ILLINOIS POLLUTION CONTROL BOARD October 2, 2017

IN THE MATTER OF:)	
)	
PUBLIC WATER SUPPLIES: PROPOSED)	R18-17
NEW 35 ILL. ADM. CODE 604 AND)	(Rulemaking - Water)
AMENDMENTS TO 35 ILL. ADM. CODE)	
PARTS 601, 602, 607, AND 611)	

On August 3, 2017, the Illinois Environmental Protection Agency (IEPA) proposed that the Board amend its public water supplies rules by adopting a new Part 604 and amending Parts 601, 602, 607, and 611. On August 17, 2017, the Board accepted IEPA's proposal for hearing and directed the assigned hearing officer to schedule and proceed to hearing.

In an order dated August 23, 2017, the hearing officer scheduled the first hearing on Tuesday, October 17, 2017, in Springfield. The hearing officer order also set a deadline of September 7, 2017, to pre-file testimony for the first hearing. On August 31, 2017, IEPA pre-filed the testimony of Richard Cobb, David Cook, Stephen Johnson, and W.D. (Dave) McMillan.

To expedite the first hearing and make it more efficient, the hearing officer order also set a deadline of October 2, 2017, to pre-file written questions based on any testimony for the first hearing. The Board and its staff have reviewed the proposal and testimony submitted by IEPA and pre-files its questions in Attachment A to this order. The Board directs IEPA to prepare to respond to them at the first hearing on October 17, 2017. The Board may ask follow-up questions during the first hearing.

IT IS SO ORDERED.

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Section 601.101

- 1) To clarify proposed subsection (a), would the following change be acceptable to IEPA?
 - Owners and official custodians of a public water supply in the State of Illinois shall provide, pursuant to the Act, Board Rules, and the Safe Drinking Water Act (42 USC 300f et seq.), continuous operation and maintenance of public water supply facilities to assure sothat the water is shall be assuredlysafe in quality, clean, adequate in quantity, and of satisfactory mineral characteristics for ordinary domestic consumption.
- Subsection (b)(2) proposes in part that "[n]o substance used in treatment *should remain* in the water at a concentration greater than that required by good practice," and subsection (b)(3) proposes in part that listed concentrations of constituents "*should not be exceeded* in the finished water." If a community water supply (CWS) fails to meet standards stated in the italicized terms, please comment on whether that failure would be a violation of the regulations.
- 3) In subsection (b)(2), please clarify IEPA's intended meaning of the phrase "at a concentration greater than that required by good practice."

Section 602.105

- 4) In this section providing IEPA direction on issuing permits, subsections (a)(1), (a)(2), and (a)(4) direct that IEPA "shall not" issue a permit, while subsections (a)(3), (a)(5), and (b) direct IEPA "must not issue" a permit. For consistency and clarity, please comment on whether each of these should be amended to provide that IEPA "will not issue."
- 5) The proposed addition to subsection (a)(3) provides that "[t]he Agency may require a pilot study." Please comment on the factors or standards IEPA would apply in determining whether to require a pilot study.

Section 602.106

To clarify the first sentence of subsection (a), would the following change be acceptable to IEPA?

Restricted status <u>is</u> shall be defined as the Agency determination, pursuant to Section 39(a) of the Act and Section 602.105, that a community water supply facility, or portion thereof, may no longer be issued a construction permit without causing a violation of the Act or Board or Agency rules.

Section 602.305

7) In subsection (a), IEPA proposes that an application for an operating permit "must be on forms prescribed by the Agency. . . ." Has IEPA developed an application form for an operating permit? If so, please submit it into the record.

