TEXAS COMMISSION ON ENVIRONMENTAL QUALITY

Protecting Texas by Reducing and Preventing Pollution

September 4, 2009

TO: All Persons on Mailing List

RE: **TCEQ Docket No. 2009-0912-WR, Application No. 08-4261A to Amend COA No. 08-4261;** In the matter of an amendment to a water right by the **City of Houston.**

The above-referenced matter is scheduled to be considered by the Texas Commission on Environmental Quality on **September 23, 2009** at **9:30 A.M.** in Room 201S, Building E, 12100 Park 35 Circle, Austin, Texas. The Commission will consider whether notice is required for this application, and if so, what type of notice will be required. The Executive Director's memorandum and recommendation and other documents related to this matter may be found at http://www.tceq.state.tx.us/permitting/water_supply/water_rights/wran.html.

Should you need any additional information, please contact Melissa Chao at the Texas Commission on Environmental Quality, Office of the Chief Clerk, (512) 239-3300.

Sincerely,

LaDonna Castañuela
Chief Clerk

LDC/mc

MAILING LIST
CITY OF HOUSTON
TCEQ DOCKET NO. 2009-0912-WR

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TEXAS COMMISSION ON ENVIRONMENTAL QUALITY
INTEROFFICE MEMORANDUM

TO: Commissioners

DATE: June 24, 2009

THRU: Todd Chenoweth, Director
Water Supply Division

FROM: Kellye Rila, Section Manager
Water Rights Permitting & Availability Section

Robin Smith, Attorney
Environmental Law Division

SUBJECT: City of Houston
Docket # 2009-0912-WR
Application No. 08-4261A to Amend Certificate of Adjudication No. 08-4261
Trinity River, Trinity River Basin,
Harris, Polk, Liberty, Chambers, Trinity, and San Jacinto Counties

On June 9, 2006 the Texas Supreme Court issued an opinion in the case of *Marshall v Uncertain*.[1] The Court in that opinion considered the Commission's practices regarding notice and hearing for applications to amend a water right under Texas Water Code (TWC) § 11.122(b). The Court held that it could not determine under the record in that case whether notice and a hearing would be required. The Court remanded the case to the Commission.

The Court held that when reviewing the type of notice required for an amendment to a water right, the Commission must determine whether there could be an adverse impact from the application on other water rights or the environment beyond or irrespective of the full use assumption, explained below. The Court also held that the Commission must determine if the application could have an adverse impact on the public interest criteria: beneficial use, public welfare, groundwater effects, consistency with the state and regional water plan, compliance with administrative requirements, and conservation.

The types of amendments that come within the *Marshall* decision are those amendments that do not already have a specific notice requirement in a rule for that type of amendment and that do not change the amount of water to be taken or the diversion rate. These amendments include changes in use, changes in place of use, or non-substantive changes in a water right.

[1] City of Marshall et. al. v. City of Uncertain et. al., No. 03-1111 (Tx. June 9, 2006).

The purpose of this memo is to discuss the public notice that should be given in the above referenced application by the City of Houston in light of agency rules and the Court's decision in the case of *Marshall*.

Current Authorization and Application for Amendment

The City of Houston (City) currently owns Certificate of Adjudication 08-4261 which authorizes the City, in conjunction with the Trinity River Authority (Owner of Certificate of Adjudication No. 08-4248), to maintain an existing dam and reservoir (Lake Livingston) on the Trinity River, Trinity River Basin, and impound therein not exceed 1,750,000 acre-feet of water.

Certificate of Adjudication No. 08-4261 also authorizes the City to divert and use 444,000 acre-feet of water per year from Lake Livingston for municipal purposes at a diversion rate of 1,700 cfs (765,000 gpm), and to divert and use not to exceed 458,800 acre-feet of water per year from Lake Livingston for industrial purposes at a diversion rate of 775 cfs (348,750 gpm). The time priority of the owner's right is September 23, 1959.

Many special conditions apply which include conditions for releases from Lake Livingston and the subordination of this certificate to numerous other rights in the Trinity River Basin.

The City seeks to amend Certificate of Adjudication No. 08-4261 to add non-consumptive hydroelectric power generation as an additional authorized use for the water rights authorized by Certificate of Adjudication No. 08-4261. The City indicates hydroelectric power generation will only be conducted when water is released from Lake Livingston for another authorized purpose(s) such as water released from Lake Livingston for downstream use, to meet priority calls, or to pass inflows when the conservation storage of Lake Livingston is full.

Rules Related to Notice

The Commission has rules concerning what notice is required for applications to amend a water right in 30 Texas Administrative Code (TAC) § 295.158. There are no rules that specifically provide notice for adding a purpose of use. Under 30 TAC § 295.158(c), no notice is required if no additional consumptive use is contemplated, no increase in diversion rate or period will be granted, and in the judgment of the Commission there is no potential for harming another water right. This application falls under this rule and does not require notice for the reasons set out below.

Texas Water Code

This application for an amendment to an existing water right is governed by TWC § 11.122. TWC § 11.122(a) requires a water right holder, except as discussed above, to obtain a water right amendment if the holder is going to change the purpose of use or "otherwise alter a water right."

TWC § 11.122(b) sets out the scope of the Commission's authority in reviewing applications to amend a water right. Staff notes that, in the application, the City is not asking for either an increase in the amount of water authorized for diversion or an increase in the rate of diversion. With that understanding of the application, it then becomes a duty of the Commission to approve the application *"if the requested change will not cause adverse impact on other water right holders or the environment on the stream of greater magnitude than under circumstances in which the permit . . . that is sought to be amended was fully exercised according to its terms and conditions as they existed before the requested amendment, "* and the application must meet, *"all other applicable requirements,"* of Chapter 11 of the TWC. The clause that requires the Commission to compare the requested amendment to the existing water right as if the existing water right was fully exercised is often referred to as the "full use assumption."

Adverse Impact on Water Right Holders and the Environment

Under the *City of Marshall* opinion, the Commission must evaluate whether an amendment can adversely impair other water rights or the environment beyond the full use assumption. Under the full use assumption, the addition of hydroelectric use can have no greater impact on other water right holders or the environment than the impacts to those interests under the existing certificate because the City is merely seeking to add a non-consumptive purpose of use to Certificate of Adjudication No. 08-4261 and the current special conditions in the certificate will still apply. Adding hydroelectric use would not the change the amount water released or the amount of diversion authorized by the Certificate. Both before and after the amendment the amount of water diverted or released will be the same. Because there is no specific pattern of use in the certificates, the full use assumption requires the Commission to consider the existing certificate and the proposed amended certificate as potentially exercised under all lawful patterns of use.

It makes no difference to other water right holders or the environment, whether the City is adding hydroelectric use to their rights in Lake Livingston. The effect on streamflow, and therefore water available for downstream water right holders or the downstream aquatic environment, will be the same: hydroelectric use is non-consumptive and no additional diversions or releases will be made. Therefore with the full use assumption, the proposed amendment will not cause adverse impact to other water right holders or the environment.

Concerning whether there are impacts to water rights or the environment beyond the full use assumption, the Executive Director believes that there are none for adding a purpose of use. This amendment is to add hydroelectric use to the water authorized by the certificate, and does not change a non-consumptive use to a consumptive use. In fact, the application would add a non-consumptive use.

Unless the existing permit requires a specific pattern of use, the Executive Director does not believe that this is a proper factor to consider because patterns of use change due to weather, time of use, and needs of the applicant, and it cannot be specifically determined ahead of time how an applicant will use its water.

Another issue is whether the Executive Director should consider if the applicant is using all of the water authorized in the existing water right. The Executive Director does not believe that this is a proper factor to consider because it would discourage conservation and future water planning.

Other Applicable Requirements

Under TWC § 11.122(b), the proposed amendment must also satisfy all other applicable requirements of TWC Chapter 11. The Supreme Court in the *Marshall* case itemized those other requirements. We turn now to a consideration of the requested amendments and those other requirements that the Supreme Court has told us are applicable.

Administrative Requirements

Staff has reviewed the application and has found that it meets all administrative requirements of the Texas Water Code Chapter 11. Notice fees have not been requested or paid. Therefore, this application has not been declared administratively complete. In the event the Commission recommends that notice is required, appropriate notice fees will be requested at that time and upon payment of notice fees the application will be declared administratively complete and accepted for filing with the Chief Clerk.

Beneficial Use

Proposed appropriations of state water must be for a beneficial use. Beneficial use is defined in TWC § 11.002(4) as "the use of the amount of water which is economically necessary for a purpose authorized by this chapter, when reasonable intelligence and reasonable diligence are used in applying the water to that purpose and shall include conserved water." The applicant has asked that hydroelectric use be added as an authorized use in their certificate. Hydroelectric use

is recognized as a beneficial use by TWC § 11.023(a)(4). The City will only use water for this purpose when it is released for another purpose to efficiently use its water.

