BEFORE THE POLLUTION CONTROL BOARD
OF THE STATE OF ILLINOIS

IN THE MATTER OF:	)	
	)	
	)	R07-09
TRIENNIAL REVIEW OF SULFATE AND TOTAL DISSOLVED SOLIDS WATER QUALITY STANDARDS: PROPOSED AMENDMENTS TO: 35 Ill. Adm. Code 302.102(b)(6), 302.102(b)(8), 302.102(b)(10), 302.208(g), 309.103(c)(3), 405 .109(b)(2)(A), 405.109(b)(2)(B), 406.100(d); REPEALED 35 Ill. Adm. Code 406.203, PART 407; and PROPOSED NEW 35 Ill. Adm. Code 302 .208(h).	)	(Rulemaking - Water)

NOTICE OF FILING

To:

Dorothy Gunn, Clerk Illinois Pollution Control Board 100 West Randolph Street Suite 11-500 Chicago, Illinois 60601	Marie E. Tipsord Hearing Officer Illinois Pollution Control Board 100 West Randolph, Suite 11-500 Chicago, Illinois 60601
Mathew Dunn Illinois Attorney General's Office Environmental Control Division James R. Thompson Center 100 West Randolph Street Chicago, Illinois 60601	Jonathan Furr Illinois Department of Natural Resources One Natural Resources Way Springfield, Illinois 62702-1271

Please take notice that on June 7, 2007, we filed with the Office of the Clerk of the Illinois Pollution Control Board via electronic mail **CITGO'S POST-HEARING COMMENTS REGARDING REVISIONS TO WATER QUALITY STANDARDS FOR TOTAL DISSOLVED SOLIDS**, a copy of which is served upon you.

CITGO PETROLEUM CORPORATION

By: _____
One of Its Attorneys

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CITGO'S POST-HEARING COMMENTS REGARDING REVISIONS TO WATER QUALITY STANDARDS FOR TOTAL DISSOLVED SOLIDS

NOW COMES CITGO Petroleum Corporation ("CITGO"), by and through its attorneys, pursuant to 35 Ill. Adm. Code § 102.108, and offers the following POST-HEARING COMMENTS in the above-captioned proposed rule. In addition, CITGO has attached, in response to the Board's request, relevant portions of the Illinois Environmental Protection Agency's (the "Agency's") draft proposal to revise the water quality standards for secondary contact waters (see Attachment 1).

I. Introduction

CITGO supports the Agency's proposal to eliminate the existing water quality standard for Total Dissolved Solids ("TDS") for general use waterways. CITGO believes, however, that the elimination of TDS standards should not be limited to general use waterways, but should also be eliminated for secondary contact waterways.

The Agency's position, as expressed during the April 23, 2007 hearing in this proceeding, is that it preferred to wait to include the changes to TDS for secondary contact waters until a proposal could be made that addressed all water quality standards with respect to those waters.

Agency representative Bob Mosher stated[1] that there are two reasons for the Agency's desire to postpone the elimination of TDS standards until the general secondary contact standard revision is proposed: 1) the group of stakeholders currently meeting to discuss changes in secondary contact standards (also referred to as the Use Attainability Analysis ("UAA")) should have the opportunity to consider TDS issues; and 2) the Agency must consider the appropriate sulfate standard for waters in which chloride levels exceed 500 mg/l. Neither of these is sufficient grounds for denying CITGO relief in this proceeding.

The potential delays surrounding the timing of the secondary contact water quality standards rulemaking proceeding are likely significant. The likely delay in such a proceeding will cause harm to CITGO as CITGO will likely be required either: (1) to file its own site-specific rule change, (2) to file another variance petition, or (3) to act on the conditions of its five-year variance from the TDS water quality standard. None of these alternatives would be needed if the Agency's pending rule was applied to eliminate the applicable TDS water quality standard for CITGO.

For these reasons, as supported by the pre-filed and sworn testimony of Brigitte Postel and James Huff, CITGO urges the Board to eliminate the TDS water quality standard for secondary contact waters. In the alternative, CITGO requests that the Board eliminate the TDS water quality standard for the Lemont Refinery's discharge to the Chicago Sanitary & Ship Canal.

