WISCONSIN LEGISLATIVE COUNCIL
INFORMATION MEMORANDUM

New Law Relating to Variances to Limits on Phosphorus Discharges (2013 Wisconsin Act 378)

Sources that discharge phosphorus into the environment must comply with discharge limitations specified in permits issued by the Department of Natural Resources (DNR). Under prior law, sources that could not comply with permit limitations for specified reasons had two alternatives. First, such a source could apply to the DNR for a variance from the permit limit. Second, a source could implement adaptive management, that is, reduce phosphorus discharges from other sources to off-set its own discharges in excess of its permit limits.

2013 Wisconsin Act 378 creates, as a third alternative, a statewide variance for a category of phosphorus discharges if compliance with permit limits by sources in that category cannot be achieved without causing substantial and widespread adverse social and economic impacts on a statewide basis. In order to be implemented, the proposed statewide variance created in the Act must first be reviewed and approved by the federal Environmental Protection Agency (EPA).

REGULATION OF PHOSPHORUS DISCHARGES

A Wisconsin pollution discharge elimination system permit ("WPDES permit") is required for the discharge of any pollutant from a point source to waters of the state.[1] [s. 283.31 (1), Stats.] Point sources include discharges of wastewater from publicly owned treatment works and industrial facilities. WPDES permits are issued by DNR under authority granted by the EPA under the federal Clean Water Act. The EPA retains the authority to review and object to individual WPDES permits. [33 U.S.C. s. 1342 (d).] Variances to water quality standards in WPDES permits are also subject to EPA review and approval. [40 C.F.R. Part 131.]

A WPDES permit includes starting and expiration dates, a compliance schedule, and effluent limitations. [ss. 283.31 (3) and (4) and 283.55, Stats.] Effluent limitations are limits on the

[1] "Waters of the state" is defined to include those portions of Lake Michigan and Lake Superior within the boundaries of this state and all lakes, bays, rivers, streams, springs, ponds, wells, impounding reservoirs, marshes, water courses, drainage systems, and other surface water or groundwater, natural or artificial, public or private, within this state or its jurisdiction, except those waters which are entirely confined and retained completely upon the property of a person. [s. 283.01 (20), Stats.]

specific pollutants that may be discharged. Effluent limitations are expressed as "technology-based" limits, which are based on the level of pollution control achieved using treatment technology that is reasonably available for limiting the discharge of the pollutant, and "water quality-based" limits, which are based on the quality of the stream or lake receiving the wastewater discharge. Water quality based effluent limitations may be narrative (describing the characteristics the water should have) or numeric (specifying the maximum concentration of a pollutant). A WPDES permit contains either technology-based limitations or water quality-based limitations, whichever are most stringent. A WPDES permit issued by the DNR may not be for a term of more than five years. [s. 283.53 (1) (a), Stats.]

PHOSPHORUS WATER QUALITY RULES

In December 2010, the DNR adopted revisions to two administrative rules relating to the discharge of phosphorus from point sources.[2] First, the narrative water quality criteria for phosphorus were replaced with numerical water quality criteria in ch. NR 102, Wis. Adm. Code. Second, water quality-based effluent limitations for phosphorus were established to replace the technology-based phosphorus limitations where the quality of the receiving water requires that level of protection in ch. NR 217, Wis. Adm. Code. Under the rule, the water quality-based effluent limitations for phosphorus in ch. NR 217 may be based on the numerical criteria in ch. NR 102, or on a total maximum daily load (TMDL) analysis for waters that have TMDLs approved by the EPA.

The DNR has recently begun to implement the phosphorus water quality-based effluent limitations as WPDES permits become due for reissuance.

ALTERNATIVES TO COMPLIANCE WITH CURRENT PHOSPHORUS STANDARDS UNDER PRIOR LAW

Prior to the enactment of 2013 Wisconsin Act 378, sources of phosphorus discharges had two alternatives to comply with the phosphorus standards: an individual variance for a specific limit under a WPDES permit; and adaptive management. Both alternatives are retained under Act 378.