Section 602.325

- 8) Please comment on whether it would clarify subsection (a) to state that, "[b]y fulfilling all of the requirements of this section, a community water supply is considered to have met the requirements for obtaining an operating permit . . ."
- 9) In subsection (d), IEPA proposes that it "may notify an eligible community water supply that it may not seek a permit-by-rule . . ." Please comment on the factors or standards IEPA would use in determining whether to provide this notification to a CWS.
- 10) If a CWS has received this notification but believes that it is otherwise eligible to obtain a permit-by-rule, does it have any recourse other than to wait for the two-year period to end?
- Please comment on whether it would clarify subsection (d) to state that a community water supply "may not seek a permit-by-rule if the community water supply has <u>failed</u> neglected to submit the information required by Agency or Board rules in the <u>last</u> two years <u>preceding the Agency's notification</u>."
- In subsection (g), IEPA proposes that a CWS seeking to obtain an operating permit-byrule "must submit a certification on forms prescribed by the Agency. . . ." Has IEPA developed a form certification to use in obtaining an operating permit-by-rule? If so, please submit it into the record.

Section 604.100

Please clarify whether the proposed design, operational, and maintenance criteria in the proposed Part 604 apply to both existing and new CWSs. If the proposed criteria apply only to new facilities, please explain how IEPA will ensure proper design, operation and maintenance of existing CWSs.

- 14) Please clarify whether the proposed minimum design capacity of "at least 20 percent greater than the maximum average daily demand" in subsection (a) is based on the Recommended Standards for Water Works (Recommended Standards) or other industry standard. If not, explain the basis for choosing the design capacity as at least 20 percent greater than the maximum demand.
- Subsection (b) proposes that "[t]he basic criteria for design of community water supply facilities must be the standards under this Part or other criteria which the applicant demonstrates will produce a finished water which meets requirements of 35 Ill. Adm. Code 611 under all operating conditions."

Please explain the "basic criteria" for design of a CWS. Are there criteria in proposed Part 604 that are optional for the design of CWS facilities? If so, please identify such criteria.

- Regarding "other criteria" under subsection (b), please clarify whether IEPA plans to implement a process of application and demonstration for applicants seeking to demonstrate compliance with the requirements of Part 611. If so, please comment on whether IEPA's determination on use of "other criteria" would be appealable to the Board.
- In addition to Part 611, should the applicant be required to demonstrate that "other criteria" also comply with the requirements of 35 Ill. Adm. Code 601.101 in order to be consistent with proposed Section 604.145(b)(1)?

Section 604.110

- As proposed, this Section applies to selection of construction sites by "[a]ll community water supplies." Please clarify the applicability of this section to existing CWS facilities and how existing CWS facilities would comply with the proposed location standards.
- 19) Subsection (b) requires CWS facilities to be at least 2 feet above the higher of the 100 year flood or flood of record.

Please clarify whether subsection (b) should refer to "2 feet above the 100 year flood elevation or maximum flood of record" to be consistent with proposed subsection (c).

Section 604.115

- 20) IEPA proposes that, when water pumpage records are not available or a new supply is proposed, average daily usage must be based on at least 75 gallons per person per day. IEPA rules now base average daily usage in those circumstances on "at least 50 gallons per person per day." 35 Ill. Adm. Code 653.104(a).
 - Please explain the basis for proposing this increase in subsection (a). Does IEPA's proposed usage rate reflect both indoor and outdoor water usage?
- For subsections (c) and (d), please explain the basis for the proposed multiplication factors of 1.5 and 6 used to calculate maximum demand and peak hourly flow. Also, please explain why subsection (d) expresses "peak hourly flow" in "gallons per minute."

Section 604.120

22) In subsection (a), please clarify whether "consistent standard" refers to the piping color scheme in subsection (b). If so, comment on whether the following changes would be acceptable to IEPA:

- a) Piping in a community water supply treatment facility shall must be identified clearly by legends and color coding that are consistent. A consistent standard shall be used throughout the system.
- b) The following color scheme or a similar consistent scheme must be used to identifyTo facilitate identification of piping in plants and pumping stations it is recommended that the following color scheme be utilized:

Section 604.125

23) Please explain the terms "protected aeration" and "enclosed retention" in subsection (b).