II. Argument

A. The Agency's Reasons For Postponing The Elimination Of TDS Standards For Secondary Contact Waters Are Unfounded.

[1] Mr. Mosher presented a statement of the Agency's position at the Chicago hearing (Tr. 40:2-43:16). He did not purport to testify or comment on technical or economic matters. His statement is one of policy, not of evidentiary support.

The Agency has resisted eliminating TDS water quality standards in secondary contact waters, in part, on the grounds that a group of stakeholders that has been discussing UAA issues as a whole should have the opportunity to weigh in on the issues of TDS, chloride, and sulfate standards. (Tr. at 40:13-22). The Agency's assertion presumes that members of the stakeholder group would even wish to weigh in on these issues. As Ms. Postel and Mr. Huff testified, TDS, chloride, and sulfate standards are not among the issues on which members of the stakeholder group disagree. While the UAA proceeding promises to be controversial, the points of contention among stakeholders relate to changes in other pollutants such as temperature, ammonia, and bacteria. CITGO asserts that it is the only discharger in the Chicago area that is adversely affected by the current TDS standard. TDS has not even been mentioned in the UAA discussions, and it is not necessary to postpone the discussion here to afford stakeholders additional opportunity for input.

The Agency has also taken the position that eliminating the TDS standard for secondary contact waters must be done in conjunction with the construction of a corresponding sulfate and/or chloride standard. (Tr. 40:22 - 41:23). The Agency's concern appears to be based on the method for determining sulfate levels, which takes into account the chloride levels of the surrounding waterway. The Agency has posed its belief that the 500 mg/l chloride standard in Ill. Adm. Code § 302.208 is protective of aquatic life; however, the Agency has presented no scientific basis for this belief: "Our chloride standard for General Use waters is 500 milligrams per liter. We believe that is a good protective standard. We believe that when waters exceed 500, that's probably bad for aquatic life. There's probably some sensitive species of aquatic life that would suffer when that condition happens." (Tr. at 57: 2 - 57:9).

Moreover, the Agency has acknowledged that the general use proposal is not intended to answer the question of how sulfate levels are determined for waters that exceed 500 mg/l

because its intention is not to develop a rule that implies chloride concentrations greater than 500 mg/l are acceptable. (Tr. at 57:2 - 58:18). Instead, the Agency has indicated that it intends to address these waterways on a case-by-case basis, perhaps through permitting. (Tr. at 60:1-20).

Given the lack of scientific data, the fact that there is currently no chloride standard for secondary contact waters, and the Agency's desire to approach sulfate standards on a case-by-case basis where waterways, such as the Chicago Sanitary & Ship Canal, have chloride levels above 500 mg/l, there is no need to address sulfate and chloride standards at the same time as eliminating the TDS standard for secondary contact waters. Standards for these other constituents may be addressed in the UAA process, or through individual permitting.

In the event that the Board determines that it is necessary to adopt sulfate and/or chloride levels in addition to eliminating the TDS standards for secondary contact waters, CITGO posits that adopting the equation from the general use proposal (without the 500 mg/l chloride cap in light of the absence of a chloride standard for secondary contact waters), would be sufficient. In its general use proposal, the Agency has formulated the following equation for determining sulfate levels, which is dependent, in part, on the chloride levels in the receiving water:

Sulfate, mg/l = (1276.7 + 5.508(Hardness, mg/l) - 1.457(Chlorides, mg/l)) x 0.65

For secondary contact waters, the calculated sulfate limit using a chloride value of 500 mg/l in the equation could be used whenever chlorides are at or above 500 mg/l.

Thus, both of the Agency's concerns are easily addressed by the evidence in the record in this proceeding, and the Board need not postpone the elimination of the TDS standards until the UAA proposal is submitted.

B. CITGO Will Be Harmed By Postponing The Elimination Of The TDS Standard For Secondary Contact Waters

As demonstrated in the testimony of Ms. Postel and Mr. Huff, CITGO is reaching a critical decision-making time under its variance from TDS water quality standards. Under the

variance, which expires on December 15, 2009, CITGO must take steps throughout the five-year variance to evaluate and begin work on constructing a holding area for bleed from the refinery's wet gas scrubber for the maximum number of days that the TDS level in the Des Plaines River at the I-55 Bridge exceeds 1,000 mg/l. CITGO must size and design such a system beginning in May 2008 and must begin construction on the system by March 1, 2009. *Citgo Petroleum Corp. v. Ill. Envtl. Prot. Agency*, PCB 05-85, Opinion and Order of the Board (April 21, 2005).

