplands. The permittee shall ensure that the created wetlands meet the federal wetland criteria outlined in the report entitled "Corps of Engineers Wetlands Delineation Manual", dated January, 1987, with current Corps of Engineers guidance. All grading, seeding and planting in conjunction with the wetlands mitigation work shall be completed prior to August 15, 1999.

(B) Within 30 days of the date of this letter, the permittee shall install proper erosion control measures, such as silt fencing, along the edge of the proposed landfill cap in all areas where the edge of the cap is to be placed in wetlands. Within 30 days of the date of this letter the permittee shall remove accumulated sediment from the 0.2 acres proposed to be excavated, plant the 0.7 acres enhancement area with at least three species of shrubs, and seed the area with at least three species of herbaceous plants. All species proposed to be planted and seeded in the enhancement area shall consist only of hydrophytic plants (those with a regional indicator status of FAC, FAC+, FACW +/-, or OBL in the report entitled "National List of Plant Species that Occur in Wetlands, Northeast [Region 1] ", published by the U.S. Fish and Wildlife Service).

(C) The permittee shall ensure that all proposed mitigation plantings have an eighty-five (85) percent survival rate and the

created and enhanced wetland areas in conjunction with the compensatory mitigation shall have an eighty-five (85) percent coverage rate of hydrophytic plants, as indicated in (B) above. The permittee shall also ensure that the vegetation in the created wetlands does not consist of more than a total of 10% aerial coverage of common reed (Phragmites australis) and/or purple loosestrife (Lythrum salicaria). If the survival and coverage rates are not met by August 15, 1999, and each year of the monitoring period, the permittee shall take all necessary measures to ensure the level of survival and coverage by the end of the next growing season, including re-planting and re-grading if necessary.

(D) Within 60 days of the date of this letter, the permittee shall submit to this office two copies of a revised compensatory mitigation plan which incorporates the following revisions:

- i. A list of all species proposed to be seeded and/or planted (the revised plan should list the regional indicator status of each species);
- ii. A section drawing for the proposed wetland creation area indicating the proposed edge of wetlands, in addition to the existing and proposed contours in the creation area and proposed drainage channel (the channel shall be constructed in such a manner as to maintain the hydrology of the proposed creation area);
- iii. A plan-view drawing consisting of a field surveyed one-foot contour elevation plan with appropriate spot elevations and existing and proposed grades shown;
- iv. The plan-view drawings shall show appropriate erosion control measures to be installed in the created wetland areas and indicate that these measures shall be maintained until all exposed soils are stabilized;
- v. The plan-view drawings shall also show appropriate signage to be installed along the edge of the created and enhanced wetland areas indicating that these areas are mitigation areas which are not to be disturbed or mowed.

No work shall be performed on the proposed landfill cap until the permittee receives written approval of this revised plan from this office.

(E) The permittee shall provide to this office annual reports on the status of the mitigation activities, prepared during the growing season, no later than August 15 in each of the following five (5) years after initiation of the activities authorized by this letter. These reports shall include the

following at a minimum:

- i. All plant species, along with their estimated relative frequency and percent cover, shall be identified by using plots measuring 10 feet by 10 feet with at least one representative plot located in each of the habitat types within the mitigation site. The location of each plot shall be identified on the plan view engineering drawing;
- ii. Vegetation cover maps and a wetland delineation map, at a scale of one inch equals 100 feet, or larger scale, prepared for each growing season;
- iii. Photographs showing all representative areas of the mitigation site/s taken at least once each year during the period between June 1 and August 15;
- iv. Surface water and groundwater elevations in representative areas of the mitigation site/s recorded twice a month during April through October of each year. The location of the monitoring well or gauge shall be shown on the plan view engineering drawing;
- v. A Corps of Engineers approved wetland delineation data sheet for each cover type within the mitigation sites.

If this office determines that the success criteria outlined in (A) and (C) above has not been met for at least three consecutive years during the five-year monitoring period, this period will be extended until this office determines that the success criteria has been met for three consecutive years.

(F) The permittee shall ensure that no mowing of the mitigation areas shall occur.

(G) The permittee shall undertake the authorized filling activities in a manner aimed at reducing impacts upon the general environment. In addition, the permittee shall not stockpile fill or other materials in a manner conducive to erosion, or in areas likely to cause high turbidity runoff during storm events. All exposed soils shall be re-vegetated in a timely manner to further reduce potential effects. The permittee shall also fence off all wetlands and other sensitive ecological areas during construction periods to prevent equipment and personnel from entering these areas.

