

Appendix B
Storm water Permit



September 3, 2013

Philip Haas
HAAS SONS INC
203 East Birch Street
Thorp, WI 54771-9609

SUBJECT: Nonmetallic Mining Operations General Permit WI-0046515-5

FACILITY Lawin-South Pit
LOCATION: between CTH SS and 155th Ave at conf. of O'Neil and McCann Creeks, Town of EAGLE
POINT, Chippewa County
FACILITY ID NUMBER (FIN): 47415

Dear Permittee:

The Department of Natural Resources (Department) has evaluated the Notice of Intent you submitted for the above site and has determined that your discharge will be regulated in accordance with the Nonmetallic Mining Operations (NMM) General Wisconsin Pollutant Discharge Elimination System Permit No. WI-0046515-5.

(Optional section modify as appropriate) The information you provided states that

- Excavation, aggregate crushing, or washing will be occurring at the Lawin-South Pit site.
- Mining process wastewater will be generated from aggregate washing or mine dewater pumping [*and/or boiler blowdown, vehicle washwaters, contact and non-contact cooling water, and other process wastewaters*] and monitoring and submittal of an annual discharge monitoring report (DMR) is required.
- Storm water run-off is **externally drained** with a discharge of storm water to McCann and O'Neill Creeks.

STORM WATER CONTROL REQUIREMENTS

1. Facilities that have Department concurrence that their storm water contains only earthen materials from NMM operations and **the storm water is seeped into the ground within the mining site in areas that are not protected** wetlands under NR 103, Wis. Adm. Code are required to have the following as detailed in the general permit:
 - Physical Controls;
 - Contaminated Storm Water Treatment Best Management Practices; and
 - Annual Facility Site Compliance Inspections (AFSCI).
2. NMM operations that have storm water contact with overburden, raw material, intermediate product, finished product or waste material and have **storm water drainage off the mining site or to a protected wetland** under NR 103, Wis. Adm. Code shall be operated in compliance with a Storm Water Pollution Prevention Plan (SWPPP) as detailed in the general permit. Any concrete product operations covered under this permit and any portable NMM groupings specifically requested to be covered under this permit shall also be operated in compliance with a SWPPP.
 - Development of **SWPPP** and Certification of SWPPP Completion:

- New NMM operations shall comply with the SWPPP requirements of this permit and shall submit a SWPPP certification to the Department prior to initiating NMM activities that result in a discharge of storm water to surface waters or to a protected wetland.
 - Existing NMM operations discharging without a permit must comply with the Department's enforcement action or stipulated schedule for SWPPP development, implementation, and certification within the shortest time practicable.
 - **Quarterly Site Inspection** of Storm Water Controls (*Demonstrations supporting a waiver to an annual frequency or to an alternate schedule for inactive sites with no material stockpiles must be submitted as part of SWPPP certification*).
 - **Quarterly Visual Check** of Storm Water Runoff Quality (*Can be waived in certain instances as specified in permit parts 3.7.2 & 3.7.3. Submit justification as part of SWPPP certification*).
3. An **annual check** for NMM operation discharges to impaired waters or to Total Maximum Daily Load (TMDL) allocated waters is required by **February 15th, each year**. If the discharge is to 303(d) impaired waters or to TMDL allocated waters, an updated SWPPP or TMDL implementation plan is required to be submitted to the Department.

PROCESS WASTEWATER REQUIREMENTS

1. Monitoring requirements for mining process water **discharges to seepage (to groundwater)**:
 - Quarterly discharge flow monitoring (estimate typical day seepage into the earth), except
 - *Monthly* monitoring is required for 12 months following a month with a discharge greater than 200,000 gal/day.
 - Annual oil & grease monitoring, except
 - *Quarterly* monitoring for 4 quarters beginning the quarter following a sample result above 15 mg/L, and
 - *Further annual samples waived* if the first year (after June 2009) result is less than 7.5 mg/L.
 - Water Treatment Additives - A record of water treatment chemical additive use (such as polymers, biocides, boiler steam additives, etc) is required on a monthly basis.
2. Monitoring requirements for process water **discharges to surface water resources**:
 - Quarterly flow monitoring (total gallons per day and number of days of discharge), except
 - *Monthly* monitoring for 12 months following a month with a discharge flow greater than 200,000 gallons per day.
 - Quarterly total suspended solids monitoring, except
 - *Monthly* monitoring using a 3 grab composite sample for 12 months beginning the month following a sample result above 40 mg/L.
 - Quarterly pH monitoring for concrete product operations, except
 - *Annual* monitoring if four consecutive quarterly samples are within the range of 6.7 to 8.3 s.u.
 - Annual pH monitoring for nonmetallic mining operations, except
 - *Further annual samples waived* if the first two annual (after June 2009) samples are within the range of 6.7 to 8.3 std.units.
 - Annual oil & grease monitoring, except
 - *Quarterly* monitoring for 4 quarters beginning the quarter following a sample result above 15 mg/L, and
 - *Further annual samples waived* if the first year (after June 2009) result is less than 7.5 mg/L.
 - Water Treatment Additives - A record of water treatment chemical additive use (such as polymers, biocides, boiler steam additives, etc) is required on a monthly basis.

