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April 7, 2015

Paula Wilson
Idaho Department of Environmental Quality
1410 N. Hilton
Boise, ID 83706 filed by email to paula.wilson@deq.idaho.gov

RE: Association of Idaho Cities Comments on Idaho Pollutant Discharge Elimination System Draft 3.0

Dear Ms. Wilson,

The Association of Idaho Cities (AIC) was founded in 1947 and is a nonpartisan, nonprofit corporation owned, organized, and operated by Idaho's city governments. The organization serves to advance the interests of the cities of Idaho through legislative advocacy, technical assistance, training and research. AIC is actively engaged in water quality issues through the work of our Environment Committee, chaired by Boise City Councilmember Elaine Clegg.

Idaho cities play an important role as the primary implementers of the Clean Water Act and have a significant interest in the development of rules and guidance for the Idaho Pollutant Discharge Elimination System permit program. AIC recognizes that the Clean Water Act anticipated states as the primary implementers of the Act and is on record as supporting development of an EPA approvable IPDES Application. AIC has developed general and specific comments that are attached for consideration by the Idaho Department of Environmental Quality.

AIC appreciates the opportunity to comment on the draft IPDES sections and looks forward to working with our state and federal partners to implement programs to protect the environment and human health. Should you have questions concerning our comments, please feel free to contact me.

Sincerely,

Seth Grigg

Executive Director

Cc: Elaine Clegg, AIC Environment Committee Chair

Association of Idaho Cities Comments on IPDES Draft Discussion Papers Number 1-3

April 7, 2015

1. Discussion Paper #1: Incorporation of NPDES Rules by Reference

   The Association of Idaho Cities (AIC) understands the three options proposed in the discussion paper. AIC supports the Idaho Department of Environmental Quality (IDEQ) proposed use of the hybrid approach of adoption by reference of federal rules for reasons of cost effectiveness and development of some rules to incorporate important aspects of the rules that might be Idaho specific or that are not currently included in existing federal rules.

2. Discussion Paper # 2.1: Permit Process, Application, and Public Participation

   Section 101.01: Rights:

   The second sentence of this section is a confusing restatement of the key elements contained in the first sentence and should be deleted.

   Section 104: Pre-application Process

   This section should include language clarifying that for General Permits, the Notice of Intent (NOI) to Discharge and any other information IDEQ deems appropriate (e.g. receiving water impairment status…) is necessary to obtain coverage under a General permit, and that a meeting with IDEQ prior to submitting the NOI, while possible, is not required.

   Section 105: Application for an IPDES Permit

   1.05.03.a: Time to Apply:

   This section, or a new section near here, appears to be necessary to define the minimum time after filing of the NOI prior to the General Permit going into effect for each of the General Permits (e.g. Construction General Permit, Multi-Sector General Permit…) and not the minimum 180 day period required for individual permits.

   105.03.c: Time to Reapply:

   This section, or a new section near here, appears to be necessary to clarify the reapplication process for General Permits.

   Section 105.06: Application Information Applicable to All Dischargers

Section 106: Does the information required in this section apply to all General Permits as well, or is there a separate or multiple sets of General Permit information that is necessary?

Section 105.07: Required Application information for permits other than publically or privately owned municipal treatment works

107: Do these requirements apply to General Permits or is there a separate set of General Permit information that needs to be developed in or near this section?

Section 105.16: Information for POTWs with Combined Storm Sewer Systems and Overflows

a. The title might be more clear to the regulated and non-regulated community if it used the term "POTWs with Combined Storm Sewer Systems and Overflows" instead of "POTWs with Combined Sewer Systems".

b. Combined municipal, industrial, and storm sewer systems (CSOs) are remnants of the country's early infrastructure that are a significant environmental concern and are not promoted or encouraged today. EPA has a CSO control policy (1994) for the approximately 772 CSO municipalities nationwide to control CSOs. There are no CSO communities in Idaho today, nor are any likely to be constructed based on our understanding of the IDEQ design review and approval requirements. If there are no CSO communities today and there will be none in the future, does this section need to be included in the rules?