(H) The permittee shall secure a conservation easement or deed restriction on the wetland mitigation site and all remaining wetlands to guarantee their preservation for wetland and wildlife resources. Copies of the instrument(s) effecting such easement shall be submitted to the New York District Corps of Engineers for approval prior to execution, and the instrument(s) shall be

executed and recorded with the Saratoga County Registrar of Deeds within one year from the date of this letter.

(I) The permittee shall assume all liability for accomplishing the corrective work should the New York District determine that the compensatory mitigation has not been fully satisfactory. If the New York District does not find the mitigation satisfactory, an extension of monitoring time may be required to cover any necessary remedial work.

This determination covers only the work described in the submitted material. Any major changes in the project may require additional authorizations from the New York District.

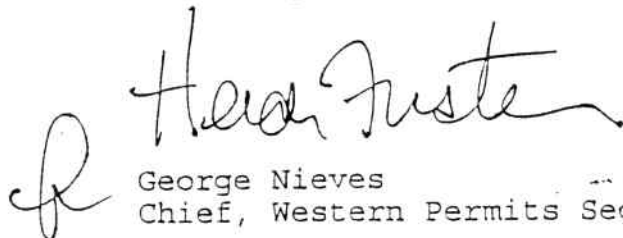
Care should be taken so that construction materials, including debris, do not enter any waterway to become drift or pollution hazards. You are to contact the appropriate state and local government officials to ensure that the subject work is performed in compliance with their requirements.

This verification is valid for two years from the date of this letter, unless the nationwide permit is modified, suspended or revoked. If the nationwide permits are suspended, revoked, or modified in such a way that the activity would no longer comply with the terms and conditions of a nationwide permit, and the proposed activity has commenced, or is under contract to commence, the permittee shall have 12 months from the date of such action to complete the activity.

Within 30 days of the completion of the activity authorized by this permit and any mitigation required by this permit, you are to sign and submit the attached compliance certification form to this office.

If any questions should arise concerning this matter, please contact John R. Connell, of my staff, at (518) 270-0589.

Sincerely,

A handwritten signature in cursive script, appearing to read "George Nieves".

George Nieves
Chief, Western Permits Section

Enclosures

cf: D. Mt. Pleasant - NYSDEC, Region 5 (Warrensburg)
B. Smith - Sterns and Wheler



DEPARTMENT OF THE ARMY
N.Y. DISTRICT, CORPS OF ENGINEERS
ALBANY FIELD OFFICE
1 BOND STREET
TROY, NEW YORK 12180

RECEIVED
STEARNS & WHEELER L.L.C.

DEC 15 1998

IN REPLY REFER TO

DEC 9 1998

Regulatory Branch

SUBJECT: Permit Application Number 98-10741-YM
by the Town of Moreau

Harry G. Gutheil, Jr. Supervisor
Town of Moreau
Town Office Building
P.O. Box 1349
South Glens Falls, New York 12803

Dear Mr. Gutheil:

On September 15, 1998, the New York District Corps of Engineers issued a letter (copy enclosed) confirming that, with certain special conditions, the above referenced project would comply with the terms and conditions of Nationwide General Permit No. 38, as prescribed in the December 13, 1996, Federal Register, Final Notice of Issuance, Reissuance, and Modification of Nationwide Permits (61 FR 65874). The project site is in the Hudson River basin and is located off N.Y.S. Route 9, in the Town of Moreau, Saratoga County, New York.

In accordance with Special Condition (D), you submitted detailed plans, to create at least two acres of wetlands on the project site, entitled "Landfill Closure, Proposed Conditions, Southern Wetland Mitigation Site Plan - Grading", and "Landfill Closure, Planting Plan and Notes", both prepared by Stearns and Wheeler, LLC., and dated November 9, 1998.

In addition, by letter dated October 1, 1998, you requested modifications to the conditions of our September 15, 1998 letter. Specifically, you requested modification to Special Condition (B), extending the completion date for certain activities within the 0.7 acres enhancement area to June 15, 1998.

Based on the information submitted to this office, we have determined that the requirements of Special Condition (D) have been met, and with the following revised Special Condition (B), you are authorized to begin work. All other terms and conditions of our letter dated September 15, 1998, remain in effect.