Concerning whether an applicant should only be allowed to change the use for water that is being used, the Executive Director acknowledges that due to the nature of this application the additional use is being limited to water that is already being used, as requested by the applicant. However, in general, the Executive Director believes that limiting the change or additional use to the amount of water currently being used is inappropriate. The fact that the applicant may not be using all of their appropriated water does not mean that there has not been or will not be a beneficial use of the water. In addition, this factor would discourage conservation and future water planning. The cancellation statutes, TWC §§ 11.171 - 11.186, provide that the Commission, in determining whether non-use is justified, will consider whether the purpose of use is consistent with the approved regional water plan. Also, TWC § 11.173(b)(3) exempts from cancellation a water right that was obtained to meet demonstrated long-term public water supply or electric generation needs as evidenced by a water management plan and is consistent with projections of future water needs contained in the state water plan.

We will consider whether the use is non-wasteful under "Avoidance of Waste and Achievement of Water Conservation" below.

Protection of Public Welfare

A proposed appropriation of state water must not be detrimental to the public welfare. No definition of "detriment to public welfare" is provided in the law. Therefore, the Commission has wide discretion in determining benefits or detriments to the public welfare. The City seeks to add hydroelectric use to their existing certificate. This type of multi-use certificate is authorized by TWC § 11.023(e). A multi-use certificate in this situation would allow the City to more efficiently and effectively utilize their existing water supply. The City states that the amendment to Certificate of Adjudication No. 08-4261 to add hydroelectric generation as an additional use will not be detrimental to the public welfare. In fact, the proposed amendment will actually benefit the public welfare by allowing the City to more efficiently and effectively utilize the existing water supply. There are no specific facts that would indicate that this use is not in the public welfare.

The Executive Director does not believe that an applicant should only be allowed to amend the purpose of use for the water that is being used. The Executive Director believes that limiting the change or additional use to the amount of water currently being used is inappropriate for the reasons stated above.

Another issue is whether the applicant should show that the additional use is as beneficial as some other use of the water. The Executive Director believes that this is inappropriate because

TWC §11.024 of the Texas Water Code, which provides for a preference of use, only applies when there are two pending applications for the same water.[2] Also, a law that required the Texas Commission on Environmental Quality (TCEQ) to give preference to municipal use was repealed several years ago. If the TCEQ is to weigh uses in granting permits, and deny permits that it does not think are the best use of the water, this would be a major change in TCEQ policy.

The Executive Director's opinion is that there is no detriment to the public welfare by granting this application.

Groundwater Effects

A proposed appropriation of state water must consider effects of the proposed permit on groundwater or groundwater recharge. The Commission's Water Availability Model (WAM) is used to evaluate the availability of unappropriated water for new appropriations and takes into account both contributions to river flow caused by groundwater coming to the surface in the river (springs) and decreases in river flow caused by the river flowing over recharge features and losing surface water to groundwater recharge. The WAM contains channel loss factors that account for the gain or loss of river flow. These channel loss factors were developed by the expert engineering contractors hired by the Commission to develop the WAMs.

The Trinity WAM includes the segment of the Trinity River (Lake Livingston) where the diversions under this permit occur. The Trinity WAM includes channel loss factors, however there are no channel losses associated with the Trinity River at the permitted diversion point.

Concerning use of the Texas Water Development Board Groundwater Availability Models (GAMs) and information from the University of Texas Bureau of Economic Geology to assess groundwater impact, predictive simulations using the GAMs do not account for streamflow changes associated with permitted surface water withdrawals or return flows. GAMs were not originally designed to address groundwater-surface water interactions and there are issues with using these models for that purpose.[3] The GAMs are regional in nature and are not able to simulate groundwater-surface water interaction in detail.[4] Both the WAMs and the GAMs have

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[2] Although there are no cases directly in point on this issue, *see*, City of San Antonio v. Texas Water Commission, 407.S.W.2d 752, 764 (Tex. 1966) (discussing preferences of use in the context of competing water rights). *See also,* Tex. Water Code § 11.147(c)(6), which provides that a factor for determining beneficial inflow requirements in an application is "the declarations as to **preferences** for competing uses of water as found in TWC § 11.024." (http://web2.westlaw.com/find/default.wl?tf=-1&rs=WLW8.11&ifm=NotSet&fn=_top&sv=Split&tc=-1&docname=TXWAS11.024&ordoc=1034726&findtype=L&db=1000186&vr=2.0&rp=%2ffind%2fdefault.wl&mt=Texas)

[3] Bureau of Economic Geology. 2005. Groundwater-Surface Water Interactions in Texas. August 2005.

[4] Mace, R., Austin, B. Angle, E. and R. Batchelder. 2007. Surface Water and Groundwater Together Again. Paper presented at State Bar of Texas 8th Annual Changing Face of Water Rights in Texas. San Antonio, Texas.

issues related to quantifying groundwater-surface water interaction; however, the WAMs were developed as a tool for surface water permitting.

The Bureau of Economic Geology provides information about aquifer recharge rates.[5] In general, these rates, where quantified, are applicable to aquifers or portions of aquifers. As such, they do not provide sufficient detail to determine interaction between surface and groundwater at discrete points. The application is located in the Lower Trinity Groundwater Conservation District (LTGCD).[6] The Region H Water Planning Group 2006 Regional Water Plan does not indicate issues with groundwater or groundwater recharge directly related to the application.[7]

The amount of water diverted and released by the owner will be the same whether that water is drawn from the Trinity River (Lake Livingston) for the existing or proposed use. Thus, the diversion and release of the full authorized volume of water for the existing uses, municipal and industrial, will have no greater effect on groundwater resources or groundwater recharge than the non-consumptive use of water for hydroelectric power generation. Therefore, the Executive Director concludes that there is no potential groundwater issue involved with this application.

Consistency with Regional and State Plans

Water right applications are only granted if the application addresses a water supply need in a manner that is consistent with the state water plan and the relevant regional water plan, unless the Commission determines that conditions warrant a waiver of this requirement. The purpose of the state and regional water plans is to assess the likely future use of water and to develop strategies for meeting water supply shortfalls. The state and regional water plans generally do not address every possible change in individual water rights. According to the approved regional water plan, hydroelectric generation is important to the economy in the area. Therefore, the Executive Director concludes that because of this statement in the regional water plan and because the state and regional water plans are not designed to cover this specific type of amendment, the requested amendment is consistent with the relevant regional water plan and the state water plan.—If the Commission determines that the amendment is not consistent with the relevant regional water plan and the state water plan, the Executive Director believes that it would warrant a waiver of the consistency requirement.

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[5] Scanlon, B., Dutton, A. and M. Sophocleous. 2002. Groundwater Recharge in Texas. Water Research Fund Grant Contract No. 2000-483-340

[6] http://www.twdb.state.tx.us/mapping/maps/pdf/gcd_only_8x11.pdf

[7] 2006 Regional Water Plan. Prepared as joint venture by Kellogg Brown & Root and Truner Collie & Braden for the Region H Water Planning Group for the Texas Water Development Board. December 2005.

In addition, the applicant states the proposed amendment will not affect issues involving water supply. The City's water rights will still be available to meet demand projections found in the state and regional water plans just as they were prior to this proposed amendment.

Avoidance of Waste and Achievement of Water Conservation

The Commission has adopted rules to specify the type of water conservation plans that will be required for amendments to existing water rights in 30 TAC § 295.9(4). The City is not increasing the amount of the appropriation. The City is adding hydroelectric use to make more efficient use of the water already authorized. The City has submitted a water conservation plan covering all of their current uses. The plan has been reviewed and declared administratively sufficient. Staff finds that the applicant can achieve water conservation and avoid waste.

Conclusion.

This application seeks an amendment to add hydroelectric use to existing municipal and industrial uses. The application does not seek an increase in either the amount of water diverted, or the rate of diversion. Under the full use assumption, the amendment will not have an adverse impact on other water right holders or the environment, and there are no negative impacts to other water rights or the environment beyond the full use assumption. The application does not raise any issues of beneficial use, detriment to the public welfare, groundwater effects, consistency with the state and regional water plans, compliance with administrative requirements, or avoidance of waste and achievement of water conservation. Commission rules, statutes, and case law allow this application to be processed without notice. Therefore, the Executive Director recommends that no notice be issued for this application.

