



May 19, 2017

IP-WC-2016-42-00902  
Corps #

Meteor Timber LLC  
Chris Mathis  
115 Perimeter Center Place, Suite 940  
Atlanta, GA 30346

Dear Mr. Mathis:

The Department has completed review of your proposal to fill 16.25 acres of wetland to construct a dry plant processing plant and associated transload facility to ship industrial sand. We have determined that your project meets state standards. Enclosed is your state wetland permit which approves your project and lists the conditions which must be followed. Please read your permit carefully so that you are fully aware of what is expected of you.

Your enclosed state water quality certification confirms the state certification necessary for proceeding under an approval pursuant to a federal permit issued by the Army Corps of Engineers.

This permit contains several conditions and requirements, including site specific actions, that must be performed to the satisfaction of the Department before you are authorized to undertake regulated activities under the wetland fill permit and the Chapter 30 waterways permit.

Please note, the placement of wildlife underpasses, the removal of cranberry beds, the removal and restoration of Old Town Road, the Rudd Creek stream relocation, and the conservation easement on the MTN8268 property have all been proposed by the applicant as a net positive environmental impact (NPEI) to assist in offsetting anticipated significant adverse impacts to water quality in the wetland filling permit application. In order for appropriate value to be ascribed as a NPEI, these projects must be implemented according to the permits and permit conditions, and properly documented in order to be accurately assessed as part of the wetland fill permit review.

Also please be advised that prior to commencement of any regulated activity on the site, Meteor must have a finalized Incidental Take Permit through the Wisconsin Department of Natural Resources, which includes a 30 day public notice period and a finalized Conservation Plan approved by the Bureau of Natural Heritage Conservation that includes adequate minimization and mitigation measures as determined by the NHC species experts. Because the project includes likely impacts to a federally listed species, the US Fish and Wildlife Service must sign off on the project prior to

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commencement of activities.

Please note you are required to submit photographs of the completed project within 7 days after you've finished construction. This helps both of us to document the completion of the project and compliance with the permit conditions.

Your next step will be to notify me of the date on which you plan to start construction and again after your project is complete.

For project details, maps, and plans related to this decision, please see application number IP-WC-2016-42-00902 on the Department's permit tracking website at <https://permits.dnr.wi.gov/water/SitePages/Permit%20Search.aspx>.

If you have any questions about your permit, please call Brad Johnson at 715-359-2872 or [bradleya.johnson@wisconsin.gov](mailto:bradleya.johnson@wisconsin.gov).

Sincerely,

/s/ Robert Rosenberger  
Deputy Watershed Bureau Director

cc: Sam Woboril, USACOE  
Alison Elliot-Monroe County Zoning Administrator  
Pam Schense-Mitigation Coordinator - WT/3  
John Behling-Weld Riley

**STATE OF WISCONSIN  
DEPARTMENT OF NATURAL RESOURCES**

**Wetland Individual Permit  
IP-WC-2016-42-00902**

Chris Mathis is hereby granted under Section 281.36, Wisconsin Statutes, and 33 U.S.C.S §1341 (CWA §401) a permit for wetland fill or disturbance near Rudd Creek, in the Town of Grant, Monroe County, also described as being in Sections 1 and 2, Township 19 North, Range 2 West, subject to the following conditions:

**PERMIT**

**General Conditions**

1. You must notify Brad Johnson at phone (715) 359-2872 or email BradleyA.Johnson@wisconsin.gov before starting the discharge and again not more than 5 days after the discharge is complete.
2. You must complete the discharge as described on or before May 19, 2020. If you will not complete the discharge by this date, you must submit a written request for an extension prior to the expiration date of the permit. Your request must identify the requested extension date and the reason for the extension. A permit extension may be granted, for good cause, by the Department. You may not begin or continue construction after the original permit expiration date unless the Department grants a new permit or permit extension in writing.
3. This permit does not authorize any work other than what you specifically describe in your application and plans and as modified by the conditions of this permit. If you wish to alter the project or permit conditions, you must first obtain written approval of the Department.
4. You are responsible for obtaining any permit or approval that may be required for your project by local zoning ordinances and by the U.S. Army Corps of Engineers before starting your project.
5. Upon reasonable notice, you shall allow access to your project site during reasonable hours to any Department employee who is investigating the project's construction, operation, maintenance or permit compliance.
6. The Department may modify or revoke this permit if the project is not completed according to the terms and conditions of the permit, or if the Department determines the activity results in significant adverse impact to wetland functional values, in significant adverse impact to water quality, or in other significant adverse environmental consequences.
7. You must post a copy of this permit at a conspicuous location on the project site, for at least five days prior to construction, and remaining at least five days after construction. You must also have a copy of the permit and approved plan available at the project site at all times until the project is complete.
8. Your acceptance of this permit signifies that you have read, understood and agreed to follow all conditions of this permit. Except as otherwise provided in this permit, all conditions of this permit must be satisfied prior to beginning work on the project.