Section 604.130

- 24) Please clarify whether this section pertains only to monitoring equipment and does not address performing monitoring. If so, comment on whether the following changes would be acceptable to IEPA:
 - a) Monitoring Equipment. Community water supplies must <u>have provide</u> equipment to monitor the water as follows:

* * *

3) Ion exchange plants for nitrate removal must <u>have the capability to</u> continuously monitor and record the finished water nitrate level.

- In subsection (c)(1)(A), please clarify whether the term "public water supply" should be changed to "community water supply."
- Please comment on whether the boil order notification under subsection (c)(1)(A) is subject to notification requirements under subsection (c)(2). If so, should subsection(c)(1) include a cross-reference to subsection (c)(2)?
- 27) To clarify subsection (c)(1)(B), would the following change be acceptable to IEPA?
 - This boil order <u>will</u> shall remain in effect until appropriate corrective action approved by the Agency is taken and microbiological samples demonstrate that the water is safe for domestic use.
- Subsection (c)(1)(C) proposes that, "[i]f the owner or official custodian of the supply fails to take such action, the Agency *may* issue a boil order directly to the consumers affected." Please comment on the factors and standards IEPA will consider when determining whether to issue a boil order if the owner or official custodian of a community water supply fails to take appropriate corrective action.
- 29) To clarify subsection (c)(2)(C), would the following change be acceptable to IEPA?

- The Agency will shall require the community water supply to notify all consumers of appropriate actions to protect themselves if the water supply has become contaminated or the consumers' safety may be endangered.
- Please comment on whether the issuance of a boil order under subsection (c)(3) is subject to notification requirements under subsection (c)(2). If so, should subsection (c)(3) include a cross-reference to subsection (c)(2)?
- In subsection (c)(3)(A), please clarify what would be an "adequate" level of chlorine residual. Do the Board's public water supplies regulations under Subtitle F specify minimum levels of residual chlorine for finished water? If so, please comment on whether subsection (c)(3)(A) should include a cross-reference to those regulations.
- 32) In subsection (c)(3)(C), please clarify what would be considered a "significant" increase in turbidity or decrease in residual chlorine.

Section 604.145

- In its Statement of Reasons (SR), IEPA states that "[t]he exception in Section 604.145(a) allows community water supplies flexibility until future renovations or construction projects are necessary at which time, all the standards in Part 604 must be met." SR at 18. Please comment on whether the regulations should explicitly state this intent.
- Please clarify whether IEPA's determination under subsection (b)(3) is appealable to the Board.

Section 604.160

- Subsection (a) requires CWSs that use chemical treatment to have and maintain a chemical safety plan. Please explain the types of information and procedures that a CWS must include in the plan. Should the regulations specify minimum requirements for chemical safety plans?
- For subsection (b), please comment on where CWS personnel involved with the use and maintenance of chemicals can obtain chemical safety training.

Section 604.165

37) Subsection (a) requires CWSs to prepare an operating report on a form approved by IEPA as specified in a construction, operating or special exception permit. Has IEPA approved a form for this report? If so, would IEPA submit a copy into the record. If not, please explain the types of information that a CWS should include in the operating report. Should the regulations specify informational requirements for the operating report?

Based on the submission schedule in subsection (c), would it be acceptable to IEPA to change the Section heading to "Monthly Operating Report."

Section 604.200

- 39) In subsection (c), please clarify the meaning and significance of the phrase "above the point of water supply intake."
- 40) Would it be acceptable to IEPA to revise subsection (e) for clarification as follows:
 - e) <u>The Agency will approve</u> Surface water, groundwater under the direct influence of surface water, or groundwater must be approved as a community water supply source only if treatment produces water which meets the primary drinking water standards of 35 Ill. Adm. Code 611 and the following conditions are met is provided:
- Please clarify whether subsection (e)(2) requiring submission of "representative samples" to IEPA requires a CWS to provide actual water samples to IEPA for analysis. Also, comment on whether subsection (e)(3) requiring "more frequent sampling" to determine raw water quality requires submission of additional samples to IEPA. If not, please propose revisions to this subsection to reflect IEPA's proposed intent.

