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Via email: cwhiteash@state.pa.us

Mr. Christopher Whiteash
Pennsylvania Department of Environmental Protection
Bureau of Water Standards and Facility Regulation
Rachel Carson State Office Building-11th floor
P.O. Box 8774
Harrisburg, PA 17105-8774

Re: Comments on draft Technical Guidance Document 385-2100-002, Policy and Procedure for NPDES Permitting of Discharges of Total Dissolved Solids (TDS) – 25 Pa. Code §95.10

Ref: 41 Pa. Bulletin 560 (January 22, 2011)

Dear Mr. Whiteash:

On behalf of its membership comprising thousands of businesses of all sizes and across all industry sectors, the Pennsylvania Chamber of Business and Industry ("Chamber") respectfully offers the following comments concerning the draft Technical Guidance Document entitled "Policy and Procedure for NPDES Permitting of Discharges of Total Dissolved Solids (TDS)."

Since 2009, the Chamber has actively participated in a task force with our members and a number of other industries and industry organizations regarding the issues relating to regulation of TDS, including the Department's 2009 TDS strategy and the subsequent proposals culminating in the §95.10 TDS discharge standards and the proposed implementation guidance document that addresses NPDES permitting policies and procedures. The Chamber and its members have sought to work interactively with the Department and other stakeholders from the ground-floor to develop a permitting guidance document that will ensure consistent implementation of §95.10 across all DEP regional offices. Regional consistency is a very significant concern with Chamber members. In addition, the Chamber's feedback throughout this process is to ensure the permitting guidance will clearly capture the intent of DEP headquarters as expressed in TDS Task Force meetings.

With these concerns and objectives in mind, we offer the following comments for the Department's consideration:

Section II – Definitions

1. The guidance document uses the term "net mass loading" several times. We suggest that DEP include in the definitions section a clear definition for "net mass loading."

2. The acronym "WWTP" is used several times in this guidance. We understand that this abbreviation is intended to refer to "wastewater treatment plant." We suggest that the following be added to Section II: "WWTP: A wastewater treatment plant."

Section III – Policy

3. Third paragraph, last sentence: This sentence currently reads:

Examples of TDS loadings where the requirements of §95.10 generally do not apply are noncontact cooling water, or storm water that does not come into contact with industrial materials and activities as described §92a.32(b).

Similar to noncontact cooling water, discharges from feedwater treatment systems do not generally add to net TDS loading. An example would be a membrane-based makeup water system for a boiler feed water system. The TDS loading associated with such a membrane-based system's reject water originates from the intake water itself, and does not represent an overall increase in net TDS loading. Often, treatment of such feedwater allows for higher cycles of concentration within boiler, non-contact cooling water, or recycle systems. Such water conservation initiatives should be encouraged and as such, it should be clear that such feedwater treatment discharges are exempted from the requirements of §95.10. Therefore, the Chamber recommends the following change to this sentence:

Examples of TDS loadings where the requirements of §95.10 generally do not apply are noncontact cooling water, *feedwater treatment discharges*, or storm water that does not come into contact with industrial materials and activities as described §92a.32(b).

4. Third paragraph: The Chamber recommends the following sentence be added to the end of this paragraph:

In addition, upgrades to existing WWTPs or changes in chemical additives that do not require a net increase beyond the previously authorized TDS loading are not subject to the §95.10 TDS discharge standard for new or increased loadings. The addition of emission control devices or chemical additives used to enhance the removal of flue gas constituents upstream of existing WWTPs that do not require a net increase beyond authorized TDS loading are not subject to the rule.

These statements are necessary to ensure consistency and clarity among DEP Regional permit writers, as some dischargers have already experienced issues with these specific examples. Some regional permit writers proposed to add TDS limits as a result of the above scenarios. Inclusion of this situation-specific language is consistent with the language already existing in this paragraph in which the non-applicability of certain specific discharges (noncontact cooling water, noncontact storm water) is already mentioned.