9. You must submit a series of photographs to the Department, within one week of completion of work on the site. The photographs must be taken from different vantage points and depict all work authorized by this permit.
10. You, your agent, and any involved contractors or consultants may be considered a party to the violation pursuant to Section 281.36 (13), Wis. Stats., for any violations of Section 281.36, Wisconsin Statutes, or this permit.
11. Construction shall be accomplished in such a manner as to minimize erosion and siltation into adjacent wetlands and surface waters. Erosion control measures (such as silt fence and straw bales) must meet or exceed the technical standards of ch. NR 151, Wis. Adm. Code. The technical standards are found at:  
[http://dnr.wi.gov/topic/stormwater/standards/const\\_standards.html](http://dnr.wi.gov/topic/stormwater/standards/const_standards.html) .
12. Authorization hereby granted by the Department is transferable to any person upon prior written approval of the transfer by the Department.
13. All equipment used for the project including but not limited to tracked vehicles, barges, boats, hoses, sheet pile and pumps shall be de-contaminated for invasive and exotic viruses and species prior to use and after use.

The following steps must be taken *every time* you move your equipment to avoid transporting invasive and exotic viruses and species. To the extent practicable, equipment and gear used on infested waters shall not be used on other non-infested waters.

1. **Inspect and remove** aquatic plants, animals, and mud from your equipment.
2. **Drain all water** from your equipment that comes in contact with infested waters, including but not limited to tracked vehicles, barges, boats, hoses, sheet pile and pumps.
3. **Dispose** of aquatic plants, animals in the trash. Never release or transfer aquatic plants, animals or water from one waterbody to another.
4. **Wash your equipment** with hot (>140° F) and/or high pressure water,  
- OR -  
Allow your equipment to **dry thoroughly for 5 days.**

14. A plan must be submitted to the Department Water Management Specialist for review and written approval that maximizes groundwater flow-through under the rail spur to maintain hydrology in the remaining wetland. The plan must include the following information:
  - a) The number of hydrologic connectivity pipes (equalizer pipes) must be a minimum of 8 in number and each pipe must be a minimum of 36 inches in size.
  - b) The hydrologic connectivity pipes must be partially submerged to allow surface and shallow subsurface flow-through and allow for visual inspection and easier maintenance without the need to excavate.
  - c) Fill material under rail spur tracks shall be primarily sand to maximize flow-through across the rail embankment.

**Conditions necessary to allow Department consideration of the applicant's proposals  
respectively to "net positive or negative environmental impact" under s. 281.36(3n)(b)5., Wis.  
Stats.**

1. To ensure that the Department has appropriately assessed the environmental impact of a change in land use at the site pursuant to s. 281.36(3n)(b)5., a detailed description must be provided to the Department Water Management Specialist prior to construction of the project that describes the total number of acres of land removed from cranberry beds and the total number of acres of land that will be industrial use including but not limited to the dry plant, rail corridor and access roads.
2. To ensure that the Department has appropriately assessed the environmental impact of the total reduction in use of chemicals before and after construction of the rail and dry plant pursuant to s. 281.36(3n)(b)5., a detailed description must be provided to the Department Water Management Specialist prior to construction of the project. This must include a description of all chemicals and amounts to be eliminated through elimination of existing cranberry operations as well as all chemicals and amounts necessary to be used in establishment and management of any mitigation, restoration or preservation areas and any adjacent areas to the rail, dry plant and access roads proposed.
3. Conditions to enable success of proposed Wildlife Underpass and open top channels between railroad ties pursuant to s. NR 103.03(1), Wis. Adm. Code
  - a) A 3-year monitoring plan must be submitted to the Department Ecologist for approval prior to construction of the wildlife underpasses. The monitoring plan must include detail on how the underpasses will be monitored for use by the target wildlife species. The monitoring plan will start post construction.
  - b) If, after 3 years of monitoring, the Department Ecologist determines the standard under NR103.03(1)(f), Wis. Adm. Code is not being met, the permittee shall implement measures to ensure adequate wildlife passage.
  - c) Scientific data from existing literature must be submitted to the Department Ecologist prior to construction of the project to support efficacy of the design of the open top channels between railroad ties including but not limited to: the size, number and location of the open top channels. The data in the literature shall support the use of the proposed design by the range of reptile, amphibian and mammal species expected to exist in the project area.
  - d) A 3-year monitoring plan for use and to track mortality must be submitted to the Department Ecologist for approval prior to construction of the project. The monitoring plan must include detail on how the under rail passage will be monitored for use by the target wildlife species as well as how mortality will be documented. The monitoring plan will start post construction.
  - e) If after 1 year post construction significant mortality of wildlife species as determined by the Department Ecologist is documented a revised under rail wildlife passage method must be approved by the Department and implemented.
  - f) Annual monitoring reports must be submitted to the Department Ecologist by January 31 of the following year for review.
4. Old Town Road Restoration conditions