Section 105.19: Permit Application Requirements for facilities with cooling water intake structures

This section addresses Clean Water Act section 116(b) requirements.

Section 316(a) of the CWA applies to point sources with thermal discharges. It authorizes the NPDES permitting authority to impose alternative effluent limitations for the control of the thermal component of a discharge in lieu of the effluent limits that would otherwise be required under sections 301 or 306 of the CWA. Regulations implementing section 316(a) are codified at 40 C.F.R. Part 125, subpart H. These regulations identify the criteria and process for determining whether an alternative effluent limitation (i.e., a thermal variance from the otherwise applicable effluent limit) may be included in a permit and, if so, what that limit should be. This means that before a thermal variance can be granted, 40 C.F.R. §§ 125.72 and 125.73 require the permittee to demonstrate that the otherwise applicable thermal discharge effluent limit is more stringent than necessary to assure the protection and propagation of the waterbody's balanced, indigenous population (BIP) of shellfish, fish and wildlife.

40 C.F.R. § 125.71(c) defines the BIP as:

> "a biotic community typically characterized by diversity, the capacity to sustain itself through cyclic seasonal changes, presence of necessary food chain species and by lack of domination by pollution tolerant species. Such a community may include historically non-native species introduced in connection with a program of wildlife management and species whose presence or abundance results from substantial irreversible environmental modifications. Normally however, such a community will not include species whose presence or abundance is attributable to the introduction of pollutants that will be eliminated by compliance by all sources with section 301(b)(2) of the Act; and may not include species whose presence or abundance is attributable to alternative effluent limitations imposed pursuant to section 316(a)."

IDEQ should include CWA Section 316(a) information in the application for point sources with thermal discharges, which would be particularly useful for facilities that may have received numeric permit limits and schedules of compliance that cover more than one permit cycle and are seeking a CWA Section 316(a) variance or for facilities reapplying for a permit for which a CWA Section 316(a) variance has been granted. Because a CWA Section 316(a) variance is a permit condition and not a permit limit, EPA suggests that:

> "With respect to renewal of a prior section 316(a) thermal variance, it is essential that permitting authorities require applicants to provide as much of the information described in 40 C.F.R. § 125.72(a) and (b) as necessary to [1]demonstrate that the alternative effluent limit assures the protection and propagation of the BIP. 40 C.F.R. § 125.72(c). Such information may include a description of any changes in facility operations, the waterbody, or the BIP since the time the variance was originally granted."

The State of Wisconsin has a recently modified water quality standards (2010)[2] and created guidance (2013)[3] for implementation of temperature requirements for point sources. There are five logic diagrams in the guidance that are particularly useful in

[1] Implementation of Clean Water Act Section 316(a) Thermal Variances in NPDES permits (Review of Existing Requirements), James A Hanlon, October 28, 2008, 4 p http://www.epa.gov/region1/npdes/merrimackstation/pdfs/ar/AR-338.pdf

[2] **NR 106.51 Applicability.** This subchapter applies to point sources that discharge cooling water, non−contact cooling water, or other wastewater to surface waters of the state if the discharge contains an associated heat load or is elevated in temperature relative to the ambient temperature of the receiving water. The procedures for calculation of effluent limitations identified in this subchapter do not apply to storm water discharges. Effluent limitations determined under this subchapter supersede any temperature limitations listed in s. NR 104.06 (2) (b). **Note:** Section 283.11 (2) (b), Stats., states that rules concerning storm water discharges may be no more stringent than the requirements under the federal water pollution control act and regulations adopted under that act. Storm water pollution prevention plans may address thermal issues on a case−by−case basis. **Note:** The department will use enforcement discretion whenever there are exceedances of effluent temperature limitations in a WPDES permit for an electric generating facility during an energy emergency warning or when an energy emergency event has been declared under a Federal Energy Regulatory Commission order (Standard EOP−002, North American Electric Reliability Corporation). **History:** CR 07−111: cr. Register September 2010 No. 657, eff. 10−1−10

[3] Guidance for Implementation of Wisconsin's Thermal Water Quality Standards, August 2013, 189 pages, Wisconsin Department of Natural Resources http://dnr.wi.gov/topic/SurfaceWater/documents/ThermalGuidance2edition8152013.pdf

understanding how the permit application process incorporates CWA Section 316(a) elements for Wisconsin point source dischargers.