Agency representative Bob Mosher testified during the hearing that the secondary contact changes would be proposed "later this year;" however, when pressed to identify when in 2007 the proposal would be made, Mr. Mosher indicated that such a proposal would not be introduced until "late in the year 2007." (Tr. at 40:2-12; 42:1-11). As Hearing Officer Tipsord correctly noted, if the proposal is not made until December of 2007 on what is potentially a controversial rulemaking, a final rule may well not be issued until the second half of 2008 at the very earliest. (Tr. at 41:24 - 42:12).

Given this uncertainty, CITGO would be forced to expend significant funds to begin designing a system for storing wastewater from its wet gas scrubber, when such an exercise would be a nullity upon the eventual elimination of TDS standards for secondary contact waters. Moreover, as Mr. Huff testified, CITGO's decision to pursue a variance from the TDS standard instead of a site-specific rule (as ExxonMobil had obtained), was driven in part by the Agency's indication of its intent to eliminate the TDS water quality standard. (Postel Test. p. 4; Huff Test. p. 2). To require CITGO, by virtue of the Agency's timing, to adhere to the conditions of a variance that was forced upon CITGO because of timing issues would be inequitable and inappropriate under the present circumstances. This is particularly so given the Agency's knowledge about the lack of toxicity of TDS at significantly higher levels than those contained in the current regulations.

In the absence of relief from TDS standards for secondary contact waters, CITGO would be left with no other alternative than to immediately pursue a site-specific rule. Given the Board's opportunity to address CITGO's concerns in the context of an already-existing proceeding, CITGO believes that initiating a separate rulemaking proceeding would be duplicative and wasteful of the Board's time and resources, particularly when the Board will likely have to revisit similar issues once the UAA rule is proposed.

III. Conclusion

For all of the foregoing reasons, CITGO respectfully requests that the Board eliminate the TDS water quality standards for secondary contact waterways in Illinois. In the alternative, CITGO respectfully requests that the Board eliminate the TDS water quality standards for the Chicago Sanitary & Ship Canal, or eliminate the TDS standard for the outfall from CITGO's Lemont Refinery.

Dated June 7, 2007

Respectfully submitted,

CITGO PETROLEUM CORPORATION

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ATTACHMENT 1

SUBPART D: CHICAGO AREA WATERWAY SYSTEM AND LOWER DES PLAINES RIVER ~~SECONDARY CONTACT AND INDIGENOUS AQUATIC LIFE~~ STANDARDS

SUBPART E: LAKE MICHIGAN BASIN WATER QUALITY STANDARDS

aquatic life to undiluted effluent, and "rapid" dispersion means an effluent's merging with receiving waters so as to minimize the length of exposure time of aquatic life to undiluted effluent. Upon proof by the applicant that a proposed ZID conforms with the requirements of Section 39 of the Act and this Section, the Agency shall, pursuant to Section 39(b) of the Act, include within the NPDES permit a condition defining the ZID.

f) Pursuant to Section 39 of the Act and 35 Ill. Adm. Code 309.103, an applicant for an NPDES permit shall submit data to allow the Agency to determine that the nature of any mixing zone or mixing zone in combination with a ZID conforms with the requirements of Section 39 of the Act and of this Section. A permittee may appeal Agency determinations concerning a mixing zone or ZID pursuant to the procedures of Section 40 of the Act and 35 Ill. Adm. Code 309.181.

g) Where a mixing zone is defined in an NPDES permit, the waters within that mixing zone, for the duration of that NPDES permit, shall constitute the sole waters within which mixing is allowed for the permitted discharge. It shall not be a defense in any action brought pursuant to 35 Ill. Adm. Code 304.105 that the area and volume of waters within which mixing may be allowed pursuant to subsection (b) is less restrictive than the area or volume or waters encompassed in the mixing zone.

h) Where a mixing zone is explicitly denied in a NPDES permit, no waters may be used for mixing by the discharge to which the NPDES permit applies, all other provisions of this Section notwithstanding.

i) Where an NPDES permit is silent on the matter of a mixing zone, or where no NPDES permit is in effect, the burden of proof shall be on the discharger to demonstrate compliance with this Section in any action brought pursuant to 35 Ill. Adm. Code 304.105.