- a) A restoration plan for the Old Town Road shall be submitted to the Department for approval prior to construction of the project. The restoration plan must include: detailed plans for where the excavated material will be placed, appropriate erosion control and stabilization methods, a seed mix that includes appropriate native, non-invasive species, and a monitoring and management plan for establishment of the native species and long term control of any invasive species.
5. Condition for drawdown of reservoir areas not part of compensatory mitigation plan
    - a) A detailed plan for the drawdown of the reservoir areas not part of compensatory mitigation shall be submitted to the Department for approval prior to construction of the project. The plan must include details on: execution of the drawdown, removal of control structures and dikes, description of the target wetland communities, re-vegetation including any seed mix to be used, and a monitoring and management plan for establishment of the target wetland communities and long term control of invasive species.
6. [REDACTED] Habitat Mitigation and Management plan requirements
    - a) The [REDACTED] habitat mitigation and management plan must be approved by the Department Natural Heritage Conservation Herpetologist in consultation with the Department Wetland Mitigation Coordinator prior to construction of the project.
    - b) The [REDACTED] habitat mitigation and management plan must not be in conflict with the wetland compensatory mitigation plan.
7. MTN8268 property
    - a) Prior to construction of the project, a wetland delineation of the MTN8268 property must be provided to the Department Water Management Specialist for approval to accurately document the amount of wetland and upland in the MTN8268 preservation area. The delineation must either be conducted by a professionally assured delineator or must receive concurrence through the Department's Wetland Identification Program.
    - b) Prior to construction of the project, a detailed vegetation survey for the wetland area must be provided to the Department Water Management Specialist for approval to accurately document the existing condition of the wetland in the MTN8268 area and support the claim the area is a high quality White Pine – Red Maple Swamp.
    - c) Prior to construction of the project, an invasive species management plan must be provided to the Department Water Management Specialist for approval to ensure the existing quality of the White Pine – Red Maple Swamp wetland is maintained.
    - d) A conservation easement protecting the area in perpetuity with the Department as the Grantee shall be submitted to the Department Water Management Specialist within 30 days of permit issuance for Department review and approval. Once approved, the Department will record the easement with the appropriate County Register of Deeds. The easement must include a survey and legal description (including metes and bounds). The easement boundary cannot include enrollment of any of the area in Managed Forest Law or any other similar timber harvest or management programs.

### **Mitigation Plan Conditions**

1. The compensatory mitigation project must be constructed, maintained, monitored and managed in accordance with the Wetland Compensatory Mitigation Plan, Meteor Timber, LLC – AK Knapp Property, dated April 17, 2017 and as modified by the conditions of this permit. The final plan must receive written approval by the Department Wetland Mitigation Coordinator prior to starting the permitted activity. Any adjustments to any component of the mitigation plan that may be necessary shall be submitted to the Department Wetland Mitigation Coordinator for review and approval prior to implementing. See Wis. Adm. Code s. NR 350.09(2)(b).
2. In the event that at the end of the required 10 years of monitoring the cranberry bed mitigation area does not meet final performance standards, the monitoring period shall be extended until such time that standards have been met and the site has been determined to be successful by the Department Wetland Mitigation Coordinator. See Wis. Adm. Code s. NR 350.09(3)(g).
3. Once all of the components of the mitigation plan have been finalized and have received written approval by the Department Wetland Mitigation Coordinator, the final mitigation credit requirements shall be determined by the Department Wetland Mitigation Coordinator for both the project impacts and for the credits expected to be generated by the cranberry bed mitigation and preservation mitigation areas. See Wis. Adm. Code ss. NR 350.06, 350.07.
4. Any extra mitigation credits that may be generated at the mitigation site beyond those required by the Department cannot be used for future mitigation requirements of other projects proposed by this applicant or any other permit applicant.
5. Four groundwater monitoring wells with data loggers shall be installed in the locations shown on the attached map to monitor for any potential impacts to hydrology within the mitigation preservation area. Well readings shall be recorded a minimum of four times a day. Locations of the monitoring wells may be adjusted based on the final location of the equalization culverts. See Wis. Adm. Code s. NR 350.08.
6. A fifth groundwater monitoring well with data logger shall be installed in the location shown on the attached map. This well will be used as a reference well and the data collected used to dictate the hydrology performance standard for the cranberry bed mitigation area. See Wis. Adm. Code s. NR 350.08.
7. A plan detailing how the groundwater monitoring wells will be installed shall be submitted to the Department Wetland Mitigation Coordinator for review and written approval. See Wis. Adm Code s. 350.08.
8. The hydrology performance standard for the cranberry bed mitigation area shall state that wetland hydrology within the wooded swamp (White Pine-Red Maple Swamp) wetland community is within a 10% variability range compared to the reference. It shall also state that this metric must be met for a minimum of 2 growing season of normal to wetter than normal hydrological conditions to be considered successful. See Wis. Adm. Code s. 350.08.
9. An adequate remedial action plan for hydrology shall be prepared and submitted to the Department Wetland Mitigation Coordinator to address impacts to wetland hydrology within the mitigation preservation area due to the project. See Wis. Adm. Code s. NR 350.09(4)(c).