Variances to WPDES Effluent Limitations

Any WPDES permittee may request a variance to a water quality based effluent limitation. [s. 283.15, Stats.] The DNR must issue a tentative decision on an application for a variance within 120 days after receipt of a complete application. The DNR generally must grant a variance if a permittee demonstrates by the greater weight of the credible evidence that attaining the water quality standards is not feasible because of certain natural, physical, or human-caused conditions, hydrologic modifications, or because the relevant standard, as applied to the permittee, will cause substantial and widespread adverse social and economic impacts in the area where the permittee is located.

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[2] The DNR also adopted revisions to ch. NR 151, Runoff Management, Wis. Adm. Code, to add phosphorus index performance standards for agricultural sources to address runoff from agricultural lands. These changes became effective on July 1, 2012.

An initial variance under this section may not exceed five years. The term of the initial variance and any renewals of the variance may not exceed the time that the DNR determines is necessary to achieve the water quality based effluent limitation. Initial and interim effluent limitations established in a variance apply, as appropriate, for the term of the underlying permit as reissued or modified to implement the variance. [s. 283.15 (5) (a) and (b), Stats.]

A specific variance from phosphorus water quality based effluent limitations is authorized for certain wastewater treatment systems that consist primarily of a stabilization pond system or lagoon system. [s. NR 217.19, Wis. Adm. Code.] That option is available only to existing permittees. An application for this variance must show that compliance with the water quality-based standard for phosphorus in the applicant's permit will cause substantial and widespread adverse social and economic impacts in the area where the permittee is located. If a permittee receives approval for a variance to the phosphorus standard, the permittee may request a continued variance from the phosphorus standard in a subsequent reissued permit.

Adaptive Management

The 2010 administrative rule revisions included a provision creating a watershed adaptive management option. The concept of adaptive management is to allow a permittee to reduce phosphorus discharges from other sources, including nonpoint sources, if doing so is more cost-effective than reducing its own discharge. Under the rule revisions, the DNR may authorize a permittee to use adaptive management if the permittee has met certain conditions, including the submission of an adaptive management plan. An adaptive management plan must include specified analyses, goals, and demonstrations. A reissued permit authorizing adaptive management must include monitoring and reporting requirements, and water quality based effluent limitations or a TMDL approved by the EPA. [s. NR 217.18 (3) (e), Wis. Adm. Code.]

A permittee may elect the adaptive management option in three successive permits, in order to comply with its water quality-based effluent limitation for phosphorus. Since each permit is for a five-year term, this allows a permittee 15 years in which to achieve compliance with phosphorus water quality standards through adaptive management. [s. NR 217.18 (3) (e) and (f), Wis. Adm. Code.]

2013 WISCONSIN ACT 378

As is described in greater detail below, Act 378 creates a process under which a statewide variance could be created for certain point sources that cannot achieve compliance with a water quality-based effluent limitation for phosphorus. A statewide variance is a variance that applies to any permittee in the state that meets specified conditions.[3] The Act also makes certain modifications to the adaptive management option.

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[3] A statewide variance is analogous in concept to general permits, which have been used for some time. Act 378 is the first law to apply the concept to variances. In the terminology used by the U.S. EPA, this is a "multi-discharger variance."

DETERMINATION CONCERNING COMPLIANCE WITH PHOSPHORUS STANDARD

The Act directs the Department of Administration (DOA), in consultation with the DNR, to determine whether it is feasible to attain the water quality standard for phosphorus through compliance by certain point sources with their permitted effluent limitations without causing substantial and widespread adverse social and economic impacts on a statewide basis. The point sources in question are those that cannot achieve compliance with water quality based effluent limitations without major facility upgrades. The Act defines "major facility upgrade" to mean the addition of new treatment equipment and a new treatment process. It does not specify what constitutes a widespread adverse social or economic impact.