Section IV – General Considerations

5. Second paragraph: it is unclear why the word "existing" is used in the first sentence, which refers to "a new or existing discharge". It was understood from meetings of the TDS Task Force, and from the EQB's Order relating to the new regulatory language that the §95.10 TDS discharge regulation only applies to "new or expanding" discharges of TDS. The second sentence of the second paragraph, however, states: "While the treatment requirements of §95.10(c) are applicable to such discharges (apparently referring to "new or existing" in the paragraph's first sentence). This is incorrect; the rule at §95.10(c) quite clearly states that the standard applies

only to: "New and ***expanding*** mass loadings of TDS not addressed subsections (a) and (b)" (emphasis added). To avoid confusion and be consistent with the regulation, the language in the second paragraph of Section IV should be modified to only refer to "new or ***expanding***" not "existing."

6. Second paragraph, second sentence: This sentence currently reads: "While the treatment requirements of §95.10(c) are applicable to such discharges, these discharges are effectively unaffected by the treatment requirements and there should be no permit actions applicable under this guidance for such discharges." We would recommend adding the following after this sentence:

It should be further noted that any such reasonable potential comparison is applicable only to the effluent quality of final outfalls (to receiving streams) and is not applicable to internal monitoring points.

In a variety of industries, monitored flows at internal monitoring points may contain TDS concentrations above 1,000 to 2,000 mg/L, but final effluent quality may not have a reasonable potential to exceed 2,000 mg/L once commingled with other discharges before the receiving stream. Providing clarity that internal monitoring locations or discharges are not subject to the analyses expressed in the opening sentences of this section will avoid potential confusion for permit writers.

7. Pg. 6, Paragraph "a." (Radiation Protection Plan Reference): The Guidance contains a series of statements beyond the requirements of §95.10, including a declaration that WWTPs that receive natural gas wastewater should have a "radiation protection Action Plan" – with a definition in Section I that references the guidance for landfills and solid waste units. This language is later repeated (with even more mandatory phrasing) in Appendix B, Natural Gas Wastewater Examples 1.1 and 1.2.

During the TDS Task Force meeting on December 13, 2010, DEP personnel in attendance were asked to clarify the requirements for the Radiation Protection Action Plan as cited in the Guidance Document. Department personnel answered that the Radiation Protection Bureau should be consulted for their definition of the Plan. During a NORM seminar in Williamsport, PA on January 27, 2011, Mr. Dave Allard, Director of DEP's Bureau of Radiation Protection, was asked to explain how the Department was going to interpret the Action Plan for wastewater treatment facilities that deal with NORM. He recommended that this question be presented to Water Management. When informed that Water Management had recommended that Radiation Protection be consulted with, Mr. Allard responded that he would consult with Water Management and clarify what the Plan would entail.

The Guidance Document definition for Action Plan which cites the *Final Guidance Document on Radioactivity Monitoring at Solid Waste Processing Disposal Facilities* (250-3100-001). This current Plan for landfills consists of:

- Monitoring and detection of gamma radiation for incoming trucks with different Action Levels based on the amount of radiation present;
- Personnel Training by a certified health physicist;
- Characterization of the radiation and a determination of its source;
- Notification and Exemption Forms from DEP and DOT;
- Disposition and/or Storage; and
- Recordkeeping, including daily and yearly operational records.

The estimated costs for implementing this type of plan at the current wastewater treatment plants and POTW's that receive relatively high TDS levels from the oil and gas industry are listed below:

- Monitoring equipment: \$96,000
- Plan preparation: \$7,000
- Personnel training: \$12,000
- Recordkeeping: Additional

The levels of NORM that are observed in oil and gas fluids do not justify this type of expense, especially for smaller facilities and POTW's. The established CWT facilities have already taken a proactive approach to the radiation issue. A number of facilities currently monitor and report the radiation levels of every load of sludge that leaves their facilities. A number of studies analyzing levels of radiation of incoming fluids, discharged fluids, and the sludge generated during the treatment process have been performed by a number of facilities. Facility dose assessments for the protection of employees have been performed. In addition, these same facilities have provided radiation training for supervisory staff by a certified health physicist.

We would respectfully suggest that an offhand statement in this guidance is not the appropriate way to establish requirements for WWTPs on the subject of radiation monitoring or NORM. If the Department wishes to address this question, it should do so in a clearly articulated and separate manner. Cross-reference to a document that was designed for solid waste landfills seems quite inappropriate.