10. A performance standard for hydrology within the mitigation preservation area shall be submitted to the Department Wetland Mitigation Coordinator for review and written approval. See Wis. Adm. Code ss. NR 350.08(3), 350.09(3)(b). This will assist with monitoring the site and determining if the remedial action plan for hydrology needs to be implemented. The performance standard shall utilize data collected from a groundwater monitoring well placed within the preservation wetland in a reference location compared to data collected in the four required groundwater monitoring wells associated with the preservation mitigation area. The standard shall require that the target hydrology shall be within a 10% variability range compared to the reference well. It shall also state that this metric must be met for a minimum of 2 growing season of normal to wetter than normal hydrological conditions to be considered successful.
11. Adequate soils data shall be submitted to characterize the soils within the cranberry beds being utilized for permittee-responsible mitigation. See Wis. Adm. Code s. NR 350.08(3). The extent of soils sampling must include soil profiles from 2 sampling points in each cranberry bed associated with the mitigation area. If the 2 profiles vary greatly from each other, then soil profiles from additional sampling points need to be characterized until there is more consistent data within a bed. This information is necessary to determine the extent of soil disturbance and sanding within the beds. Soil data collected may result in revisions being required by the Department Wetland Mitigation Coordinator to some components of the cranberry bed mitigation plan, including the removal of excessive sand down to a more native wetland soil.
12. Drain tiles within the cranberry beds shall be completely removed to achieve a more complete hydrologic restoration within the beds. See Wis. Adm. Code s. NR 350.08.
13. Vegetation performance standards within the mitigation preservation area shall state that for invasive, non-native vegetation species (INN), the standards should be written such that the percentage of INN species shall not be greater than baseline conditions in all preservation areas. Regarding tree mortality, the performance standard needs to be such that mortality cannot exceed baseline conditions. While it is expected that some trees will die, new trees should also be coming in. Also, disease may be a response to hydrologic stress, which would be the responsibility of the applicant if hydrology is altered and which must be addressed as part of the remedial action plan. In the buffer area, the proposed INN final cover standard of 5% is acceptable but the mortality of woody species standard shall be  $\leq 5\%$ . See Wis. Adm. Code s. NR 350.08.
14. A long-term monitoring and management shall be submitted to the Department Wetland Mitigation Coordinator for review and written approval for the cranberry bed mitigation area. See Wis. Adm. Code s. NR 350.09(4)(b). This plan shall cover monitoring and management after the required pre-construction and post-construction monitoring has been completed and final performance standards for both hydrology and vegetation has been met.
15. An endowment fund shall be established to cover long-term management of all mitigation areas once required monitoring periods are over. See Wis. Adm. Code s. NR 350.10. Details of the endowment fund shall be approved by the Department Wetland Mitigation Coordinator prior to final establishment. Allowable uses of these funds must be related to maintenance and monitoring activities associated with the mitigation lands. In the event that the mitigation site is transferred to another entity, any remaining endowment funds at the time of transfer shall also be transferred to the new entity. Copies of the final fund paperwork shall be provided to the Department Wetland Mitigation Coordinator.