Section 105.20: Permit Application Requirements for Municipal Separate Storm Sewer Discharges

AIC is pleased that IDEQ has added this section to draft number 2.1 in response to AIC comments during the February 20, 2015 meeting.

Section 105.21: Permit Application Requirements for Industrial and Construction Individual Permits

AIC is pleased that IDEQ has added this section to draft number 2.1 in response to AIC comments during the February 20, 2015 meeting.

Section 108: Draft Permit and Fact Sheet

EPA[4] identifies additional permit and fact sheet requirements for 316(a) thermal variances, including:

> "NPDES permits containing a 316(a) thermal variance must include a fact sheet that complies with the general requirements of 40 C.F.R. § 124.8. Among other things, the fact sheet must explain why the permitting authority believes any section 316(a) thermal variance included in the permit is justified, and it should contain a summary of any 316(a) thermal variance history from previous permits, if applicable (e.g., dates, determinations, limitations, etc.), as well as the basis for continuing the 316(a) thermal variance in the present permit.
>
> A 316(a) thermal variance is an NPDES permit condition. It, therefore, expires along with the permit. A permittee may request a renewal of its 316(a) thermal variance prior to the expiration of the permit. Any discharger holding a 316(a) thermal variance should be prepared to support the continuation of the variance with studies based on the discharger's actual operation experience (See Note following 40 C.F.R. 125.72)."

Section 109: Public Notification and Comment

EPA[5] identifies public notice elements for permitees requesting a 316(a) variance (40 CFR 124.57 and 40 CFR 124.10(d)(1), including two additional requirements:

1. A statement that the thermal component of the discharge is subject to effluent limitations under CWA sections 301 or 306 and a brief description, including a

[4] Implementation of Clean Water Act Section 316(a) Thermal Variances in NPDES permits (Review of Existing Requirements), James A Hanlon, October 28, 2008, 4 p http://www.epa.gov/region1/npdes/merrimackstation/pdfs/ar/AR-338.pdf
[5] Ibid

quantitative statement, of the thermal effluent limitations proposed under Section 301 or 306, and

2. A statement that a Section 316(a) request has been filed and that alternative less stringent effluent limitations may be imposed on the thermal component of the discharge under Section 316(a) and a brief description, including a quantitative statement, of the alternative effluent limitations, if any, included in the request.

3. Discussion Paper #3.0

Sections 300 and 301: Temperature Provisions Consistent with Section 316(a) and CFR 130.7(c)(2) of the Act

Throughout the entire section, there are references to water-quality based effluent limitations based on multiple sections of the Act, which never include section 316(a), which provide special consideration of balanced aquatic populations when listing waters, developing TMDLs (40 CFR 130.7(c)(2)), or developing thermal limitations for point sources (e.g. 300.01(a)(ii); 301.03; 301.04(a); 301.06; 301.07…). These references do not include section 316(a) provisions of the Act for point sources and should be reviewed and modified as necessary to provide Clean Water Act Section 316 elements.

Section 300.05: Upset

The upset provisions contained in the draft are consistent with federal rules (40 CFR 122.41(n)(2)), however, only apply to four conventional pollutants (BOD, TSS, pH and 85% BOD/TSS removal rate) contained in the Act. Because many water quality based limits are contained in permits and biological processes to meet these limits are sensitive to variation in influent, temperature, and other factors out of the control of the POTW, some states have extended the upset provision to water quality based limits using the same approach as for conventional pollutants.

