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Jeff Gunderson  
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RE: Great Lake States' Prohibition on Release of GMOs (MASGP 09-008-09)

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Dear Jeff,

Below is the summary of research regarding Minnesota Sea Grant's request for a survey of Great Lake states that may have laws regulating, and specifically prohibiting, the release of genetically modified aquatic organisms. Please note that no state has an outright prohibition on release. This information is intended as advisory research only and does not constitute legal representation of Minnesota Sea Grant by the Law Center. It represents our interpretation of the relevant laws and cases and does not necessarily reflect the views of the National Sea Grant Office, NOAA, or any other agency or entity.

### **Minnesota**

Chapter 18F of the Minnesota Statutes governs the release of certain genetically engineered agriculturally related organisms. The purpose of Chapter 18F is to establish permits for the release of certain genetically engineered agriculturally related organisms to protect humans and the environment from the potential for significant adverse effects of those releases. Minn. Stat. § 18F.02 and Minn. R. 1558.0020 define "genetically engineered agriculturally related organisms" to include any organism that is used in agricultural production or processing of agricultural products or private aquatic life or genetically engineered wild animals.

Specifically, § 18F.07 states that a person may not conduct a release of a genetically engineered agriculturally related organism until a permit for the release has been obtained from the State agriculture commissioner. Each release of a genetically engineered agriculturally related

organism requires a new permit until the commissioner determines by rule that the proposed use of the agriculturally related organism is no longer subject to regulation under the chapter.

Subd. 2(a) of § 18F.07 states that "after reviewing a completed application, the commissioner may issue a genetically engineered agriculturally related organism permit if the commissioner determines that the applicant has adequately demonstrated that the proposed release does not have the potential for unreasonable adverse effects on the environment." Section 18F.13 states that the commissioner may provide exemptions to the requirements to prepare an environmental assessment worksheet and obtain a permit for release of genetically engineered agriculturally related organisms for which substantial evidence, including past releases, has shown that the organism can be released without adverse effects on humans and the environment.

The commissioner may deny issuance of a genetically engineered agriculturally related organism permit if the commissioner determines that the use to be made of the agriculturally related organisms under the proposed terms and conditions may cause unreasonable adverse effects on the environment.

Furthermore, the Minnesota Environmental Quality Board (EQB) is designated the state coordinating organization for state and federal regulatory activities relating to genetically engineered organisms.<sup>1</sup> The EQB is authorized to issue release permits for genetically modified organisms.<sup>2</sup> The EQB release permits are in addition to those required under Chapter 18F. Any person who proposes to use a genetically engineered organism must comply with these EQB's regulations.<sup>3</sup> The use of a genetically engineered organism in a containment facility, or any facility determined by the EQB to provide adequate safeguards, is not considered a release and therefore does not require a release permit.<sup>4</sup> An application for a release permit for the release of genetically engineered organisms must be filed in the form approved by the chair of the EQB.<sup>5</sup>

The EQB may impose release permit conditions to minimize the adverse impacts of the release on human health or the environment and to provide information adequate to monitor compliance with the release permit and for analysis relating to future applications.<sup>6</sup> In determining whether a release permit should be issued or denied, modified, or revoked and in specifying or modifying permit conditions, the EQB must consider, among other things, the potential for the genetically engineered organisms to cause adverse environmental effects including, but not limited to: whether the recipient organism is native or nonnative to the release area; whether the genetically engineered organism is pathogenic or toxic to target or non-target organisms; the extent to which the genetically engineered organism's competitiveness has been changed or potentially changed as a result of the genetic engineering.<sup>7</sup>

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<sup>1</sup> MINN. STAT. § 116C.92

<sup>2</sup> MINN. R. 4420.0020

<sup>3</sup> *Id.* at Subpart 5.

<sup>4</sup> *Id.* at Subpart 2.

<sup>5</sup> *Id.* 4420.0025

<sup>6</sup> *Id.* 4420.0030

<sup>7</sup> *Id.* 4420.0035, Subpart 3C.

## Michigan

Mich. Comp. Laws § 324.41305 governs the introduction of prohibited or restricted species, or genetically engineered or nonnative fish.<sup>8</sup> Specifically, a person shall not introduce a prohibited species, a restricted species, or a genetically engineered or nonnative fish or aquatic plant unless the introduction is authorized by one of the following, as applicable:

- For a fish, by a permit issued by the Michigan Department of Natural Resources (DNR) under § 324.48735;
- For a prohibited species or restricted species that is an insect, by a permit issued by the Department of Agriculture under § 324.41306;
- For an aquatic plant, by a permit issued by DNR under § 324.41306.

“Genetically engineered” refers to an organism whose genome, chromosomal or extrachromosomal, is modified permanently and heritably, using recombinant nucleic acid techniques, or the progeny thereof. “Introduce,” with reference to an organism, means to knowingly and willfully stock, place, plant, release, or allow the release of the organism in this state at any specific location where the organism is not already naturalized. Violations of this section are punishable by fine or imprisonment.

Unless the genetically engineered variant is specifically identified in the permit, § 324.48735 provides that a permit to possess live game fish in public or private ponds, pools, or aquariums or to import or bring any live game fish, including viable eggs of any game fish, from outside of this state does not include a genetically engineered variant. Additionally, any of the permits issued under this subsection may be limited to a genetically engineered fish.