16. A conservation easement protecting the mitigation wetlands in perpetuity with the Department as the Grantee shall be submitted to the Department Wetland Mitigation Coordinator within 30 days of permit issuance for review and approval. Once approved, the Department will record the easement with the Monroe County Register of Deeds. The easement must include a survey and legal description (including metes and bounds) of the mitigation lands. The easement boundary of the mitigation wetlands shall include the buffer area surrounding the wetland mitigation preservation area except that the buffer to the north of the preservation area is not required to be included. See Wis. Adm. Code s. NR 350.11.
17. Permittee shall include a vegetated buffer adjacent to restored and preserved wetlands that is adequate to filter run-off entering the wetland and maintain the performance standards of the wetlands considered for mitigation credit. See Wis. Adm. Code ss. NR 350.05(5), 350.08.
18. Final, signed financial assurances for both the construction and maintenance phases of the cranberry bed mitigation project as well as the maintenance of the mitigation preservation area in the form of irrevocable escrow agreements in the amounts proposed in the April 17, 2017 Wetland Compensatory Mitigation plan must be submitted to the Department Wetland Mitigation Coordinator within 30 days of permit issuance. See Wis. Adm. Code s. NR 350.08.
19. A seeding and planting plan for a shrub and herbaceous layer in the cranberry bed mitigation area indicative of a White Pine – Red Maple Swamp wetland community shall be submitted for Department Wetland Mitigation Coordinator review and written approval. It shall include a plan to utilize the hydric soil layer from the area where the wetland fill is proposed as this layer would include the appropriate herbaceous layer species. An appropriate seed mix shall also be prepared to supplement the seed bank in the hydric soils as needed. See Wis. Adm. Code s. NR 350.08.
20. Details regarding the size of the white pine and red maple saplings proposed to be planted in the cranberry bed mitigation area shall be submitted to the Department Wetland Mitigation Coordinator for review and approval as well as the method by which the trees will be planted. To optimize tree survival, the planting method shall include the construction of microtopographic mounds on which the trees can be planted. See Wis. Adm. Code s. NR 350.08.
21. Appropriate native seed mixes for the sedge meadow, wetland buffer, emergent marsh and upland buffer shall be submitted to the Department Wetland Mitigation Coordinator for review and approval prior to use. See Wis. Adm. Code s. NR 350.08.
22. A plan for prescribed burning as a maintenance tool in the upland buffer shall be submitted to the Department Wetland Mitigation Coordinator for review and approval. As an alternative, an upland buffer seed mix that does not include prairie species can be proposed, which would not require prescribed burning. See Wis. Adm. Code s. NR 350.08.
23. While conducting herbicide treatments in the mitigation areas, if areas of standing water are encountered where invasive, non-native species will be treated, the herbicides RoundUp, Select Max and Garlon 4 cannot be used. An alternative herbicide shall be submitted to the Department Wetland Mitigation Coordinator for review and written approval prior to use.
24. A Department aquatic plant management permit shall be obtained prior to applying herbicides in wetlands. See Wis. Adm. Code Ch. NR 107.

25. Vegetation performance standards in the cranberry bed mitigation shall state that when a number of years are required to meet a particular interim or final standard, the number of years applies to all components of the standard. It must also be indicated that performance standards run consecutively, meaning that the years required to meet Interim 2 do not start until after Interim 1 has been met and the years required to meet Final do not start until after Interim 2 has been met. See Wis. Adm. Code s. NR 350.08.
26. The final vegetation performance standard for native, non-invasive (NNI) versus INN species shall be  $\geq 90\%$  NNI and  $< 10\%$  INN for all plant communities, not just in the sedge meadow and emergent marsh as proposed. See Wis. Adm. Code s. NR 350.08.
27. The final vegetation performance standard for both buffer plant communities shall include a metric related to the allowable amount of unvegetated, bare ground. The standard shall state that "No unvegetated areas  $> 10$  square feet". See Wis. Adm. Code s. NR 350.08.
28. The 2nd metric in the final vegetation performance standard for both the wetland and upland buffer shall specify wetland or upland buffer as this metric cannot be combined for both buffer types. Also, this metric in the wetland buffer must specify hydrophytic species. See Wis. Adm. Code s. NR 350.08.
29. The 2nd and 3rd metrics in the final vegetation performance standard for both the wetland and upland buffer are conflicting. One requires  $\geq 20$  NNI species and the other requires  $\geq 10$ . The standard shall state  $\geq 20$  for both. See Wis. Adm. Code s. NR 350.08.
30. The final vegetation performance standard in all plant communities related to the number of dominant species that must comprise a specific percentage of the relative cover must specify that those dominant species must be perennial. See Wis. Adm. Code s. NR 350.08.
31. In the wooded swamp vegetation performance standards, it must be stated that the metrics in both the Interim 1 and Interim 2 standards must be met for  $\geq 3$  consecutive years. See Wis. Adm. Code s. NR 350.08.
32. In the wooded swamp vegetation performance standards, the interim and final standards related to survival and relative cover of planted trees must state that the standard applies to the white pine and red maple species and that in each case, each must comprise 40-60% of the standard. See Wis. Adm. Code s. NR 350.08.
33. In the wooded swamp vegetation performance standards, it must be stated the NNI and INN relative cover percentages must be  $\geq 90\%$  and  $< 10\%$  respectively, in each layer (tree, shrub and herbaceous) and not in all layers combined. See Wis. Adm. Code s. NR 350.08.
34. A plan to address potential herbivory in the cranberry bed mitigation area shall be submitted for Department Wetland Mitigation Coordinator for review and written approval. Measures to control herbivory such as deer fencing, tree tubes or other appropriate measures shall be included. See Wis. Adm. Code s. NR 350.08.
35. Additional vegetation sampling plots within the sedge meadow, wetland buffer along the northern boundary of the cranberry bed mitigation area and in the emergent marsh shall be included and added to Figure 27 of the Wetland Compensatory Mitigation Plan. The Department Wetland Mitigation Coordinator shall review and approve the additional vegetation sampling plots. See Wis. Adm. Code s. NR 350.08.