3. **Annual monitoring reports** shall be submitted to the Department by **February 15th**, each year reporting sampling result from discharges during the previous calendar year.
4. **For portable operations**, monitoring may occur at any site where the unit is located during the specified sampling period for samples representative of the process wastewater discharge associated with operation of the portable unit.

You are responsible to notify the Department should conditions at this site change, as your permit requirements will also change.

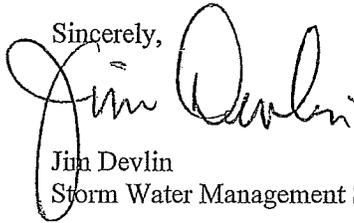
The Nonmetallic Mining general permit documents can be accessed on the Department's internet site at the following address: <http://dnr.wi.gov/org/water/wm/ww/gpindex/gpinfo.htm>

The permit limitations, conditions, and requirements are designed to ensure that mining wastewater and storm water discharges from nonmetallic mining operations does not degrade the quality of Wisconsin's surface waters, wetlands, or groundwater. It is important that you read and understand this permit because it is enforceable under both state and federal law.

Copies of a quarterly visual inspection form, an annual facility site compliance inspection (AFSCI) form, and additional storm water forms including an example NMM storm water pollution prevention plan can be obtained at <http://dnr.wi.gov/runoff/stormwater/industrialforms.htm> or by contacting Department storm water staff.

Additional information regarding the Department's legal authority in this matter and your rights of appeal are shown below. If you have any questions regarding the permit or your coverage under the permit you can contact Jim Devlin at (715) 684-2914. We appreciate your help in protecting Wisconsin's water resources.

Sincerely,



Jim Devlin
Storm Water Management Specialist

Ref. General Permit WI-0046515-5, Nonmetallic Mining Operations & Fact Sheet
DMR form (if needed for process wastewater discharge)
Quarterly Visual Inspection Form
AFSCI Form

Appendix C
Seeding Plan

WORKING DRAFT - NON-METALLIC MINE RECLAMATION - POST MINING LAND USE

CATEGORY OF POST MINING LAND USE	SUB-CATEGORY	LAND COVER	DEVELOPMENT DENSITY/INTENSITY	PUBLIC ACCESS/USE	
Wildlife Habitat/Conservancy	Terrestrial	Grassland/Prairie	No Residential, Commercial, or Industrial Development	No Public Use -vs- Defined Public Use	
	Mixed	Grassland/Prairie/Forest Savannah			
	Aquatic	Wet/Sedge Meadow			
		Shallow ponded/Deep Ponded			
Agricultural	Ag Production	Cultivated cropland; Row Crop	No Development -Non-Irrigated -Irrigated	No Public Use -vs- Defined Public Use	
		Cultivated Cropland; Forage Based			
		Pasture			
		Other			
Forest	Forest Production	Even aged species	No Development Low Density	No Public Use -vs- Defined Public Use	
		Mixed aged species			
Residential	Ag/Forest Residential		Low Density Med. Density High Density	Defined Dev. Plan	
	Res Subdivision				
Commercial	Light		Low Intensity Med. Intensity High Intensity	Defined Dev. Plan	
	Heavy				
Industrial	Light		Low Intensity Med. Intensity High Intensity	Defined Dev. Plan	
	Heavy				
Institutional	Public Inst.				
	Private Inst.				
Any other land use category that may currently or potentially apply to the subject mine site, as defined in an approved comprehensive plan or zoning ordinance.					

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MIX 1 - PASTURE

Common Name	Scientific Name	Lb./Ac.*	Price/Lb.	Price
Timothy	<i>Phleum pratense</i>	4	\$ 1.50	\$ 6.00
Tall Fescue	<i>Festuca arundinaceae</i>	5	\$ 1.50	\$ 7.50
Canada Wild Rye	<i>Elymus canadensis</i>	3	\$ 12.00	\$ 36.00
Agricultural Rye	<i>Secale cereale</i>	4.5	\$ 1.00	\$ 9.00
Alfalfa**	<i>Medicago sativa</i>	10	\$ 4.00	\$ 40.00
Alsike Clover**	<i>Trifolium hybridum</i>	4.5	\$ 2.00	\$ 9.00
Total		31 lbs.	Total	\$ 107.50

MIX 2 – STABILIZATION/WILDLIFE/GRAZING (Mix 3 would be suitable too)