Separately, the Michigan Aquaculture Development Act (MADA) governs the production or research of organisms that may be genetically engineered. “Genetically engineered” refers to an organism whose genome, chromosomal or extrachromosomal, is modified permanently and heritably using recombinant nucleic acid techniques, or the progeny thereof.<sup>9</sup> Section 5 of the MADA provides a very lengthy list of approved fish species that may be produced through aquaculture. For the purposes of the MADA, however, each genetically engineered variant of an aquaculture species shall be considered a distinct aquaculture species. A genetically engineered variant is not included on the list of approved aquaculture species under § 5 unless specifically identified, by rule, as being included on the list. An aquaculture research permit does not cover a

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<sup>8</sup> “Prohibited fish species” means any of the following or the eggs thereof:

- (i) Bighead carp (*Hypophthalmichthys nobilis*) or a hybrid or genetically engineered variant thereof.
- (ii) Bitterling (*Rhodeus sericeus*) or a hybrid or genetically engineered variant thereof.
- (iii) Black carp (*Mylopharyngodon piceus*) or a hybrid or genetically engineered variant thereof.
- (iv) Grass carp (*Ctenopharyngodon idellus*) or a hybrid or genetically engineered variant thereof.
- (v) Ide (*Leuciscus idus*) or a hybrid or genetically engineered variant thereof.
- (vi) Japanese weatherfish (*Misgurnus anguillicaudatus*) or a hybrid or genetically engineered variant thereof.
- (vii) Rudd (*Scardinius erythrophthalmus*) or a hybrid or genetically engineered variant thereof.
- (viii) Silver carp (*Hypophthalmichthys molitrix*) or a hybrid or genetically engineered variant thereof.
- (ix) A fish of the snakehead family (family Channidae) or a genetically engineered variant thereof.
- (x) Tench (*Tinca tinca*) or a hybrid or genetically engineered variant thereof.

MICH. COMP. LAWS § 324.41305(f).

<sup>9</sup> MICH. COMP. LAWS § 286.872

genetically engineered organism that is a variant of an aquaculture species unless specifically identified in the permit.

### **Illinois**

Pursuant to the Illinois Release of Genetically Engineered Organisms Act<sup>10</sup> no person may commence a regulated release unless the person provides to the reviewing state department for that regulated release all of the information concerning that release within seven days after the person submits or should have submitted the information specified to a federal regulator. If a release prohibition is not deemed to be necessary to protect public health or the environment, then the reviewing state-level department may waive any reporting requirements.

For purposes of the Act, a "regulated release" is a release into the environment for which the coordinated framework requires that the person proposing to commence the release into the environment do one or more of the following:

- Notify a federal regulator of the release into the environment;
- Secure the approval of or a permit or license from a federal regulator before commencing the release into the environment; or
- Secure a determination by a federal regulator of the need for notification, approval, licensing, or issuance of a permit by the federal regulator if the determination is part of a procedure specified in the coordinated framework.

"Coordinated framework" refers to the framework outlined in 7 C.F.R. part 340. Part 340 is published by the U.S. Department of Agriculture to regulate the introduction of organisms and products altered or produced through genetic engineering which are, or believed to be, "plant pests."

### **Wisconsin**

Wis. Stat. § 146.60 regulates the notice of the release of genetically engineered organisms into the environment. "Release into the environment" is defined under the statute as the "introduction or use in this state of an organism or pathogen anywhere except within an indoor facility which is designed to physically contain the organism or pathogen, including a laboratory, greenhouse, growth chamber or fermenter."

Similar to the Illinois statute, Wisconsin provides that no person may commence a regulated release unless the person provides to the reviewing department for that regulated release all of the following information within seven days after the person submits or should have submitted the information to a federal regulator, whichever is sooner:

- A copy of all information which the person is required to submit to the federal regulator and which is not confidential information;
- A summary of any confidential information which the person submits or is required to submit to a federal regulator. The summary shall be sufficient enough to enable the reviewing department to prepare the comment authorized under § 146.60(4) and to provide information to the public and shall have minimal extraneous and irrelevant information.

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<sup>10</sup> ILL. COMP. LAWS. § 430 95/0.01).

The reviewing state agency may request that a person submit to it part or all of any of the confidential information that is the subject of the summary submitted to that reviewing department. That person shall submit the information to the reviewing department no later than three working days after receiving the request.

### Indiana

312 Ind. Admin. Code 9-6-7 provides that a person must not import, possess, propagate, buy, sell, barter, trade, transfer, loan, or release into public or private waters any of the following live fish or fry of live fish or their viable eggs or genetic material:

- Exotic catfish
- Bighead carp
- Black carp
- Silver carp
- White perch
- Snakehead
- Rudd
- Ruffe
- Tubenose goby
- Round goby
- A hybrid or genetically altered fish of any of these species.

Furthermore, a person who takes a fish listed in this subsection does not violate this section if the fish listed is killed immediately upon capture. This section does not apply to the following:

- The use of a fish by a properly accredited zoological park;
- During the lawful interstate shipment of fish through the state if the fish are not unloaded or do not leave the control of a common carrier; or
- A person who lawfully possesses an exotic fish under a permit issued under 312 Ind. Admin. Code 9-10-17 for medical, educational, or scientific purposes.<sup>11</sup>

Additionally, there are restrictions on genetically altered fish for individuals who seek to import fish. Fish importation permits are issued pursuant to 312 Ind. Admin. Code 9-10-15. These regulations assist in administration of the requirements relative to fish importation. Section 15(e) provides a "clean list" of fish species allowed without restriction. Genetically altered fish are not allowed under the clean list. Imported fish must be free of communicable diseases, must not become a nuisance, and must not damage a native wild species or domestic species of animal or plant.

I hope you find the above information is useful. The Law Center would be happy to conduct any follow-up research if you have any additional questions. Thank you for bringing your questions to the Law Center and we look forward to working with you in the future.

Sincerely,

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<sup>11</sup> 312 IND. ADMIN. CODE 9-6-7(b).