36. The legends found on the figures within the Wetland Compensatory Mitigation Plan must be corrected so that they are clear, legible and accurate.
37. The purchase of either wetland mitigation bank credit or WI Wetland Conservation Trust (WWCT) In-Lieu Fee mitigation credits as determined by the Army Corps of Engineers, must be completed prior to the start of the project. An affidavit from the mitigation bank or WWCT program must be submitted to the Department Wetland Mitigation Coordinator to verify the purchase has been completed.
38. After the Department has approved all required components, a final Wetland Compensatory Mitigation Plan incorporating all components shall be submitted to the Department Wetland Mitigation Coordinator. See Wis. Adm. Code s. NR 350.08.

### FINDINGS OF FACT

1. Chris Mathis of Meteor Timber LLC., has filed an application for a permit to fill wetland, in the Town of Grant, Monroe County, also described as being in Sections 1 and 2, Township 19 North, Range 2 West.
2. The project consists of a dry plant processing facility and rail infrastructure adjoining the Union Pacific Railroad mainline between the communities of Millston and Warrens, just south of the Jackson County line, in Monroe County. The current land use at the site is in cranberry culture with generally two property owners having approximately 100 acres of cranberry beds, with 4 reservoirs and numerous water control structures. The site also contains a large wetland complex made up of primarily a White Pine-Red Maple Swamp plant community. The State of Wisconsin Natural Heritage Inventory Program has ranked the White Pine-Red Maple Swamp plant community type as an S2, which means the community type is considered imperiled in Wisconsin due to a restricted range, few populations or occurrences, steep declines, severe threats, or other factors.
3. Meteor has proposed to eliminate cranberry operations on the site and convert the site to an industrial land use. Their plans are to mine and wash sand approximately 14 vehicle miles away, truck it to this site for drying and shipping. In order to do that, Meteor must construct a dry plant and associated access road and rail infrastructure.
4. The rail infrastructure has been designed to utilize unit train shipments of sand. Unit train design length is 7150 feet, composed of 137 rail cars, 50 feet long, with 4 locomotives 50 feet long. In order to accommodate unit trains, Meteor's rail will consist of approximately 53,400 lineal feet of track including dedicated arrival and departure tracks with the ability to receive one empty unit train and ship one full unit train, storage tracks, inferior order tracks, and inspection access road.
5. The project will result in 16.25 acres of wetland fill. The 16.25 acres of wetland fill includes 13.37 acres of White Pine-Red Maple Swamp, 1.18 acres of shrub-carr/alder thicket, 1.37 acres of shallow marsh/open water, and 0.33 acres of fresh wet meadow.
6. The Department granted Meteor Timber their request for a limiting of the scope of the alternative analysis under s. 281.36(3n)(a)1.a, Wis. Stats.

7. Meteor evaluated a number of alternatives at this site. The other alternatives were not deemed feasible by the applicant due to site constraints and/or economic reasons.
8. The Department reviewed 8 different alternatives at the A.K. Knapp site, including a no-build alternative, a layout with on-site mining, a layout between the existing rail and the interstate, a layout with a loop track, a number of layouts with larger rail configurations and larger wetland impacts, and the preferred alternative. The 7 alternatives other than the preferred were not chosen because there were larger wetland impacts, one alternative was not consistent with a scenic easement held by the State of Wisconsin, and the no-build alternative did not accomplish the purpose and need of the project.
9. The Department made a number of visits to the site in 2016 and conducted an assessment of the functional values of the wetlands with proposed impacts (following the Wetland Rapid Assessment Methodology 2.0).
10. The Department found the functional values of the wetlands to be:
  - a. Floristic integrity rated exceptional, with very low percent cover of non-native species and an un-weighted mean coefficient of conservatism of 5.8 and un-weighted floristic quality index of 40.7.
  - b. Human use values rated as exceptional due to the support for rare species: the [REDACTED] Blanding's Turtle (special concern) and Four-toed Salamander (special concern). Human use values also rated exceptional due the wetlands' intrinsic value based on the rarity and exceptional quality of the wetland type.
  - c. Wildlife habitat rated exceptional because of the large block (over 500 acres) of high quality, structurally diverse wetland and contiguous habitat.
  - d. Groundwater processes rated as exceptional due to its location high in the watershed and the continuous presence of groundwater.
  - e. Fish and aquatic life habitat rated as high. Standing water in the wetland supports amphibian and invertebrate breeding and Rudd Creek and cranberry reservoirs also support fish.
  - f. Water quality protection rated as high due to the opportunity for wetlands to support this function because of their proximity to the cranberry operations.
  - g. Flood and storm water support and shoreline protection are rated as medium. There is a high potential for the wetlands to support these functions but lower opportunity due to the relatively undeveloped area.
11. The applicant is required to compensate for the direct impacts to wetlands through wetland compensatory mitigation. Wetland compensatory mitigation proposed includes the permittee-responsible mitigation through on-site mitigation, preservation and purchase of mitigation credits. The other components identified in the Wetland Compensatory Mitigation Plan, dated April 17, 2017, listed as added environmental benefits were not evaluated as mitigation and do not apply towards the wetland compensatory mitigation requirement.
12. The on-site permittee-responsible mitigation includes the restoration of 57.81 acres of existing cranberry beds to 33.81 acres of White Pine-Red Maple Swamp, 6.68 acres of sedge meadow, 5.52 acres of emergent marsh, 3.98 acres of upland buffer and 4.97 acres of wetland buffer. The plan includes the removal of dikes, filling in of ditches, removal of

drain tiles and establishment of native plants. A Conservation Easement will be granted to the Department to protect and preserve these acres in perpetuity.