TEXAS COMMISSION ON ENVIRONMENTAL QUALITY
INTEROFFICE MEMORANDUM

TO: Chief Clerk DATE: June 24, 2009

THRU: Iliana Delgado, Team Leader
Water Rights Permitting Team

FROM: Esteban (Steve) Ramos, Project Manager
Water Rights Permitting Team

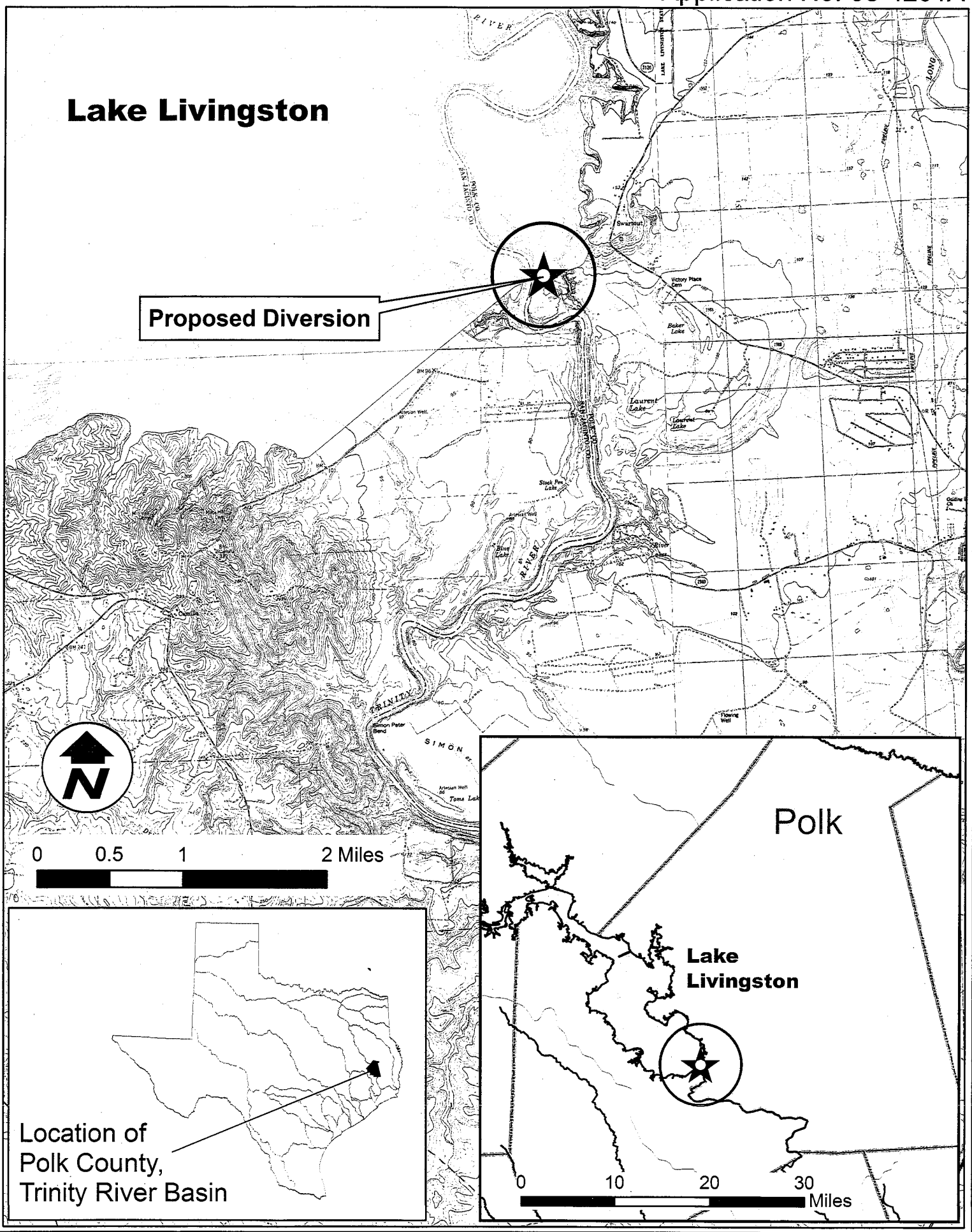
SUBJECT: City of Houston
Docket 2009-0912-WR
ADJ 4261
Application No. 08-4261A to Amend Certificate of Adjudication No. 08-4261
Trinity River, Trinity River Basin,
Harris, Polk, Liberty, Chambers, Trinity, and San Jacinto Counties

Below is the caption for this application:

Consideration of the notice required for the application of the City of Houston to amend its Certificate of Adjudication No. 08-4261 to add non-consumptive hydroelectric power generation as an additional authorized use. Hydroelectric power generation will only be conducted when water is released from Lake Livingston for another authorized purpose(s). Certificate of Adjudication No. 08-4261 currently authorizes the City of Houston in conjunction with the Trinity River Authority (Owner of Certificate of Adjudication No. 08-4248) to maintain an existing dam and reservoir (Lake Livingston) on the Trinity River, Trinity River Basin, and impound therein not exceed 1,750,000 acre-feet of water. Certificate of Adjudication No. 08-4261 also authorizes the City to divert and use 444,000 acre-feet of water per year from the Trinity River (Lake Livingston) for municipal purposes, and to divert and use not to exceed 458,800 acre-feet of water per year from the Trinity River (Lake Livingston) for industrial purposes. Executive Director has prepared a memorandum recommending that no notice be required. (Steve Ramos, Robin Smith)

Docket No. 2009-0912-WR

City of Houston
Application No. 08-4261A



CERTIFICATE OF ADJUDICATION

CERTIFICATE OF ADJUDICATION: 08-4261

OWNER: City of Houston
Water Division Dept.
of Public Works
P. O. Box 1562
Houston, Texas 77002

COUNTIES: Harris, Polk, Liberty, Chambers, Trinity and San Jacinto

PRIORITY DATE: December 30, 1913, and September 23, 1959

WATERCOURSE: Old River, tributary of the Trinity River and the Trinity River

BASIN: Trinity River

WHEREAS, by final decree of the 344th Judicial District Court of Chambers County, in Cause No. 344-10865, In Re; The Adjudication of Water Rights in the Lower Trinity River Segment of the Trinity River Basin and the western portion of the Neches-Trinity Coastal Basin dated October 30, 1985 a right was recognized under Certified Filing 71ABCD, Permit 1970C, Permit 1974A and Permit 2621 to appropriate waters of the State of Texas as set forth below;

NOW, THEREFORE, this certificate of adjudication to appropriate waters of the State of Texas in the Trinity River Basin is issued to the City of Houston, subject to the following terms and conditions:

1. IMPOUNDMENT

A. Owner, in conjunction with the Trinity River Authority of Texas under Certificate of Adjudication 08-4248, is authorized to maintain an existing dam and reservoir (Lake Livingston) on the Trinity River and impound therein not to exceed 1,750,000 acre-feet of water. The east end of the dam is located in the Thomas Bradley Survey, Abstract 98, Polk County, Texas.

B. Owner, in conjunction with the Trinity River Authority of Texas under Certificate of Adjudication 08-4248, is authorized to complete construction of a dam and reservoir (Lake Wallisville) on the Trinity River and impound therein not to exceed 51,600 acre-feet of water. Station 0 + 00 on the centerline of dam bears S 32°29'54"W, 13,906.24 feet from the northwest corner of the S. Burney Grant, Abstract 7, Chambers County, Texas.

C. Owner is authorized to maintain an existing 4700 acre-foot capacity off-channel reservoir (Lynchburg Reservoir). The levee creating said reservoir is located in the Nathanial Lynch Grant, Abstract 44, Harris County.

D. Owner is authorized to temporarily store water diverted from the Trinity River, in Lake Houston located on the San Jacinto River in the San Jacinto River Basin.

2. USE

A. Owner is authorized to divert and use not to exceed 444,000 acre-feet of water per annum from the Trinity River (Lake Livingston) and 10,000 acre-feet of water from the Trinity River (Lake Wallisville-when completed) for municipal purposes.

B. Owner is also authorized to divert and use not to exceed 458,800 acre-feet of water per annum from the Trinity River (Lake Livingston), 28,000 acre-feet of water per annum from the Trinity River (Lake Wallisville-when completed) and 31,600 acre-feet of water per annum directly from the Trinity River for industrial purposes.

C. Owner is authorized to divert and use 13,400 acre-feet of water per annum from the Trinity River and Old River to irrigate a maximum of 9350 acres of land within Chambers and Liberty Counties.

D. Owner is authorized to divert and use water authorized under this certificate and stored in Lake Houston and Lynchburg Reservoir for municipal and industrial purposes only.

E. Owner is authorized to use the water impounded in the aforesaid on-channel reservoirs for recreation purposes.

3. DIVERSION

A. Location and rate:

(1) At a point on the Trinity River in the John A. Williams Grant, Abstract 119, Liberty County, Texas, at a maximum rate of not to exceed 1700 cfs (765,000 gpm).

(2) At a point on the Trinity River in the Theodore Dorsett Grant, Abstract 27, Liberty County, Texas, at a maximum rate of not to exceed 775 cfs (348,750 gpm).

(3) At a point on the Old River in the Henry Griffith Grant, Abstract 12, Chambers County, Texas, at a maximum rate of 288 cfs (129,600 gpm).

(4) At a point on the Trinity River in the B.B.B.& C. RR Co. Survey, Abstract 58, Chambers County, Texas, at a unspecified rate.

B. Maximum combined rate: 3400 cfs (1,530,000 gpm) upon completion of Lake Wallisville Dam.

4. PRIORITY

A. The time priority of owner's right is December 30, 1913 to divert and use 31,600 acre-feet of water per annum for industrial purposes; 13,400 acre-feet of water per annum for irrigation purposes at a diversion rate of 288 cfs (129,600 gpm) at diversion point No. 3.

B. The time priority of owner's right is September 23, 1959 to divert and use 444,000 acre-feet of water per annum for municipal purposes and 458,800 acre-feet of water per annum for industrial purposes at a diversion rate of 1700 cfs (765,000 gpm) at diversion point No. 1 and 775 cfs (348,750 gpm) at diversion point No. 2.

C. Upon completion of Lake Wallisville Dam and Reservoir the time priority of owner's right is September 23, 1959 to divert the remaining 10,000 acre-feet of water per annum for municipal purposes; the remaining 28,000 acre-feet of water for industrial purpose and the maximum combined diversion rate of 3400 cfs (1,530,000 gpm).