Section 604.205

- In subsection (a), define the terms "drought," "one in fifty-year drought," and "extreme drought of record." Please clarify whether the Illinois State Water Survey determines one in fifty year droughts on a regional basis for Illinois. If not, how does a CWS obtain drought information to comply with this requirement.
- Please clarify whether the 20% surplus in subsection (b) requires a surplus over the amount of the maximum projected water demand of the service area. If so, please revise subsection (b) to reflect the proposed intent.

- To clarify subsections (a) and (b), would the following changes be acceptable to IEPA?
 - (a) For all surface water, community water supplies must provide conventional filtration treatment or other filtration treatment <u>using</u> technologies approved by the Agency <u>under pursuant to</u> 35 Ill. Adm. Code 611.250(d) and disinfection.
 - (b) For all groundwater under the direct influence of surface water, community water supplies must provide filtration <u>treatment using</u> technologies approved by the Agency <u>under pursuant to</u> 35 Ill. Adm. Code 611.250 and disinfection.

45) Under subsection (c), please clarify whether a CWS must perform a source water assessment for both surface water and groundwater under the influence of surface water. If so, please revise subsection (c) to reflect the proposed intent.

Section 604.215

- In subsection (a)(5), please clarify the frequency of "occasional cleaning of the inlet line."
- 47) In subsection (a)(6), please clarify how a community water supply would provide "adequate" protection from rupture.

Section 604.230

- 48) To clarify subsection (a), would the following change be acceptable to IEPA?
 - A community water supply must determine groundwater Groundwater source adequacy shall be determined by the amount of water produced by each well pumping within its calculated safe yield.
- 49) Under subsection (b), please comment on why single well systems are not required to meet the same delivery requirement that multiple-well systems must meet. Also, please comment on whether a groundwater source should be required to meet the maximum projected water demand, including a 20% surplus, and compensate for losses as surface water sources must do under Section 604.205. If so, please propose revisions to this section to reflect the proposed intent.
- 50) To clarify subsection (c), would the following changes be acceptable to IEPA?
 - Single well systems: No community water supply, the construction or modification of which commences after the effective date of this <u>Partsection</u> shall rely only on a single well for its water source. A community water supply, the construction of which commenced before and not modified after <u>the</u> effective date of this <u>Partsection</u>, may rely on a single well for its water source . . .
- 51) In subsection (c), please explain the consequences of placing a single well CWS on the critical review list. After a CWS is placed on that list, are there any circumstances in which it may be removed from the list? IF so, please describe those circumstances.

Section 604.235

In subsection (c), please clarify whether microbiological analysis involves testing for total coliform bacteria. If so, should this subsection be revised to be consistent with subsection (a)? Also, clarify whether a sample result is "satisfactory" based on the presence or absence of coliform bacteria.

- Please comment on whether it would be acceptable to revise subsection (d) as follows to be consistent with the proposed language in Section 604.210(c):
 - d) A source water assessment <u>under pursuant to Section 604.315 must be completed considering made of the factors</u>, both natural and manmade, which may affect water quality in the groundwater.

Section 604.240

In subsection (k), please clarify whether "flood of record" should be "<u>maximum</u> flood of record". Also, please clarify whether the 15-foot horizontal distance in subsection (k)(1) should be measured from the top of the well casing or from the edge of the well house. If not, please explain the application of the proposed 15-foot setback.

Section 604.245

To clarify subsection (a), would the following change be acceptable to IEPA?

The specific capacity of the production well must be determined <u>by a drawdown test</u> before the well is placed in service

Section 604.315

To clarify subsection (b), would the following change be acceptable to IEPA?