AIC recommends the upset provisions contained in the rule apply to conventional and water quality based limitations.

Rationale:

In 1982, the agency proposed to extend the upset defense to violations of water quality based limits. 47 Fed. Reg. at 52,089. The defense would be allowable to permittees who could demonstrate that despite the upset, instream water quality standards were not exceeded. The very conservative nature of stacking conservative assumptions (e.g. design flow, 7Q10, 90-95% effluent concentration; 95-99% receiving water concentration for temperature/pH/hardness….) results in limits that are very conservative and likely to be overprotective in essentially all real discharge situations (e.g. properly managed utilities always have additional capacity; combined worst case assumptions for all parameters is a statistically improbable circumstance…). The upset

defense for violations of water quality based limits, while consistent with the Act, was not adopted as a final rule.

In 1988, the U.S. Court of Appeals for the D.C. Circuit ruled that EPA's refusal to extend the upset defense to water quality based permit limits was arbitrary and capricious (see *Natural Resources Defense Council v. EPA, 859 F.2d 156, 209-10 (D.C. Cir. 1988))*[6]. Upon remanding the regulation to the agency, the court specifically stated that it did not mean to imply that EPA must allow the defense for water quality based limitation, only that if the agency decides not to extend the defense, it must provide a reasoned basis for its decision[7].

Some states with EPA authorized NPDES programs allow upset defense for any limitation contained in a permit (e.g. Minnesota[8], Wisconsin[9], Florida[10]), while others do not. Thus, this is a state by state policy consideration and decision. AIC recommends that the upset provisions of the proposed Idaho rule include both technology and water quality based limitations.

Section 301.03: Establishing Technology-based Permit Provisions

AIC supports the incorporation of both technology and water-quality based permit conditions to meet the goals of the Clean Water Act. Section 301.03 appears to include

[6] Environmental Law Handbook, Bell, C.L et al, 2013
[7] Ibid.
[8] Draft permit language from City of Welcome Wastewater Treatment Facility draft permit, April 3, 2015
http://www.pca.state.mn.us/index.php?option=com_k2&id=3177_439e64cc07169acec52f7f8a2ff527d4&task=download&view=item

> Upset Defense. In the event of temporary noncompliance by the Permittee with an applicable effluent limitation resulting from an upset at the Permittee's facility due to factors beyond the control of the Permittee, the Permittee has an affirmative defense to an enforcement action brought by the Agency as a result of the noncompliance if the Permittee demonstrates by a preponderance of competent evidence: a. The specific cause of the upset; b. That the upset was unintentional; c. That the upset resulted from factors beyond the reasonable control of the Permittee and did not result from operational error, improperly designed treatment facilities, inadequate treatment facilities, lack of preventative maintenance, or increases in production which are beyond the design capability of the treatment facilities; d. That at the time of the upset the facility was being properly operated; e. That the Permittee properly notified the Commissioner of the upset in accordance with Minn. R. 7001.1090, subp. 1, item I; and f. That the Permittee implemented the remedial measures required by Minn. R. 7001.0150, subp. 3, item J.

[9] Personal communication, March 30, 2015, Keith Pierce, Acting Wastewater Section Chief, WDNR.
[10] South Florida Water Management District permit:
http://www.dep.state.fl.us/secretary/news/2012/06/npdes_watershed_permit_consent_order.pdf

> *Permit provisions that extend to any limitation (e.g. WQBEL or reuse) "Any upset which causes any reclaimed water of the effluent to exceed any limitation in the permit."*
>
> *Upset Provisions:*
> a. A permittee who wishes to establish the affirmative defense of upset shall demonstrate, through properly signed contemporaneous operating logs, or other relevant evidence that:
> (1) An upset occurred and that the permittee can identify the cause(s) of the upset;
> (2) The permitted facility was at the time being properly operated;
> (3) The permittee submitted notice of the upset as required in Condition VIII.20 [notification requirements] of this permit; and
> (4) The permittee complied with any remedial measures required under Condition VIII.5 [duty to comply/limitations on liability] of this permit.
> b. In any enforcement proceeding, the burden of proof for establishing occurrence of an upset rests with the permitttee.
> c. Before an enforcement proceeding is instituted, no representation made the Department review of a claim that non-compliance was caused by an upset is final agency action subject to judicial review. [62-620-610(23, F.A.C.]