Section V – Existing Mass Loading of TDS

8. First Paragraph, third sentence: We believe that this sentence should be modified to read: "If there is a net increase in TDS loading *on an annual average basis* of more than 5,000 lb/day above the previously authorized loading." This would ensure clarity and consistency among all regions, and ensure the Department's intent as expressed in §95.10(a)(7) is clearly captured.
9. Second Paragraph: After the third sentence ("However, existing mass loadings are terminated if an NPDES permit expires or is voided, or if the authorization was temporary for the purposes of technology demonstration or treatment feasibility."), we recommend adding the following for clarity:

Administratively extended permits are not considered expired for the purposes of this Guidance. As such, existing mass loads are carried forward through the permit reissuance in this instance.

For the purposes of this guidance, the Department needs to clarify that the definition of "administratively extended" permits and "expired" permits are not one and the same. Lack of clarity on this issue may create confusion and misinterpretation.

10. Third Paragraph, Second Sentence: We believe that this sentence – "Existing mass loadings should be expressed on both an average daily and maximum daily basis in order to conform with the requirements of §95.10(a)(1) and (7)." – is fundamentally inconsistent with the regulation and represents an attempt to rewrite §95.10(a)(1). Section 95.10(a)(1) very clearly describes the "grandfathering" of existing loads, stating: "**Maximum daily discharge** loads of TDS or specific conductivity levels that were authorized by the Department prior to August 21, 2010" are "not considered new and expanding mass loadings of TDS and are exempt from the treatment requirements in this section." This definition of existing mass loading as the maximum daily discharge is differentiated from the 5,000 lb/day de minimis expansion exemption, which is

expressed as an average daily value. Specifically, §95.10(a)(7) provides a separate exemption for “ New and expanding discharge loadings of TDS equal to or less than 5,000 pounds per day, measured as an average daily discharge over the course of a calendar year, otherwise known as the annual average daily load.” This is an additional exemption, not an additional trigger of regulation.

To provide a specific example, if an industry had an established maximum daily discharge loading of 10,000 pounds per day, and if its TDS loadings in the future stay under that value, §95.10(a)(1) provides an exemption from being considered a new or expanded TDS loading. If that same industry had its average loading increase from 4,000 to 9,100 pounds per day, but the maximum daily discharge load did not exceed 10,000 pounds per day, then §95.10(a)(1) **would still accord that industry an exemption**. It would not be eligible for the separate exemption in §95.10(a)(7), but that separate exemption is irrelevant if the criteria in §95.10(a)(1) is met.

This point must be clarified in the guidance. The Department could have written §95.10 differently, with dual triggers, instead of separate and independent exemptions. However, the regulation as adopted by the Environmental Quality Board is binding, and cannot be altered by a guidance document or staff reinterpretation.

11. Third Paragraph, Third Sentence: The sentence that starts, "For the case where there is a discrepancy between the existing mass loading that was authorized ...", is at once somewhat circular and misses some important nuances. The first key issue here is to ascertain what DEP previously authorized, explicitly or implicitly. That authorization should reflect, as stated during the TDS Task Force meetings, the greatest actual or projected mass loading data. In ascertaining those values, consideration should be given to the design, process, operations and data submitted with the discharger's applications for their existing or prior NPDES permits. At the same time, more recent data may be considered, and if the current mass loading is higher, the question becomes “why?” If there was no change in the process from what was previously described in the NPDES permit application – *e.g.*, the higher loadings are associated with increased hours of operation or productivity, but without triggering any of the requirements to provide a notice under §92a.24, then the more recent data may well be the more accurate measure of what is currently authorized. If a change in process occurred that triggered a requirement for notice and §92a.24, but no such notice was made, then we could understand the Department's position that current data cannot be utilized to characterize the loading that DEP previously authorized. Accordingly, we believe that the third sentence of this paragraph needs to be rewritten and expanded, along the following lines:

In a case whether there is a discrepancy between the mass loading reflected in data submitted as prior permit applications and the existing mass loading that is observed from more recent effluent data, the reasons for the discrepancy should be examined:

(a) If there has not been a change in design or process, and no circumstances have occurred triggering a requirement for providing a notice of change of wastestream under §92a.24, the more recent effluent data may be considered in determining the existing authorized loading.

(b) If there has been a change of wastestream requiring a notice under §92a.24, and the Permittee provided such notice to the Department, but the Department did not require a change to the NPDES permit, the loading associated with such change of wastestream is considered authorized and the more recent effluent data may be considered in determining the existing authorized loading.