13. The applicant proposed to preserve 296.24 acres of existing wetland as mitigation. The Department evaluated the proposal and determined that of the 296.24 acres proposed, a total of 175-acres of wetland will receive mitigation credit as preservation and will be protected in perpetuity under a Conservation Easement granted to the Department. Adequate documentation regarding the quality of the additional 121.24 acres of wetland was not submitted to the Department to be able to allow mitigation credits to be given for these acres. The Conservation Easement will also include an upland buffer. An additional wetland buffer will be provided between the preservation area and the permitted fill.
14. The Department evaluated the wetland mitigation proposal and has determined that compensatory mitigation may not compensate for the direct loss of 13.37 acres of exceptional quality White Pine-Red Maple Swamp due to the uncertainty of the success of the permittee-responsible cranberry bed restoration project and the potential degradation of the preservation area as a result of the proposed rail spur and dry plant. If the permittee-responsible mitigation project is fully successful as defined by the conditions of this permit and evaluated by the required performance standards in the final, Department approved wetland compensatory mitigation plan, the mitigation could compensate for the direct wetland loss. The State of Wisconsin Natural Heritage Inventory Program has ranked the White Pine-Red Maple Swamp plant community type as an S2, which means the community type is considered imperiled in Wisconsin due to a restricted range, few populations or occurrences, steep declines, severe threats, or other factors.
15. Direct impacts to wetlands include the permanent loss of 16.25 acres of wetland and wetland functional values associated with those wetlands. 13.37 acres of the wetlands proposed to be filled are White Pine-Red Maple Swamp. The State of Wisconsin Natural Heritage Inventory Program has ranked the White Pine-Red Maple Swamp plant community type as an S2, which means the community type is considered imperiled in Wisconsin due to a restricted range, few populations or occurrences, steep declines, severe threats, or other factors. This loss is expected to be irreversible and has high significance.
16. Secondary impacts to functional values include:
  - a. Increased disturbed fringe and wildlife habitat fragmentation. Expected impacts to habitat include increased edge effects and decreased core habitat to certain species as well as decreased connectivity to the parts of the wetland that are proposed to be bisected. If the core habitat is decreased enough the habitat can become unsuitable or an ecological trap for some species (e.g., interior nesting birds, raptors). Species such as rare herptiles and small mammals with small home ranges potentially won't be able to move to other parts of the wetland. There is potential for species to avoid sections of the wetland due to activity in the rail corridor.
  - b. Secondary impacts to wetland functional values from routine rail traffic along the length of the proposed new rail and dry plant and associated runoff is likely to provide a conduit for invasive species establishment. The project plan proposes to monitor and treat invasive species which may offset some of these impacts.
  - c. There is a potential for secondary impacts to wetland functional values due to modification of hydrology resulting from the re-routing of the stream

and construction of the new rail corridor and associated access roads. The proposed equalization culverts may help offset some of the impacts from the rail corridor.

17. Secondary impacts to wetlands are expected to be permanent and irreversible and the significance of those impacts is high. The Department has evaluated the proposed actions as proposed to offset secondary impacts to wetland functional values and concludes that these actions are not likely to fully compensate for secondary impacts to impacted wetlands.
18. Cumulative impacts to wetland functional values:
  - a. Impacts to the wetlands' spatial/habitat integrity. The rail corridor will result in fragmentation of habitat. Wildlife underpasses and track crossings are proposed to compensate for this impact, however, the efficacy of these actions has not been proven.
  - b. Approving a permit to fill 16.25 acres of wetland, 13.37 of those acres being an exceptional quality White Pine-Red Maple Swamp, an imperiled wetland plant community, may lead to increased applications to fill rare, sensitive and valuable wetland plant communities. Impacts to this rare plant and animal community could result in future impacts to similar quality plant and animal communities.
19. The Department has evaluated the potential cumulative impacts to wetland functional values resulting from this project and has determined that significant cumulative impacts may occur.
20. The Department has completed an investigation of the project site and has evaluated the project as described in the application and plans.
21. The proposed project, if constructed in accordance with this permit and all of the conditions of this permit will not adversely affect water quality, will not increase water pollution in surface waters and will not cause environmental pollution as defined in s. 283.01(6m), Wis. Stats.
22. The proposed project, if constructed in accordance with this permit and all of the conditions of this permit represents the least environmentally damaging practicable alternative taking into consideration practicable alternatives that avoid wetland impacts.
23. All practicable measures to minimize the adverse impacts to wetland functional values will be taken if the proposed project is constructed in accordance with this permit and all of the conditions of this permit.
24. The proposed project, if constructed in accordance with this permit and all of the conditions of this permit will not result in significant adverse impact to wetland functional values, in significant adverse impact to water quality, or in other significant adverse environmental consequences.
25. All of the conditions of this permit must be satisfied for this project to meet statutory standards.