5. SPECIAL CONDITIONS

A. Owners shall maintain a sluiceway in the aforesaid Lake Livingston Dam at a bottom elevation of not more than seventy (70) feet above mean sea level, having an opening of not less than ninety-six (96) inches in diameter and equipped with a regulating gate for the purpose of allowing the free passage through the dam at all times of those waters to which lower users are lawfully entitled. Whenever the Commission finds that the owners are storing any waters to which downstream appropriators or lawful diverters are entitled, the owners shall release same to said appropriators or lawful diverters on the order of the Texas Water Commission.

B. Owners are authorized and required to operate the Lake Livingston dam and reservoir described in this certificate of adjudication in conjunction with the Lake Wallisville dam and reservoir which are required to be constructed on the Trinity River in Chambers County, Texas. The total water available

from both projects shall be divided between the owners so that the City shall receive seventy per cent (70%) and the Authority shall receive thirty per cent (30%) thereof and that the specific quantitities for each shall, if necessary, be adjusted so as to divide the total available water between the owners in such proportions.

C. Owner shall install and maintain a metering instrument at each diversion point which will automatically record the total amount of water diverted. Owner shall make determinations of water surface elevations in Lake Livingston Reservoir by means of recording gauges set to U. S. Coast and Geodetic Survey datum, each of which shall be protected by a well house designed for such purposes and the Commission shall be furnished complete records of such determinations. Owners shall relocate, or cause to be relocated, all existing stream flow stations which may be inundated or impaired by the reservoir and establish, or cause to be established, such other recording stream flow stations as the Commission may deem necessary to record inflows into the reservoir. Owner shall maintain daily records of waters released through the reservoir authorized herein for downstream use. All stream flow stations shall be set to the same datum described above and the Commission shall be furnished complete records of the data herein required to be kept. The metering instruments, the gauges for well houses, and the stream flow stations and the installation, design and operation thereof shall be subject to approval of the Commission.

D. Owner is authorized to use the bed and banks of the Trinity River, below the aforesaid dams (Lake Livingston and Lake Wallisville), to convey and deliver water to be appropriated hereunder to downstream diversion points.

E. Owner is authorized to use all of the water diverted from the Trinity River Basin in the San Jacinto River Basin, the Trinity-San Jacinto, the San Jacinto-Brazos, and the western portion of the Neches-Trinity Coastal Basins, excluding Bolivar Peninsula.

F. Owner is authorized to convey the water diverted from the Trinity River at Diversion Point No. 1 authorized herein by pipeline, canal and the bed and banks of Luce Bayou, for temporary storage in Lake Houston located on the San Jacinto River in the San Jacinto River Basin.

G. Owner's use of the bed and banks of Luce Bayou as authorized herein shall not interfere with any rights held under Certificate of Adjudication 10-3979 in the San Jacinto River Basin issued by the Commission. Any plans and specifications in connection with such use shall make all necessary and specific provisions for the protection of the on-channel reservoir, the off-channel reservoir and the pumping facilities authorized by such certificate of adjudication and all other rights in connection therewith.

H. Owner's right is subordinate to any claim on waters of the Trinity River Basin imported into and/or originating in and above Lake Lewisville Reservoir, Grapevine Reservoir, Lake Worth Reservoir, and Lake Ray Hubbard Reservoir, and shall not constitute any limitation upon the granting of permits by the Commission for the impoundment and use of waters above the said four named reservoirs.

I. This certificate is further subordinate to any claim on waters imported and/or originating in the Trinity River Basin above Lake Livingston reservoir authorized herein, that could be impounded by: 1) existing reservoirs; 2) by reservoirs for which permits have been granted or certificates of adjudication issued and the construction of such reservoirs is

incomplete; 3) by reservoirs for which applications are now pending before the Commission; or 4) by the following proposed reservoirs as shown in the Master Plan Report of the Trinity River Authority of Texas dated April 18, 1958, but only to the extent necessary to insure a dependable yield from each such proposed reservoir as shown opposite the respective names, to-wit:

Reservoir Name	Dependable Yield (MGD)*
Big Fossil	0.5
Tehuacana	61.0
Tennessee Colony	362.0
Upper Keechi	13.6
Lower Keechi	20.5
Big Elkhart	11.0
Little Elkhart	6.2
Hurricane Bayou	15.6
Bedias	95.5
Nelson	14.6
Harmon	7.4
Gail	16.6
Mustang	13.2
Caney	13.5
Long King	18.5

*Million Gallons per Day

It is the intent herein that this certificate of adjudication shall not constitute a prior claim against upstream flows necessary to produce dependable yields in the aggregate amount from future reservoirs hereinabove listed. Except for the Tennessee Colony Reservoir, nothing herein shall prohibit the construction of future reservoirs at different locations, of different dimensions, or the combination of reservoirs as substitutes for the above-listed future reservoirs; provided, however, that such modifications in dimensions, locations or the combination of reservoirs shall not diminish the dependable yield of the reservoir authorized herein in excess of the diminution which would be occasioned by the construction of such reservoirs with the respective dependable yields as hereinabove listed. Tennessee Colony Reservoir may be modified as to location and dimension provided that any such modification shall likewise not further diminish the dependable yield of the reservoir authorized herein.

J. This certificate of adjudication is specifically subordinate to the present and future use and reuse and consumptive use of any return flows from waters impounded in each of the existing and above described proposed reservoirs and the return flows from water imported into the river basin, for municipal and industrial purposes within the Trinity River Basin above Lake Livingston notwithstanding the re-entry of such return flows into a public stream they may nevertheless be used again, diverted and routed through such treatment facilities as may be considered necessary for their purification, under authority of permits heretofore or hereafter issued by the Texas Water Commission for such purposes in the upstream watershed. This certificate is also subordinate to the present and future use and reuse for navigation purposes of the return flows from the metropolitan areas of Dallas and Fort Worth in their natural flowing state and by impoundment in pools created by locks and appurtenances within the river and navigation channels; and further, such return flows shall be allowed to pass through the reservoir authorized herein to the extent necessary to provide navigation below said reservoir and the rights hereby acquired shall be subordinate to such uses.

K. Owner may divert water from Diversion Point No. 1 not to exceed 902,800 acre-feet of water per annum. Owner may divert from Diversion Point No. 2 up to 450,000 acre-feet of water per annum, provided that the total amount diverted at both diversion points must not exceed a total of 902,800 acre-feet of water per annum.

L. Owner may not exercise the right to divert and use that portion of the water authorized herein which is to be diverted from Lake Wallisville for any purposes until construction of the aforesaid reservoir is complete and owner applies for and is granted a diversion point or points and a rate of diversion from said reservoir.

M. Construction of the Wallisville dam, reservoir and related facilities authorized or required by this certificate of adjudication shall be in accordance with plans approved by the Texas Water Commission and shall be started and completed within the time limits established by the Commission.

N. Owner shall maintain a suitable outlet in the aforesaid dams authorized herein to allow the free passage of water that owner is not entitled to divert or impound.

O. Owner shall make no diversions of water from the diversion points, downstream of the Lake Wallisville dam, except to the extent that water for such diversions is released from the aforesaid reservoir.

The locations of pertinent features related to this certificate are shown on Pages 16, 18, 20 and 21 of the Lower Trinity River Segment Certificates of Adjudication Maps, copies of which are located in the offices of the Texas Water Commission, Austin, Texas and the Harris, Polk, Liberty, Chambers, Trinity and San Jacinto County Clerks.

This certificate of adjudication is issued subject to all terms, conditions and provisions in the final decree of the 344th Judicial District Court of Chambers County, Texas, in Cause No. 344-10865, In Re: The Adjudication of Water Rights in the Lower Trinity River Segment of the Trinity River Basin and the western portion of the Neches-Trinity Coastal Basin dated October 30, 1985 and supersedes all rights of the owner asserted in that cause.

This certificate of adjudication is issued subject to senior and superior water rights in the Trinity River Basin.

This certificate of adjudication is issued subject to the Rules of the Texas Water Commission and its continuing right of supervision of State water resources consistent with the public policy of the State as set forth in the Texas Water Code.

