February 11, 2005

Mr. Stuart Mackey, Chair Little Rock Sanitary Sewer Committee 1001 North University, Suite 100 Little Rock, Arkansas 72207

> Re: Sierra Club Settlement Compliance Report, Paragraph No. 9, Page 16 of Agreement dated September 12, 2001

Dear Mr. Mackey:

This letter is in reference to the captioned matter for the purpose of providing you and other members of the Little Rock Sanitary Sewer Committee ("LRSSC") an annual update on the status of Little Rock Wastewater Utility ("LRWU") compliance with respect to specific provisions of the Sierra Club Settlement Agreement ("Settlement").

As you know, throughout 2004, LRSSC has been involved with the site selection process for the proposed Little Maumelle Basin Wastewater Treatment Plant. Discussion and public comments on this issue were presented to the Sewer Committee at its regularly held monthly meetings February, April, July, August, September, November, and December. Moreover, a Citizens' Advisory Group ("CAG") composed of interested persons stakeholders was formed in 2003 to provide public input on The CAG continued its meetings in 2004 and this issue. made a recommendation of the site to be selected by ranking the sites, as set forth in the letter dated April 20, 2004 from Katie McCain, CAG Facilitator, to LRSSC. You, as a member of LRSSC, were a member of the CAG and attended the CAG meetings and participated in the discussion and vote.

In 2004, a revenue note and bonds were issued based on the approval by LRSSC and the City of Little Rock ("CLR")

Board of Directors in connection with Utility projects necessary for compliance with the Settlement, as follows:

- 1. \$4,000,000.00 CLR Sewer Revenue Note, Series 2004, dated 1/20/04, a portion of which would be used to purchase easements for sewer improvements to mitigate overflows.
- 2. \$23,100,000 CLR Sewer Revenue Bond, Series 2004A, dated 3/3/2004, for the purpose of construction of additions to the Adams Field Wastewater Treatment Plant of the CLR.
- 3. \$14,000,000.00 CLR Sewer Revenue Bond, Series 2004B, dated 3/3/04, for the purpose of rehabilitating and increasing the capacity of sewer collection facilities of the CLR.

In addition to the financing, LRSSC took the following actions in compliance with the Settlement:

- 1. 2/18/04 LRSSC discussed and approved the Sierra Club/LRSSC Settlement Agreement Annual Compliance report.
- 2. 2/18/04 LRSSC discussed the two possible locations of the proposed wet weather detention basins and authorized staff to present the matter to the affected neighborhoods and government agencies.
- 3. By Resolution dated 3/17/04, the Sewer Committee authorized the execution of a service contract to reconstruct sewers using the cured-in-place pipe method between the Little Rock Sanitary Sewer Committee and Insituform Technologies, Inc. for the term April 1, 2004 to December 31, 2004, with optional annual extensions not to exceed a total contract period of five years.
- 4. By Resolution dated 3/17/04, the Sewer Committee authorized the execution of a service contract to

reconstruct sewers using the pipe bursting method between the Little Rock Sanitary Sewer Committee and Heller Company, Inc. for the term April 1, 2004 to December 31, 2004, with optional annual extensions not to exceed a total contract period of five years.

- 5. 6/23/04 LRSSC awarded \$2,079,186.92 contract to Diamond Construction Company for the District 119 Open Cut Project, which will address overflow problems between Madison Heights and Asher Avenue.
- 6. 7/21/04 LRSSC approved the Investment Work Order on the Coleman Outfall, Lee Avenue to I-630, in the amount of \$1,795,120.00. This is one of two major pipeline projects along Coleman Creek designed to eliminate numerous wet weather overflows from Lee Street to Asher Avenue.
- 7. 9/15/04 LRSSC awarded the Coleman Creek, Lee Avenue to I-630 to Building and Utility Contractors in the amount of \$1,032,918.00.
- 8. 10/20/04 LRSSC awarded the Adams Field Wastewater Treatment Plant renovation project to Max Foote Construction Company in the amount of \$20,475.000.
- 9. 12/15/04 LRSSC awarded a contract in the amount of \$441,000.00 to RJN Group to perform sanitary sewer evaluation surveys for the purpose of locating and prioritizing the repair of defects in the Upper Hinson Creek, East Jimerson Creek and Natural Resources Drive areas in connection with the performance criteria for dry and wet weather overflows in the Sierra Club Settlement.