(Source: Amended at _____ Ill. Reg. _____, effective _____)

SUBPART D: CHICAGO AREA WATERWAY SYSTEM AND LOWER DES PLAINES RIVER ~~SECONDARY CONTACT AND INDIGENOUS AQUATIC LIFE~~ STANDARDS

Section 302.401 Scope and Applicability

Subpart D contains the Chicago Area Waterway System and Lower Des Plaines River ~~secondary contact and indigenous aquatic life~~ standards. These must be met only by ~~certain~~ waters specifically designated in Part 303. The Subpart B general use and Subpart C public water supply standards of this Part do not apply to waters described in Section 303.204 and listed in Sections 303.220 through 303.237 of this Part as the

Chicago Area Waterway System or the Lower Des Plaines River ~~designated for secondary contact and indigenous aquatic life (Section 303.204)~~.

Section 302.402 Purpose

The Chicago Area Waterway System and Lower Des Plaines River standards shall protect incidental contact or non-contact recreational uses; commercial activity, including navigation and industrial water supply uses; and the highest quality indigenous aquatic life and wildlife that is compatible with existing physical habitat and hydrologic conditions. ~~Secondary contact and indigenous aquatic life standards are intended for those waters not suited for general use activities but which will be appropriate for all secondary contact uses and which will be capable of supporting an indigenous aquatic life limited only by the physical configuration of the body of water, characteristics and origin of the water and the presence of contaminants in amounts that do not exceed the water quality standards listed in Subpart D.~~

(Source: Amended at _____ Ill. Reg. _____, effective _____)

Section 302.403 Unnatural Sludge

Waters subject to this subpart shall be free from unnatural sludge or bottom deposits, floating debris, visible oil, odor, unnatural plant or algal growth, or unnatural color or turbidity.

(Source: Amended at _____ Ill. Reg. _____, effective _____)

Section 302.404 pH

pH ~~(STORET number 00400)~~ shall be within the range of 6.5 ~~6.0~~ to 9.0 except for natural causes.

(Source: Amended at _____ Ill. Reg. _____, effective _____)

Section 302.405 Dissolved Oxygen

Dissolved oxygen ~~(STORET number 00300)~~ concentrations shall not be less than the minimum values contained in subsections (a) and (b) of this Section ~~4.0 mg/l at any time except that the Calumet-Sag Channel shall not be less than 3.0 mg/1 at any time~~.

a) For waters listed in Section 303.230 and 303.237, 5.5 mg/l as a daily mean averaged over 30 days and 3.5 mg/l at any time.

b) For waters listed in Section 303.235, 3.5 mg/l at any time.

(Source: Amended at _____ Ill. Reg. _____, effective _____)

Section 302.406 Bacteria ~~Fecal Coliform (Repealed)~~

Beginning March 1, 2010, the following bacteria standards shall not be exceeded during the recreational season lasting from March 1 through November 30:

a) The Incidental Contract Recreation Waters listed in Section 303.220 of this Part shall not exceed a 30-day geometric mean for *Escherichia Coli* (*E. Coli*) of 1030 colony forming units (cfu).

b) The Non-Contract Recreation Waters listed in Section 303.225 of this Part shall not exceed a 30-day geometric mean for *Escherichia Coli* (*E. Coli*) of 2740 colony forming units (cfu).

c) There is no bacteria standard for the Non-Recreational Waters listed in 35 Ill. Adm. Code 303.227.