Upon request, the Agency will shall provide technical assistance to a community water supply in conducting the source water assessment.

Section 604.335

57) To clarify the first sentence, would the following change be acceptable to IEPA?

The Agency, not later than 45 days following the receipt of the source water protection plan, will shall either approve or disapprove the plan.

58) If IEPA disapproves a source water protection plan, please clarify whether IEPA's disapproval is appealable to the Board.

Section 604.400

59) Please explain "stability of the water after aeration" in subsection (c) and how stability is evaluated after aeration.

- Please explain why packed tower aeration requires a construction permit and pilot study but other types of aeration (forced, spray and pressure) do not.
- Please comment on whether it would clarify subsection (a) to provide that packed tower aeration "may be used for <u>removing</u> compounds."
- Please comment on whether it would clarify subsection (c)(1) and more closely follow Section 4.7.5.2.a of the Recommended Standard to identify materials that are appropriate for construction of the tower.

Section 604.500

- 63) Under subsection (c), please clarify whether the requirement that a CWS that treats groundwater must have two clarification units applies only if the CWS provides clarification. If so, would it be acceptable to IEPA to revise subsection (c) as follows:
 - c) Community water supplies designed to treat groundwater <u>will be required to should</u> have a minimum of two clarification units if clarification is provided.

Section 604.505

Please clarify whether coagulation requirements apply to all CWSs, including those that treat groundwater. If so, propose revisions to subsections (b) and (c) to reflect the proposed intent.

Section 604.510

- In subsection (c), please clarify whether the minimum detention time should be specified as a minimum requirement rather than a recommendation as proposed.
- Subsection (f) proposes that "[a] superstructure over the flocculation basins may be required." Please comment on the factors and standards IEPA would consider in determining whether to require construction of a superstructure over flocculation basins.

- To clarify subsection (c), should it state that "[t]he velocity through a sedimentation basin must should not exceed 0.5 feet per minute?"
- Subsection (d) recommends the use of submerged orifices to provide volume above the orifices for storage when there are fluctuations in flow. Please comment on whether the following revision making the recommendation a conditional requirement is acceptable to IEPA:
 - d) Outlet devices Outlet weirs or submerged orifices must maintain velocities suitable for settling in the basin and minimize short-circuiting. The use of

<u>sS</u>ubmerged orifices <u>must be used if necessary</u> <u>is recommended</u> to provide a volume above the orifices for storage when there are fluctuations in flow. . . .

Section 604.520

- Please explain how solids contact units differ from conventional sedimentation units. Would it be appropriate include a brief description or definition such as those provided in Section 604.505(a) for coagulation and Section 604.510(a) for flocculation? If so, please propose such language.
- 70) For subsection (c), please clarify the circumstance under which IEPA would require a rapid mix device or chamber ahead of the solids contact units. Also, comment on whether construction requirements at subsections (c)(1) and (c)(2) apply only to a rapid mix device or chamber required by IEPA ahead of a solids contact unit. If so, would it be acceptable to IEPA to revise subsection (c) as follows:
 - c) The Agency may require a rapid mix device or chamber ahead of solids contact units to assure proper mixing of the chemicals applied. <u>If required by the Agency, the mixing devices employed shallmust</u> be constructed to:
- 71) Please comment on whether it would clarify subsection (d)(3) to provide that flocculation equipment "<u>must should</u> provide <u>a that the</u> flocculation and mixing period <u>of at least to be not less than</u> 30 minutes."
- 72) Please comment on whether the following changes would clarify subsection (e):

Sludge removal design must

- 1) Require sludge pipes must not less than three inches in diameter and so arranged as to facilitate cleaning;
- 2) <u>Prevent clogging at the</u> entrance to sludge withdrawal piping must prevent clogging;
- 3) Locate valves must be located outside the tank for accessibility; and
- 4) <u>Allow</u> the operator <u>to</u> may observe and sample sludge being withdrawn from the unit.
- 73) In subsections (g)(1) and (g)(2), please clarify whether "upflow clarifiers" are solids contact units. If so, would it be acceptable to IEPA to refer to them as "upflow solids contact clarifiers" in the regulations?
- 74) In subsection (i)(2)(A), please explain the basis for the proposed weir loading rate limits for cone shaped, helical upflow solid contact units.