Special Condition (B): The permittee shall maintain proper erosion control measures, such as silt fencing, along the edge of the proposed landfill cap in all areas where the edge of the cap is to be placed in wetlands, until the cap is complete and the soils have been stabilized by the establishment of vegetation. By June 15, 1999, the permittee shall complete the planting of the 0.7 acres enhancement area with at least three species of shrubs, and seed the area with at least three species of herbaceous plants. By June 30, 1999, the permittee shall submit to this office photographs of the enhancement area showing that the planting and seeding is complete. All species proposed to be planted and seeded in the enhancement area shall consist only of hydrophytic plants (those with a regional indicator status of FAC, FAC+, FACW +/-, or OBL in the report entitled "National List of Plant Species that Occur in Wetlands, Northeast [Region 1] ", published by the U.S. Fish and Wildlife Service).

If any questions should arise concerning this matter, please contact John R. Connell, of my staff, at (518) 270-0589.

Sincerely,



George Nieves
Chief, Western Permits Section

Enclosure

cc: D. Mt. Pleasant - NYSDEC - Region 5 (Warrensburg)
B. Smith - Stearns and Wheler

RICHARD J. BARTLETT
PAUL E. PONTIFF
ALAN R. RHODES
ROBERT S. McMILLEN
PHILIP C. MCINTIRE
MARK A. LEBOWITZ
J. LAWRENCE PALTROWITZ
MALCOLM B. O'HARA
PATRICIA E. WATKINS
MARK E. CERASANO
MARTIN D. AUFFREDOU
BRUCE O. LIPINSKI
PAULA NADEAU BERUBE

BARTLETT, PONTIFF, STEWART & RHODES, P.C.
ATTORNEYS AT LAW
P.O. Box 2168
ONE WASHINGTON STREET
GLENS FALLS, NEW YORK 12901-2168

TELEPHONE (518) 792-2117
FAX (518) 792-3309
EMAIL bpsr@netheaven.com

RECEIVED
OCT 25 1999
JONATHAN C. LAPPER
AMY C. BARTLETT
JAMES R. BURKETT
TUCKER C. STANCLIFT

ROBERT S. STEWART
BERTRAM J. DUBE
OF COUNSEL

October 21, 1999

Mr. John Connell
US Army Corps. of Engineers
Regulatory Branch/Albany Field Office
One Bond Street
Troy, New York 12180

Re: Special Condition Modifications
Permit Application No. 98-10740-YM
Town of Moreau, New York

Dear Mr. Connell:

As you know from our previous telephone conversation, the south slope of the Town of Moreau landfill failed once again. The affected area is approximately 3 to 4 acres. According to the Town's engineers, the failure was caused, in part, by heavy rain our region received from the remnants of hurricane Floyd during the month of September.

As a result of the unexpected second failure of the south slope, repair to the damage is needed and the construction schedule provided by the contractor will be modified accordingly. This means, of course, that the Town of Moreau is requesting another modification to special condition (A) of the U.S. Army Corp. of Engineers permit. After consulting with the Town's engineer, we are requesting that special condition (A) be modified to read "grading and seeding of the created wetland area to be completed by June 15, 2000, with planting to be completed by September 15, 2000."

With respect to special condition (H) of the Town's permit, which states that a conservation easement or deed restriction shall be executed and recorded within one year of the date of this letter (i.e. September 15, 1999), the Town is requesting that this condition be modified to reference a date of November 1, 2000.

The Town has heard from both the Open Space Institute and the Beaver Kill Conservancy, Inc. and neither entity is interested in accepting a conservation easement on a wetland to be created adjacent to the Town's landfill. As such, in accordance with our telephone conversation, the Town will prepare a deed restriction for the wetland areas. We will send you a draft of the proposed deed restriction in the very near future.

The Town's engineer indicates that the recent slope failure has not significantly impacted the area proposed for wetland remediation. As such, at this time, the Town intends to create the wetland in the area previously proposed.

Your cooperation is greatly appreciated. If you have any questions, please feel free to contact me.

Sincerely,

Martin D. Auffredou

MDA:tlh #94155

cc: Moreau Town Board Members
Brad Smith, Stearns & Wheeler

New York State Department of Environmental Conservation
Division of Environmental Permits, Region 5

232 Hudson Street-P.O. Box 220, Warrensburg, New York 12885-0220
Phone: (518) 623-3671 FAX: (518) 623-3603

FAT
Buck Smith
cc: m...
John H...