A summary of specific actions taken by LRWU staff to comply with certain provisions of the Sierra Club Agreement follows;

1. <u>Signage/Public Notification/Public Information</u>:

As required in the Settlement Agreement, LRWU staff developed a Sanitary Sewer Overflow ("SSO") Response Plan which was authorized by the Little Rock Sanitary Sewer Committee on September 18, The SSO Response Plan, as amended, is 2002. included in this document as "Attachment A". The plan establishes a protocol for maintenance crews to follow when responding to an SSO event, and specifies internal and regulatory reporting The procedures. response protocol includes provisions for temporary signage and posting notices at individual residences. Temporary signage currently used by LRWU is shown "Attachment B". A copy of the "door hanger" the Utility uses to post residences is provided in "Attachment C".

Practically all of the SSO Notification Program requirements contained in the Settlement Agreement are addressed in the SSO Response Plan, including the provisions for permanent signage at recurring SSO locations on public property. Locations eligible for permanent signage included the following manholes:

SSO Manhole	Subbasin	Maintenance
Number	Number	Crew Area
2Н018	30040	HWST
3E143	31000	HWST
3K058	30700	HCNT
3K059	30700	HCNT
4B001	10090	HWST
4N016	30400	HCNT
5H004	21303	HCNT
5н086	21303	HCNT
5H104	21303	HCNT
6C002	10090	HWST

	6G011	21303	HCNT
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An example of permanent signage placed at recurring SSO sites is shown in "Attachment D".

In 2004 the Utility changed some key factors in the already successful Can the Grease® program, its campaign to decrease the number of grease related overflows by educating the residential population. The program consists of distributing educational packets to residential customers of Little Rock Wastewater Utility. Packed in clear plastic bags, the packet contains literature on problems associated with dumping household grease the sanitary sewer collection system; a refrigerator magnet bearing the campaign name; and the reusable grease container. Additionally, the packet contains six heat-resistant bags for use with the grease can. Previously, the packet contained only two bags. Another change in the program is the distribution of packets. residential customers make a request for packet, packets are delivered to their homes and the homes of everyone tied to the same sewer line segment. Approximately 2700 packets distributed residential to customers. ("Attachment E")

Several other Utilities in the United States have adopted the program in their own communities including the Jacksonville (Arkansas) Wastewater Utility and the Knoxille (Tennessee) Utilities Board.

The Utility continued to employ "Cowboy Slick" to educate children on the subject of wastewater treatment, water conservation, and "good and bad flushing". The main focus of "Cowboy Slick" (portrayed by a LRWU employee) is to promote *Can the Grease* by getting children to help in the fight for fat-free sewers by encouraging them to

tell their parents about the program. "Cowboy Slick" appearances target elementary schools and daycare centers.

The Utility created an insert promoting the Utility website and its content in the December 2004 bills from *Utility Billing Service*. Two key messages of the insert were important telephone numbers and the website address. Directions for how a customer should respond to an overflow are addressed in the "frequently asked questions" section of the website. ("Attachment F")

A complete listing of the Utility's public communication, and education efforts is provided under "Attachment G".

2. Supplemental Environmental Projects and Any Other LRWU Environmental Efforts:

The Settlement Agreement requires the Little Rock Sanitary Sewer Committee ("LRSSC") to establish a Supplemental Environmental Project consisting of the following:

- a. Fourche Creek Wastewater Treatment Plant Wetlands: The 90 acres of wetlands next to the Fourche Creek Wastewater Treatment Plant have not been disturbed and are available to Little Rock Parks & Recreation Department if it wishes to develop hiking trails on the property. So far, these wetlands remain in their natural condition and no further action has been taken.
- b. Bike Paths: The Settlement Agreement requires LRSSC to cooperate with the Little Rock Parks & Recreation Department ("P&R") to address common goals and specifically to cooperate in the development of bike paths and trails on mainline sanitary sewer easements. LRWU recently contacted Brian Day of P&R that the City is

moving forward with the Bike Path Project but it is still in the planning stage.