(c) If a change of wastestream requiring a notice under §92a.24 has occurred, but the Permittee did not provide notice to the Department, more recent effluent data should not be considered determining the existing authorized loading; and the existing authorized loading should be determined based upon information (including design, process, operations and effluent data) provided in the permittee's prior permit applications.

12. Fifth paragraph:

(a) Bullet "a": This bullet as written is not comprehensive or clear enough to capture all potential situations that would consider and incorporate worst-case existing TDS load. For example, situations of a TDS limit that is neither water quality effluent limit-based or ELG-based, but rather production based would be one. A production-based BPJ limit for TDS would be based on the five previous years of production data (a "reasonable measure of actual production" that can be expected over the permit cycle). If the discharger being evaluated has had a recent decline in production, they may be penalized their flow and therefore mass loading would be down. The following is proposed for bullet "a:"

a. If there are existing mass-based TDS effluent limits that are not WQBELs, adjust the loads to account for design flow using the equation in Bullet b and use as the basis for existing TDS mass loading. If the mass-based effluent limits are WQBELs, use these for the basis of the loading.

(b) Bullet "b": As discussed in Comment No. 10 above, §95.10(a)(1) defines the exemption for existing mass loadings in terms of maximum daily discharge loads of TDS or specific conductivity. There is no reference to the use of average daily loadings as the basis or definition of existing mass loadings. All references to average daily loadings in this section for determining existing mass loadings of TDS should be removed. The existing mass loading that is exempted under §95.10(a)(1) is the maximum daily mass loading, which should be defined on the basis of the maximum concentration times the maximum daily design flow.

(c) Bullet "c": We recommend that this bullet be changed to read as follows:

c. If no effluent limits for TDS are applicable:

i. Utilize information from current and/or prior permit applications. Evaluate NPDES application information for the discharger's projected TDS mass and/or concentration loadings based on the discharger's planned and projected operations. If the NPDES applications do not contain information on planned and projected TDS loadings, evaluate TDS sampling and analysis data that was submitted as part of prior applications and authorizations as the basis for the average and maximum existing mass loading. Perform concentration/flow calculations using the facility annual average design flow as described above in bullet b.

ii. If no effluent limits for TDS are applicable, but monitoring and reporting through the DMR process has been performed, TDS analysis data from the DMRs also may be used as a basis for establishing the average and maximum existing mass loading (but do not consider data collected after a change in process or wastestream which required a notice under §92a.24, where such notice was not provided or the change was not otherwise authorized by the Department).

- iii. *As an option to the use of permit application data, the permittee may choose to collect TDS data to characterize a range of existing discharge conditions. The permit writer should work with the permittee to determine the appropriate sampling frequency to capture and evaluate the variability of the discharge.*

In general, the highest representative data may be selected from the average data values and the maximum data values that are available, including planned and projected TDS loadings from discharger operations under the current permit, provided that the representative data are consistent with Department authorizations issued prior to August 21, 2010."

This recommended language is to ensure consistency with DEP's intent to consider the greatest or worst-case TDS loading in determining existing mass loading. It will assist in ensuring Regional consistency by mentioning all available resources in the guidance that should be used for determining existing mass loading of TDS.

- (d) Bullet "d", second paragraph (starting at sentence reading, "Supplemental sampling of a discharge may be most appropriate ..."): In cases where process water and industrial storm water are commingled, the total previously authorized TDS load determined solely from data submitted with an application may not account for industrial storm water contributions, especially if permit renewal data were used and renewal sampling took place on days where qualifying storm events did not occur. In a situation involving such commingled flows, the total authorized load (prior to August 21, 2010) should account for industrial storm water loading, since these discharges were authorized by the Department. Therefore, the following changes are recommended:

Supplemental sampling of a discharge may be most appropriate to characterize the variability of a discharge of TDS, thereby supplementing existing data from a previous application, or if no TDS data were available at all for some reason. Supplemental sampling may include industrial storm water loading characterization where process water and industrial storm water is commingled in final outfalls. Such supplemental sampling should include characterization of qualifying storm events as described in the effective National Pollutant Discharge Elimination System General Permit for Discharges of Storm water Associated with Industrial Activities (PAG-03). In these cases, the daily maximum loading should include industrial storm water contributions to determine the total previously authorized load."