- Subsection (a) requires pretreatment for the use of rapid rate gravity filters. Please explain what constitutes pretreatment. Also, comment on whether it would be appropriate to specify the applicable pretreatment processes and any cross references to those processes.
- In subsection (g)(4)(D)(i), please clarify whether the cross reference to the basic specifications for filter media should be subsections (g)(1) through (g)(3) instead of subsections (f)(1) through (f)(3).
- In subsection (g)(4)(E), does IEPA intend that "[o]ther media types or characteristics must be approved by the Agency" under 35 Ill. Adm. Code 604.145(b)?
- 78) In subsection (h)(1), please clarify whether water quality should be reviewed prior to use of "porous plate bottoms" and not "porous plate caps" as proposed.
- 79) In subsection (j)(2)(B), please comment on whether it should require rather than recommend "a rate sufficient to provide for a 50 percent expansion of the filter bed."
- 80) To clarify subsection (1), would the following change be acceptable to IEPA?

 Air scouring can be used in place of surface wash. The if the air scouring meetsmust meet the following requirements:
- Please comment on whether the following revisions to subsection (1)(5) reflecting Section 4.3.1.9 of the Recommended Standards would be acceptable to IEPA:
 - 5) If air scour distribution systems are placed at the media and supporting bed interface, the air scour nozzles must be designed to prevent medial from clogging the nozzles or the air entering the air distribution system.

Section 604.610

Subsection (c) specifies that minimum criteria for structural details, hydraulics, and filter media for rapid rate gravity filters also apply to pressure filters "where appropriate." Please clarify whether Sections 604.605(e) and (g) are the appropriate criteria. If so, would it be acceptable to IEPA to have subsection (c) include a cross reference to those sections?

Section 604.615

Subsection (a) requires that, before a CWS uses a deep bed rapid rate gravity filter, "a pilot study must be completed and approved by the Agency". Please clarify whether IEPA's approval relates to results of the pilot study, the use of deep bed filter, or both. If necessary, please propose revisions to subsection (a).

- This proposed section states that biologically active filtration can have adverse impacts on turbidity, particle and microbial pathogen removal, disinfection practices, head loss development and filter run times and distribution system corrosion. However, the rule does not explicitly require any measure to minimize adverse impacts. Please comment on whether the pilot study required in subsection (a) is expected to address these potential impacts or whether subsection (a) should require the pilot study to address them.
- In subsection (a), please clarify whether IEPA's approval relates to the results of the pilot study, the use of biologically active filters, or both. If necessary, please propose revisions.

Section 604.700

- Please explain the rationale for requiring disinfection in addition to continuous chlorination for sources of raw waters listed in subsection (a). Also, please clarify whether subsection (a) should apply to "all community water supplies" instead of "all sources," as proposed.
- Has IEPA considered whether to rely on coliform testing or other standards as the basis to determine whether to require disinfection in addition to chlorination?
- Has IEPA considered whether water that has been disinfected in addition to being chlorinated may have any adverse effects on receiving waters when users discharge into them? If so, what conclusions did IEPA reach?
- 89) Subsection (d) requires notification to the public of a change in disinfection practices. Please clarify whether CWSs must also notify IEPA of any changes in disinfection practices.
- Please comment on whether other Board regulations specify public notification suitable to meet this proposed requirement. If so, provide citations to those regulations. If not, comment on whether additional notification requirements must be specified in subsection (d) and propose any necessary revisions.