Proposed Little Maumelle River Basin Wastewater C. Treatment Plant: In 2003, the Utility began the process of selecting a site for the proposed wastewater treatment plant with the selection of outside engineering firms and the formation of a citizens' advisory group, known as the Little Maumelle Basin Advisory Team ("LMBAT"). outside consultant, Katie McCain, was in charge of the meetings, which were held on 1/26/04, 3/22/04, and 4/19/04 for the purpose of reviewing possible sites and ranking them in order of preference, which was done at the last meeting on 4/19/04. The rankings were sent to the Little Rock Sanitary Sewer Committee for review to further analyze the data and recommendations and The study performed by then make a selection. Carter-Burgess Engineering was amended to further study the Two Rivers area, the County Farm Road area and the Site 2 area, and a written report dated November, 2004 was presented to LRSSC on The LRSSC then asked staff to study 11/24/04. possible sites which would accommodate a smaller plant designed to treat 4 MGD, which Rick Barger did and presented to LRSSC on 1/19/05. As stated in the first paragraph of this letter, the LRSSC heard public comments on the proposed plant site in every monthly meeting of 2004, except for four meetings. Moreover, Hank Bates, attorney Sierra Club, was provided information of this process by letter dated 10/28/04 and 2/2/05, and no written response has been received to date.

Beyond the requirements of the Settlement Agreement, the Utility participated in the following activities to promote environmental education and conservation.

a. <u>Audubon Fourche Bottoms Nature Center</u>: LRWU is a partner with Audubon and Little Rock Parks & Recreation in the development of Audubon's

Fourche Creek Project and staff has been in contact with Ken Smith, Director of the Audubon Society of Arkansas for discussion and updates. In 2004, LRWU had additional copies of the project brochure printed. ("Attachment H") The Utility also removed abandoned aerial crossings along Fourche Creek that inhibited boating at the request of Audubon.

- b. Science Fairs: LRWU sponsored science fairs at Washington and Fair Park Elementary Schools and Central High School on 1/22/04, 2/6/04, and 3/6/04, respectively. Our sponsorship included prizes for the contestants and judges for environment related fields of study.
- c. Earth Day 2004: Little Rock Wastewater Utility employees and family members participated in Earth Day activities at the Little Rock Zoo for two days on April 23 and 24, 2004. The Utility sponsored a display featuring information on wastewater treatment, the importance of water conservation, and "Can The Grease". Several hundred people visited the display to play games to learn about the importance of water quality protection, the Utility and its programs.
- The Utility continued its d. Urban Forestry: partnership with the City of Little Rock Department of Parks and Recreation in maintaining and operating urban tree farms on the grounds of the two treatment plants. The trees are now approximately two years old and ready harvest. Tornadoes in October 2004 destroyed trees in neighborhoods and communities across the state. Trees from the urban tree farm were used to "releaf" the City of Haskell, which received tornado damage, particularly the elementary school. Trees were distributed after a special planting ceremony in December tree 2004. ("Attachment I")

e. <u>Humane Society Project</u>: LRWU has spent over \$10,000.00 in time and material helping the Humane Society upgrade their treatment plant in 2004.

3. <u>2004 Non-Capacity Related Sanitary Sewer</u> Overflows:

Compliance Standard: The Settlement Agreement limits the number of non-capacity related SSOs based on 100 miles of sanitary sewer operated and maintained by LRWU in LRSSC's collection and treatment system. The Settlement Agreement specifies the following "interim schedule" for non-capacity related SSOs:

	Number of Non-Capacity
	Related SSOs per 100
Calendar Year	Miles of Sewer
2002	12
2003	11
2004	10
2005	9
2006	8
2007	7
2008	6

For the calendar year 2002, the Settlement Agreement establishes the mileage of sewers at 1100 miles; actual mileage according to LRWU's GIS system as of December 31, 2004 is 1210 miles. The 2004 mileage data establishes a benchmark of 1200 miles of sewers. Therefore, the 2004 performance requirement for LRWU was to limit non-capacity related SSOs to no more than 120 SSOs, according to the interim schedule.