Section VI – Existing Discharges with TDS Loadings Authorized Prior to August 21, 2010

13. The purpose and intent this section VI is unclear, given that §95.10 only applies to new or expanding discharges. The opening paragraph directs the permit writer to evaluate an application to determine if the discharge is new or expanding to be evaluated under later sections, or if existing and therefore the TDS loading of that application be evaluated under Section VI. The subsequent evaluation instructs the permit writer to classify the existing discharge as "Unaffected," "Authorized Load/No Increase," or "Exempt." This evaluation seems to go well beyond the defined applicability of the regulation.

The third paragraph of Section VI seems, again, intent on rewriting the clear language of §95.10(a). It purports to declare as "Exempt" only those discharges falling within "§95.10(a)(2) through (6) or (8)" – ignoring §95.10(a)(1) and (a)(7). The EQB did not delegate to DEP staff

the power to pick and choose among the 8 listed categories of discharges that “are not considered new or expanding mass loadings of TDS.” All 8 categories are exempt – period.

As noted above, under §95.10(a)(1), TDS loadings or specific conductivity levels authorized by the Department prior to August 21, 2010 are considered existing mass loadings and are exempt. Based on the language in the regulation, it is unnecessary and excessive to classify an already exempt discharge into other categories. Such additional classifications will result in confusion and invite inconsistency among the regional offices. As previously stated, achievement of Regional consistency is a primary goal of these collective comments.

This confusing section requires substantive change and simplification to ensure compliance and consistency with the new regulation. This section should exist strictly to direct the permit writer that (a) they have an existing discharge under §95.10(a), and therefore no further action required, or (b) that the discharge is new or expanding and therefore evaluation under sections VII or VIII is necessary. The regulated community perceives that the Department is attempting to adjudicate or include regulation of existing TDS discharges that were not included in the final rulemaking.

Section VII – New or Expanding Discharges Treating Natural Gas Wastewater

14. As noted in the comments provided by the Eastern Pennsylvania Water Pollution Control Operators Association, the discussion in Section VII as it applies to POTW’s accepting natural gas wastewaters appears to be problematic. On the one hand, new or increased natural gas wastewaters entering the POTW must meet the §95.10 requirements. But the discussion in the “Non-Exempt (Natural Gas)” section seems to go further to imply that in all cases the entire discharge volume of the POTW, including sewage and industrial wastewater loadings, must also be treated to meet the 500 mg/L TDS, 250 mg/L Chlorides values. There may be good and valid reasons for pre-treated wastewaters from natural gas sources to use a POTW for handling other constituents, but as already pointed out on numerous occasions, many POTW’s have difficulty meeting a 500 mg/L TDS value when dealing with other domestic and industrial wastewaters. DEP’s prescription of applying the 95.10(b)(3) limits at both the front end (influent received from the indirect discharger CWT) and the back end of the POTW essentially forces the POTW to treat all sewage down to 500 mg/L of TDS irrespective of source if just a small fraction of the influent is from natural gas sources. This does not make sense and is counterproductive.

Section VIII – New or Expanding Discharges Treating Wastewater Other than Natural Gas Wastewater

15. The evaluations and direction in this section appear to conflict with the language and intent of §95.10. The Department has developed several categories for the new or expanded discharge that applies based on the data in the application, in which the new or expanding should be classified.

The description of one of the classifications, "Conditionally Non-exempt," conflicts with the exemptions listed in §95.10(a)(1) through (8). It seems to suggest that whenever the average daily TDS loading increases by more than 5000 pounds per day, the discharge becomes non-exempt and subject to the rule’s discharge limits. As noted above, that is not how §95.10(a) is structured. If the average daily loading increases, *but the maximum daily loading remains unchanged*, §95.10(a)(1) provides that the discharge is not a new or increased loading of TDS.

The “Unaffected” classification paragraph creates a 1,000 mg/l trigger concentration. This trigger concentration is not referenced anywhere in the regulations. The Department explained in TDS Task Force meetings that this trigger concentration is incorporated as an efficiency and financial resource saving measure. DEP stated that as a matter of guidance, if a new or expanding discharge is less than 1,000 mg/l, permit writers are not to spend anymore time evaluating or developing criteria for that discharge. But as presented in the "Unaffected"

category of this section, this intent is unclear and confusing. Wording clarifications are suggested.