John P. Cahill
Commissioner

September 25, 1998

Town of Moreau
P.O. Box 1349
South Glens Falls, New York 12803

Re: Article 24: Freshwater Wetlands
and
6NYCRR 608: Water Quality Certification
DEC Permit #5-4144-00009/00001
Moreau (T), Saratoga (Co.)

Dear Permittee:

Enclosed find your Article 24 (Freshwater Wetlands) permit which was issued in accordance with the applicable provisions of the Environmental Conservation Law and your Water Quality Certificate which was issued in accordance with Section 608.7 of 6NYCRR Part 608 (Use and Protection of Waters)

Please note the general and special permit conditions that are intended to minimize the environmental disturbance associated with your project. It is the responsibility of the permittee and his agent to comply with all permit conditions and project sketches. Carefully review the project sketches attached to this permit. Minor changes may have been made in the location or dimensions of your project, or additional materials (i.e., filter fabric or rock rip-rap) may have been included in the plans. Further, the permit is valid only for the activity expressly authorized. Work beyond the scope of the permit shall be considered as work without a permit. Any failure to comply with these terms may be treated as a violation of the Environmental Conservation Law. Questions regarding the terms of this permit should be directed to Alan Koechlein of our Regional Fish and Wildlife Office, telephone (518) 623-3671. Work done under this permit is subject to inspection by Forest Rangers and Environmental Conservation Officers.

Should your plans change, please contact this office to determine if modifications of the permit are required.

Thank you for your interest in environmental conservation.

Sincerely,

Joseph C. Prall
Deputy Regional Permit Administrator

JCP/psb
Enclosure
cc" FR C. Liebelt
US Army COE
D. Mt. Pleasant

A. Koechlein
File

art24&wd:fm

REG 5 Form 1 (05/95) cmf

DEC PERMIT NUMBER
5-4144-00009/00001

FACILITY/PROGRAM NUMBER(S)



PERMIT

Under the Environmental Conservation Law (ECL)

EFFECTIVE DATE

9/25/98

EXPIRATION DATE

October 1, 1999

TYPE OF PERMIT

☒

New



Renewal



Modification

Article 15, Title 5:
Protection of WaterArticle 15, Title 27:
Wild, Scenic and Recreational RiversArticle 23, Title 27:
Mined Land Reclamation6NYCRR 608:
Water Quality CertificationArticle 24:
Freshwater Wetlands

Other: _____

PERMIT ISSUED TO

Town of Moreau

TELEPHONE NUMBER

(518) 792-1030

ADDRESS OF PERMITTEE

P.O. Box 1349, South Glens Falls, New York 12803

CONTACT PERSON FOR PERMITTED WORK

Stearns & Wheeler, LLC, One Remington Park Dr., Cazenovia, NY 13035

TELEPHONE NUMBER

(315) 655-8161

NAME AND ADDRESS OF PROJECT/FACILITY

Moreau Landfill

LOCATION OF PROJECT/FACILITY

COUNTY

Saratoga

TOWN/CITY/VILLAGE

Moreau

WATERCOURSE/WETLAND NO

FWW GF-3

NYTM COORDINATES

E:608.5 N:4790.4

DESCRIPTION OF AUTHORIZED ACTIVITY

During the capping of the Moreau landfill, sediment that was deposited in Freshwater Wetland GF-3 and/or its 100 foot adjacent area shall be removed from three locations, to a depth of 6" to 12" (to be determined), where shown on the attached sketch that is made a part of this permit.

By acceptance of this permit, the permittee agrees that the permit is contingent upon strict compliance with the ECL, all applicable regulations, the General Conditions specified (see next page) and any Special Conditions included as part of this permit.

DEPUTY REGIONAL PERMIT ADMINISTRATOR

Joseph C. Prall

ADDRESS

Hudson Street, P.O. Box 220, Warrensburg, NY 12885-0220

AUTHORIZED SIGNATURE

DATE

9/25/98

Page 1 of 4

GENERAL CONDITIONS

Inspections

1. The permitted site or facility, including relevant records, is subject to inspection at reasonable hours and intervals by an authorized representative of the Department of Environmental Conservation (the Department) to determine whether the permittee is complying with this permit and the ECL. Such representative may order the work suspended pursuant to ECL 71-0301 and SAPA 401(3). A copy of this permit, including all referenced maps, drawings and special conditions, must be available for inspection by the Department at all times at the project site. Failure to produce a copy of the permit upon request by a Department representative is a violation of this permit.