all of the rule language necessary to do that; however, does not describe or address guidance on how the State of Idaho intends to establish these limitations (e.g. use EPA (1991) Technical support document for the development of water quality based toxics or develop a separate IPDES guidance). States have significant flexibility in the assumptions and conditions used to determine water quality based conditions and the use of appropriate approaches and assumptions in the development of WQBELs is of significant interest to permittees and the public.

AIC has two comments on this section:

1. If IDEQ intends to develop WQBEL Guidance, it appears that this section 300.03 may be an appropriate portion of the rule to include that information.

2. IDEQ should identify that temperature impairment listing, temperature TMDL development (see 40 CFR 130.7(c)(2)), and limitations for point sources are addressed differently by the Act (e.g. Balanced Indigenous Population of aquatic life) instead of simply relying on compliance based on numeric water quality criteria as is typically done for other WQBEL parameters.

Section 301.20: Authorization for Trading in permit

AIC supports the option for the State to include an explicit authorization for trading into permits. AIC believes that this is an essential element in the permitting and TMDL landscape now and in the future. The March 6, 2015 draft Lower Boise Phosphorus TMDL contains no reserve for growth for any point source with the anticipation that all future growth will come from discharges at the TMDL water quality target (70 ug/l TP) or a combined treatment plus trade approach.

Section 302.07(d): Intake Credits

AIC appreciates and supports the inclusion of intake credits in the determination of IPDES limitations, particularly for toxics. However, the proposed provision only provides credits for facilities that withdraw source waters from the same waterbody to which they discharge. In Idaho, over 90% of the domestic potable water is from groundwater sources, which might be higher or lower for specific pollutants than surface waters. Across the state, groundwater is primarily the source of waters used by public and industrial sources, and under the draft Intake Credit language, not available to be included as an intake credit.

AIC recommends that the language be modified to include all source waters, including groundwaters, so this important implementation tool is available to all IPDES permittees instead of only those few that have the same source and receiving waters.

Section 304.01.(d)(ii): Schedules of Compliance

AIC appreciates and supports the inclusion of Schedules of Compliance (SOCs) into IPDES permits as necessary.

Schedules of Compliance (SOC) have been suggested by IDEQ as one of ten implementation measures in the Fish Consumption Rulemaking that is currently occurring. The conventional SOC is treatment plant improvement combined with definable construction steps and schedules, and generally have not extended beyond two permit cycles. However, the use of SOCs for toxic pollutants, some of which can have very low and non-attainable endpoints (e.g. current Oregon 0.03 mg/kg methylmercury, Idaho 64 parts per quadrillion criteria for PCBs…), significantly complicate portions of SOC (e.g. reasonable progress; projected completion date…) rule requirements for permittees and the IPDES program.

For example, if Idaho were to adopt criteria similar to those recently adopted by the State of Oregon, or if a discharger in Idaho discharges to waters that flow into Oregon, compliance with the methylmercury fish tissue (0.03 mg/kg) is highly unlikely in the short and long term because of existing U.S. and global atmospheric anthropogenic emissions of mercury and the global circulation and deposition of mercury into Idaho waters.

Many Idaho municipal permittees already have implemented and achieved significant mercury reductions and at a certain point will not be able to make additional reductions and are unlikely to be able to effect regional, national, or global anthropogenic reductions necessary to meet the standard or determine the timeframe necessary to meet the criterion.