(Source: Old repealed at 6 Ill. Reg. 13750, effective October 26, 1982, new added at _____ Ill. Reg. _____, effective_____)

Section 302.407 Chemical Constituents

a) The acute standard (AS) for the chemical constituents listed in subsection (e) shall not be exceeded at any time except as provided in subsection (d).

b) The chronic standard (CS) for the chemical constituents listed in subsection (e) shall not be exceeded by the arithmetic average of at least four consecutive samples collected over any period of at least four days, except as provided in subsection (d). The samples used to demonstrate attainment or lack of attainment with a CS must be collected in a manner that assures an average representative of the sampling period. For the metals that have water quality based standards dependent upon hardness, the chronic water quality standard will be calculated according to subsection (e) using the hardness of the water body at the time the metals sample was collected. To calculate attainment status of chronic metals standards, the concentration of the metal in each sample is divided by the calculated water quality standard for the sample to determine a quotient. The water quality standard is attained if the mean of the sample quotients is less than or equal to one for the duration of the averaging period.

c) The human health standard (HHS) for the chemical constituents listed in subsection (f) shall not be exceeded when the stream flow is at or above the harmonic mean flow pursuant to Section 302.658 nor shall an annual average, based on at least eight samples, collected in a manner representative of the sampling period, exceed the HHS except as provided in subsection (d).

d) In waters where mixing is allowed pursuant to Section 302.102 of this Part, the following apply:

1) The AS shall not be exceeded in any waters except for those waters for which a zone of initial dilution (ZID) applies pursuant to Section 302.102 of this Part.

2) The CS shall not be exceeded outside of waters in which mixing is allowed pursuant to Section 302.102 of this Part.

3) The HHS shall not be exceeded outside of waters in which mixing is allowed pursuant to Section 302.102 of this Part.

e) Numeric Water Quality Standards for the Protection of Aquatic Organisms

Constituent	AS (µg/L)	CS (µg/L)
Arsenic (trivalent, dissolved)	340 X 1.0*=340	150 X 1.0*=150
Cadmium (dissolved)	Exp[A+Bln(H)] X {1.138672-[(lnH)(0.041838)]}*, where A=-1.743 and B=1.0166	Exp[A+Bln(H)] X {1.101672-[(lnH)(0.041838)]}*, where A= -4.719 and B=0.7409
Chromium (hexavalent, total)	16	11
Chromium (trivalent, dissolved)	Exp[A+Bln(H)] X 0.316*, where A=3.7256 and B=0.8190	Exp[A+Bln(H)] X 0.860*, where A=0.6848 and B=0.8190
Copper (dissolved)	exp[A+Bln(H)] X 0.960*, where A=-1.645 and B=0.9422	Exp[A+Bln(H)] X 0.960*. where A=-1.646 and B=0.8545
Cyanide**	22	5.2
Lead (dissolved)	exp[A+Bln(H)] X {1.46203-[(lnH)(0.145712)]}*, where A=-1.301 and B=1.273	Exp[A+Bln(H)] X {1.46203-[(lnH)(0.145712)]}*, where A=-2.863 and B=1.273
Mercury (dissolved)	1.4 X 0.85*=1.2	0.77 X 0.85*=0.65
Nickel (dissolved)	exp[A+Bln(H)] X 0.998*, where A=0.5173 and B=0.8460	exp[A+Bln(H)] X 0.997*, where A=-2.286 and B=0.8460
TRC	19	11
Zinc (dissolved)	exp[A+Bln(H)] X 0.978*, where A=0.9035 and B=0.8473	Exp[A+Bln(H)] X 0.986*, where A=-0.8165 and B=0.8473
Benzene	4200	860
Ethylbenzene	150	14

Toluene	2000	600
Xylene(s)	920	360

where: µg/L = microgram per liter,

exp[x] = base natural logarithms raised to the x- power,

ln(H) = natural logarithm of Hardness in milligrams per liter, and

* = conversion factor multiplier for dissolved metals

** = sample may be in the available or weak acid dissociable (WAD) forms

f) Numeric Water Quality Standard for the Protection of Human Health

Constituent	HHS in micrograms per liter (µg/L)
Mercury	0.012
Benzene	310

g) Numeric Water Quality Standards for other chemical constituents

Concentrations of the following chemical constituents shall not be exceeded except in waters for which mixing is allowed pursuant to Section 302.102 of this Part.