Non-Capacity Related SSOs in 2004: There were 53 non-capacity related SSOs reported in 2004. Of the 53 total, 6 SSOs were related to construction, and 5 SSOs were related to vandalism. The result was a total of 42 non-capacity related overflows attributed to the operation and maintenance of the LRWU collection system. Of the 42 non-capacity related overflows, 2

SSOs were attributed to debris; 8 SSOs were attributed to equipment failure; 10 SSOs were attributed to grease; 4 SSOs were attributed to line failures; 7 SSOs were attributed to a combination of roots and grease; 11 SSOs were attributed to roots. A complete listing of non-capacity related SSOs are provided under "Attachment J".

Compliance Assessment: Using 1200 miles of maintained sewers and the "interim schedule" provided in the Settlement Agreement, LRWU complied with its 2004 performance requirement to have no more than 120 non-capacity related SSOs, with 42 non-capacity related overflows attributed to the operation and maintenance of the collection system owned and operated by Little Rock Wastewater Utility.

In a continued effort to maximize the Utility's rehab dollars, the Utility treated 45,300 feet of mainline with a contracted chemical root removal company and is in the process of evaluating these lines, as well as identifying more lines for the upcoming year. Root removal is an important component of the Utility's Plan 66 that targets SSO reduction.

The Utility completed work on 141 line segments that were in need of repair. Work was performed under a maintenance contract for pipe bursting and cured-in-place-pipe (CIPP). Additional work was completed by LRWU personnel that included replacement or relocation of the sewer line. Approximately 28,359 feet of sewer line was rehabilitated, replaced, or relocated.

In 2004 the Cleaning & Inspection Department replaced one combination cleaning truck, added one easement cleaning machine, one CCTV crew as well as upgraded all three existing CCTV units' software programs for improved rehab evaluation. One combination cleaning truck is up for replacement in 2005 along with two rod crew trucks.

4. 2004 Capacity Related Sanitary Sewer Overflows:

Compliance Standard: The Settlement Agreement requires that capacity related SSOs be eliminated, provided that SSOs may occur without a breach of the Settlement Agreement if rainfall amounts exceed a duration-quantity table that essentially defines a two-year storm event ("qualifying event"). qualifying event shall occur if any of the nine permanent rain gauges within the collection system record a two-year storm event. More specific, to that end, the agreement required completion of a study recommending and establishing a time line for specific actions to address capacity related SSOs. The study would serve as the foundation for a long-term compliance program.

Capacity Related SSOs in 2004: There were 277 capacity related SSOs reported in 2004 at 80 locations, shown on "Attachment K". Qualifying rain events were recorded from June 29, 2004 through July 4, 2004, and from November 1, 2004 through November 4, 2004. A total of 69 SSOs were reported during the qualifying events. Little Rock experienced above average rainfall for the year 2004, particularly in October and November when Little Rock received over 20 inches of rain. The fact there were significantly more SSOs in 2004 than 2003 can largely be attributed to the 144 SSOs reported in these two months.

Compliance Assessment: The System Evaluation and Capacity Assurance Plan ("SECAP") is a long-term capital improvement program to eliminate collection system discharges that occur during heavy rains and was a cornerstone of the Sierra Club Settlement. The SECAP was finalized in March of 2002. A rate increase to fund SECAP projects and increases in operating expenses to the year 2007 was approved later that year, and went into full affect in June of 2003. The rate increase enabled the Utility to issue over \$37,000,000 in debt to fund SECAP projects. The status

of funded SECAP projects and important future projects is summarized below.