Permit Changes and Renewals

2. The Department reserves the right to modify, suspend or revoke this permit when:
 - a) the scope of the permitted activity is exceeded or a violation of any condition of the permit or provisions of the ECL and pertinent regulations is found;
 - b) the permit was obtained by misrepresentation or failure to disclose relevant facts;
 - c) new material information is discovered; or
 - d) environmental conditions, relevant technology, or applicable law or regulation have materially changed since the permit was issued.
3. The permittee must submit a separate written application to the Department for renewal, modification or transfer of this permit. Such application must include any forms, fees or supplemental information the Department requires. Any renewal, modification or transfer granted by the Department must be in writing.
4. The permittee must submit a renewal application at least:
 - a) 180 days before expiration of permits for State Pollutant Discharge Elimination System (SPDES), Hazardous Waste Management Facilities (HWMF), major Air Pollution Control (APC) and Solid Waste Management Facilities (SWMF); and
 - b) 30 days before expiration of all other permit types.
5. Unless expressly provided for by the Department, issuance of this permit does not modify, supersede or rescind any order or determination previously issued by the Department or any of the terms, conditions or requirements contained in such order or determination.

Other Legal Obligations of Permittee

6. The permittee has accepted expressly, by the execution of the application, the full legal responsibility for all damages, direct or indirect, of whatever nature and by whomever suffered, arising out of the project described in this permit and has agreed to indemnify and save harmless the State from suits, actions, damages and costs of every name and description resulting from this project.
7. This permit does not convey to the permittee any right to trespass upon the lands or interfere with the riparian rights of others in order to perform the permitted work nor does it authorize the impairment of any rights, title, or interest in real or personal property held or vested in a person not a party to the permit.
8. The permittee is responsible for obtaining any other permits, approvals, lands, easements and rights-of-way that may be required for this project.

9. That if future operations by the State of New York require an alteration in the position of the structure or work herein authorized, or if, in the opinion of the Department of Environmental Conservation, I shall cause unreasonable obstruction to the free navigation of said waters or flood flows or endanger the health, safety or welfare of the people of the State, or cause loss or destruction of the natural resources of the State, the owner may be ordered by the Department to remove or alter the structural work, obstructions, or hazards caused thereby without expense to the State, and if, upon the expiration or revocation of this permit, the structure, fill, excavation, or other modification of the watercourse hereby authorized shall not be completed, the owners, shall, without expense to the State, and to such extent and in such time and manner as the Department of Environmental Conservation may require, remove all or any portion of the uncompleted structure or fill and restore to its former condition the navigable and flood capacity of the watercourse. No claim shall be made against the State of New York on account of any such removal or alteration.
10. That the State of New York shall in no case be liable for any damage or injury to the structure or work herein authorized, which may be caused by or result from future operations undertaken by the State for the conservation or improvement of navigation, or for other purposes, and no claim or right to compensation shall accrue from any such damage.
11. Granting of this permit does not relieve the applicant of the responsibility of obtaining any other permission, consent or approval from the U.S. Army Corps of Engineers, U.S. Coast Guard, New York State Office of General Services or local government which may be required.
12. All necessary precautions shall be taken to preclude contamination of any wetland or waterway by suspended solids, sediments, fuels, solvents, lubricants, epoxy coatings, paints, concrete, leachate or any other environmentally deleterious materials associated with the project.

13. Any material dredged in the prosecution of the work herein permitted shall be removed evenly, without leaving large refuse piles, ridges across the bed of a waterway or floodplain or deep holes that may have a tendency to cause damage to navigable channels or to the banks of a waterway.
14. There shall be no unreasonable interference with navigation by the work herein authorized.
15. If upon the expiration or revocation of this permit, the project hereby authorized has not been completed, the applicant shall, without expense to the State, and to such extent and in such time and manner as the Department of Environmental Conservation may require, remove all or any portion of the uncompleted structure or fill and restore the fill to its former condition. No claim shall be made against the State of New York on account of any such removal or alteration.
16. If granted under Article 36, this permit does not signify in any way that the project will be free from flooding.
17. If granted under 6NYCRR Part 803, the New York State Department of Environmental Conservation hereby certifies that the subject project will not contravene any limitations or other limitations or standards under Sections 301, 302, 303, 304 and 305 of the Clean Water Act of 1977.
18. (PL 96-217) provided that all of the conditions listed herein are met.
19. All activities authorized by this permit must be in strict conformance with the approved plans submitted by the applicant or his agent as part of the permit application.