Common Name	Scientific Name	Lb./Ac.*	Price/Lb.	Price
Agricultural Rye	<i>Secale cereale</i>	4	\$ 1.00	\$ 4.00
Timothy	<i>Phleum pratense</i>	2	\$ 1.50	\$ 3.00
Tall Fescue	<i>Festuca arundinaceae</i>	3	\$ 1.50	\$ 4.50
Switchgrass	<i>Panicum virgatum</i>	1	\$ 13.50	\$ 13.50
Big Bluestem	<i>Andropogon gerardi</i>	1	\$ 10.50	\$ 10.50
Canada Wild Rye	<i>Elymus canadensis</i>	3	\$ 12.00	\$ 36.00
Alsike Clover**	<i>Trifolium hybridum</i>	4	\$ 2.00	\$ 8.00
Red Clover**	<i>Trifolium repens</i>	4	\$ 2.00	\$ 8.00
Alfalfa**	<i>Medicago sativa</i>	5	\$ 4.00	\$ 20.00
Total		27 lbs.	Total	\$ 107.50

MIX 3 – NATIVE MIX FOR WILDLIFE/PASSIVE RECREATION

Common Name	Scientific Name	Unit	Unit/Ac.*	Price/Unit	Price
Big Bluestem	<i>Andropogon gerardi</i>	lb.	1	\$ 10.50	\$ 10.50
Canada Wild Rye	<i>Elymus canadensis</i>	lb.	3	\$ 12.00	\$ 36.00
Switchgrass	<i>Panicum virgatum</i>	lb.	1	\$ 13.50	\$ 13.50
Indiangrass	<i>Sorghastrum nutans</i>	lb.	3	\$ 16.00	\$ 48.00
Purple Prairie Clover**	<i>Dalea purpurea</i>	oz.	2	\$ 4.50	\$ 9.00
Canada Tick Trefoil**	<i>Desmodium canadensis</i>	oz.	5	\$ 20.75	\$ 103.75
New England Aster	<i>Aster novae angliae</i>	oz.	0.2	\$ 48.75	\$ 9.75
Purple Cone Flower	<i>Echinacea purpurea</i>	oz.	4	\$ 4.50	\$ 18.00
Dotted Mint**	<i>Monarda punctata</i>	oz.	4	\$ 51.25	\$ 205.00
Bergamot**	<i>Monarda fistulosa</i>	oz.	5	\$ 25.75	\$ 128.75
Yellow Coneflower	<i>Ratibida pinnata</i>	oz.	3	\$ 4.50	\$ 13.50
Blackeyed Susan	<i>Rudbeckia hirta</i>	oz.	0.5	\$ 3.00	\$ 1.50
Blue Vervain	<i>Verbena hastata</i>	oz.	1	\$ 6.75	\$ 6.75
Total		~9.5 lbs.	Total	\$ 604.00	

MIX 4 – WET SOILS/POND EDGE/WEDLAND AREA

Common Name	Scientific Name	Unit	Unit/Ac.*	Price/Unit	Price
Canada Wild Rye	<i>Elymus canadensis</i>	lb.	3	\$ 12.00	\$ 36.00
Switchgrass	<i>Panicum virgatum</i>	lb.	1	\$ 13.50	\$ 13.50
Timothy	<i>Phleum pratense</i>	lb.	2	\$ 1.50	\$ 3.00
Blue Joint Grass	<i>Calamagrotis canadensis</i>	oz.	3.2	\$ 56.25	\$ 180.00
Annual Oats	<i>Avena sativa</i>	lb.	8	\$ 2.00	\$ 16.00
Alsike Clover**	<i>Trifolium hybridum</i>	lb.	1	\$ 2.00	\$ 2.00
Red Clover**	<i>Trifolium repens</i>	lb.	1	\$ 2.00	\$ 2.00
Culver's Root	<i>Veronicastrum virginicum</i>	oz.	2	\$ 77.00	\$ 154.00
Canada Tick Trefoil**	<i>Desmodium canadensis</i>	oz.	5	\$ 20.75	\$ 103.75
Blackeyed Susan	<i>Rudbeckia hirta</i>	oz.	0.2	\$ 3.00	\$ 0.60
Smooth Aster	<i>Aster laevis</i>	oz.	2	\$ 48.75	\$ 97.50
New England Aster	<i>Aster novae angliae</i>	oz.	0.6	\$ 30.75	\$ 18.45
Joe Pye Weed	<i>Eupatorium maculatum</i>	oz.	1	\$ 36.00	\$ 36.00
		Total	~17 lbs.	Total	\$ 662.80

* Seeding rates assume broadcast seeding and may be multiplied by 0.5 to approximate rates if drilled.

** Denotes legumes, which must be inoculated according to the seed provider's instructions prior to seeding.

Pricing for native species found at Agrecol in 2012.

<http://www.agrecol.com>