16. Categories: Overall, the categories "Non-Exempt (Other)" and "Conditionally Non-Exempt" are very confusing in that no distinction or difference between the two categories is evident nor is DEP's intent understood. A new or expanding discharger should be either Unaffected (using DEP's de minimis 1,000 mg/l threshold), Exempt (covered by one of the exemptions listed in §95.10(a)(1) to (8)), or Non-Exempt (e.g., subject to the regulation). Therefore, the following changes to this section are recommended for clarity and simplification. :

A new or expanding wastewater treatment facility that treats wastewater other than natural gas wastewater should fit into one of the listed classifications (unless it secures a variance for TDS):

Unaffected: *Certain discharges will not warrant close examination. If the discharge treats wastewater other than natural gas wastewater and the permit writer determines that the discharge has no reasonable potential to approach or exceed the 2,000 mg/L concentration referenced in §95.10, this determination should be documented in the Fact Sheet. For situations involving TDS effluent concentrations less than 1,000 mg/L, no further permit actions would be required. If there is some significant concern that TDS concentrations might approach the 2,000 mg/L level, consideration should be given to imposing a monitor and report requirement for TDS as a permit condition.*

A discharge may also be classified as Unaffected if it generally does not represent a net increase in TDS loading compared to the source water. For example, a non-contact cooling water discharge that merely recirculates and concentrates the TDS in source water would not represent a net TDS loading increase, and may be classified as Unaffected.

If the discharge treats wastewater other than natural gas wastewater and the permit writer determines that the discharge has a reasonable potential to approach or exceed a concentration of 2,000 mg/L TDS, the permit writer should proceed to determine whether the discharge is Exempt or Non-Exempt.

Exempt: *Determine if the discharge is exempt from any treatment requirements under §95.10. This is the case if the discharge is listed in §95.10(a)(1) through (8). It is Exempt if the discharge is not a new or expanding discharge, which means that it meets one of the following requirements: (i) it's maximum daily TDS loading is not increased above previously authorized values; (ii) it is a post-mining pollutorial discharge from an abandoned mine site; (iii) it is a surface mining activity with one or more existing discharges subject to Chapter 87 Subchapter F, Chapter 88 Subchapter G, or Chapter 90 Subchapter F; (iv) it is a discharge from an active coal mining operation with an open pit dimension of less than 450,000 sq ft exposed at any time; (v) it is a discharge from an erosion and sediment control facility at a surface mining activity as defined in § 86.1; (vi) it involves existing mine drainage directed to a mine pool that is treated in accordance with applicable requirements of Chapters 91 through 96; (vii) the expanding discharge is less than 5,000 pounds per day on an annual average; or (viii) this discharge is subject to applicable ELGs for TDS, sulfate, or chloride. A discharge with no applicable ELGs for TDS, sulfate, or chloride may qualify as Exempt if EPA determined during the ELG development process that a technology-based limitation for TDS, chloride, or sulfate is not necessary. Such a discharge will be evaluated upon formal request on a case-by-case basis, and the determination based on EPA's reasoning for not establishing a technology-based limitation.*

If a discharge is determined to be exempt from any treatment requirements, note this in the Fact Sheet. Monitor and report requirements for TDS, specific conductivity, sulfate, chloride, or any other pollutant of concern may be appropriate to resolve uncertainties, to provide data to support a water quality analysis, or for other reasons beyond the scope of §95.10. Monitoring frequency is as per established practice for toxic pollutants.

If a discharge is Exempt because it meets the criteria in §95.10(a)(1), the determination of the existing maximum daily TDS loading should be noted in the Fact Sheet, and if necessary to assure compliance with the exemption, the maximum daily TDS loading value should be stated as an effluent limitation in the permit.

If the discharge is Exempt because it meets the criteria in §95.10(a)(7), the determination of the existing authorized maximum daily TDS loading and existing authorized average daily TDS loading should be stated in the Fact Sheet, and if necessary to assure compliance with the exemption, the exempt maximum daily TDS loading value and the exempt average daily TDS loading values (prior authorized average daily load + 5000 lb/day) should be established as TDS limits in the permit.