Such approved plans were prepared by:

on _____

SPECIAL CONDITIONS

1. A DEC sign is to be conspicuously posted at the site, protected from the weather, for the duration of the project.
2. The permittee shall require that any contractor, project engineer, or other person responsible for the overall supervision of this project reads, understands and complies with this permit, including all special conditions to prevent environmental degradation.
3. To satisfy the requirement of general condition #1, the permittee or an authorized representative shall notify in writing the Bureau of Wildlife, Hudson Street, Warrensburg, NY 12885-0220, within one week prior to commencement of activities authorized by this permit.
4. Objects or survey ribbon that define the boundaries of the wetland and/or permitted structure(s) must not be removed or substantially altered without permission of DEC prior to one calendar year after permit expiration date.
5. The project may be inspected by DEC up to one year following the expiration of this permit.
6. Any debris or excess materials from construction of this project (including earth, construction materials, trees and stumps) shall be immediately and completely removed from the wetland and adjacent area to an appropriate upland area for disposal.

DEC PERMIT NUMBER

5-4144-00009/00001

PROGRAM/FACILITY NUMBER

Page 3 of 4

ADDITIONAL SPECIAL CONDITIONS FOR ARTICLE 24 (Town of Moreau)

SPECIAL CONDITIONS

7. Staked bales of hay or other means to control erosion as shown on the attached sketch are to be used on the downslope edge of any disturbed areas. The barrier is to be put in place where shown on the attached project plans before any disturbance of the ground or wetland occurs. The barrier is to be maintained in good condition until all disturbed land is heavily vegetated to retain sediments on the project site.
8. Equipment shall operate on the landfill while removing sediment from sites A and B.
9. All areas of soil disturbance resulting from this project shall be seeded with an appropriate perennial grass seed and mulched with hay or straw within one week of final grading. Mulch shall be maintained until a suitable vegetative cover is established.
10. Sediment removal area C shall be returned to a shallow water condition. If completed before the 1999 growing season, the area will naturally seed to aquatic vegetation.
11. Sketches attached to this permit include the following:
 - (a) Town of Moreau, New York; Landfill Closure; Proposed Conditions, Siltation Removal Locations, Site Plan, Sheet W-4; prepared by Stearns & Wheler, LLC; date stamped by the NYSDEC 9/11/98.
 - (b) Town of Moreau, New York; Landfill Closure Plan; Proposed Site Plan; Sheet 1 of 2; prepared by Stearns & Wheler, LLC; dated 7/2/98 by HBL.
 - (c) Town of Moreau, New York; Landfill Closure; Miscellaneous Details; Sheet 2 of 2; prepared by Stearns & Wheler, LLC; dated 7/2/98 by HBL.

cc: A. Koechlein

DEC PERMIT NUMBER

5-4144-00009/00001

PROGRAM/FACILITY NUMBER

Page 4 of 4

71

New York State
Department of Environmental Conservation



The Department of Environmental Conservation (DEC) has issued permit(s) pursuant to the Environmental Conservation Law for work being conducted at this site. For further information regarding the nature and extent of work approved and any Departmental conditions on it, contact the Regional Permit Administrator listed below. Please refer to the permit number shown when contacting the DEC.

Deputy Regional Permit Administrator

Permit Number 5-4144-00009/00001
TOWN OF MOREAU

Expiration Date October 1, 1999

NOTE: This notice is **NOT** a permit

S&W Submittal Comments:

Town of Moreau Landfill Closure
Job No. 70011PA

Date: October 14, 1998

Submittal No.: 016

Title: Submittal for erosion control fabric

Specification Section: 02268

Comments:

1. This submittal was reviewed and is approved. Please note that the material thickness should be .5 lb/yd², not 5 lb/yd², as stated in the contract documents.

☒ **APPROVED**

☐ **APPROVED AS CORRECTED**
(Resubmit final copy for file)

☐ **REVISE AND RESUBMIT BEFORE PROCEEDING**

☐ **NOT APPROVED**

Reviewed only for conformance with the design concept of the project and with information given in the Contract Documents. The Contractor is responsible to: dimensions to be confirmed and correlated at the job site; for information that pertains solely to the fabrication processes or to techniques of construction and for coordination of the work of all trades.

STEARNS & WHEELER L.L.C., Engineers and Scientists

By AAL Date 10/14/98

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