TEXAS WATER COMMISSION

Paul Hopkins

Paul Hopkins, Chairman

DATE ISSUED:

JUN 9 1986

ATTEST:

Mary Ann Hefner

Mary Ann Hefner, Chief Clerk

8-4261-B-6

TEXAS COMMISSION ON ENVIRONMENTAL QUALITY

AMENDMENT TO A CERTIFICATE OF ADJUDICATION

CERTIFICATE NO. 08-4261B

TYPE § 11.122

Owner: City of Houston

Address: 611 Walker
Houston, Texas
77002

Filed: April 29, 2009

Granted: MAY 05 2009

Purposes: Municipal, Agricultural, Industrial, and Recreation

Counties: Harris, Polk, Liberty, Chambers, Trinity, and San Jacinto

Watercourse: Trinity River

Watershed: Trinity River Basin

WHEREAS, Certificate of Adjudication No. 08-4261 authorizes the City of Houston to maintain multiple dams and reservoirs on the Trinity River, Trinity River Basin, and an off channel reservoir for recreation purposes. Certificate of Adjudication No. 08-4261 also authorizes the City of Houston divert and use water from three points on the Trinity River, and one point on the Old River for municipal, agricultural and industrial purposes at a maximum combined diversion rate of 3,400 cfs (1,530,000 gpm). Multiple Special Conditions apply; and

WHEREAS, the City of Houston has a concurrent pending application, designated as application No 08-4261A; and

WHEREAS, the Owner requests a correction to Certificate of Adjudication No. 08-4261 to include a fifth diversion point which was inadvertently omitted during the drafting of the Certificate, but was included in the Final Determination and the Final Judgement of the City's adjudication of it's water right; and

WHEREAS, pursuant to 30 Texas Administrative Code § 50.145, the Executive Director, on his own motion or at the request of a permittee, may make a nonsubstantive correction to a permit without formal amendment and public notice procedures to correct a clerical error and to describe more accurately the point of diversion; and

WHEREAS, the Texas Commission on Environmental Quality finds that jurisdiction over the application is established; and

WHEREAS, no requests for a contested case hearing were received for this application; and

WHEREAS, the Commission has complied with the requirements of the Texas Water Code and rules of the Texas Commission on Environmental Quality in issuing this amendment;

NOW, THEREFORE, this amendment to Certificate of Adjudication No. 08-4261 designated Certificate of Adjudication No. 08-4261B, is issued to the City of Houston, subject to the following conditions:

1. DIVERSION

a) In addition to the previous authorization, Owner is now authorized to divert water from a point on the Trinity River which bears S 48° 19'W, 1109 feet from the northeast corner of the William Whitlock Survey, Abstract No 118, in Liberty County, Texas.

b) In addition to the previous authorization, Owner is authorized to divert the water from the new diversion point at a maximum rate of 775.0 cfs (348,750gpm), and a combined maximum diversion rate of 3400.0 cfs (1,530,000 gpm) for all points authorized by the Certificate.

This amendment is issued subject to all terms, conditions and provisions contained in Certificate of Adjudication No. 08-4261, except as specifically amended herein.

This amendment is issued subject to all superior and senior water rights in the Trinity River Basin.

Owner agrees to be bound by the terms, conditions and provisions contained herein and such agreement is a condition precedent to the granting of this amendment.

All other matters requested in the application which are not specifically granted by this amendment are denied.

This amendment is issued subject to the Rules of the Texas Commission on Environmental Quality and to the right of continuing supervision of State water resources exercised by the Commission.

For the Commission

Date issued: MAY 05 2009

TEXAS COMMISSION ON ENVIRONMENTAL QUALITY

P.O. Box 13088, MC-160
Austin, Texas 78711-3088
Telephone No. (512) 239-4691 FAX (512) 239-4770

APPLICATION FOR AMENDMENT TO A WATER RIGHT

☐ REQUIRING MAILED AND PUBLISHED NOTICE
X NOT REQUIRING MAILED AND PUBLISHED NOTICE

Reference Texas Administrative Code § 295.158(b) or (c)

Notice: This form will not be processed until all delinquent fees and/or penalties owed to the TCEQ or the Office of the Attorney General on behalf of the TCEQ are paid in accordance with the Delinquent Fee and Penalty Protocol.

Customer Reference Number (if issued): CN600128995

Note: If you do not have a Customer Reference Number, complete Section II of the Core Data Form (TCEQ-10400) and submit it with this application.

1. Name: City of Houston c/o Michael S. Marcotte, P.E., D.WRE, BCEE, Director of Public Works & Engineering
   Address: 611 Walker, 25th Floor
   Houston, TX 77002
   Email Address: _____ Fax: (713) 837-0435

2. Applicant owes fees or penalties? NO

   If yes, provide the amount and the nature of the fee or penalty as well as any identifying number:

3. ☐ Permit No. _____ ☒ Certificate of Adjudication No. 08-4261

   Stream: Trinity River Watershed: Trinity River Basin
   Reservoir (present condition, if one exists): Good

   County: Trinity

4. Proposed Changes To Water Right Authorizations:

   Add additional use for the purpose of hydroelectric power generation - see attached supplemental statement for additional information.

   (ATTACH ADDITIONAL PAGE AS NECESSARY, ATTACH MAP/PLAT DEPICTING PROJECT LOCATION, DIVERSION POINT, PLACE OF USE AND OTHER PERTINENT DATA)

5. I understand the Agency may require additional information in regard to the requested amendment before considering this application.

6. I have partially submitted the required fees herewith. Please calculate any additional required fees and notify us of the amount.

City of Houston

By: [signature]
Michael Marcotte, P.E., D.WRE, BCEE,
Its: Director of Public Works & Engineering

Subscribed and sworn to me as being true and correct before me this 6th day of ~~January~~ February, 2009.

GUADALUPE V. MUSSIO
Notary Public, State of Texas
My Commission Expires 06/20/2012

[signature]
Notary Public, State of Texas

SUPPLEMENTAL STATEMENT IN SUPPORT OF THE CITY OF HOUSTON'S APPLICATION TO AMEND CERTIFICATE OF ADJUDICATION 08-4261

I. OWNER

City of Houston is a municipal corporation, body politic and Home Rule City created and operating pursuant to the Constitution and applicable general laws of the State of Texas. As evidenced by Certificate of Adjudication No. 08-4261, Houston owns the right to store and beneficially use water stored in Lake Livingston Dam and Reservoir on the Trinity River, which was constructed and is operated in cooperation with the Trinity River Authority pursuant to a contract dated September 2, 1964.

II. BACKGROUND

Certificate of Adjudication 08-4261 authorizes Houston, in conjunction with the Trinity River Authority[1] to maintain an existing dam and reservoir (Lake Livingston) on the Trinity River Basin, and impound therein not to exceed 1,750,000 acre-feet of water. Certificate of Adjudication 08-4261 authorizes Houston to divert and use, not to exceed, 898,800 acre-feet of water to use for domestic, municipal, industrial, and agricultural purposes. A copy of Certificate of Adjudication No. 08-4261 is attached hereto as Appendix 1. The Trinity River Authority's rights in Lake Livingston are evidenced by Certificate of Adjudication No. 08-4248.

III. CHANGE PROPOSED

Houston seeks to add non-consumptive hydroelectric power generation as an additional authorized use of the water rights authorized by Certificate of Adjudication No. 08-4261. Hydroelectric power generation will only be conducted when water is released from Lake Livingston for another authorized purpose(s) (*e.g.*, water released from Lake Livingston for downstream use, to meet priority calls, or to pass inflows when the conservation storage of Lake Livingston is full).

IV. REASON FOR CHANGE

Houston and the Trinity River Authority have negotiated a memorandum of understanding with East Texas Electric Cooperative ("ETEC") to generate renewable hydroelectric power at Livingston Dam (the "ETEC MOU"). A copy of the ETEC MOU is attached hereto as Appendix 2.

V. NOTICE

This amendment application is filed pursuant to Section 11.122(b), Texas Water Code. For the reasons set forth below, notwithstanding the Texas Supreme Court's decision in *City of Uncertain v. City of Marshall*, 206 SW3d 97 (Tex. 2006), no notice is required for this amendment. The changes contemplated by this Application, when granted, will not have any

[1] The Trinity River Authority is filing a complimentary application to amend Certificate of Adjudication No. 08-4248 to seek authorization to use the waters released from Lake Livingston for hydroelectric power purposes.

increased impact on downstream water right holders or the environment greater than the existing impact of currently authorized operations under Certificate of Adjudication 08-4261, as it exists prior to this amendment. Moreover, there are no public welfare issues associated with this amendment, nor is there any requirement for this type of amendment to be considered in the applicable water plans. The proposed amendment will not have any effect on groundwater resources as the generation of hydroelectric power will be wholly ancilliary to existing releases from Lake Livingston. Finally, Houston has an approved water conservation and drought management plan, a copy of which is attached hereto as Appendix 3. The City's analysis of the *Marshall* decision is discussed in greater detail below.

On June 9, 2006, the Texas Supreme Court ruled on the issue of whether notice and an opportunity for hearing are required when a proposed water right amendment filed pursuant to Section 11.122(b), Texas Water Code, requests to add or change purposes of use, but does not seek to increase the amount of water diverted or the rate at which such water is diverted. *See Marshall, supra.* Although the *Marshall* Court did conclude that the "full-use assumption" was intended to limit the TCEQ's evaluation, the Court found that TCEQ, when issuing a water right amendment, cannot limit its evaluation to whether the requested change adversely impacts other water right holders or the environment. The Court concluded that TCEQ must also assess several "limited public interest criteria" in determining whether to issue notice on an application to amend a water right filed under Section 11.122(b). Such criteria include those found in Texas Water Code, Section 11.134(b) that are not 1) specifically identified in Section 11.122(b) (*i.e.*, ". . . that the requested change does not adversely impact other water rights holders or the on-stream environment any more than would full use of the permitted right"), or 2) those criteria that are inapplicable to the proposed water right amendment.