Section 604.705

Subsection (b)(2) requires chlorination equipment to be capable of feeding chlorine to the water being treated at a dosage rate of at least 5.0 mg/L except when the water has a high chlorine demand. Please comment on what IEPA considers to be "high chlorine demand" for the purposes of this provision. Also, please comment on whether the rule should specify a level of chlorine demand at which the dosage rate of 5.0 mg/L no longer applies?

Please clarify whether duplicate chlorination equipment "provided" under subsection (b)(3) could satisfy the requirement that duplicate equipment be "installed and operational" under subsection (b)(4).

Section 604.715

Please comment whether it would clarify subsection (a) to require that "a minimum chlorine contact time of 60 minutes must be provided at all plants treating surface water, groundwater under the direct influence of surface water, groundwater with basins open to the atmosphere, and groundwater obtained from unconfined, fractured bedrock."

Section 604.735

94) Under subsection (b)(2), please clarify whether the Chlorine Institute has specific recommendations for chlorine solution piping and fittings. If so, please incorporate the recommendation by reference in 35 Ill. Adm. Code 601.115 and add a citation to the recommendation in subsection (b)(2).

Section 604.805

95) Under subsection (o), please clarify what constitutes as "suitable disposal" of brine waste. Please comment on whether the regulations should include a cross reference to the Board's waste disposal regulations under Subtitle G for disposal of brine waste.

Section 604.1000

96) Subsection (a) requires presedimentation basins to have the capability for dewatering, which may include hopper bottoms or a continuous mechanical sludge removal apparatus. However, Section 4.2.1.a of the Recommended Standard provides that:

Basin design - presedimentation basins should have hopper bottoms or be equipped with continuous mechanical sludge removal apparatus, and provide arrangements for dewatering.

Please clarify whether "arrangements for dewatering" refers to the dewatering of sludge removed from presedimentation. If so, please comment on any revision to subsection (a) that would reflect the Recommended Standards.

Section 604.1005

Proof Requirements for sampling taps under subsection (b)(6) and for brine and salt storage under subsection (b)(7) are the same as those under Section 604.805. Please comment on whether it would be acceptable to IEPA to replace subsections (b)(6) and (b)(7) with cross-references to Sections 604.805(1) and (m), respectively?

- In subsection (d), please clarify whether the term "maximum day water demand" refers to the maximum average daily demand. If not, please explain how those two terms differ.
- 99) Please comment whether it would clarify subsection (f)(2) to require that "the backwash flow rate <u>must shall</u> be <u>between approximately 4.0 and to 6.0 gallons per minute per square foot of bed area."</u>

Section 604.1010

- 100) In subsection (b)(1), please clarify whether chemical oxidation must be approved by IEPA under Section 604.145(b). If so, please propose revisions to reflect this approval.
- 101) Similarly, in subsection (e), please clarify whether the use of sequestration of iron and /or manganese by sodium silicates must be approved by IEPA under Section 604.145(b). If so, please propose revisions to reflect this approval.

Section 604.1020

Please comment whether it would clarify subsection (a) and align it with the Recommended Standards to require that "[p]owdered activated carbon must be added <u>as early as possible</u> in the treatment process to provide maximum contact time <u>to allow the effective</u> and economical use of the chemical."

Section 604.1105

103) In subsection (c)(5)(A), please comment on what IEPA intends by "reasonable" precision for weighing scales.

Section 604.1200

Please clarify whether the term "sanitary quality of pumped water" means the quality of either raw water or finished water. If so, would it be acceptable to IEPA to amend this section as shown below? If not, please provide a definition of "sanitary quality", since this term is used in provisions including Section 604.1210(d)(3)(A) and Section 604.1225(d)(1) and (d)(2).

Pumping facilities must be designed to maintain the sanitary quality of pumped water.

Section 604.1205

105) Under subsections (d) and (e), please comment on how IEPA intends to determine that "adequate heating" and "adequate ventilation" are provided.