Constituent	Unit	Standard
Chloride	mg/L	500
Iron (dissolved)	mg/L	1.0
Silver (total)	µg/L	3.2
Selenium (total)	mg/L	1.0
Sulfate	mg/L	[1276.7+5.508(H)-1.457(C)] X 0.65

where: mg/L = milligram per liter and µg/L = microgram per liter,
H = Hardness in mg/L, and
C = Chloride in mg/L

~~Concentrations of other chemical constituents shall not exceed the following standards:~~

~~CONSTITUENTS~~	~~STORET NUMBER~~	~~CONCENTRATION (mg/L)~~
~~Ammonia Un-ionized (as N*)~~	~~00612~~	~~0.1~~
~~Arsenic (total)~~	~~01002~~	~~1.0~~

~~Barium (total)~~	~~01007~~	~~5.0~~
~~Cadmium (total)~~	~~01027~~	~~0.15~~
~~Chromium (total hexavalent)~~	~~01032~~	~~0.3~~
~~Chromium (total trivalent)~~	~~01033~~	~~1.0~~
~~Copper (total)~~	~~01042~~	~~1.0~~
~~Cyanide (total)~~	~~00720~~	~~0.10~~
~~Fluoride (total)~~	~~00951~~	~~15.0~~
~~Iron (total)~~	~~01045~~	~~2.0~~
~~Iron (dissolved)~~	~~01046~~	~~0.5~~
~~Lead (total)~~	~~01051~~	~~0.1~~
~~Manganese (total)~~	~~01055~~	~~1.0~~
~~Mercury (total)~~	~~71900~~	~~0.0005~~
~~Nickel (total)~~	~~01067~~	~~1.0~~
~~Oil, fats and grease~~	~~00550, 00556 or 00560~~	~~15.0**~~
~~Phenols~~	~~32730~~	~~0.3~~
~~Selenium (total)~~	~~01147~~	~~1.0~~
~~Silver~~	~~01077~~	~~1.1~~
~~Zinc (total)~~	~~01092~~	~~1.0~~
~~Total Dissolved Solids~~	~~70300~~	~~1500~~

~~*For purposes of this section the concentration of un-ionized ammonia shall be computed according to the following equation:~~

$$U = \frac{N}{[0.94412(1 + 10^{X}) + 0.0559]}$$ ~~where:~~

$$X = 0.09018 + \frac{2729.92}{(T + 273.16)} - pH$$

~~U = Concentration of un-ionized ammonia as N in mg/L~~
~~N = Concentration of ammonia nitrogen as N in mg/L~~
~~T = Temperature in degrees Celsius~~

~~**Oil shall be analytically separated into polar and non-polar components if the total concentration exceeds 15 mg/L. In no case shall either of the components exceed 15 mg/L (i.e., 15 mg/L polar materials and 15 mg/L non-polar materials).~~

(Source: Amended at _____ Ill. Reg. _____, effective _____)

Section 302.408 Temperature

SEE ALTERNATIVE TEMPERATURE PROPOSALS

(Source: Amended at _____ Ill. Reg. _____, effective _____)

Section 302.409 Cyanide (Repealed)

~~Cyanide (total) shall not exceed 0.10 mg/l~~

(Source: Repealed at _____ Ill. Reg. _____, effective _____)

Section 302.410 Substances Toxic to Aquatic Life

Any substance or combination of substances toxic to aquatic life not listed in Section 302.407 shall not be present in amounts toxic to indigenous aquatic life ~~exceed one half of the 96-hour median tolerance limit (96-hour TL_m) for native fish or essential fish food organisms~~.

a) Any substance or combination of substances shall be deemed to be toxic or harmful to aquatic life if present in concentrations that exceed the following:

1) An Acute Aquatic Toxicity Criterion (AATC) validly derived and correctly applied pursuant to procedures set forth in Sections 302.612 through 302.618 or in Section 302.621; or

2) A Chronic Aquatic Toxicity Criterion (CATC) validly derived and correctly applied pursuant to procedures set forth in Sections 302.627 or 302.630.

b) Any substance or combination of substances shall be deemed to be toxic or harmful to wild or domestic animal life if present in concentrations that exceed any Wild and Domestic Animal Protection Criterion (WDAPC) validly derived and correctly applied pursuant to Section 302.633.