In making this determination, DOA must include all of the following:

- A calculation of the statewide cost of compliance with water quality based effluent limitations for phosphorus by point sources that cannot achieve compliance without major facility upgrades.
- A calculation of the statewide per household cost for water pollution control by publicly owned wastewater treatment systems that cannot achieve compliance with water quality based effluent limitations for phosphorus without major facility upgrades, including the projected costs of compliance with those water quality based effluent limitations, and a calculation of the percentage of median household income the per household cost represents.
- A determination of whether the cost of compliance with water quality based effluent limitations by point sources that cannot achieve compliance without major facility upgrades would cause substantial adverse social and economic impacts on a statewide basis.
- A determination of whether the cost of compliance with water quality based effluent limitations by point sources that cannot achieve compliance without major facility upgrades would cause widespread adverse social and economic impacts on a statewide basis.

The Act directs the DOA to make a preliminary determination no later than December 21, 2014. The DOA must provide public notice of its preliminary determination and must provide a public comment period of at least 30 days following the public notice. The DOA must consider any public comments it receives in making its final determination and is required to make the final determination no later than the 30th day after the end of the public comment period. The DOA must send a notice describing its final determination to the Legislative Reference Bureau for publication in the Wisconsin Administrative Register.

A determination that it is **not** feasible to attain the specified standards by the specified facilities without the specified adverse impacts triggers the requirement that the DNR seek approval from the EPA to implement the new variance. In the remainder of this memorandum, such a determination will be referred to as a "determination of infeasibility."

The DOA may make separate determinations for different categories of sources, in which case the availability of the variance and all other provisions that flow from a determination of infeasibility apply only to sources in those categories.

AVAILABILITY OF VARIANCE

Under the Act, a WPDES permittee is eligible for a variance to the water quality standard for phosphorus for a particular point source if all of the following apply:

- The point source was subject to a WPDES permit on December 1, 2010 (i.e., before the 2010 rule revisions took effect).
- The permittee is subject to a determination of infeasibility.
- The permittee certifies that the point source cannot achieve compliance without a major facility upgrade.
- The permittee agrees to comply with the terms of the variance.

A permittee may apply to the DNR for the variance. After an application is submitted and until the last day for seeking review of the DNR's final decision on an application or a later date fixed by a reviewing court, the water quality based effluent limitation for phosphorus and any corresponding compliance schedule are not effective. All other provisions of the permit continue in effect except those for which a petition for review has been submitted under s. 283.63, Stats.

The DNR must take final action on an application for a variance within 30 days of receiving the application. It is required to approve an application unless it finds that the applicant's assertion that it cannot meet the specified limitation without a major facility upgrade is substantially inaccurate. If DNR fails to take final action by the 30-day deadline, the application is considered to be approved.

A variance remains in effect for a point source until the permit is reissued, modified, or revoked and reissued. There is no right to a contested case hearing regarding a variance.

VARIANCE PROVISIONS

Discharge Limitations

The Act establishes a schedule of increasing phosphorus controls such that a discharger must meet its phosphorus discharge limitation by the end of the fourth permit cycle for which the variance is available.[4] Specifically, permits must include the following provisions:

- In the first permit for which the DNR approves the variance, a requirement to achieve, by the end of the term of that permit, compliance with an effluent limitation for phosphorus equal to 0.8 milligrams per liter as a monthly average.
- In the second permit for which the DNR approves the variance, a requirement to achieve, by the end of the term of that permit, compliance with an effluent limitation for phosphorus equal to 0.6 milligrams per liter as a monthly average.

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[4] The Act does not explicitly state that this schedule applies in the first four permit cycles for which the variance is available (i.e., approved by both the DNR and the EPA). This conclusion is based on the treatment of dischargers who do not apply for this variance in the first permit cycle for which it is available, as described later in the memorandum.