Non-Exempt: *The discharge treats wastewater other than natural gas wastewater, and:*

- 1. is a new discharge, or*
- 2. is an existing discharge that has proposed to expand its TDS loading*

And

- 1. the discharge does not meet the Exemption criteria of §95.10(a)(1) through (8),*
- 2. has not obtained a Variance (Section IX of this guidance), and*
- 3. there is a reasonable potential that the effluent concentration may approach or exceed 2,000 mg/L.*

This classification may also apply if an Authorized Load/No Increase discharge surrenders or otherwise becomes ineligible to retain its existing mass loading for any reason.

For all facilities and activities classified as Non-Exempt, establish the permit conditions listed below, or the WQBEL or applicable technology-based limit, whichever is most stringent.

- a. TDS 2,000 mg/L as AML; 4,000 mg/L as MDL*

For an existing discharger, concentration-based effluent limits should be established based on a mass balance between the wastewater representing the existing mass loading and the wastewater representing the expanding mass loading. This mass balance calculation should be performed for TDS to produce both an average monthly limit (AML) and a maximum daily limit (MDL). That calculation will result in certain effluent limits for those pollutants, and those effluent limits should be established in the permit. If the WQBEL or an applicable technology-based limit is more stringent, it would be applied in the permit instead of the calculated limit.

The ability to perform the necessary calculations is dependent on the minimum required data being available, including the design flow of the facility, the expanding flow increment, and TDS concentration data sufficient to produce the average daily existing mass loading and the maximum daily existing mass loading. If one or more of these data

values are not available, use best estimates or contact the Environmental Engineer Manager, NPDES Permits section, in central office. The mass balance can be performed using the existing average concentration for TDS and the facility flow, mass-balanced with the required treatment concentration (2,000 mg/L) in §95.10 (c) and the expanding flow increment. Document all determinations and uncertainties in the Fact Sheet. See Appendix B for example calculations.

- b. Additional loading-based limits should be established as required by 40 CFR 122.45. Monitoring frequency as per established practices for toxic pollutants."*

Appendix A

17. Second Flow Chart: Change "Conditionally Exempt" to "Exempt" per previous comments.

Appendix B

18. Scenario 7.1 and 7.2: We concur with the expression in these two scenarios that a situation involving a reactivation of a production line to return a plant to its previously authorized flow should not constitute an expansion of a mass loading.
19. Scenario 7.3: Consistent with our comments provided above, we believe the analysis of Scenario 7.3 is missing some important elements. If the new, fourth production line is proposed, ***but the maximum daily TDS loading will not change***, §95.10(a)(1) declares that the facility does ***not*** constitute a new or increased loading. The Scenario improperly focuses solely on the change in average daily loading (which is a different exemption). If the maximum daily TDS loading does not increase, the facility is exempt, and there is no basis for imposing a TDS loading limit. If the maximum TDS loading will increase, ***and*** the average daily loading will increase by more than 5000 lb/day (that is, if neither exemption 95.10(a)(1) or (a)(7) applies), then TDS limits are applicable.
20. Scenario 7.4: We agree that if the average daily loading in Scenario 7.4 does not increase by more than 5000 lb/day due to the increased efficiency of the new line (or increased efficiency on the old lines), there is no triggering of the §95.10 TDS limits. However, the same can be said if the increase efficiency were to result in no increase in maximum daily TDS loading. If, as a result of increased treatment or production efficiency, the facility increases its flow rate with the fourth production line, but manages its total TDS such that the maximum daily TDS load does not increase, the §95.10(a)(1) exemption applies, and the facility should be classified as Authorized Load/No Increase.
21. Scenario 8.1: Once again, attention should be given to the §95.10(a)(1) exemption. The permit writer must ask whether the expansion results in an increase in the maximum daily TDS load from that previously authorized. If not, then this is still an Authorized Load/No Increase situation.

The Chamber appreciates the Department's consideration of our comments. These comments are offered to address significant concerns expressed by Chamber members with regional inconsistencies and potential misinterpretation of §95.10, which have already been experienced by some of our members in various parts of the Commonwealth. These rules clearly are complex and merit careful articulation in the guidance. We hope the above comments will contribute to that result.

Sincerely,

A handwritten signature in black ink, appearing to read "Gene Barr". The signature is fluid and cursive, with a prominent initial "G" and a long, sweeping tail.

Gene Barr
Vice President, Government & Public Affairs