- Adams Field Wastewater Treatment Plant Improvements The proposed improvements will increase the hydraulic capacity of the Adams Field Treatment Plant by 24 million gallons per day, and significantly reduce the amount of diluted wastewater discharged during heavy rains. In 2004, the Utility finalized a debt issue of \$23,100,000 to fund the improvements, advertised the project, and awarded the construction work to Max Foote Construction Company in the amount of \$20,475,000. Work is scheduled to start in February of 2005 and be completed in late summer of 2006.
- b. District 119 Collector Improvements Capacity improvements to eliminate overflows in the District 119 area was one of several projects funded through a \$14,000,000 debt issue finalized in early 2004. The construction work was awarded to Diamond Construction Company in the amount of \$2,079,186.92 at the June 23rd Sewer Committee Meeting. At the close of 2004, work had progressed to eliminate what many consider the Utility's most severe residential overflow at 2715 Boulevard Street. Work is scheduled to be complete in the spring of 2005 and should bring the District 119 service area into compliance with the 2-year storm compliance standard.
- c. Coleman Creek Collector Improvements Capacity improvements to eliminate overflows in the Coleman Creek area were also funded with \$14,000,000 debt issue. Construction work in the amount of \$1,032,918.00 to address overflows between Lee Street and I-630 was awarded to Building and Utility Contractors at the September 15th Sewer Committee Meeting. The contractor is on site and scheduled to complete work in June, 2005. Additional work to address Coleman Creek

overflows from I-630 to Asher Avenue is estimated at \$6,000,000, and is scheduled for contract award in the spring of 2005.

- d. Rose Creek Central Sewer Improvements - Yet another project funded by the \$14,000,000 debt issue, the Rose Creek Central project completes over \$8,000,000 of improvements targeting overflows in this area; of which, over \$6,000,000 was under construction or complete before adoption of the SECAP report. This project, estimated at \$2,200,000, will address remaining overflows in the Rose Creek watershed. The project will be bid in two phases, one for conventional open-cut construction and one for trenchless construction. Both phases scheduled to be advertised and awarded in the first half of 2005. All work should be complete in 2005.
- e. Sanitary Sewer Evaluation Surveys for Future Work Also funded by the \$14,000,000 debt issue, certain areas of the city must be evaluated to identify necessary improvements for compliance. At the December 15th meeting, the Sewer Committee awarded a \$441,000.00 contract to the RJN Group to evaluate sewers in the Jimmerson Creek, Upper Hinson Creek, and Natural Resources Drive areas. This work will result in sewer improvement construction contracts scheduled in the 2007-2010 time frame.
- f. Little Maumelle Wastewater Treatment Much of the work performed on this project has been discussed in previous sections of this report. The Utility will continue to pursue a site for this controversial project in 2005. Plans are to secure a site in 2005, procure an engineering firm for planning and design, and start on the necessary work to arrange financing for construction in 2007 and 2008. Although construction of a new treatment facility in the

Little Maumelle Basin presents a tremendous challenge to the Utility, it is the only feasible solution to abate rain-related wastewater overflows in the basin itself and Murray Park.

Fourche Creek Wet Weather Detention Facilities g. At the February Sewer Committee Meeting in 2004, staff presented alternatives for constructing wet weather detention facilities at two different locations. Construction of detention facilities could significantly impact overflows in the Fourche Creek bottoms. The Sewer Committee directed LRWU staff to continue assessing the feasibility of locating a detention facility near 60th Street. Nine letters were forwarded to adjacent property owners with one negative response. The Utility also contracted with FTN & Associates to determine potential impacts; the final wetlands report was delivered to the Utility in November and did not eliminate the 60th Street option. In addition, discussions and correspondence with the Arkansas Department of Health, the Arkansas Department of Environmental Quality, the Audubon Society, CLR Public Works, and CLR Park and Recreation indicate detention facilities continue to be a viable option to address overflows. Given the relatively short term impact this project can have on Fourche Creek overflows, the Utility budgeted procurement of an engineer to prepare a more detailed cost estimate and facility plan in 2005. Preliminary costs estimates indicate detention facilities will reduce the cost of LRWU's long range capacity assurance and overflow mitigation plan by a minimum \$25,000,000.

In addition to the progress made on SECAP projects, LRWU spent approximately \$1,300,000.00 renewing or replacing structurally deteriorated sewer mains. Old deteriorated sewers are sources of infiltration/inflow and are prone to blockage, contributing to both the number of capacity and non-capacity SSOs.

By copy of this letter to the Sierra Club c/o Hank Bates, attorney, I am sending them this information in accordance with the Settlement Agreement.

Yours truly,

Reggie A. Corbitt, P.E. C.E.O.

RAC/bc

cc: Members of LRSSC
Don F. Hamilton
Rick L. Barger
Thad Luther
Mack Vought
James A. Barham
John Jarratt