- In the third permit for which the DNR approves the variance, a requirement to achieve, by the end of the term of that permit, compliance with an effluent limitation for phosphorus equal to 0.5 milligrams per liter as a monthly average.
- In the fourth permit for which the DNR approves the variance, a requirement to achieve, by the end of the term of that permit, compliance with the effluent limitation for phosphorus.

If a discharger initially selects a different option for compliance with phosphorus discharge limitations and later applies for the variance created by the Act, the discharger enters the phase-in schedule described above as if it had applied for the new variance in the first permit cycle. For example, if a discharger did not apply for a variances in the first two permit cycles for which the variance is available, and applied for a variance in the third permit cycle, it would be required, by the end of the term of that permit, to achieve the 0.5 milligram per liter limitation.[5]

If a permittee certifies that the point source cannot achieve compliance with an interim phosphorus limit in its first, second, or third permit for which the DNR approved a variance without a major facility upgrade, the DNR must include in the permit a requirement to achieve compliance with the highest achievable interim limit. The DNR may not include an interim limit that is higher than the technology-based phosphorus limit in the administrative rule.

If the DNR approves a variance and also issues a modified water quality-based effluent limitation for phosphorus under its general authority to establish effluent limitations, a permittee must comply with the least stringent of the two effluent limitations. However, if the DNR establishes more stringent limitations in response to a review of the determination of infeasibility, described below, permittees must comply with the more stringent limitations.

The Act also authorizes the DNR to include in the terms of a variance a requirement that the discharger optimize the performance of the source in controlling phosphorus discharges.

Other Required Measures

In addition to the interim limitations for phosphorus discharges, the Act requires a permittee operating under a statewide variance to implement the permittee's choice of the following measures to reduce the amount of phosphorus entering the waters of the state:

- Making payments to counties.
- Entering into a binding, written agreement with the DNR under which the permittee constructs a project or implements a plan that is designed to result in an annual reduction of phosphorus pollution from other sources in the basin in which the point

[5] This is the basis of the conclusion that the phase-in schedule applies to the first four permit cycles beginning after EPA approval of the variance. It also implies that there is no applicability of this variance after those permit cycles.

source is located, in an amount equal to the difference between the annual amount of phosphorus discharge by the point source and its target value.[6]

- Entering into a binding, written agreement, that is approved by the DNR, with another person under which the person constructs a project or implements a plan that is designed to result in an annual reduction of phosphorus pollution from other sources in the basin in which the point source is located, in an amount equal to the difference between the annual amount of phosphorus discharge by the point source and its target value.

If a permittee chooses to make payments to counties for phosphorus reduction, the permittee must make the payments to each county that has territory within the basin in which the point source is located in proportion to the amount of territory each county has within the basin. The payments are $50 multiplied by the number of pounds by which the amount of phosphorus discharged by the point source exceeds the source's targeted value, adjusted annually for inflation, up to a maximum of $640,000 per year.

The Act requires counties that receive payments to use the funds for the following purposes:

- To provide cost sharing for projects to assist agricultural nonpoint sources of phosphorus pollution to comply with performance standards. A county must use at least 65% of the funds for this purpose.
- For modeling or monitoring to evaluate the amount of phosphorus in the waters of the state for planning purposes.
- For staff to implement projects to reduce phosphorus pollution from non-point sources.

A participating county must prepare annual plans for use of the funds, which must be consistent with the county's land and water resource management plan.[7] Plans must identify projects and watersheds where there appear to be the greatest potential for reducing phosphorus pollution, based on an assessment of the land and land use practices in the county. It must also describe measures it will take to ensure that each project it funds is completed and evaluated.