This scenario applies to multiple pollutants, some of which EPA banned as early at the 1970s (e.g. PCBs, DDT/DDE/DDD, dieldrin, endrin…) but still are used in other countries and like mercury, can be globally distributed atmospherically or are contained in products approved for use by the Federal Government (e.g. currently allowed PCB levels include 50 ppm in inks, 10 ppm in food packaging paper, 3 ppm in poultry, and 2 ppm in fish). EPA's current recommended water quality criteria to states is 170 parts per quadrillion and the current Idaho criterion is 64 parts per quadrillion, so many waters of the U.S. and state have PCB levels that persist and are above state water quality criteria levels. There are also naturally occurring elevated arsenic and selenium concentrations in the western United States (including Idaho) and areas with legacy mining that create significant compliance and SOC challenges (e.g. lead, cadmium, and zinc in the Silver Valley of Idaho with 40 year SOCs).

AIC recommends that the draft language be modified to include the use of SOCs for conventional and non-conventional (e.g. global and legacy toxics) pollutants so that this

important compliance tool can be used effectively based on the type of permitting challenge that needs to be addressed.

Section 310: Variances

AIC appreciates and supports the use of variances as an important Clean Water Act tool to address difficult water quality based permit issues, including the use of section 316(a) variances included in the Act but not EPA regulation.

AIC suggests that due to the nature of some pollutants, that variances should be allowed on a watershed (e.g. Silver Valley) or statewide basis (e.g. mercury, arsenic, PCBs…) either in this or other sections of the IPDES rules.

Watershed Based and Bubble Permitting:

Watershed-based NPDES permitting is a process that emphasizes addressing all stressors within a hydrologically-defined drainage basin, rather than addressing individual pollutant sources on a discharge-by-discharge basis. Watershed-based permitting can encompass a variety of activities ranging from synchronizing permits within a basin to developing water quality-based effluent limits using a multiple discharger modeling analysis. The type of permitting activity will vary depending on the unique characteristics of the watershed and the sources of pollution impacting it. The ultimate goal of this effort is to develop and issue NPDES permits that better protect entire watersheds. In 2007, EPA published guidance for watershed based permitting (http://water.epa.gov/polwaste/npdes/basics/upload/watershed_techguidance.pdf) and EPA has conducted watershed based permitting in Idaho (eleven concurrent NPDES permits issued to municipal wastewater and industrial discharges in 1999).

Bubble Permitting is also a tool available to the IPDES program that provides innovative and cost effective strategies to comply with nutrient or other pollutants and been discussed as a tool to implement the Spokane Nutrient TMDL. Bubble permitting also may accelerate environmental compliance by providing additional incentives for over compliance and is frequently associated with trading.

Watershed based and Bubble permitting are two tools that IDEQ could use to address difficult nutrient or toxic pollutant water quality challenges (e.g. Watershed based TMDLs) in a more effective and cost efficient manner.

AIC encourages the IPDES program to incorporate and implement both watershed based and bubble permitting as foundational tools to efficiently and cost effectively implement IPDES permit and achieve difficult watershed based challenges more quickly.

IPDES Rulemaking Schedule

The IPDES rulemaking schedule is very aggressive. AIC remains supportive of the IPDES authorization process; however, important issues that provide flexibility, cost effectiveness, and accelerated compliance with environmental goals (e.g. IPDES Technical Support Document for Toxics Control; Watershed and Bubble Permit Policy/Guidance…) are important elements to include at the inception of the program.

AIC is concerned that a rush to authorization could lead to the loss of important opportunities associated with an efficient and effective rollout of the IPDES program. Or, to put more plainly: good is better than fast for the IPDES permittees of the state.

AIC recognizes IDEQ is responding to a statutory deadline and also the enormous amount of work that needs to be done to pull together the rules, regulations, policies and guidance to run an effective and efficient IPDES program.

AIC is willing to work with IDEQ, other interested stakeholders, and if necessary the Idaho Legislature, to provide IDEQ additional time to complete this very important task of developing rules, regulations, guidance, and policy necessary to implement an effective and efficient IPDES program.