- 106) Under subsection (b), when a pump is out of service, please clarify whether the remaining pump or pumps must be capable of meeting the "maximum daily demand" rather than "maximum demand."
- 107) Also, please comment on whether a similar change should be made in Section 604.1215(a).

Section 604.1225

108) In subsection (e)(1), please clarify what operational level above the rated capacity would be considered as "dangerous overload." Would it be possible to include such a level in the regulations?

Section 604.1310

109) Both subsection (b) and Section 7.0.8 of the Recommended Standards provide for manholes above the water lines at each compartment "where space permits." Please comment on how often IEPA expects space not to permit these manholes. Where space does not permit these manholes, please comment on how the storage structure provides access.

Section 604.1315

110) Subsection (b)(5)(B) requires vents on elevated tanks and standpipes to be "fitted with four mesh non-corrodible screen, or with finer mesh non-corrodible screen in combination with an automatically resetting pressure-vacuum relief in combination with mechanism, as required by the Agency." Please clarify the phrase "resetting pressure-vacuum relief in combination with mechanism." Also, clarify whether it is the use of mesh finer than 4 mesh to cover vents or some other venting equipment that requires Agency approval.

Section 604.1350

Please comment on whether it would clarify subsection (c) to require that "[c]onsideration <u>must</u> should be given to sizing the generator to provide power for at least one well."

- 112) Subsection (a) proposes that raw water mains from groundwater sources must have the same sanitary separation as finished water mains under Section 604.1440. Please clarify whether this requires separation from sanitary sewers, storm sewers, combined sewers, house sewer service connections and drains.
- Subsection (b) proposes that raw water mains from surface water sources must have the same sanitary separation from sanitary sewers and combined sewers as finished water

mains under Section 604.1440. In its Statement of Reasons, IEPA states that it did "not include storm water sewers when the raw water main is from surface water because the surface water contains storm water runoff." SR at 57. Please comment on whether this separation should also include "house sewer service connections and drains."

Section 604.1505

- 114) Section 653.801(a) of IEPA's rules requires a cross connection control survey of the distribution system at least every two years. 35 Ill. Adm. Code 653.801(a). Proposed subsection (b)(2) requires all CWSs to conduct a cross connection control survey of the distribution system at least every three years. Please explain the change in survey frequency to 3 years.
- 115) IEPA rules require that the survey "must consist of a pencil and paper collection of information, conducted by telephone, mail or personal visit to the manager or owner of a specific property." 35 Ill. Adm. Code 653.801(a)(1). Please comment on whether IEPA expect CWSs to continue conducting the required surveys in this manner.

Section 604.1510

- Under subsection (b), please clarify whether IEPA charges a fee to review an application for approval as a cross-connection control device inspector (CCCDI) or a renewal application. Please explain the rationale for requiring renewal of CCCDI approval every year as opposed to every two or three years.
- 117) Please comment on whether it would clarify subsection (b)(4) to combine (B) and (C) as follows.

The Agency may initiate a suspension <u>or</u> revocation procedure on the basis of any written complaint or on its own motion. The <u>Agency's</u> decision to initiate suspension or revocation <u>proceedings will</u> shall be based on the seriousness of the violation and its potential deleterious impact upon public health and safety.

Section 611.121

Subsection (b) specifies that "[a]n MCL for a particular contaminant applies in lieu of any finished water quality narrative standard." Please provide a citation to the narrative standard or standards to which this subsection refers.

Section 611.231

Subsection (c) provides that "[u]se of recycled sewage treatment plant effluent by a CWS on a routine basis must not be permitted." Please comment on whether this limitation applies if the effluent meets all applicable source water requirements under Part 604, Subpart B.

Also, please comment on whether this additional state limitation would be more appropriately codified in the source water general requirements in Section 604.200 than in Section 611.231, which specifies conditions IEPA must consider when determining whether to require filtration.