A participating county must submit annual reports to the DNR, DOA, and Department of Agriculture, Trade, and Consumer Protection (DATCP). The reports must describe the projects for which it provided cost sharing, quantify the associated phosphorus reductions achieved using accepted modeling technology, and identify any staff funded with the payments from the permit holder. The DNR must then evaluate the reports submitted by counties. If the DNR determines that a county is not using the payments to effectively reduce phosphorus, the Act

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[6] The Act defines "target value" to mean the number of pounds of phosphorus that would be discharged from a point source during a year if the average concentration of phosphorus in the effluent discharged by the point source during the year was 0.2 milligrams per liter.

[7] It does not appear that the Act requires a county to submit its plans to a state agency for approval.

authorizes the department to require permit holders to eliminate or reduce future payments to the county.

Under the Act, it appears that all counties are included in the program unless a county opts out of the program. A county must notify the DNR by January 1 of each year if it chooses not to participate in the program.

If a permittee chooses to either implement projects to reduce phosphorus pollution or to enter into an agreement with another person to implement such projects, the person implementing the projects must annually report to the DNR the amount, in pounds, of phosphorus pollution reductions achieved through the projects, based on accepted modeling technology. If the DNR determines, based on the modeling results, that a project is not effectively reducing phosphorus pollution, it must terminate or modify the agreement under which the project is conducted.

The additional measures required under a statewide variance, described here, share a common approach with the adaptive management option for compliance with phosphorus limitations created in the DNR's 2010 rule revisions, described earlier, in that both involve parties other than a permittee in efforts to achieve phosphorous reduction. However, the additional measures required under the Act authorize an individual permittee to take a more indirect role in such reduction efforts. To comply with the adaptive management option, a permittee must develop a plan that includes certain analyses and goals and that identifies sources of funding required to implement the plan, and the permittee is accountable for meeting the goals. Under Act 378, a permittee who qualifies for the statewide variance may make payments to counties in an amount designated under the Act. Under that option, accountability measures are required of counties rather than the individual permittee.

REVIEW OF A DETERMINATION OF INFEASIBILITY

In 2024, if a determination of infeasibility is in effect, the DOA is required to prepare a report to evaluate whether that determination of infeasibility remains accurate. In addition, every three years, as part of the review of water quality standards required under federal law, the DNR must determine whether such a review should be undertaken. In conducting its review, the DOA must consult with the DNR, permittees that would be subject to water quality-based effluent limitations, and other interested parties. The DNR must provide determinations of all of the following to the DOA for the review:

- Whether technology is reasonably available for point sources to comply with effluent limitation for phosphorus that are more stringent than those provided in the statewide variance.
- Whether technology is reasonably available for any category of point sources to comply with effluent limitation for phosphorus that are more stringent than those provided in the statewide variance.
- Whether any technology that is reasonably available for compliance with effluent limitations for phosphorus that are more stringent than those provided in the statewide variance is cost effective.

If the DOA decides its determination remains accurate, the DNR must seek EPA approval for renewal of the statewide variance. Also, the DNR must decide whether it is appropriate to

apply more stringent effluent limitations than those in the initial statewide variance to all point sources or to any category of point sources, based on the availability and cost-effectiveness of technology for compliance, and if so, specify those more stringent limitations based on its report. DOA must provide public notice and public comment on the preliminary and final determinations in the same manner as its initial determination.

ADAPTIVE MANAGEMENT

In addition to creating the new statewide variance, Act 378 codifies in statute the adaptive management option for compliance with phosphorus limitations created in the DNR's 2010 rule revisions, described earlier. The adaptive management option authorized under the Act is substantially similar to the earlier version, with two exceptions. First, the Act allows a permittee to use adaptive management to achieve compliance with the water quality standard for phosphorus or for a TMDL for total suspended solids, i.e., particles suspended in water, whereas the earlier version authorized that option only for compliance with the water quality standard for phosphorus. Second, the Act allows a permittee to utilize the adaptive management option for four permit terms before it must comply with its water quality based effluent limitations or TMDL, whereas the earlier version required a permittee to comply with these limitations after utilizing adaptive management for only three permit terms.

This memorandum is not a policy statement of the Joint Legislative Council or its staff.

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