For a water right amendment that does not seek to increase the amount or rate of diversion, the *Marshall* Court concluded that the "other applicable requirements" of Chapter 11 to which Section 11.122(b) refers include: 1) whether the application conforms with the agency's administrative requirements; 2) whether the amendment is intended for a beneficial use; 3) whether the amendment is not detrimental to the public welfare; 4) the effects, if any, of the application on groundwater or groundwater recharge; 5) whether the amendment is consistent with the state water plan and regional water plan; and, 6) whether the applicant has provided evidence that reasonable diligence will be used to avoid waste and achieve water conservation. In its decision, the *Marshall* Court indicated that TCEQ should be able to determine "from the face of a proposed amendment" whether these criteria are met or "are not implicated by a particular amendment application," in which event a contested case hearing is not necessary.

The Court did not require TCEQ to issue notice or provide an opportunity for a contested case hearing if, in its review of an application, the agency could determine "from the face of a proposed amendment" that such criteria had been met or were not implicated by the amendment. For the reasons set forth below, including the full-use assumption, the City believes that the Commission can issue the City's proposed amendment to authorize hydroelectric power as a purpose of use to Certificate of Adjudication No. 08-4261 without notice pursuant to TCEQ regulations at 30 TAC § 295.158(c) and in compliance with the direction of the Supreme Court in *Marshall*. The information set forth below supports this conclusion:

A. Applicant Information

Name of Applicant	The City of Houston
Address:	611 Walker, 25th Floor Houston, Texas 77002
Principal Contact:	Michael Marcotte, P.E., D.WRE, BCEE, Director of Public Works & Engineering
Telephone:	(713) 837-0448
Fax:	(713) 837-0435

B. Administrative Requirements and Fees

This Application, including the attachments hereto, provides relevant information to address the pertinent requirements of Texas law, including by way of example administrative requirements of 30 TAC § 295, Subchapter A and the requirements of Texas Water Code Chapter 11, necessary to amend the Certificate pursuant to Section 11.122(b), Texas Water Code.

In accordance with 30 TAC § 295.131 and subsequent rules relating to fees, the City is enclosing Check No. 6433 payable to TCEQ in the amount of $125.00 in payment of the application fee and preliminary estimated recording fees. The City requests TCEQ to determine any additional information or fees that may be required. Upon receipt of such determination, the City will forward such additional information and fees to the Commission, as may be requested.

C. Beneficial Use

Section 11.134(b)(3)(A), Texas Water Code, requires that proposed appropriations of water be intended for a beneficial use. The "beneficial use" of water is defined in Section 11.002(4), Texas Water Code, and 30 TAC § 297.1(8), as the use of water "which is economically necessary for a purpose authorized by [Chapter 11 of the Texas Water Code]." The use of water for hydroelectric power generation purposes is identified in both Section 11.023(a)(4) and 11.024(4), Texas Water Code, as a purpose for which water may be diverted and beneficially used. Hydropower use is defined in 30 TAC § 297.1(23) as "the use of water for hydroelectric and hydromechanical power and for other mechanical devices of like nature."

The City intends for its hydroelectric power generation use of the existing water authorized by Certificate of Adjudication No. 08-4261 to be secondary and, in fact, purely an incidental by-product to its existing authorized diversions and releases for municipal, industrial and irrigation purposes. Specifically, hydroelectric power generation use will only occur when the City releases water from Lake Livingston for its existing downstream uses or to meet other requirements of the terms and conditions of the Certificate and/or Texas law. The City does not anticipate modifying its schedule for releases and/or its downstream usage patterns either to accommodate or facilitate the requested hydroelectric power generation use.

By utilizing its existing water rights to facilitate hydroelectric power generation the City is assisting in the creation of a beneficial renewal energy source and receiving some compensation capable of being used to offset the City's overall operations costs at no additional cost to its customers or taxpayers. The City's proposed amendment will simply enhance the City's ability to make more efficient non-consumptive beneficial use of the water authorized for

diversion under Certificate of Adjudication No. 08-4261. Thus, for both economic and conservation purposes, it is beneficial and necessary for the City to secure the requested hydroelectric power generation use authorization.

D. Public Welfare

As discussed above, the proposed amendment will enhance the City's ability to continue to provide water for beneficial use purposes, as defined under the Texas Water Code. Such action is consistent with the City's intent to protect the public welfare, and will certainly not be detrimental to the public welfare, as is addressed by Texas Water Code Section 11.134(b)(3)(C). The proposed amendment will benefit the public welfare by improving the City's ability to more effectively and efficiently utilize its existing water supplies to address multiple demands for water, including non-consumptive use of water to create a renewable, lower cost energy source with less environmental impacts to other natural resources, *i.e.,* our air supply in a region of the state already under a State Improvement Plan ("SIP") for air attainment, as well as generate revenues to off-set customer costs.

The non-consumptive use of non-potable water to generate electricity as a renewable energy source at no cost to the City's water ratepayers and, in fact, at a profit provides a benefit to the public. Additionally, the City's proposed amendment will not result in environmental impacts, as water will continue to be diverted and utilized within the confines of Certificate of Adjudication No. 08-4261's existing amount, diversion point, rate of diversion, and pattern of diversions. The City's proposed addition of hydroelectric power generation use authorization under its existing water right will not result in the diversion or consumption of any additional water supplies, but will allow the City to maximize the efficient beneficial use of its existing water supplies. As discussed, by this amendment the City is not seeking to increase either its authorized amount of diversions or the rate at which water will be diverted. Thus, based upon the above-outlined reasons, the proposed amendment is not detrimental to the public welfare.

E. Effects on Groundwater or Groundwater Recharge

There is no significant connection, if any, between groundwater resources or groundwater recharge and the City's diversion of water for currently authorized purposes from Lake Livingston. Simply adding a non-consumptive hydroelectric power generation purpose of use to the City's existing water right, without changing the volume of water proposed to be diverted, the location, or the rate at which water is diverted from Lake Livingston, will have no effect on groundwater resources or groundwater recharge to any greater degree than would the City's existing use of water. Water will continue to be released in the same volumes and usage patterns to meet the City's existing needs as it historically has been. The only change to Certificate of Adjudication No. 08-4261 is the addition of the beneficial non-consumptive use of the water for hydroelectric power generation as water is released from the dam. Thus, groundwater resources and groundwater recharge are not implicated by this particular amendment Application.

F. Consistency with State and Regional Water Plans

The City's proposed amendment to add an additional non-consumptive use to its existing authorization is consistent with applicable water plans. The purpose of this amendment is to enable the City to enhance its efficient use of the state water authorized by Certificate of Adjudication No. 08-4261. The City's amended water right will continue to be available to meet

the demand projections found in the State and Regional Water Plans just as it was prior to granting the amendment.

G. Water Conservation, Drought Contingency and Avoidance of Waste

The City's water conservation and drought contingency plans have been reviewed and revised by its consulting engineers and such revised plans were formally amended by the City. These plans include provisions that allow the City to enforce conservation of supplies on customers, thereby reducing the consumption of water, and the loss or waste of water, so that a water supply is made available for future or alternative uses. The City's drought contingency plan is applicable to all consumptive users. As noted above, the request to add a non-consumptive use of the City's existing water rights enhances the beneficial use, as well as conservation of those water rights. There is no need for the City to amend its plan to specifically address the addition of the proposed non-consumptive hydroelectric power generation use, which will be ancillary and secondary to the existing ongoing uses.

As defined in both 30 TAC § 295.9 and Texas Water Code § 11.002(8), "conservation" means those practices that will "reduce the consumption of water, reduce the loss or waste of water, *improve the efficiency in the use of water,* or increase the recycling and reuse of water so that a water supply is made available for future or alternative uses." [Emphasis added]. The City has an acute awareness of the need to conserve its water supplies. By amending Certificate of Adjudication No. 08-4261 to allow for non-consumptive hydroelectric power generation purposes in addition to industrial and municipal purposes, the City is more efficiently and effectively utilizing its water supplies. Such efficiency, along with the City's water conservation and drought contingency plans, will allow the City to address its water supply needs in a manner that will allow it to avoid waste and achieve water conservation.

H. <u>Impacts on Other Water Rights Holders or the On-Stream Environment</u>

1. The Full-Use Assumption

The City's proposed amendment to add a non-consumptive beneficial purpose of use *e.g.*, hydroelectric power generation, to Certificate of Adjudication No. 08-4261 will not have an impact on other water right holders or the on-stream environment on the Trinity River. Unless provided otherwise in a water right, there is no restriction against full consumption of water properly authorized for diversion by the state. The City is currently authorized to divert and fully consume up to 898,800 acre-feet of water per annum pursuant to Certificate of Adjudication No. 08-4261, and pursuant to Texas Water Code § 11.046(c), which provides that water authorized for diversion can be "beneficially used and reused" without limit. While TCEQ has issued some water rights that require a certain percentage of return flows to the basin of origin, or an express limitation on consumption, the City's Certificate of Adjudication No. 08-4261 contains no such restriction.

In this instance, the proposed additional beneficial non-consumptive use of the water for hydroelectric power generation incident to releases from Lake Livingston for existing authorized beneficial uses will not result in the consumption of the water. Accordingly, the City's use of a portion of its 898,800 acre-feet of water rights for hydroelectric power generation purposes will not cause an adverse impact on other water rights holders or the on-stream environment because of the non-consumptive nature of the use. Even assuming that hydroelectric power generation

was a consumptive beneficial use, the impact of such use would not be of a greater magnitude than if the City fully exercised its rights as currently authorized in Certificate of Adjudication No. 08-4261. By employing the Water Code's "full use assumption," there is no circumstance under which either downstream water rights or the environment will be harmed by the City's proposed non-consumptive use amendment.