26. In accordance with s. 1.11, Stats., and Ch. NR 150, Adm. Code, the Department is authorized and required to determine whether it has complied with s.1.11, Stats., and Ch. NR 150, Wis. Adm. Code. This is an integrated analysis action under s. NR 150.20 (2) (a) 8. and 11., Wis. Adm. Code. The Department has complied with the requirements of the Wisconsin Environmental Policy Act, s. 1.11, Stats., and ch. NR 150, Wis. Adm. Code.
27. A summary of the environmental analysis completed for this project has been completed, and is included with the permit file.
28. The wetland permit was public noticed on the Department's website on February 28, 2017.
29. A public informational hearing was held on April 18, 2017. Public comments were received on the impacts to wetland functional values as well as other comments.
30. The Department of Natural Resources has completed all procedural requirements and the project as permitted will comply with all applicable requirements of Section 281.36, Wisconsin Statutes and Chapters NR 103, Wisconsin Administrative Code.
31. If constructed in accordance with this permit and all of the conditions of this permit, the activity will not cause environmental pollution as defined in s. 299.01(4).
32. The applicant was responsible for fulfilling the procedural requirements for publication of notices under s. 281.36(3p)(d)1m., Stats, Stats., and was responsible for publication of the notice of pending application under s. 281.36(3p)(d)1m., Stats. or the notice of public informational hearing under s. 281.36(3p)(d)1m., Stats., or both. Section 281.36(3p)(d)1m., Stats., provides that if no public hearing is held, the Department must issue its decision within 30 days of the 30-day public comment period, and if a public hearing is held, the Department must issue its decision within 20 days after the 10-day period for public comment after the public hearing. Section 281.36(3p)(d)1m., Stats, requires the Department to consider the date on which the department publishes a notice on its web site as the date of notice.

#### CONCLUSIONS OF LAW

1. The Department has authority under the above indicated Statutes and Administrative Codes, to issue a permit for the construction and maintenance of this project, subject to the conditions contained herein.

#### NOTICE OF APPEAL RIGHTS

If you believe that you have a right to challenge this decision, you should know that the Wisconsin statutes and administrative rules establish time periods within which requests to review Department decisions shall be filed. For judicial review of a decision pursuant to sections 227.52 and 227.53, Wis. Stats., you have 30 days after the decision is mailed, or otherwise served by the Department, to file your petition with the appropriate circuit court and serve the petition on the Department. Such a petition for judicial review shall name the Department of Natural Resources as the respondent.

To request a contested case hearing of any individual permit decision pursuant to section 281.36.(3q), Wis. Stats., you have 30 days after the decision is mailed, or otherwise served by the Department, to serve a petition for hearing on the Secretary of the Department of Natural Resources, P.O. Box 7921, Madison, WI, 53707-7921. The petition shall be in writing, shall be dated and signed by the petitioner, and shall include as an attachment a copy of the decision for which administrative review is sought. If you are not the applicant, you must simultaneously provide a copy of the petition to the applicant. If you wish to request a stay of the project, you must provide information, as outlined below, to show that a stay is necessary to prevent significant adverse impacts or irreversible harm to the environment. If you are not the permit applicant, you must provide a copy of the petition to the permit applicant at the same time that you serve the petition on the Department.

**The filing of a request for a contested case hearing is not a prerequisite for judicial review and does not extend the 30 day period for filing a petition for judicial review.**

A request for contested case hearing must meet the requirements of section 281.36 (3q), Wis. Stats., and section NR 2.03, Wis. Adm. Code, and if the petitioner is not the applicant the petition must include the following information:

1. A description of the objection that is sufficiently specific to allow the department to determine which provisions of this section may be violated if the proposed discharge under the wetland individual permit is allowed to proceed.
2. A description of the facts supporting the petition that is sufficiently specific to determine how the petitioner believes the discharge, as proposed, may result in a violation of the provisions of this section.
3. A commitment by the petitioner to appear at the administrative hearing and present information supporting the petitioner's objection.
4. If the petition contains a request for a stay of the project, the petition must also include information showing that a stay is necessary to prevent significant adverse impacts or irreversible harm to the environment.

Dated at on May 19, 2017.

STATE OF WISCONSIN DEPARTMENT OF NATURAL RESOURCES  
For the Secretary

By     /s/ Robert Rosenberger      
Deputy Watershed Management Bureau Director