c) The most stringent criterion of subsections (a) and (b) shall apply at all points outside of any waters within which, mixing is allowed pursuant to Section 302.102. In addition, the AATC derived pursuant to subsection (a)(1) shall apply in all waters except that it shall not apply within a ZID that is prescribed in accordance with Section 302.102.

d) The procedures of Subpart F set forth minimum data requirements, appropriate test protocols and data assessment methods for establishing criteria pursuant to subsections (a) and (b). No other procedures may be used to establish such criteria unless approved by the Board in a rulemaking or adjusted standard proceeding pursuant to Title VII of the Act. The validity and applicability of the Subpart F procedures may not be challenged in any proceeding brought pursuant to Titles VIII or X of the Act, although the validity and correctness of application of the numeric criteria derived pursuant to Subpart F may be challenged in such proceedings pursuant to subsection (e).

e) Agency derived criteria may be challenged as follows:

1) A permittee may challenge the validity and correctness of application of a criterion derived by the Agency pursuant to this Section only at the time such criterion is first applied in an NPDES permit pursuant to 35 Ill. Adm. Code 309.152 or in an action pursuant to Title VIII of the Act for violation of the toxicity water quality standard. Failure of a person to challenge the validity of a criterion at the time of its first application shall constitute a waiver of such challenge in any subsequent proceeding involving application of the criterion to that person.

2) Consistent with subsection (e)(1), if a criterion is included as, or is used to derive, a condition of an NPDES discharge permit, a permittee may challenge the criterion in a permit appeal pursuant to Section 40 of the Act and 35 Ill. Adm. Code 309.181. In any such action, the Agency shall include in the record all information upon which it has relied in developing and applying the criterion, whether such information was developed by the Agency or submitted by the Petitioner. THE BURDEN OF PROOF SHALL BE ON THE PETITIONER TO DEMONSTRATE THAT THE CRITERION-BASED CONDITION IS NOT NECESSARY TO ACCOMPLISH THE PURPOSES OF SUBSECTION (a) (Section 40(a)(1) of the Act), but there is no presumption in favor of the general validity and correctness of the application of the criterion as reflected in the challenged condition.

3) Consistent with subsection (e)(1), in an action where alleged violation of the toxicity water quality standard is based on alleged excursion of a criterion, the person bringing such action shall have the burdens of going forward with proof and of persuasion regarding the general validity and correctness of application of the criterion.

f) Subsections (a) through (d) do not apply to USEPA registered pesticides approved for aquatic application and applied pursuant to the following conditions:

1) Application shall be made in strict accordance with label directions;

2) Applicator shall be properly certified under the provisions of the Federal Insecticide, Fungicide, and Rodenticide Act (7 U.S.C. 135 et seq. (1972));

3) Applications of aquatic pesticides must be in accordance with the laws, regulations and guidelines of all state and federal agencies authorized by law to regulate, use or supervise pesticide applications.

(Source: Amended at _____ Ill. Reg. _____, effective _____)

Section 302.412 Total Ammonia Nitrogen

a) Total ammonia nitrogen must in no case exceed 15 mg/L.

b) The total ammonia nitrogen acute, chronic, and sub-chronic standards are determined by the equations given in subsections (b)(1) and (b)(2) of this Section. Attainment of each standard must be determined by subsections (c) and (d) of this Section in mg/L.

1) The acute standard (AS) is calculated using the following equation:

$$AS = \frac{0.411}{1 + 10^{7.204-pH}} + \frac{58.4}{1 + 10^{pH-7.204}}$$

2) The chronic standard (CS) is calculated using the following equations:

A) During the Early Life Stage Present period, as defined in subsection (e) of this Section:

i) When water temperature is less than or equal to 14.51°C:

$$CS = \left\{ \frac{0.0577}{1+10^{7.688-pH}} + \frac{2.487}{1+10^{pH-7.688}} \right\} (2.85)$$

ii) When water temperature is above 14.51°C:

CERTIFICATE OF SERVICE

I, the undersigned, an attorney, certify that I have served upon the individuals named on the attached Notice of Filing true and correct copies of **CITGO'S POST-HEARING COMMENTS REGARDING REVISIONS TO WATER QUALITY STANDARDS FOR TOTAL DISSOLVED SOLIDS,** via First Class Mail, postage prepaid on June 7, 2007.