The City does not seek to move or add a diversion point, increase the rate at which it diverts water, alter the patterns of its usage, or increase the amount of water the City is currently authorized to divert and fully consume in order to use the water for the proposed hydroelectric power generation purposes. The City merely seeks to add a non-consumptive purpose of use to Certificate of Adjudication No. 08-4261 so that the City will have the ability to provide ETEC the opportunity to produce a renewable, environmentally friendly energy resource. Accordingly, there will be no adverse impact.

2. Impacts "Beyond or Irrespective" of the Full-Use Assumption

In its *Marshall* decision, the Texas Supreme Court suggests that TCEQ must evaluate whether a proposed amendment will affect other water-rights holders or the on-stream environment "beyond or irrespective" of the full-use assumption. The Court provides that such an affect may occur with applications seeking to move the point of diversion "upstream above a senior right holder," or seeking to change the purpose of use from a "nonconsumptive use to a consumptive one." The City's Application seeks neither of these types of amendments and, in light of the absence of a change in a diversion point and the non-consumptive nature of the proposed additional use, the amendment on its face will not affect or impact other water right holders or the environment even as much as the legislatively mandated full-use assumption right would.

The City's water right currently includes an authorization to divert, without any limitation or condition on consumption, up to 898,800 acre-feet of water per annum under a municipal purpose of use authorization. The City's proposed amendment seeks only to add (not to change) a non-consumptive hydroelectric power purpose of use. The addition of a hydroelectric power generation purpose of use does not in any way alter the amount of water the City is already authorized to consume under its water right. Again, with its Application, the City merely seeks the ability to enhance the efficient beneficial use of its water supply within the current parameters of Certificate of Adjudication No. 08-4261.

IV. Additional Information

To the extent additional information regarding the City's proposed amendment to Certificate of Adjudication No. 08-4261 is required, please contact the City's water rights attorney, Ed McCarthy. Mr. McCarthy can be reached in Austin, Texas at the following:

Edmond R. McCarthy, Jr.
Jackson, Sjoberg, McCarthy & Wilson, LLP
711 W. 7th Street
Austin, Texas 78701
Tel: (512) 225-5606
Fax: (512) 225-5565
emccarthy@jacksonsjoberg.com

TEXAS COMMISSION ON ENVIRONMENTAL QUALITY

Protecting Texas by Reducing and Preventing Pollution

April 7, 2009

Edmond R. McCarthy, Jr
Jackson, Sjoberg, McCarthy & Wilson, LLP
711 W. 7th Street
Austin, Texas 78701-3503

CERTIFIED MAIL

RE: City of Houston
ADJ 4261
CN600128995, RN105645519
Application No. 08-4261A to Amend Certificate of Adjudication No. 08-4261
TWC §11.122
Old River, Tributary of the Trinity River, Trinity River Basin,
Harris, Polk, Liberty, Chambers, Trinity, and San Jacinto Counties

Dear Mr. McCarthy:

This acknowledges receipt, on February 12, 2009, of the referenced application and fees in the amount of $125.00 (receipt No. R918015 enclosed).

The Commission is reviewing notice requirements for water right amendment applications pursuant to Texas Water Code (TWC) §11.122(b). On Friday, January 18, 2008, the Commission decided that in order to determine if an amendment application requires notice, staff must consider how an application addresses the relevant public interest criteria described in TWC §11.134 and outlined by the Texas Supreme Court in the case of *Marshall v. Uncertain* as well as how the proposed amendment will or will not impact water right holders or the environment beyond and irrespective of the fact that the water right can be used to its full authorized amount.

Therefore, staff is requesting responses to Items 1-7 below. In lieu of providing responses, the applicant may agree to the issuance of published notice and mailed notice to the water right holders of recorder in the Trinity River Basin.

Staff acknowledges that the applicant addressed or partially addressed Items 1-7 in the application submitted. Please confirm whether the applicant chooses to supplement its previous response

If you elect to proceed without agreeing to published and mailed notice, additional information is required.

1. Confirm whether this application meets the administrative requirements for an amendment to a water use permit pursuant to TWC Chapter 11 and Title 30 Texas Administrative Code (TAC) §§

281, 295, and 297. An amendment application should include, but is not limited to, a sworn application, maps, completed conservation plan, fees, etc.

2. Discuss how the proposed amendment is a beneficial use of the water right as defined in TWC §11.002 and listed in TWC §11.023. Identify the specific proposed use of the water (e.g., road construction, hydrostatic testing, etc.) for which the amendment is requested.

3. Explain how the proposed amendment is not detrimental to the public welfare. Consider any public welfare matters you think might be relevant to a decision on the application. Examples could include concerns related to the well-being of humans and the environment.

4. Discuss the effects, if any, of the proposed amendment on groundwater or groundwater recharge.

5. Describe how the proposed amendment addresses a water supply need in a manner that is consistent with the state water plan or the applicable approved regional water plan for any area in which the proposed appropriation is located or, in the alternative, describe conditions that warrant a waiver of this requirement. The state and regional water plans are available for download at this website: http://www.twdb.state.tx.us/RWPG/planning_page.asp.

6. Provide evidence that reasonable diligence will be used to avoid waste and achieve water conservation as defined in TWC §11.002. Examples of evidence could include, but are not limited to, a water conservation plan or, if required, a drought contingency plan, meeting the requirements of 30 TAC §288.

7. Explain how the proposed amendment will or will not impact water right holders or the environment beyond and irrespective of the fact that the water right can be used to its full authorized amount.

The responses will be reviewed by the Executive Director's staff to make a determination of the application's notice requirement. The staff-recommended notice determination may then be set on Commissioner's Agenda for consideration. In lieu of responding to Items 1-7 above, the applicant may agree to published notice and mailed notice to the water right holders of record in the Trinity River Basin.

If you elect to proceed with published notice and mailed notice, please remit fees in the amount of $451.86 described below.

Filing Fee	$ 100.00
Recording Fee	$ 1.25
Notice Fee (Trinity River Basin)*	$ 475.64
TOTAL FEES DUE	$ 576.89
FEES PAID	$ 125.00
BALANCE DUE	$ 451.86

(*If you elect not to proceed with published notice and mailed notice and have provide a response to items 1-7 listed above, no additional fees are required)

In addition to the information and fees requested above the following information is required before the application can be declared administratively complete.

8. Verify that the application is requesting to add hydroelectric power generation to 892,800 acre-feet authorized under Certificate of Adjudication 08-4261. Page 2 of the application states that the water right authorizes the City of Houston to divert and use 898,800 acre-feet for domestic, municipal, industrial, and agricultural purposes.

9. Submit documentation evidencing that Michael Marcotte has the authority to sign for the City of Houston pursuant to Title 30 Texas Administrative Code (TAC) §295.14 (copy enclosed).

10. Confirm that the applicant is only requesting to add hydroelectric to the water released from Lake Livingston.

Please provide the requested information and fees is applicable by **May 7, 2009,** or the application may be returned pursuant to 30 TAC §281.18.

If you have any questions concerning this matter, please contact me at (512) 239-6538 or by e-mail at sramos@tceq.state.tx.us.

Sincerely,

Esteban (Steve) Ramos, Project Manager, MC-160
Water Rights Permitting Team
Water Rights Permitting & Availability Section

Enclosures

LAW OFFICES OF

JACKSON, SJOBERG, MCCARTHY & WILSON, L.L.P.

711 WEST 7TH STREET
AUSTIN, TEXAS 78701-2785
(512) 472-7600
FAX (512) 225-5565

DAVID E. JACKSON*
JOHN MATTHEW SJOBERG*
EDMOND R. MCCARTHY, JR.
ROBERT WILSON

*BOARD CERTIFIED IN OIL, GAS AND MINERAL LAW
TEXAS BOARD OF LEGAL SPECIALIZATION

SHERIDAN L. GILKERSON

ELIZABETH A. TOWNSEND†
OF COUNSEL

†LICENSED IN TEXAS AND TENNESSEE

May 7, 2009

Mr. Steve Ramos (MC-160)
Application Manager
Water Rights Permitting Team
Texas Commission on Environmental Quality
P.O. Box 13087
Austin, Texas 78711-3087

Via E-mail & Regular Mail

Re: City of Houston
ADJ 4261
CN600128995, RN105645519
Application No. 08-4261A to Amend Certificate of Adjudication No. 08-4261
TWC § 11.122
Old River, Tributary of the Trinity River, Trinity River Basin,
Harris, Polk, Liberty, Chambers, Trinity, and San Jacinto Counties

Dear Steve:

I am writing in response to your letter of April 7, 2009, requesting additional information in support of the above-referenced Application. For the sake of clarity, I have grouped your questions into two groups: (i) questions related to the Commission's analysis of whether "notice" should be published pursuant to the *Marshall* decision, and (ii) other information the Commission wants to review as part of the processing of the Application. Accordingly, your questions, as grouped, are restated below and individually answered.

I. *Marshall* Questions

The answers to the seven *Marshall* questions are intended to supplement the information already provided to the Commission as part of the City's amendment application in connection with the *Marshall* issues:

1. Confirm whether this application meets the administrative requirements for an amendment to a water use permit pursuant to TWC Chapter 11 and Title 30 Texas Administrative Code (TAC) §§ 281, 295, and 297. An amendment application should include, but is not limited to, a sworn application, maps, completed conservation plan, fees, etc.

Response: The Applicant believes that the Application, as filed and supplemented herein, meets the applicable administrative requirements set forth above. for an amendment to a water use permit pursuant to Chapter 11 of the Texas Water Code and Title 30 of the Texas Administrative Code (TAC) §§ 281, 295, and 297, which includes a sworn application, resolution, maps, conservation plan, and fees.

2. Discuss how the proposed amendment is a beneficial use of the water right as defined in TWC §11.002 and listed in TWC §11.023. Identify the specific proposed use of the water (*e.g.*, road construction, hydrostatic testing, etc.) for which the amendment is requested.

Response: Certificate of Adjudication No. 08-4261, as amended, authorizes City to divert and use amounts of water as specified therein for domestic, municipal, industrial, and agricultural purposes. The City seeks to add hydroelectric generation as an additional use of Certificate of Adjudication No. 08-4261, as amended. "Hydropower use" is defined as "[t]he use of water for hydroelectric and hydromechanical power for other mechanical devices of like nature." 30 Tex. Admin. Code §297.1(23) (2008) (Tex Comm'n on Envtl. Quality, Water Rights, Substantive).

The Texas Water Code requires that TCEQ grant an application only if the proposed appropriation "is intended for a beneficial use." TEX. WATER CODE § 11.134(b)(3)(A) (Vernon 2008). "Beneficial use" of water is defined as "use of the amount of water which is economically necessary for a purpose authorized" by Chapter 11 of the Texas Water Code. TEX. WATER CODE §11.002(4) (Vernon 2008). Use of water for hydroelectric power has been recognized as a beneficial use. *See* TEX. WATER CODE §11.024(4) (Vernon 2008).

3. Explain how the proposed amendment is not detrimental to the public welfare. Consider any public welfare matters you think might be relevant to a decision on the application. Examples could include concerns related to the well-being of humans and the environment.

Response: The Texas Water Code requires that TCEQ grant an application only if the proposed appropriation "is not detrimental to the public welfare." TEX. WATER CODE §11.134(b)(3)(C) (Vernon 2008). The City's amendment to Certificate of Adjudication No. 08-4261 to add hydroelectric generation as an additional use will not be detrimental to the public welfare. In fact, the proposed amendment will actually benefit the public welfare by allowing the City to more efficiently and effectively utilize the existing water supply. This addition of a new non-consumptive use for this water will create a renewable, beneficial, lower cost energy source with less environmental impacts to other natural resources. A renewable energy source achieved through a non-consumptive use of non-potable water is beneficial to the public welfare. There will be no changes to the existing amount, diversion point, rate of diversion, and pattern of diversions in Certificate

of Adjudication No. 08-4261, as amended; therefore, the proposed amendment will not result in environmental impacts that will be detrimental to the public welfare.

4. Discuss the effects, if any, of the proposed amendment on groundwater or groundwater recharge.

Response: The proposed amendment will not change the volume of water released, the diversion point, the rate of diversion, or usage patterns in Certificate of Adjudication No. 08-4261, as amended; therefore, the proposed amendment will have no effect on groundwater or groundwater recharge. Adding hydroelectric power, a non-consumptive use, as a purpose of use to the City's water right will have no effect on groundwater resources or groundwater recharge to any greater degree than would the City's existing use of water. Groundwater resources and groundwater recharge are not affected by this amendment application.

5. Describe how the proposed amendment addresses a water supply need in a manner that is consistent with the state water plan or the applicable approved regional water plan for any area in which the proposed appropriation is located or, in the alternative, describe conditions that warrant a waiver of this requirement. The state and regional water plans are available for download at this website: http://www.twdb.state.tx.us/RWPG/planning_page.asp.

Response: The City's proposed amendment is consistent with the applicable state and regional water plans. This amendment will enable the City to more efficiency and effectively use the state water authorized by Certificate of Adjudication No. 08-4261, as amended. The proposed amendment will not affect issues involving water supply. The City's water right will still be available to meet demand projections found in the state and regional water plans just as it was prior to this proposed amendment.

6. Provide evidence that reasonable diligence will be used to avoid waste and achieve water conservation as defined in TWC §11.002. Examples of evidence could include, but are not limited to, a water conservation plan or, if required, a drought contingency plan, meeting the requirements of 30 TAC §288.

Response: The City will continue to use reasonable diligence to avoid waste and achieve water conservation if this proposed amendment is granted. "Conservation" is defined as "the development of water resources" and "those practices, techniques, and technologies that will...improve the efficiency in the use of water, or increase the recycling and reuse of water so that a water supply is made available for future or alternative uses." TEX. WATER CODE § 11.002(8) (Vernon 2008). This amendment to Certificate of Adjudication No. 08-4261 will add hydroelectric generation as an additional use, allowing the City to make more efficient use of the water already authorized under Certificate of Adjudication No.

08-4261, as amended. This increased efficiency, along with the City's current water conservation and drought contingency plans, will allow the City to address its water supply needs in a way that avoids waste and achieves water conservation.

The City's current water conservation and drought contingency plans include provisions that allow the City to enforce conservation measures on customers, thereby reducing the consumption of water, and the loss or waste of water, so that a water supply is made available for future or alternative uses. The City's water conservation and drought contingency plan have been submitted as a part of this amendment application. There is no need for the City to amend its plan because hydroelectric power use is a non-consumptive use; the City's drought contingency plan is applicable to all consumptive uses, and was recently updated and adopted. Additionally, as noted above, this hydroelectric power use enhances the beneficial use of the City's existing water right, as well as conservation of those water rights.

7. Explain how the proposed amendment will or will not impact water right holders or the environment beyond and irrespective of the fact that the water right can be used to its full authorized amount.

Response: This application does not seek to increase either the amount or rate of water that can be diverted pursuant to the Certificate as amended, nor does it seek to improve the priority of the water right. Accordingly, the City's proposed amendment to add hydroelectric generation as an additional use to Certificate of Adjudication No. 08-4261, as amended, will not have an impact on other water right holders or the on-stream environment on the Trinity River. Approving hydroelectric generation as an additional use to the City's water right will not result in the consumption of water; therefore, this will not cause an adverse impact on other water right holders or the on-stream environment.. By this amendment, the City does not seek to move the point of diversion "upstream above senior right holder," or change the purpose of use from a "non-consumptive use to a consumptive one," as discussed in the *City of Marshall v. City of Uncertain* decision. The City merely seeks to add a non-consumptive purpose of use to Certificate of Adjudication No. 08-4261, as amended. This will only enhance the efficient use of the water supply within the current parameters of Certificate of Adjudication No. 08-4261, as amended.

II. Additional Questions:

1. If the applicant elects to proceed with published and mailed notice, please remit fees in the amount of $451.86, described below:

Filing Fee	$	100.00
Recording Fee	$	1.25
Notice Fee (Trinity River Basin)*	$	475.64
TOTAL FEES DUE	**$**	**576.89**
FEES PAID	**$**	**125.00**
BALANCE DUE	**$**	**451.86***

* If you elect not to proceed with published notice and mailed notice and have provided a response to items 1-7 listed above, no additional fees are required).

Response: Pending the Commission's analysis to the responses set forth above to the "*Marshall* Questions" and a ruling on whether notice is required, the Applicant has elected not to remit that portion of the additional fees related to such notice.

2. Verify that the application is requesting to add hydroelectric power generation to 892,800 acre-feet authorized under Certificate of Adjudication 08-4261. Page 2 of the application states that the water right authorizes the City of Houston to divert and use 898,800 acre-feet for domestic, municipal, industrial, and agricultural purposes.

Response: The City intends to use all of the water currently authorized for appropriation from Lake Livingston released through the Livingston Dam pursuant to its Certificate of Adjudication No. 08-4261 for the additional non-consumptive purpose of hydroelectric generation at the time it is released from the Livingston Dam.

3. Submit documentation evidencing that Michael Marcotte has the authority to sign for the City of Houston pursuant to Title 30 Texas Administrative Code (TAC) §295.14 (copy enclosed).

Response: Appended hereto as Attachment "A" is a copy of the City Public Works & Engineering Department's ("PWE") request for Council Action to authorize the Director of PWE to execute water rights applications on behalf of the City pursuant to 30 TAC §295.14. As evidenced by the copy of the January 8, 2009, City Council Agenda appended hereto as Attachment "B," this matter was Item No. 3 on the Consent Agenda and was passed pursuant to Motion No. 2009-0026.

4. Confirm that the applicant is only requesting to add hydroelectric to the water released from Lake Livingston.

Response: The City is only requesting to add hydroelectric to the water released from Lake Livingston.

Please let me know if you have any questions about the information provided herein, or need any additional information in order to determine the Application to be Administratively Complete. Thanks for your assistance. Best wishes.

Sincerely,

JACKSON, SJOBERG, MCCARTHY & WILSON L.L.P.

Edmond R. McCarthy, Jr.

ERM/tn
Enclosures

cc: City of Houston
Attn: Jun Chang, Interim Deputy Director, PWE